JUE-501/JUE-251

INMARSAT FleetBroadband FB500/FB250
Maritime Satellite Communication Terminal

INSTRUCTION MANUAL

JRC Japan Radio Co., Ltd.

ABOUT YOUR SAFETY

CAUTIONS AGAINST HIGH VOLTAGE

Radio and radar devices are operated by high voltages of anywhere from a few hundred volts up to many hundreds of thousands of volts. Although there is no danger with normal use, it is very dangerous if contact is made with the internal parts of these devices. (Only specialists should attempt any maintenance, troubleshooting, or adjustments.)
There is a very high risk of death by even a few thousand volts, in some cases you can be fatally electrocuted by just a few hundred volts. To circumvent accidents, you should avoid contact with the internal parts of these devices at all costs. If contact is inevitable as in the case of emergency, you must switch off the devices and ground a terminal in order to discharge the capacitors. After making certain that all the electricity is discharged, only then can you insert your hand into the device.
Wearing cotton gloves and putting your free hand in your pocket, in order not to use both hands simultaneously, is also a very good method of shock prevention. Quite often, an injury occurs by secondary factors, therefore it is necessary to choose a sturdy and level working surface. If someone is electrocuted it is necessary to thoroughly disinfect the affected area and seek medical attention as soon as possible.

CAUTIONS CONCERNING TREATMENT OF ELECTROCUTION VICTIMS

When you find an electrocution victim, you must first switch off the machinery and ground all circuits. If you are unable to cut off the machinery, move the victim away from it using a non-conductive material such as dry boards or clothing.
When someone is electrocuted, and the electrical current reaches the breathing synapses of the central nervous system inside the brain, breathing stops. If the victim's condition is stable, he or she can be administered artificial respiration. An electrocution victim becomes very pale, and their pulse can be very weak or even stop, consequently losing consciousness and becoming stiff. Administration of first aid is critical in this situation.

FIRST AID

☆Note points for first aid

Unless there is impending danger leave the victim where he or she is, then begin artificial respiration. Once you begin artificial respiration, you must continue without losing rhythm.

(1) Make contacts with the victim cautiously, there is a risk that you may get electrocuted.

(2) Switch off the machinery and then move the victim away slowly if you must.

(3) Inform someone immediately (a hospital or doctor, dial emergency numbers, etc.).

(4) Lay the victim on his or her back and loosen any constructive clothing (a tie, or belt).

(5) (a) Check the victim's pulse.
(b) Check for a heartbeat by pressing your ear against the victim's chest.
(c) Check if the victim is breathing by putting the back of your hand or face near the victim's face.
(d) Check the pupils of the eyes.

(6) Open the victim's mouth and remove any artificial dentifrice, food or chewing gum. Leave the mouth opened and flatten the tongue with a towel or by putting something into the mouth to prevent the victim's tongue from obstructing the throat (If he or she is clenching their teeth and it is difficult to open the mouth, use a spoon or the like to pry open the mouth).

(7) Continually wipe the mouth to prevent the accumulation of saliva.

☆If the victim has no pulse and is not breathing

If the victim has no pulse, his or her pupils are dilated, and if you cannot detect a heartbeat, the heart may have stopped; beginning artificial respiration is critical. However, in case of (*), omit rescue breathing and proceed to the next step.

(*) If there is a fear of infection because the injured or ill person has an intraoral injury, you are hesitant about giving mouth-to-mouth resuscitation, or preparing the mouthpiece for rescue breathing takes too long.

(1) Put both hands on the diaphragm, with hands on top it and keeping both arms straight each other (If your elbows are bent; you cannot push with as much power). Press the diaphragm with your body weight until the chest sinks about 2 cm (about 50 times per minute).

(2) If administering first aid when alone:
Perform the heart massage about 15 times then administer artificial respiration by blowing in twice (In case of (*), rescue breathing is omittable). Repeat this routine.
If administering first aid with two people:
One person performs the heart massage 15 times, and the other person blows air in twice (In case of (*), rescue breathing is omittable). Repeat this routine (Heart massage and “mouth to mouth” resuscitation used together).

(3) Constantly check the pupils and the pulse, if the pupils become normal and the pulse steadies, keep him in a laying position and give him something warm to drink, be sure that he rests (do not give him any alcohol). In any case you have to entrust any major decision making to a doctor. Having understanding people around is essential to the victim’s recovery from the mental shock of electrocution.

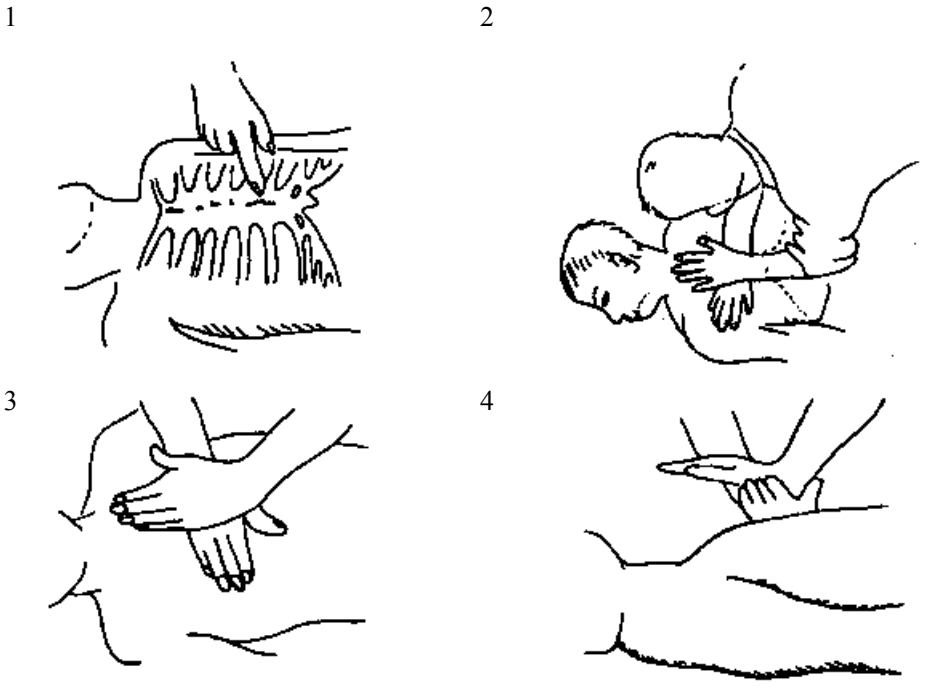


Figure 1 Heart massage in combination with artificial respiration.

Flow of Cardiopulmonary Resuscitation (CPR)

A person is collapsing.
- Secure the safety of the surrounding area.
- Prevent secondary disasters.

↓

Check for response.
- Call while tapping the shoulder.

→ Responding: Listen to the appeal of the injured or ill person and give the necessary first-aid treatment.

↓ Not responding

Ask for help.
- Make an emergency call.
- Ask to bring an AED.

↓

Open the airway.
- Check for breathing.

→ Breathing: Recovery position
- Lay the injured or ill person on his/her side and wait for the arrival of the emergency services.

↓ Not breathing

Give 2 rescue breaths; omittable Note([1])

↓

Give CPR.
- 30 chest compressions
- Give 2 rescue breaths; omittable Note([1])

↓

Arrival of an AED
- Turn on the power.
- Use the AED by following its voice prompts. Fitting of the electrode pads, etc.

↓

Automatic electrocardiogram analysis
- Do not touch the injured or ill person.

→ Electric shock is not needed.

↓ Electric shock is needed.

Delivery of electric shock

↓

Resume CPR from chest compressions by following the voice prompts of the AED.

→ When to stop CPR: When the injured or ill person has been handed over to the emergency services or has started moaning or breathing normally, lay him/her on his/her side in a recovery position and wait for the arrival of emergency services.

The AED automatically analyzes the heart rhythm every 2 min.

Note([1]) Omission of rescue breathing:
If there is a fear of infection because the injured or ill person has an intraoral injury, you are hesitant about giving mouth-to-mouth resuscitation, or preparing the mouthpiece for rescue breathing takes too long, omit rescue breathing and proceed to the next step.

Specific Procedures for Cardiopulmonary Resuscitation (CPR)

1. Check the scene for safety to prevent secondary disasters

a) Do not touch the injured or ill person in panic when an accident has occurred. (Doing so may cause electric shock to the first-aiders.)

b) Do not panic and be sure to turn off the power. Then, gently move the injured or ill person to a safe place away from the electrical circuit.

2. Check for responsiveness

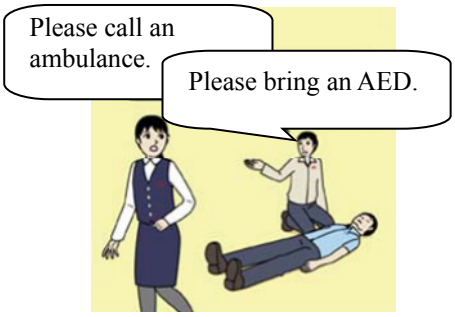
a) Tap the shoulder of the injured or ill and shout in the ear saying, "Are you OK?"

b) If the person opens his/her eyes or there is some response or gesture, determine it as "responding." But, if there is no response or gesture, determine it as "not responding."

3. If responding

a) Give first-aid treatment.

4. If not responding



a) Ask for help loudly. Ask somebody to make an emergency call and bring an AED.

- Somebody has collapsed. Please help.
- Please call an ambulance.
- Please bring an **AED**.
- If there is nobody to help, call an ambulance yourself.

5. Open the airway

a) Touch the forehead with one hand. Lift the chin with the two fingers of the middle finger and forefinger of the other hand and push down on the forehead as you lift the jaw to bring the chin forward to open the airway. If neck injury is suspected, open the airway by lifting the lower jaw.

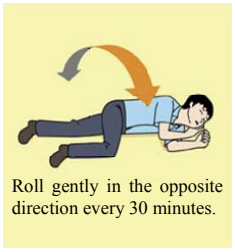
6. Check for breathing

a) After opening the airway, check quickly for breathing for no more than 10 seconds. Put your cheek down by the mouth and nose area of the injured or ill person, look at his/her chest and abdomen, and check the following three points.

- Look to see if the chest and abdomen are rising and falling.
- Listen for breathing.
- Feel for breath against your cheek.

b) If the injured or ill person is breathing, place him/her in the recovery position and wait for the arrival of the emergency services.

- Position the injured or ill person on his/her side, maintain a clear and open airway by pushing the head backward while positioning their mouth downward. To maintain proper blood circulation, roll him/her gently to position them in the recovery position in the opposite direction every 30 minutes.



7. Give 2 rescue breaths (omittable)

a) If opening the airway does not cause the injured or ill person to begin to breathe normally, give rescue breaths.

b) If there is a fear of infection because the injured or ill person has an intraoral injury, you are hesitant about giving mouth-to-mouth resuscitation, or getting and preparing the mouthpiece for rescue breathing takes too long, omit rescue breathing and perform chest compressions.

c) When performing rescue breathing, it is recommended to use a mouthpiece for rescue breathing and other protective devices to prevent infections.

d) While maintaining an open airway, pinch the person's nose shut with your thumb and forefinger of the hand used to push down the forehead.

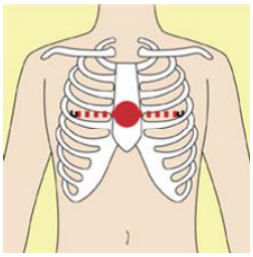
e) Open your mouth widely to completely cover the mouth of the injured or ill person so that no air will escape. Give rescue breathing twice in about 1 second and check if the chest rises.

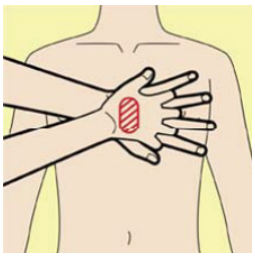
8. Cardiopulmonary resuscitation (CPR) (combination of chest compressions and rescue breaths)

a) Chest compressions

1) Position of chest compressions

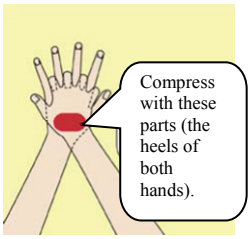
- Position the heel of one hand in the center of the chest, approximately between the nipples, and place your other hand on top of the one that is in position.





2) Perform chest compressions

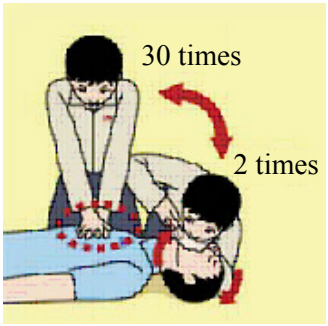
- Perform uninterrupted chest compressions of 30 at the rate of about 100 times per minute.
  While locking your elbows positioning yourself vertically above your hands.



- With each compression, depress the chest wall to a depth of approximately 4 to 5 cm.

b) Combination of 30 chest compressions and 2 rescue breaths

1) After performing 30 chest compressions, give 2 rescue breaths. If rescue breathing is omitted, perform only chest compressions.
2) Continuously perform the combination of 30 chest compressions and 2 rescue breaths without interruption.
3) If there are two or more first-aiders, alternate with each other approximately every two minutes (five cycles of compressions and ventilations at a ratio of 30:2) without interruption.



9. When to stop cardiopulmonary resuscitation (CPR)

a) When the injured or ill person has been handed over to the emergency services

b) When the injured or ill person has started moaning or breathing normally, lay him/her on his/her side in a recovery position and wait for the arrival of emergency services.

10. Arrival and preparation of an AED

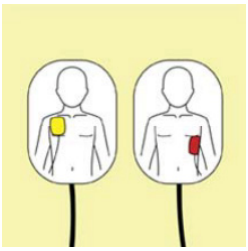
Turn on the power.

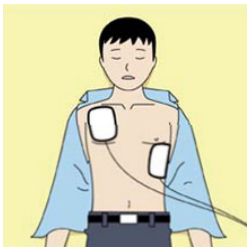
a) Place the AED at an easy-to-use position. If there are multiple first-aiders, continue CPR until the AED becomes ready.

b) Turn on the power to the AED unit. Depending on the model of the AED, you may have to push the power on button, or the AED automatically turns on when you open the cover.

c) Follow the voice prompts of the AED.

11. Attach the electrode pads to the injured or ill person's bare chest





a) Remove all clothing from the chest, abdomen, and arms.

b) Open the package of electrode pads, peel the pads off and securely place them on the chest of the injured or ill person, with the adhesive side facing the chest. If the pads are not securely attached to the chest, the AED may not function. Paste the pads exactly at the positions indicated on the pads, If the chest is wet with water, wipe dry with a dry towel and the like, and then paste the pads. If there is a pacemaker or implantable cardioverter defibrillator (ICD), paste the pads at least 3 cm away from them. If a medical patch or plaster is present, peel it off and then paste the pads. If the injured or ill person's chest hair is thick, paste the pads on the chest hair once, peel them off to remove the chest hair, and then paste new pads.

c) Some AED models require to connect a connector by following voice prompts.

d) The electrode pads for small children should not be used for children over the age of 8 and for adults.

12. Electrocardiogram analysis

a) The AED automatically analyzes electrocardiograms. Follow the voice prompts of the AED and ensure that nobody is touching the injured or ill person while you are operating the AED.

b) On some AED models, you may need to push a button to analyze the heart rhythm.

13. Electric shock (defibrillation)

Press the shock button.

a) If the AED determines that electric shock is needed, the voice prompt saying, "Shock is needed" is issued and charging starts automatically.

b) When charging is completed, the voice prompt saying, "Press the shock button" is issued and the shock button flashes.

c) The first-aider must get away from the injured or ill person, make sure that no one is touching him/her, and then press the shock button.

d) When electric shock is delivered, the body of the injured or ill person may jerk.

14. Resume cardiopulmonary resuscitation (CPR).

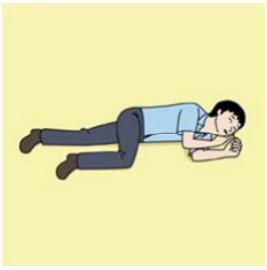
Resume CPR consisting of 30 chest compressions and 2 rescue breaths by following the voice prompts of the AED.

15. Automatic electrocardiogram analysis

a) When 2 minutes have elapsed since you resumed cardiopulmonary resuscitation (CPR), the AED automatically analyzes the electrocardiogram.

b) If you suspended CPR by following voice prompts and AED voice prompt informs you that shock is needed, give electric shock again by following the voice prompts.
If AED voice prompt informs you that no shock is needed, immediately resume CPR.

16. When to stop CPR (Keep the electrode pads on.)



a) When the injured or ill person has been handed over to the emergency services.

b) When the injured or ill person has started moaning or breathing normally, lay him/her on his/her side in a recovery position and wait for the arrival of emergency services.

PREFACE

Thank you for purchasing the JRC Inmarsat FleetBroadband Mobile Earth Station, the JUE-501/JUE-251.

The JUE-501/JUE-251 is an Inmarsat digital satellite communication terminal for Voice (4kbps Voice), Audio (64kbps 3.1kHz Audio), (*)UDI/RDI, maximum 432kbps(JUE-501) or 284kbps(JUE-251) Standard IP service, 8kbps, 16kbps, 32kbps,64kbps, 128kbps and (*)256kbps Streaming IP service and Short Message Service (SMS).

(*) is available only for JUE-501.

The JUE-501/JUE-251 is packaged and shipped under strict quality control with inspection criteria to deliver the equipment with highest quality, performance, and reliability needed to meet our customer's requirements and satisfaction.

JRC believes that you will use this equipment satisfactorily for a long time.

- Please read this manual carefully and carry out proper operation.
  This Manual describes a function and specification based on BDE-App 01.45.

- Please do not lose this useful manual, as you will have to refer to it from time to time.

- Network service is managed by Inmarsat co. or other network service providers. Network service may be changed or terminated without prior notice due to the circumstances of the network service providers.

JUE-501/JUE-251 is manufactured in consideration of effects on environment.

BEFORE OPERATION

(1) About this instruction manual

Before operating this equipment, read the manual carefully to ensure correct instruction.
This book is useful for troubleshooting, too.

(2) Concerning the symbols

This manual uses the following symbols to explain the correct operation and to help prevent injury or damage to property.
The symbols and descriptions are as follows. Understand them before proceeding with this manual.

⚠ DANGER	Indicates danger that, if ignored, will result in serious injury or even death.
⚠ WARNING	Indicates warning that, if ignored, may result in serious injury or even death.
⚠ CAUTION	Indicates caution that, if ignored, may result in injury or damage to property.

Examples of symbols

The △symbol indicates caution (including DANGER and WARNING).
The illustration inside the △symbol specifies the content of the caution more accurately. (This example warns of possible electrical shock.)

The ⃠ symbol indicates that performing an action is prohibited.
The illustration inside the ⃠ symbol specifies the content of the prohibited operation. (In this example disassembly is prohibited.)

The ● symbol indicates operations that must be performed.
The illustration inside the ● symbol specifies obligatory instructions. (In this example unplugging is obligatory.)

(3) Concerning warning labels

Warning labels are posted on the equipment.
Do not remove, damage or modify.

* Windows Internet Explorer is a registered trademark of Microsoft Corporation.

Firefox is a registered trademark of Mozilla Foundation.

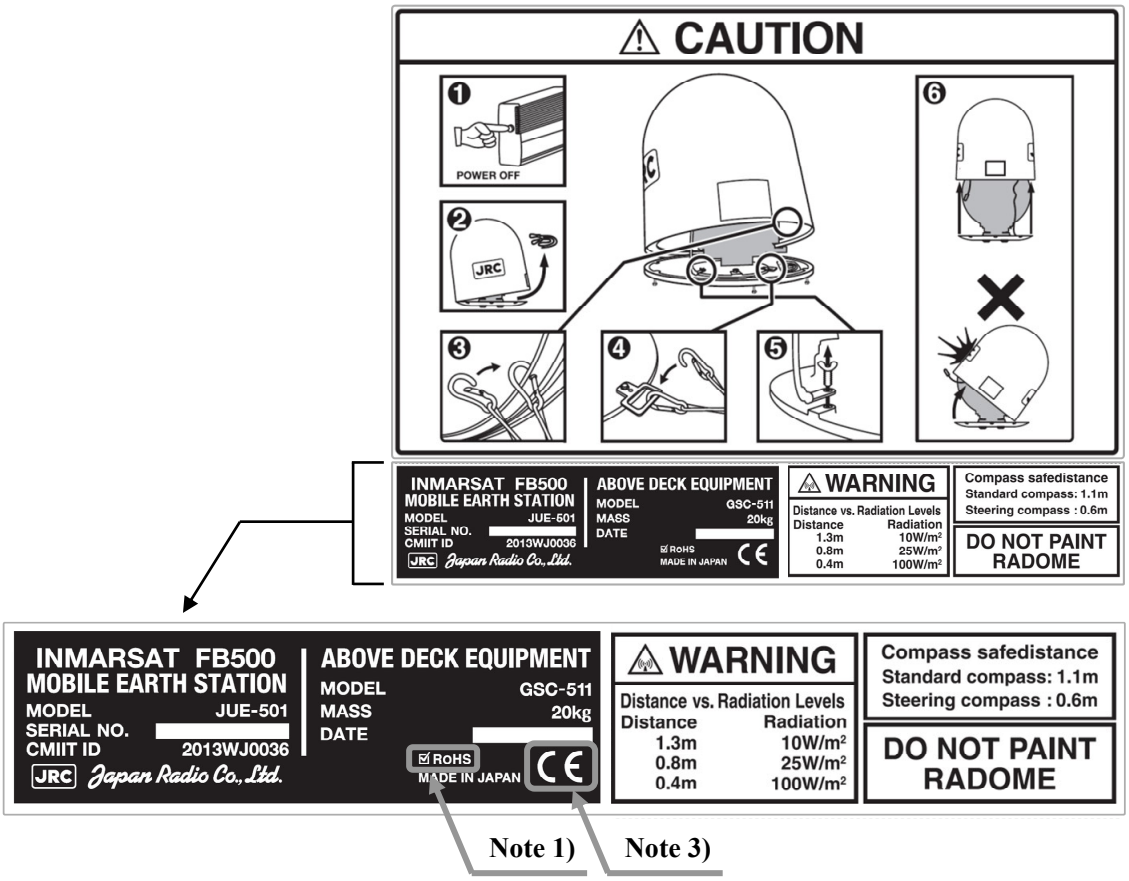
Concerning warning label

Warning labels are put on the JUE-501/JUE-251 ADE and BDE.

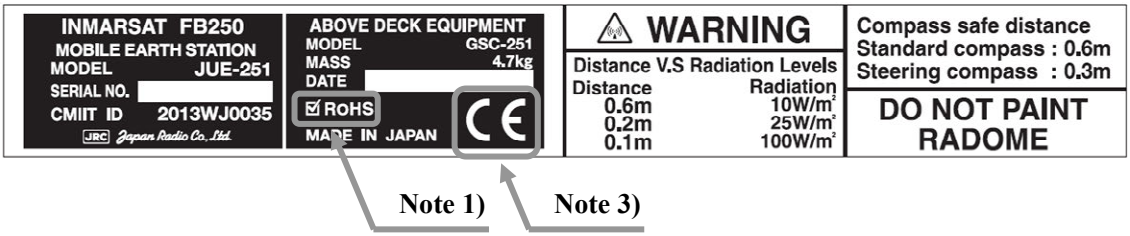
Do not take off, destroy, or modify these labels.

<Warning Label of JUE-501 ADE>

(The illustration of upper part shows the safety
Procedure for removing Radome from ADE.)



<Warning Label of JUE-251 ADE>



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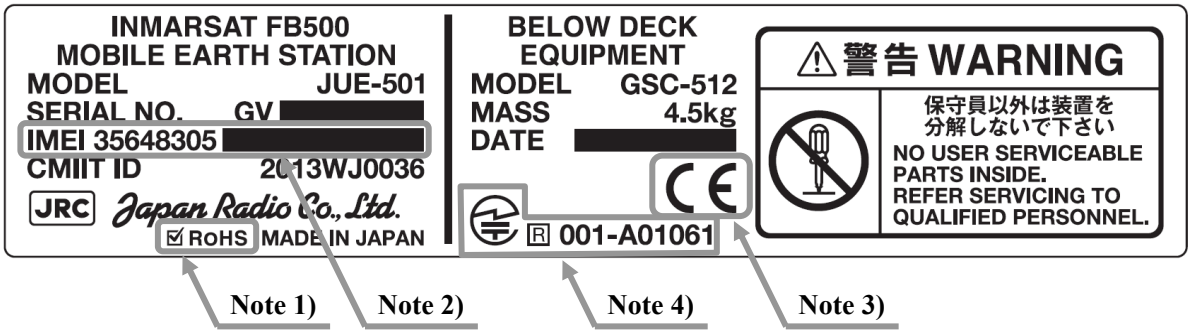

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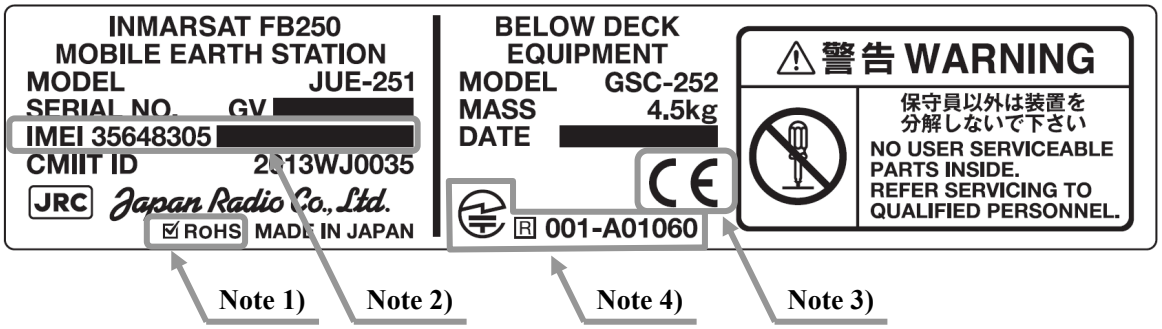

Notes

1) This mark means this equipment clears the directive of Restricting the use of Hazardous Substances (**RoHS**).

2) This mark, International Mobile Equipment Identity (**IMEI**) is an unique number used to identify an individual mobile equipment to a GSM or UMTS network.

3) This mark means the attestation number which means safe, high-quality product and suits EU instruction (Free circulation was permitted in the EU signatory).

4) This mark means this equipment clears the technical standard, agreement, proof and attestation number issued by Telecom Engineering Center Foundation in Japan.

BEFORE USING

- JRC is indemnified for any damages from incorrect operation, malfunction, and other troubles except as outlined in the product warranty and by limitation of law.

- Some functions of JUE-501/JUE-251 may not work correctly owing to the hardware and software version of equipment connected to JUE-501/JUE-251. Please confirm that whether your equipment is connectable or not to the dealer or agent.

- Your communication data are transmitted via the Inmarsat systems, therefore, there is a possibility that some errors may occur.

We strongly recommend important data be backed up to ensure safety and protection from loss.

Usually, digital scrambling of the Inmarsat system protects your communication data privacy. However we caution you to understand that your communication data might be intercepted by special technology and unauthorized access to the communication theory.

There are some additional and optional functions of the JUE-501/JUE-251 that shall be released in the near future for evaluation.

- Specifications of the JUE-501/JUE-251 and its accessories may change without notice, for improvement.

- Some functions may not be supported by a product version.

Please contact JRC for more information.

DURING OPERATION

⚠ DANGER

Do not touch any internal parts with your hands or tools.
It may cause fire, electrical shock or malfunction.

⚠ WARNING

Please do not bring the power supply code close to the heat apparatus.
The coating of the code may relieved, and it causes a fire and the electric shock.

Keep out of the area within a radius of described below from your ADE respectively, while transmitting. It transmits microwave and strong microwave may cause injury.

[JUE-501]

Radiation Level	Distance
10W/m^2	1.3m
25W/m^2	0.8m
100W/m^2	0.4m

In case of approach within a radius of 1.3meters by necessity, turn off the JUE-501 and stop transmitting.

[JUE-251]

Radiation Level	Distance
10W/m^2	0.6m
25W/m^2	0.2m
100W/m^2	0.1m

In case of approach within a radius of 0.6meters by necessity, turn off the JUE-251 and stop transmitting.

If an external matter, such as metal fragments, water, liquid, etc., infringes into your JUE-501/JUE-251, turn off the power and contact the dealer or agent you purchased the equipment from. Continuous operation may cause fire, electrical shock or malfunction.

⚠ WARNING

Install the JUE-501/JUE-251 correctly in accordance with the installation manual. Inappropriate installation may cause incorrect operation; fire, electrical shock, or malfunction. The JUE-501/JUE-251 should be installed by the trained technician or engineer. The installation should be requested to the purchasing dealer, JRC agent or one of the JRC branches.

Install ADE-BDE coaxial cable correctly in accordance with the Installation manual. Especially waterproof should be treated correctly in accordance with the installation manual. Inappropriate installation may cause incorrect operation, fire, electric shock or malfunction. The installation has to be carried out under the supervision of trained technician or field engineer.

Use the specified power supply voltage only （+21VDC to +31VDC）, otherwise trouble, fire, or electric shock or malfunction may occur.

Do not troubleshoot or repair the internal equipment of the JUE-501/JUE-251 by yourself. Any electrical work by any person other than our trained maintenance staff may cause fire or abnormal operation of this equipment or electrical shock for you. This equipment meets the technical standard of the Ministry of Internal affairs and Communications.

Do not adjust the internal circuit without a calibrated measuring instrument or exchange the parts because the internal circuit has been adjusted finely to specifications. If the equipment works abnormally, please contact the purchasing dealer.

Do not remove, destroy, or modify warning labels.
It may cause poor hazard prevention.

⚠ CAUTION

Before using, read this instruction manual.
Incorrect operation may cause improper working operation or malfunction.

When a fault has been detected, refer to the "Appendix N. Trouble shooting and FAQ". If it is not improved, turn OFF and ON the power switch of main unit to reboot. Still it persists, stop operation and contact the dealer you purchased from.

<<Above Deck Equipment>>

Do not deliver mechanical shock and/or force, because each unit of your ADE is a precision instrument. Unwanted shock and force may cause malfunction.

Do not paint the radome. Painting of the radome may cause a decrease of the communication quality.

<<Below Deck Equipment>>

Do not mount the Handset near CRT device or other devices; otherwise performance of the devices may be affected by the Handset's magnetic field.

Do not set/remove the SIM card during power switch is turned on.
It may cause malfunction.

Do not set/remove the ADE-BDE cable during power switch is turned on.
It may cause malfunction.

Do not remove the power supply cable before the power source disconnecting process is completed. It may cause malfunction.

<<Coaxial Cable and the other cables>>

Take care not to damage the connectors and the corrosion resistant sheath of cable. Otherwise, a trouble may occur.

Do not pull the cable by gripping connector plug only.
Otherwise, a trouble may occur.

Emergency Calling

(1) About 505 Emergency Calling

Inmarsat has introduced 505 Emergency Calling for the FBB terminals.
In a time of distress, a seafarer need only dial "505" and press either the offhook ( ) or # key- selected for its similarity to "SOS" - to immediately contact a Maritime Rescue Co-ordination Centre (MRCC).
Please note that **505 Emergency Calling is NOT GMDSS compliant**. 505 Emergency Calling can not be used if other phone or fax is used. Finish using phone and fax before dialing “505”.

Contents

1. Inmarsat Service systems

1.1 Outline

1.1.1 Coverage area

The Inmarsat Satellites cover the earth's surface except at the high latitude areas near the North Pole and the South Pole.

Inmarsat terminals are available for any type of vehicle or ship, and are capable of communicating day and night.

The Inmarsat coverage map displays the area of three satellite regions

- **Europe, Middle East, Africa (EMEA) Ocean Region**
- **Asia-Pacific (APAC) Ocean Region**
- **Americas (AMER)Ocean Region**

A geostationary satellite is placed on each Ocean Region (excluded spare satellites).
The adjacent Ocean Regions have overlapped area of satellite regions. Suitable Ocean Region (satellite region) is automatically selected when JUE-501/JUE-251 positions in overlapped area.

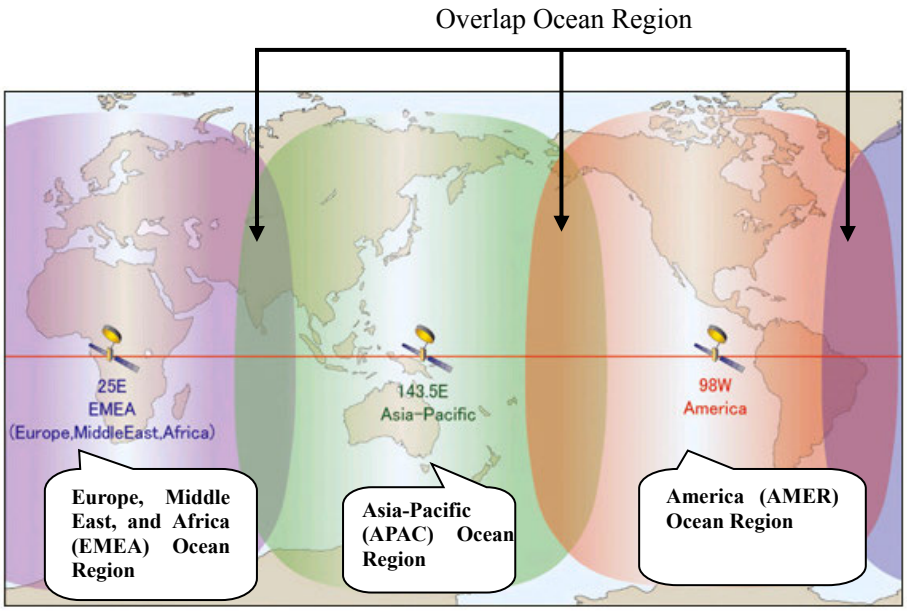

Fig.1.1.1 The coverage areas of Ocean Region

1.1.2 The Inmarsat FleetBroadband System

The Inmarsat network system consists of NCS, NOC, SCC, TT&C, and SAS.
Functions of each facility are as follows:

1) Network Coordination Station (NCS)

The NCS assigns communication channels between the Mobile Earth Stations (MES) and Satellite Access Station (SAS).

2) Network Operation Center (NOC)

The NOC located at the INMARSAT headquarters in London U.K., coordinates communication lines of the network 24 hours a day, 365 days a year. The NOC maintains contact via dedicated satellite and terrestrial links with the NCSs and SASs in all Ocean regions.

The NOC performs the following:

- Coordination with the Satellite Control Center (SCC) for operation of satellites.
- Coordination with NCS and/or SAS for system operation.
- Collection of any status data in operation .
- Coordination of any test of satellite's performance.

3) Satellite Control Center (SCC)

The SCC controls the positioning of the satellites above the equator.

4) Tracking Telemetry and Control Center (TT&C)

The TT&C supplies data on the status of the Inmarsat satellites to SCC.

5) Satellite Access Station (SAS)

The SASs located in Fucino (Italy), Burum (Holland) and Hawaii (America) which are the gateway systems operating inter-working with public network (including telephone and Internet).

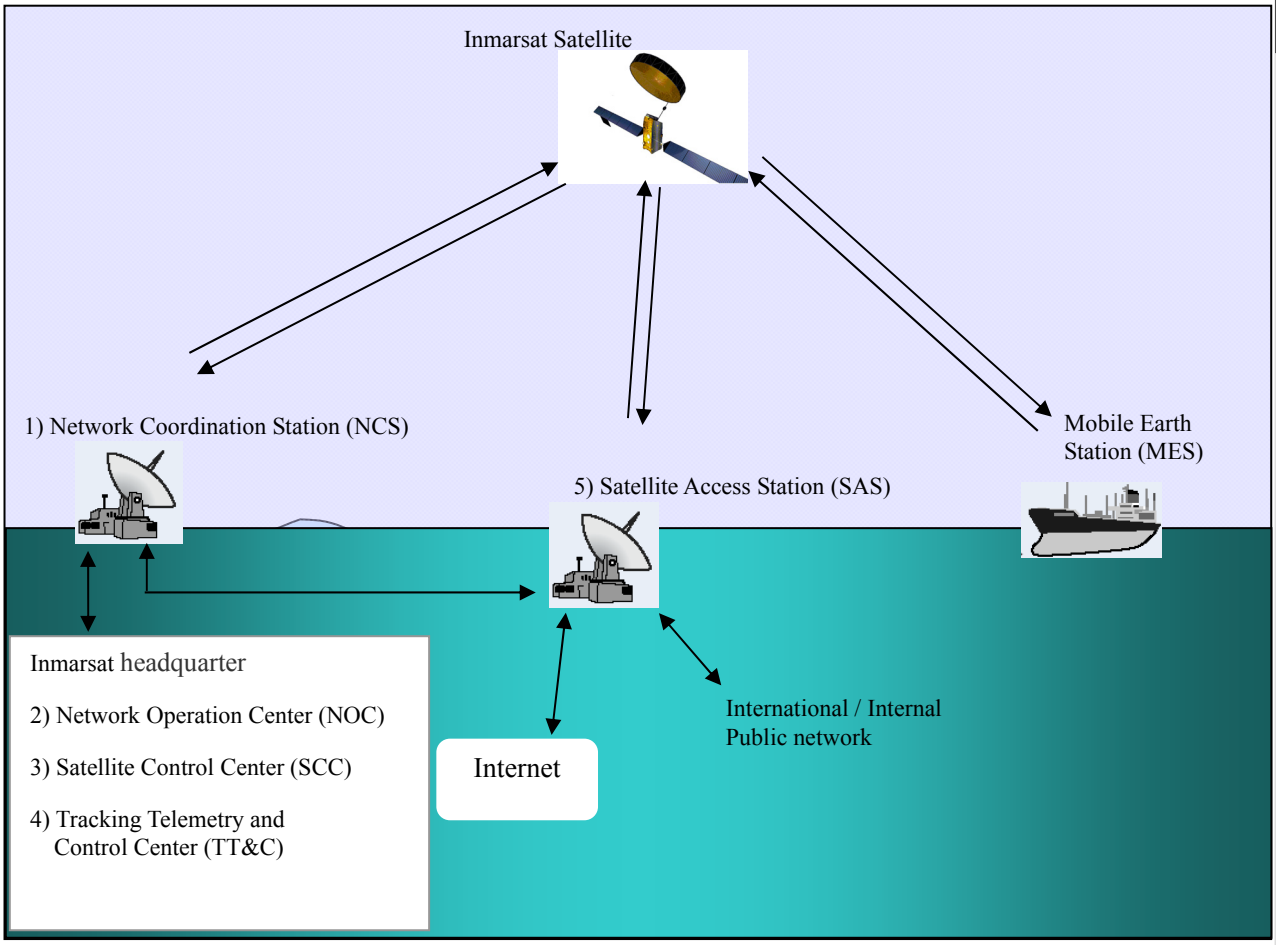

Fig.1.1.2 The Inmarsat FleetBroadband service Network

1.2 The Inmarsat FleetBroadband services

Inmarsat FleetBroadband provides service shown below.

Packet Switched service (PS), Circuit Switched service (CS), and Short Message Service (SMS) can be used simultaneously.

JUE-501/JUE-251 supports a maximum of 11 PS connections and one CS connection at the same time.

Packet switched service (PS)

Standard IP	● **Internet and intranet access at speed up to 432kbps over a shared channel for FB500. (Up to 284kbps for FB250.)** ● **Charged by data amount**
Streaming IP	● **Internet and intranet access at guaranteed data rates on demand up to 256kbps (8, 16, 32, 64, 128 and 256kbps) for FB500. (Up to 128kbps for FB250)** ● **Charged by connection time.**

Circuit switched service (CS)

4kbps Voice 	● **Low cost voice service equal to Inmarsat mini-M voice** ● **Charged by connection time**
64kbps 3.1kHz Audio 	● **High quality voice service to use FAX and analogue modem.** ● **Charged by connection time**
ISDN UDI /RDI *) data **(Only for FB500)** 	● **ISDN 64k/56kbps data service for ISDN video phone, etc.** ● **Charged by connection time**

*) UDI = Unrestricted Digital Information
RDI = Restricted Digital Information

Short Message Service (SMS)

Short Message Service 	● **Send and receive text messages up to 160 characters.** ● **Charged by message.**

1.3 Important reminder for using JUE-501/JUE-251

NOTE

- **Communication failure due to MCA wireless system interference could occur at the coast of Japan urban area.**
- **64kbps 3.1kHz Audio service is not available when satellite elevation angle (EL) value is less than 20 degrees for the JUE-251.**
- **Although 8k, 16k, 32k, 64k, 128kbps Streaming IP service and CS service can be used in the same time, use of 256kbps Streaming IP and simultaneous CS service is not possible.**
- **The service available to you is depending on the contract. Some of the services described in this manual may not work for your SIM card.**
- **Network service is managed by Inmarsat co. or other network service providers. Network service may be changed or terminated without prior notice due to the circumstances of the network service providers.**

1.4 Emergency Calling

1.4.1 505 Emergency Calling

Inmarsat has introduced 505 Emergency Calling for the FBB terminals.

In a time of distress, a seafarer need only dial "505" and press either the offhook ( ) or # key-selected for its similarity to "SOS" - to immediately contact a Maritime Rescue Co-ordination Centre (MRCC).

Please note that **505 Emergency Calling is NOT GMDSS compliant.** 505 Emergency Calling can not be used if other phone or fax is used. Finish using phone and fax before dialing "505".

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2. Introduction of the JUE-501/JUE-251

2.1 Outline

The JUE-501/JUE-251 Mobile Earth Station (MES) is composed of Above Deck Equipment (ADE) and Below Deck Equipment (BDE).
The ADE consists of Antenna Assembly, Above Deck Unit and Radome, while the BDE consists of Main Unit (MU) and Handset.

JUE-501/JUE-251 is an Inmarsat digital satellite communication terminal for voice service (4kbps Voice), G3FAX and legacy analogue modem service (64kbps 3.1kHz Audio), (*)UDI/RDI, maximum 432kbps(JUE-501) or 284kbps(JUE-251) Standard IP service, 8kbps, 16kbps, 32kbps,64kbps, 128kbps and (*)256kbps Streaming IP service and Short Message Service (SMS).
[(*) is available only for JUE-501.]

JUE-501/JUE-251 is shipped with strict quality control and inspection to provide the high quality for consumers. JRC would like to believe you to make long use of the terminal with your satisfaction.

Network service is managed by Inmarsat co. or other network service providers. Network service may be changed or terminated without prior notice due to the circumstances of the network service providers.

If your JUE-501/JUE-251 has trouble or problem in your operation, please contact the dealer or agent you purchased from.

2.2 Features

Meeting the latest FleetBroadband SDM

The JUE-501 meets the latest Inmarsat FleetBroadband FB500 technical requirements (SDM) and JUE-251 also meets the latest Inmarsat FleetBroadband FB250 technical requirements (SDM). They are suitable solutions for satellite communications equipment for any type of vessel, navigating the world's oceans.

High quality and low communication cost

The JUE-501/JUE-251 provides following services using Broadband Global Area Network (BGAN) offered from Inmarsat.

-Low cost global voice service: 4kbps Voice

-G3FAX and legacy analogue modem service using 64kbps 3.1kHz Audio service (unavailable for the JUE-251 when satellite elevation angle (EL) value is less than 20 degrees)

-Standard IP service at speed up to 432kbps over a shared channel (Up to 284kbps for JUE-251)

-Streaming IP service (8k, 16k, 32k, 64k, 128k, and 256kbps) (Up to 128kbps for JUE-251)

-UDI/RDI service (unavailable for JUE-251)

-SMS (maximum number of characters are 160)

* The service available to you is depending on the contract.

Stylish, Light weight, Space-saving, and Gyro-less

The JUE-501/JUE-251 can be installed on vessels of all sizes due to the compact and lightweight design of the ADE. The adoption of an active and Gyro-less antenna structure makes this unit a perfect fit for small vessels.

With the use of a single coaxial cable as the control line between the ADE and BDE the installation of the JUE-501/JUE-251 is simple and easy.

The Rewindless antenna produces uninterrupted communication during course change.

Adaptive to various networks

The JUE-501/JUE-251 has multiple Interfaces including Ethernet, ISDN, 2TEL ports (maximum 6 TEL ports)*, and Handset as standard equipment. An output port for WRF (Wide-band Radio Frequency) is also provided.

*Standard equipment provides 2 telephones, and 4 more telephones can be connected when connecting Junction Board (JB), as optional equipment.

Self-diagnosis system

The built-in self-diagnosis system continually monitors the status of the JUE-501/JUE-251 and indicates the warnings if any errors are detected.

2.3 Cable connection diagram and components List

2.3.1 Cable connection diagram

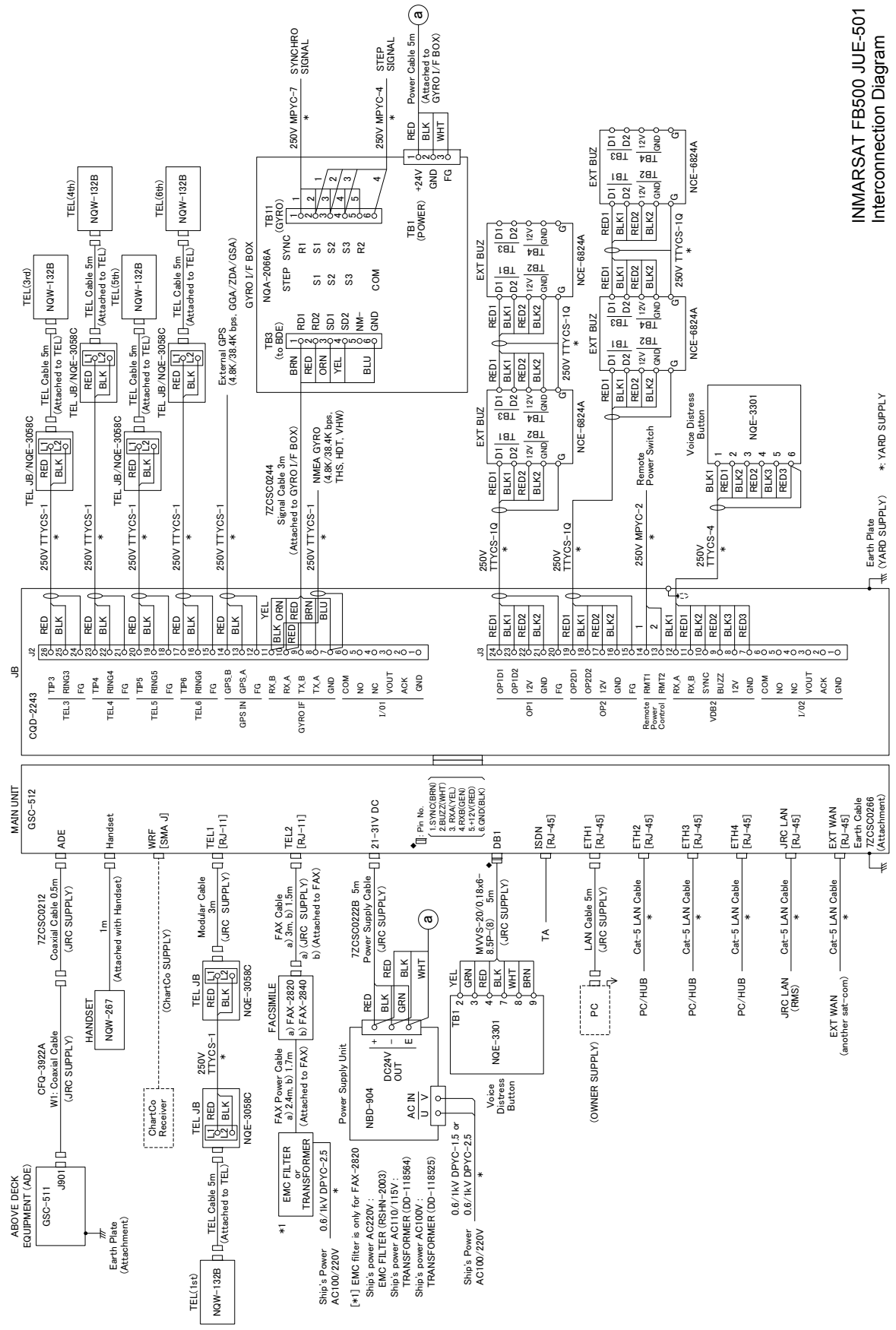


Fig. 2.3.1 Cable connection diagram (JUE-501)

2.3.2 Components list

Table 2.3.2 Components list

	Name of equipment		Type	Q'ty
Standard Components	ADE	JUE-501	GSC-511	1
		JUE-251	GSC-251	1
	BDE	JUE-501	GSC-512	1
		JUE-251	GSC-252	1
	Handset		NQW-267	1
	PSU cable (between EXT PSU and BDE main unit)		7ZCSC0222B	1
	Instruction Manual		7ZPSC0427	1
	Installation Manual		7ZPSC0429	1
	Quick Reference Guide		7ZPSC0431	1
	CD-ROM		7ZPSC0433	1
	Supplied parts for ADE installation	JUE-501	MPXP34916	1
		JUE-251	MPXP34915	1
	Supplied parts for BDE installation		7ZXSC2502	1
	Spare fuse for BDE		7ZXSC0008	3
	Inspection result			1
Option	Coaxial cable (between ADE and BDE)	JUE-501	CFQ-3922A5* (50m)	1
		JUE-251	CFQ-5924A3** (30m)	1
	Relay cable (between CFQ-3922A/3923A and BDE main unit)		7ZCSC0212	1
	Relay connector (In case of connecting CFQ-3922A/3923A cable to JUE-251 ADE)		NJ-TNCP (JRC : 5JAAE01753)	1
	Junction Board		CQD-2243	1
	Telephone		NQW-132B	1
	Facsimile (brother FAX-2820)		7EZSC0060	1
	Facsimile (brother FAX-2840)		5HPCD00003	1
	Power transformer for Facsimile (For AC100V)		DD-118525	1
	Power transformer for Facsimile (For AC110V/115V)		DD-118564	1
	EMC Filter for facsimile (For AC230V direct coupling)		RSHN-2003 (for FAX-2820)	1
	External Power supply Unit (EXT PSU)		NBD-904	1
	Telephone Junction Box (TEL JB)		NQE-3058C	2
	Handset extension cable		7ZCSC0291	1
	GYRO I/F Box		NQA-2066A***	1

	External Buzzer	NCE-6824A	Max 4
	Voice Distress Button	NQE-3301	Max 2
	Wall mount adapter for VDB	7ZZSC0095	Max 2
	Instruction Manual (Japanese)	7ZPSC0428	1
	Installation Manual (Japanese)	7ZPSC0430	1
	Quick Reference Guide (Japanese)	7ZPSC0432	1

*CFQ-3922A series (15m to 45m, 5m interval、5D)、CFQ-3923Aseries（70m and 100m、10D）are available as options.
**CFQ-5924A15 (15m), CFQ-3922A series (35m to 50m, 5m interval, 5D) and CFQ-3923A series（70m and 100m、10D）are available as options.
***SYNC/STEP GYRO requires GYRO I/F BOX.

2.4 Dimensional drawing (JUE-501/JUE-251 standard components)

2.4.1 ADE (Above Deck Equipment) JUE-501[GSC-511]

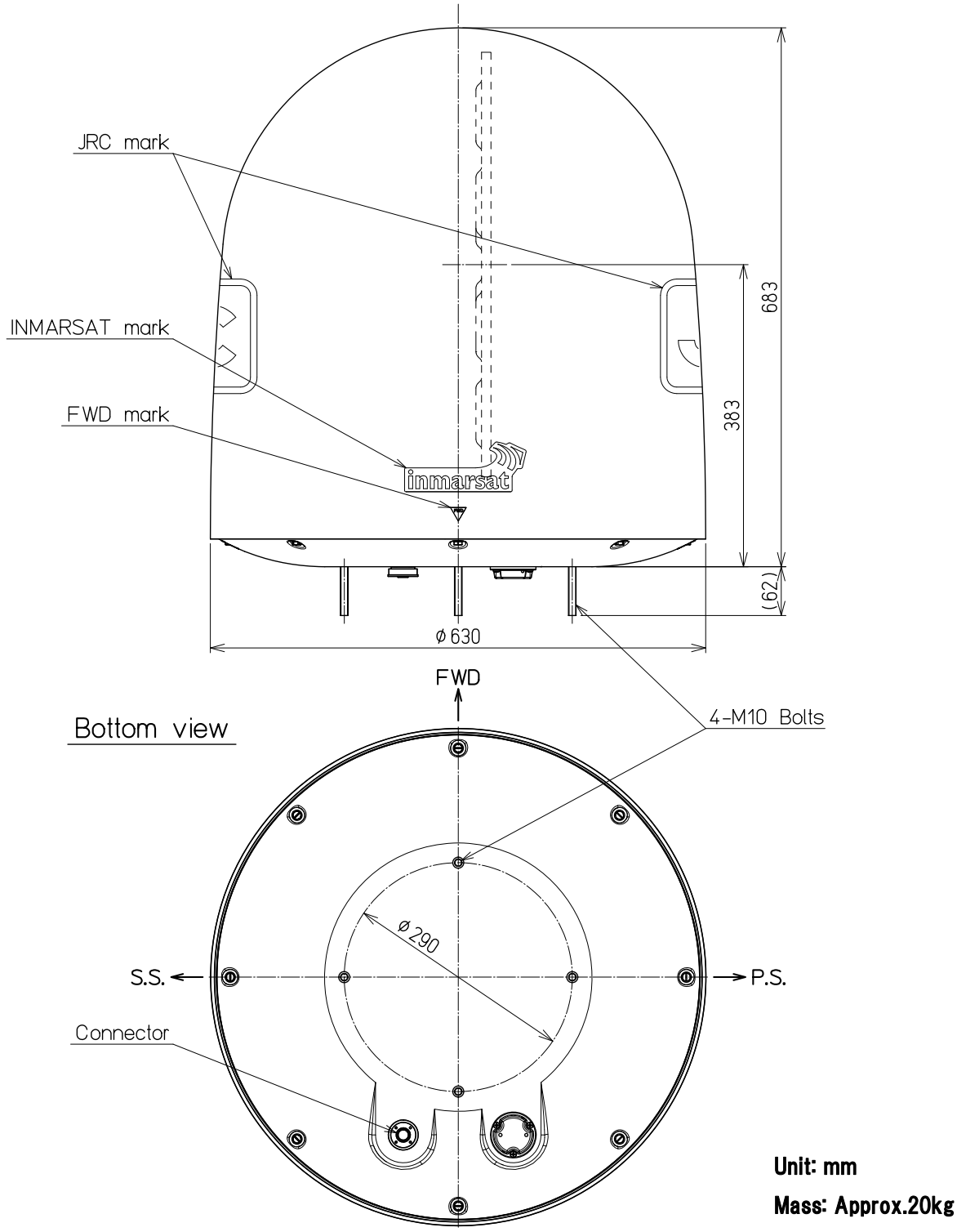


Fig. 2.4.1 Appearance of JUE-501 ADE (GSC-511)

2.4.2 ADE (Above Deck Equipment) JUE-251[GSC-251]

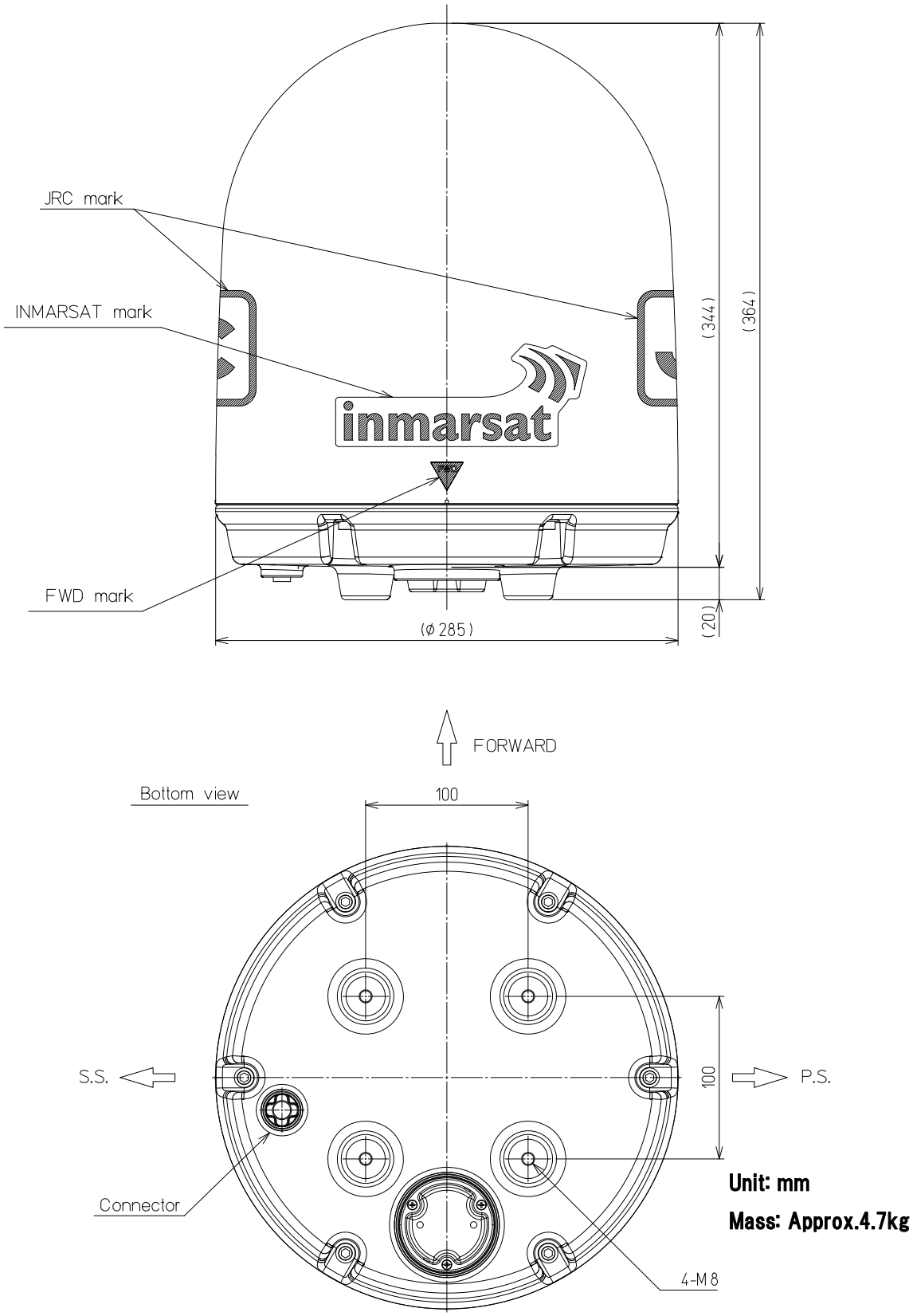
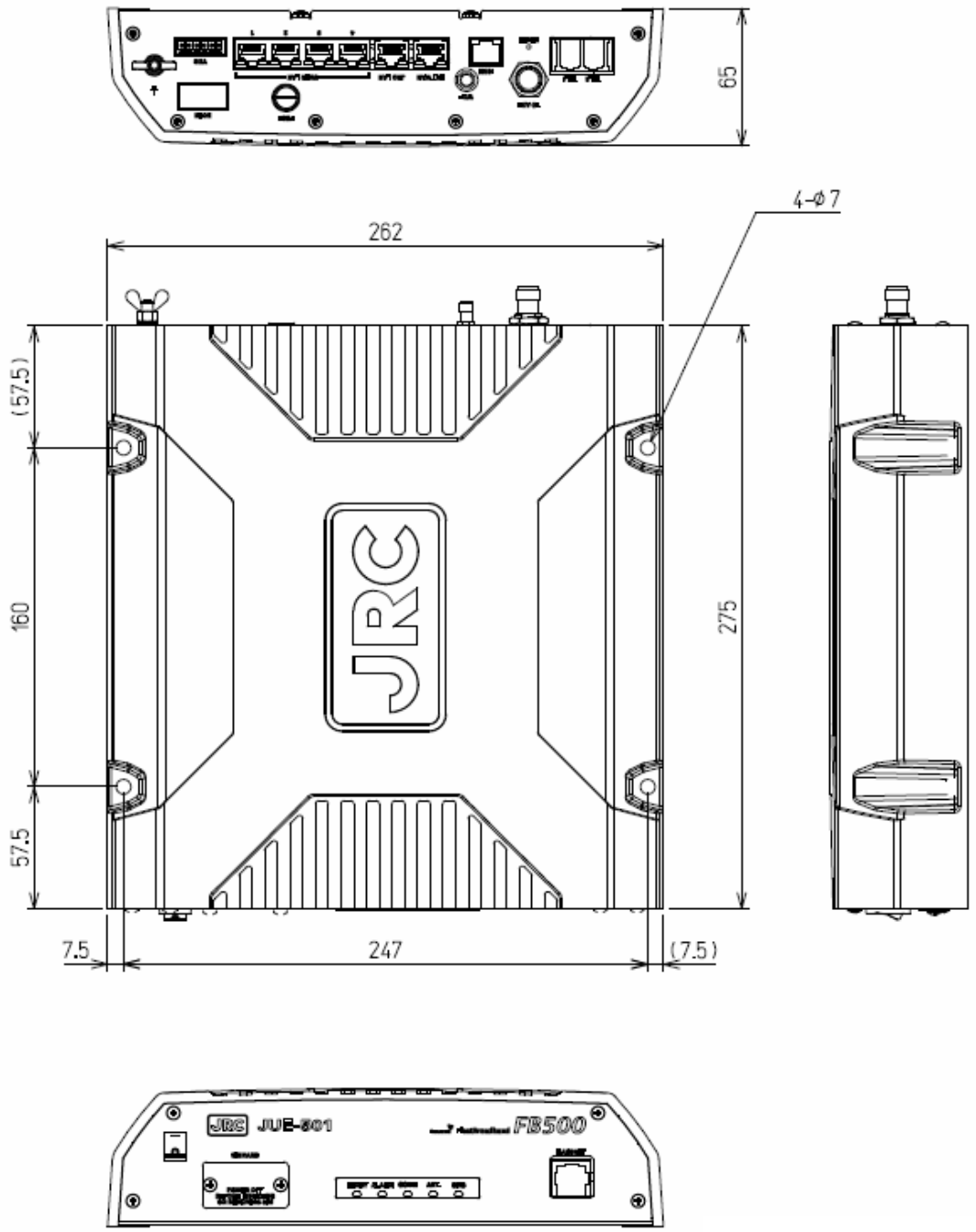


Fig. 2.4.2 Appearance of JUE-251 ADE (GSC-251)

2.4.3 BDE (Below Deck Equipment) JUE-501[GSC-512]

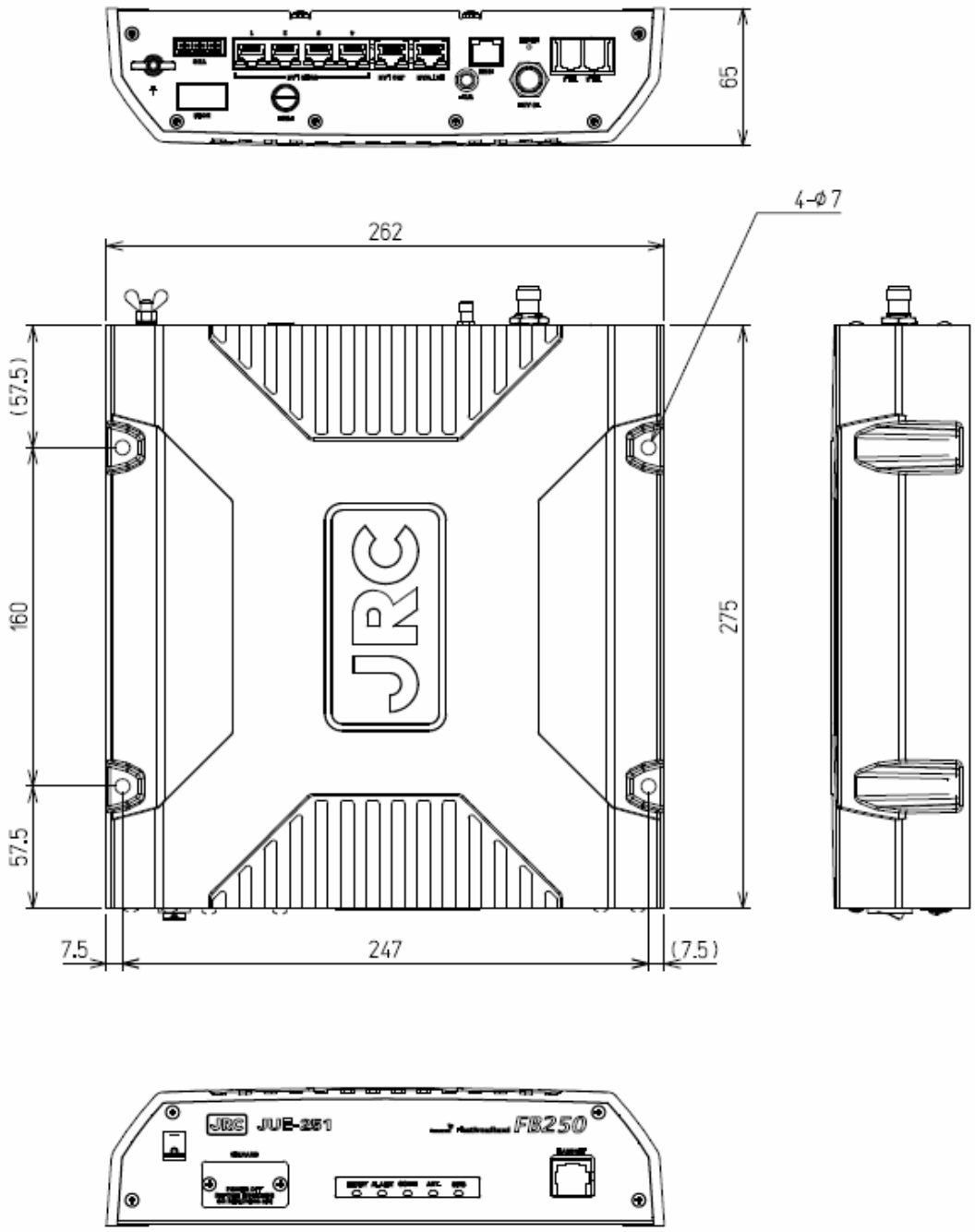


Unit: mm

Mass: approx. 4.5kg

Fig. 2.4.3 Appearance of JUE-501 BDE (GSC-512)

2.4.4 BDE (Below Deck Equipment) JUE-251[GSC-252]

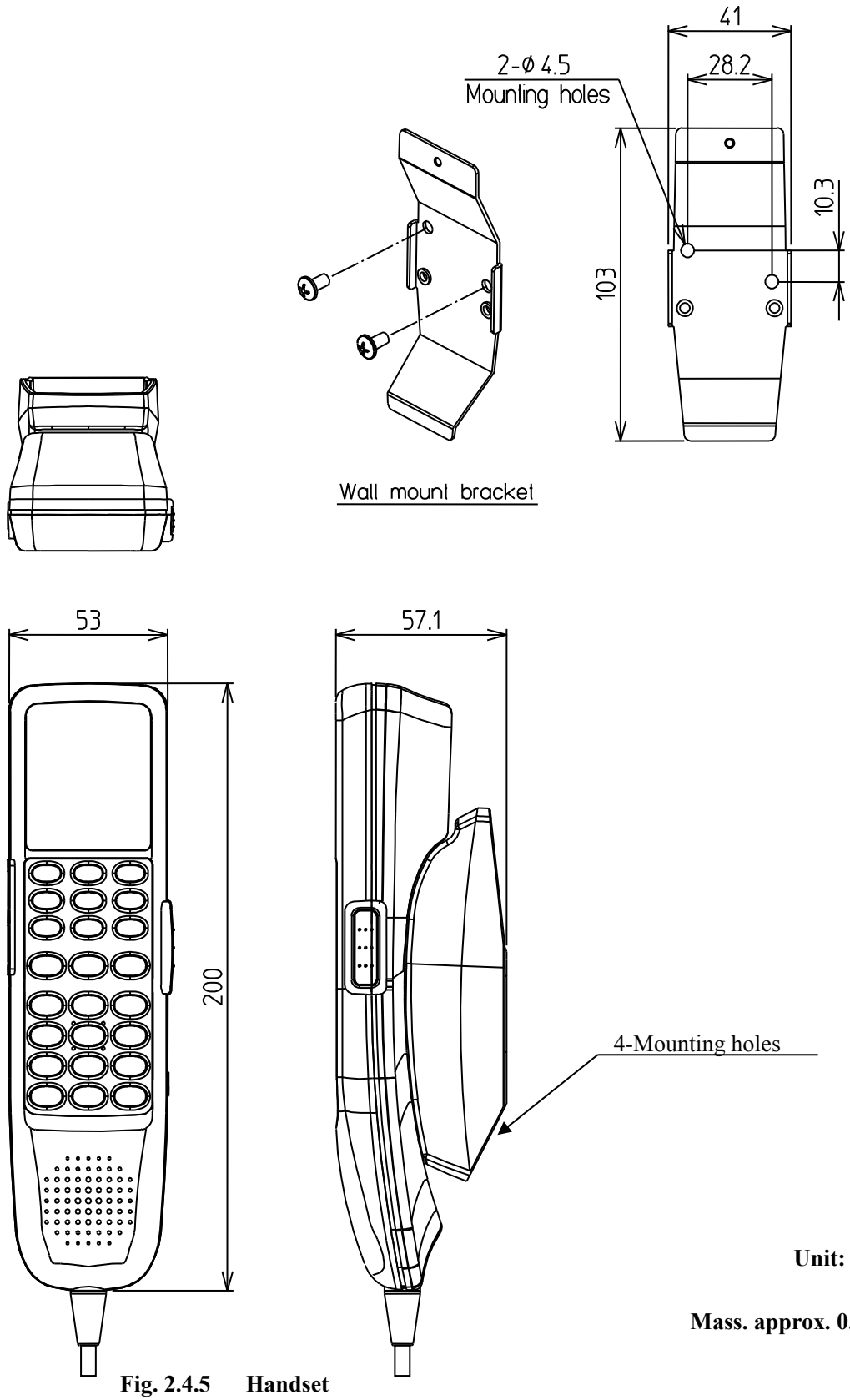


Unit: mm

Mass: approx. 4.5kg

Fig. 2.4.4 Appearance of JUE-251 BDE (GSC-252)

2.4.5 Handset [NQW-267]

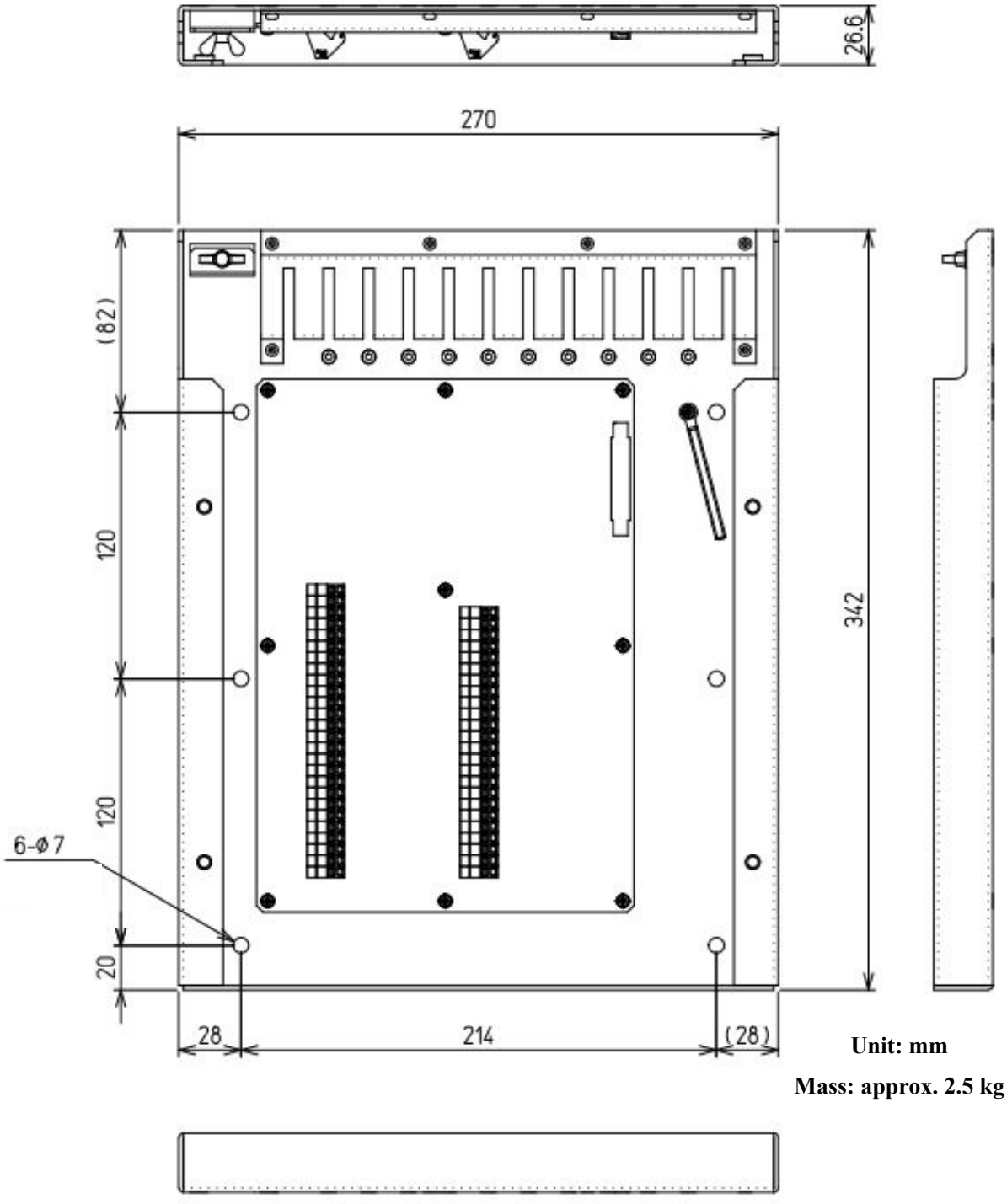


Unit: mm

Mass. approx. 0.5kg

Fig. 2.4.5 Handset

2.4.6 Junction Board [CQD-2243]

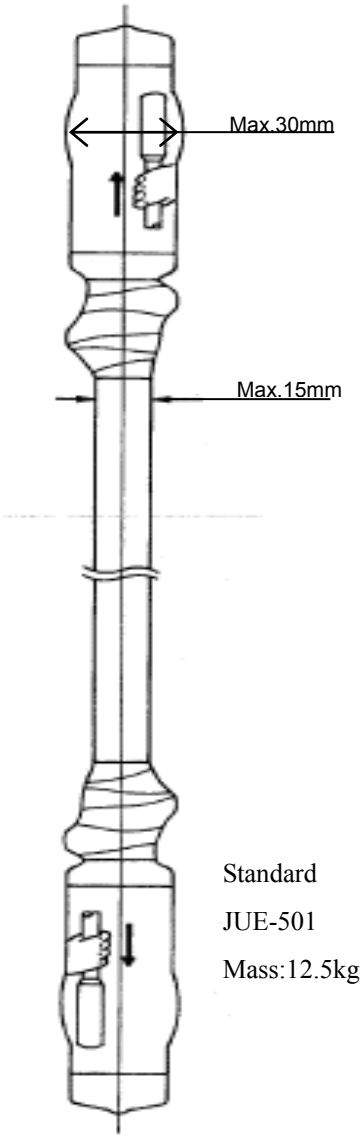


Unit: mm

Mass: approx. 2.5 kg

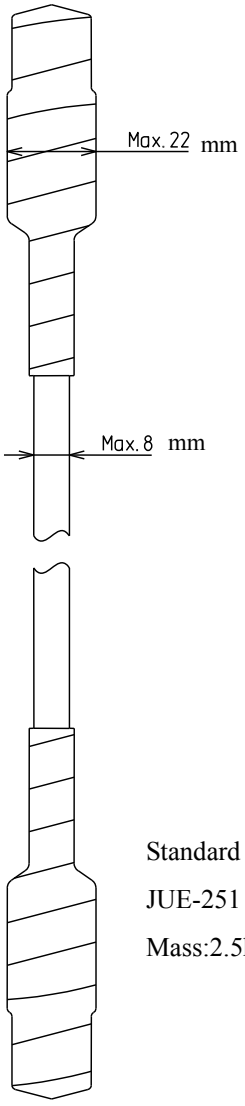
Fig. 2.4.6 Appearance of Junction Board (CQD-2243)

2.4.7 Coaxial cable [CFQ-3922A5/CFQ-5924A3]



Standard cable for JUE-501
Mass:12.5kg

CFQ-3922A5



Standard cable for JUE-251
Mass:2.5kg

CFQ-5924A3

Type	Length	Connector Dia.	Cable Dia.	Mass	Minimum bending radius	Remarks
CFQ-3922A5	50m±0.5m	30mm	15mm	12.5kg or less	100mm	Standard for JUE-501 With N connector
CFQ-5924A3	30m±1.0m	22mm	8mm	2.5kg or less	50mm	Standard for JUE-251 With TNC connector

Concerning cable length option, please refer to [Table 2.3.2 Components list].

Fig. 2.4.7 Coaxial cable

3. Appearance

In this section, the composition of the JUE-501/JUE-251 and terminal equipments are explained.

1) Above Deck Equipment (ADE): Antenna unit and radome (Antenna Cover)
2) Blow Deck Equipment (BDE): Main unit
3) Coaxial cable: A Cable connects ADE to BDE
4) Handset: Handset and cradle
5) Terminal equipments: Accessories used for communication (user supplied PC, FAX, and telephone)

3.1 ADE

Radome covers the antenna equipments, which is composed of:

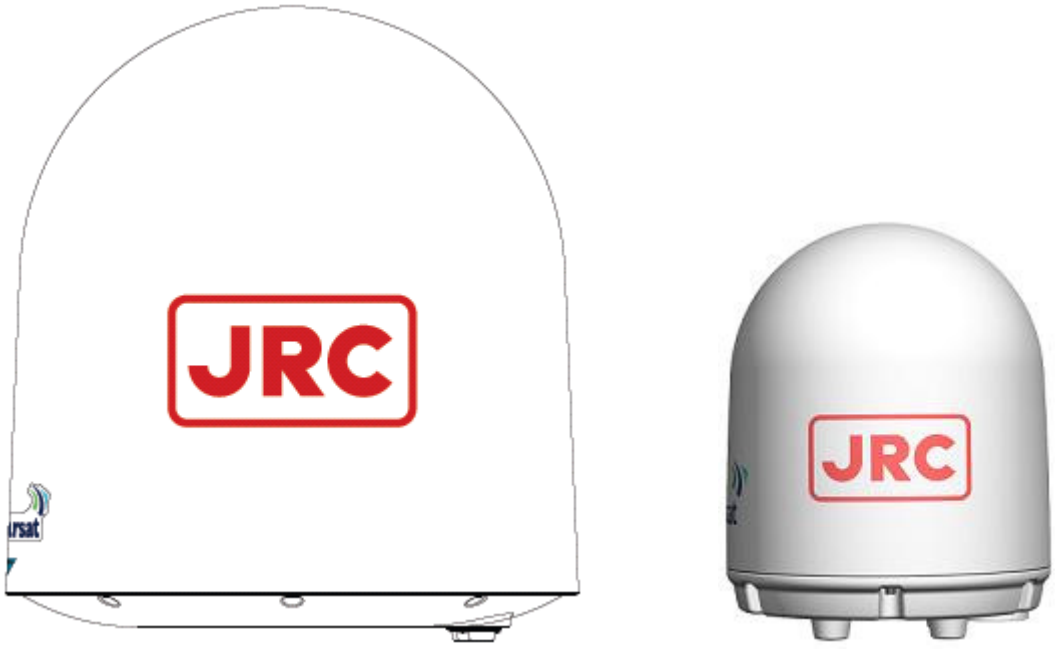
a) Low Noise Amplifier (LNA)

b) Above Deck Unit (ADU) contains GPS circuit.

c) Rotary joint

d) Antenna pedestal

All signals (and power) pass through a single coaxial cable, which connects the ADE and BDE.



GSC-511 for JUE-501

GSC-251 for JUE-251

Fig. 3.1 ADE

3.2 BDE

Main unit

Main unit appearance

Front view

Rear view

Fig. 3.2a Main unit appearance

Front view

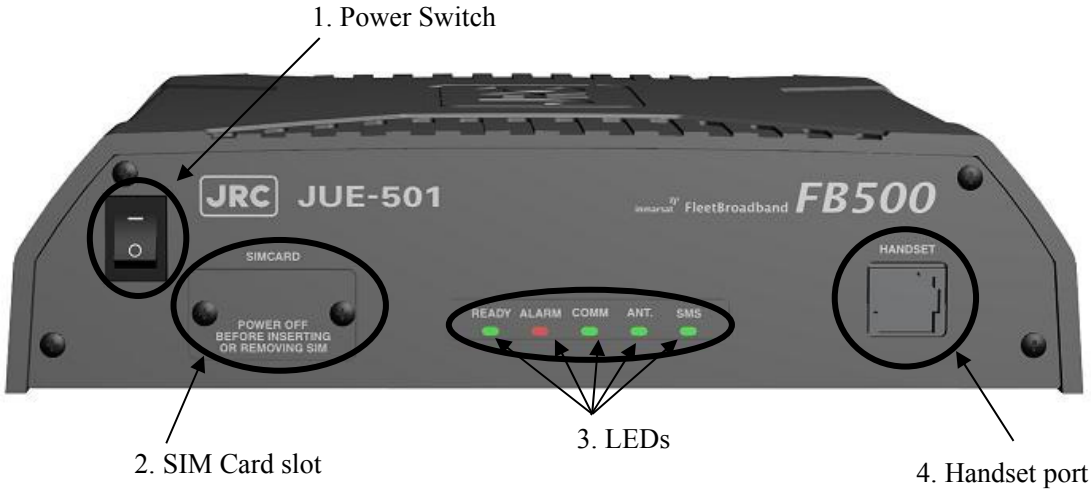


Fig 3.2b Main unit front view

Rear view

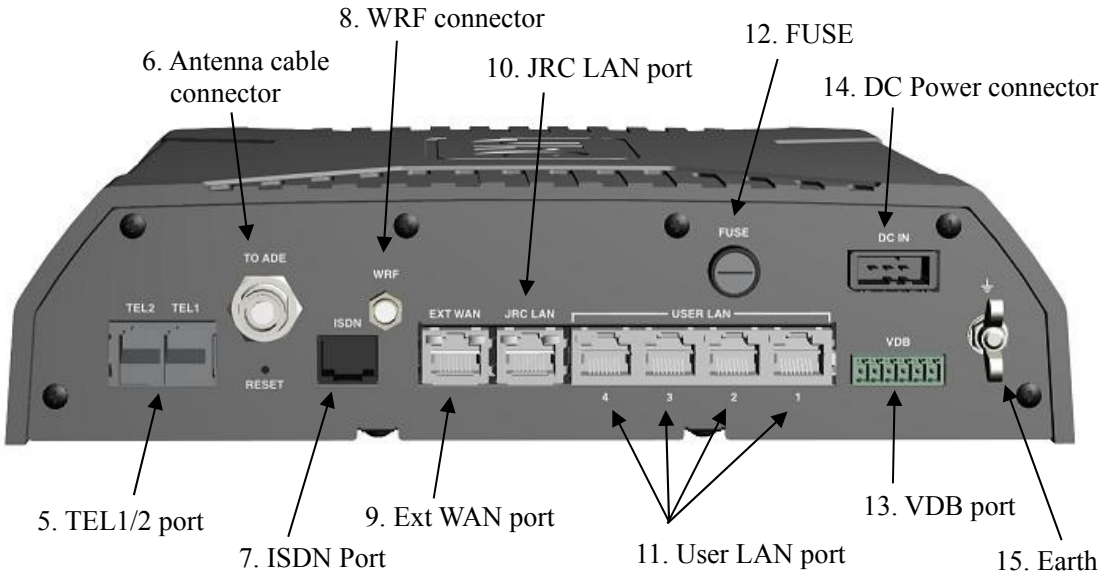


Fig. 3.2c Main unit rear view

1 Power Switch

Turns power on and off.

2 SIM card slot

Mounts a SIM card.

3 LEDs

Indicates the communication/apparatus status. READY LED, ALARM LED and COMM LED lit in the same way as LEDs on the Handset, except at the time of startup. Main unit has two more LEDs (ANT. LED and SMS LED) on its front panel and indicates antenna status and new-SMS-receiving status. The meanings and sequence of the LEDs are described in [Appendix P Front Panel LED lamps].

4 Handset port (12-PIN Modular Cable)

Connects with Handset unit.

Offered service: 4kbps Voice and SMS

5 TEL 1/2 ports (RJ-11 type 6-PIN Modular Cable)

Connects the analog equipment, terminal telephones, and facsimile to the main unit.

Offered services: 4kbps Voice and 64kbps 3.1kHz Audio

6 Antenna cable connector

Connects with the coaxial cable from the antenna (ADE).

7 ISDN port (RJ-45 type 8-PIN Modular Cable for ISDN)

Connects with equipment, which has an ISDN interface.

Offered services: 4kbps Voice, 64kbps 3.1kHz Audio, UDI, and RDI

8 WRF connector

Connects with Wide-band Radio Frequency (WRF) communication equipment such as Chartco etc.

9 Ext WAN port (RJ-45 type 8-PIN Modular Cable for Ethernet)

Connects with External WAN such as ESV.

10 JRC LAN port (RJ-45 type 8-PIN Modular Cable for Ethernet)

Connects with JRC LAN. It creates additional value like remote maintenance or status monitor by connecting JRC products other than FBB.

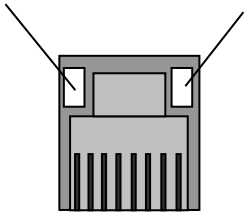
11 User LAN port × 4 (RJ-45 type 8-PIN Modular Cable for Ethernet)

Connects with user device such as user PC.

Offered services: Standard IP, Streaming IP, and SMS.

A maximum total capacity of 32 W PoE (Power over Ethernet) is available on User LAN.

PoE LED:
Lit in green when power is supplied.
Lit in orange when PoE is failed. (power supplying beyond 32 W)



Link LED:
Bright when the link with the connected terminal has been established. (It shines in orange for 10Base-T and it shines in green for 100Base-T.)

12 Fuse

Melt down when over current are detected.

Replacement procedure: Loosen the folder head to counterclockwise direction with slotted screwdriver, and pull out the folder when it is ejected. Replace the fuse to new one and set it in the folder. Insert the folder and tighten it clockwise direction until folder is securely locked in place.

13 VDB port

Connects with Voice Distress Button (VDB).

14 DC power connector

Connects with the cable which supplies the power source to the main unit.

15 Earth

3.3 ADE - BDE connecting cable

＊This cable can be connected to ADE and BDE in either direction.

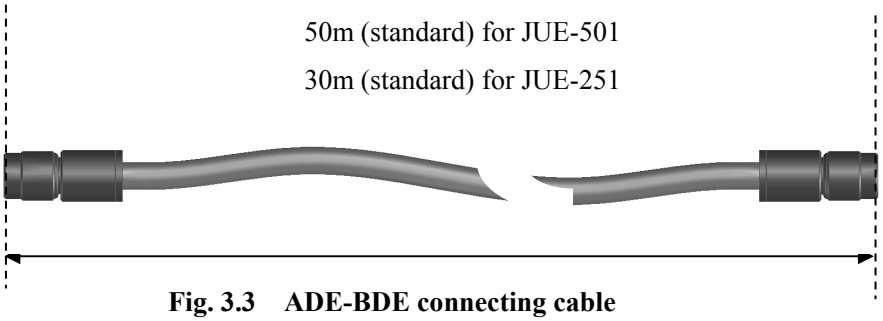


Fig. 3.3 ADE-BDE connecting cable

3.4 Handset

The Handset consists of main body and cradle (Handset rest)

The Handset is fixed on the cradle by a strong magnet.

⚠ CAUTION

Do not mount the Handset near CRT device or other devices; otherwise performance of the devices may be affected by the Handset's magnetic field.

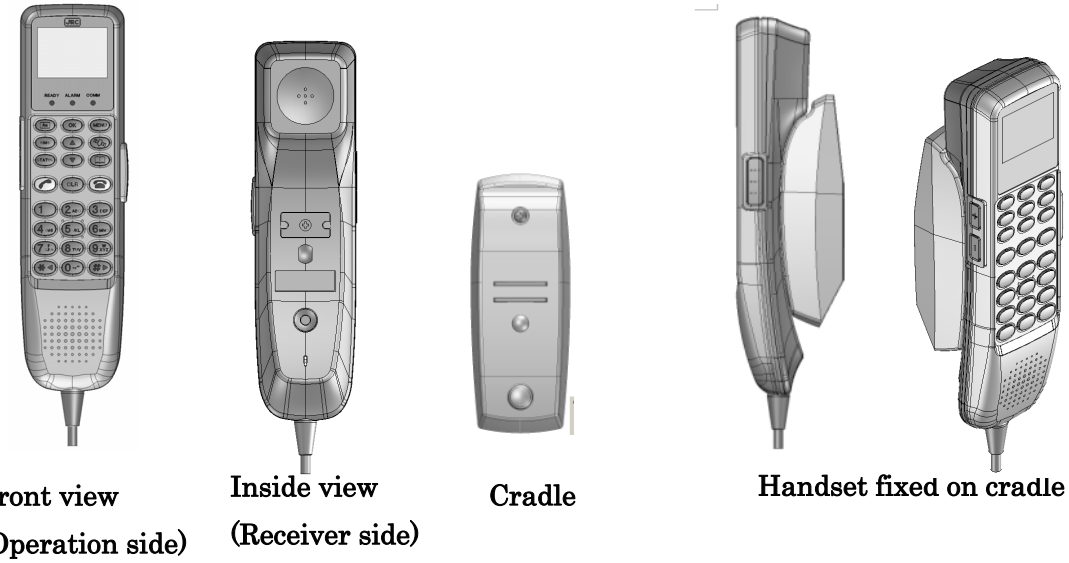


Fig 3.4a Handset and cradle

Handset operation side consists of three sections:

3.4.1. LCD / LED section

LCD screen displays JUE-501/JUE-251 user information.

LEDs indicate communication/apparatus status.

3.4.2. Functional button section

Buttons in this section control basic functions of the JUE-501/JUE-251.

3.4. 3. Alpha-Numeric button section

Numeric mode is used to enter number sequences like phone numbers. Alpha mode is used to enter letters.

These two modes are switched by pressing Aa button of the Function section.

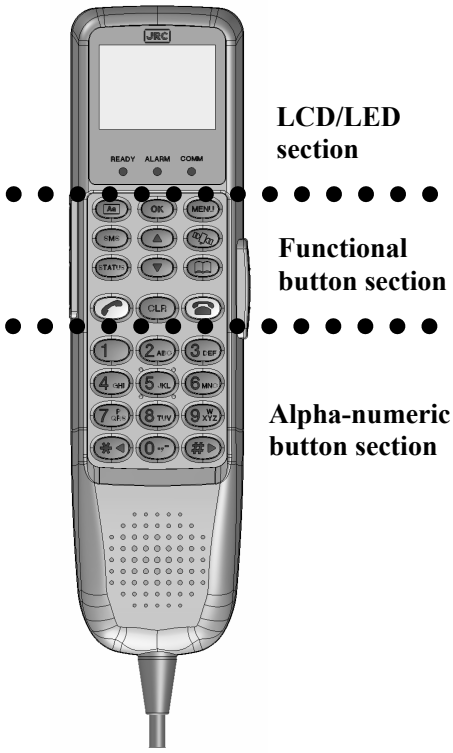


Fig. 3.4b Section of Handset

3.4.1 LCD/LED section

Functions of the LCD screens of the Handset.

Common items for all screens are:

1 [Operational button] Displays operatable keys: ▲▼ , ◀ or ▶

2 [Enter mode] Displays which key enter mode is accepted, Aa (alphabet mode), or nothing (numeric mode) is displayed. (Only in SMS editing mode, aA is displayed)

Displays every status: , expect for Enter mode

3 [Each status] Displays every status : , , , , , or

4 [Condition of reception] Displays style icon

5 [Connecting IP service] Displays style icon

6 [Selected satellite] Displays E143.5 etc.

7 [Current time] Displays UTC/LT, or communicating time.

8 [Status of equipment] Displays CS PS READY, COMM (OUT), etc.

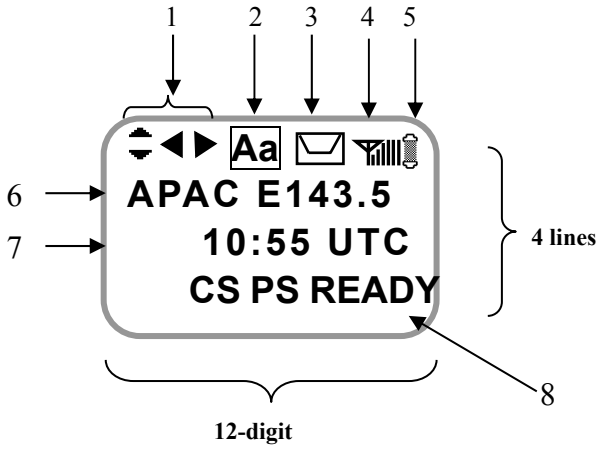
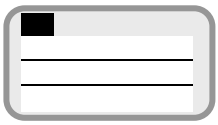
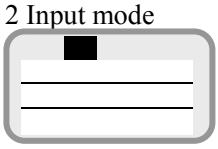
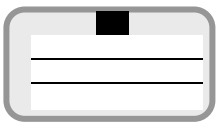


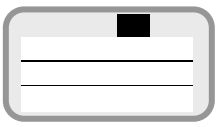
Fig. 3.4.1a Explanation of LCD section

Fig. 3.4.1b LCD section

Table 3.4.1 Explanation of items displayed on screens

Displayed items	Contents
1 Operational button 	Displays when the scrolling-up/down or switching-left/right is available. Scroll the screen when up/down is displayed, with ▲ ▼ buttons. Switch the screen when left/right ◀ ▶ is displayed, with *◀ #▶ buttons.
2 Input mode 	1) Displays Aa or aA mark when alphabet input mode. 2) Displays when FAX is out of service. 3) Displayes when the incoming call is not answered **These Aa and aA icons are :** • Displaying the terminal is in the alphabet input mode. If these icons are not displayed, numeric input mode only available. (Except in SMS menu, aA is displayed as lower case letter mode and Aa is displayed as upper case letter mode.) **This icon is :** • Displaying FAX is out of service. This icon is displayed when satellite elevation angle (EL) value of JUE-251 is less than 20 degrees.
3 Each status 	1) Displays when Phonebook menu is selecting. 2) Displays when Outgoing Calls List menu is selecting. 3) Displays when Incoming Calls List menu is selecting. 4) Displays when call is on hold. 5) Displays when SMS message is arrived. 6) Displays when the storage volume of SMS message is FULL. **This icon is :** • Displaying the storage volume on SIM card for SMS message is full. To send and receive new message, please delete unnecessary messages. **This icon is :** • Not displayed even new message is received, when another icons (, , , and) are need to be displayed in this area. • Disappeared when Inbox menu (refer to [8.2.2 Inbox menu](p8-15)) is selected and [Inbox list view screen] is once opened, regardless of the newly arrived message is read or not. • Disappeared when Power OFF with displaying it, and ON afterwards. • Kept displaying even the new message is read, when it is executed by an external access such as PC.

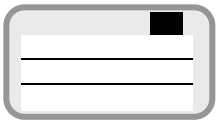
4 Condition of reception



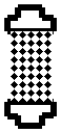
1)Displays a bar graph of signal reception level by seven (7) grades. It blinks when antenna was hidden from satellite by obstructions.

Number of bars	Communication
0	Impossible (no reception)
1	Possible to communicate but unstable
2	Possible to communicate but unstable
3	Possible to communicate stably
4	Possible to communicate stably
5	Possible to communicate stably
6	Possible to communicate stably

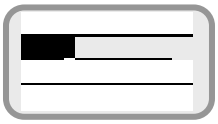
5 Connecting IP service



1)Displays an icon which shows connecting IP service .

Icon style	IP service type
	Standard IP service only.
	Streaming IP service only.
	Both of above IP services.

6 Selected Satellite

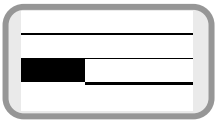


Displays selected satellite /communicating terminals.

- Satellite (Displays when CS communication is not used)

  It displayed in units of 0.1 degree, and in the range of W180.0 to E180.0

7 Current time

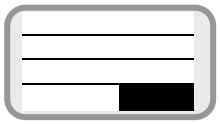


Display is changed between UTC (Universal Time coordinated) and LT (Local Time).

If you set the time difference, the display is switched to LT automatically.

Refer to [7.9.1.2 Local Time setting](p7-38).

8 Status of equipment



Displayed only in SMS menu

The items in this table are arranged in displaying priority.

Displays the status of equipment. Normally, this area displays below contents under waiting communication or under transmitting.

Status of equipment	Displayed txt.	Contents
Normal	nnn/NNN	Displays the used amount (nnn) and total capacity (NNN) of input characters of SMS
Abnormal	ADE?	ADE is abnormal condition
Abnormal	SIM?	SIM is abnormal condition
Normal	SIM LOCK	The available SIM is limited by Facility Lock function (Sec. 6.5.7), and the terminal is locked.
Abnormal	POSITION?	GPS does not receive the radio wave from satellite. It is not always failure. The other factors including blocking can be considered.
Normal	HEADING?	GYRO of Sync/Step requires Heading value
Abnormal	GYRO?	GYRO is abnormal condition.
Normal	COMM (OUT)	Called from the ship.
Normal	COMM (IN)	Called from the land.
Normal	SAT SEARCH	Searching Satellite.
Normal	REGISTERING	It is displayed from the Satellite search is completed and until READY status is started.
Abnormal	SEARCH NG	Satellite search has been failed.
Normal	CS PS READY	Communication is possible. (Circuit switch service and Packet switch service are available)
Normal	*CS PS READY	Communication is possible. (Circuit switch service, Packet switch service and Multi-Voice service are available)
Normal	CS READY	Communication is possible. (Circuit switch service only available)
Normal	PS READY	Communication is possible. (Packet switch service only available)
Normal	NOT READY	Communication is impossible.

Lighting of LEDs

Ready lamp: displays communication status (available/non-available)

Green light: All communication services are available.

Blinking Green: No service is available (starting system, calibrating cable, searching satellite or registering SIM).

Orange light: Registration failure or SIM card is not inserted.

Blinking Orange:

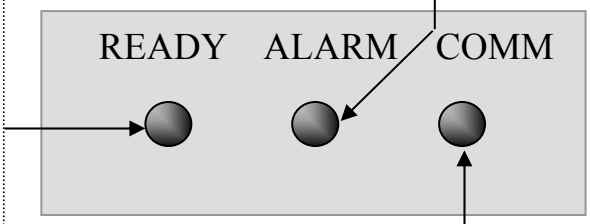
- Starting system with initialization.
- After power switch is turned off, until the power is run out completely.

(**No light:** power switch is OFF)

ALARM lamp: indicates failure alert

Red light: Failure has occurred in the system.

(**No light:** The status is normal)



COMM lamp: indicates communication starting.

Green light: In CS service communication

(**No light:** In PS service communication, or no CS service communication is on the way now.)

Fig. 3.4.1c Indication of LEDs

LEDs on the Handset are lit in the same way as the main unit, except just after the startup.

3.4.2 Functional button section

This section describes function buttons except those for entering characters.

Fig. 3.4.2 Functional button section

Buttons and its function

Aa Switching button Switches enter mode, between alphabets and numbers.

SMS SMS button Reads, creates, sends, and deletes Short Message Service（SMS).

STATUS Status button Makes direct access to STATUS menu.

OK OK button Registers entered contents.

▲ Scroll up button
Scrolls up the screen / makes direct access to Outgoing Calls List menu.

▼ Scroll down button
Scrolls down the screen/makes direct access to Incomming Calls List menu.

MENU Menu button Makes direct access to TOP Menu.

Satellite button Makes direct access to Satellite menu.

Phonebook button Makes direct access to Phonebook menu.

Off Hook(Call starting)button Makes a call and receives a call.

CLR Clear button Clears (cancels) the entry immediately before.

On Hook(Call finishing)button Hangs up the call.

3.4.3 Alpha-numeric button section

Buttons and usage

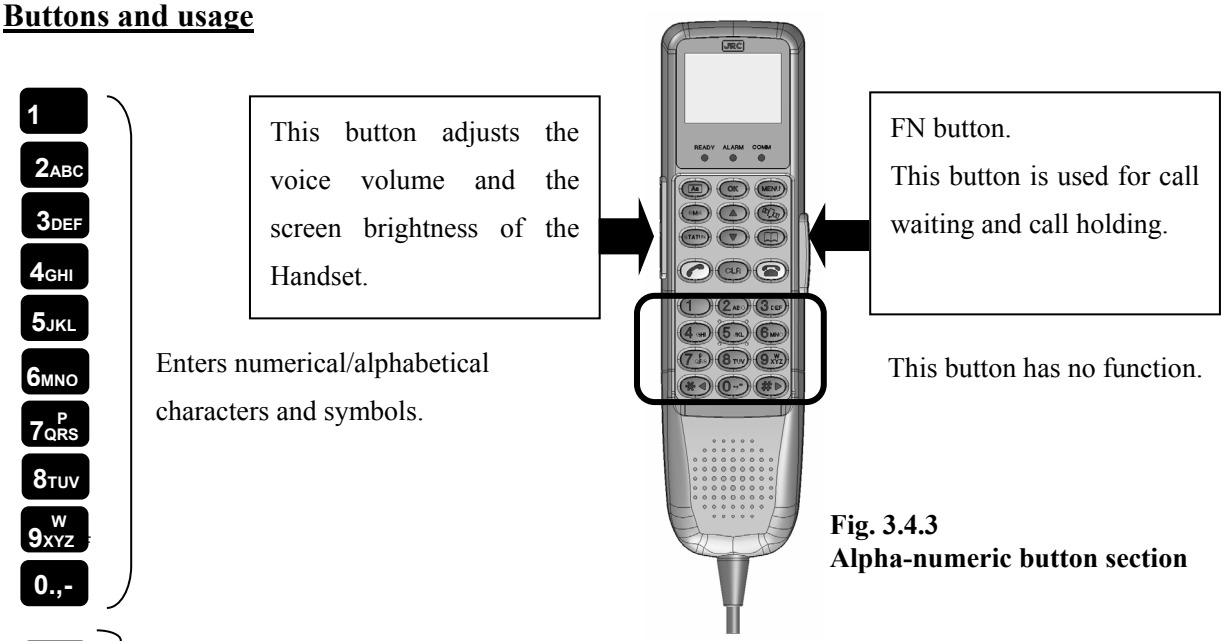
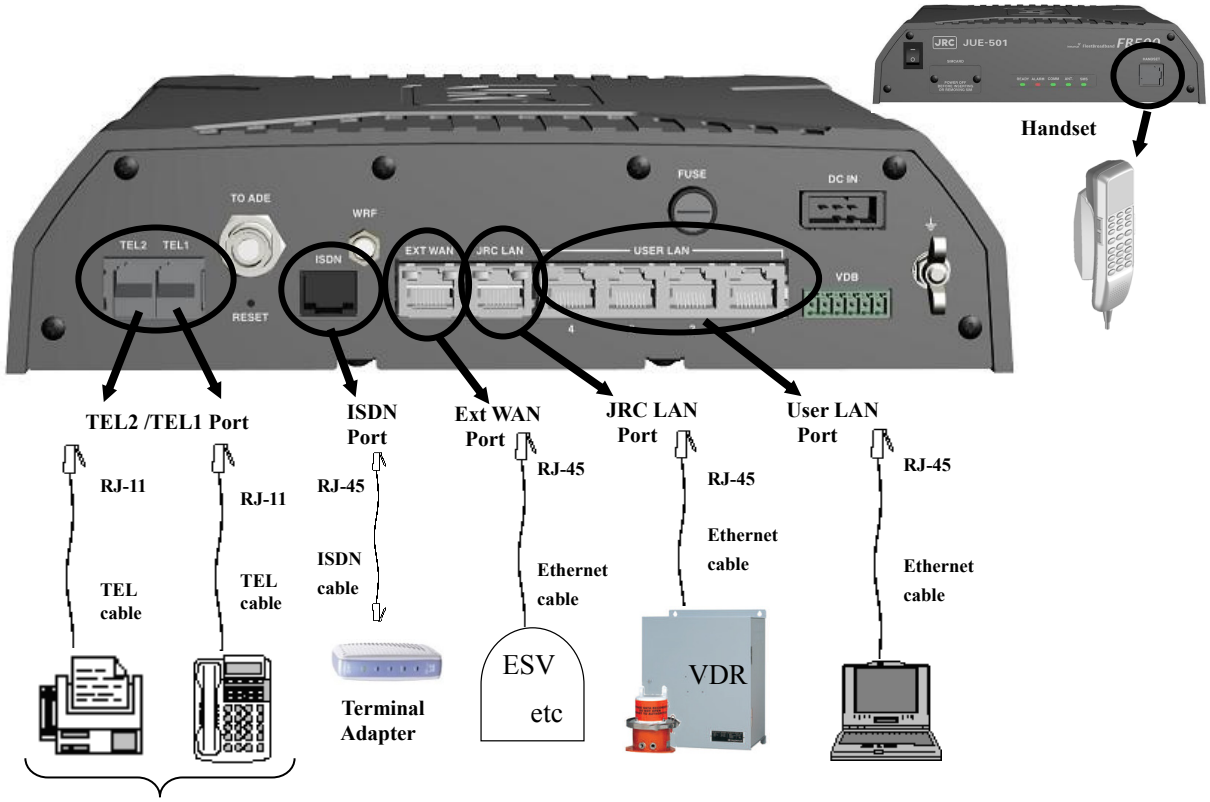


Fig. 3.4.3
Alpha-numeric button section

3.5 Communication terminals

3.5.1 Terminal requirements

＊Series connection (of terminal telephone and FAX) is not available on one port.



NOTE

Service type of TEL1/2 port must be set properly according to the connected terminal (telephone or FAX).

(Refer to p4-12 for Service type modification).

NOTE

JUE-501/JUE-251 recognizes the type of Ethernet cable (cross or straight) automatically.

A maximum of total 32W PoE (Power over Ethernet) is available on User LAN.

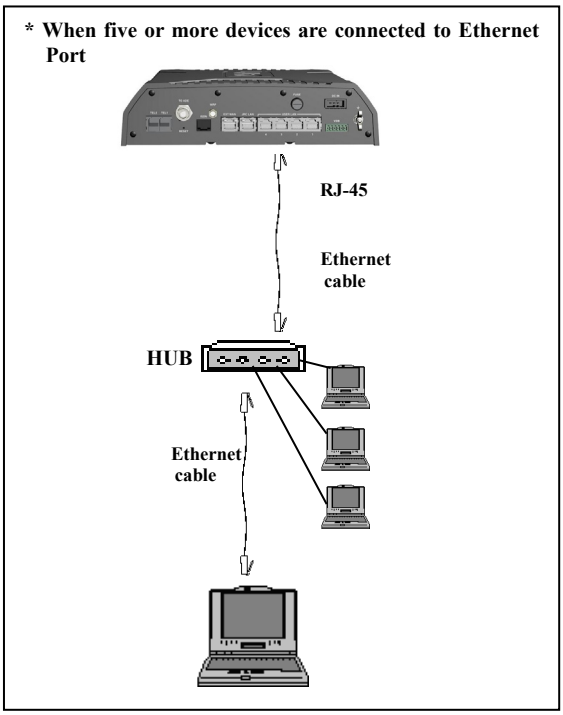


Fig. 3.5.1 Terminal requirements

3.5.2 Usage environment

Table 3.5.2 Usage environment

PC	OS	Microsoft Windows XP/ Vista/ 7
	Interface	Ethernet
ISDN Terminal Equipment	Switch type	Euro ISDN, INS
	Coding type of voice	A-law, μ -law
	Interface	RJ-45 (S/T interface)

3.6 Handset menu

On the JUE-501/JUE-251, various menu screens can be displayed and set, from Handset.

Guest User [*1)]cannot utilize the menus of Admin User[*2)].

[*1)] Guest User: General user
[*2)] Admin User：User who is authorized to make settings of the JUE-501/JUE-251.

Handset menu

For more detail, refer to [7. Handset Menu System](p7-1).

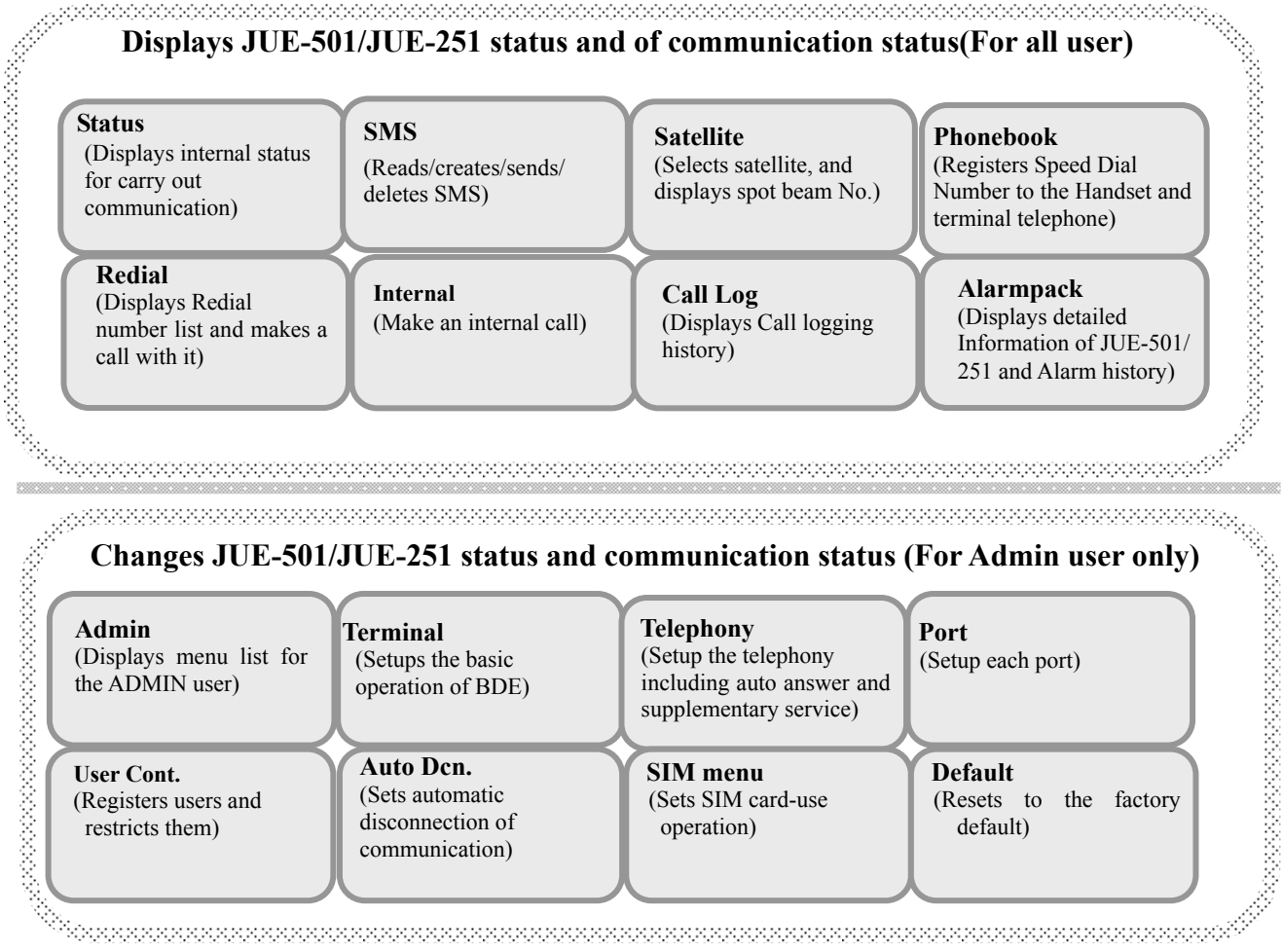


Fig. 3.6 Handset menus (Classified by user authority)

4. Getting started

In Section 4.1, connecting the Handset and terminal devices to Main unit, and installing SIM card are described; and initial setting for communication is described in Section 4.2.

NOTE

JUE-501/JUE-251 has two types of satellite tracking mode, **Signal tracking mode** and **Gyro tracking mode**.

Press MENU+3 button (Satellite menu) on the Handset. [3.Heading] is displayed when the JUE-501/JUE-251 is set as Gyro tracking mode.

You can use **Web browser** or **LaunchPad** for the Packet switching service (Standard/Streaming IP communication).

About Web browser

JUE-501/JUE-251 is accessible by Web browser on your PC. Functional adjustment of JUE-501/JUE-251 as well as fundamental services like displaying the status/setting of JUE-501/JUE-251, connecting/disconnecting Standard/Streaming IP service, and sending/receiving SMS can be made by Web browser.

NOTE

- Refer to [Chapter 6 Web Menu System](p6-1) of this manual to control BDE by Web browser.
- JUE-501/JUE-251 supports Microsoft Internet Explorer 7, Mozilla Firefox 3.6 and their later version.

About the LaunchPad

LaunchPad is the application software manufactured by Inmarsat for handling Mobile Earth Station (MES). Fundamental services are also available by using LaunchPad.

NOTE

- Refer to [Appendix K] and [Appendix L] of this manual to install and to use the LaunchPad.
- LaunchPad version 5.0.4 or later supports the Windows XP/Vista/7 32bit.

About the TCP accelerator （TCP PEP）

TCP accelerator (TCP PEP) is PC application software which improves the performance of TCP applications (transfer rate) over FleetBroadband network.

Install TCP accelerator (TCP PEP) to your PC using attached CD-ROM if necessary.

NOTE

- If using TCP accelerator is not made by Inmarsat, or depending on the type of application, transfer rate may not be improved.
- The TCP accelerator version2 or later supports the Windows XP/Vista/7 32bit and Windows 7 64bit.

4.1 Connecting terminals and power on

4.1.1 Connecting terminals with cables

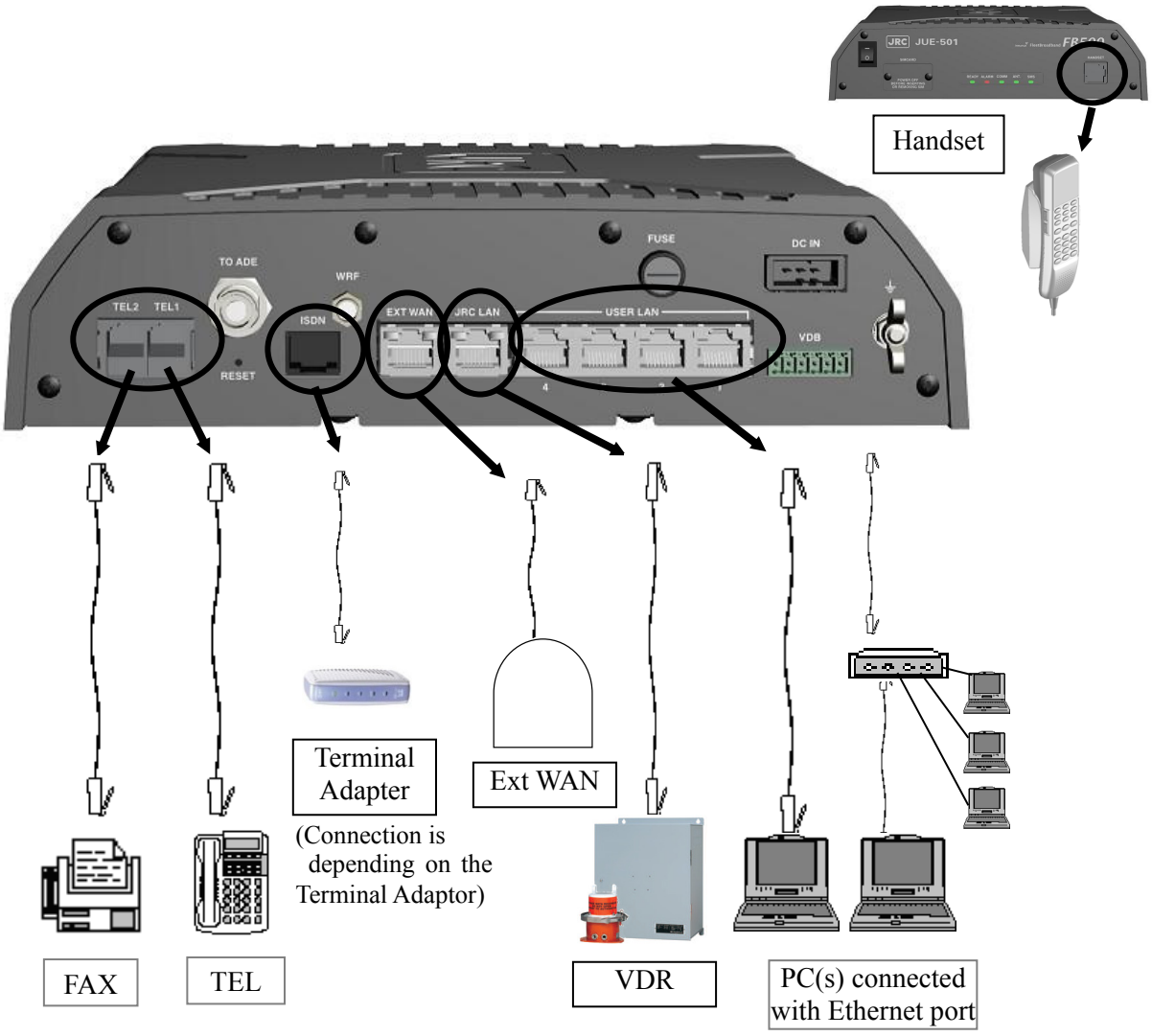


Fig.4.1.1 The Cable connection of each terminal

NOTE

- The JUE-501/251 recognizes Ethernet cable type (cross or straight) automatically.
- Service type of TEL1/2 port must be set properly according to the connected terminal (telephone or FAX). (Refer to p4-12 for Service type modification).
- A maximum of total 32W PoE (Power over Ethernet) is available on User LAN.

Connecting terminal telephone and FAX to TEL1/2port

Connect terminal telephone/FAX to TEL1 and TEL2 port with 2 wire, 6-PIN modular cable (RJ-11 type).

Connecting Handset to Handset port

Connect adapter of Handset to Handset port.(12-PIN modular cable)

Connecting PC to User LAN port

Connect your PC to User LAN port with Ethernet cable.

Connecting VDR to JRC LAN port

Connect VDR (produced by JRC) to JRC LAN port with Ethernet cable if needed.

Connecting external WAN to Ext WAN port

Connect external WAN to Ext WAN port with Ethernet cable if needed.

Connecting terminal adapter to ISDN port

Connect terminal adapter to ISDN port with ISDN cable.

(Subsequent connection depends on the type of terminal adapter)

4.1.2 Setting/removing SIM card

Please make sure that SIM card is inserted correctly before turning on the power every time.

NOTE

- JUE-501/JUE-251 will not work without a **valid SIM** card, which is furnished from the Distribution Partner.
- Make sure that power switch is correctly turned off, before you set/remove the SIM card to/from main unit.

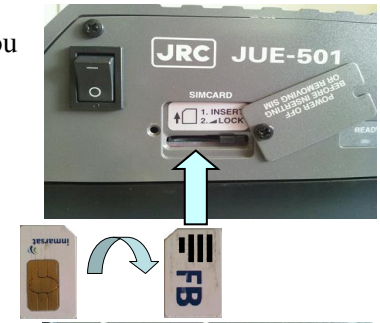
⚠ CAUTION

Do not set/remove the SIM card during power switch is turned on.

SIM card setting procedure (Before power switch is turned on)

1) Remove the SIM card protector by unscrewing cross-head screws on front panel.

2) Insert your SIM card with the metal side down. Push it in until you hear the SIM card slot make a click sound.



3) Fasten the SIM card by sliding the black knob.

4) Restore the SIM card protector by driving the screws in.

SIM card removing procedure (After power is turned off)

1) Remove the SIM card protector by unscrewing cross-head screws on front panel.
2) Loosen the SIM card by sliding the black knob.
3) Push the SIM card and then it comes out. Remove the SIM card.
4) Restore the SIM card protector by driving the screws in.

4.1.3 Power ON

Before turning on the power, check the following;

- Check the obstacles between antenna and satellite.
- Check that SIM card is correctly set.
- Check that the breaker of inboard power supply is turned on.
- Check that the coaxial cable from ADE is connected to BDE, certainly.
- Check that the Handset is connected to BDE, certainly.

Power ON

Turn the "POWER" switch of the main unit to "ON".

The READY LED on the front panel will light up in green and start blinking. After a while, the ANTENNA lamp will start blinking and then both lamps will stop blinking and light green.

Although there is nothing wrong with JUE-501/JUE-251, turning on the switch makes some noise on ADE.

Power OFF

Turn the "POWER" switch to "OFF".

Then, the READY lamp begins blinking in orange color, while the power source disconnecting process is carried out. After, the power source disconnecting process is completed, the power supply is turned off.

⚠ CAUTION
Do not remove the power supply cable before the power source disconnecting process is completed.

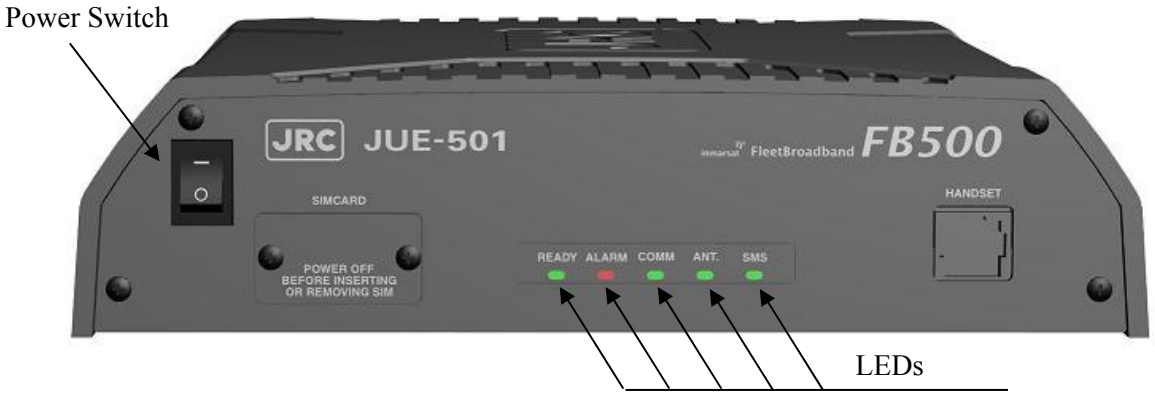


Fig.4.1.3a Power switch and LEDs of Main unit

Satellite Search (acquisition) function works automatically

When JUE-501/JUE-251 is turned on, the system automatically calculates the satellite position by measuring ship's position by GPS (built-in), and then automatically turns the antenna towards the satellite.

After acquiring the satellite, the JUE-501/JUE-251 automatically controls the antenna angle to maximize receiving signal strength.

LCD screen of Handset displays “CS PS READY” when communication is available.

NOTE
If the communication fails although LCD screen shows [CS PS READY], low level of receiving signal strength is suspected. Try the communication again after a while.

Initialization of the unit may take more than 5 minutes to complete. During this time, "CS PS READY" may not be displayed on the screen. It is not abnormal status (the JUE-501/JUE-251 is executing the initialization, satellite search, and registering to the network).

NOTE
Please confirm that the GPS you are using reports proper position. (Refer to [7.1.3 Position status display],p7-6). Contact the purchasing dealer, JRC agent or one of the JRC branches with confirming above matter, when the satellite search function does not work.

”SEARCH NG” is displayed in status column of Handset screen, when automatic satellite search function is failed. In this case, carry out satellite acquisition again manually after checking that there is no obstacle between the antenna and the satellite (refer to [4.2.3. Setting satellite search]) (p4-14). If satellite search was not executed manually, JUE-501/JUE-251 will restart satellite search automatically after 10 minutes.

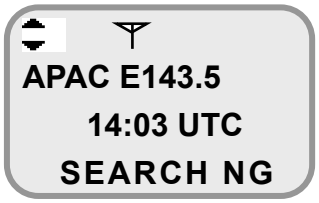


Fig. 4.1.3b SEARCH NG status of Idle screen

4.1.4 Screen display of Handset

Turn on JUE-501/JUE-251 by pushing power switch off Main unit.
If Gyro is being selected for tracking, refer to Appendix C.3.

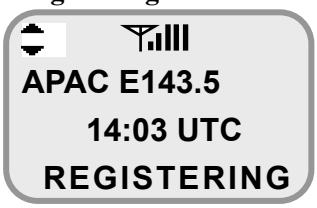
Initializing

A LED of Main unit starts blinking.
About 90 seconds later, initializing is started and blinking [Initialize] text is displayed.
It takes about 1 minute until satellite searching is started.

Satellite searching

[SAT SEARCH] text is displayed on the lowest, [Status] line. Satellite search is started.

Registering to network



Satellite search is terminated and then [REGISTERING] text is displayed.
Registering to Inmarsat network is started.

Communication available status

Registering is terminated and [CS PS READY] text is displayed.
Various services are available.

* Antenna bars display communication status

0 : Impossible to communicate (no reception)

1 to 2:Possible to communicate but unstable

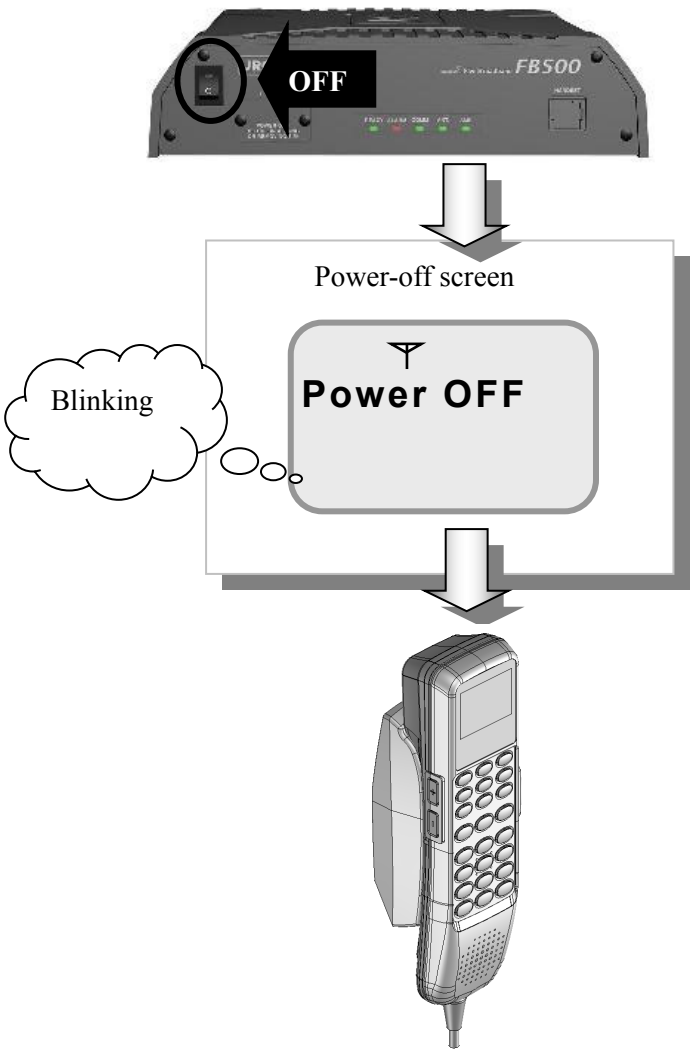
3 to 6: Possible to stable communicate

[READY] lamp lit.
(Refer to [3.4.1. LCD/LED section] (p3-11).

Go to chapter 4.2 for initial setting.

Fig.4.1.4a Screen transition when Power switch is turned on

(Screen transition when power switch is turned off)



Turn off the power switch.

Quitting operation is on the way in the JUE-501/JUE-251. Characters on the screen blink.

Screen and all LEDs are turned off.
Operation is completed.

Fig.4.1.4b Screen transition when Power switch is turned off

NOTE

Carry out available countermeasure referring to [7.10.Other screen: TX alarm screen] (p7-77), when JUE-501/JUE-251 displays the below screen during communication.

These screens indicate a failure has occurred on the communication system of the JUE-501/JUE-251.

T

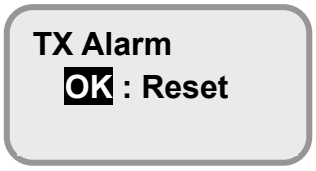


Fig. 4.1.4c TX alarm screen

4.2 Initial setting for communication

Setting flow

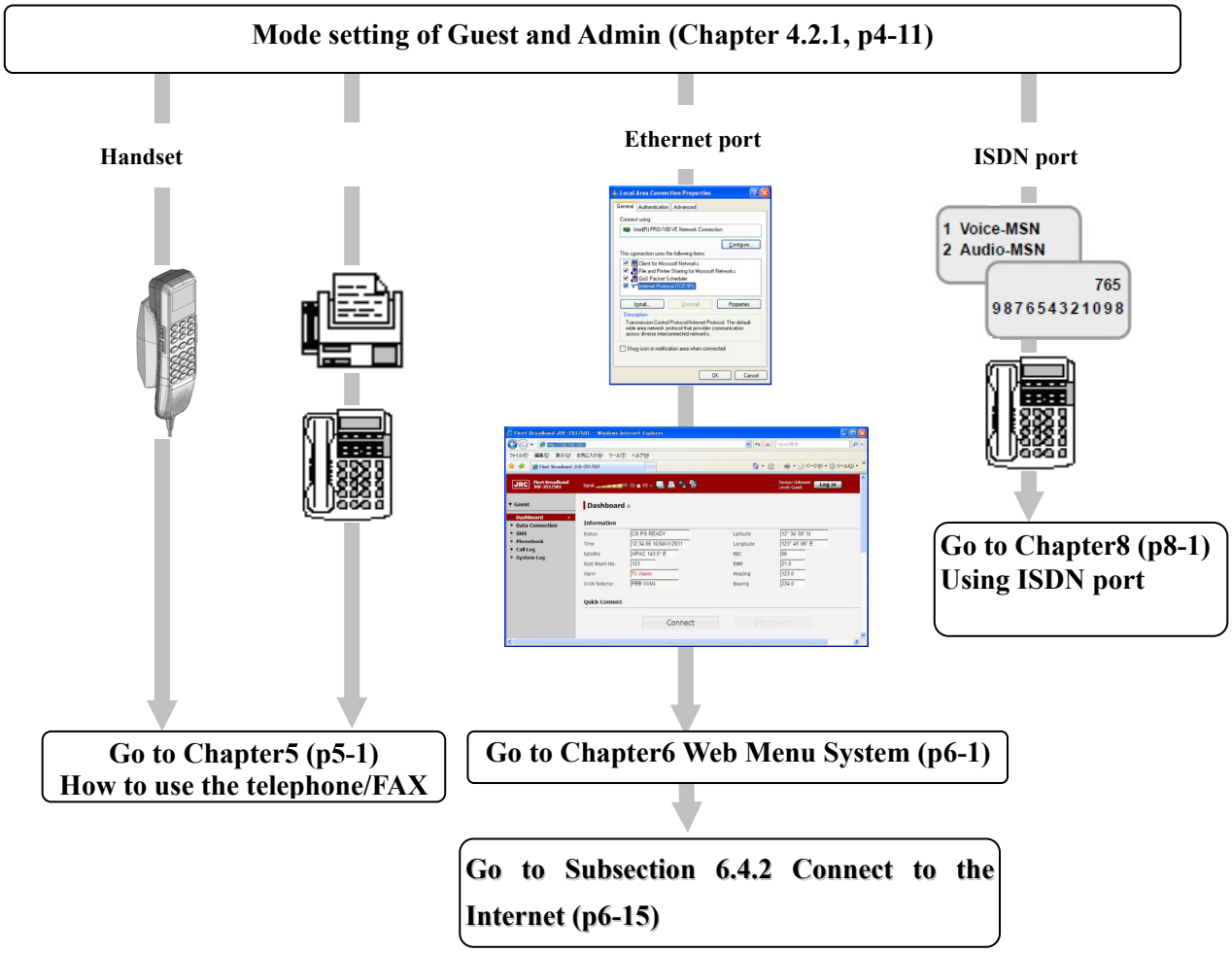


Fig. 4.2a Setting flow

NOTE

Following screen pops-up for a moment and returns to previous action/screen when wrong operation/entering is carried out from Handset.

Fig. 4.2b Setting error screen

4.2.1 Mode setting of Guest and Admin

Guest user can perform the daily operation of the JUE-501/JUE-251.
Admin user can access additional functions like setup of the JUE-501/JUE-251 and information control.

When power switch is pressed only, the user logs in as a Guest user.

To operate the Admin user-limited menu described [5.1.5 Adjusting Handset], [6.5 Menus for Admin Users (Web)] or [7.9Admin menu (Handset)] of this Manual, Log-in with secret code of Admin user is required.

NOTE

Initial secret code of Admin is "0001".

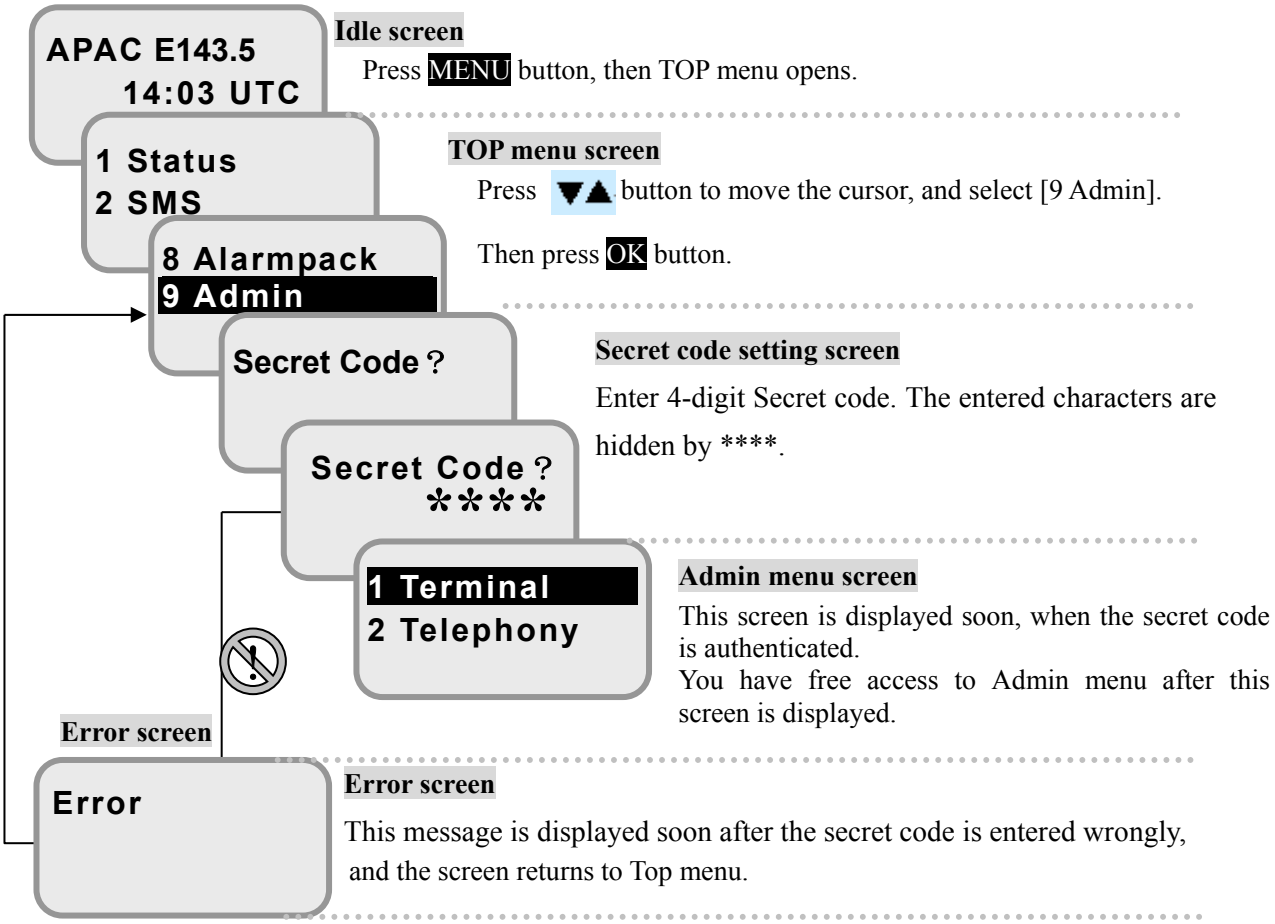


Fig. 4.2.1 Mode setting of Guest/Admin user

NOTE

* Return to Idle screen by pressing CLR button several times or pressing (On-hook) button once to quit Admin user mode.

4.2.2 Setting outgoing service type

In this section, setting the outgoing service types for TEL ports and ISDN port is explained.
The service type set here is used as the default for making a call on the port. Select the outgoing service type for each port by following the terminal device (telephone or FAX) being connected to each port.

Open [9 Admin] menu by the sequence of [4.2.1] screen. Select [2 Telephony] menu, then [Telephony menu] screen will open. Select [1 Telephony], and open [Telephony setting item selection] screen. Select the port you want to set from [TEL1] ~ [TEL6] or [ISDN] and open [TEL menu] (or [ISDN menu]) screen. Then, select [3 Out Type] and choose outgoing service type from [Voice], [Fax] and [Audio]. Press **OK** button and the screen returns to [TEL menu] (or [ISDN menu]) screen. The contents of each service type are explained below.

Voice	4kbps Voice service (for telephone).
Fax	64kbps 3.1kHz Audio service for Fax. (Internal call is unavailable.)
Audio	64kbps 3.1kHz Audio service for high quality phone. (Internal call is available.)

Regardless of setting here, Voice call can be made by adding * on the head of dialing sequence, and Fax/Audio call can be made by add ** on the head of dialing sequence. Refer to [5.2.1 Dial-up procedure for forced setting of service type](p5-30).

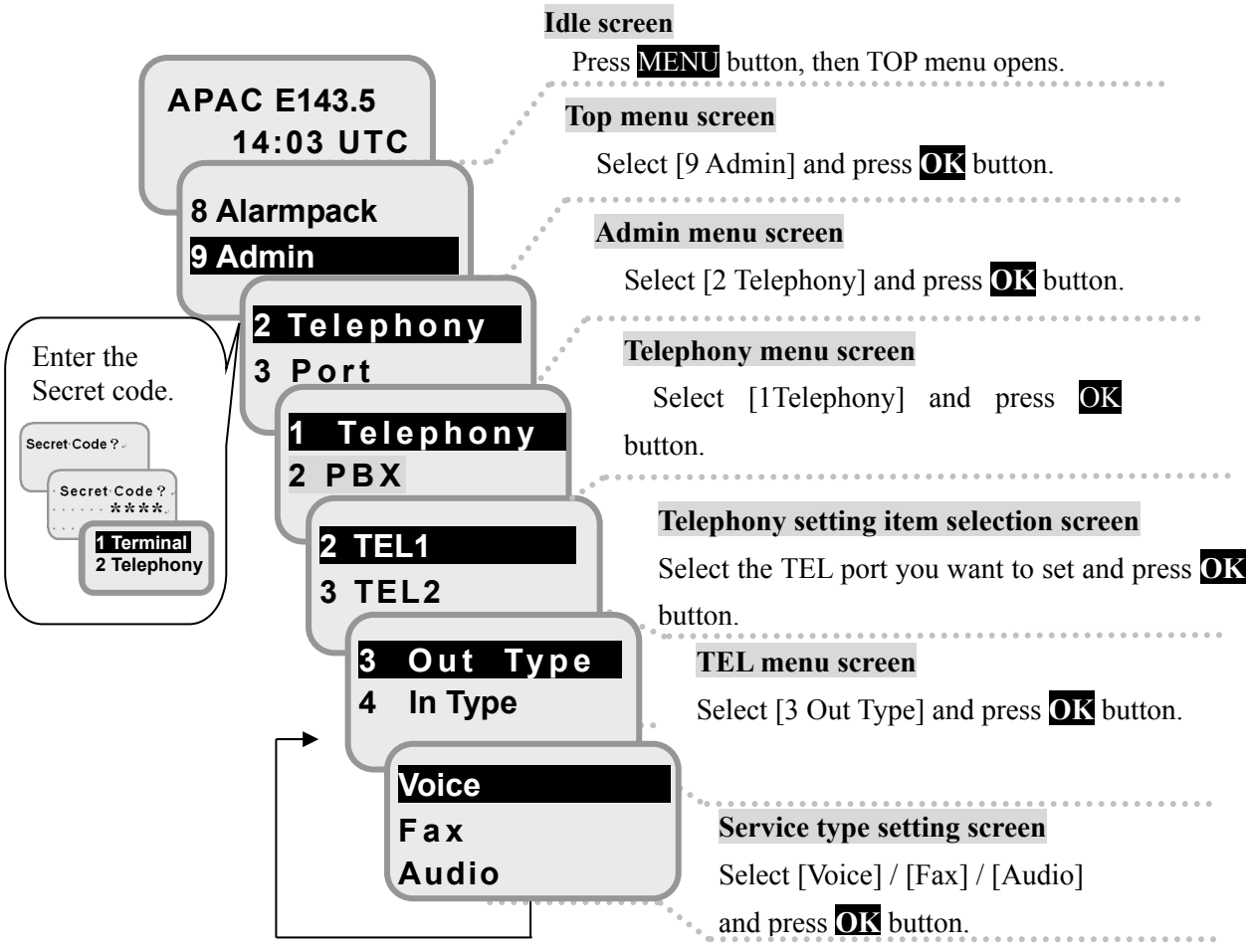


Fig.4.2.2 Setting service type menu

4.2.3 Setting incoming service type

In this section, setting the incoming service types for TEL ports and ISDN port is explained.
The service type set here is used for ring indication of receiving calls on the port. Select the incoming service type for each port by following the terminal device (telephone or FAX) being connected to each port.

Open [9 Admin] menu by the sequence of [4.2.1] screen. Select [2 Telephony] menu, then [Telephony menu] screen will open. Select [1 Telephony], and open [Telephony setting item selection] screen. Select the port you want to set from [TEL1] ~ [TEL6] or [ISDN] and open [TEL menu] (or [ISDN menu]) screen. Then, select [4In Type] and choose incoming service type from [Voice], [Fax], [Audio], [Voice/Fax] and [Voice/Audio]. Press **OK** button and the screen returns to [TEL menu] (or [ISDN menu]) screen. The contents of each service type are explained below (same with those of outgoing).

Voice	4kbps Voice service (for telephone).
Fax	64kbps 3.1kHz Audio service for Fax. (Internal call is unavailable.)
Audio	64kbps 3.1kHz Audio service for high quality phone. (Internal call is available.)
Voice/Fax	Both of 4kbps Voice service and 64kbps 3.1kHz Audio service for Fax.
Voice/Audio	Both of 4kbps Voice service and 64kbps 3.1kHz Audio service for high quality phone.

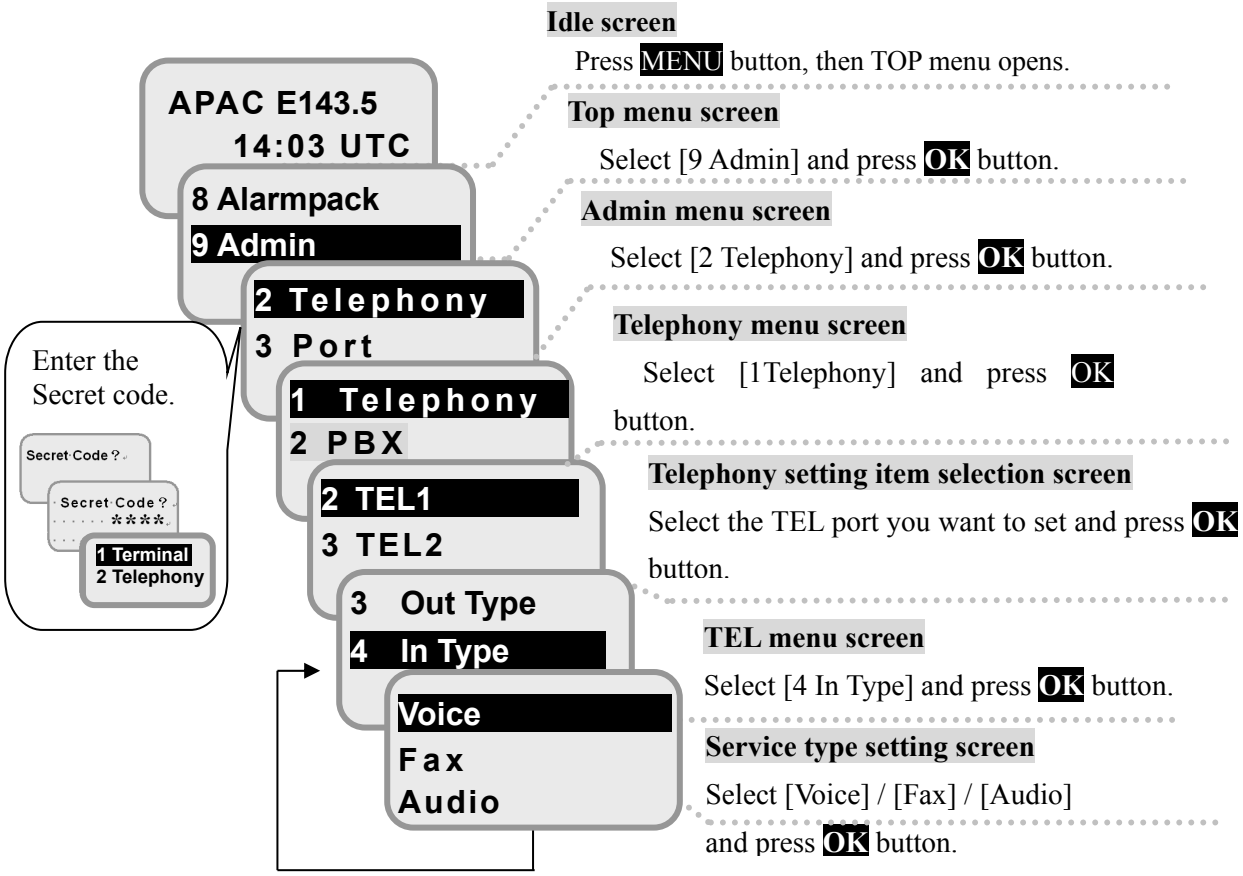


Fig.4.2.2 Setting service type menu

4.2.4 Setting satellite search

In this section, setting of Satellite search is explained. Select [3 Satellite] from [Top menu], and select [1 Satellite] from displayed [Satellite] menu screen.

Current setting is displayed with * mark on its line head. To change it, move the cursor by ▼▲ buttons, and press OK button (by selecting [Auto], suitable satellite is automatically chosen).

JUE-501/JUE-251 automatically acquires the satellite which is suitable for communication from the ship and which has high-elevation. However, the acquisition may fail because of a blocking due to affection of an antenna and a blockage. In this case, Handset shows “SEARCH NG” at the lowest line of the Handset screen or the antenna icon starts blinking at the top line. Select available satellite which is able to communicate and is not blocked.

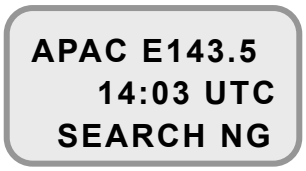


Fig. 4.2.3b SEARCH NG status of Idle screen

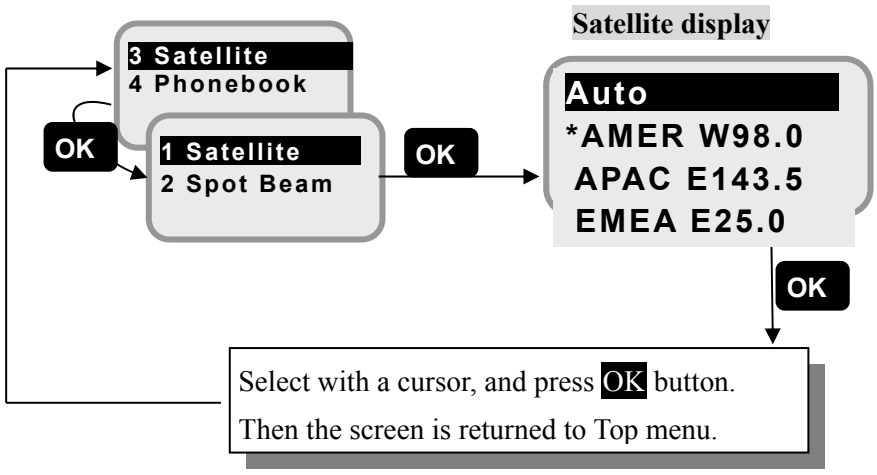


Fig. 4.2.3a Flow of Satellite selection

* Although there is nothing wrong with JUE-501/JUE-251, selecting satellite makes some noise on ADE.

* Handset will display the suitable satellites from the operating satellites.

AMER W98.0	(Americas satellite)
APAC E143.5	(APAC satellite)
EMEA E25.0	(EMEA satellite)

5. How to use the Telephone / FAX

In chapter 5.1(p5-6), the telephone functions with Handset listed below are explained.
(The capped number of each function is the chapter No.)

In chapter 5.2(p5-30), functions of TEL/FAX using the TEL ports are explained.
(The capped number of each function is the chapter No.)

Dial-up procedure of the JUE-501/JUE-251

The telephone number dialed last is memorized in main unit. Redialing of telephone is simple. Refer to the procedure below.

Table 5a. Dial-up procedure of the JUE-501/JUE-251

Dial-up procedure of the JUE-501/JUE-251 (from terminal telephone/Handset)

■ Regular calling **00** **Country Code** **Area Code** **Subscriber's number** #

Example) Placing a call to +81-422-45-9xxx, in Japan→**0081422459xxx** #

■ Speed Dialing **Speed Dialing number (2 digits or 3 digits)** * #

Example) Calling by a Speed Dial number 005 →**05** * #
Calling by a Speed Dial number 083 →**83** * #
Calling by a Speed Dial number 128 →**128** * #

■ Redial calling **00** * # (Last dialed number stored in each port is redialed)

■ Secret Code calling

Secret Code **00** **Country Code** **Area Code** **Subscriber's number** #

Example) Placing a call with secret code **4321,** to +81-422-45-9xxx in Japan. → **4321**0081422459xxx #

Dial-up procedure for forced setting of service type

Just adding * or * * on the head of dialing sequence, user can easily set the service type (Voice or FAX) to each port, regardless of setup made at [6.5.2.1 Set up Port (p6-37)].
This is temporary setting, and available only for the transmission.
Only Voice service can be available on the Handset.

Table 5b. Dial-up procedure of the JUE-501/JUE-251, for forced setting of each service type

Using Voice service (4kbps Voice) temporarily

- Regular calling * 00 **Country Code** **Area Code** **Subscriber's number** #
- Speed Dialing * **Speed Dialing number** * #
- Redial calling * 00 * #
- Secret Code calling **Secret Code** * 00 **Country Code** **Area Code** **Subscriber's number** #

Using FAX service (3.1kHz FAX) temporarily

- Regular calling * * 00 **Country Code** **Area Code** **Subscriber's number** #
- Speed Dialing * * **Speed Dialing number** * #
- Redial calling * * 00 * #
- Secret Code calling **Secret Code** * * 00 **Country Code** **Area Code** **Subscriber's number** #

Dial-up procedure for number display and non-display

In this menu, user sets whether notifying or not-notifying their number to the recipient by just adding 1+ * or 2+ * on the head of dialing sequence.

This is a temporary setting, and available only for the transmission.

Table 5c. Dial-up procedure for number display and non-display

Displaying number

- Regular calling: 1 * 00 **Country Code** **Area Code** **Subscriber's number** #
- Speed Dialing: 1 * **Speed Dialing number** * #
- Redial calling: 1 * 00 * #
- Regular calling with forced service type of Voice (4kbps Voice)
  * 1 * 00 **Country Code** **Area Code** **Subscriber's number** #
- Secret Code calling: **Secret Code** 1 * 00 **Country Code** **Area Code** **Subscriber's number** #
- Secret Code calling with forced service type of FAX (3.1kHz FAX)
  Secret Code * * 1 * 00 **Country Code** **Area Code** **Subscriber's number** #

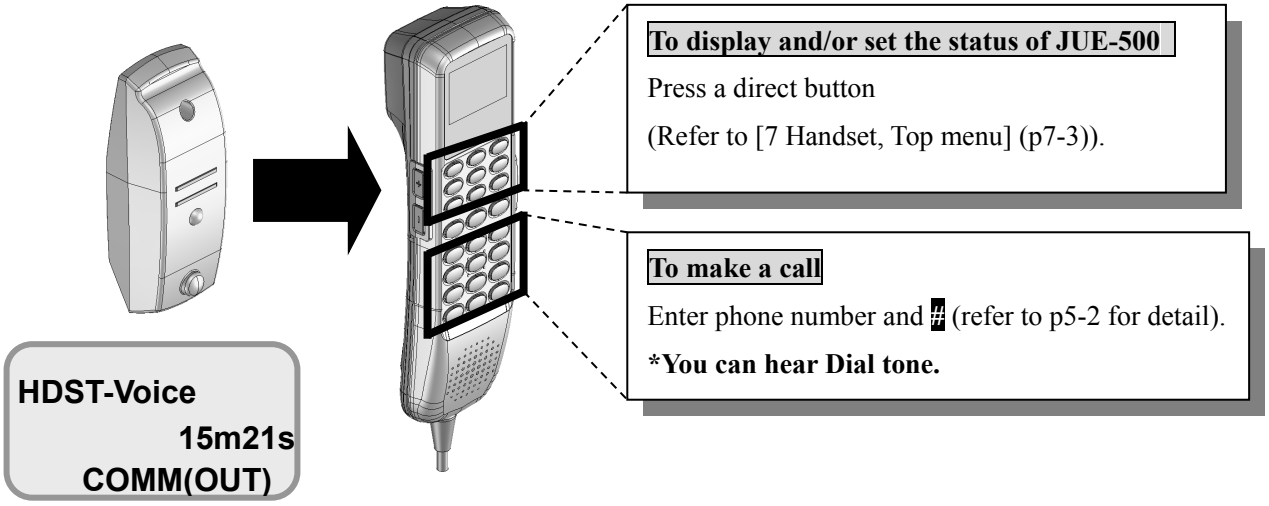
Not displaying number

- Regular calling: 2 * 00 **Country Code** **Area Code** **Subscriber's number** #
- Speed Dialing: 2 * **Speed Dialing number** * #
- Redial calling: 2 * 00 * #
- Regular calling with forced service type of Voice (4kbps Voice)
  * 2 * 00 **Country Code** **Area Code** **Subscriber's number** #
- Secret Code calling: **Secret Code** 2 * 00 **Country Code** **Area Code** **Subscriber's number** #
- Secret Code calling with forced service type of FAX (3.1kHz FAX)
  Secret Code * * 2 * 00 **Country Code** **Area Code** **Subscriber's number** #

Before using Handset

You can operate the JUE-501/JUE-251 with the Handset both on-hooked and off-hooked to the cradle.

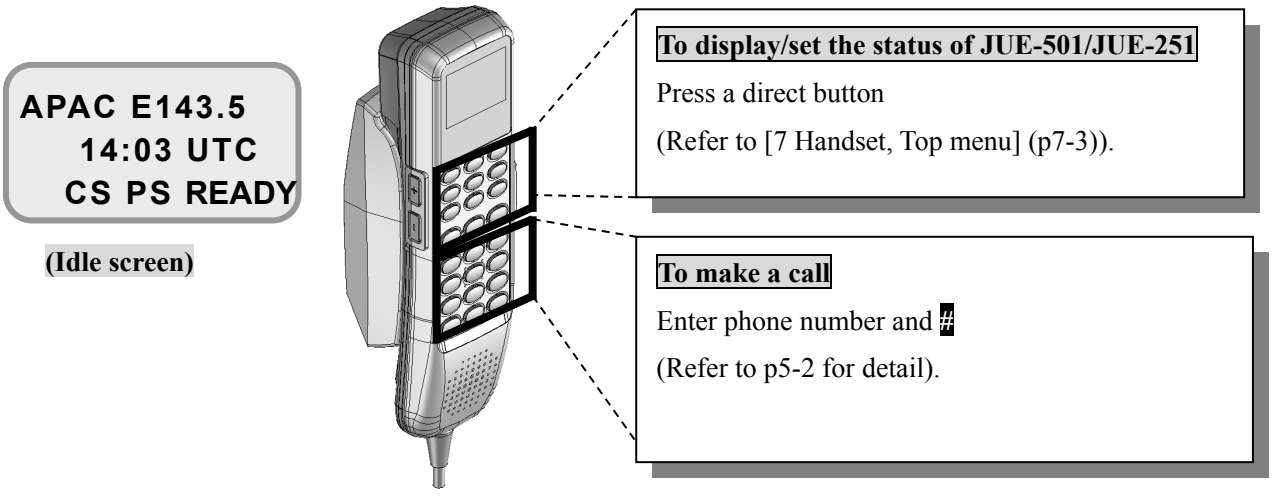
1. Off-hook the Handset from the cradle (Off-hook mode)



(On communication screen of outside line)

Fig. 5a Operation on Off-hook mode

2. On-hook the Handset on the cradle(On-hook mode)



(Idle screen)

Fig. 5b Operation on On-hook mode

In this Chapter, operations based on the On-hook mode are explained.

Making a call on Handset without Secret Code is not available, when the Secret code setting is turned on.

5.1 Handset

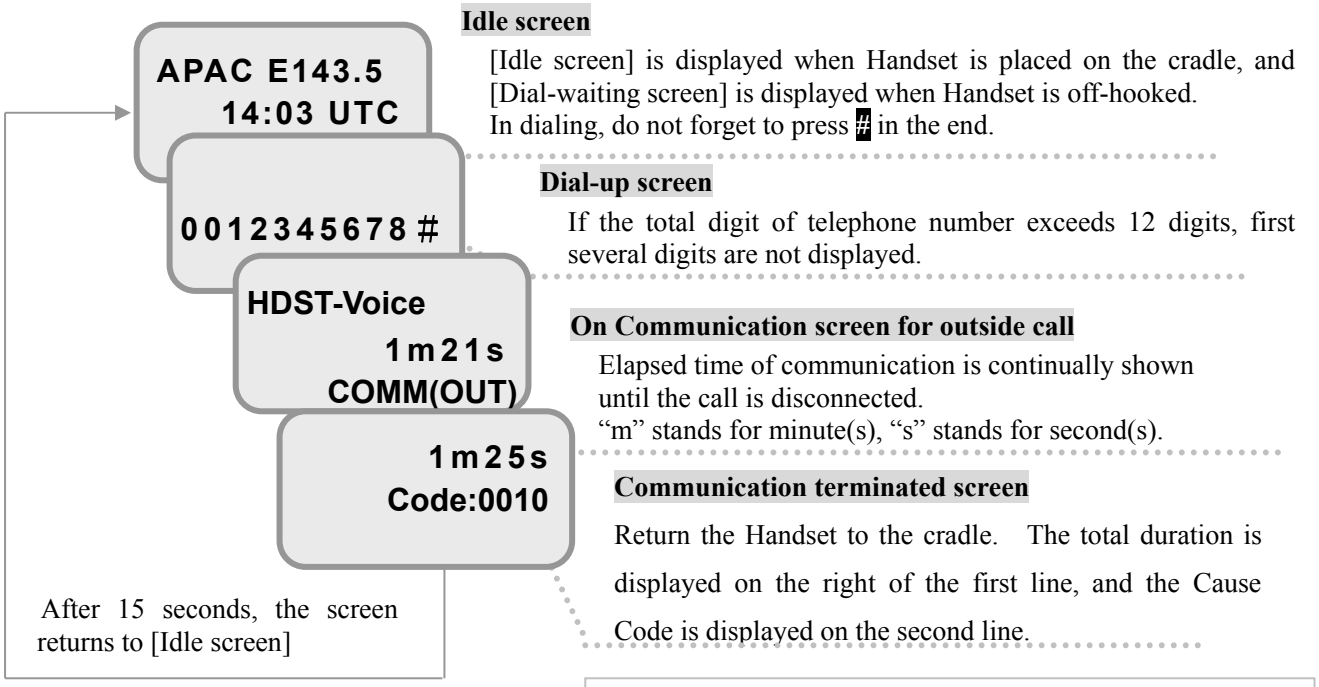
5.1.1 Making/ Answering an outside call

Making an outside call

Hook off the Handset and press the number followed by # button.

When the party answers the call, [On Communication screen for outside call] is displayed. Enjoy your conversation with the party.

Return Handset to the cradle when the telephone call ends. [Disconnection screen] is displayed for 15 seconds with Cause Code and duration of communication. After the call has been completed, the display returns to [Idle screen].



Idle screen

[Idle screen] is displayed when Handset is placed on the cradle, and [Dial-waiting screen] is displayed when Handset is off-hooked.
In dialing, do not forget to press # in the end.

Dial-up screen

If the total digit of telephone number exceeds 12 digits, first several digits are not displayed.

On Communication screen for outside call

Elapsed time of communication is continually shown until the call is disconnected.
"m" stands for minute(s), "s" stands for second(s).

Communication terminated screen

Return the Handset to the cradle. The total duration is displayed on the right of the first line, and the Cause Code is displayed on the second line.

*Cause Code: 4-digit code. Identities the cause of disconnection (refer to [Appendix O Cause Code])

Fig.5.1.1a Flow of making a call

■Dial-up procedure **00 Country Code Area Code Subscriber's Number #**

Example) Placing a call to +81422-45-9xxx in Japan→**0081422459xxx#**

Answering the phone

If the JUE-501/JUE-251 receives a call from outside, ring tone will sound and the screen changes to [Arrival screen for outside call].

Take up the Handset from the cradle, then you can talk with the party. The screen will change to [On communication screen for outside call]. After the disconnection, return the Handset to the cradle.

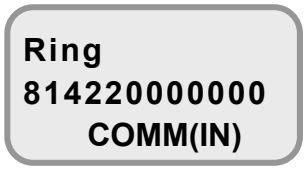


Fig.5.1.1b Arrival screen for outside call

NOTE

Voice of landside might be distorted or interrupted if the JUE-501/JUE-251 is used under a remarkably noisy environment, for example, in a small and high-speed ship.

5.1.2 Using Phonebook (Speed dial)

Register the phone numbers before the Phonebook (Speed dial) is used.
Refer to [5.1.13 Entry, change and deletion of Phonebook](p5-22).

To make a call with Speed dial from Handset

Press 📖 button in Idle screen.

[Phonebook address screen] is displayed.
Scroll the screen with ▼▲ buttons, select the address with the cursor and press OK button.
(It is also available by below mentioned **Quick procedure for Speed dialing**).

Example) Placing a call to Mr. SMITH, who has been registered in Phonebook No.006.

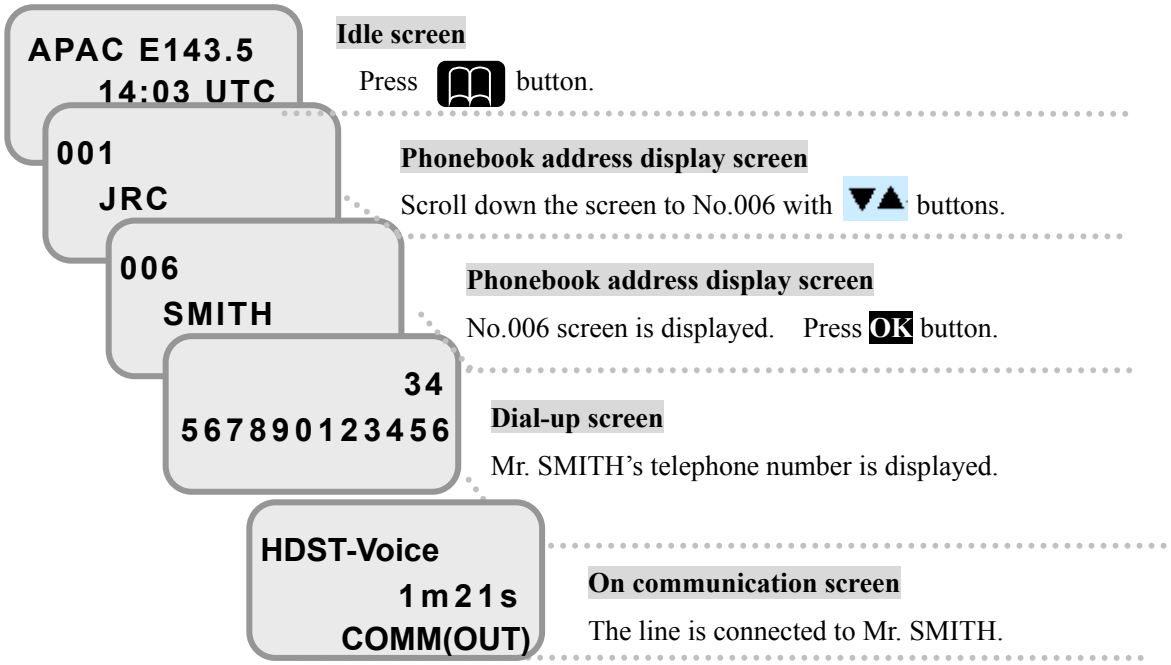


Fig.5.1.2 Flow of using Phonebook (Speed Dial)

Quick procedure for Speed dialing

■ Speed Dialing

Speed Dialing number ✳ #

Example) Placing a call to Speed Dialing No.001→**01** ✳ #

Placing a call to Speed Dialing No.018→**18** ✳ #

Placing a call to Speed Dialing No.113→**113** ✳ #

5.1.3 Using Outgoing/Incoming Calls List menu

Outgoing/Incoming Calls List menu displays the calls number of the last 50 calls.

Outgoing Calls List

Example) To display 0081-422-45-9xxx with the Outgoing Calls List, press ▲ button, and scroll through the screen with ▲▼ buttons. Place a call to the number. by pressing OK button.

Press ▲ buttons with the display on [Idle screen], the screen will change to [Outgoing Calls List screen].

Press ▲▼ buttons until desired dial number is displayed.

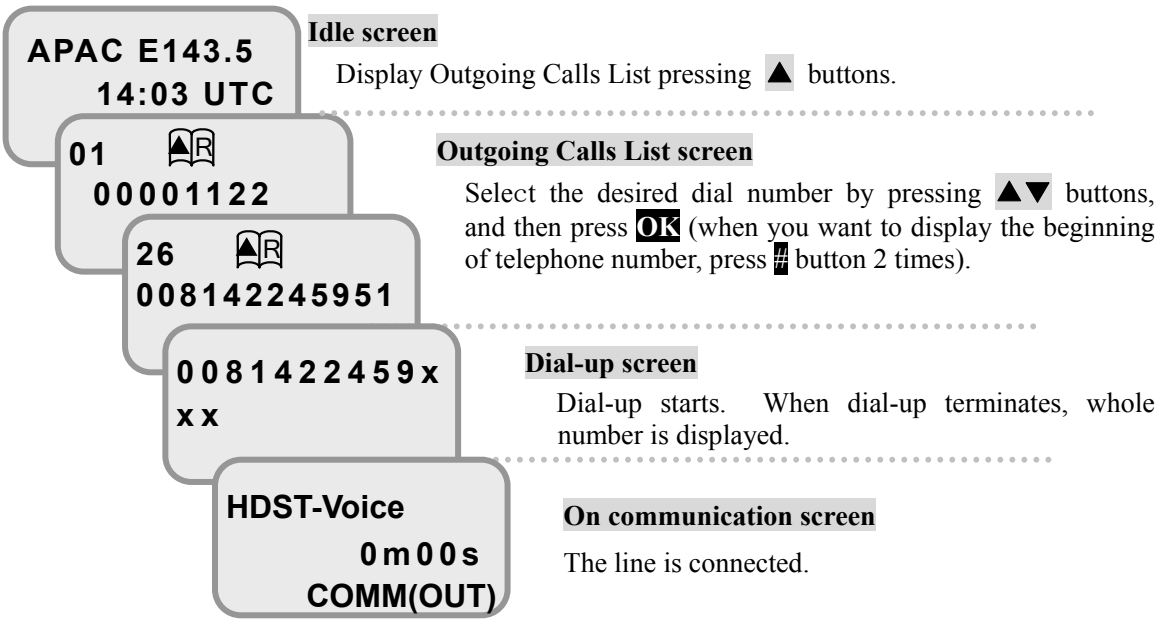


Fig.5.1.3 Flow of using Outgoing Calls List menu

Incoming Calls List

Example) To display 0081-422-45-9xxx with the Incoming Calls List, press ▼ button, and scroll through the screen with ▲▼ buttons. Then place a call to the number by pressing OK button.

Press ▼ button with the display on [Idle screen], the screen will change to [Incoming Calls List screen]. [Incoming Calls List icon] will appear at the upper part of the Handset screen.

Press ▲▼ buttons until desired dial number is displayed. When the call was a missed call, it has * mark at the beginning of the displayed number.

When there were some missed calls [missed call icon] will appear at the upper part of the Handset screen. The icon will continue to be displayed until the Incoming Calls List has been confirmed. (On some screen of input mode, the missed call icon won't be displayed because input mode icon has a priority over the missed call icon.)

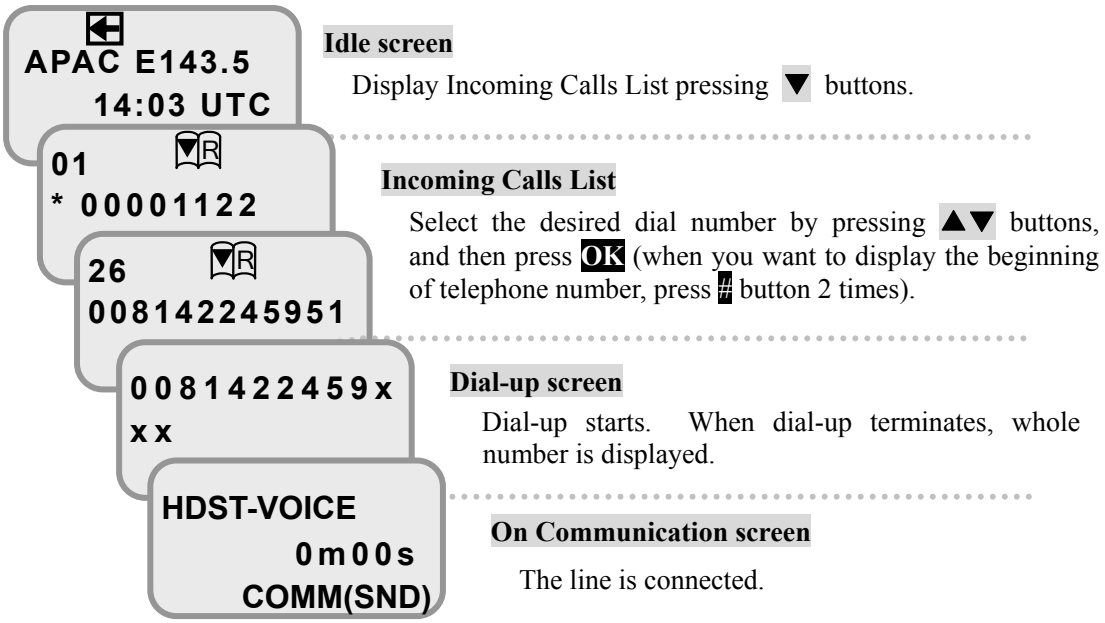


Fig.5.1.3.2 Flow of using Incoming Calls List

5.1.4 Adjusting voice volume, backlight brightness, and ringer volume

Quick adjustment of voice volume **(Handset status: Off- hook mode)**

To adjust the voice volume, press ⊞⊟ buttons on the left side of the Handset, during the communication.

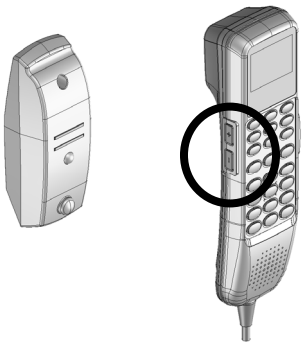


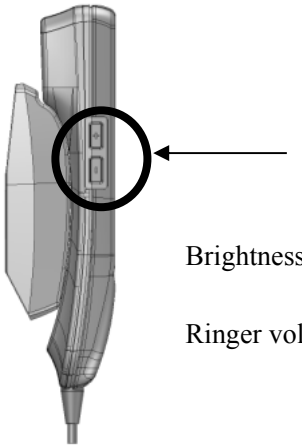
Fig.5.1.4a Quick adjustment of voice volume using ⊞⊟ buttons

Quick adjustment of backlight brightness **(Handset status: On- hook/Off-hook mode)**

To adjust the brightness of the screen, press ⊞⊟buttons on the left side of the Handset. Both modes are available, On-hook mode (placing the Handset on the cradle, or pick up the Handset and operating a Menu button) or Off-hook mode.

Quick adjustment of ringer volume **(Handset status: On- hook mode)**

To adjust the ringer volume, press ⊞⊟ buttons on the left side of the Handset, while it is ringing.



Brightness adjustment of the screen is available only in On-hook mode.

Ringer volume adjustment is also possible while it is ringing only in On-hook mode.

Fig.5.1.4b Quick adjustment of backlight brightness and ringer volume using ⊞⊟ buttons

These adjustments are only temporary. To make permanent adjustments, please refer to the [5.1.5 Adjusting ringer volume/pattern/voice volume/backlight brightness (Admin user only)](p5-10).

5.1.5 Adjusting ringer volume /pattern/voice volume/backlight brightness (Admin user only)

Adjusting the ringer volume

Ringer volume can be adjusted from the menu of the Handset.

Refer to below flow chart, open the menu screens and start the setup.

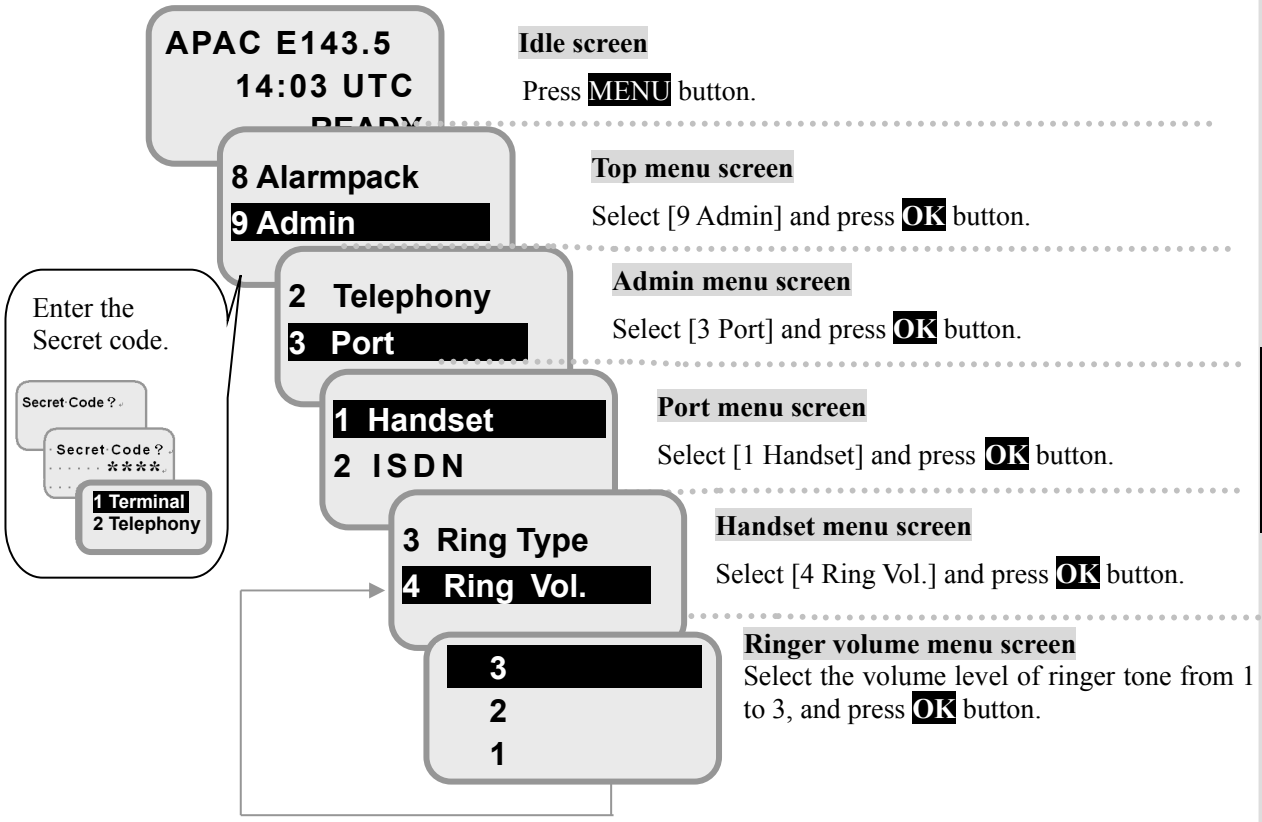


Fig.5.1.5a Flow of setting ringer volume

Selecting the ringer type

The pattern of ringer tone can be selected from six types, in the same way as above.

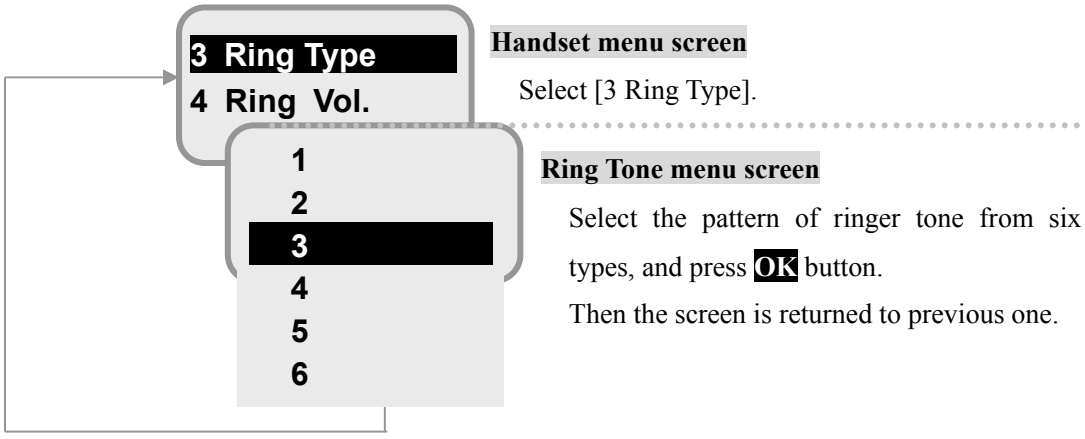


Fig.5.1.5b Flow of setting pattern of Ring Type

Adjusting the voice volume and the backlight brightness by the buttons of Handset

Voice volume can be adjusted using the ⊞⊟buttons on the left side of Handset (refer to [5.1.4 Adjusting voice volume and the backlight brightness](p5-10)).

To change the default voice volume, follow the way shown below.

Setting voice volume from Handset screen

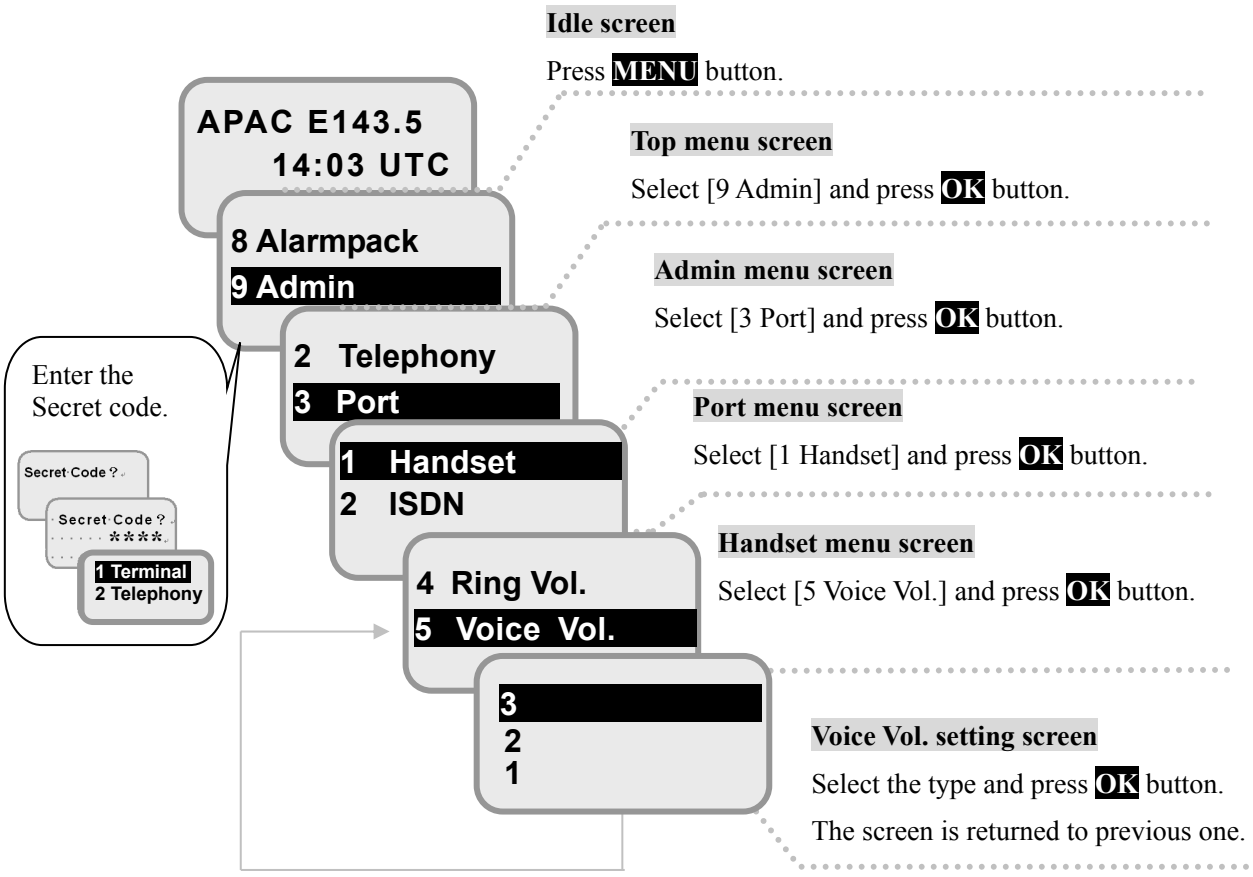


Fig.5.1.5c Flow of setting voice volume

Setting backlight brightness (in Port Menu screen)

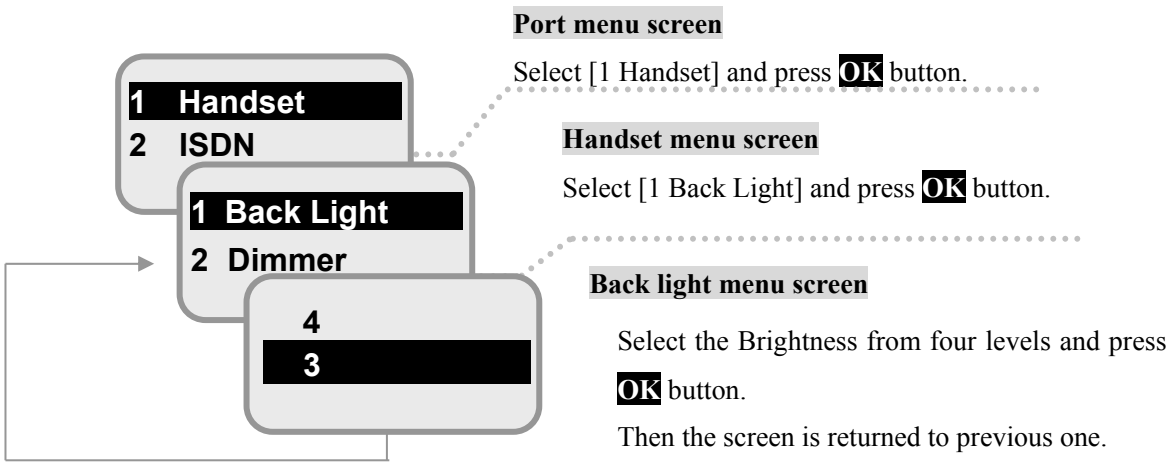


Fig.5.1.5d Flow of setting backlight brightness

5.1.6 Calling Internal Phone

Hook off the Handset and press # and the extension number listed in table below.

Table 5.1.6 Allocated Extension Number

Device	Allocated number
Handset	000
TEL1~TEL6	001~006
All TEL ports and Handset	099
ISDN (Set PBX-MSN. Refer to p6-43.)	401
IPTEL1 ~ IPTEL9	501~509
All	999

When the party answers the call, [On Communication screen for Internal Phone] is displayed. Return Handset to the cradle when the telephone call ends. [Disconnection screen] is displayed for 15 seconds with Cause Code and duration of communication. After the call has been completed, the display returns to [Idle screen].

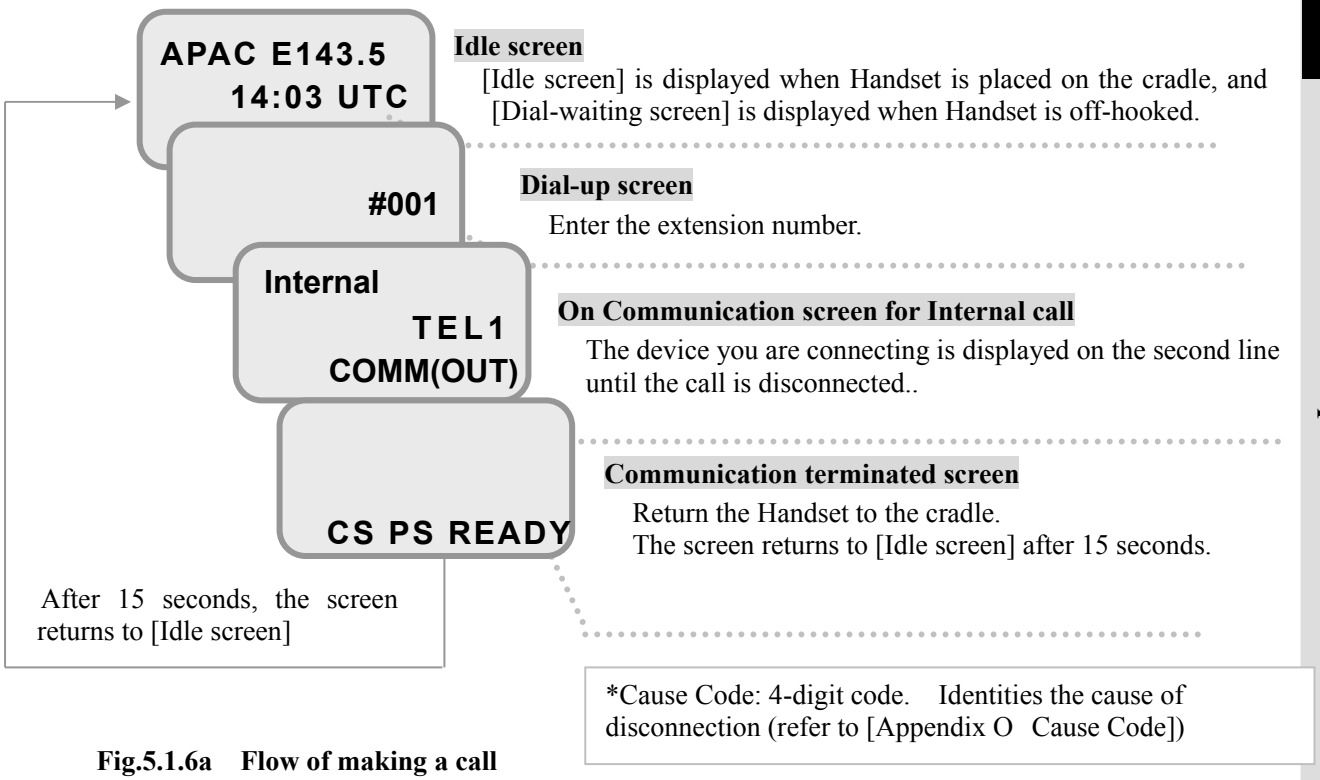


Fig.5.1.6a Flow of making a call

Answering the Internal call

If the Handset receives an internal call, ring tone will sound and the screen changes to [Arrival screen for internal call].

Take up the Handset from the cradle, then you can talk with the party. The screen will change to [On communication screen for internal call]. After the disconnection, return the Handset to the cradle.

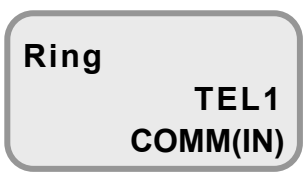


Fig.5.1.6b Arrival screen for internal call

5.1.7 Forwarding a call from Handset to terminal telephone

JUE-501/JUE-251 has two ways to pass a call to the terminal telephones which connected to BDE. One is Quick Forwarding and another is Announced Forwarding.

* Quick Forwarding is unavailable when Multi-Voice Function is enabled. In that case, use Announced Forwarding. About Multi-Voice Function, refer to Appendix J.

To forward a call to outside call automatically, refer to [6.5.2.3 Set Telephone Supplementary Service (p6-40)] or [7.9.2.3 Suppl. setting (p7-50)].

Quick Forwarding

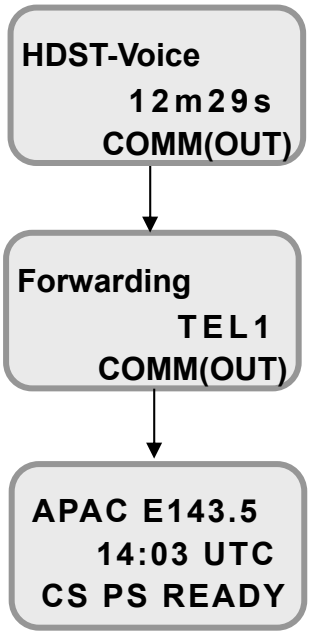
Quick Forwarding forwards an outside call to local terminals connected to the BDE without any talk on internal call.

To use Quick Forwarding, press * * and the extension number during the communication. Press the On hook button (☎) or place the Handset on the cradle, after you heard the beep tone.
Extension numbers of the JUE-501/JUE-251 are designated as follows.

Table 5.1.7a Allocated Extension Number

Device	Allocated number
Handset	000
TEL1~TEL6	001~006
All TEL ports and Handset	099
ISDN (Set PBX-MN. Refer to p6-43.)	401
IPTEL1~IPTEL9	501~509
All	999

Example) Terminal telephone connected with TEL port 1…..* * +001+[On-hook]



On communication screen

Press * * and the **extension number**(to be transferred).

Press * * **001** to transfer to the terminal telephone connected with TEL 1 port.

Press * * **401** to transfer the telephone connected with ISDN port.

Press the On hook button (☎) or place the Handset on the cradle, after you heard the beep tone.

The specified terminal and Handset will ring the same time. To cancel forwarding, take the call on Handset again.

Idle screen (after the call is picked up by destination)

Ring tone sound stops when the forwarded destination picks up the call. The screen will back to the Idle screen.

To cancel forwarding mode, press * *+* * *.
Forwarding mode will be cancelled and return to [on communication status]

Announced Forwarding

Announced Forwarding forwards an outside call to local terminals connected to the BDE after a talk on internal call. The outside caller will wait until your conversation will end hearing the suspension tone.

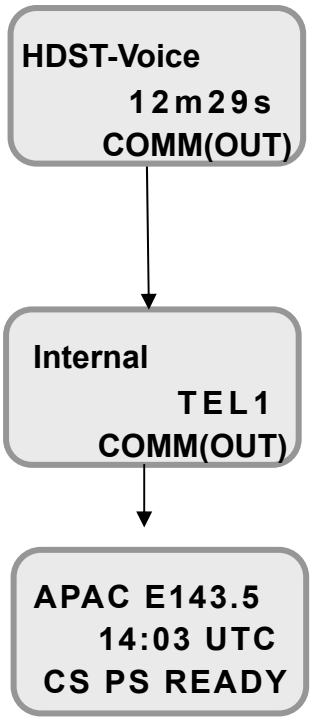
To use Announced Forwarding, press **0** * and the extension number during the communication. The specified terminal will ring and you can talk with the forwarding destination on internal call. Press the On hook button ( ) or place the Handset on the cradle after your internal call finished. Then the forwarding destination and the outside caller will start talking.

Extension numbers of the JUE-501/JUE-251 are designated as follows.

Table 5.1.7b Allocated Extension Number

Device	Allocated number
Handset	000
TEL1~TEL6	001~006
All TEL ports and Handset	099
ISDN (Set PBX-MSN. Refer to p6-43.)	401
IPTEL1~IPTEL9	501~509
All	999

Example) Terminal telephone connected with TEL port 1….. **0** * +001→ internal call→ [On-hook]



On communication screen

Press 0 * and the **extension number**(to be transferred).

Press 0 * **001** to transfer to the terminal telephone connected with TEL port 1.

Press 0 * **401** to transfer the telephone connected with ISDN port.

On communication screen for Internal call

The specified terminal will ring and on communication screen for internal call will be displayed after your party takes the phone. Press the On hook button ( ) or place the Handset on the cradle, after your internal call finished.

Idle screen

The specified terminal will start communication with the outside call. The screen backs to the idle screen.

To cancel forwarding mode, press * *+* * *.
Forwarding mode will be cancelled and return to [on communication status]

5.1.8 Handling Call Waiting

You may hear a call waiting Indication during talking on the phone. The call waiting Indication tone is two beeps every three seconds. To handle call waiting with Handset, use FN (Function) button on right side of Handset. Enable / disable call waiting is performed by Web setting (refer to [6.5.2.3 Set Telephone Supplementary Service (p6-40)]).

Follow the procedure below as desired.

Clear the current call, and accept the waiting call.
Press FN 1 #, during the call waiting indication is ringing.

Hold the current call, and accept the waiting call.
Press FN 2 #, during the call waiting indication is ringing.
To exchange the held call for the active call, press FN 2 #.
To clear the active call and back to the held call, press FN 1 #.

Ignore the waiting call.
Just ignore the waiting call indication (take no action).

Reject the waiting call.
Press FN 0 #.

Fig.5.1.8 FN button

NOTE

The BGAN system supports only one Call Waiting at the same time.

These functions have not been supported yet.
A new version supporting them will be released at the end of May 2014.

5.1.9 Holding on the line

To hold a call on with Handset, use **FN** (Function) button on right side of Handset.

Follow the procedure below as desired.

Place a call on hold.

Press **FN** **2** **#**, during the call is active.

Place the existing call on hold and establish a new call.

Press **FN** and dial the second phone number followed by **#**.

Example) Establishing new call to +81422-45-9xxx in Japan

→**FN** 0081422459xxx **#**

Exchange held call for active call.

Press **FN** **2** **#**.

Clear the active call and back to the held call.

Press **FN** **1** **#**.

Clear the holding call (if no waiting call exists).

Press **FN** **0** **#**.

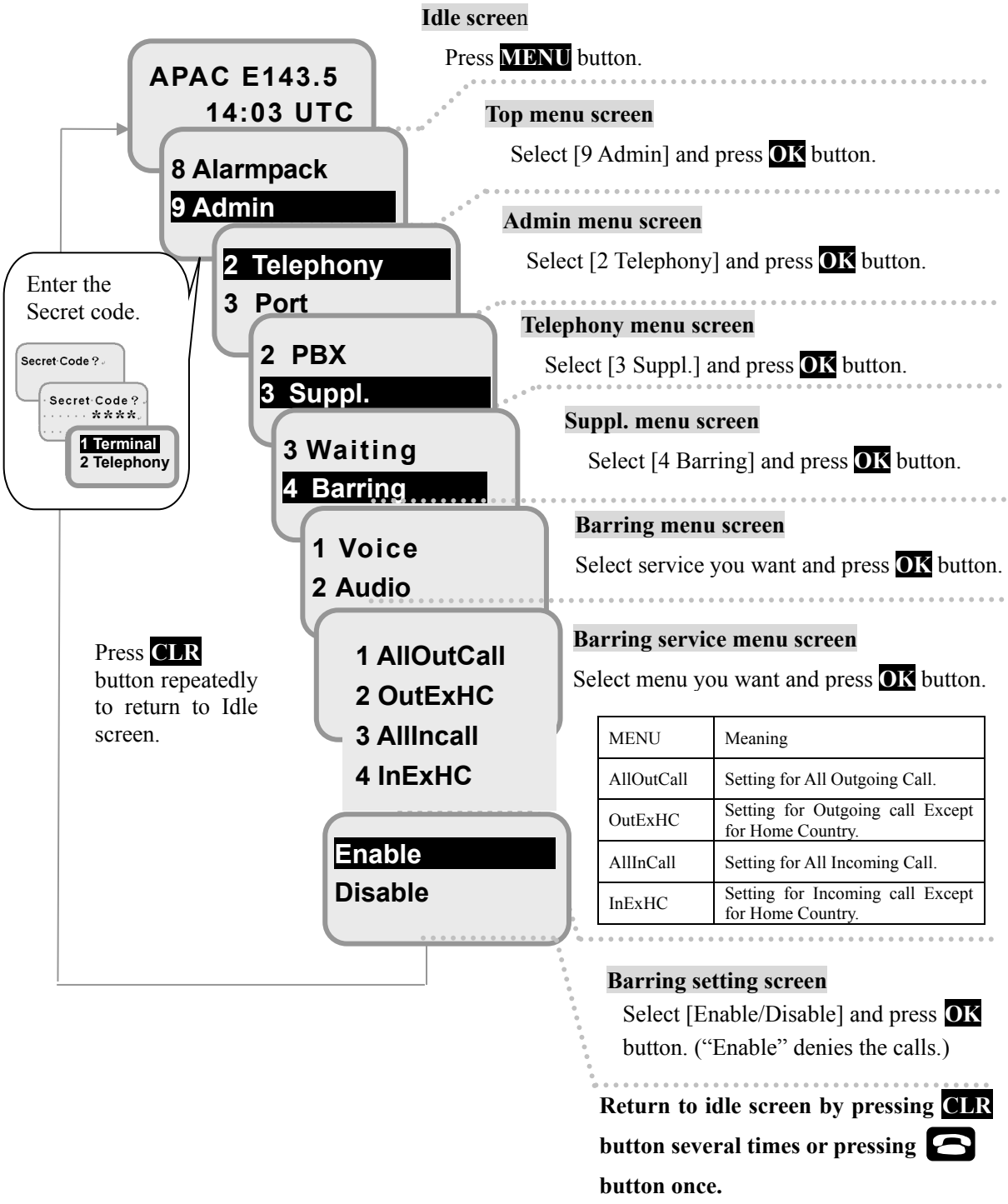
Fig.5.1.9 FN button

These functions have not been supported yet.

A new version supporting them will be released at the end of May 2014.

5.1.10 Rejecting Incoming/Outgoing call (call barring)

To reject Incoming/Outgoing call, you need to setup call barring function. It can be set by Web interface also (refer to [6.5.2.3 Set Telephone Supplementary Service (p6-40)]).



MENU	Meaning
AllOutCall	Setting for All Outgoing Call.
OutExHC	Setting for Outgoing call Except for Home Country.
AllInCall	Setting for All Incoming Call.
InExHC	Setting for Incoming call Except for Home Country.

Fig.5.1.10 Flow of setting Call Barring

5.1.11 Displaying voice mail service number

You may get notification of voice mail by SMS. Then check your voice mail service number and dial the number. You can get message from the service center. The number can be checked by Web interface also (refer to [6.5.2.3 Set Telephone Supplementary Service (p6-40)]).

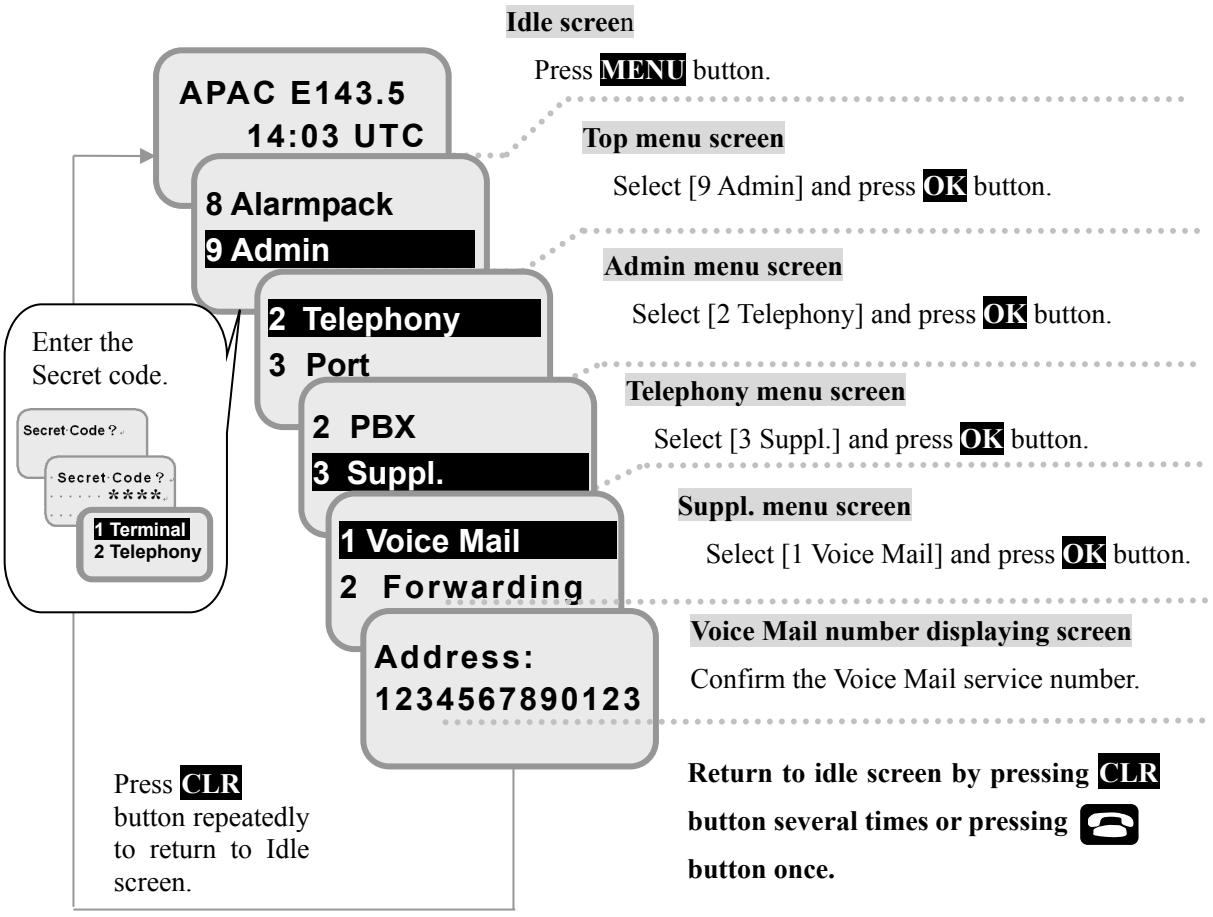


Fig.5.1.11 Flow of displaying Voice Mail service number

■Dial-up procedure **00 Voice Mail service Number #**

Example) Placing a call to 1234567890123 →**001234567890123#**

5.1.12 Using a Secret Code

Setup procedure

Enable the Secret Code to use Secret Code

To use the Secret Code, port setting is required.

NOTE

Once the Secret Code is set on a telephone terminal, making a call without entering Secret Code is impossible.(Only receiving a call is possible).

To make it possible, unlock the setting.

Carry out below procedure.

(Repeat the same procedure for other telephones if Secret Code setup is required for them.)

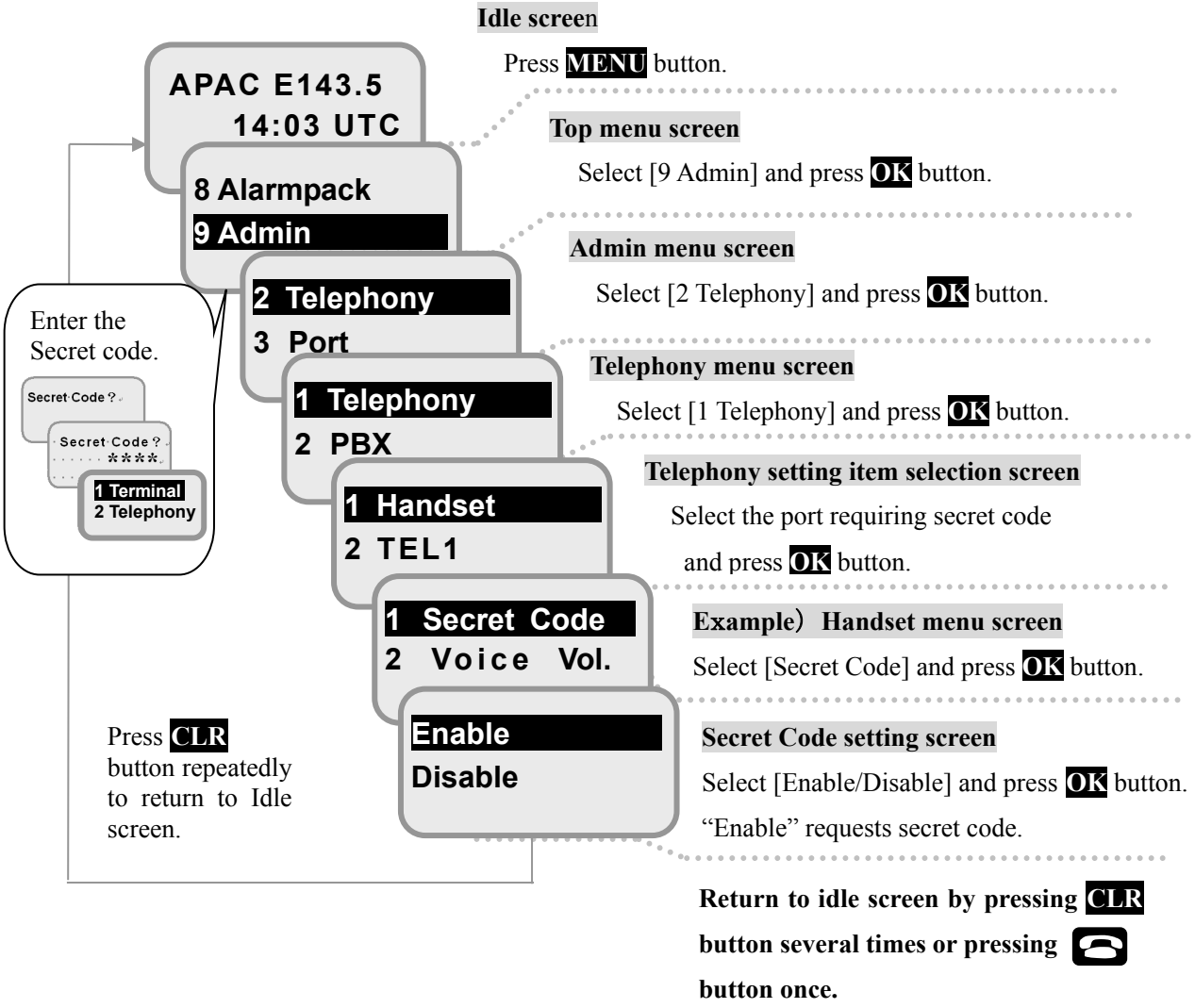


Fig.5.1.8a Flow of setting the Secret Code

Secret Code calling

*If you have not set up the Secret Code, open previous page and set it up.

■ Regular Secret Code calling

Secret Code **00** **Country Code** **Area Code** **Subscriber's number** #

Example) Placing a call with secret code **4321,** to +81-422-45-9xxx in Japan. → **4321**0081422459xxx #

■ Secret Code calling with forced service type of Voice service (4kbps Voice)

Secret Code * **00** **Country Code** **Area Code** **Subscriber's number** #

■ Secret Code calling with forced service type of FAX (3.1kHz Audio FAX)

Secret Code * * **00** **Country Code** **Area Code** **Subscriber's number** #

■ Number displaying Secret Code calling with forced service type of FAX (3.1kHz Audio FAX)

Secret Code * * **1** * **00** **Country Code** **Area Code** **Subscriber's number** #

■ Non-number displaying Secret Code calling with forced service type of FAX (3.1kHz Audio FAX)

. **Secret Code** * * **2** * **00** **Country Code** **Area Code** **Subscriber's number** #

5.1.13 Entry, change and deletion of Phonebook

■ **Telephone number entry**

Calling procedure with Speed Dial number is explained at [5.1.2 Using Phonebook (Speed Dial)](p5-7). Maximum 200 Speed Dial numbers can be registered though the practically registerable number is defined by your SIM card. The procedures of registration , changing, deleting methods are described below.

Example) Entering a phone number to Speed Dial No.025.
(Name) JOHN (Phone Number) 012345678901234

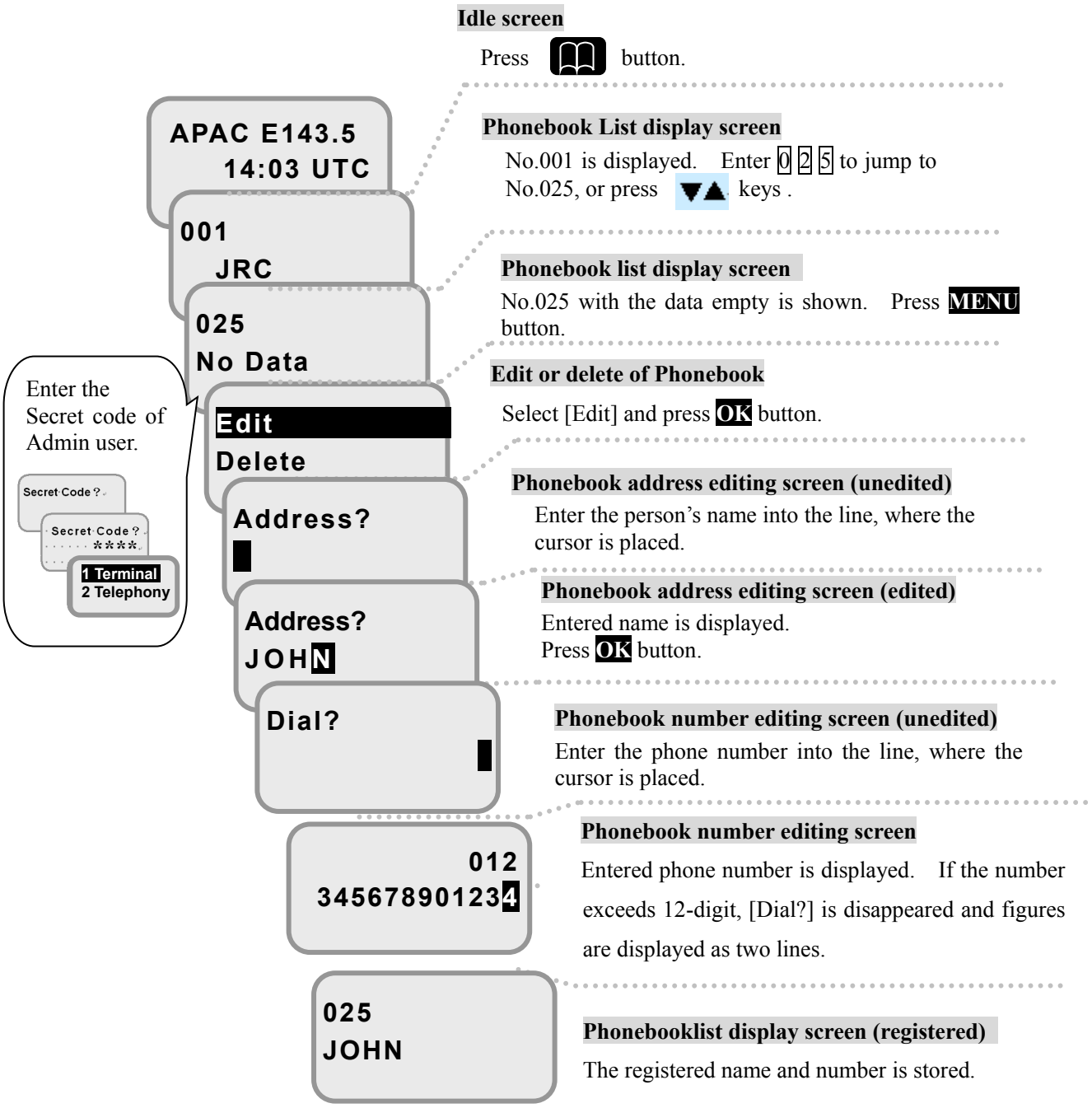
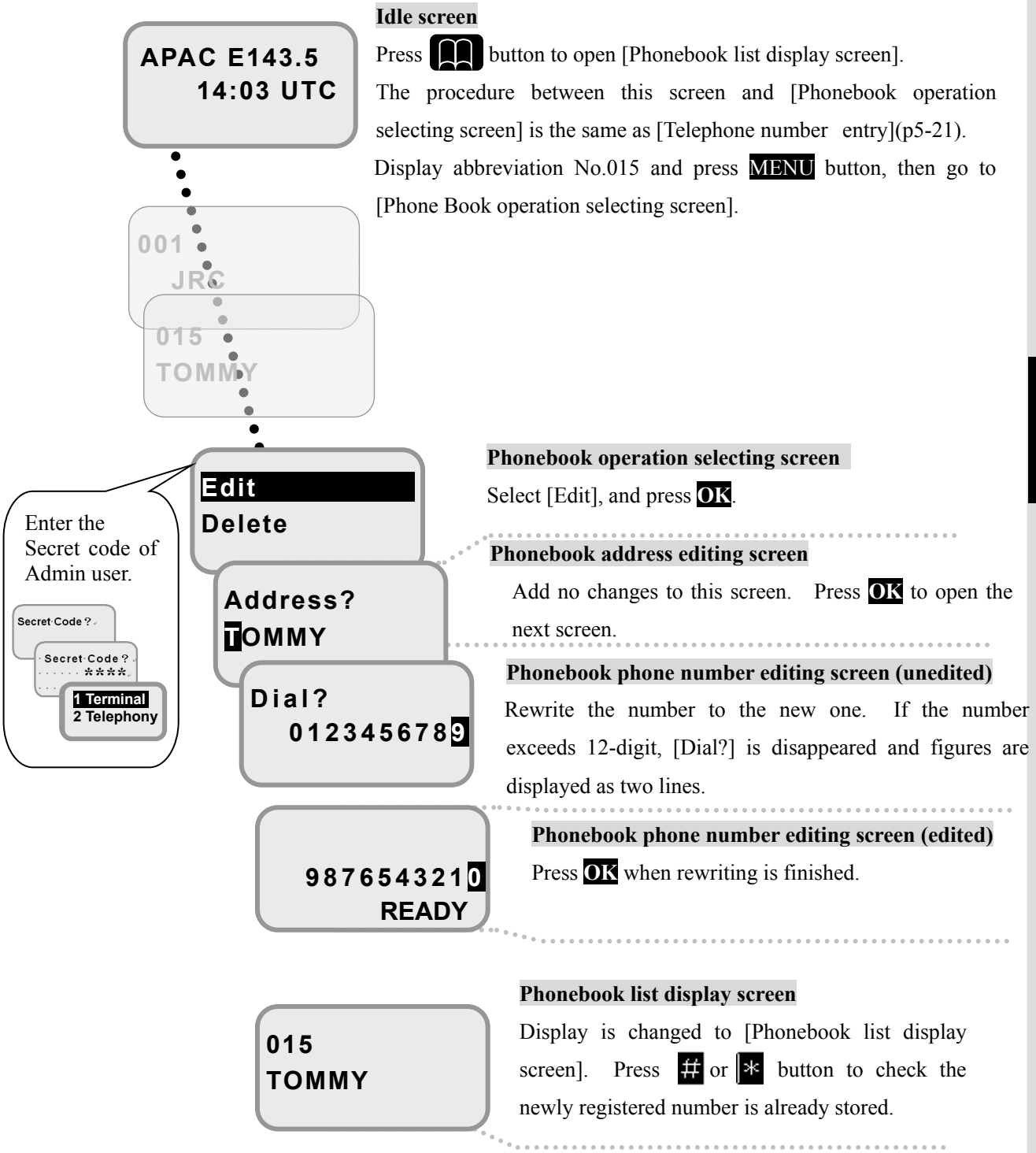


Fig.5.1.13a Flow of telephone number registration to Phonebook

■Changing party name and telephone number

Example) Speed Dial number: 015, person's name: TOMMY, phone number: 0123456789.
Change the phone number to 9876543210.



Idle screen

Press 📖 button to open [Phonebook list display screen].
The procedure between this screen and [Phonebook operation selecting screen] is the same as [Telephone number entry](p5-21).
Display abbreviation No.015 and press MENU button, then go to [Phone Book operation selecting screen].

Phonebook operation selecting screen

Select [Edit], and press OK.

Phonebook address editing screen

Add no changes to this screen. Press OK to open the next screen.

Phonebook phone number editing screen (unedited)

Rewrite the number to the new one. If the number exceeds 12-digit, [Dial?] is disappeared and figures are displayed as two lines.

Phonebook phone number editing screen (edited)

Press OK when rewriting is finished.

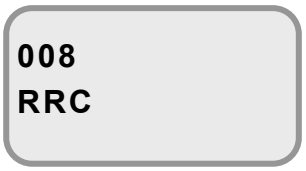
Phonebook list display screen

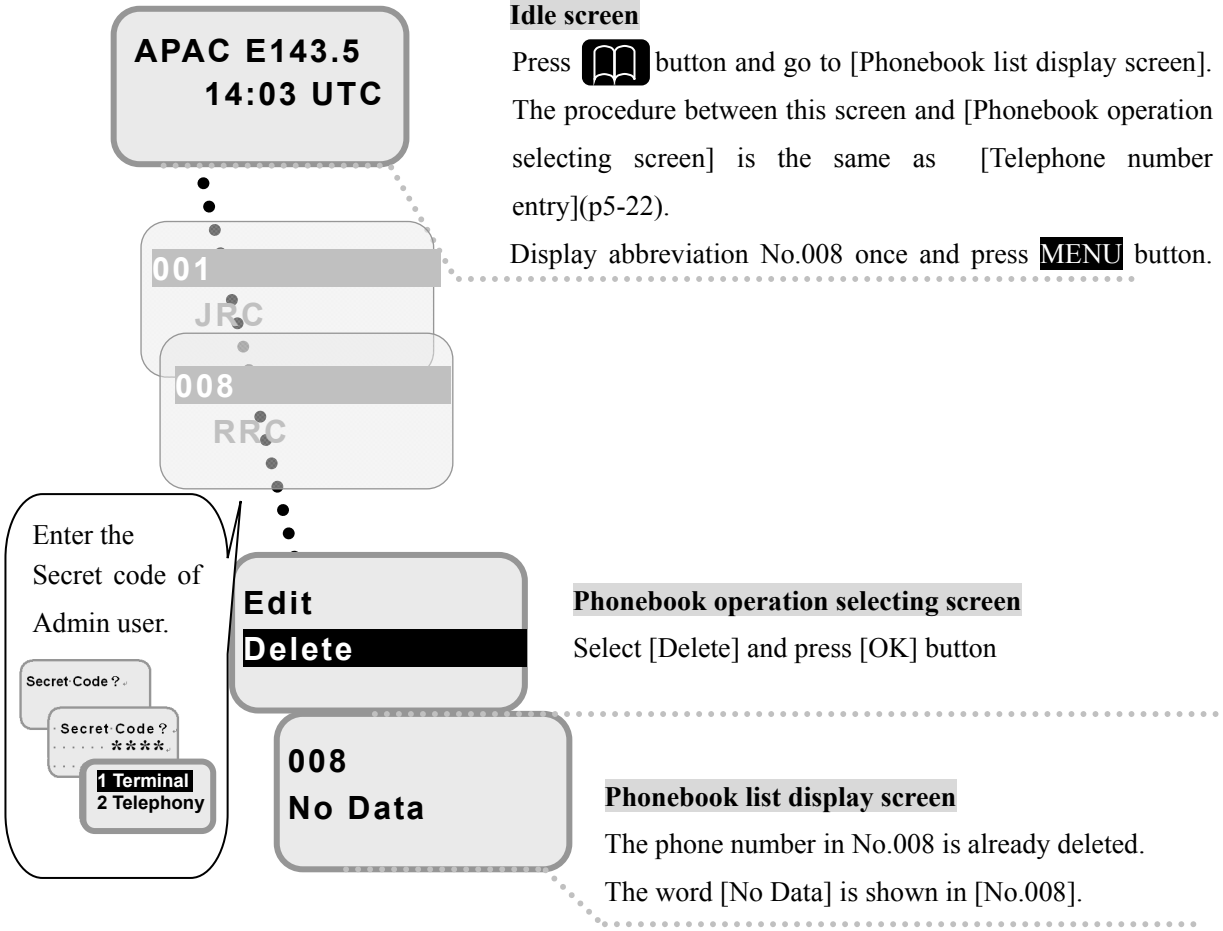
Display is changed to [Phonebook list display screen]. Press # or * button to check the newly registered number is already stored.

Fig.5.1.13b Flow of changing telephone number and name on Phonebook

■Deleting data

Example) Deleting Speed Dial No.008, company's name "RRC".





Idle screen

Press 📖 button and go to [Phonebook list display screen]. The procedure between this screen and [Phonebook operation selecting screen] is the same as [Telephone number entry](p5-22).

Display abbreviation No.008 once and press MENU button.

Phonebook operation selecting screen

Select [Delete] and press [OK] button

Phonebook list display screen

The phone number in No.008 is already deleted.

The word [No Data] is shown in [No.008].

Fig.5.1.13c Flow of deleting data on Phonebook

5.1.14 Displaying Call Log

Call Log is displayed in eight service types Voice, Fax, Audio, UDI, RDI, SMS, Standard and Streaming IP for JUE-501 and six service types Voice, Fax, Audio, SMS, Standard and Streaming IP for JUE-251. They are divided into three kinds of screens, Both (outgoing and incoming), Out (outgoing only), and In (incoming only).

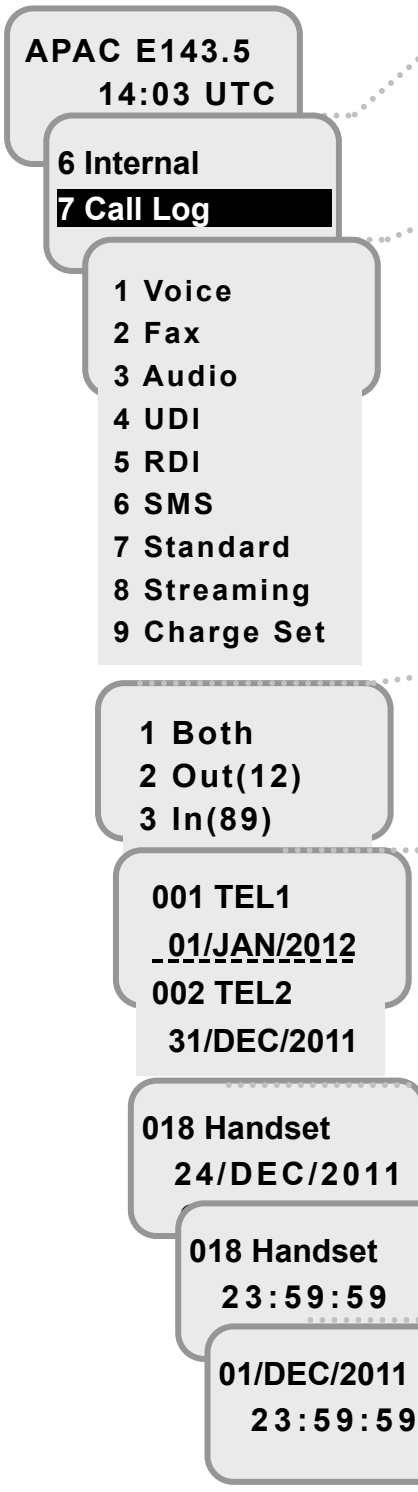
1. Voice	Making and receiving a call from/to Handset or terminal telephone connected to TEL or ISDN port
2. Fax	Sending and receiving a facsimile from/to the fax connected to TEL or ISDN port
3.Audio	Using 3.1kHz Audio service on the terminal connected to ISDN or TEL port
4. UDI	Using UDI service on the terminal connected to ISDN port
5. RDI	Using RDI service on the terminal connected to ISDN port
6. SMS	Sending and receiving a SMS from/to the PC connected to Ethernet or Handset port
7. Standard	Using Standard IP service on the PC connected to User LAN port
8. Streaming	Using Streaming IP service on the PC connected to User LAN port

* [4 UDI] and [5 RDI] menus are not displayed for JUE-251.

* [Out] and [In] call log displays maximum 100 data on Handset, respectively.
[Both] call log stores latest 100 data of above both directions.

* Calls are classified into three transmission types, Both (outgoing and incoming transmission), Out (outgoing only), and In (incoming only), except **[7. Standard]** and **[8. Streaming]**.

To check the contents, follow the instruction shown in next page.



Idle screen

Press **MENU**.

Top menu screen

Select [7 Call Log], then press **OK**.

Call Log menu screen

Select the communication type, and press **OK**.
Select either one from 1 to 8, then the screen changes to the next.

*[4 UDI] and [5 RDI] menus are not displayed for JUE-251.
*[7 Standard] and [8 Streaming] have no directions for transmission, so they not go through the [Communication menu screen].

Communication menu screen

Select the menu from [1 Both,] [2 Out] and [3 In] and press **OK**.

[Out] and [In] show the total log number.

Call Log menu screen

Display the Call-Log and select the one you want to confirm (Day/Month/Year of each call is shown).

Call Log menu screen/detailed screen

To check the outgoing/incoming time of the call, display "detailed screen" pressing either of # * buttons. Press **OK** to go to the next [Both/Out/In detailed information screen].

Call Log detailed information screen

Search for the information you want to check by pressing ▼▲ .

(The contents are explained in detail in the next page)

Fig.5.1.14a Flow of displaying Call Log (for JUE-501)

Call Log detailed information screen (Voice/Fax/Audio/UDI/RDI services are selected)

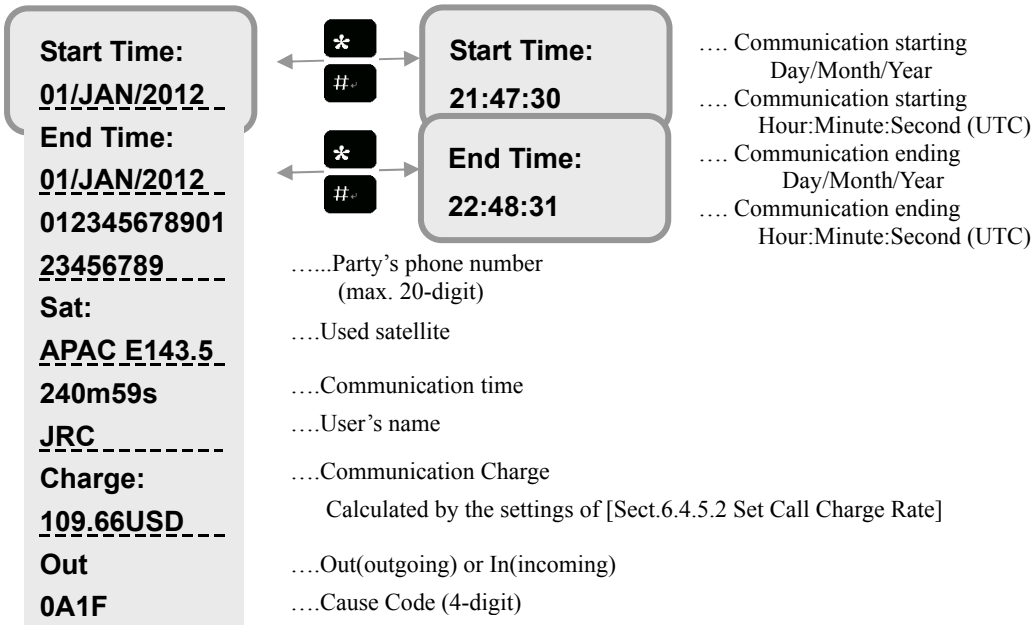


Fig.5.1.14b Call Log detailed information screen (Voice/Fax/Audio/UDI/RDI services are selected)

* User's name is displayed only when Secret Code is required for the transmission.
When Secret Code is not used, it displays [GUEST].

The contents of Call Log detailed information screen are difference depending on the service.

Refer to [7.7 Call Log (Communication history) menu] (p7-26).

5.1.15 Restricting Outgoing Call

Admin user can control originating a call from the terminal connecting to the port. This function can be set by Web interface also (refer to [6.5.2.1 Set up Ports (p6-37)]).

Setting	Function
Enable	Originating a call is permitted.
Allowed Num	Originating a call only to the allowed number (maximum 4) is permitted.
Phonebook	Originating a call only to the number registered in phonebook is permitted.
Disable	Originating a call is prohibited.

If this function is set to Disable, busy tone is heard when you Off-hook the Handset. Dialing is unavailable.

To set the Out (Outgoing) Call "Enable" on Handset port:

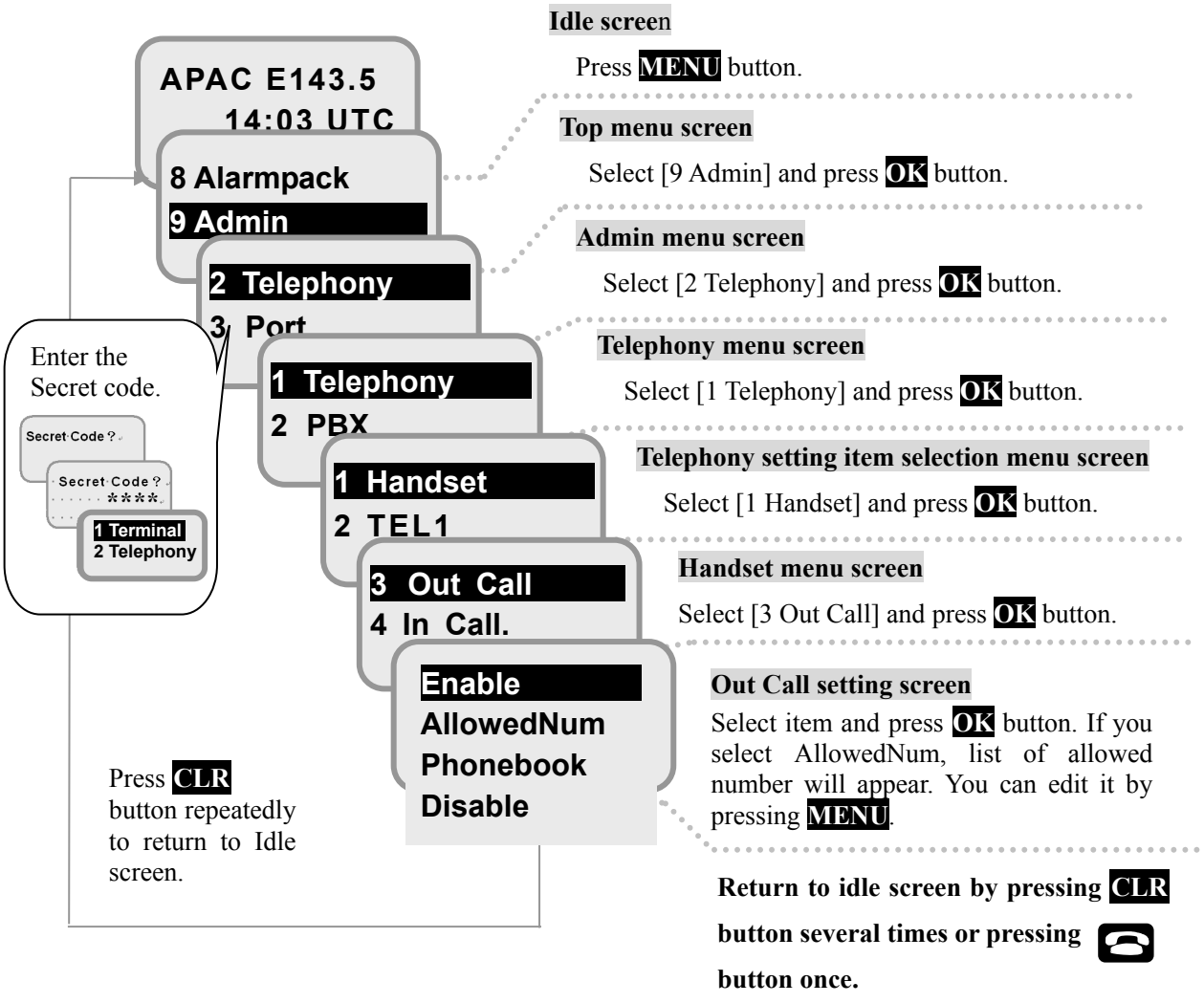


Fig 5.1.15 Out Call setting method

5.1.16 Setting Call-Sound for Incoming Call

User can set to ring or not to ring a terminal connected to the main unit, when a call arrived. Also, by selecting the time, user can set the time (seconds) to call up the terminal after the call arriving. This function can be set by Web interface also (refer to [6.5.2.3 Set Telephone Supplementary Service (p6-40)]).

Setting	Function
Enable	Rings when a call is arrived on JUE-501/JUE-251 main unit.
After 5s	Rings after 5 seconds later since a call has arrived on JUE-501/JUE-251 main unit.
After 10s	Rings after 10 seconds later since a call has arrived on JUE-501/JUE-251 main unit.
After 20s	Rings after 20 seconds later a call has arrived on JUE-501/JUE-251 main unit.
Disable	Not sounds

To set the In (Incoming) Call "Enable" on Handset port:

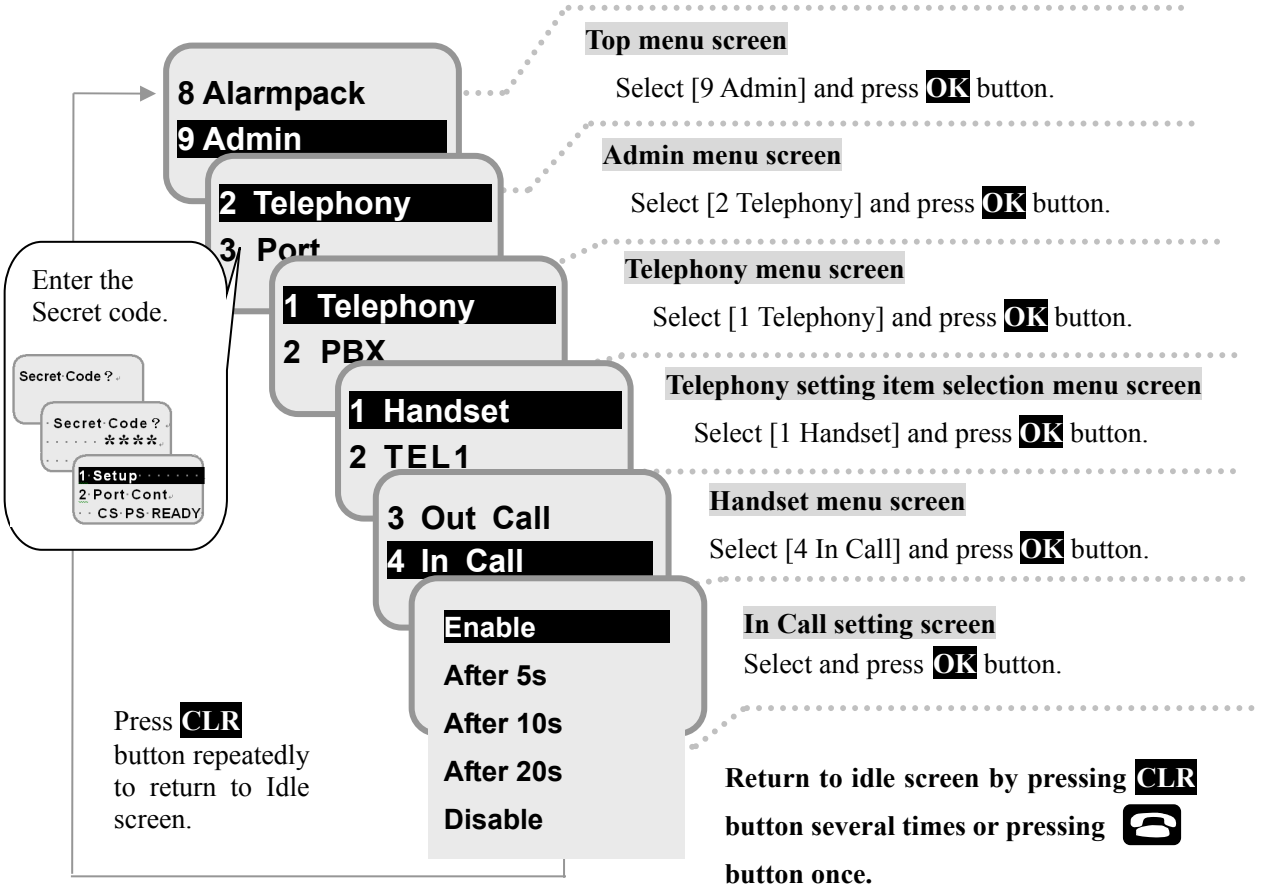


Fig 5.1.16 In Call setting method

5.2 Using telephone/FAX with TEL port

5.2.1 Dial-up procedure

The telephone number dialed last is memorized in MES. Redialing of telephone is simple.

Also, both of the telephone and FAX connected to TEL ports can utilize the abbreviation number of Phonebook. Refer to the procedure below.

Table 5.2.1a. Dial-up procedure of the JUE-501/JUE-251

Dial-up procedure of the JUE-501/JUE-251 (Available from terminal telephone)

■ Regular calling **00 Country Code Area Code Subscriber's number #**

Example) Placing a call to +81-422-45-9xxx, in Japan→**0081422459xxx #**

■ Speed Dialing **Speed Dialing number (2 digits or 3 digits) * #**

Example) Calling by a Speed Dialing number 05 →**05 * #**
Calling by a Speed Dial number 083 →**83 * #**
Calling by a Speed Dial number 128 →**128 * #**

■ Redial calling *** # 00** (Last dialed number which is stored in each port is redialed)

■ Secret Code calling **Secret Code 00 Country Code Area Code Subscriber's number #**

Example) Placing a call with secret code **4321,** to +81-422-45-9111 in Japan. →**4321**0081422459xxx **#**

Dial-up procedure for forced setting of service type

Just adding [*] or [*][*] on the head of dialing sequence, user can easily set the service type (Voice or FAX) to TEL port, regardless of setup done at [6.5.2.1 Set up Port (p6-37)].
This is temporal setting, and available for only transmission (ship to shore).

Table 5.2.1b. Dial-up procedure of the JUE-501/JUE-251, for forced setting of each service type

Setting Voice service (4kbps Voice) to TEL port

- Regular calling [*] [00] [Country Code] [Area Code] [Subscriber's number] [#]
- Speed Dialing [*] [Speed Dialing number] [*][#]
- Redial calling [*] [00] [*][#]
- Secret Code calling [Secret Code] [*] [00] [Country Code] [Area Code] [Subscriber's number] [#]

Setting FAX service (3.1kHz Audio FAX) to TEL port

- Regular calling [*][*] [00] [Country Code] [Area Code] [Subscriber's number] [#]
- Speed Dialing [*][*] [Speed Dialing number] [*] [#]
- Redial calling [*][*] [00] [*] [#]
- Secret Code calling [Secret Code] [*][*] [00] [Country Code] [Area Code] [Subscriber's number] [#]

The contents of above-mentioned table are the same as the one of the third page of this chapter, table 5b.

Dial-up procedure for number display and non-display

In this menu, user sets whether notifying or not-notifying their number to the recipient by just adding 1+ * or 2+ * on the head of dialing sequence.

This is a temporary setting, and available for only transmission.

Table 5.2.1c. Dial-up procedure for number display and non-display

Displaying number

■ Regular calling 1 * 00 **Country Code** **Area Code** **Subscriber's number** #

■ Speed Dialing 1 * **Speed Dialing number** * #

■ Redial calling 1 * 00 * #

■ Regular calling with forced service type of Voice (4kbps Voice)

* 1 * 00 **Country Code** **Area Code** **Subscriber's number** #

■ Secret Code calling **Secret Code** 1 * 00 **Country Code** **Area Code** **Subscriber's number** #

■ Secret Code calling with forced service type of FAX (3.1kHz Audio FAX)

Secret Code * * 1 * 00 **Country Code** **Area Code** **Subscriber's number** #

Not displaying number

■ Regular calling 2 * 00 **Country Code** **Area Code** **Subscriber's number** #

■ Speed Dialing 2 * **Speed Dialing number** * #

■ Redial calling 2 * 00 * #

■ Regular calling with forced service type of Voice (4kbps Voice)

* 2 * 00 **Country Code** **Area Code** **Subscriber's number** #

■ Secret Code calling **Secret Code** 2 * 00 **Country Code** **Area Code** **Subscriber's number** #

■ Secret Code calling with forced service type of FAX (3.1kHz Audio FAX)

Secret Code * * 2 * 00 **Country Code** **Area Code** **Subscriber's number** #

The contents of above-mentioned table are the same as the one of the fourth page of this chapter, table 5c.

5.2.2 Calling Internal Phone

To make an internal call, press # and the extension number listed in table below.

Table 5.2.2 Allocated Extension Number

Device	Allocated number
Handset	000
TEL1~TEL6	001~006
All TEL ports and Handset	099
ISDN (Set PBX-MSN. Refer to p6-43.)	401
IPTEL1~IPTEL9	501~509
All	999

Example) Make a internal call to Handset → # **000**

5.2.3 Forwarding a call to the other terminals

We have two ways to pass a call to the terminal telephones which connected to BDE. One is Quick Forwarding and another is Announced Forwarding.

* Quick Forwarding is unavailable when Multi-Voice Function is enabled. In that case, use Announced Forwarding. About Multi-Voice Function, refer to Appendix J.

To forward a call to outside call automatically, refer to [6.5.2.3 Set Telephone Supplementary Service (p6-40)] or [7.9.2.3 Suppl. setting (p7-50)].

Quick Forwarding

Quick Forwarding forwards an outside call to local terminals connected to BDE without any talk on internal call.

To use Quick Forwarding, press *** *** and the extension number during the communication. After you heard the beep tone, put the receiver back in its cradle.

Announced Forwarding

Announced Forwarding forwards an outside call to local terminals connected to BDE after a talk on internal call.

To use Announced Forwarding, press **0 *** and the extension number during the communication. The specified terminal will ring and you can talk with your crew on internal call. Put the receiver back in its cradle after your internal call finished. Then your crew can talk with the outside caller.

Refer to table below for extension numbers of the JUE-501/JUE-251.

Table 5.2.3 Allocated Extension Number

Device	Allocated number
Handset	000
TEL1~TEL6	001~006
All TEL ports and Handset	099
ISDN (Set PBX-MSN. Refer to p6-43.)	401
IPTEL1~IPTEL9	501~509
All	999

Example) Transfer a call to TEL1 with Quick Forwarding……*** *** +001+[On-hook]
Transfer a call to Handset with Announced Forwarding…….... **0 *** +000

To cancel forwarding mode, press *** ***+*** * ***. Forwarding mode will be cancelled and return to [on communication status]

5.2.4 Handling Call Waiting

You may hear a call waiting Indication during talking on the phone. The call waiting Indication tone is two beeps every three seconds. To handle call waiting, the phone must have R key. R key can be replaced by pushing hook button of the phone for short time. Enable / disable call waiting is performed by Web setting (refer to [6.5.2.3 Set Telephone Supplementary Service (p6-40)]).

Follow the procedure below as desired.

Hold the current call, and accept the waiting call.

Press R 2 #, during the call waiting indication is ringing.

To exchange the held call for the active call, press R 2 #.

To clear the active call and back to the held call, press R 1 #.

Clear the current call, and accept the waiting call.

Press R 1 #, during the call waiting indication is ringing.

Reject the waiting call.

Press R 0 #.

Ignore the waiting call.

Just ignore the waiting call indication (take no action).

These functions have not been supported yet.
A new version supporting them will be released at the end of May 2014.

5.2.5 Holdi..

To hold a call on, the phone must have R key. R key can be replaced by pushing hook button of the phone for short time.

Follow the procedure below as desired.

Place a call on hold.

Press R 2 #, during the call is active.

Exchange held call for active call.

Press R 2 #.

Place the existing call on hold and establish a new call.

Press R and dial the second phone number followed by #.

Example) Establishing new call to +81422-45-9xxx in Japan → R 0081422459xxx #

Clear the active call and back to the held call.

Press R 1 #.

Clear the holding call (if no waiting call exists).

Press R 0 #.

NOTE

The BGAN system supports only one Call Waiting at the same time.

This page is remained as a blank.

6. Web Menu System

In this Chapter, the way how to operate or set Web setting menus is explained as described below.

1. Connect Your PC to JUE-501/JUE-251 (Sec. 6.1)
2. Web Screen (Sec. 6.2)
3. Login/Logout (Sec. 6.3)
4. Menus for all users (Sec. 6.4)

Subsection	Content
6.4.1 Dashboard	displays the status of JUE-501/JUE-251
6.4.2 Connect Internet	displays active connection list and makes data connection
6.4.3 SMS Menus	contains New Message/Inbox/Sent/Draft/ Setting
6.4.4 Phonebook	displays and sets phonebook
6.4.5 Call Log Menus	contains Call Log/Call Charge
6.4.6 System Log Menus	contains Alarmpack/Event Log/ADE Monitor

5. Menus for Admin users (Sec. 6.5)

Subsection	Content
6.5.1 Set basic Information	sets basic information of JUE-501/JUE-251
6.5.2 Telephony Menus	contains Telephony/PBX/Supplementary
6.5.3 Port Menus	contains Handset/ISDN/Ethernet/I/O/Option
6.5.4 User Control Menus	contains User Registration/Device Registration/Usage Restriction
6.5.5 Network Menus	contains WAN Profile/Packet Filter/Always Activate/Remote Activate/LAN Group/LAN/Static DHCP/Routing Table/WAN Selector/PPPoE
6.5.6 Disconnect Automatically by time	sets auto disconnect function
6.5.7 Configure SIM	sets SIM configuration
6.5.8 File Export / Import	exports and imports files
6.5.9 Reset to Factory Default	reset to the factory default
6.5.10 Update Software	updates software
6.5.11 Perform Diagnostic Test	performs a diagnostic test

NOTE

In some condition of JUE-501/JUE-251, it may fail to display intended screen. In that case, please click the item once again.

6.1 Connect Your PC to JUE-501/JUE-251

We assume here the Operation System of your PC is Microsoft Windows XP and JUE-501/JUE-251 is running under the initial settings.

Set your PC

1. Open the [Start] menu from the Desktop and click [Control Panel].
   - [Control Panel] window will appear.

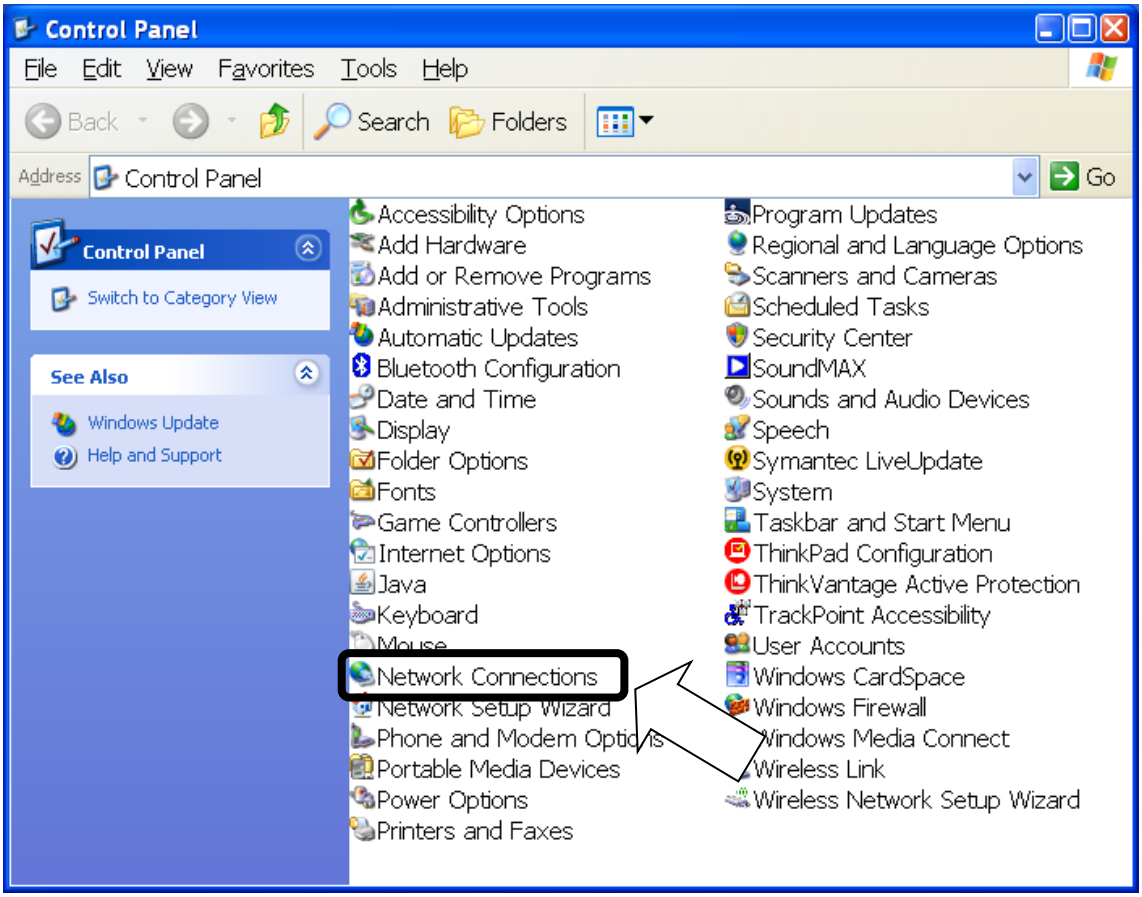


Fig. 6.1a Control Panel window

2. Double-click the icon labeled [Network Connections].
   - [Network Connections] window will be displayed.

3. Select [Local Area Connection] and right-click, then click [Properties] from displayed menu.
   - [Local Area Connection Properties] dialogue box is displayed.
   - Confirm that [General] tab is displayed on the front of the screen.

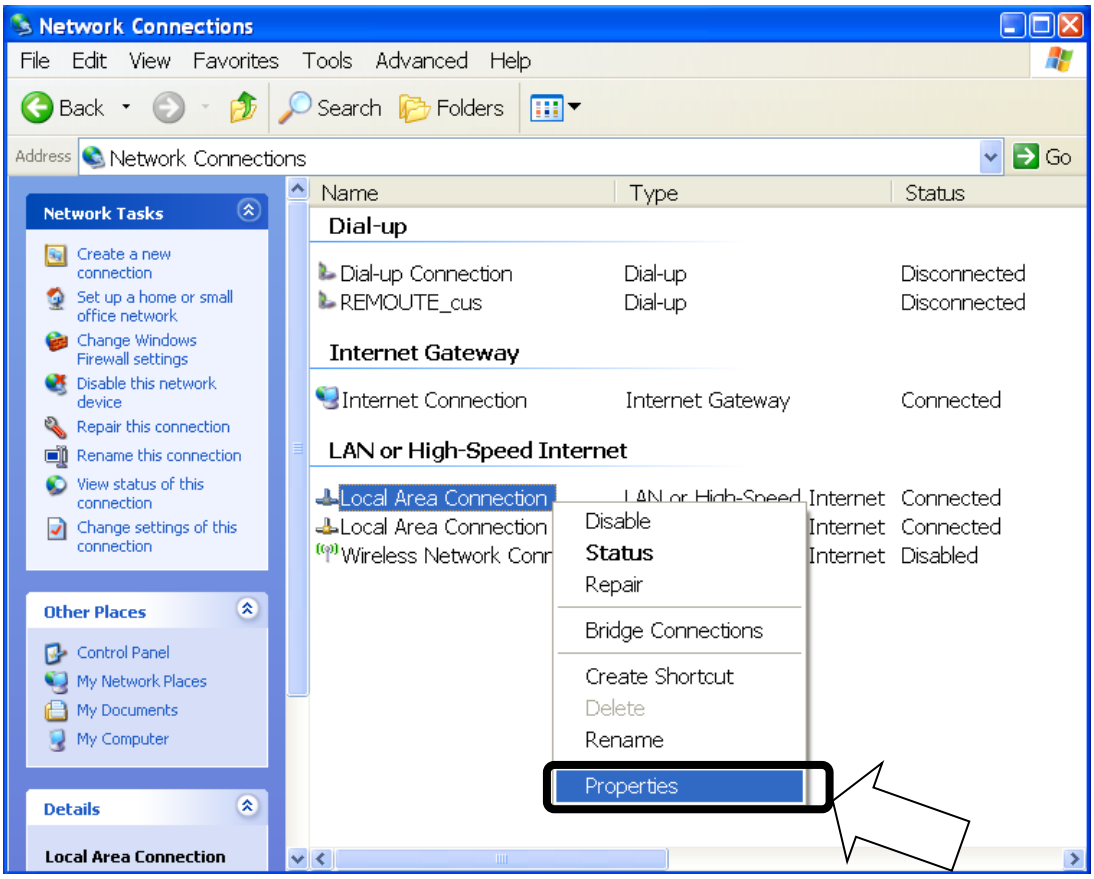


Fig. 6.1b Network Connections window

4. Select [Internet Protocol (TCP/IP)] and click [Properties] button.

   - [Internet Protocol (TCP/IP) Properties] dialogue box is displayed.
   - Select [Obtain an IP address automatically].

     cf. If you want to set your IP address manually, check your JUE-501/JUE-251 IP address.

     The initial settings are:

IP address	192.168.128.100
Subnet Mask	255.255.255.0

     Then, setting of your PC might be

IP address	192.168.128.101
Subnet Mask	255.255.255.0
Default gateway	192.168.128.100

   - Select [Obtain DNS server address automatically].

     When you set IP address manually, select [Use the following DNS server address].

     Input *192.168.128.100 to the [Preferred DNS server] box and remain blank in the [Alternate DNS server] box.

     * We explain here with the assumption of factory default. In practice, enter the IP Address of main unit.

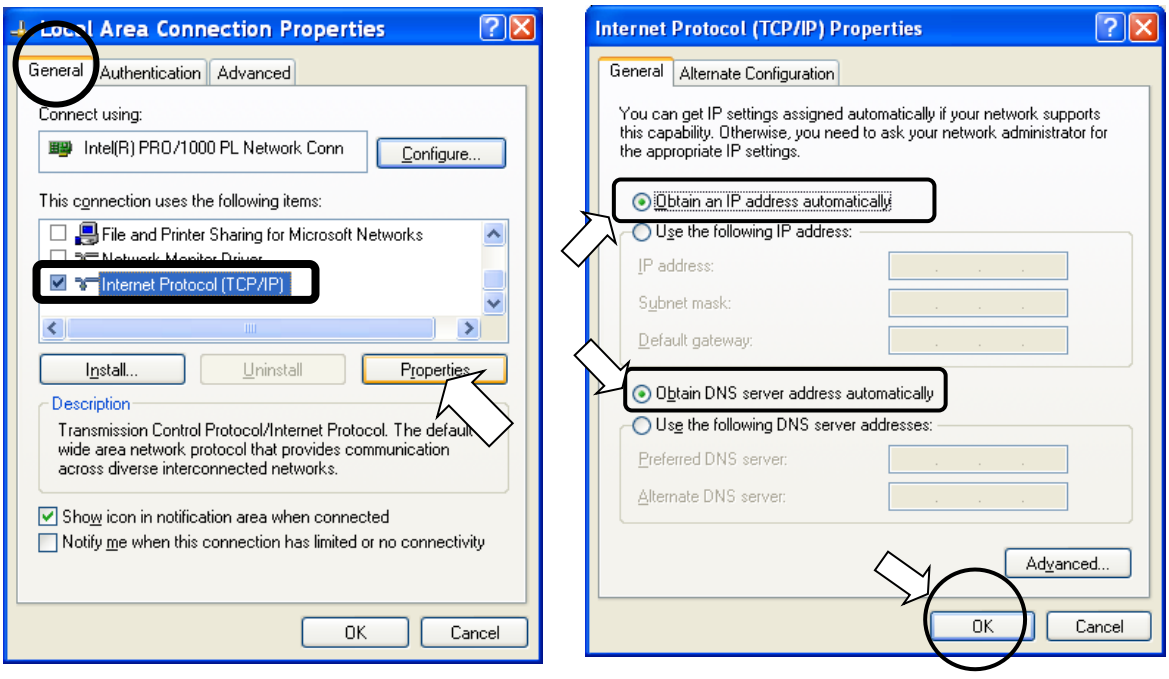


Fig. 6.1c Local Area network properties

5. Click [OK] button.

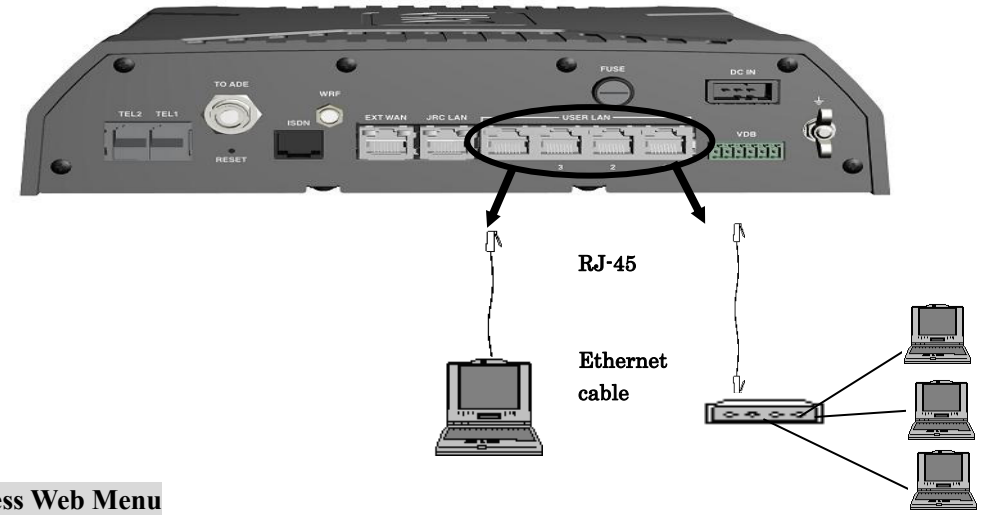
   - Screen is returned to [Local Area Connection Properties] dialogue box.

6. Click [OK] button.

   - If message of rebooting is displayed, reboot the PC.

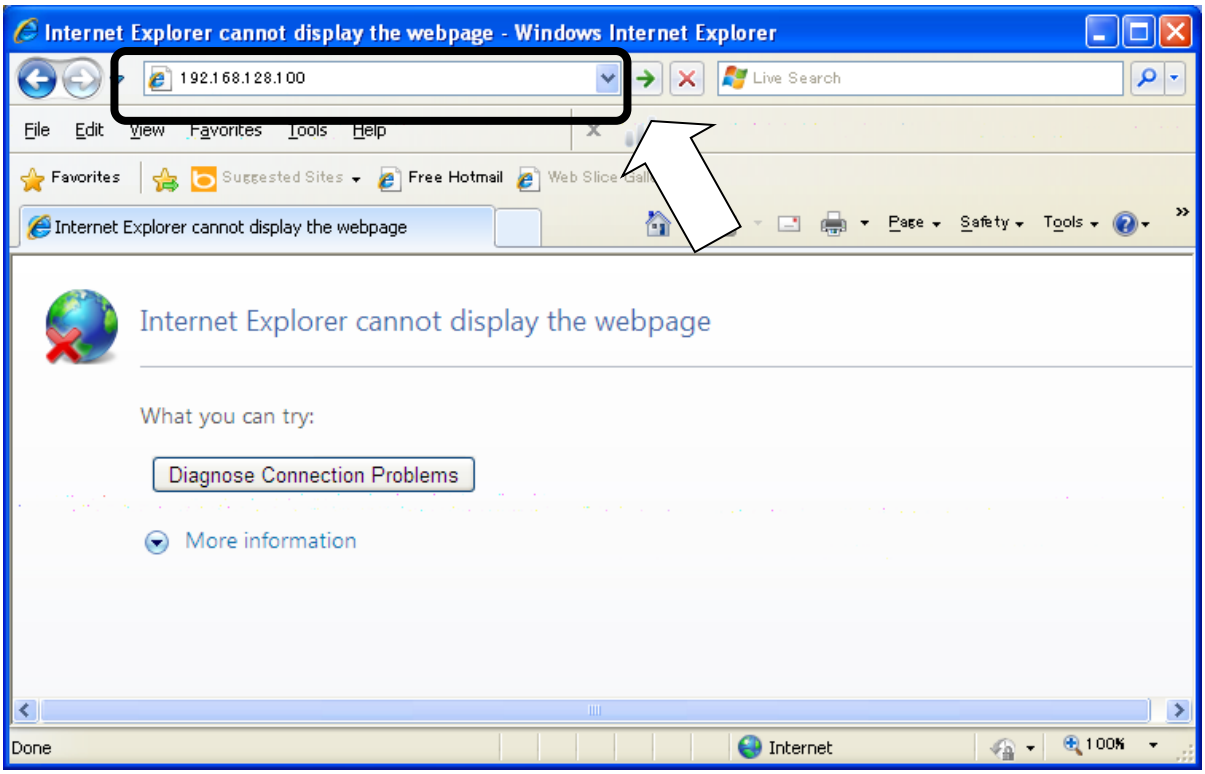
Connect your PC to User LAN port of JUE-501/JUE-251

Connect your PC to User LAN port with Ethernet cable. JUE-501/JUE-251 recognizes the type of Ethernet cable (cross or straight) automatically. A maximum of total 32W PoE (Power over Ethernet) is available on User LAN.



To Access Web Menu

Launch[*1] your Web browser[*2] and enter [192.168.128.100][*3] to the URL box. Then press [Enter] key.



[*1] Your PC must be in the same network with main unit (refer to [Set your PC], P6-2).

[*2] While JUE-501 / JUE-251 officially supports Microsoft Internet Explorer7 and Mozilla Firefox3.6, their upper version can be available when they have compatible system.

[*3] We explain here with the assumption of factory default. In practice, enter http://[main unit IP Address]/ to the URL box of your Web browser.

6.2 Web Screen

Basic Constitution of Web Menu

All screens have constitution mentioned below.

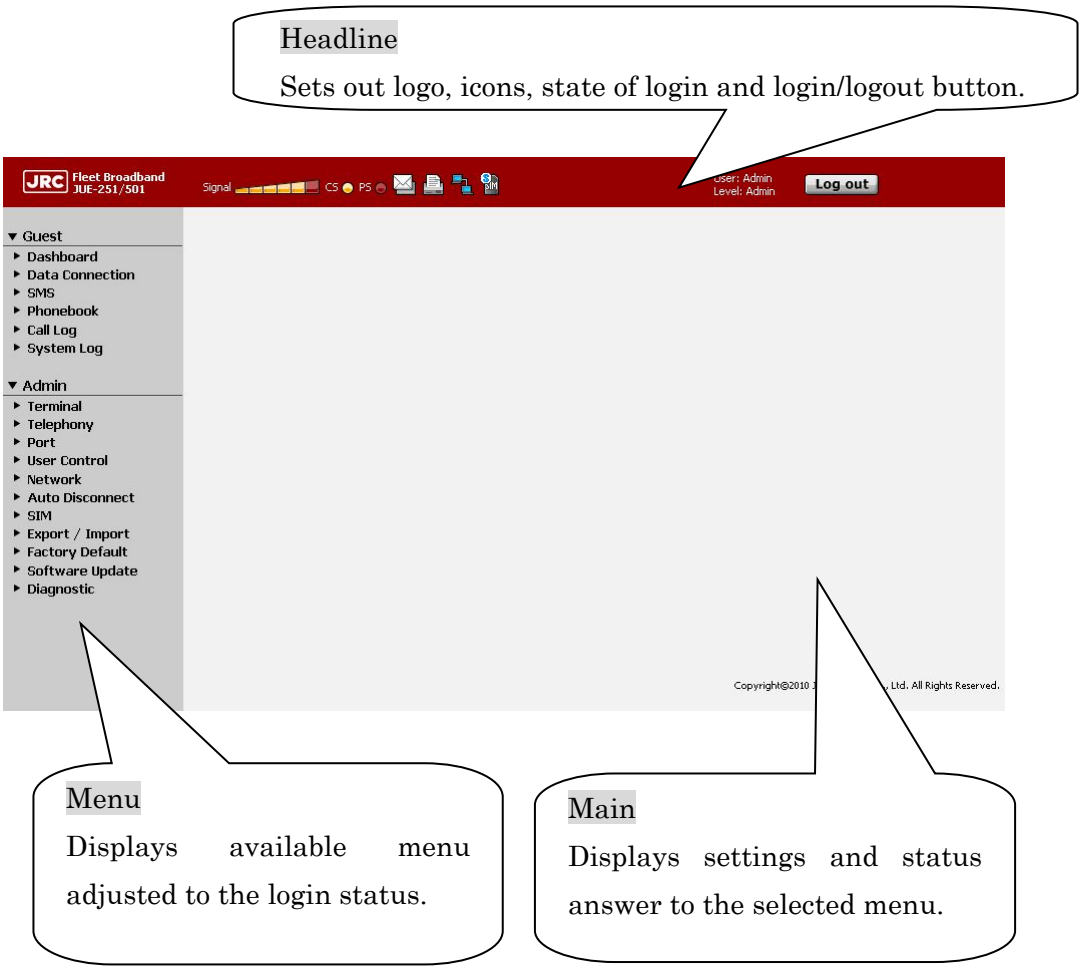


Fig. 6.2 Basic Constitution of Web Screen

Meanings of Icons

In this section, the icons set out in the headline are got together.

Table 6.2 Headline Icons

Icon	Explanation
Signal 	Reception Level Indicator Displays reception level by its number of bar at seven steps. Green color suggests ordinal status and Orange color blocking status. See table 6.5.1b of this manual.
CS 	CS Icon Displays CS connection is in process.
PS-Voice 	PS-Voice icon Displays Voice service on PS connection is in process.（This icon is displayed only when Multi-Voice function is Enabled on Appendix J.）
PS 	PS Icon Displays PS connection is in process.
	SMS Icon Displays there are some newly arriving SMS messages.
	SMS Icon (FULL) Displays the memory capacity for SMS on the SIM card is full. To receive or send new SMS message, delete SMS messages on the SIM card.
	FAX Icon (not-available) Displays FAX is out of service. This icon is displayed when satellite elevation angle (EL) value of JUE-251 is less than 20 degrees.
	Remote Access Icon Displays a remote access (a connection established by Remote Activate function [refer to Sec.6.5.5.4 Establish Remote Connection (p6-66)] or a connection established for remote maintenance) is active.
	SIM Card Icon Displays SIM card is available.
	SIM Card Icon (not-available) Displays SIM card is unavailable.
	Secondary SIM Card Icon Displays Secondary SIM Card is in use.
	Secondary SIM Card Icon (not-available) Displayed when Secondary SIM Card is selected but it is unavailable.

	Multi-Voice icon Displays Multi-Voice function is available.（This icon is displayed only when Multi-Voice function is Enabled on Appendix J.）
	Multi-Voice icon (not-available) Displays Multi-Voice function is unavailable.（This icon is displayed only when Multi-Voice function is Enabled on Appendix J.）
	Login button Login to the specific user.
	Logout button Logout any currently logged in user.

Menu

[Menu] lying in the left side of the screen is adjusted to the login status.

With the “Guest menu”, basic operations (PS connection and SMS operation) can be performed as well as the indication of the device status. With the “Admin menu”, device setting (port setting, user controlling, network setting and so on) can be performed.

When an item in the [Menu] is clicked, it displays the item to the [Main] screen.

6.3 Login/Logout

In this section, how to login and logout is explained. Cookie need to be enabled in your Web browser. While users can access JUE-501/JUE-251 without logging in, configuring main unit and connecting packet data by granted permissions is available by logging in.

The state of login is shown in the right side of the headline.

Fig. 6.3a Example of Headline panel

User Login

Log in made by user name and their Secret Code. User Login needs that the user is registered (refer to [Sec.6.5.4.1 Register Users], p6-48) in advance. To login by [User Login], click [Login] button lying in the right end of the headline and enter user name and their secret code. Make sure that Cookie is enabled in your Web browser. When you logged in, the [Login] button changes into [Logout] button. Click the [Logout] button when you want to logged out.

The default Admin user is registered as 01 user with user name "ADMIN" and secret code "0001".

Device Reorganization

JUE-501/JUE-251 recognizes a terminal automatically with the IP address when it has been registered in advance. This is convenient for the devices which can not handle "user login" like cameras to connect internet. For more information about device registration, see [Sec.6.5.4.2 Register Devices] (p6-50).

Registered devices are recognized automatically (by its IP address). Then User Login/Logout (by their name and secret code) can be made when the user clicks the Login/Logout button.

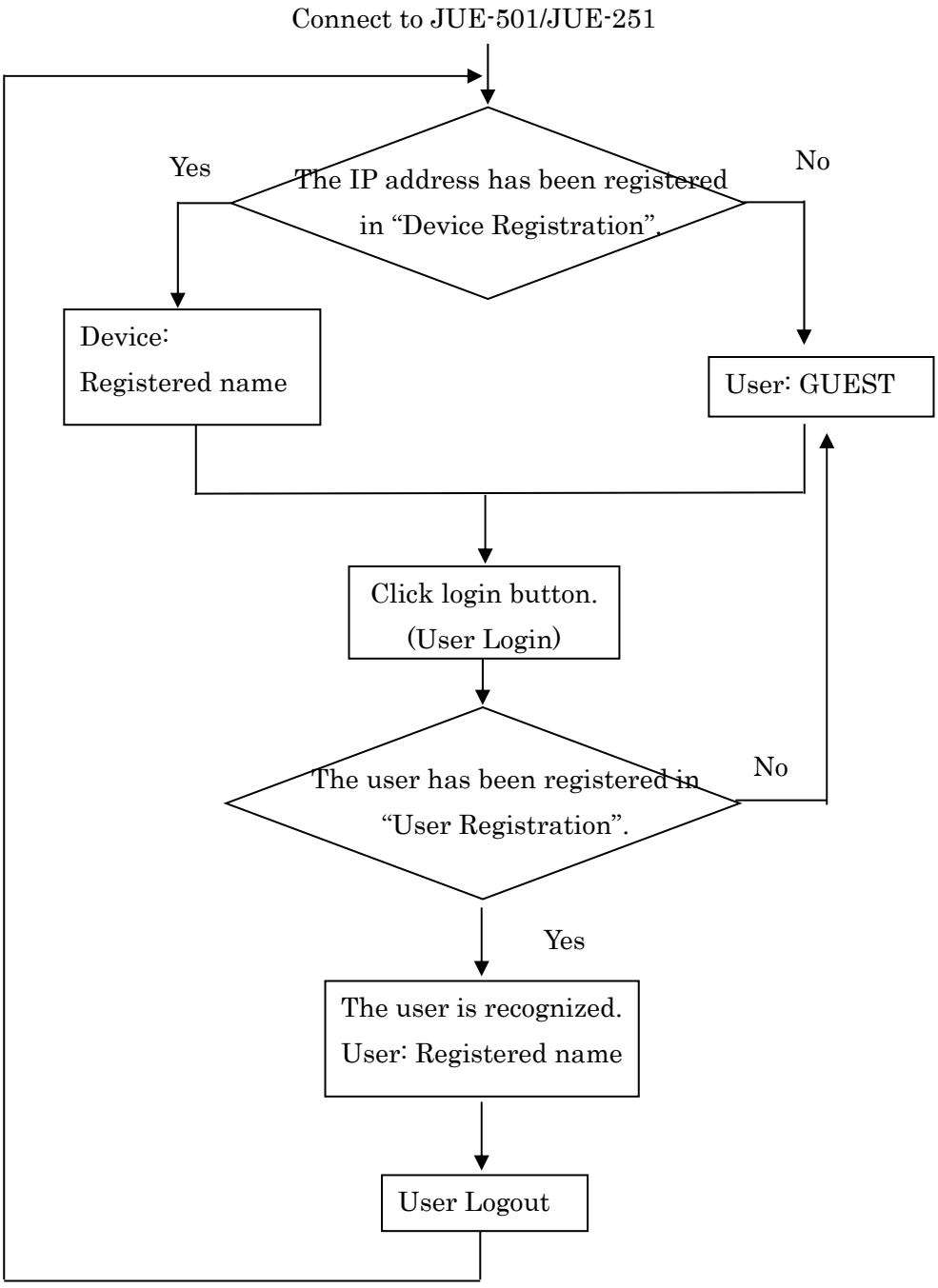


Fig. 6.3 b Flow of login

HINT
To control users refer to [6.5.4 User Control Menu](p6-48).

6.4 Menus for all Users

6.4.1 Dashboard (Dashboard Screen)

To enter the Dashboard screen, select “Dashboard” from the left [menu] panel.

Dashboard screen mainly displays status of JUE-501/JUE-251 and consists of following seven parts 1.Information, 2.Quick Connect, 3.Active Session & Calls, 4.User Information, 5.Setting, 6. Usage Information and 7.Display Style.

● Information part

Displays the status of JUE-501/JUE-251.

Fig. 6.4.1a Dashboard-Information part

Table 6.4.1a Contents of Dashboard-Information

a)	Status	Status of JUE-501/JUE-251	
		CS PS READY	Communication is available (available both CS and PS connection)
		CS READY	Communication is available (available only CS connection)
		PS READY	Communication is available (available only PS connection)
b)	Time	Current time (Displayed in UTC when local time has not been set.)	
c)	Satellite	Current-using satellite name and longitude	
d)	Spot Beam No.	Current-using spot beam Number	
e)	Alarm	Displayed in red text, during TX alarm generation TX ALARM is the function that informs the TX output is turned off due to a failure on the TX system.	
f)	WAN Selector	Current-using WAN access route	
g)	Latitude	Ship’s latitude	
h)	Longitude	Ship’s longitude	
i)	REC	Current reception level (value-displaying version of antenna icon)	
j)	EIRP	Current transmission level	
k)	Heading	Heading value of the ship (only for GYRO mode)	
l)	Bearing	Current Bearing value (Antenna direction when the bow is set to 0 degree.)	

m)	Elevation	Current Elevation value

● Quick Connect part

Connect to the internet quickly and easily via Standard IP connection. These buttons are available only when [Quick Connect] has been enabled for the login user in User Registration [Sec. 6.5.4.1](p6-48) or Device Registration [Sec. 6.5.4.2](p6-50).

Fig. 6.4.1b Dashboard-Quick Connect part

Table 6.4.1b Contents of Dashboard-Quick Connect

1)	Connect button	Connects to the internet（available only when unconnected）
2)	Disconnect button	Disconnects the internet（available only when connected）

● Active Session & Calls part

This block shows connections in progress.

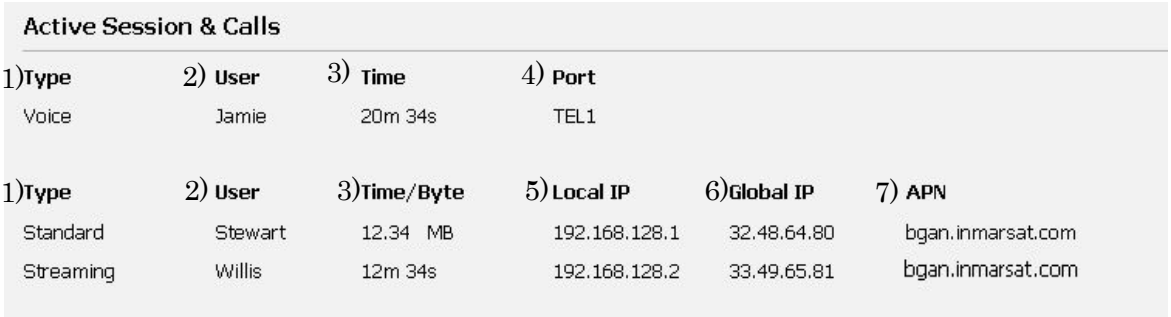


Fig. 6.4.1c Dashboard-Active Session & Call part

Table 6.4.1c Contents of Dashboard-Active Session & Call

1)	Type	Service Type	
		Voice	4 kbps AMBE service
		Audio	3.1 kHz Audio service
		Standard	Standard IP service
		Streaming	Streaming IP service
2)	User	Connecting user. User name for CS communication is recognized by Secret Code. If Secret Code is not used on the CS communication, the user name will be GUEST.	

3)	Time／Byte	Communication time In Standard communications, data size is displayed. In Standard communications, logs are saved every 10 M Byte.
4)	Port	Using port
5)	Local IP	1by1 NAT: Connecting local IP IP Masquerade: Connecting local network address Bridge: Connecting global IP PPPoE: PPPoE bridge mode
6)	Global IP	Using global IP
7)	APN	Access Point Name

● Usage Information part

This block shows information of the logged in user. For details about user registration, refer to User Registration [Sec. 6.5.4.1](p6-48) or Device Registration [Sec. 6.5.4.2](p6-50).

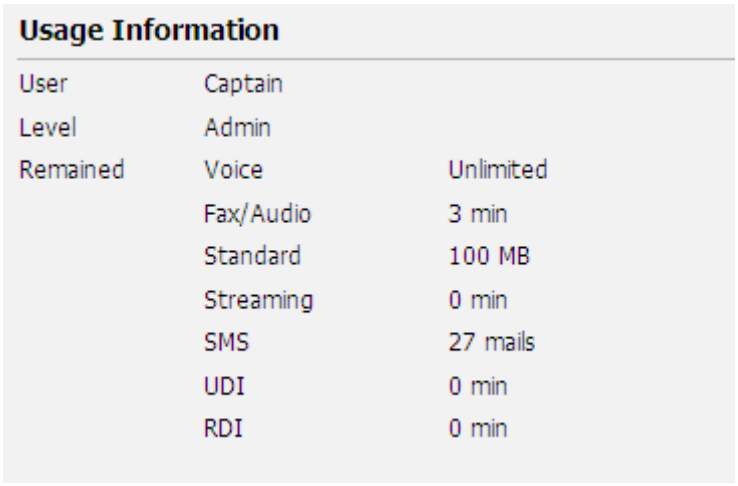


Fig. 6.4.1d Dashboard – Usage Information part

Table 6.4.1d Contents of Dashboard - Usage Information

1)	User	User name of the logged in user
2)	Level	Authority of the logged in user
3)	Remained	Remaining connection time/bytes/mails of the logged in user

● Setting part

This block sets Heading value, Satellite selection method, or clears TX Alarm. The state of TX Alarm can be confirmed by Dashboard-Information part.

* Although there is nothing wrong with JUE-501/JUE-251, selecting satellite makes some noise on ADE.

Fig. 6.4.1e Dashboard-Setting part

Table 6.4.1e Contents of Dashboard-Setting

1)	Heading	Input Heading value. (This term is displayed only when Gyro is selected for Tracking mode)
2)	Satellite	Set the satellite to be used. When you select Auto, JUE-501/JUE-251 automatically selects the most suitable satellite.
3)	TX Alarm	Click [TX Alarm Clear] button when TX Alarm is displayed in Alarm column (table 6.4.1a (e)) of Information part, and the TX output limitation will be cleared.

TX ALARM

TX ALARM is displayed (Fig. 6.4.1a e)) when a failure is occurred on the transmission system. Release TX ALARM because transmission output function is turned off by compulsion when this alarm is generated.

Step1: Press [TX Alarm Clear] to release the TX ALARM.

Step2: Check the ALARM column (Fig. 6.4.1a e)) is turned to empty. If TX ALARM is not disappeared, execute Step1 again.

If TX ALARM generated frequently, contact the dealer you purchased JUE-501/JUE-251 from.

● Display Style part

This part sets display style of Web screen.

Fig. 6.4.1f Dashboard-Display Style part

Table 6.4.1f Contents of Dashboard-Display Style

1)	Color Style	Select style from following five styles, JRC Red, Marine Pale Blue, BGAN Navy Blue, Gray Scale, and Earth.

6.4.2 Connect Internet (Data Connection Screen)

To enter the Data Connection screen, select “Data Connection” from the left [menu] panel.

On this screen, user can easily connect the internet within their permission. This screen varies by users (permissions) set in User Registration or Device Registration.

For more information about User Registration and Device Registration, refer to [Sec. 6.5.4.1 Register Users](p6-48) and [Sec.6.5.4.2 Register Devices](p6-50).

Data Connection screen consists of two parts, “Connection List” and “Setting”.

● Connection List

The list displays the information of PS connections. The list contains connection status (* means the connection is active), CID (Call ID), user, local IP address, Global IP address, service type, communication rate and using APN. Disconnect buttons are available only when [Multi Connect] has been enabled for the login user in User Registration [Sec. 6.5.4.1](p6-48) or Device Registration [Sec. 6.5.4.2](p6-50).

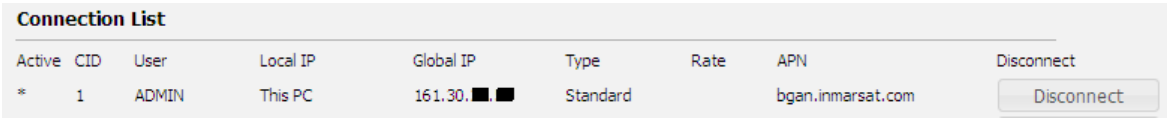


Fig. 6.4.2a Data Connection-Connection List part

● Setting

Settings for connecting to the internet. The setting displayed here is the same with the profile which has been assigned to the user on User Registration [Sec. 6.5.4.1](p6-48) or Device Registration [Sec. 6.5.4.2](p6-50). User can edit the setting only when their assigned profile permits them to edit it.

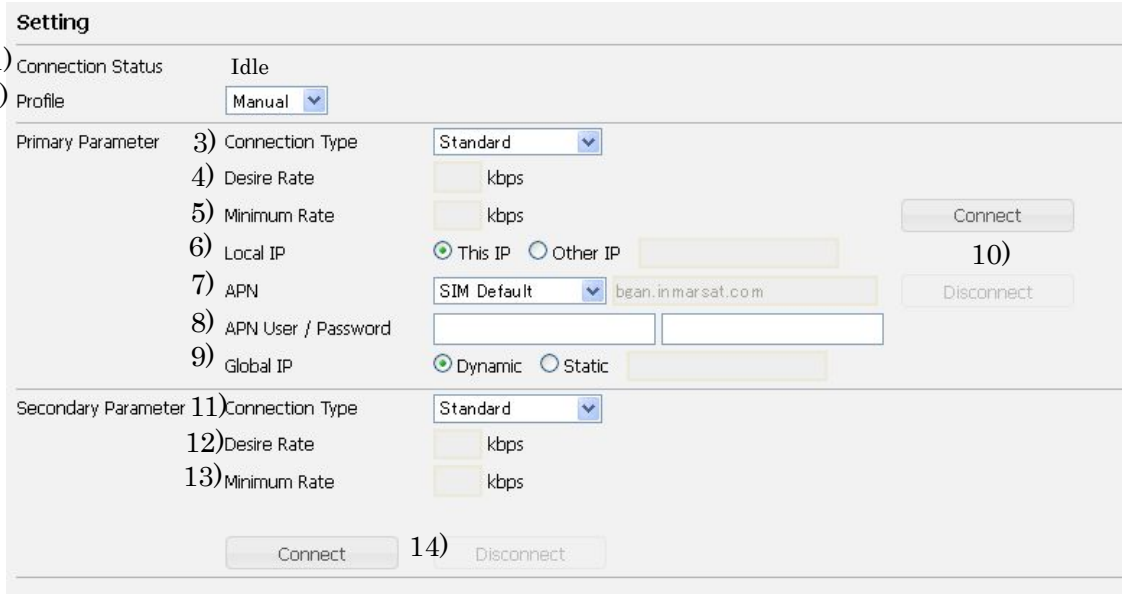


Fig. 6.4.2b Data Connection-Setting part

Table 6.4.2 Contents of Data Connection-Setting part

1)	Connection Status	Status of connection
2)	Profile	Assigned profile
3)	Connection Type	Available service type defined by assigned profile
4)	Desire Rate	Desire Rate for the connection (Only for the streaming service)
5)	Minimum Rate	Minimum Rate for the connection (Only for the streaming service) Connection will be cut automatically when the communication rate falls below this rate.
6)	Local IP	Local IP address for the connection. * Other IP is available only when [Multi Connect] has been enabled for the login user in User Registration [Sec. 6.5.4.1](p6-48) or Device Registration [Sec. 6.5.4.2](p6-50).
7)	APN	* Access Name Point
8)	APN User/Password	* User name and Password for APN. The password will be hidden by ● when it entered.
9)	Global IP	* Select Dynamic or Static for Global IP address used for this connection. Input of Global IP address is required only when Static is selected.
10)	Connect/Disconnect	Connect/Disconnect the connection
11)	Connection Type	Connection type for the secondary service
12)	Desire Rate	Desire Rate for the secondary connection (Only for the streaming service)
13)	Minimum Rate	Minimum Rate for the secondary service (Only for the streaming service) Secondary service will be cut automatically when the communication rate falls below this rate
14)	Connect/Disconnect	Connect/Disconnect the secondary connection

* 7) APN, 8) APN User/Password and 9) Global IP are editable only when the column of "Edit" on WAN Profile screen is set to "Permitted".

6.4.3 SMS Menu

SMS menu is on the left [menu] panel.

In this menu, reference of each message stored in SIM, sending SMS and setting of SMS can be executed.

SMS icon  appears on the Headline of the Web page when new message arrived to the main unit. Check the message out on the Inbox screen.

SMS Menu contains following screens.

- New Message Screen（Sec. 6.4.3.1 SMS New Message）
- Inbox Screen（Sec. 6.4.3.2 SMS Inbox）
- Sent Screen（Sec. 6.4.3.3 SMS Sent box）
- Draft Screen (Sec. 6.4.3.4 SMS Draft box)
- Setting Screen (Sec. 6.4.3.5 SMS Setting)

NOTE

SMS icon (FULL) 

appears on the Headline of the Web page when the memory capacity for SMS on the SIM card is full. Delete unnecessary messages to receive or send new message. How to delete individual message is described in [Sec. 6.4.3.2-4] and how to delete all message is described in [Sec. 6.4.3.5].
To check message capacity, refer to [Sec. 6.4.3.5].

6.4.3.1 SMS New Message (New Message Screen)

To enter the New Message screen, open "SMS" menu on the left [menu] panel and select "New Message".

On New Message Screen, you can write and send new SMS message.

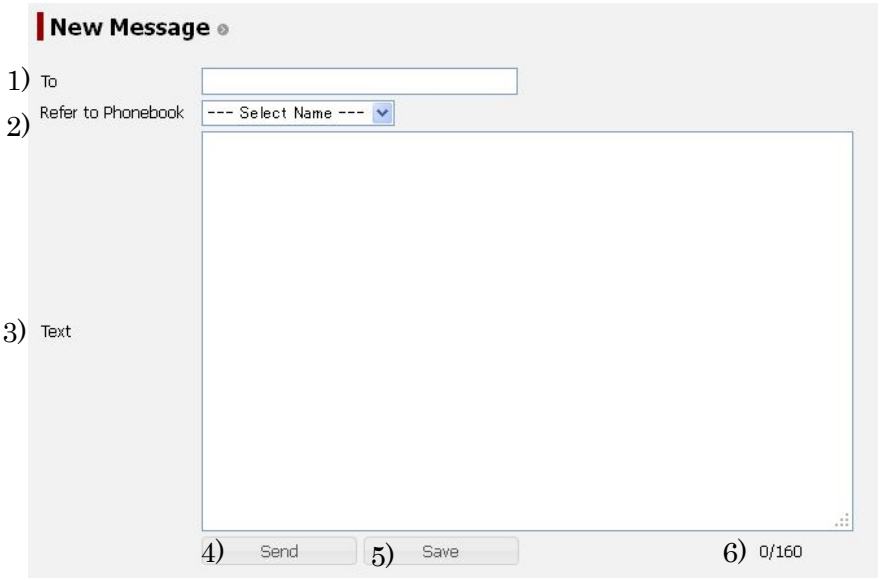


Fig. 6.4.3.1 New Message Screen

Table 6.4.3.1 Contents of New Message Screen

Display		Contents
1)	To	Destination for the message
2)	Refer to Phonebook	Refers to Phonebook instead of entering the telephone No. into 1) "To" textbox
3)	Text	Displays contents of message
4)	Send	Sends message
5)	Save	Saves message into Draft box
6)	--/---	(Entered character number) / (Maximum capacity of character number in SMS)

How to send a New Message

Step1: Enter the destination directly to "To" text box or select the name of destination from Phonebook in "Refer to Phonebook" box.

Step2: Write a message in "Text" box. SMS message can contain maximum 160 characters.

Step3: Click "Send" button, and the message is sent.

The sent message is saved in "Sent" screen. Click "Save" button to save the message into "Draft" box.

NOTE

In some condition of JUE-501/JUE-251, it may fail to send message. In that case, the message is saved into "Draft" box.

6.4.3.2 SMS Inbox (Inbox Screen)

To enter the Inbox screen, open "SMS" menu on the left [menu] panel and select "Inbox".
On this screen, user can check received message. Select a data from the Message List, and whole the message will be displayed on "Detail (the upper part of the screen)".

To make some action (Reply/Forward/Delete) to the displayed message, click buttons below the Text box.

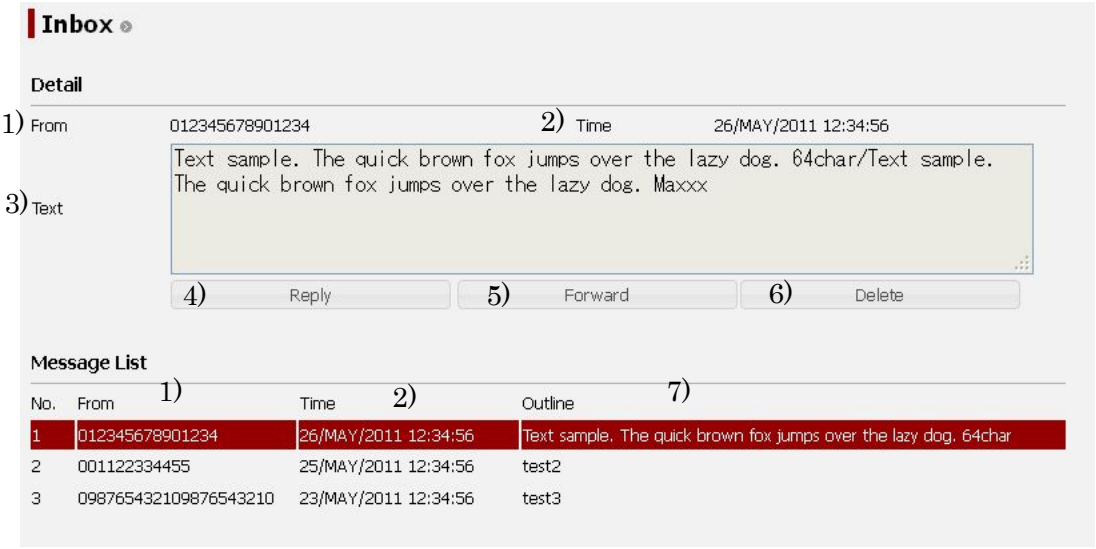


Fig. 6.4.3.2 Inbox Screen

Table 6.4.3.2 Contents of Inbox Screen

Display		Contents
1)	From	Sender
2)	Time	Reception date and time (UTC)
3)	Text	Message contents
4)	Reply	New message screen is displayed as the replay screen to the sender.
5)	Forward	New message screen is displayed as the forwarding screen.
6)	Delete	Deletes displayed message
7)	Outline	Head part of the message

6.4.3.3 SMS Sent box (Sent Screen)

To enter the Sent screen, open “SMS” menu on the left [menu] panel and select “Sent”.
On this screen, user can check sent message. Select a data from the Message List, and whole the message will be displayed on “Detail (the upper part of the screen)”.

To make some action (Resend/Forward/Delete) to the displayed message, click buttons below the Text box.

Fig. 6.4.3.3 Sent Screen

Table 6.4.3.3 Contents of Sent Screen

Display		Contents
1)	To	Destination for the message
2)	Text	Message contents
3)	Resend	New message screen is displayed for resending the message.
4)	Forward	New message screen is displayed as the forwarding screen.
5)	Delete	Deletes displayed message
6)	Outline	Head part of the message

*Sent messages are not necessarily stored in order of their transmitted time.

6.4.3.4 SMS Draft box (Draft Screen)

To enter the Draft screen, open "SMS" menu on the left [menu] panel and select "Draft".
On this screen, user can check saved message in Draft box. Select a data from the Message List, and whole the message will be displayed on "Detail (the upper part of the screen)".

To make some action (Edit/Forward/Delete) to the displayed message, click buttons below the Text box.

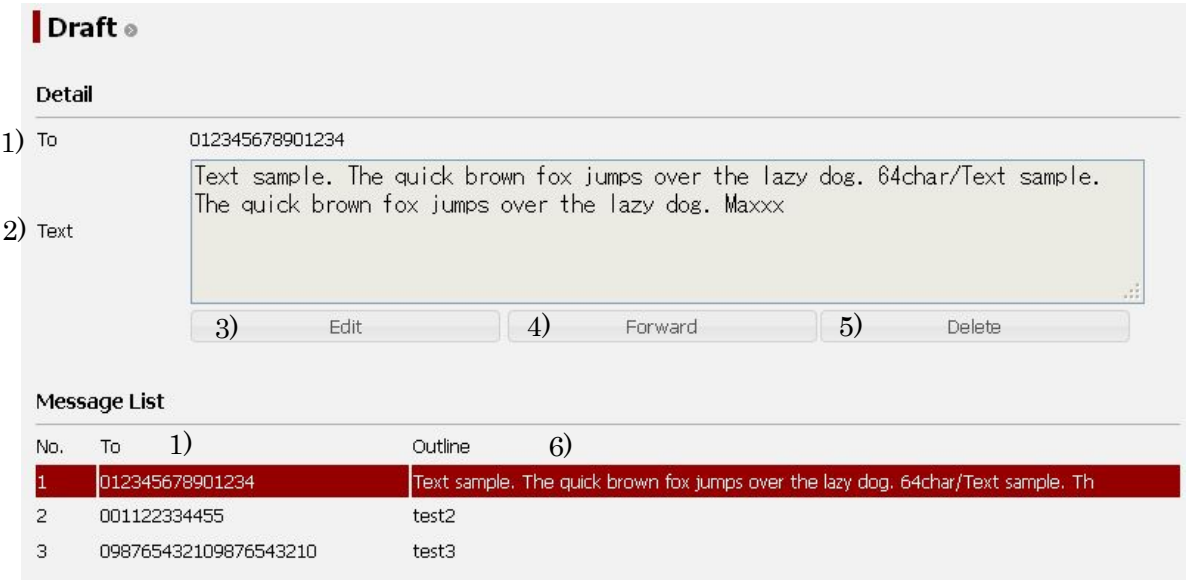


Fig. 6.4.3.4 Draft Screen

Table 6.4.3.4 Contents of Draft Screen

Display		Contents
1)	To	Destination for the message
2)	Text	Message contents
3)	Edit	New message screen is displayed for editing To and Text box and sending the message. *After this operation, when Send is clicked on the editing screen, this Draft message will be deleted. And when Save is clicked in that screen, this Draft message will be overwritten.
4)	Forward	New message screen is displayed as the forwarding screen.
5)	Delete	Deletes displayed message
6)	Outline	Head part of the message

*Draft messages are not necessarily stored in order of their saved time.

6.4.3.5 SMS Setting (Setting Screen)

To enter the Setting screen, open “SMS” menu on the left [menu] panel and select “Setting”.
On this screen, user can check message capacity and delete all messages.

Also user can set the details of SMS Service.

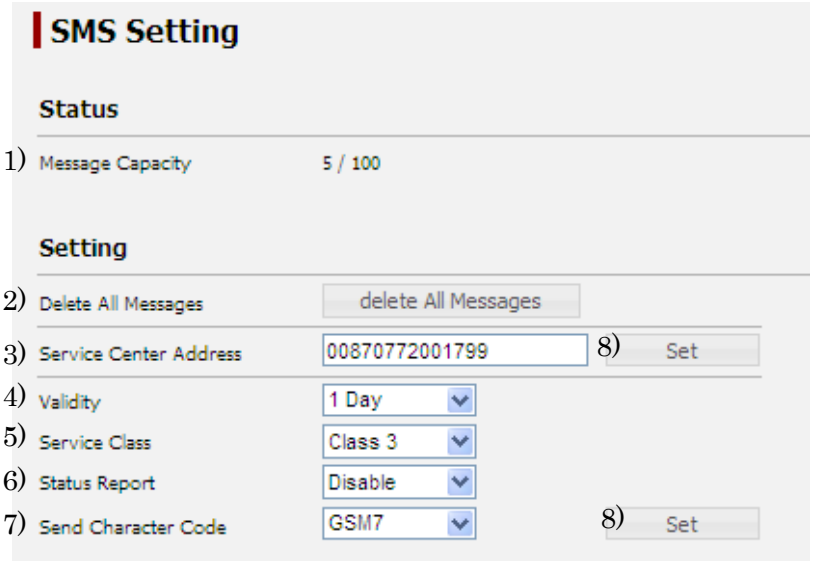


Fig. 6.4.3.5 SMS Setting Screen

Table 6.4.3.5 Contents of SMS Setting

Display		Contents
1)	Message Capacity	The number of the message which can be saved, and the preservation number of the present message are displayed.
2)	Delete All Message	Deletes all messages
3)	Service Center Address	Telephone No. of service center
4)	Validity	Storage validity term counted from the SMS is received by the Service Center.
5)	Service Class	Service class of sending SMS sets the behavior of the message after it is sent to recipient’s terminal. No Class: Not specified Class 0: Displays only (not stored) Class 1: Requests to store in recipient phone memory Class 2: Requests to store in recipient SIM memory Class 3: Uses recipient’s default mode
6)	Status Report	Delivery confirmation (Status Report) is available or not
7)	Send Character Code	Character code (GSM7/Unicode) of SMS Limit on the number of characters changes into 70 when Unicode was selected.
8)	SET	Registers setting contents

6.4.4 Phonebook (Phonebook Screen)

To enter the Phonebook screen, select "Phonebook" from the left [menu] panel.
On this screen, Phonebook stored in SIM card can be displayed. Phonebook can contain a maximum of 254 combinations of Name and Phone number. (The practical number which can be registered is based on SIM card.) Users with Admin level can set, edit and delete phonebook easily on this screen.

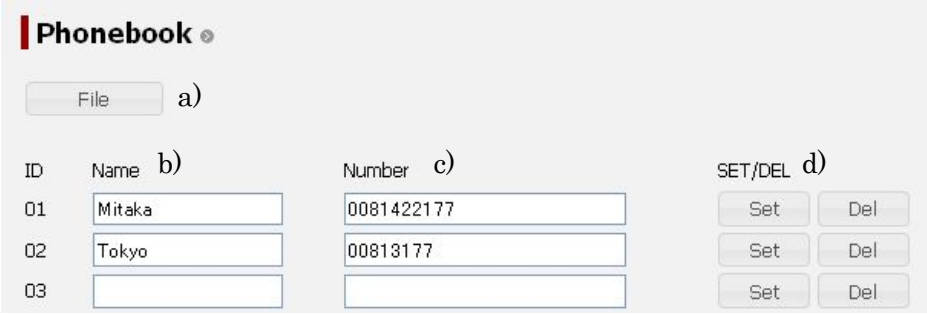


Fig. 6.4.4 Phonebook Screen

Table 6.4.4 Contents of Phonebook Screen

a)	File button	Displays the contents of Phonebook in CSV text format. *If this function is executed by multiple PCs simultaneously, the file may be damaged. In this case, obtain the file again. *Follow the PC manual to save the data.
b)	Name	Party's name (maximum 10 characters)
c)	Number	Party's telephone number (maximum 20 numbers)
d)	Set/Del button	Set button registers entered items (Party's name and number). Del button deletes entered items (Party's name and number)

Procedure of registration

Step 1: Input a party's name into the b) Name column of preferred ID.

Step 2: Input a party's telephone number into the c) Number column of the same row.

Step 3: Click d)[Set] button to register the items in the row.

Procedure of deletion

Step 1: Click d)[Del] button and the items in the row are deleted.

6.4.5 Call Log Menus

Call Log menu is on the left [menu] panel.
In this menu, user can display/clear the Call Log and set Call Charge to calculate communication charge. Call Log Menu contains following screens.

- Call Log Screen（Sec. 6.4.5.1 Check Call Log）
- Call Charge Screen（Sec. 6.4.5.2 Set Call Charge Rate）

6.4.5.1 Check Call Log (Call Log Screen)

To enter the Call Log screen, open “Call Log” menu on the left [menu] panel and select “Call Log”.

A maximum of 2000 Call Logs are stored in this page. When the stored logs exceed 2000 affairs, it deletes the oldest one.

When a voice service session has established by Multi-Voice function, logs of PS connections with those user name “Multi-Voice” will be recorded in addition to the voice-call log. The charges of these PS connections are free. Refer to Appendix J for Multi-Voice function.

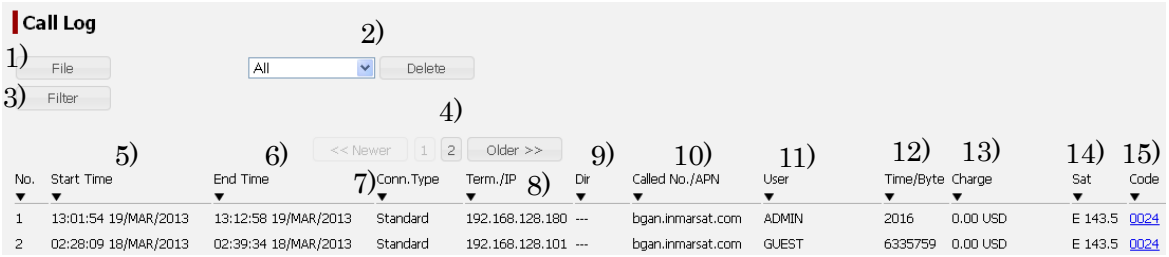


Fig. 6.4.5.1 Call Log Screen

Table 6.4.5.1 Contents of Call Log Screen

1)	File	Displays call logs in the CSV text format. *If this function is executed by multiple PCs simultaneously, the file may be damaged. In this case, obtain the file again. * Follow the PC manual to save the data. * Output file also reflects Filters explained in 3) as well as the display.
2)	Delete	Deletes selected Call Log.
3)	Filter	Filter the Call Log.
4)	Display button	Displays newer / older logs.
5)	Start Time	Communication starting time (UTC)
6)	End Time	Communication ending time (UTC)
7)	Conn. Type	Connection type (Voice/Audio/Standard/Streaming/SMS/UDI/RDI) *UDI/RDI is not available for JUE-251.
8)	Term.	Used port
9)	Dir.	Communicated direction (Out(Outgoing)/In(Incoming)) *This column is blank for Standard/Streaming service.
10)	Called No./APN	Party’s address (if it is acquired) (In the Standard/Streaming service, APN is displayed).

11)	User	For CS connection, the user is recognized by secret code. (Only when it was inputted.) For PS connection, the user is recognized by the login status.
12)	Time/Byte	Communication time In Standard communications, data size is displayed. In Standard communications, logs are saved every 10 M Byte.
13)	Charge	Estimated charge for the communication calculated by "Call Charge" function.
14)	Sat	Number of using satellite
15)	Code	Cause code

Sorting call log

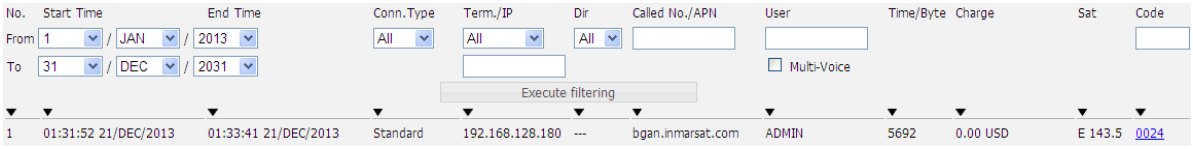
Step1: Click one of the column titles (No./ Start Time/ End Time/ Conn. Type/ Term/ Dir./ Called No./APN/ User/ Time/Byte/ Charge/ Sat/ Code) to sort the call log.

The sort function is applied only to the displayed log.

(If the sort function would not work, refer to [Appendix N.11.When the call log sort function is not working] (pN-12).)

Filtering call log

Filter conditions will appear on the top of the call-log list when "Filter" button (3) of table 6.4.5.1) is clicked.



Enter the filtering condition and click "Execute filtering" button.

* Only Called No./APN term allows partial match.

Outputting procedure

Step1: Click "File" button

The Call Log is Displayed in the CSV text format on Web browser.

*If this function is executed by multiple PCs simultaneously, the file may be damaged. In this case, obtain the file again.

* Follow the PC manual to save the data.
* Output file also reflects Filters explained in 3) of table 6.4.5.1 as well as the display.

Clearing procedure

Step1: Select the service type to delete from the pull-down menu.

Step2: Click "Delete" button.

Step3: Confirmation sentence will appear. Click "Yes" button.

Call Logs are deleted.

6.4.5.2 Set Call Charge Rate (Call Charge Screen)

To enter the Call Charge screen, open “Call Log” menu on the left [menu] panel and select “Call Charge”.

JUE-501/JUE-251 calculates the communication charge automatically from the list of “Rate for Unit” when it is filed by user. The calculated charge is displayed in Call Log.

NOTE

* This calculation is only a rough estimation based on user input.
* JRC does not take any responsibility for the correctness of the estimated charge.
* Settings for UDI, RDI and 256k Streaming are not displayed for JUE-251 because FB250 system doesn’t support these services.
* Only Admin users can change these settings.

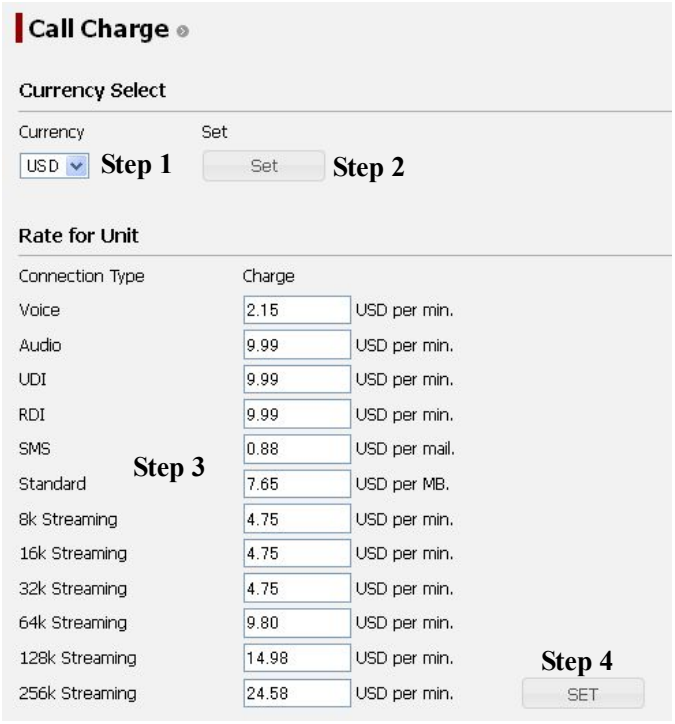


Fig. 6.4.5.2 Call Charge Screen

Procedure of setting Call Charge

Step 1: Select the Currency from the pull down menu. The menu contains USD, EUR and JPY.

Step 2: Click the Set button located to the right side of the Currency.

Step 3: Enter the charge for at a rate per unit time (minute), size (Mbyte) and mail.

Step 4: Register the settings by clicking Set button below.

6.4.6 System Log Menus

System Log menu is on the left [menu] panel.

In this menu, user can display/clear the status and logs of JUE-501/JUE-251.

System Log Menu contains following screens.

- Alarmpack Screen（Sec. 6.4.6.1 Check Alarmpack）
- Event Log Screen（Sec. 6.4.6.2 Check Event Log）
- ADE Monitor Screen（Sec. 6.4.6.3 Check ADE）

6.4.6.1 Check Alarmpack (Alarmpack Screen)

To enter the Alarmpack screen, open “System Log” menu on the left [menu] panel and select “Alarmpack”.

On this screen, current alarm information and alarm history (maximum 50 cases) can be displayed.

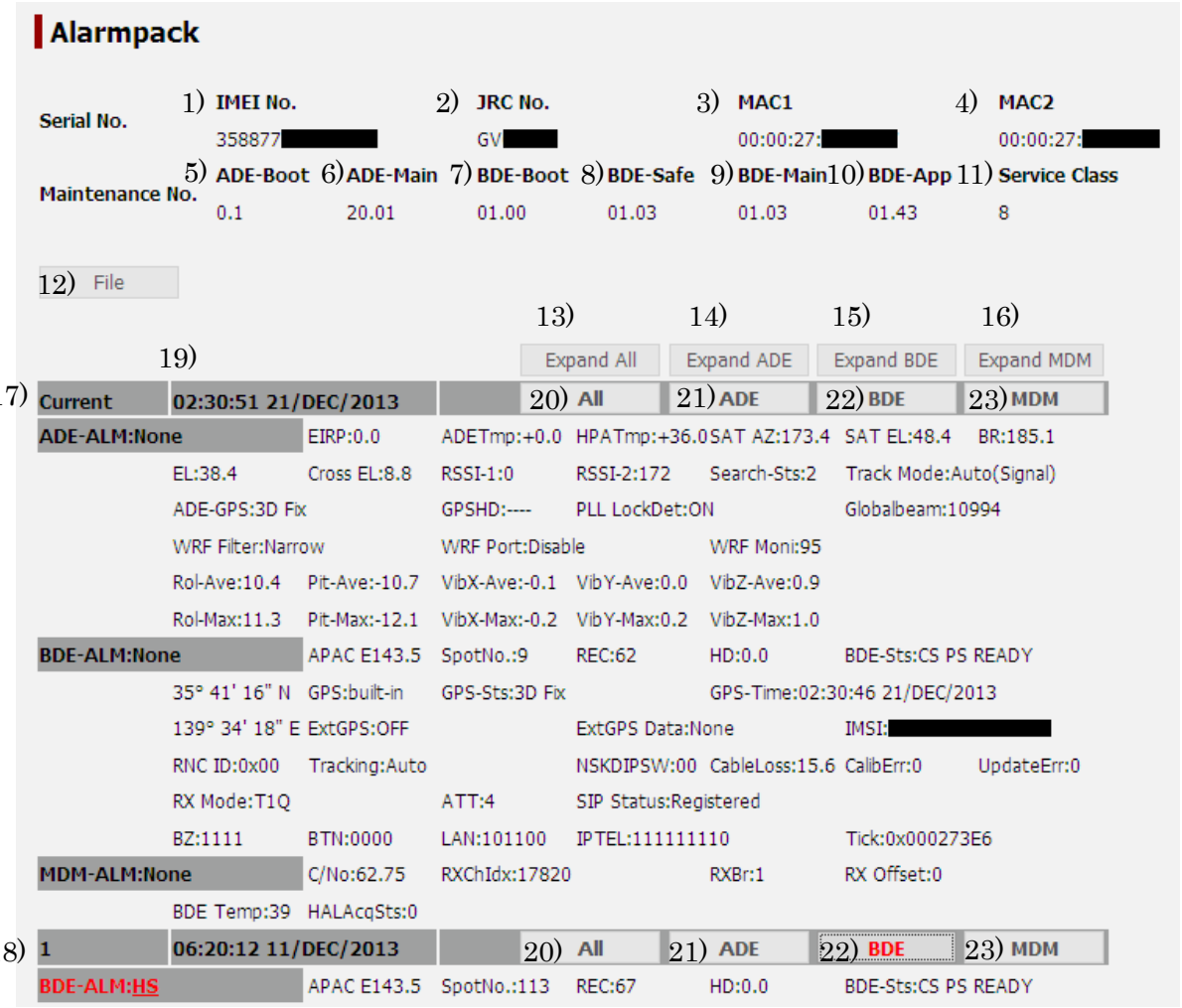


Fig. 6.4.6.1a Alarmpack Screen

Table 6.4.6.1a Contents of Alarmpack Screen

Serial No.		
1)	IMEI No.	International Mobile Equipment Identity number (15 digits)
2)	JRC No.	manufacturer's serial number (7digits)
3)	MAC 1	MAC address for EXT WAN Ethernet Port.
4)	MAC 2	MAC address for User LAN Ethernet Port and JRC LAN Ethernet Port.
Maintenance No.		
5)	ADE-Boot	ADE Boot maintenance number
6)	ADE-Main	ADE maintenance number
7)	BDE-Boot	BDE Boot maintenance number
8)	BDE-Safe	BDE Safe mode maintenance number
9)	BDE-Main	BDE maintenance number
10)	BDE-App	BDE Application maintenance number
11)	Service Class	Inmarsat Class number 8 is for FBB500 system and 9 is for FB250 system.
Buttons		
12)	File	Displays Alarmpack in the CSV text format. *If this function is executed by multiple PCs simultaneously, the file may be damaged. In this case, obtain the file again. * Follow the PC manual to save the data.
13)	Expand (Shrink) All	Displays (closes) Alarmpack all
14)	Expand (Shrink) ADE	Displays (closes) Alarmpack of ADE part for all the log
15)	Expand (Shrink) BDE	Displays (closes) Alarmpack of BDE part for all the log
16)	Expand (Shrink) MDM	Displays (closes) Alarmpack of MDM part for all the log
17)	Current	Current information
18)	n	Logged information (a maximum of 50 logs)
19)	Time	Logging time (00：00：00 DD/MMM/YYYY) (UTC)
20)	All	Displays Alarmpack all for the selected log
21)	ADE	Displays Alarmpack of ADE part for the selected log
22)	BDE	Displays Alarmpack of BDE part for the selected log
23)	MDM	Displays Alarmpack of MDM part for selected the log

Each Alarm information has three parts—ADE (Above Deck Equipment) part, BDE (Below Deck Equipment) part and MDM (MoDeM) part.

The details are described below.

1. ADE part

Fig. 6.4.6.1b Alarmpack ADE part

Table 6.4.6.1b Contents of Alarmpack ADE part

Line	Display	Contents	Displayed style
1	ADE-ALM:	Existence of ADE alarm	None or objective part
	EIRP:	Transmission status (EIRP value)	0.0～22.0
	ADETmp:	ADE temperature	+0.0 (fixed to 0.0 for JUE-501/251)
	HPATmp:	HPA temperature	-125～125
	SAT AZ:	Satellite AZ	0.0～359.9
	SAT EL:	Satellite EL	0.0～90.0
	BR:	Antenna bearing	0.0～359.0
2	EL:	Antenna EL	-25.0～120.0
	Cross EL:	Antenna XEL	-30.0～30.0
	RSSI-1:	RSSI-1 value	0 (fixed to 0 for JUE-501/251)
	RSSI-2:	RSSI-2 value	0～255
	Search-Sts:	Satellite search status	0~5
	Track Mode:	Tracking Mode	Auto(Signal)/Auto(GpsHD)/ Auto(Sensor)/Gyro
3	ADE-GPS:	ADE GPS fix status	Cold Start / Unfix / 2D Fix / 3D Fix
	GPSHD:	ADE GPS Heading	0.0 ~ 359.9
	PLL LockDet:	PLL lock detect	ON/OFF
	GlobalBeam:	Global Beam channel	0, 3200~19600
4	WRF Filter	Using filter	Narrow / Wide
	WRF Port	Use or non-use of WRF port	Enable / Disable / Auto
	WRF Moni	WRF Monitor	0~254
5	Rol-Ave:	Average value of Rolling for last 6 min	-40.0~+40.0
	Pit-Ave:	Average value of Pitching for last 6 min	-40.0~+40.0
	VibX-Ave:	Average value of X vibration for last 6 min (unit: G)	-6.0~+6.0

	VibY-Ave:	Average value of Y vibration for last 6 min (unit: G)	-6.0~+6.0
	VibZ-Ave:	Average value of Z vibration for last 6 min (unit: G)	-6.0~+6.0
6	Rol-Max:	Maximum value of Rolling for last 6 min	-40.0~+40.0
	Pit-Max:	Maximum value of Pitching for last 6 min	-40.0~+40.0
	VibX-Max:	Maximum value of X vibration for last 6 min (unit: G)	-6.0~+6.0
	VibY-Max:	Maximum value of Y vibration for last 6 min (unit: G)	-6.0~+6.0
	VibZ-Max:	Maximum value of Z vibration for last 6 min (unit: G)	-6.0~+6.0

2. BDE part

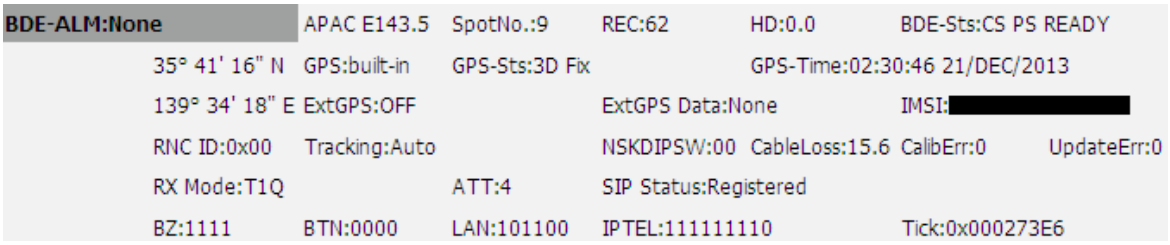


Fig. 6.4.6.1c Alarmpack BDE part

Table 6.4.6.1c Contents of Alarmpack BDE part

Line	Display	Contents	Displayed style
1	BDE-ALM:	Existence of BDE alarm	None or objective part
	Name [E,W] ddd.d	Longitude of used satellite	Ex.) APEC E 143.5
	SpotNo.:	Used spot beam number	0~255
	REC:	Reception level	0～80
	HD:	Heading value	0.0~359.9
	BDE-Sts:	BDE status	Ex) CS PS READY
2	ddd° mm ’ ss” [N,S]	Latitude	Ex.) 12° 34’56” N
	GPS:	Using GPS	built-in / Ext / Test
	GPS-Sts:	GPS fix status	Cold Start / Unfix / 2D Fix / 3D Fix
	GPS-Time:	GPS UTC	hh:mm:ss dd/MMM/yyyy
3	ddd° mm ’ ss” [E,W]	Longitude	Ex.) 123° 45’06” E
	ExtGPS:	External GPS	OFF/ON
	ExtGPS Data:	Receiving GPS sentence	None/ GGA/ ZDA
	IMSI:	IMSI value stored in SIM card	123456789012345

4	RNC ID:	Satellite Station ID	0x00-0xFF
	Tracking:	Satellite tracking type (Auto, Auto(Gyro): Signal Tracking, Other: Gyro)	Auto,Auto(Gyro),Sync/Step, LAN,NMEA(4.8k), NMEA(38.4k)
	NSKDIPSW:	NSK Unit Dip-SW	XX (00 ~ FF)
	CableLoss:	ADE-BDE Cable loss	0.0～50.0
	CalibErr:	Calibration Error Code	0~255
	UpdateErr:	Updating result	0 (fixed to 0 for JUE-501/251)
5	RX Mode:	Receiving Channel type	T025Q / T1Q / T1X / T45X
	ATT:	BDE attenuator value	0~255
	SIP Status:	Connection status to Inmarsat SIP server	---- / Failed / Unregistered / Request Sent / Auth Sent / Registered / Rejected / Timeout / No Auth
6	BZ:	Buzzer Connection status (0:Not connected, 1:Connected)	nnnn (BZ1 is first from left)
	BTN:	Button Connection status (0:Not connected, 1:Connected)	nnnn (BTN1 is first from left)
	LAN:	Ethernet Link status (0:Not connected, 1:Connected)	nnnnnn (User LAN1 is first from left)
	IPTEL	IPTEL connection status (0:Not connected, 1:Connected)	nnnnnnnnn (IPTEL1 is first from left)
	Tick:	The timer since system boot	0xnnnnnnnn

3. MDM part

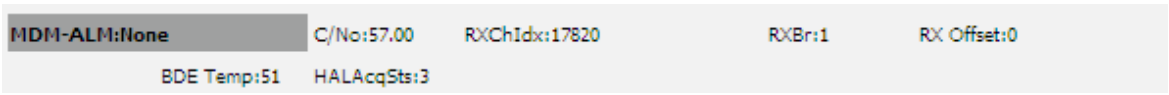


Table 6.4.6.1d Contents of Alarmpack MDM part

Fig. 6.4.6.1d Alarmpack MDM part

Line	Display	Contents	Displayed style
1	MDM-ALM:	Existence of Modem alarm	None or objective part
	C/No:	Carrier / Noise ratio	40.0~67.0
	RxChIdx:	Receiving channel index	0, 6400~39280
	RxBr:	Receiving Bearer	0~3
	RxOffset:	Receiving frequency offset	0 or 1
2	BDE Temp:	BDE Temperature	-125~+125
	HALAcqSts:	HAL Acquisition Status	0~6

6.4.6.2 Check Event Log (Event Log Screen)

To enter the Event Log screen, open “System Log” menu on the left [menu] panel and select “Event Log”.

Latest 1000 events are stored and displayed on this screen. User can display event logs in CSV text format by clocking File button.

Fig. 6.4.6.2 Event Log Screen

Table 6.4.6.2a Contents of Event Log Screen

Display			Contents
1	File		Displays event logs in CSV text format *If this function is executed by multiple PCs simultaneously, the file may be damaged. In this case, obtain the file again. * Follow the PC manual to save the data.
2	Date/Time		Logging time (00：00：00 DD/MMM/YYYY) (UTC)
3	Event		Event (See table 6.4.6.3)
4	Result	Success	The event was succeeded.
		Failure	The event was failed or alarm was detected
5	Para1		Parameter1 (See table 6.4.6.3)
6	Para2		Parameter2 (See table 6.4.6.3)

The meanings of each event and parameters are listed below.

Table 6.4.6.2b Meanings of Event Log

Event		Para 1		Para 2	
Start	Turning on the main unit	0	Fixed	0	Fixed
Power Off	Turning off the main unit	0	Normal power off	0	Fixed
		1	Manual reboot		
		2	Forced reboot		
REG End	Registering for the satellite	0	Success	0	Fixed
		Non-0	Refer to cause codes of 3GPP 24.008 Annex G		
DEREG End	Deregistering from the satellite	Refer to cause codes of 3GPP 24.008 Annex G		0	Fixed
Search Start	Starting satellite search	1	REC declining	0	Fixed
		2	Search NG 10 min. timer		
		3	7 hour timer		
		4	Fail to registration		
		5	ADE reboot		
		6	ADE request		
		7	Manual search		
Search End	Ending satellite search	0	Fixed	0	Fixed
COMM Start/End	Starting/Ending CS or PS communication	SSCCC CCC : Call ID (000-999) SS : Service 1 : CS-Voice 2 : Audio 3 : FAX 4 : UDI 5 : RDI 6 : Standard 7 : Streaming 8 : SMS 21 : PS-Voice		Start : 0 Fixed End : refer to cause codes of Call Log	
Alarm	Detecting alarm	0	Fixed	0	Fixed
SIP Register/Deregister	SIP Register/Deregister	0	Fixed	0	Fixed
IPTEL Register/Deregister	IPTEL Register/Deregister	1-9	IPTEL1-IPTEL9	0	Fixed

6.4.6.3 Check ADE (ADE Monitor Screen)

To enter the ADE Monitor screen, open “System Log” menu on the left [menu] panel and select “ADE Monitor”.

On this screen, user can monitor the status of ADE. A maximum of 100 ADE logs can be checked on Web browser and a maximum of 7200 ADE logs can be contained in an output file.

Fig. 6.4.6.4 ADE Monitor Screen

The MAX value and AVE value of ROLL, PITCHING and IMPACT(Vibration) is calculated on the last 6 minutes.

File button displays the contents of ADE Monitor in text format.

*If this function is executed by multiple PCs simultaneously, the file may be damaged. In this case, obtain the file again.

* Follow the PC manual to save the data.

6.5 Menus for Admin Users

6.5.1 Set Basic Information (Terminal Screen)

To enter the Terminal screen, select "Terminal" from the left [menu] panel.

On this screen, the basic data of JUE-501/251 can be set.

Also the blockage areas up to six can be registered to indicate the antenna of JUE-501/JUE251 is being hidden from satellite by an obstruction like ship's mast or funnel.

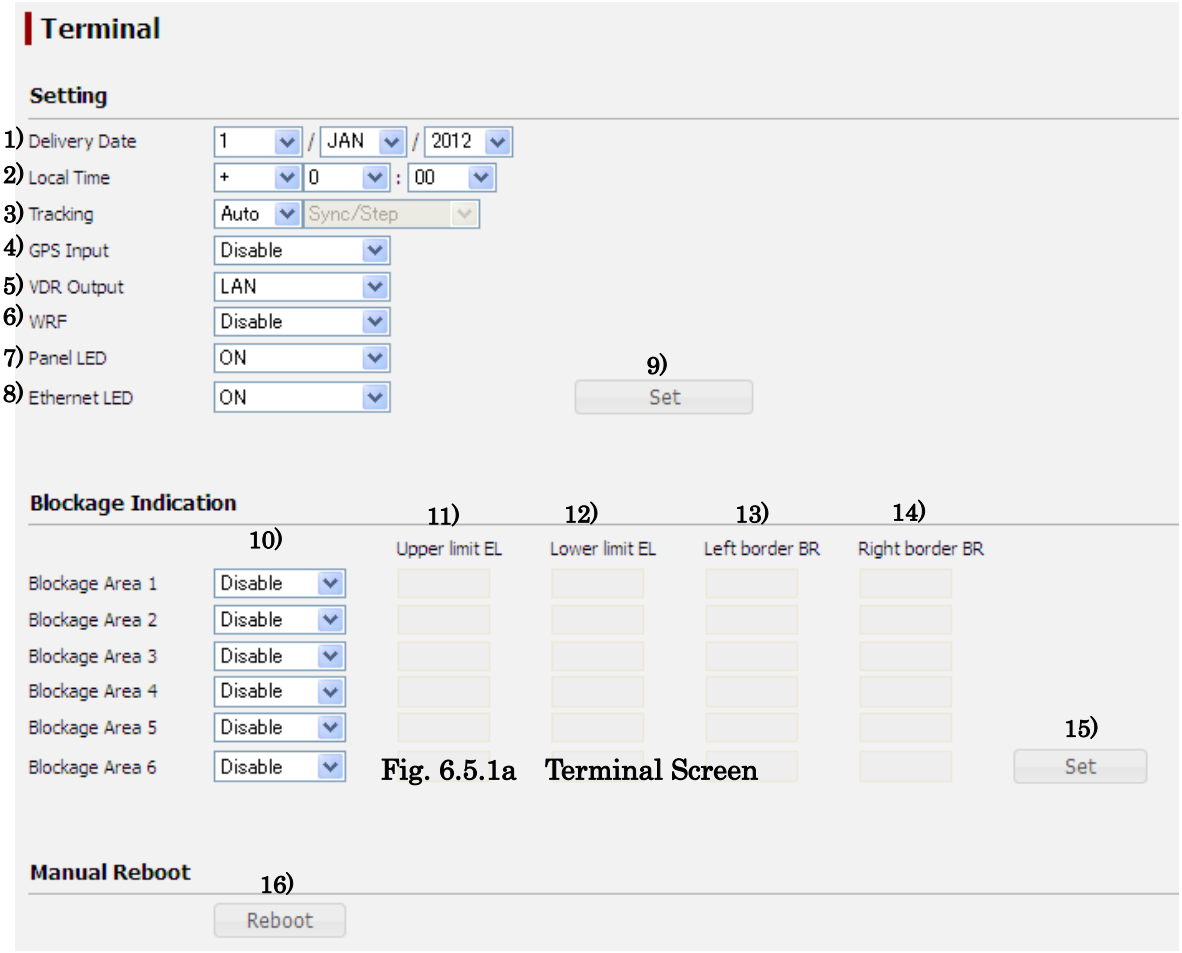


Fig. 6.5.1a Terminal Screen

Table. 6.5.1a Contents of Terminal-Setting

Display		Contents
1)	Delivery Date	Operation starting date of JUE-501/JUE-251 Delivery date does not only record the day when the JUE-501/JUE-251 was installed and communication commenced, but it helps to determine the guarantee term etc. Accurate setting is recommended.
2)	Local Time	Time differences between UTC (Universal Time Coordinated) and Local time Select [+] when Local time is faster than UTC, and [-] when it is slower.
3)	Tracking	Tracking method of JUE-501/JUE-251 Select the tracking system from Auto or Gyro. When Gyro is selected, Gyro type is required. Select Gyro type from Sync/Step, NMEA(4.8k), NMEA(38.4k) or LAN. System reboot is required to apply this setting.

4)	GPS Input	Input method of external GPS Select one from Disable (use only built-in GPS), NMEA(4.8k), NMEA(38.4k) or LAN. System reboot is required to apply this setting.
5)	VDR Output	Output method to VDR for sending Alarmpack of JUE-501/JUE-251 Select Disable or LAN. System reboot is required to apply this setting.
6)	WRF	Setting for WRF (Wide-band Radio Frequency) interface. The WRF interface is needed for a navigation system to receive the satellite signal directly. “Enable” uses wide band filter. “Disable” uses narrow band filter and prevents interference of any other radio waves. ”Auto” changes the using filter automatically.
7)	Panel LED	Setting for ON/OFF of the LEDs on the front panel of main unit
8)	Ethernet LED	Setting for ON/OFF of the Ethernet LEDs on the back panel of main unit If “Ethernet LED” is set to “OFF”, the Ethernet LED lamps will remain turned off even when some devices are connected to the LAN ports.
9)	SET	Registers the setting contents

Table. 6.5.1b Contents of Terminal-Blocking Indication

Display		Contents
10)	Enable/Disable	Use or non-use of the Blockage Area
11)	Upper limit EL	Upper limit elevation for the blockage area (Range: 1 to 90)
12)	Lower limit EL	Lower limit elevation for the blockage area (Range: 1 to 90)
13)	Left border BR	Bearer value for Left border of the blockage area (Range: 0 to 359)
14)	Right border BR	Bearer value for Right border of the blockage area (Range: 0 to 359)
15)	SET	Registers the setting contents

Table. 6.5.1c Contents of Terminal-Manual Reboot

Display		Contents
16)	Reboot	Reboot the system from Web menu.

6.5.2 Telephony Menu

Telephony menu is on the left [menu] panel.

In this menu, user can set up telephony.

Telephony Menu contains following screens.

- Telephony Screen（Sec. 6.5.2.1 Set up Ports）
- PBX Screen（Sec. 6.5.2.2 Set Auto Answering the Telephone）
- Supplementary Screen（Sec. 6.5.2.3 Set Telephone Supplementary Service）
- Multi Number Screen (Appendix J)
- Multi-Voice Screen (Appendix J)

6.5.2.1 Set up Ports (Telephony Screen)

To enter the Telephony screen, open “Telephony” menu on the left [menu] panel and select “Telephony”.

User can set Outgoing/Incoming service type, operation limit, voice volume, limitation for outgoing call and call up time for each port (Handset/ TEL1~6/ ISDN / IPTEL1~9).

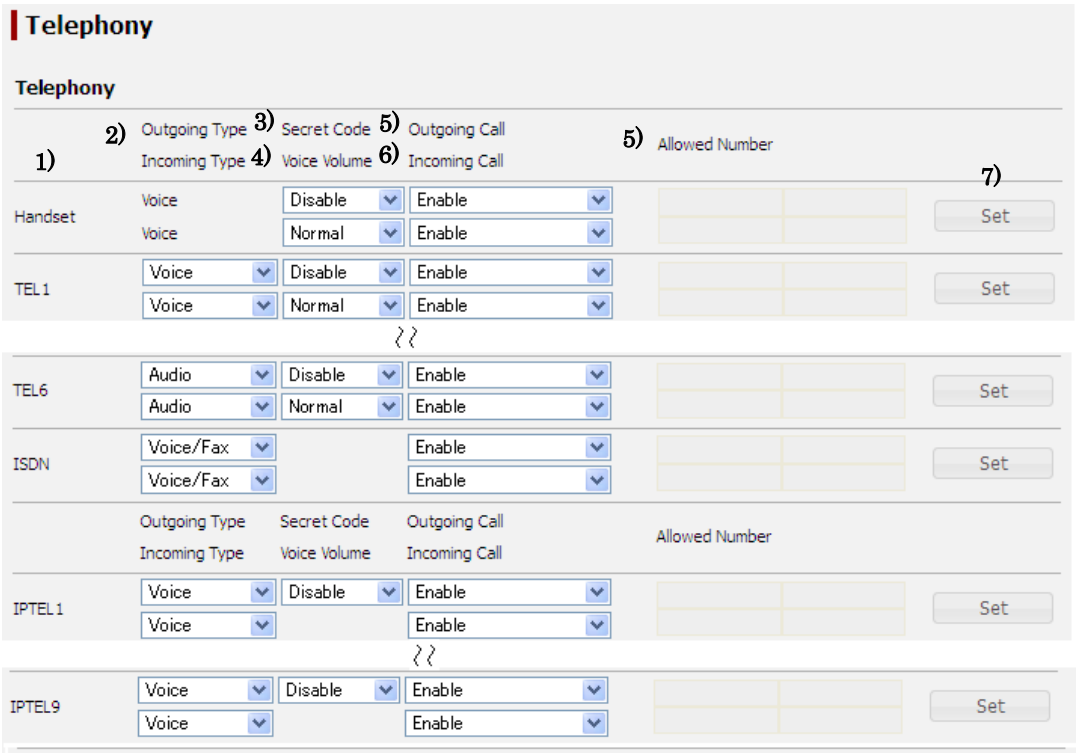


Fig. 6.5.2.1a Terminal Screen

Table. 6.5.2.1a Contents of Terminal-Setting

Display		Contents
1)	Port	Setting Port
2)	Outgoing/Incoming Type	Outgoing/Incoming type Each pull down menu contains available type for the port. "Voice" sets type to 4k AMBE service. "Fax" sets type to Fax. "Audio" sets type to 3.1 kHz Audio service. "Voice/Fax" sets type to 4k AMBE service and Fax. "Voice/Audio" sets type to 4k AMBE service and 3.1 kHz Audio service.
3)	Secret Code	Operation limit "Enable" requires secret code to operate terminal connected to the port. "Disable" doesn't require secret code so that anyone can operate terminal connected to the port.
4)	Voice Volume	Reception volume Normal or High
5)	Outgoing Call	Limitation of originating a call from the port "Disable" denies all outgoing call. "Allowed Number" permits making a call only to the allowed phone numbers. The allowed number list contains a maximum of four phone numbers. It also permits making a call to a phone number which begins with the listed number. (Setting 0081 permits making a call to 0081xxx.) "Phonebook" permits numbers registered in phonebook. "Enable" sets no limitation.
6)	Incoming Call	Call up time after a call arrives to the main unit "Enable" rings when a call arrives on main unit. "After Xs" rings after X seconds later since a call has arrived on main unit. "Disable" rings no sound.
7)	SET	Registers the setting contents

6.5.2.2 Set Auto Answering the Telephone (PBX Screen)

To enter the PBX screen, open "Telephony" menu on the left [menu] panel and select "PBX".
In this menu, user can set up auto answer. When auto answer is enabled, a fixed message (Please dial 3 digits extension number.) is reproduced automatically. The main unit waits for input from the caller for set time. If no input is recognized, the call will be forwarded to the default destination. The extension number of JUE-501/JUE-251 is designed as Table 6.5.2.2a.

Table. 6.5.2.2a Extension Number JUE-501/JUE-251

Device	Extension Number
Handset	000
TEL1~TEL6	001~006
ALL TEL ports and Handset	099
IPTEL1 ~ IPTEL6	501～509
ISDN	401
All	999

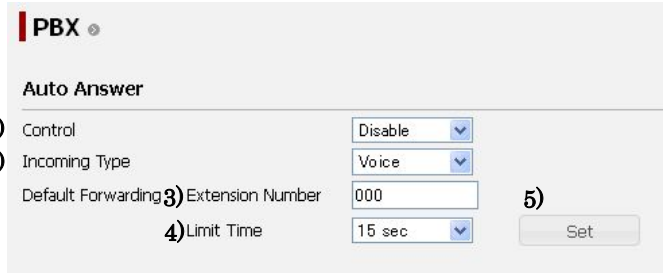


Fig. 6.5.2.2a PBX Screen

Table. 6.5.2.2b Contents of PBX-Auto Answer

Display		Contents
1)	Control	Validation of Auto Answer
2)	Incoming Type	Incoming service type (Voice/Audio) for adapting auto answer
3)	Extension Number	Default destination for forwarding a call when no input had been recognized for "Limit Time". *The call will not be forwarded when the terminal doesn't accept the service type specified at "2) Incoming Type". Check your Telephony settings (Sec.6.5.2.1).
4)	Limit Time	Waiting time for input from caller
5)	SET	Registers the setting contents

NOTE

* Auto Answer function is not available when the land telephone can not handle DTMF.
* Auto Answer function answers the call even when the receiver is absent, and thus the communication charge will be incurred.
* JRC is indemnified for any communication fee troubles using this function except as outlined in the product warranty and by limitation of law.

6.5.2.3 Set Telephone Supplementary Service (Supplementary Screen)

To enter the Supplementary screen, open “Telephony” menu on the left [menu] panel and select “Supplementary”.

On this screen, Call Forwarding, Call Waiting and Call Barring are set.

Also, Voice Mail Center Address is displayed on this screen.

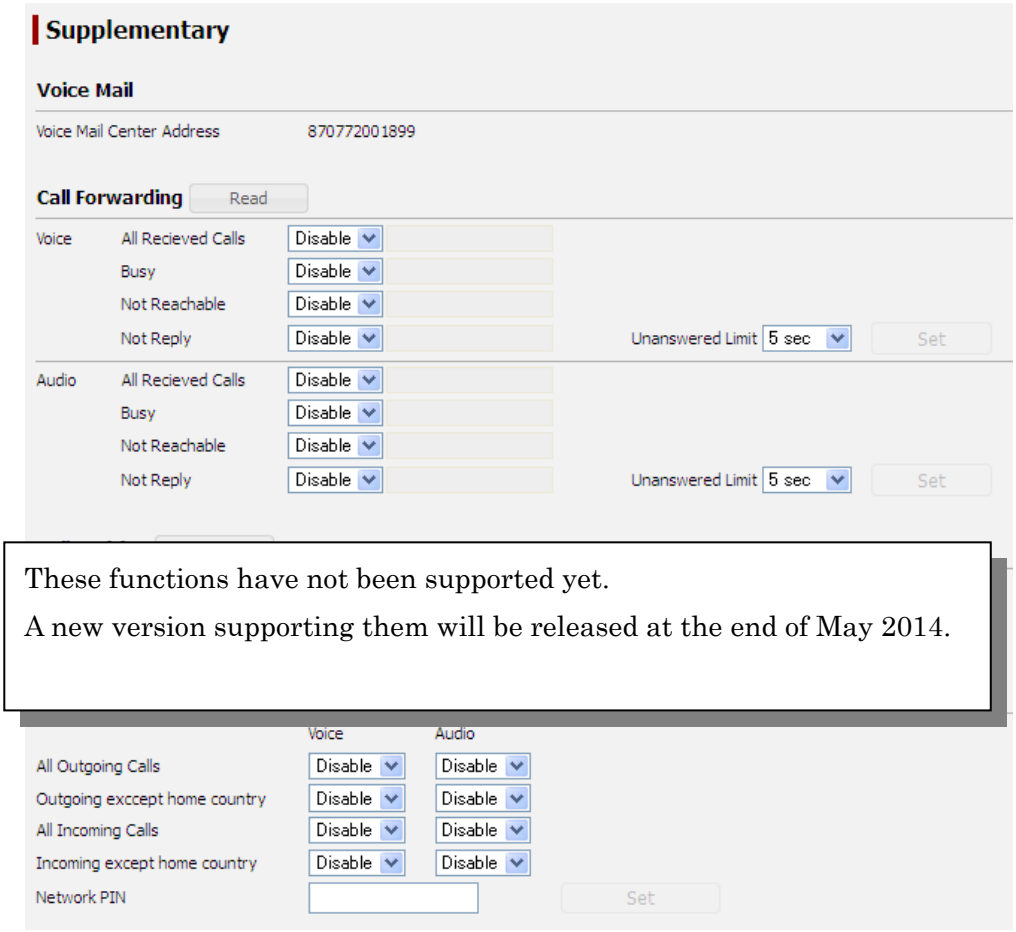


Fig. 6.5.2.3 Supplementary Screen

Get Voice Message

Dial up the displayed number.

Example) → 00870772001899#

Enable Call Forwarding

Select “Enable” for the condition for calls to be forwarded, and the box lying on the right side of the pull-down menu will be activated. And then, enter the destination for call forwarding with 00 on the head of the number. Click Set button to register the setting.

Example) To forward +81-422-45-9xxx, in Japan → Enter “0081422459xxx”

Indicate Call Waiting

Select “Enable” for the service type for call waiting to be indicated, and then click Set button. The call waiting indication tone is two beeps every three seconds. Refer to [5.1.8 Handling Call Waiting (Handset)](p5-16) or [5.2.4 Handling Call Waiting (TEL port)](p5-35) for how to handle call waiting.

Reject Incoming/Outgoing call

Select “Enable” for conditions for calls to be rejected. Beware that “Enable” makes the call reject.

To set call barring, Network PIN Code is required. Enter the PIN Code and click Set button.

Network PIN Code has no initial setting. The number (from 8 to 16 digits) which is input for the first time shall be applied as the Network PIN Code. If forgot the Network PIN, changing Call Barring settings will be disabled. Please do not forget the Network PIN Code.

6.5.3 Port Menus

Port menu is on the left [menu] panel.
In this menu, user can set up each port.
Port Menu contains following screens.

- Handset Screen（Sec. 6.5.3.1 Set Handset）
- ISDN Screen（Sec. 6.5.3.2 Set MSN）
- Ethernet Screen（Sec. 6.5.3.1 Set User LAN and Ext WAN）
- I/O Screen（Sec. 6.5.3.4 Set Input/Output Signal）
- Option Screen（Sec. 6.5.3.5 Set Option Button and Buzzer）

6.5.3.1 Set Handset (Handset Screen)

To enter the Handset screen, open “Port” menu on the left [menu] panel and select “Handset”.

On this screen, user can adjust Handset (brightness of LCD screen/LEDs, volume/pattern of ringer tone, voice volume, and key click sound).

Fig. 6.5.3.1 Handset Screen

Table. 6.5.3.1 Contents of Handset Screen

Display		Contents
1)	Back Light	Brightness of LCD. (4 is the brightest)
2)	Dimmer	Brightness of Handset LED. (4 is the brightest)
3)	Ring Type	Ring type of Handset. (6 patterns)
4)	Ring Volume	Ring volume of Handset. (3 is the loudest)
5)	Voice Volume	Voice volume of Handset. (3 is the loudest)
6)	Click Tone	Enable or disable the click tone.
7)	SET	Registers the setting contents

6.5.3.2 Set MSN and ISDN Service type (ISDN Screen)

To enter the ISDN screen, open “Port” menu on the left [menu] panel and select “ISDN”.

The MSNs (Multiple Subscribe Number) which are output to the terminals connected to the ISDN port, when the ISDN port has got a call, and the service type of ISDN are set on this screen.

For MSN setting, select used MSN from “Fixed MSN” or “Call Party Number” for “Output”. “Fixed MSN” outputs the number defined on this screen as MSN to the connected terminals when ISDN port has got a call. “Fixed MSN” can be set by service type. PBX-MSN is used when the ISDN port was specified for internal call (p5-33), Quick Forwarding (p5-34) and Announced Forwarding (p5-34). “Call Party Number” outputs the caller-specified number as MSN regardless of the settings on this screen to the connected terminals when ISDN port has got a call. Distinctive ring by MSNs is effective only when the connected device supports the service types.

For ISDN Service Type setting, select audio companding type from ETSI (A-low) or INS64 (μ -low). Please set Service Type to ETSI and Voice-MSN to 1 when you connect [Vocality Basics Multivoice] to the ISDN port.

For details about MSN and ISDN port, refer to [Sec. 8 Using ISDN port](p8-1).

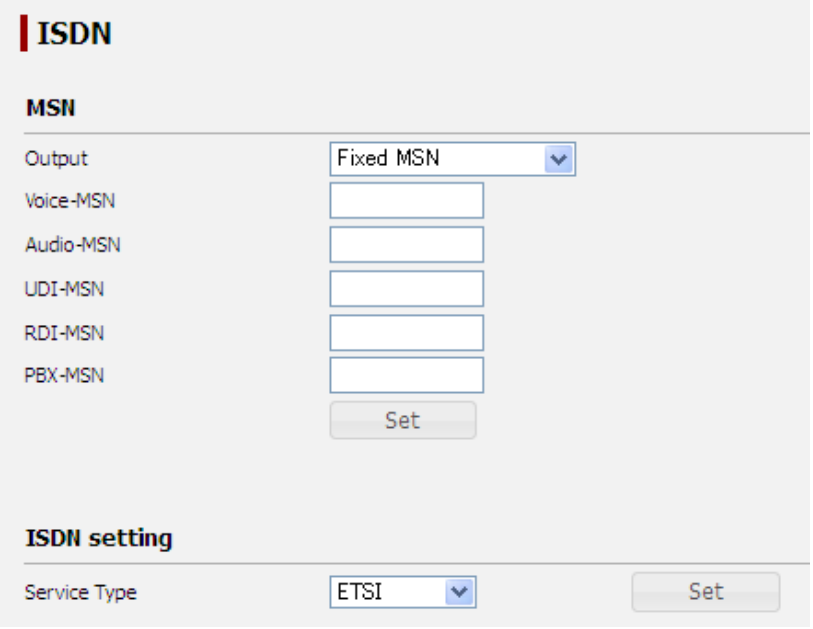


Fig. 6.5.3.2 ISDN Screen

NOTE

UDI/RDI service is not available for JUE-251 even when the device connected to TA supports them and you set their MSN.

6.5.3.3 Set User LAN and Ext WAN (Ethernet Screen)

To enter the Ethernet screen, open “Port” menu on the left [menu] panel and select “Ethernet”.

A simple User LAN Setting and Ext WAN setting are executed on this screen.
The setting of User LAN registered here is reflected to VLAN1. For further information about VLAN, refer to [Sec. 6.5.5.6 Further Setting for User LAN](p6-70). A maximum of total 32W PoE (Power over Ethernet) is available on User LAN.
Ext WAN means external WAN other than FBB system like VSAT. Setting of Ext WAN is necessary for using WAN Selector function. Refer to [Sec. 6.5.5.9 Coexistence with Other WAN] (p6-75) for WAN Selector.

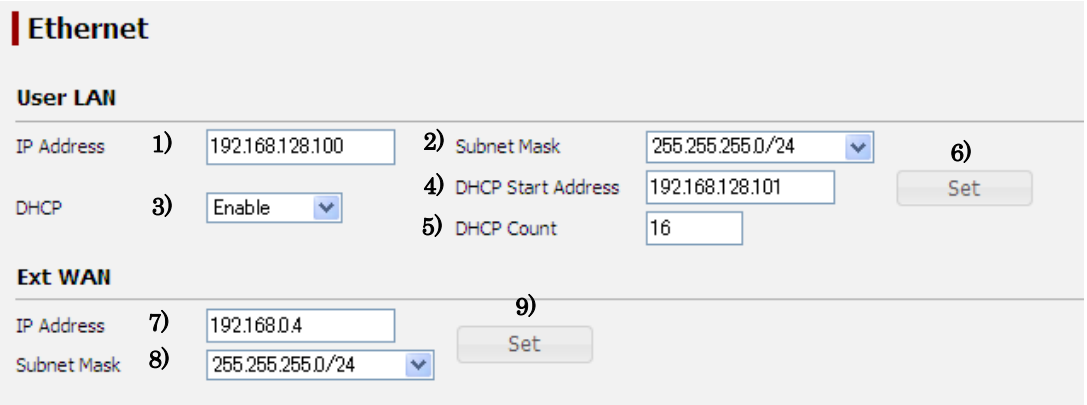


Fig. 6.5.3.3 Ethernet Screen

Table 6.5.3.3a Contents of Ethernet Screen

User LAN		Contents
1)	IP Address*1)	IP address of JUE-501/JUE-251 for User LAN
2)	Subnet Mask	Subnet Mask for User LAN It defines network address of User LAN.
3)	DHCP	When DHCP function is enabled, it allocates IP addresses automatically to the devices connected to User LAN ports.
4)	DHCP Start Address*1) *2)	Start IP address for the DHCP allocation
5)	DHCP Count*2)	The maximum amount of IP address for DHCP allocation. DHCP Count range: 1 to 254
6)	Set	Registers User LAN contents
EXT WAN		Contents
7)	IP Address*1)	IP address of JUE-501/JUE-251 for Ext WAN I/F
8)	Subnet Mask	Subnet Mask for Ext WAN I/F It defines network address of Ext WAN.
9)	Set	Registers Ext WAN contents

*1) About IP address input

IP address is configured with period-separated 4 strings of numbers.

Example) 192.168.128.100 or 10.20.30.0

Possible input range of IP Address:

10. 0.0.1 – 10.255.255.254
172.16.0.1 – 172.31.255.254
192.168.0.1 – 192.168.255.254

NOTE

- Use of "all ones" or "all zeros" for the host field of the IP address is not supported.
- 192.168.0.0/24 is used for EXT WAN and 192.168.60.0/24 is used for JRC LAN as a default. To set these addresses to User LAN, change the network address of EXT WAN or JRC LAN first and set the address to User LAN.

*2) About DHCP

The range of IP address allocated by DHCP must not exceed network address defined by parameter 1) and 2).

Table 6.5.3.3b Initial settings of Ethernet port

Port	Parameter	Value
User LAN	IP Address	192.168.128.100
	Subnet Mask	255.255.255.0
	DHCP	Enable
	DHCP Start Address	192.168.128.101
	DHCP Count	16
Ext WAN	IP Address	192.168.0.4
	Subnet Mask	255.255.255.0

6.5.3.4 Set Input/Output signal (I/O Screen)

To enter the I/O screen, open “Port” menu on the left [menu] panel and select “I/O”.

On this screen, user can set input/output of acknowledgement/indication from/to the device connected to the Junction Board. A maximum of two output devices and two input devices can be connected to Junction Board at a time.

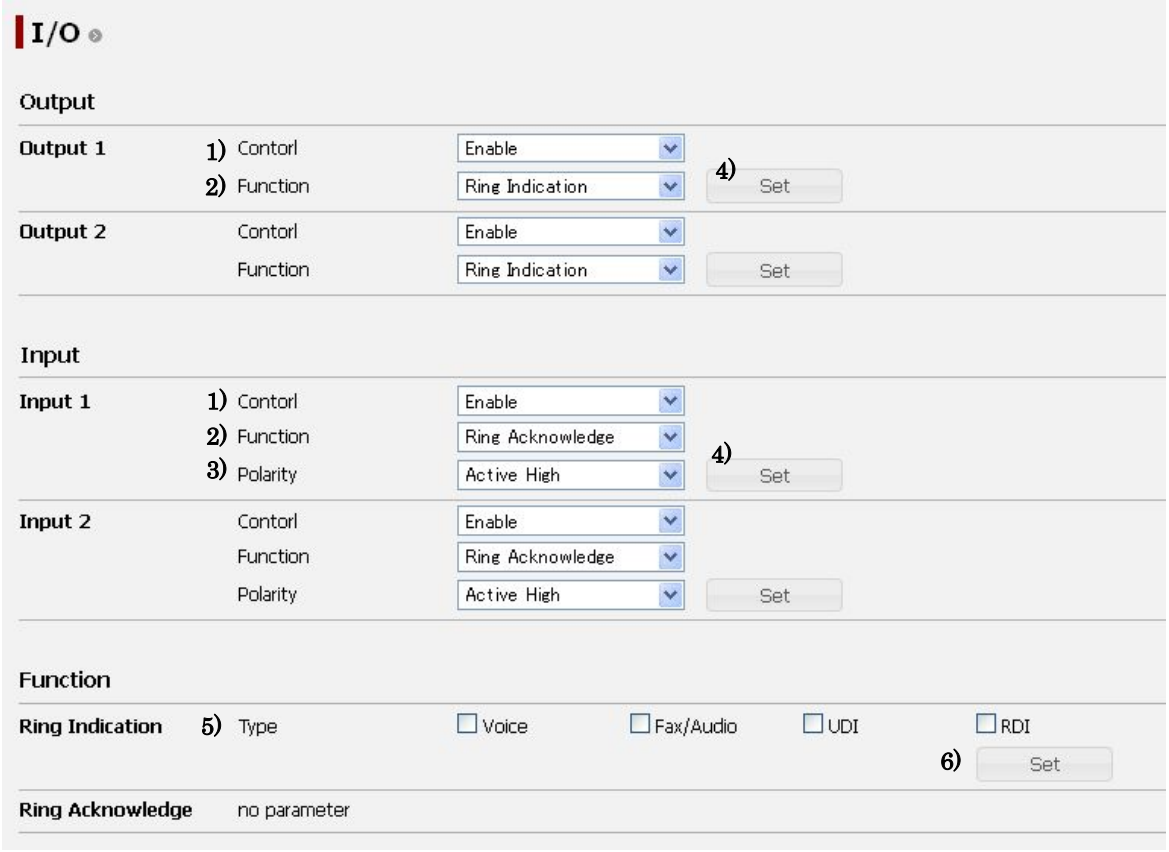


Fig. 6.5.3.4 I/O Screen

Table 6.5.3.4 Contents of I/O Screen

Output / Input		Contents
1)	Control	Use or non-use of the I/O port
2)	Function	Function of “Output” is fixed at “Ring Indication” and that of “Input” is also fixed at “Ring Acknowledge” in current version.
3)	Polarity	“Active High” means the function is executed by the higher of two voltages. “Active Low” means the function is executed by the lower of two voltages. (For the Output devices, “Active High” and ”Active Low” is controlled by their connection to the Junction Board.)
4)	Set	Registers the Output / Input settings.
Function		Contents
5)	Type	Select the service type to activate output.
6)	Set	Registers the Function settings.

6.5.3.5 Set Option Button and Buzzer (Option Screen)

To enter the Option screen, open “Port” menu on the left [menu] panel and select “Option”.

The service type for which Option Buzzer to be rung can be set on this screen. System reboot is required to change these settings.

Option Buzzers are connected to the Junction Board and ring when a set service call arrived to the main unit.

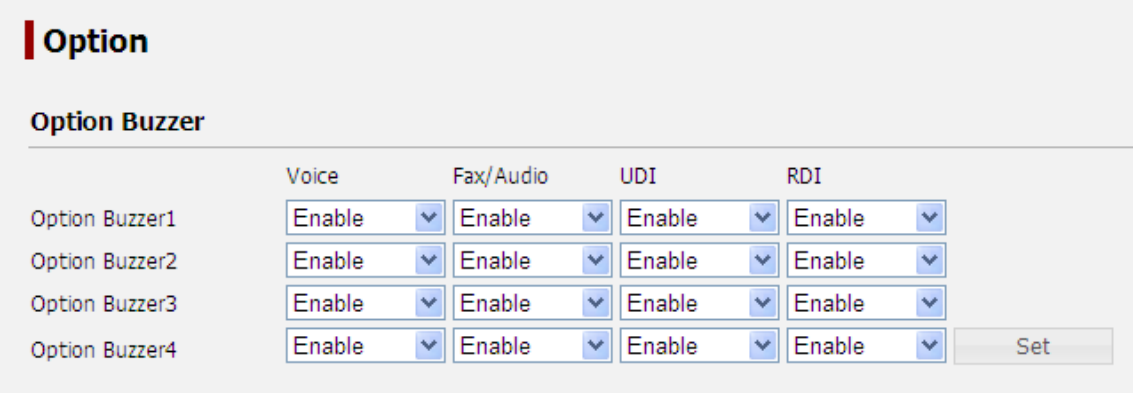


Fig. 6.5.3.5 Option Screen

Enable Option Buzzer

Select “Enable” for services for the buzzer to ring. Click Set button to register the setting.

NOTE

- UDI/RDI service is not available for JUE-251.
- A maximum of four Option Buzzers can be connected.

6.5.4 User Control Menu

User Control menu is on the left [menu] panel.

In this menu, user/device registration for login can be executed. Restriction of communication for registered users and devices is also set in this menu.

User Login

Login made by user name and Secret Code. User Login needs that the user is registered in advance. Refer to [Sec.6.5.4.1 Register Users](p6-48) for more information about User Registration.

Device Reorganization

JUE-501/JUE-251 recognizes a terminal automatically with the IP address when it has been registered in advance. This is convenient for the devices which can not handle "user login" like cameras to connect internet. For more information about device registration, see [Sec.6.5.4.2 Register Devices] (p6-50).

User Control Menu contains following screens.

- User Registration Screen（Sec. 6.5.4.1 Register Users）
- Device Registration Screen（Sec. 6.5.4.2 Register Devices）
- Usage Restriction Screen（Sec. 6.5.4.3 Restrict User Connection）

6.5.4.1 Register Users (User Registration Screen)

To enter the User Registration screen, open "User Control" menu on the left [menu] panel and select "User Registration".

Registering new user, editing existing user and deleting user can be executed on this screen. ISDN dialup connection to JUE-501/JUE-251 is available with the user name and secret code set here. (ISDN dialup connection with "ADMIN" user and "GUEST" user is not available.)

A maximum of 50 users can be registered.

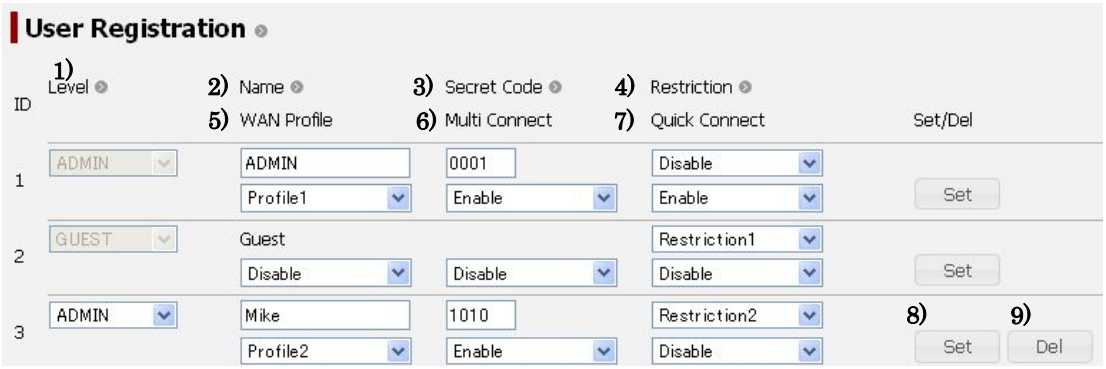


Fig. 6.5.4.1 User Registration Screen

NOTE

* Beware that once the data is deleted, it won't be recovered again.
* User 01 is reserved for an Admin user. You can not delete it nor can edit its level.
* User 02 is reserved for Guest user. You can not delete it nor can edit its level, name and Secret Code.

Table 6.5.4.1 Contents of User Registration Screen

Display		Contents
1)	Level	Level of the user. User with "Admin" level can browse and set Admin menu located in the [menu] panel of Web interface. Level of the user is displayed on the [Headline] of Web interface.
2)	Name	Name of the user. This name is displayed on the [Headline] of Web interface and used in Call Log. This field allows less than 10 alphanumeric characters.
3)	Secret Code	4 digits. Range: 0001 to 9000 This code is used to log in (User Login) or to recognize the user when a secret call was made.
4)	Restriction	Restriction of connections. The Restrictions listed on this menu are set in [Sec. 6.5.4.3 Restrict User Connection](p6-51). When "Disable" is selected, communication of the user is unlimited.
5)	WAN Profile	WAN Profile used for data connections. This profile arranges data connection (refer to [Sect. 6.4.2 Connect to the Internet (p6-15)]) for the user. For more information about WAN profile, refer to [Sec. 6.5.5.1 Set WAN profile (p6-53)].
6)	Multi Connect	Permission to connect and to disconnect internet connection for someone else on Data Connection screen.
7)	Quick Connect	Permission to use "Quick Connect" on Dashboard screen.
8)	Set	Registers the user.
9)	Del	Deletes the user.

6.5.4.2 Register Devices (Device Registration Screen)

To enter the Device Registration screen, open "User Control" menu on the left [menu] panel and select "Device Registration".

Registering new device, editing existing device and deleting device can be executed on this screen. A maximum of 50 devices can be registered.

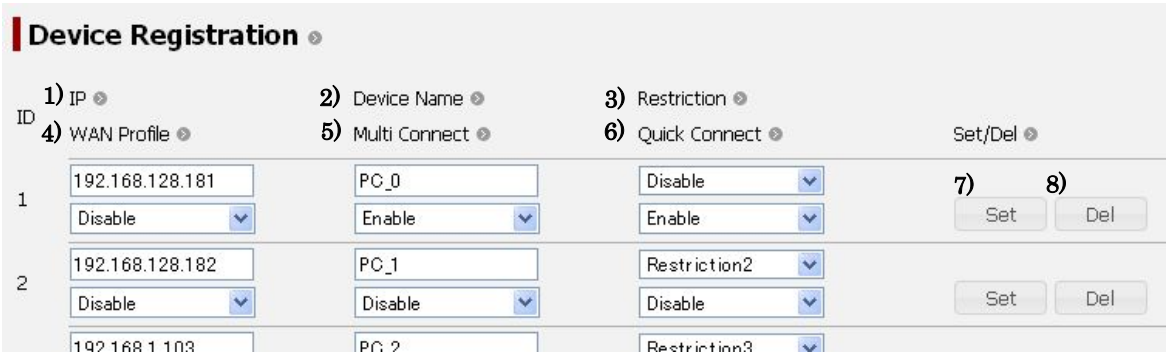


Fig. 6.5.4.2 Device Registration Screen

NOTE

* Beware that once the data is deleted, it won't be recovered again.

Table 6.5.4.2 Contents of Device Registration Screen

Display		Contents
1)	IP	IP address for the device. To use static IP address for the device, set Static DHCP (refer to [Sec. 6.5.5.7 Use Static IP Address (p6-72)]) or set the IP address manually.
2)	Device Name	Name of the device. This name is displayed on the [Headline] of Web interface and used in Call Log. This field allows less than 10 alphanumeric characters.
3)	Restriction	Restriction of connections. The Restrictions listed on this menu are set in [Sec. 6.5.4.3 Restrict User Connection (p6-51)]. When "Disable" is selected, communication of the device is unlimited.
4)	WAN Profile	WAN Profile used for data connections. This profile arranges data connection (refer to [Sect. 6.4.2 Connect to the Internet (p6-15)]) for the device. For more information about WAN profile, refer to [Sec. 6.5.5.1 Set WAN profile (p6-53)].
5)	Multi Connect	Permission to connect and to disconnect internet connection for someone else on Data Connection screen.
6)	Quick Connect	Permission to use "Quick Connect" on Dashboard screen.
7)	Set	Registers the device.
8)	Del	Deletes the device.

6.5.4.3 Restrict User Connection (Usage Restriction Screen)

To enter the Usage Restriction screen, open "User Control" menu on the left [menu] panel and select "Usage Restriction".

On this screen, Restriction groups for communication up to five can be set. The limitations are set by time (minutes) for Voice, Audio, UDI, RDI and Streaming IP, by number for SMS and by size (Mbyte) for Standard IP. User/Device can communicate within the assigned Restriction group. These settings are used in [6.5.4.1 Register Users (p6-48)] and [6.5.4.2 Register Devices (p6-50)].

To restrict communications by user/device name, assign restriction group registered here to users and devices (refer to [6.5.4.1 Register Users (p6-48)] and [6.5.4.2 Register Devices (p6-50)]) and enable "Secret Code" for each port to recognize communicating user (refer to [6.5.2.1 Set up Ports (p6-37)]). The call is made by GUEST user on ISDN port because it does not support "Secret Code".

Also, user can select reset cycle from "Manually", "Monthly", "Weekly" or "Daily" to initialize the counts of time and size.

NOTE

- UDI/RDI service is not available for JUE-251.
- Beware that the restriction assigned to the Guest user is applied for ISDN port because ISDN port doesn't recognize Secret Code.

Fig. 6.5.4.3a Usage Restriction (Restriction Setting) Screen

Set Restriction Group

Step1: Enter the name of Restriction. The name set here is displayed on Restriction menu of User Restriction screen ([6.5.4.1 Register Users]) and Device Registration screen ([6.5.4.2 Register Devices]).

Step2: Select Permission for each service types. Limitation time/number/size is required when "Limited" is selected.

Step3: Click "Set" button to register the Restriction group.

Delete Restriction Group

(Permission is set to "Unlimited" for all service types when the Restriction is deleted.)

Click "Del" button for the Restriction group.

Reset Cycle setting menu is on the bottom of this page. Reset Cycle defines the cycle to reset the count of communication time and size

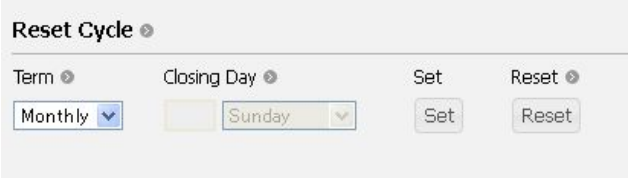


Fig. 6.5.4.3b Usage Restriction (Reset Cycle Setting) Screen

Set Reset Cycle

Step1: Select the "Term" from Manually, Monthly, Weekly and Daily. The following boxes are activated as your "Term" selection.

Step2: Click "Set" button to register your Reset Cycle.

* When "Manually" is selected, the user need to reset the count regularly.
* In the case where there is no reset date according to the month, JUE-501/251 resets the count on the last day of the month.

Reset the Count Manually

Just click "Reset" button.

6.5.5 Network Menu

Network menu is on the left [menu] panel.

In this menu, user can design flexible Local Area Network.

Network Menu contains following screens.

- WAN Profile Screen（Sec. 6.5.5.1 Set WAN Profile）
- Packet Filter Screen（Sec. 6.5.5.2 Set Packet Filter）
- Always Activate Screen（Sec. 6.5.5.3 Set Permanent Connection）
- Remote Activate Screen（Sec. 6.5.5.4 Establish Remote Connection）
- LAN Group Screen（Sec. 6.5.5.5 Set LAN Group）
- LAN Screen（Sec. 6.5.5.6 Further Settings for User LAN）
- Static DHCP Screen（Sec. 6.5.5.7 Use Static IP Address）
- Routing Table Screen（Sec. 6.5.5.8 Set Routing Table）
- WAN Selector Screen（Sec. 6.5.5.9 Coexistence with Other WAN）
- PPPoE Screen（Sec. 6.5.5.10 Set PPPoE Server）

6.5.5.1 Set WAN Profile (WAN Profile Screen)

To enter the WAN Profile screen, open "Network" menu on the left [menu] panel and select "WAN Profile".

On this screen, WAN Profiles up to five are defined.

WAN profile defines service type, settings of APN, Global IP Address, connection mode, WAN filter, settings for VPN and secondary service type. WAN profile is used as a template for regulating data connection on User Registration screen, Device Registration screen, Always Activate screen and Remote Activate screen.

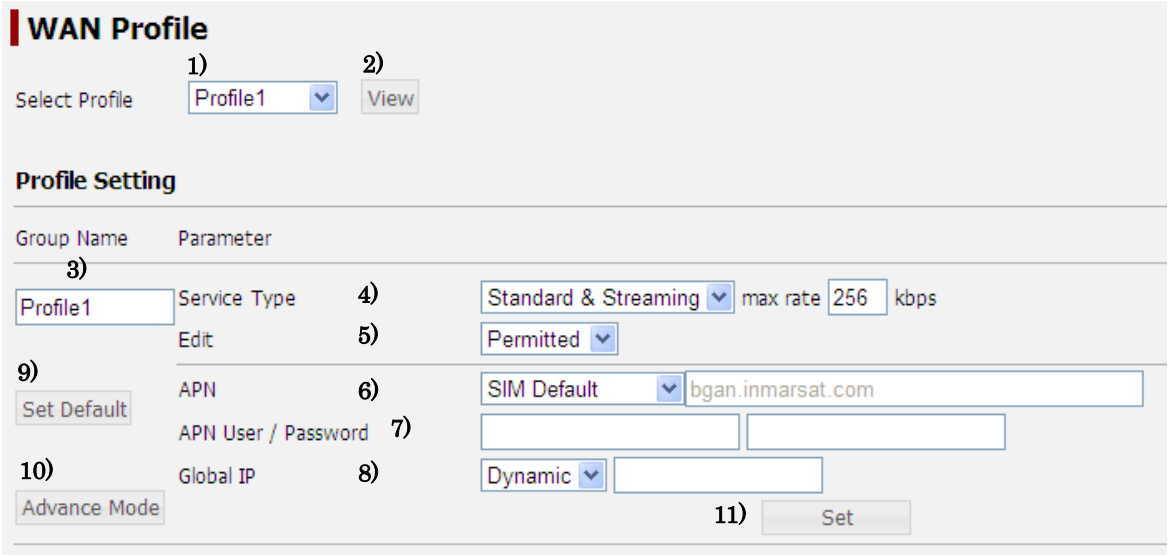


Fig. 6.5.5.1a WAN Profile Screen

Table 6.5.5.1a Contents of WAN Profile Screen

Select Profile		
1)	Select Profile	Select the profile to configure.
2)	View	Displays the selected Profile.
Profile Setting		
3)	Group Name	Name of the profile The name set here is displayed as profile name on User Registration screen, Device Registration screen, Always Activate screen and Remote Activate screen.
4)	Service Type	Service type for data connection. Max rate is required when "Streaming Only" or "Standard & Streaming" is selected.
5)	Edit	Whether this profile permits the assigned users to edit its APN settings on Data Connection screen or not.
6)	APN	Access Point Name
7)	APN User/ Password	User name and Password for APN. The password will be hidden by ● when it entered.

8)	Global IP	Select Dynamic or Static for Global IP address used in this profile. Global IP address is required only when Static is selected.
9)	Set Default	Reset the settings to the default.
10)	Advance Mode	Get into advanced configuration. (Refer to Table 6.5.5.1b)
11)	Set	Registers the profile.

■ Advance Mode

When Advance Mode button (explained by 10) of Table 6.5.5.1a) is clicked, the Advance Mode button will change into Normal Mode button and advanced configuration will be displayed.

Fig. 6.5.5.1b WAN Profile Advanced Screen

Table 6.5.5.1b Contents of WAN Profile Advanced Screen

Display		Contents
1)	Normal Mode	Hides advanced configurations.
2)	Connection Mode	Selection for Communication Mode. "1by1 NAT" is set as a default. LAN Group selection menu will appear when "IP Masquerade" is selected. (Refer to Table 6.5.5.1c-d) VLAN selection menu will appear when "Bridge" is selected. (Refer to Table 6.5.5.1c-d) Click Set button to activate the setting.
3)	Packet Detect Activate	Packet Detect Activate is a function that automatically connects Standard IP Connection by detecting outgoing packet when main unit is ready to connect PS Connection (PS READY). The Standard IP Connection connected by this function will be disconnected by Auto disconnect function if Auto disconnect function is activated.

NOTE

- There is a possibility to connect unexpected PS Connection by the settings or operation of terminal connected to Ethernet port. And if packet was sent or received through this connection, communication fee will be charged. Thus be careful to block an unexpected packet by using Packet Filter and modifying settings of the terminal etc.
- JRC is indemnified for any communication fee troubles using this function except as outlined in the product warranty and by limitation of law.
- Distribution partner of SIM card might charge a communication fee by only connecting and disconnecting Standard IP Connection.

		NOTE • Do not overlap IP address range setting of this function with Always Activate function or Remote Activate function. • This function does not work when the selected profile doesn't support Standard IP connection as its service type. • This function is interpreted by the IP address of connected terminals. Enable this function only for the profiles used in Device Registration. Do not enable this function for the profiles used in User Registration. There is a possibility to get unexpected communication fee when this function is enabled for the "GUEST" user. • This function connects only primary connection and does not connect secondary connection automatically.
4)	WAN Filter	Packet data filter (Refer to Table 6.5.5.1e)
5)	VPN	Setting for VPN (Virtual Private Network). VPN setting menu will appear when "Enable" is selected. (Refer to Table 6.5.5.1f)
6)	Secondary Service Type	Setting for Secondary Service Type. Secondary Service Type setting menu will appear when a service type is selected. (Refer to Table 6.5.5.1g)

● Connection Mode

Select Connection Mode from "1by1 NAT", "IP Masquerade" and "Bridge".

When "1by1 NAT" is selected for Communication Mode, user terminal using this WAN Profile will be associated by one-to-one with global IP assigned by Inmarsat.

When "IP Masquerade" is selected for Communication Mode, LAN Group selection menu will appear. LAN Group is a unit to which IP masquerade is applied. With "IP Masquerade" mode, the network defined by LAN Group shares the global IP address assigned by Inmarsat. Refer to [Sec. 6.5.5.5 Set LAN Group (p6-68)] for more information about LAN Group.

When "Bridge" is selected for Communication Mode, VLAN selection menu will appear. "Bridge" mode will be adapted to the VLAN. With "Bridge" mode, the global IP address assigned by Inmarsat will be assigned directly to the terminal connected to the VLAN port. Refer to [Sec. 6.5.5.6 Further Settings for User LAN (p6-70)] for more information about VLAN. Packet Detect Activate, WAN Filter, VPN and/or Secondary Service are not supported with "Bridge" mode. The detail procedure for connecting to the internet by Bridge mode is written in Appendix I.

Set the Connection Mode and click Set button.

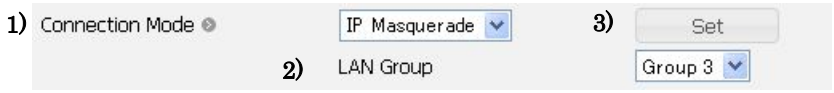


Fig. 6.5.5.1c Connection Mode menu (IP Masquerade)

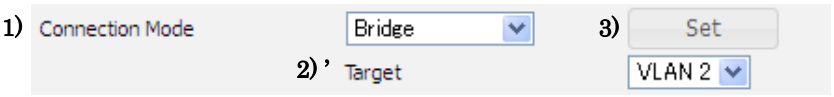


Fig. 6.5.5.1d Connection Mode menu (Bridge)

Table 6.5.5.1c-d Contents of Connection Mode menu

Display		Contents
1)	Connection Mode	Selection for Communication Mode. LAN Group selection menu will appear when "IP Masquerade" is selected.
2)	LAN Group	LAN Group (a unit to which IP masquerade is applied) Refer to [Sec. 6.5.5.5 Set LAN Group] for more information.
2)'	Target	Bridge-adapted VLAN. Packet Detect Activate, WAN Filter, VPN and/or Secondary Service are not supported with "Bridge" mode. Refer to [Sec. 6.5.5.6 Further Settings for User LAN] for more information about VLAN.
3)	Set	Registers the Connection Mode.

● WAN Filter

When "Enable" is selected for WAN Filter, WAN Filter menu will appear. A maximum of 30 WAN filters can be set for each WAN profile. JUE-501/JUE-251 can pass/drop an incoming/outgoing packet by setting. It has no filters in the initial state, so it will pass all packets.

JUE-501/JUE-251 gives higher priority to MAC filter ([Sec. 6.5.5.6 Further Settings for User LAN (p6-70)]) than any other WAN filter. There is no preference between WAN filters and packet filters ([Sec. 6.5.5.2 Set Packet Filter (p6-61)]). Just coordinate the "Priority" to make the preference. JUE-501/JUE-251 gives higher priority to Packet Filter when the same "Priority" was set to a Packet filter and a WAN filter.

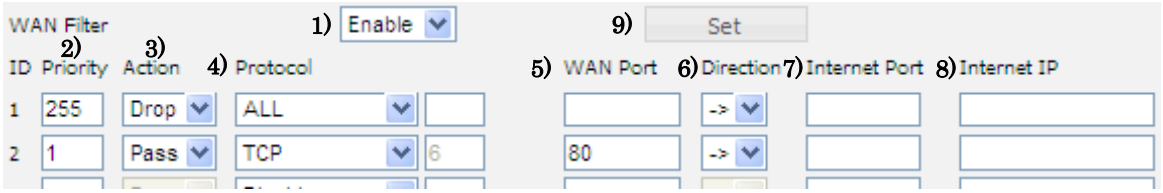


Fig. 6.5.5.1e WAN Filter menu

NOTE

* WAN filters are not applied to the connections established before setting up them.
* "Packet Detect Activate function" will establish a PS connection even when a packet to be dropped by WAN filter was made. WAN filters drop the targeting packet data after the PS connection is established. Please use Packet Filter ([Sec. 6.5.5.2 Set Packet Filter (p6-57)]) to restrict the establishment of PS connections by PDA.
* WAN filters are not applied to the Ext WAN.
* When there is a 1 by 1 NAT connection in the network of existing IP Masquerade connection, the WAN filter rules of the IP Masquerade will be applied to the 1 by 1 NAT connection as well as those of 1 by 1 NAT.

Table 6.5.5.1e Contents of WAN Filter menu

Display		Contents
1)	WAN Filter	Use or non-use of WAN filters
2)	Priority	Order of priority for WAN Filter setting Range: 1 to 255 (The highest priority is 1 and the lowest priority is 255.)
3)	Action	Setting whether to Pass or Drop the packet.
4)	Protocol	Setting the protocol (Disable / ALL / TCP / UDP / ICMP / Select No.) to filter. When "Select No." is selected, protocol number can be input. When TCP/UDP is selected, WAN Port 5) and Internet Port 7) can be input. When "Disable" is selected, the filter is deleted.
5)	WAN Port	The TCP/UDP port number on JUE-501/JUE-251 Destination port when "<-" (incoming) is selected. Source port when "->" (outgoing) is selected. "-" represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all TCP/UDP port.
6)	Direction	Direction of the filter "<-" means "incoming" and "->" means "outgoing".
7)	Internet Port	The TCP/UDP port number on 8) Internet IP Source port when "<-" (incoming) is selected. Destination port when "->" (outgoing) is selected. "-" represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all port.

8)	Internet IP	Target IP address for the filter Source IP address when "<-" (incoming) is selected. Destination IP address when "->" (outgoing) is selected. When it remains blank, the filter is adopted to all IP address.
9)	Set	Registers the WAN filters.

● VPN

When "Enable" is selected for VPN, VPN menu will appear. Set the VPN and click Set button.

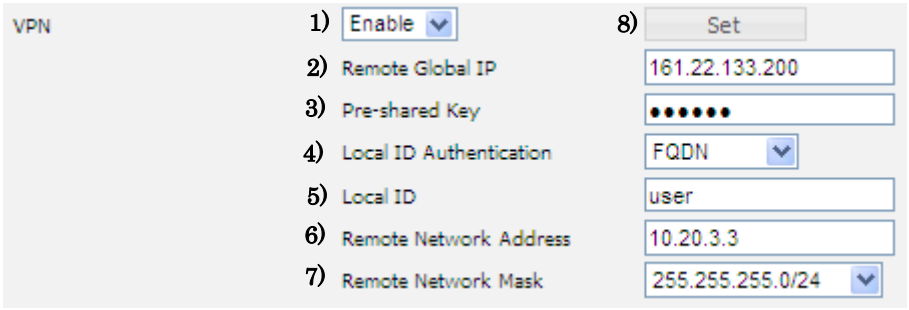


Fig. 6.5.5.1f VPN menu

Table 6.5.5.1f Contents of VPN menu

Display		Contents
1)	VPN	Enable/Disable VPN
2)	Remote Global IP	Global IP address of destination (remote VPN server)
3)	Pre-shared Key	Password for the VPN connection
4)	Local ID Authentication	The setting method of certification ID • IP Global IP address of JUE-501/JUE-251. You should not use it without Static Global IP address. Whether you can use static global IP address or not depends on your contract. • FQDN (Default) The text box of "Local ID" is activated when "FQDN" is selected. Input FQDN. • User FQDN The text box of "Local ID" is activated when "User FQDN" is selected. Input User FQDN. (A form of username@domainname)
5)	Local ID	User ID to notify the remote VPN server
6)	Remote Network Address	Remote (Destination) Network Address
7)	Remote Network Mask	Remote (Destination) Network Mask
8)	Set	Registers the VPN settings.

Setting of remote VPN server is necessary to establish VPN connection. Follow the instruction manual of VPN server to set it up. About the VPN server setting on JUE-501/251, refer to Appendix G "JUE-501/251 VPN setting"

● Secondary Service

When a service type is selected for Secondary Service Type, Secondary Service Type menu will appear. Set the Secondary Service Type and click Set button.

When “Secondary Service” is set to other than "Prohibit" and connect “Secondary Service” on Data Connection screen, it holds two lines for one Global IP address.

Packet data within the “Uplink Traffic Flow Filter” or “Downlink Traffic Flow Filter” pass through the Secondary Service.

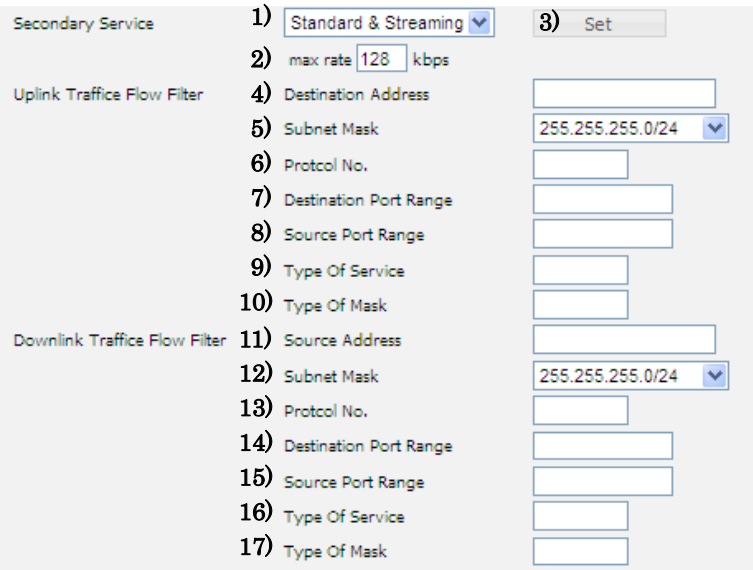


Fig. 6.5.5.1g Secondary Service Type menu

Table 6.5.5.1g Contents of Secondary Service Type menu

Display		Contents
1)	Secondary Service	Service type for secondary service
2)	max rate	Max rate for secondary service. (For Streaming service only.)
3)	Set	Registers the Secondary Service settings.
Uplink Traffic Flow Filter		Contents
4)	Destination Address	Destination address adapting Uplink Traffic Flow Filter When it remains blank, the filter is adopted to all IP address.
5)	Subnet Mask	Subnet mask for adapting Uplink Traffic Flow Filter
6)	Protocol No.	Protocol number for adapting Uplink Traffic Flow Filter Range: 1 to 255 When it remains blank, the filter is adopted to all protocols.
7)	Destination Port Range	Destination Port Range for adapting Uplink Traffic Flow Filter Range: 1 to 65535. “-” represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all TCP/UDP port.
8)	Source Port Range	Source Port Range for adapting Uplink Traffic Flow Filter Range: 1 to 65535. “-” represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all TCP/UDP port.

9)	Type of Service	Type of service embedded in packet header. Range: 1 to 255 When it remains blank, the filter is adopted to all Type of Service.
10)	Type of Mask	Mask to define adapted type-of-service. Range: 1 to 255 This item is required when “9) Type of Mask” was input.
Downlink Traffic Flow Filter		Contents
11)	Source Address	Source address adapting Downlink Traffic Flow Filter When it remains blank, the filter is adopted to all IP address.
12)	Subnet Mask	Subnet mask for adapting Downlink Traffic Flow Filter
13)	Protocol No.	Protocol number for adapting Downlink Traffic Flow Filter Range : 1 to 255 When it remains blank, the filter is adopted to all protocols.
14)	Destination Port Range	Destination Port Range for adapting Downlink Traffic Flow Filter Range: 1 to 65535. “-” represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all TCP/UDP port.
15)	Source Port Range	Source Port Range for adapting Uplink Downlink Flow Filter Range: 1 to 65535. “-” represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all TCP/UDP port.
16)	Type of Service	Type of service embedded in packet header. Range: 1 to 255 When it remains blank, the filter is adopted to all Type of Service.
17)	Type of Mask	Mask to define adapted type-of-service. Range: 1 to 255 This item is required when “16) Type of Mask” was input.

6.5.5.2 Set Packet Filter (Packet Filter Screen)

To open the Packet Filter screen, click “Network” menu on the left [menu] panel and select “Packet Filter”.

On the Packet Filter screen, the filters applied to all PS connections (any WAN Profile) are configured. JUE-501/JUE-251 can pass/drop an incoming/outgoing packet by setting packet filters. JUE-501/JUE-251 has no filters in the initial state, so it will pass all the packets between User LAN and Internet and drop all the packets between User LANs. A maximum of 100 packet filters can be set.

JUE-501/JUE-251 gives higher priority to MAC filter ([Sec. 6.5.5.6 Further Settings for User LAN (p6-70)]) than any other filters. There is no preference between WAN filters ([Sec. 6.5.5.1 Set WAN Profile (p6-56)]) and packet filters. Just coordinate the “Priority” to make the preference. JUE-501/JUE-251 gives higher priority to Packet Filter when the same “Priority” was set to a Packet filter and a WAN filter.

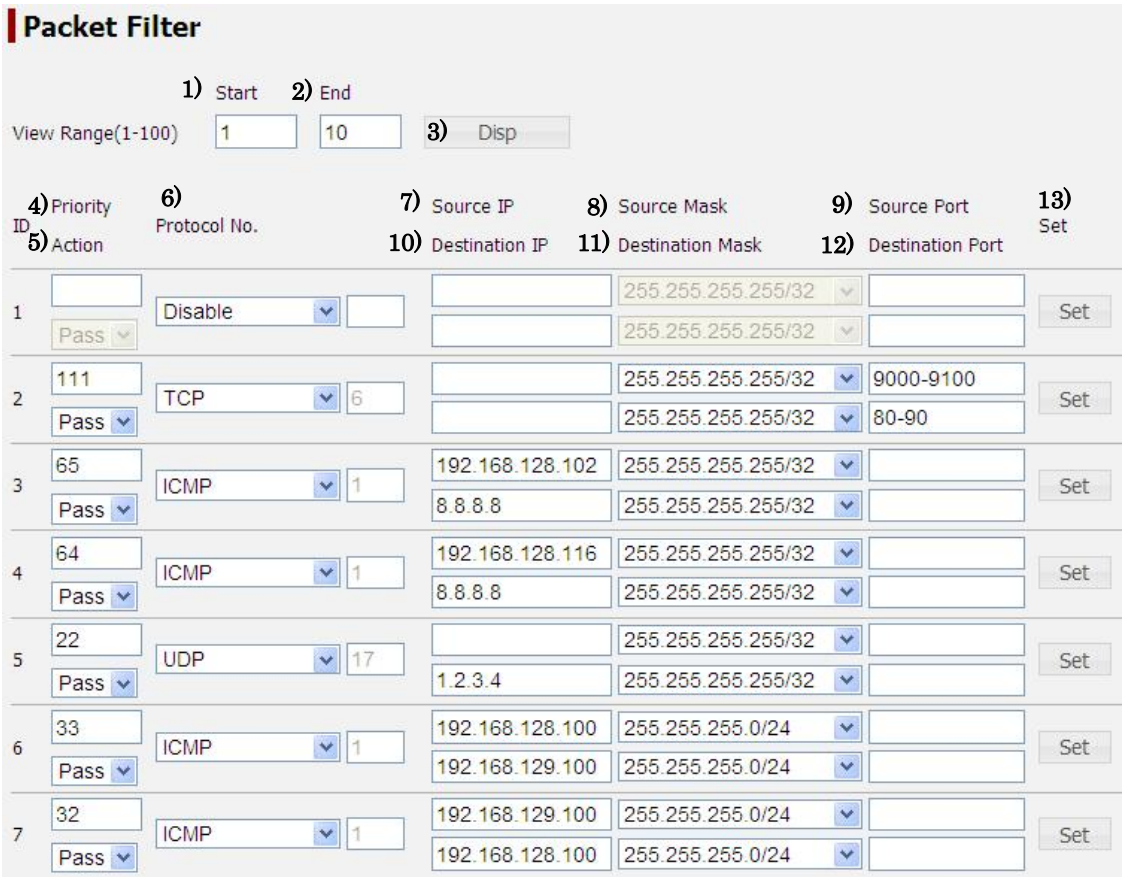


Fig.6.5.5.2 Packet Filter Screen

NOTE

* Packet filters are applied to the packets between User LANs and the packets of External WAN as well as the packets between User LAN and the internet.

Table 6.5.5.2 Contents of Packet Filter Screen

View Range		
1)	Start	Minimum ID number to display (1～100)
2)	End	Maximum ID number to display (1～100)
3)	Disp	Display the ID range
Packet Filter		
4)	Priority	Order of priority for packet filter setting Range：1 to 255 (The highest priority is 1 and the lowest priority is 255)
5)	Action	Setting whether to Pass or Drop the packet
6)	Protocol No.	Setting the protocol（Disable / ALL / TCP / UDP /ICMP / Select No.）to filter When “Select No.” is selected, protocol number can be input. When TCP/UDP is selected, Source Port 9) and Destination Port 12) can be input. When “Disable” is selected, the filter is deleted.
7)	Source IP	Packet source IP address to filter When it remains blank, the filter is adopted to all IP Address. Specified with the Source Mask 8), it defines the network address to filter.
8)	Source Mask	Subnetwork Mask for the packet source Select “255.255.255.255/32” to apply the filter only to the Source IP 7).
9)	Source Port	The source TCP/UDP port number of the packets to be filtered “-” represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all TCP/UDP port.
10)	Destination IP	Packet destination IP address to filter When it remains blank, the filter is adopted to all IP Address. Specified with the Destination Mask 11), it defines the network address to filter.
11)	Destination Mask	Subnetwork Mask for the packet destination Select “255.255.255.255/32” to apply the filter only to the Destination IP 10).
12)	Destination Port	The destination TCP/UDP port number of the packets to be filtered “-” represents range. Ex) 20-80 set from 20 to 80. When it remains blank, the filter is adopted to all TCP/UDP port.
13)	Set	Set the packet filter

Change the view range of the packet filter

Step 1: Input the minimum ID number you want to view to the "Start" box.

Step 2: Input the maximum ID number you want to view to the "End" box.

Step 3: Click "Disp" button, and the list of ranges you inputted is displayed.

Add new packet filter / Change existing packet filter

Step 1: Input the filter rule to the text boxes.

Step 2: Click "Set" button in the same line.

Delete a existing packet filter

Step 1: Select "Disable" to the "Protocol No." and click "Set" button in the same line.

Setting of packet filters are applied immediately after the "Set" button is clicked.

6.5.5.3 Set Permanent Connection (Always Activate Screen)

To enter the Always Activate screen, open “Network” menu on the left [menu] panel and select “Always Activate”.

Once Always Activate function is set enabled on this screen, JUE-501/JUE-251 automatically connect and keep Standard IP Connection after the start-up (PS READY) of main unit. (This function will reconnect PS connection when it detects the disconnection by any reason). The Standard IP Connection connected by this function will never be disconnected by Auto disconnect function.

Up to three connections can be set as always-activated connections.

NOTE

- The PS Connection connected by this function never gets disconnected by Auto Disconnect function.
- There is a possibility to get unexpected communication fee charged by sending and receiving unexpected packet through the connection. Thus be careful to block an unexpected packet by using Packet filter and modifying settings of the terminal etc.
- JRC is indemnified for any communication fee troubles using this function except as outlined in the product warranty and by limitation of law.
- Distribution partner of SIM card might charge a communication fee by only connecting and disconnecting Standard IP Connection.
- This function does not work when the selected profile doesn’t support Standard IP connection as its service type.
- If you can not send a packet through this connection, disconnect the connection and wait till it reconnects again. Then after that, try to send a packet again.
- Do not overlap IP address range setting of this function with Packet Detection Activate function or Remote Activate function.
- This function connects only primary connection and does not connect secondary connection automatically.

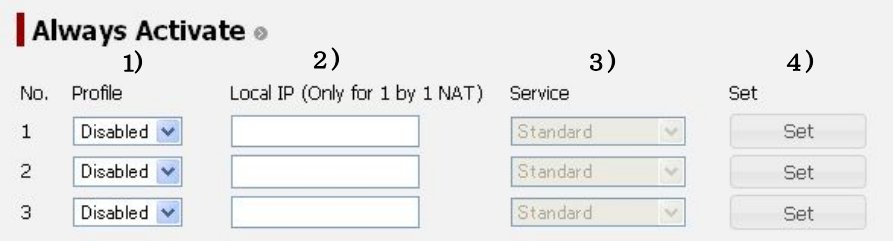


Fig. 6.5.5.3 Always Activate Screen

Table 6.5.5.3 Contents of Always Activate Screen

Display		Contents
1)	Profile	Select the WAN Profile used in the Always Activate connection.
2)	Local IP	Local IP address used in the Always Activate connection. The local IP address is used when "1by1 NAT" was selected for the Connection Mode of the 1) WAN Profile. Leave this column blank when "IP Masquerade" is selected for the connection mode.
3)	Service	Used service type (Fixed to Standard service.)
4)	Set	Registers the Always Activate settings.

Connect Always Activated connection

Step1: Select profile used in this connection from the pull-down menu. The profile must support Standard IP service. For more information about profile, refer to [6.5.5.1 Set WAN Profile].

Step2: Enter the local (private) IP address used in this connection. (The local IP address is applied if "1by1 NAT" was selected for the Connection Mode of the WAN Profile selected at Step1. Leave this column blank when "IP Masquerade" is selected for the connection mode.)

Step3: Click Set button.

Disconnect Always Activated connection

Step1: Select "Disable" in the pull-down menu of "Profile" for the connection you want to disconnect.

Step2: Click Set button.

Step3: Disconnect the target connection on "Data Connection" screen (refer to [Sec.9.2.2 Connect to the Internet]). (If the connection is not yours, you need to be set "Multi Connect" to "Enable" to disconnect it. For more information about "Multi Connect", refer to [Sec. 6.5.4.1 Register Users] or [Sec. 6.5.4.2 Register Devices].)

6.5.5.4 Establishes Remote Connection (Remote Activate Screen)

To enter the Remote Activate screen, open “Network” menu on the left [menu] panel and select “Remote Activate”.

The settings of “Remote Activate” can be executed on this screen. Anyone who knows user name and password registered here can establish Standard IP connection by sending SMS when “Remote Activate” is set to “Enable”. The connection connected by SMS can be also disconnected by SMS.

NOTE

- There is a possibility to get unexpected communication fee charged by sending and receiving unexpected packet through the connection. Thus be careful to block an unexpected packet by using Packet filter and modifying settings of the terminal etc.
- JRC is indemnified for any communication fee troubles using this function except as outlined in the product warranty and by limitation of law.
- Distribution partner of SIM card might charge a communication fee by only connecting and disconnecting Standard IP Connection.
- This function does not work when the selected profile doesn’t support Standard IP connection as its service type.
- The Standard IP connection connected by this function will be disconnected by Auto disconnect function if Auto disconnect function is activated.
- Do not overlap IP address range setting of this function with Packet Detection Activate function or Always Activate function.
- This function is case-sensitive.
- This function connects only primary connection and does not connect secondary connection automatically.

Fig. 6.5.5.4 Remote Activate Screen

Table 6.5.5.4 Contents of Remote Activate Screen

Display		Contents
1)	Remote Activate	Enable/Disable Remote Activate

2)	User	User name to use Remote Activate
3)	Password	Password to use Remote Activate
4)	Profile	WAN Profile used for Remote Activate The profile must support Standard IP service.
5)	Local IP	Local IP address used for Remote Activate The IP address is applied if "1by1 NAT" was selected for the Connection Mode of the WAN Profile selected at 4).
6)	Service	Service type for Remote Activate This setting is disable (turned gray) in current version.
7)	Set	Registers the Remote Activate settings.

Connect by SMS

Example) Establishing a Standard IP connection by User [JRC] and Password [remote].

Step1: Send SMS message to JUE-501/JUE-251. The text format is shown below.

Format	Example
Activate User Password	Activate JRC remote

*JUE-501/JUE-251 accepts "newline" and "space".

Step2: Receive SMS report.

Format	Success	Fail
*Activate User IP Global IP Result	*Activate JRC IP xx.xx.xx.xx OK	*Activate JRC Password Error NG

Disconnect by SMS

Example) Disconnecting the Standard IP connection by User [JRC] and Password [remote].

Step1: Send SMS message to JUE-501/JUE-251. The text format is shown below.

Format	Example
Deactivate User Password	Deactivate JRC remote

*JUE-501/JUE-251 accepts "newline" and "space".

Step2: Receive SMS report.

Format	Success	Fail
*Deactivate User Result	*Deactivate JRC OK	*Deactivate JRC Password Error NG

6.5.5.5 Set LAN Group (LAN Group Screen)

To enter the LAN Group screen, open "Network" menu on the left [menu] panel and select "LAN Group".

On this screen, user can define LAN Groups. A LAN Group is a unit to which IP masquerade is applied. LAN Groups defined here are used as options when "IP Masquerade" has been selected for "Connection Mode" on WAN Profile screen (refer to Table 6.5.5.1b 2)).

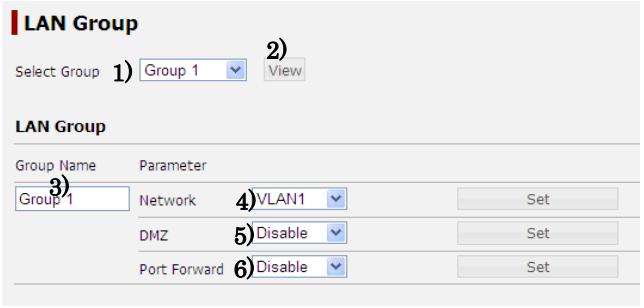


Table 6.5.5.5a Contents of LAN Group Setting Screen

Fig. 6.5.5.5a LAN Group Setting Screen

Display		Contents
1)	Select Group	Select the LAN Group to configure.
2)	View	Displays the selected LAN Group.
3)	Group Name	Name of the LAN Group The name set here is used in "Connection Mode" on WAN Profile screen (refer to Table 6.5.5.1b 2)).
4)	Network	Network (a unit to which IP masquerade is applied) Manual setting menu will appear when "Manual" is selected. (Refer to Table 6.5.5.5b)
5)	DMZ	Setting for DMZ (DeMilitarized Zone) Transferring destination menu will appear when "Enable" is selected. (Refer to Table 6.5.5.5c)
6)	Port Forward	Setting for Port Forwarding

● Network

Network can be a VLAN or manually defined network. When "Manual" is selected for "Network", manual setting menu for "Network" will appear. Input settings for the network and click "Set" button.

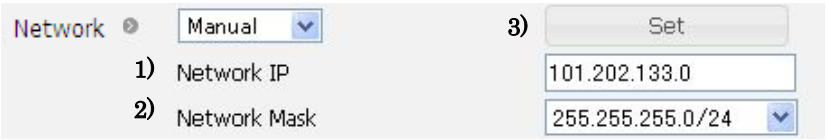


Fig. 6.5.5.5b Manual setting menu for Network

Table 6.5.5.5b Contents of Manual setting menu for Network

Display		Contents
1)	Network IP	Network address for the LAN Group
2)	Network Mask	Subnet Mask to define the range of the LAN Group
3)	Set	Registers the LAN Group.

● DMZ

When “Enable” is selected for “DMZ”, it transfers all packet data from the internet to the local IP address defined here.

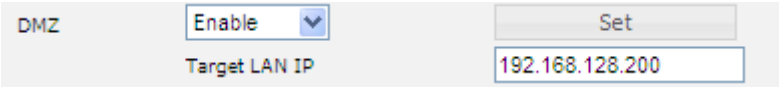


Fig. 6.5.5.5c Transferring menu for “DMZ”

● Port Forward

When “Enable” is selected for “Port Forward”, it transfers the packet data which is under the conditions of the "Port Forwarding List" to the destination defined in it. On JUE-501/JUE-251, “Port Forward” has higher priority than “DMZ”. So, the packet data listed in this setting will be transferred to the listed destinations even when “DMZ” has been enabled.

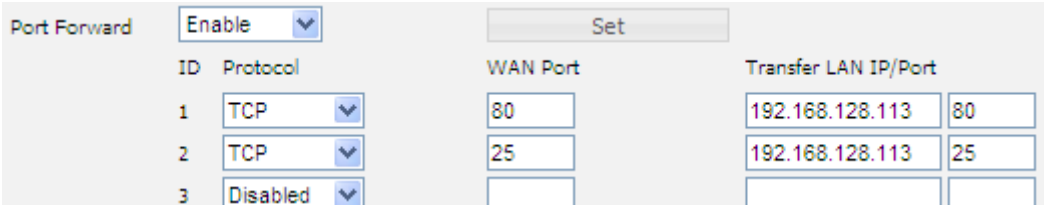


Fig. 6.5.5.5d Port Forward setting

Add new Forwarding List

Step1: Select the protocol type (TCP or UDP) to be transferred.

Step2: Input the WAN port number from which you want the data packets to be transferred.

Port range: 1 to 65535.

Step3: Input the destination (local IP address) for transferring the data.

Step4: Input the LAN port number to which you want the data packets to be transferred.

Port range: 1 to 65535.

Step5: Click “Set” button.

Delete a Forwarding List

Step1: Select the protocol type “Disable”.

Step2: Click “Set” button.

NOTE

”DMZ” and “Prot forward” set here are not applied to the connections established before setting up them.

6.5.5.6 Further Settings for User LAN (LAN Screen)

To enter the LAN screen, open “Network” menu on the left [menu] panel and select “LAN”.

On this screen, user can set a maximum of four VLANs (Virtual LAN) and a maximum of 50 MAC filters. The setting executed by [Sec. 6.5.3.3 Set User LAN and Ext WAN (p6-44)] is registered to VLAN1. This screen consists of three parts “Port Tagging”, “VLAN Setting” and “MAC Filter”.

1. Port Tagging

Fig. 6.5.5.6a Port Tagging

Select the VLAN for the User LAN port to belong and click “Set” button. The right end in User LAN port is assigned as Port1 and the left end is assigned as Port4.
In the initial state, all the User LAN port belongs to VLAN1.

2. VLAN Setting

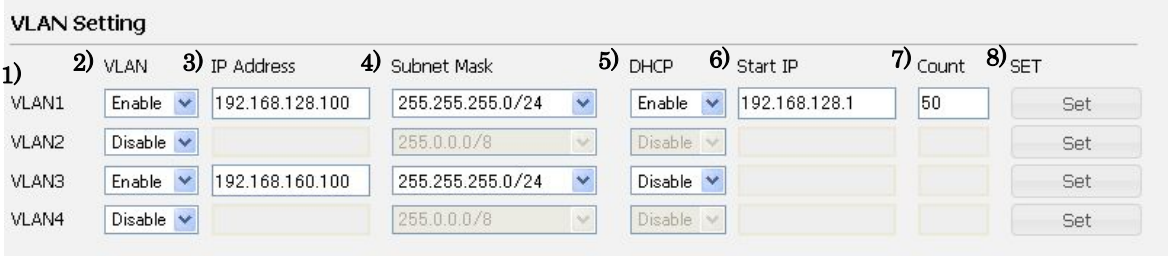


Fig. 6.5.5.6b VLAN Setting

NOTE

Your DHCP might not work when the setting of VLAN has been changed. Please check your DHCP settings (including Static DHCP) before changing VLAN setting.

Please disconnect all the packet connection before attempting to change VLAN setting. Restart the main unit if by any chance the VLAN setting should be changed with PS connected.

Table 6.5.5.6b Contents of VLAN Setting

Display		Contents
1)	VLANn	n is VLAN number
2)	VLAN	Enable/Disable the VLAN When set to "Enable", following settings is required. "Disable" can not be selected for VLAN1.
3)	IP Address*1)	IP address of JUE-501/JUE-251 for the VLAN. (The main unit has one IP address for one VLAN.)
4)	Subnet Mask	Subnet Mask to define the range of VLAN
5)	DHCP*2)	Enable/Disable DHCP server When DHCP function is enabled, it allocates IP addresses automatically to the devices connected to the VLAN.
6)	Start IP*1) *2)	Minimum IP address for the DHCP allocation
7)	Count*2)	The total amount of IP address number for DHCP allocation. Count range: 1 to 254
8)	Set	Registers the setting.

*1) About IP address input

IP address is configured with period-separated 4 strings of numbers.

Example) 192.168.128.100 or 10.20.30.0

Possible input range of IP Address:

10. 0.0.1 – 10.255.255.254
172.16.0.1 – 172.31.255.254
192.168.0.1 – 192.168.255.254

NOTE

- Use of "all ones" or "all zeros" for the host field of the IP address is not supported.
- 192.168.0.0/24 is used for EXT WAN and 192.168.60.0/24 is used for JRC LAN as a default. To set these addresses to User LAN, change the network address of EXT WAN or JRC LAN first and set the address to User LAN.

*2) About DHCP

The range of IP address allocated by DHCP must not exceed the range of VLAN defined by parameter 3) and 4).

3. MAC Filter

Once MAC Filter is enabled, all the packet data except for the data transmitted or received by permitted MAC address can not pass through the main unit. MAC filter has a higher priority than any other WAN filter. A maximum of 50 MAC filters can be registered.

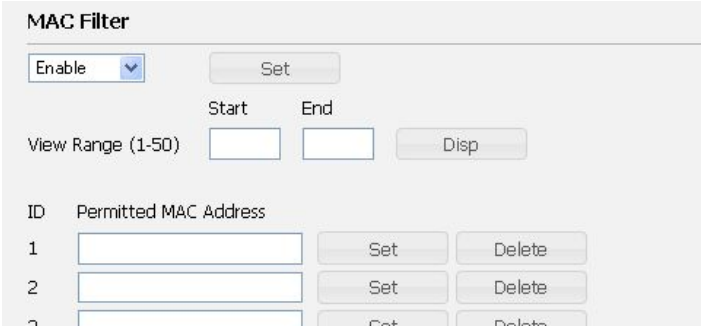


Fig. 6.5.5.6c MAC Filter Setting

Change the view range of the MAC filter list

Step1: Input the minimum ID number you want to view to the "Start" box.

Step2: Input the maximum ID number you want to view to the "End" box.

Step3: Click "Disp" button, and the list of ranges you inputted is displayed.

Add new permitted MAC address

Step1: Input a MAC address to a text box. Packet data from and to the address is permitted to pass the main unit.

Step2: Click "Set" button in the line.

MAC address is configured with colon-separated 6 strings of numbers and alphabets.

Example) 08:00:20:9E:7F:04

Delete permitted MAC address

Step1: Click "Del" button in the line

NOTICE

Access to the main unit by Web Menu or Launch Pad remains available even if the MAC address is not listed to the "Permitted MAC Address".

MAC Filter restricts the packet data flow to the internet attempted by the devices which has not been listed on "Permitted MAC Address".

6.5.5.7 Use Static IP Address (Static DHCP Screen)

To enter the Static DHCP screen, open "Network" menu on the left [menu] panel and select "Static DHCP".

You may want to use static IP address for a device to manage network or to use Device Registration. The list of IP address and MAC address on the upper part of this screen is the setting list for allocating the static IP address to the MAC address. The list of lower part of this screen shows the combination of MAC address and its IP address being allocated by DHCP at that time.

User can set a maximum of 50 combinations of IP address and MAC address for static DHCP.

NOTE

* Check your LAN setting on LAN screen (refer to [6.5.5.6 Further Setting for User LAN (p6-66)]). The device cannot connect to JUE-501/JUE-251 when the IP address was allocated beyond the LAN.

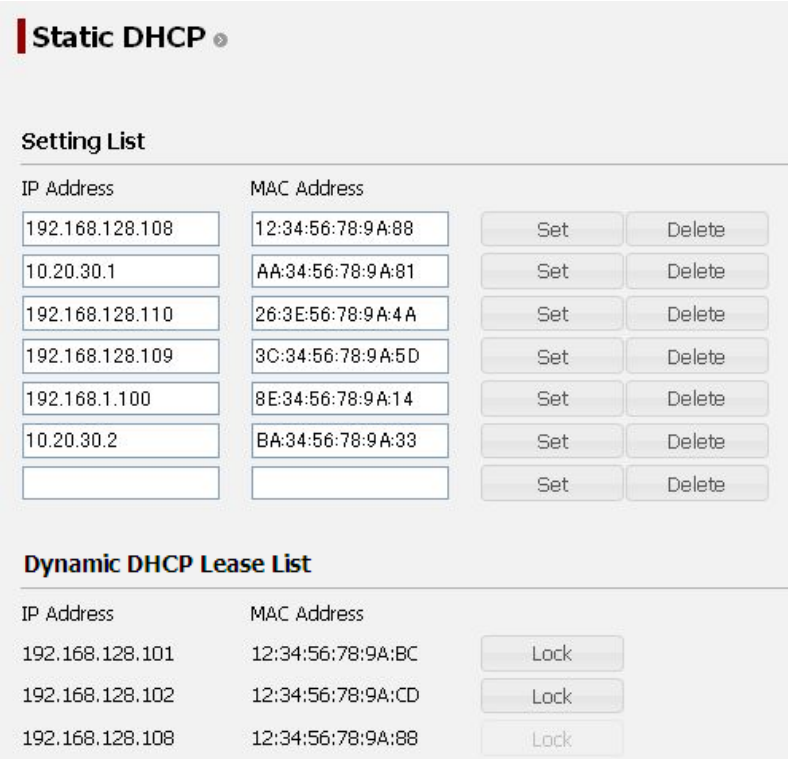


Fig. 6.5.5.7 Static DHCP screen

Set IP Address and MAC address manually

Step1: Enter the target IP address in a textbox of Setting List which located on the upper part of this screen. IP address is period-separated numbers.

Step2: Enter the MAC address of the device you want to set. MAC address is colon-separated numbers and alphabets.

Step3: Click Set button.

Set IP Address and MAC address from Dynamic DHCP Lease List

Step1: Dynamic DHCP Lease List which located on the lower part of this screen lists the combination of MAC address and its IP address being allocated by DHCP. Select a combination you want to set from the list.

Step2: To fix the setting, click Lock button lying on the right side of the combination. (The Lock button is inactivated when the combination has been listed on Setting List already.)

Step3: The Lock button will be inactivated and the combination will be listed on the Setting List.

Delete a setting

Step1: Select a combination you want to delete from the Setting List (upper list).

Step2: Click “Delete” button for the combination.

Step3: The combination is deleted from the Setting List (upper list) and the lock button of Active List (lower list) is activated when the device was connected to JUE-501/JUE-251.

6.5.5.8 Set Routing Table (Routing Table Screen)

To enter the Routing Table screen, open “Network” menu on the left [menu] panel and select “Routing Table”.

On this screen, user can edit routing table. Routing table is a data table that lists the routes to particular network destinations.

A maximum of 20 routing table can be set.

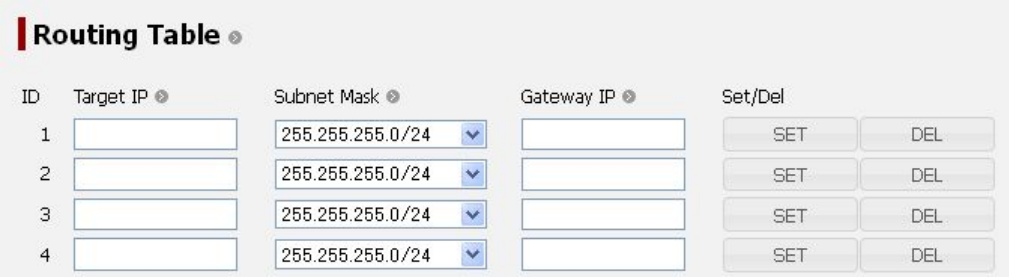


Fig. 6.5.5.8 Routing Table screen

Add new routing

Example) Adding a new routing which passes packet data of 192.168.128.1~192.168.128.15 to 10.20.30.10.

Step1: Enter an IP address which is in your target network to the “Target IP” box. In this case, enter “192.168.128.1”.

Step2: Select subnet mask which represents your target range from the “Subnet Mask” menu. In this case, select “255.255.255.240/28”.

Step3: Enter destination address to the “Gateway IP” box. Enter “10.20.30.10” for this example.

Step4: Click “Set” button.

Delete existing routing

Step1: Click “Del” button in the line you want to delete.

6.5.5.9 Coexistence with Other WAN (WAN Selector Screen)

To enter the WAN Selector screen, open “Network” menu on the left [menu] panel and select “WAN Selector”.

This screen sets auto changeover of WAN system. Once WAN selector is enabled, it checks the subsistence of the Ext (External) WAN by sending ping packets to a host. JUE-501/JUE-251 uses Ext WAN prior to FBB system when Ext WAN was recognized. When the Ext WAN has been disconnected, WAN Selector changes WAN system from the Ext WAN to Inmarsat network. It takes about five minutes to change over the WAN system. To enable the WAN Selector function, setting of Ext WAN on Ethernet screen is necessary (refer to [Sec. 6.5.3.3 Set User LAN and Ext WAN (p6-44)]).

NOTE

- There is a possibility to get unexpected communication fee charged because this function sends and receives ping packet through the Ext WAN.
- There is a possibility to get unexpected communication fee charged because inmarsat PS connection remains connected even when WAN Selector selects Ext WAN.
- JRC is indemnified for any communication fee troubles using this function except as outlined in the product warranty and by limitation of law.
- Distribution partner of SIM card might charge a communication fee by only connecting and disconnecting Connection.
- JUE-501/JUE-251 temporarily falls into a state which cannot connect to the internet when it changes WAN system from Ext WAN to Inmarsat network.
- WAN filter is not adapted when the Ext WAN is being selected.

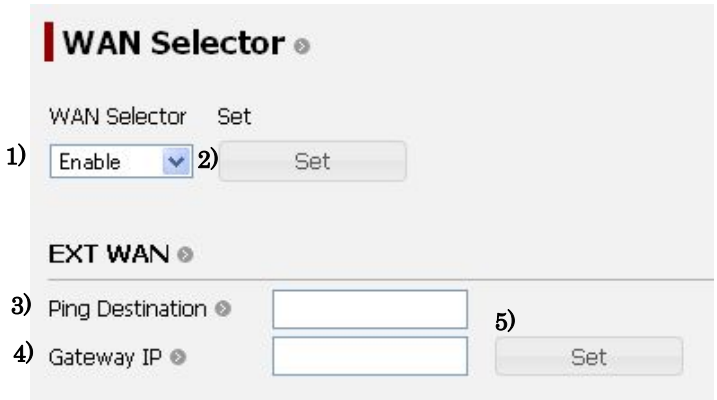


Fig. 6.5.5.9 WAN Selector screen

Table 6.5.5.9 Contents of WAN Selector screen

Display		Contents
1)	WAN Selector	Enable/Disable WAN Selector
3)	Ping Destination	Destination of ping packets to check whether the Ext WAN is alive or not. It will be an address of a host on the internet.
4)	Gateway IP	Gateway IP address for the Ext WAN
2), 5)	Set	Registers the Ext WAN setting.

6.5.5.10 Set PPPoE Server (PPPoE Screen)

To enter the PPPoE Selector screen, open “Network” menu on the left [menu] panel and select “PPPoE”. This screen sets to changeover of PPPoE Server.

Please refer to Appendix H about how to connect PPPoE..

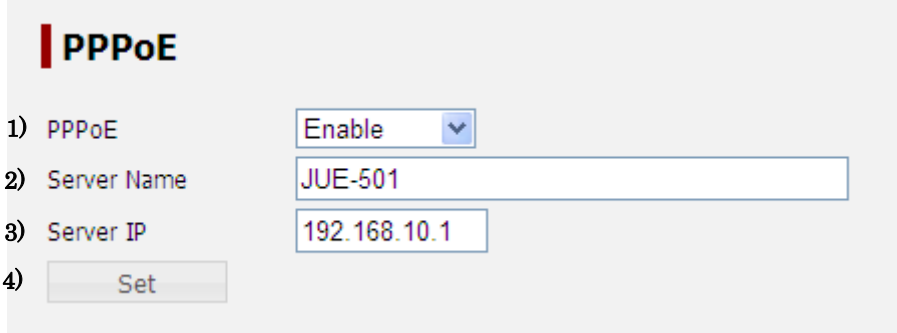


Fig. 6.5.5.10 PPPoE screen

Table 6.5.5.10 PPPoE screen

Display		Contents
1)	PPPoE	Enable/Disable PPPoE function
2)	Server Name	Set the server name. When two or more JUE-501/JUE-251 are connected to the same network, the server name is used as an identifier for choosing from PC and connecting. Please refer to Appendix H about detailed directions for use.
3)	Server IP	Set the IP address of PPPoE server. In order to avoid the trouble which occurs with a router in part, it recommends setting up addresses other than the IP address of the terminal.
4)	Set	Registers the PPPoE setting.

6.5.6 Disconnect Automatically by Time (Auto Disconnect Screen)

To enter the Auto Disconnect screen, select “Auto Disconnect” from the left [menu] panel.

Auto disconnection time (Max Time / Idle Time) can be set on this screen. This function prevents users from forgetting disconnection accidentally and from getting unexpected communication charge.

Time unit is minute and the range is 1-240min. Select “Disable” when unlimited connection is required.

Fig. 6.5.6 Auto Disconnect screen

Setting Auto Disconnect function

Step1: Select “Enable” for the port or service you want to set Auto Disconnect. In the case of Standard IP service, a condition for disconnection is selected.

Step2: Input the maximum time for the connection. The time unit is minute and the range is 1-240min. Terminal will automatically disconnect the communications according to the set time with regardless of its communication state.

Step3: Click “Set” button and register the settings.

NOTE

- Distribution partner of SIM card might charge a communication fee by only connecting and disconnecting Standard IP Connection.
- Auto Disconnect function never disconnects PS Connection connected by Always Activate function. Thus PS Connection connected by Always Activate function keeps the connection active.
- TEL3~6 is not available when Junction board is not connected.

6.5.7 Configure SIM (SIM Screen)

To enter the SIM screen, select “SIM” from the left [menu] panel.

On this screen, the SIM Configuration can be executed.

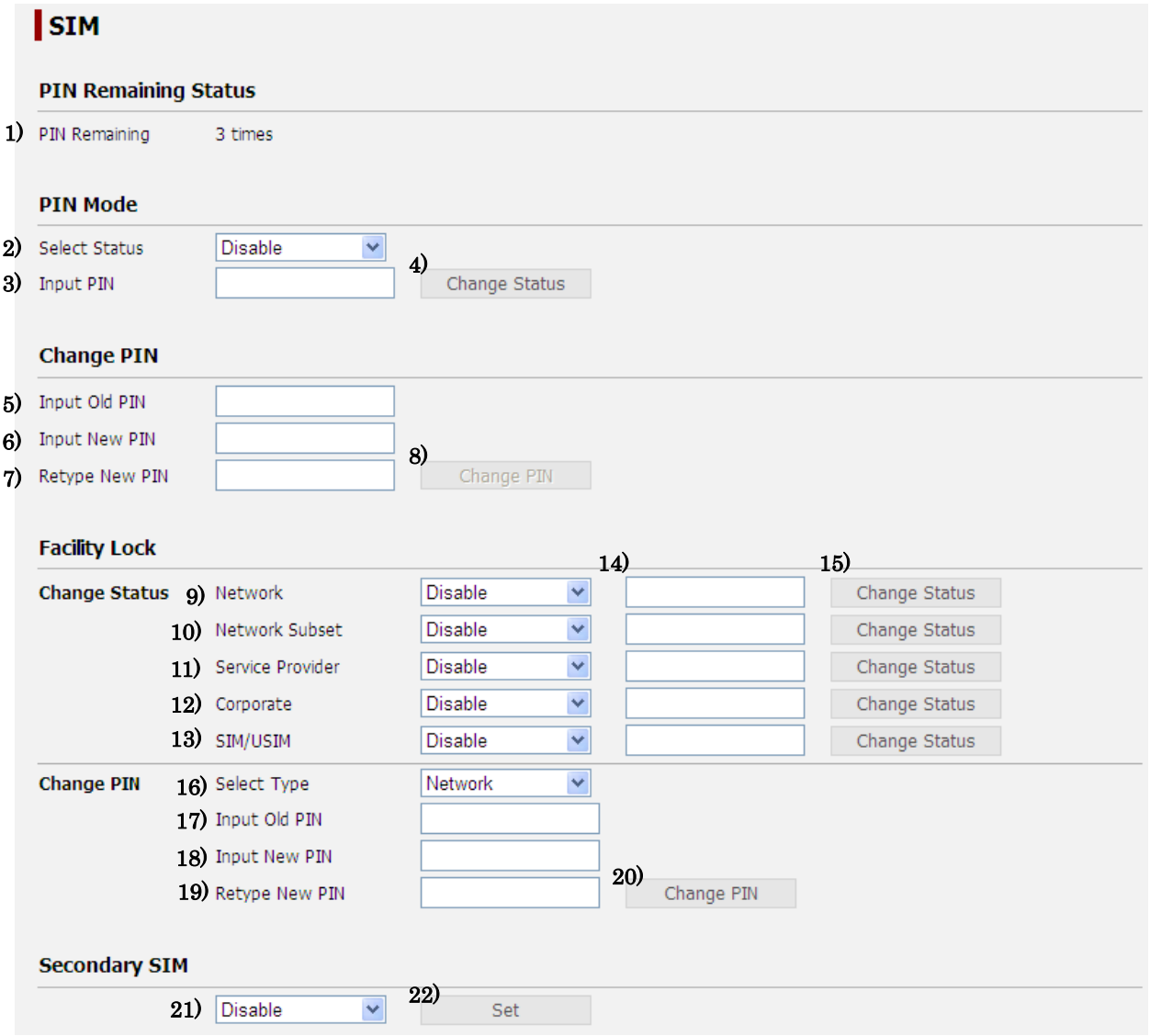


Fig. 6.5.7 SIM Configuration screen

Table 6.5.7 Contents of SIM Configuration screen

PIN Remaining Status		Contents
1)	PIN Remaining (PUK Remaining)	Remaining number before SIM Lock. When the PIN Remaining number becomes 0, the display changes into PUK Remaining and the communication through the FBB system becomes unavailable (PIN lock). In this case, a recovery by inputting PUK is needed. Type the PUK in 5) Input SIM PUK box and set new PIN code. PUK is described on SIM card holder.
PIN Mode		Contents
2)	Select Status	Enable/Disable PIN Mode If it was enabled, JUE-501/JUE-251 requires PIN input when it was turned on.

3)	Input PIN	To change PIN Mode, PIN input is required.
4)	Change Status	Changes PIN Mode
Change PIN		Contents
5)	Input Old PIN (Input SIM PUK)	Input 4-digits old PIN (Input PUK when the PIN was locked.)
6)	Input New PIN	Input new PIN. The new PIN must be 4-digits number.
7)	Retype New PIN	Retype new PIN for confirmation. Do not use copy and paste.
8)	Change PIN	Register new PIN. If the value of old PIN (or the PUK) was wrong, the SIM page is reloaded with "PIN (or PUK) Remaining" subtracted.
Facility Lock		
Change Status		Contents
9)	Network	Enable locks MCC (Mobile Country Code) and MNC (Mobile Network Code).
10)	Network Subset	Enable locks Network Subset Code.
11)	Service Provider	Enable locks Service Provider Code.
12)	Corporate	Enable locks Corporate Code.
13)	SIM/USIM	Enable locks particular one SIM/USIM Card.
14)	PIN Code input box	There are no initial PIN Codes. The number (from 8 to 16 digits) which is input for the first time shall be applied as the facility PIN Code. If forgot the facility PIN Code, changing the status and changing the PIN Code will be disabled. Please do not forget the facility PIN Codes.
15)	Change Status	Changes status. To change status, password is required. Input the password to the 13) text box located on the left side of "Change Status" button.
Change PIN		Contents
16)	Select Type	Target to change PIN Network/Network Subset/Service Provider/Corporate
17)	Input Old PIN	Input from 8 to 16 digits old PIN
18)	Input New PIN	Input new PIN. The new PIN must be from 8 to 16 digits number.
19)	Retype New PIN	Retype new PIN for confirmation. Do not use copy and paste.
20)	Change PIN	Register new Facility PIN.
Secondary SIM		Contents
21)	Secondary SIM	Use or non-use of Secondary SIM System reboot is required to apply this setting.
22)	Set	Registers the setting.

NOTE

- Communications on FBB system might be disabled by changing SIM Configurations.
- We strongly recommend you to change PIN codes for the security reason.

6.5.8 File Export/Import (Export / Import Screen)

To enter the Export/Import screen, select “Export/Import” from the left [menu] panel.

On this screen, the setting data of each menu can be saved to your PC by clicking “Export” button. Use this function to make a backup file of your settings.

Also, exported data mentioned above can be imported. System reboot is required to install the imported settings.

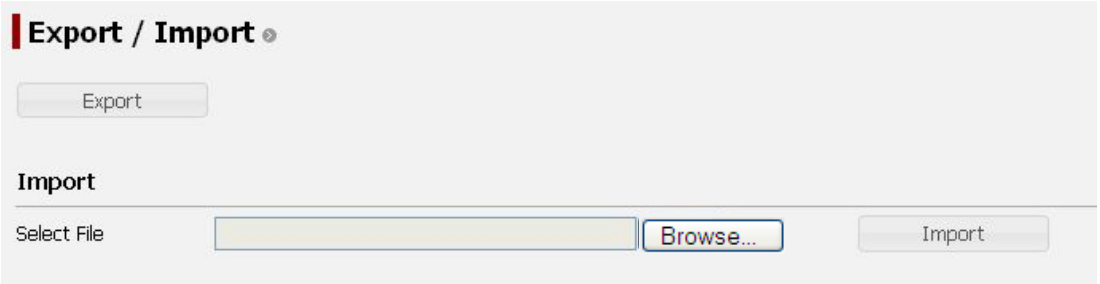


Fig. 6.5.8 Export/Import screen

NOTE

* Beware that once the data is imported, it won’t be recovered again.
* Beware that data import resets all the users’ communication amount to zero. For details about managing users’ communication, see [Sec. 6.5.4.3 Restrict User Connection].
* All the settings will return to factory default when the imported data did not meet the expected format.

6.5.9 Reset to Factory Default (Factory Default Screen)

To enter the Factory Default screen, select “Factory Default” from the left [menu] panel.
On this screen, user can delete Alarmpack logs, Event logs or ADE Monitor logs, or reset all the settings to factory default. Select one and click “Return to Default” button, and then confirmation sentence will appear. Click “Yes” button. System reboots automatically when all flash settings are reset to factory default.

Fig. 6.5.9 Factory Default screen

NOTE

Beware that once the data is reset to the factory default, it won’t be recovered again.

6.5.10 Update Software (Software Update Screen)

To enter the Software Update screen, select “Software Update” from the left [menu] panel.

User can update the software of JUE-501/JUE-251 easily. The practical procedure of software updating is described in [Appendix D] of this manual.

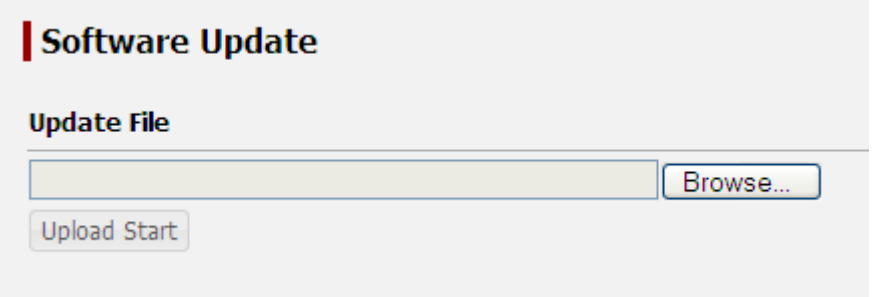


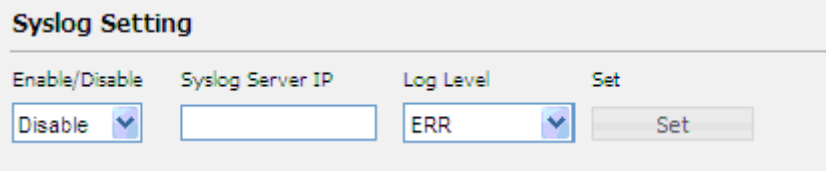
Fig. 6.5.10 Software Update screen

6.5.11 Perform Diagnostic Test (Diagnostic Screen)

To enter the Diagnostic screen, select “Diagnostic” from the left [menu] panel. This screen is divided to four sections.

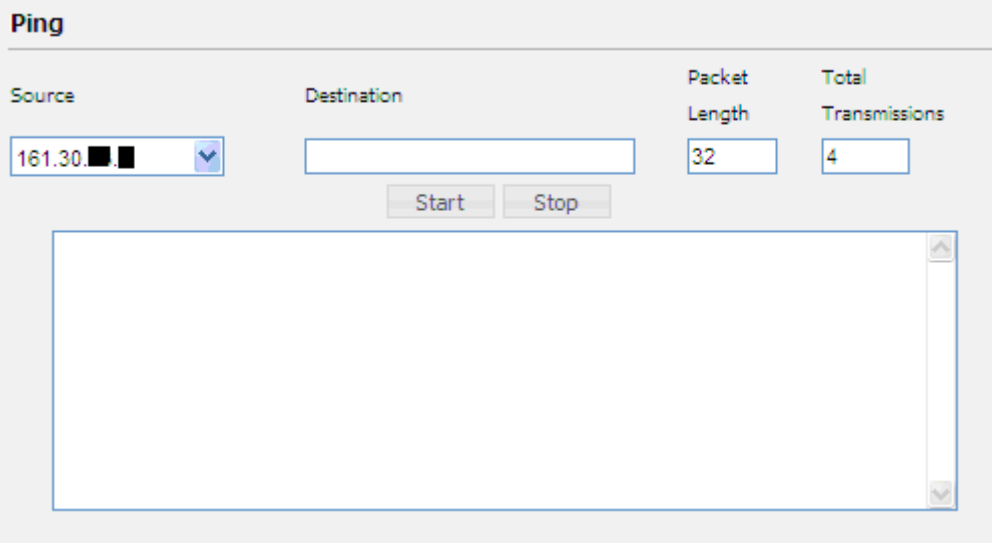
● ”Syslog Setting”

In “Syslog Setting” section, user can stack the syslog messages of JUE-501/JUE251 to user-specified server. A syslog server application which can receive syslog protocol (no.514 UDP port) needs to be activated on the specified server. The level of stacking data is defined by user. Syslog messages with upper level predefined by user will be stacked.



● ”Ping”

In “Ping” section, user can confirm whether the line being allocated to JUE-501/JUE-251 is active or not by sending ping packet from selected global IP address to specified internet host.
Destination for Ping packet is specified internet IP address or domain name.



NOTE

- Please do not display any other page or shut down your Web browser, while the ping result is being reported on the page.
- The service type to send ping packet is depending on the source IP address.
- There is a possibility to get unexpected communication fee charged by sending and receiving ping packet.
- JRC is indemnified for any communication fee troubles using this function except as outlined in the product warranty and by limitation of law.

● ”DNS”

In “DNS” section, the global IP address assigned from Inmarsat network and DNS server addresses of each PS connection are displayed. If you have a trouble in specifying domain name, confirm the DNS server address.

DNS

Local IP	Global IP	Primary DNS	Secondery DNS
192.168.128.180	161.30.[redacted]	172.30.194.8	172.30.194.11

● ”IPTEL”

In “IPTEL” section, the Registration status of each IPTEL and its local IP address are displayed.

IPTEL

Terminal	Reg Status	IP Address
IPTEL1	Registered	192.168.128.185
IPTEL2	Not Registered	
IPTEL3	Registered	192.168.128.187
IPTEL4	Not Registered	
IPTEL5	Not Registered	
IPTEL6	Not Registered	
IPTEL7	Not Registered	
IPTEL8	Not Registered	
IPTEL9	Not Registered	

This page is remained as a blank.

7. Handset Menu System

Menus can be displayed and operated with Handset are as follows.

Table. 7. Contents of Handset menu

Chapter No/Name of screen	Contents
-TOP menu	Displays the list of items of this group.
7.1 Status menu	Displays the list of the items of equipment status.
7.2 SMS menu	Displays, creates, sends, receives, and deletes the SMS.
7.3 Satellite menu	Displays the list of the items of Satellite status.
7.4 Phonebook menu	Displays the Phone Book and originating a call.
7.5 Redial menu	Displays the list of Redial number.
7.6 Internal menu	Displays and calls the Internal Phone.
7.7 Call Log menu	Displays the list of Call Log.
7.8 Alarmpack menu	Displays the list of Alarm Pack Log.

Accessible for All user

7.9 Admin menu	Displays the list of setting/ browsing items available for Admin user only
7.9.1 Terminal menu	**Sets up** Delivery date Time difference, Local Time display Tracking type GPS Input VDR Output WRF (Wide-band Radio Frequency) On/ Off of LED Blocking Indicator
7.9.2 Telephony menu (Port Control)	**Sets up** Use of Secret code of Handset/terminal telephone Voice volume of Handset/terminal telephone Type of terminal telephone (Voice or FAX) Call request/Call reception Auto Answer Voice Mail, Call Forwarding, Call Waiting, Call Barring
7.9.3 Port menu	**Sets up** (Handset) Backlight of screen/Dimmer of LEDs Pattern/Volume of Ringer tone Volume of Voice tone On/Off of key click sound (ISDN) MSN of Voice/Audio/UDI/RDI/PBX (Ethernet) User LAN; IP address/DHCP function Ext WAN; IP address/Subnet Mask (I/O)Output/Input/Function (Option)use or non use of Button/Buzzer
7.9.4 User Cont. (User Registration)	**Sets up** Users with secret code and usage restriction Usage Restriction group
7.9.5 Auto Dcn. (Auto Disconnect)	**Sets up** Maximum connection time of each communication terminal
7.9.6 SIM menu	**Sets up** Communication mode using SIM card
7.9.7 Default menu	**Sets up** Reset to Factory Default

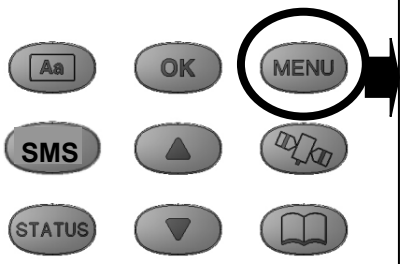
Accessible for Admin user Only

(This screen is popped up in all menu)

7.10 Other screen (TX alarm screen)	Alarm message is popped up when a failure is occurred in transmission system.

TOP menu

To open TOP menu, just push MENU button



TOP menu screen

7.1……	**1 Status**	…List of JUE-501/JUE-251 status
7.2……	**2 SMS**	…SMS
7.3……	**3 Satellite**	….List of Satellite
7.4……	**4 Phonebook**	….Phonebook
7.5……	**5 Redial**	….Redial menu
7.6……	**6 Internal**	….List of Internal Call
7.7……	**7 Call Log**	…. List of Call-logging
7.8……	**8 Alarmpack**	….List of Alarm-Pack logging
7.9……	**9 Admin**	….List of setting menus for Admin user
7.0……	**0 Service**	….List of setting menus for Serviceman*

Fig. 7a To open Top menu screen

Note*) [0 Service] is the menu for serviceman only, ordinary user cannot log-in although TOP menu screen displays this menu all the time.

Direct button makes quick access to each menu

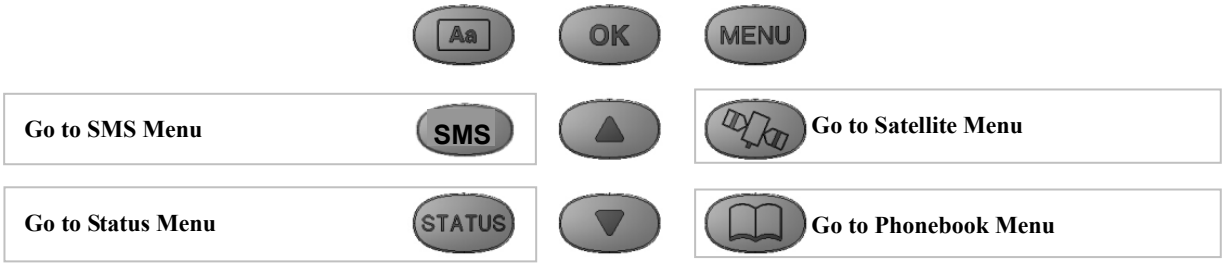


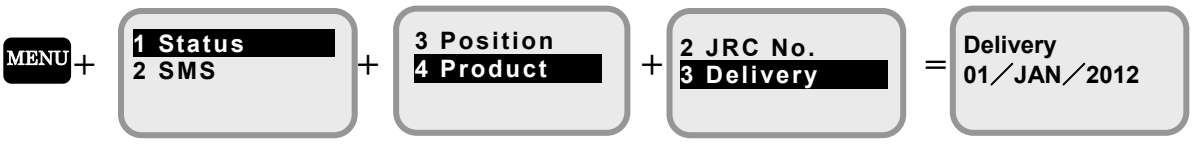
Fig. 7b Direct buttons

■ **Short cut function also makes quick access to each menu**

(Available for almost all of the screens)

Press MENU button and the number of each item, then you can display desired screen directly.

Example) To display [Delivery setting value screen], press MENU +1+4+3



Delivery setting value screen

Fig. 7c Quick access with Short cut function

■**Press CLR button to return to the previous screen.**

■**Press button to return to Idle screen instantly.**

In this section, menus for all users are described.

7.1 Status menu (Short cut is MENU+ 1)

In this menu, user can display the status of the JUE-501/JUE-251, receiving/transmitting status, latitude/longitude of the ship and the version of each device.

The figure shown below is the whole flow chart of this menu. Each item is selectable.

Press **OK** button to fix. To return to Top menu, press **CLR** button several times.

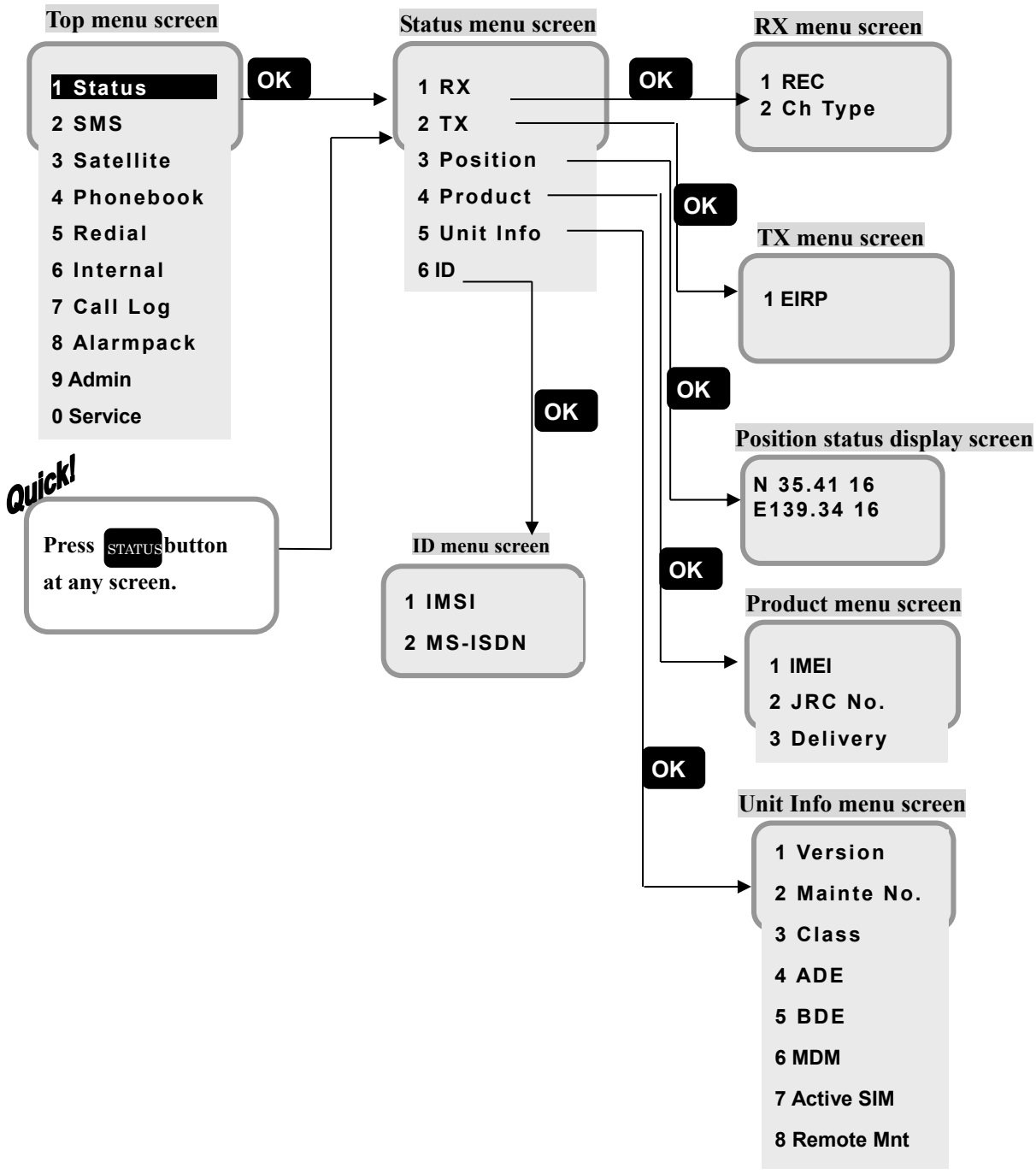
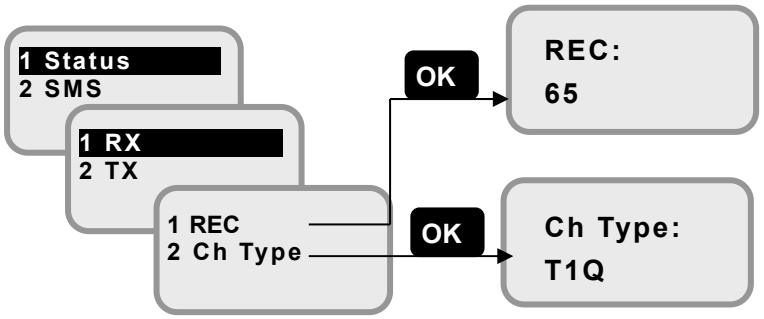


Fig. 7.1 Configuration of Status menu

7.1.1 RX(Reception) menu (MENU+ 1 +1 +1 to 2)

In this menu, user can display the Reception level (REC), and Channel type (CH TYPE).



REC level display screen

RECeiving level is displayed in number value.
Communication is not available when low value is displayed.

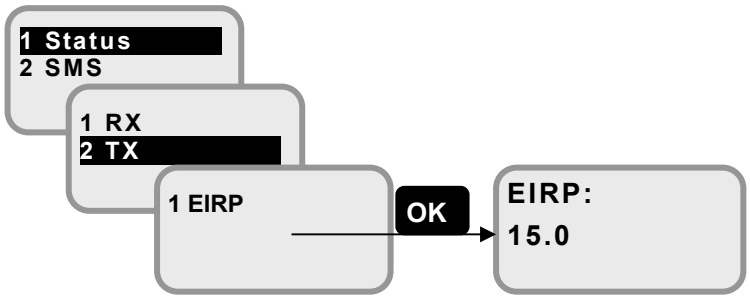
Ch Type setting value display screen

Channel type is displayed from T025Q, T1Q, T1X, and T45X.

Fig. 7.1.1 RX(Reception) Menu

7.1.2 TX(Transmission) menu (MENU+ 1 +2+ 1)

In this menu, user can display the Transmission level (EIRP).



EIRP display screen

EIRP (Transmission level) is displayed in number.

Fig. 7.1.2 TX(Transmission) menu

7.1.3 Position status display (MENU + 1 + 3)

In this menu, user can display the latitude and longitude of ship's position.

N stands for North latitude, S for South latitude, E for East longitude, and W for West longitude.

N and S are displayed in upper line, and E and W in the lower.

Status of GPS positioning consists of the four terms listed below.

Table 7.1.3 Position acquisition status of GPS

1 Cold Start	The position is not fixed yet.	Unfix status
2 Unfix		
3 2-D Fix (2 dimensional positioning)	The position has been fixed by three satellites, but altitude is not.	Fix status
4 3-D Fix (3 dimensional positioning)	The distance to satellites are measured simultaneously, the ship's latitude, longitude, and altitude are fixed.	

Unfix screen is displayed when GPS status is Cold Start or Unfix.

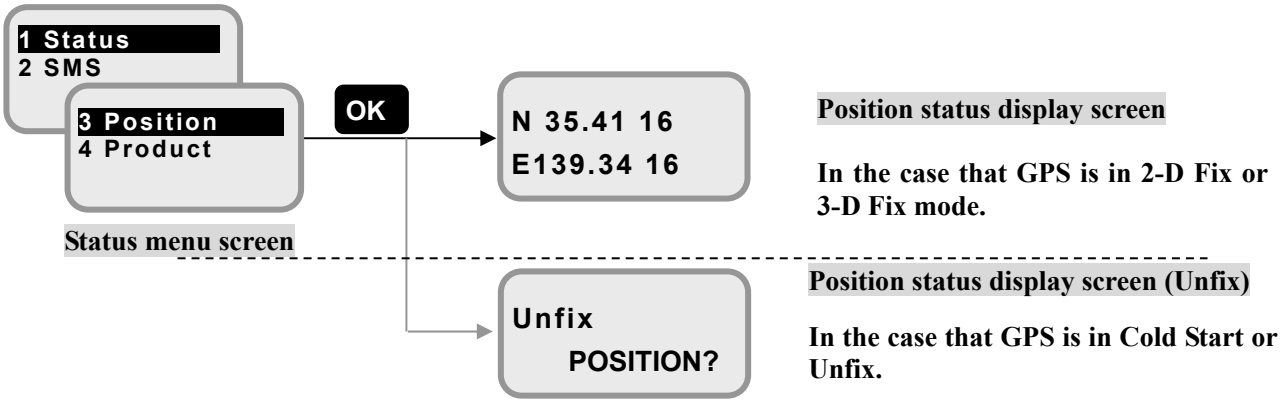


Fig. 7.1.3a Position status display screens

7.1.4 Product menu (MENU+ 1 +4 +1 to 3)

In this menu, user can display the IMEI (International Mobile Equipment Identity), JRC No (manufacturer's serial No.), and Delivery date of the JUE-501/JUE-251.

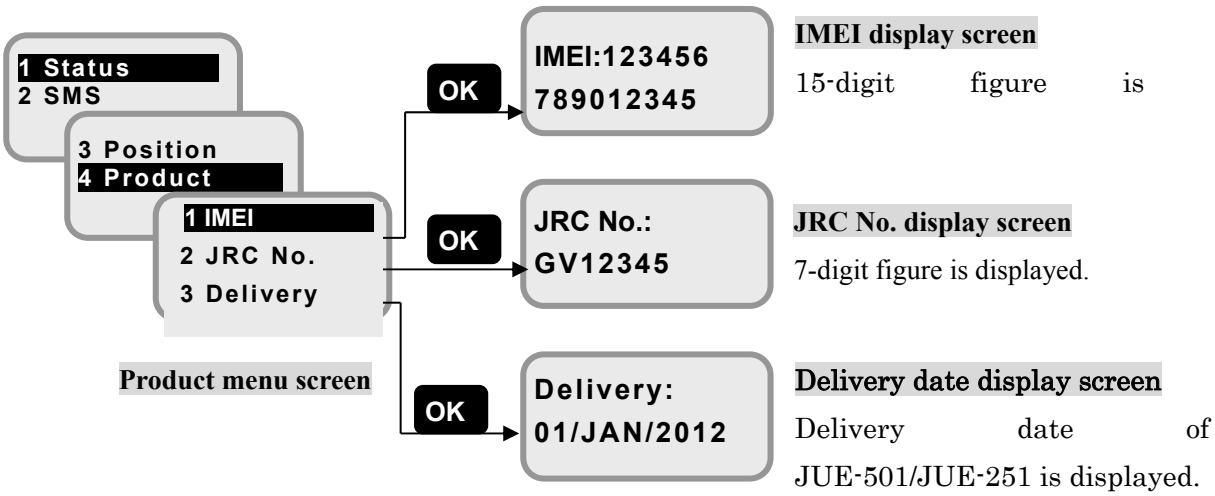


Fig. 7.1.4 Product menu status display screens

7.1.5 Unit Info menu (MENU + 1 + 5 + 1 to 4)

In this menu, user can display the software version, maintenance No. and status of ADE/BDE.

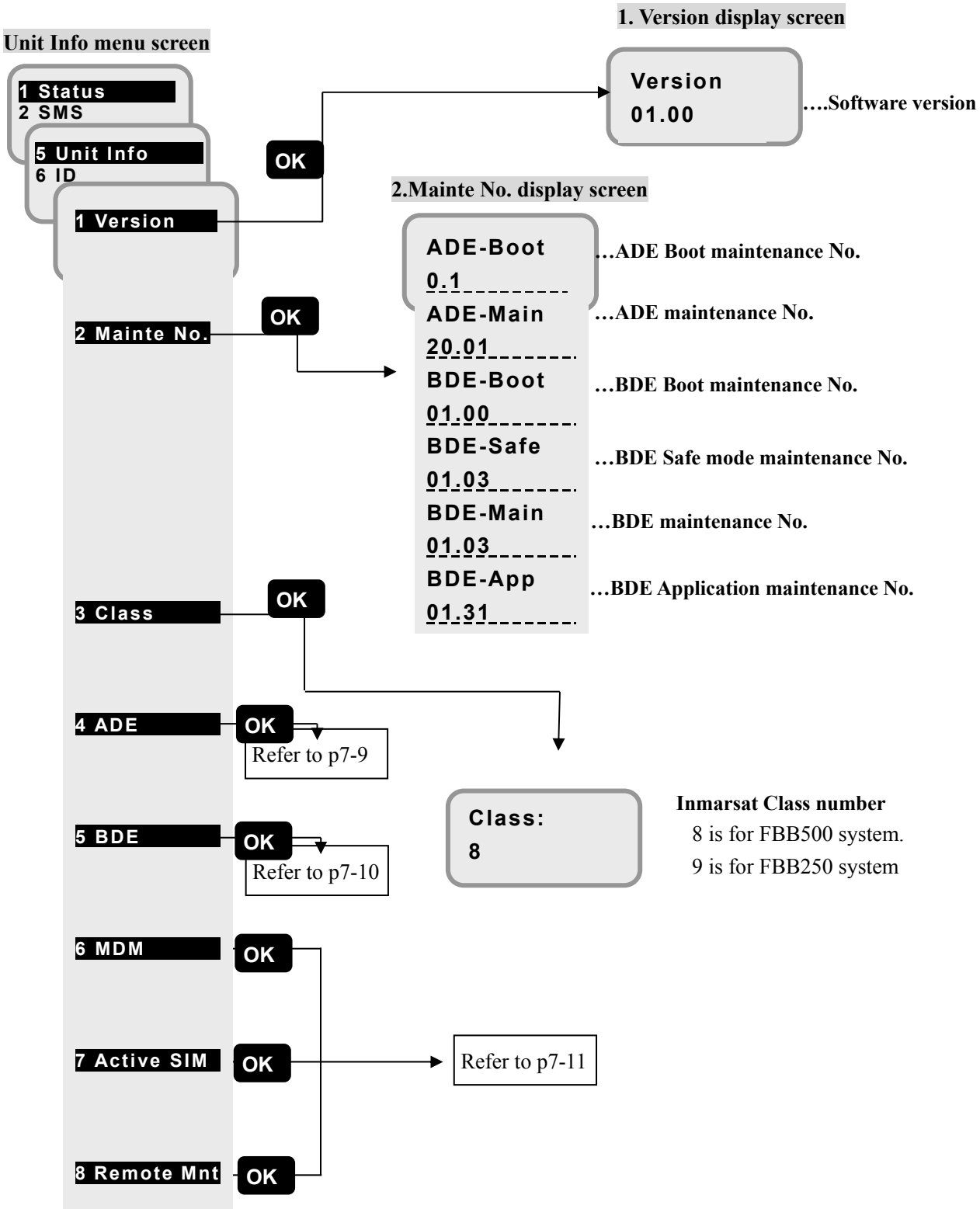
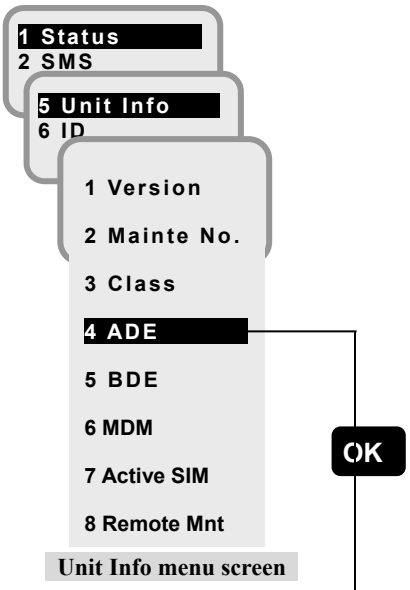


Fig. 7.1.5a Each status display screen of Unit Info (1/4)



Unit Info menu screen

4.ADE status display screen

EIRP: 15.0	….Transmitting output (dBw)
ADE: +0.0	….ADE temperature (degree) *
HPA: +45.0	….HPA temperature (degree)
Sat AZ: 173.5	….Satellite Azimuth
Sat EL: 48.0	….Satellite Elevation
BR: 163.9	….Antenna Bearing
EL: +46.0	….Antenna Elevation
Cross EL: -0.7	….Antenna Cross Elevation**
RSSI-1: 0	…..Radio wave tracking-signal value*
RSSI-2: 120	…..Radio wave step track signal value
ADE Search: 2	…..Satellite search status of ADE
GPS Status: 3D FIX	….Position acquisition status of GPS
GPSHD: 0.0	….GPS Heading value
Vib X Max: +0.0	….Maximum value of X vibration for last 6 min.
Vib X Ave: +0.0	…. Average value of X vibration for last 6 min.
Vib Y Max: +0.0	….Maximum value of Y vibration for last 6 min.
Vib Y Ave: +0.0	…. Average value of Y vibration for last 6 min.
Vib Z Max: +0.0	…Maximum value of Z vibration for last 6 min.
Vib Z Ave: +0.0	… Average value of Z vibration for last 6 min.
Rol Max: +0.0	…Maximum value of Rolling for last 6 min.
Rol Ave: +0.0	… Average value of Rolling for last 6 min.
Pit Max: +0.0	…Maximum value of Pitching for last 6 min.
Pit Ave: +0.0	… Average value of Pitching for last 6 min.
PLL LockDet: ON	….PLL Lock Detect
Global Beam: 242	….Using Global beam
A:0000000000 00	
WRF Filter: Narrow	….Using WRF filter
WRF Port: Disable	….Using WRF Port
WRF Moni: 102	….WRF Monitor
Track Mode: Auto(Signal)	….Tracking Mode (Auto(Signal)/Auto(GpsHD)/ Auto(Sensor)/Gyro)

Alarm bit display
(from left, displaying 1 means abnormal)

(1st line)
1. Axis control error
2. Acceleration sensor error
3. Rate sensor error
4. Memory error
5. Off power alarm
6. High power alarm
7. Burst error
8. Program error
9. Fan alarm
10. Internal GPS alarm

(2nd line)
11. External GPS alarm (Cold Start or Unfix)
12. PLL lock error

* is fixed to 0 for JUE-501 and JUE-251.

** is fixed to 0 for JUE-251.

Fig. 7.1.5b Each status display screen of Unit Info (2/4)

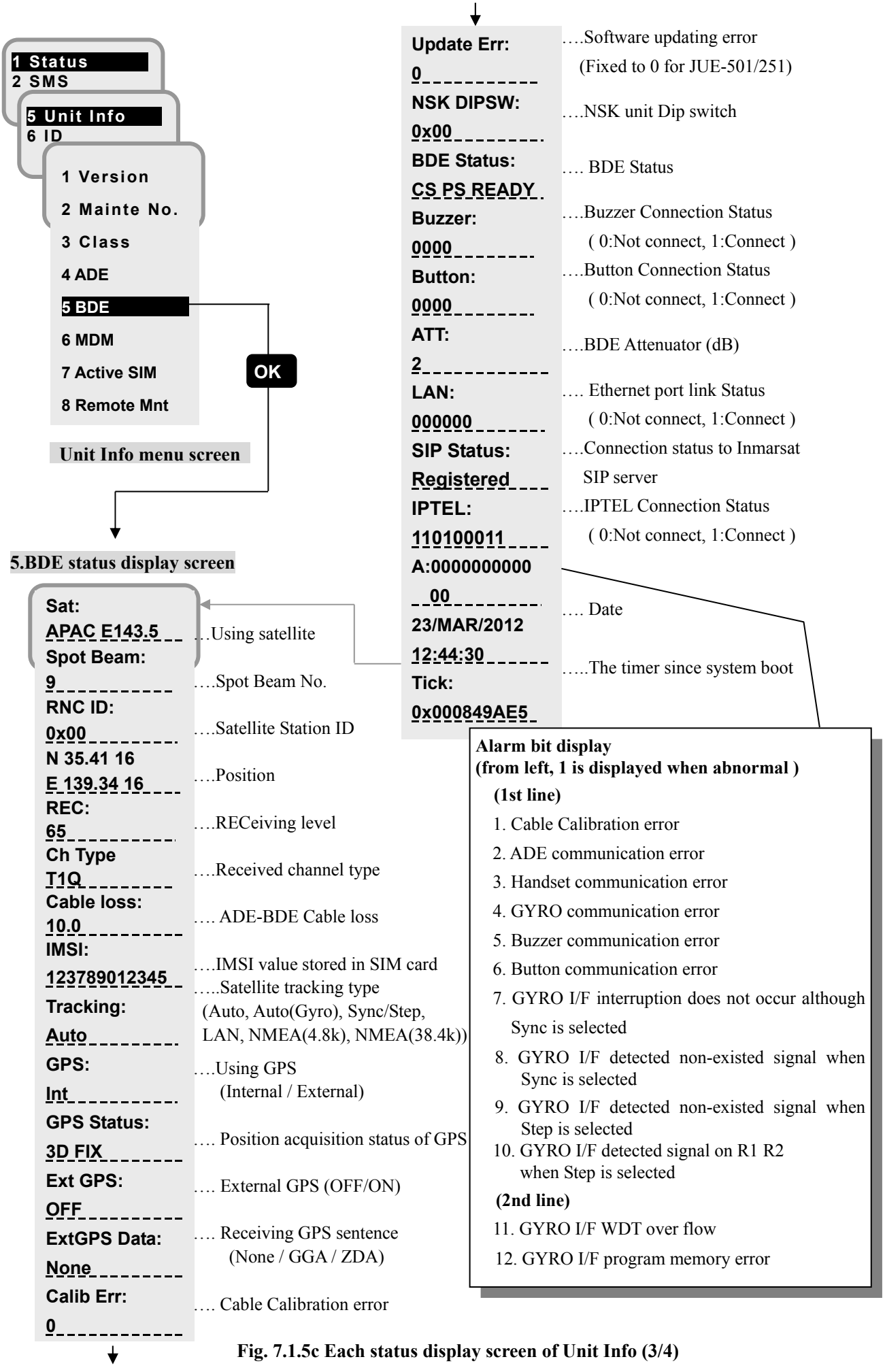


Fig. 7.1.5c Each status display screen of Unit Info (3/4)

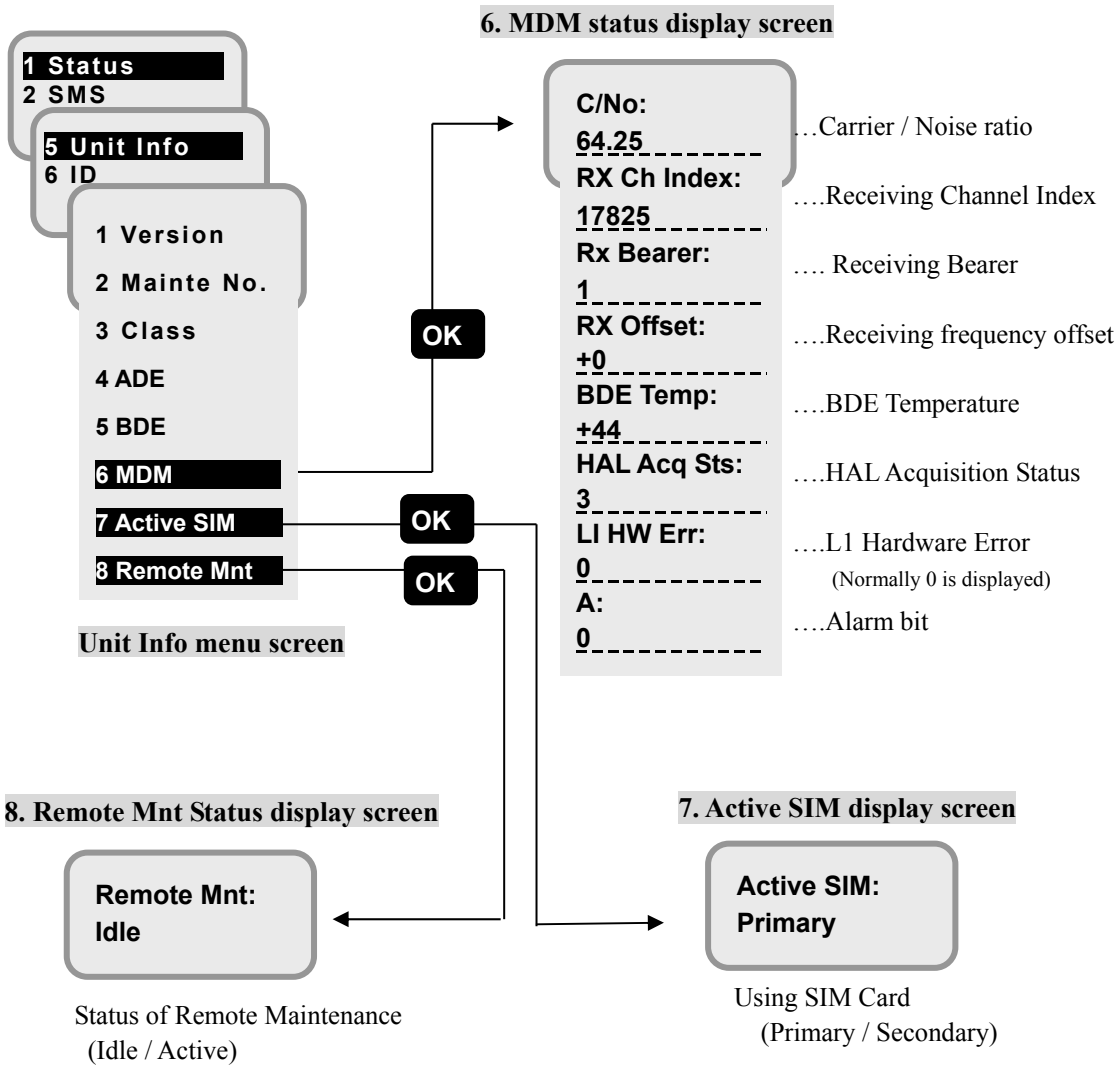
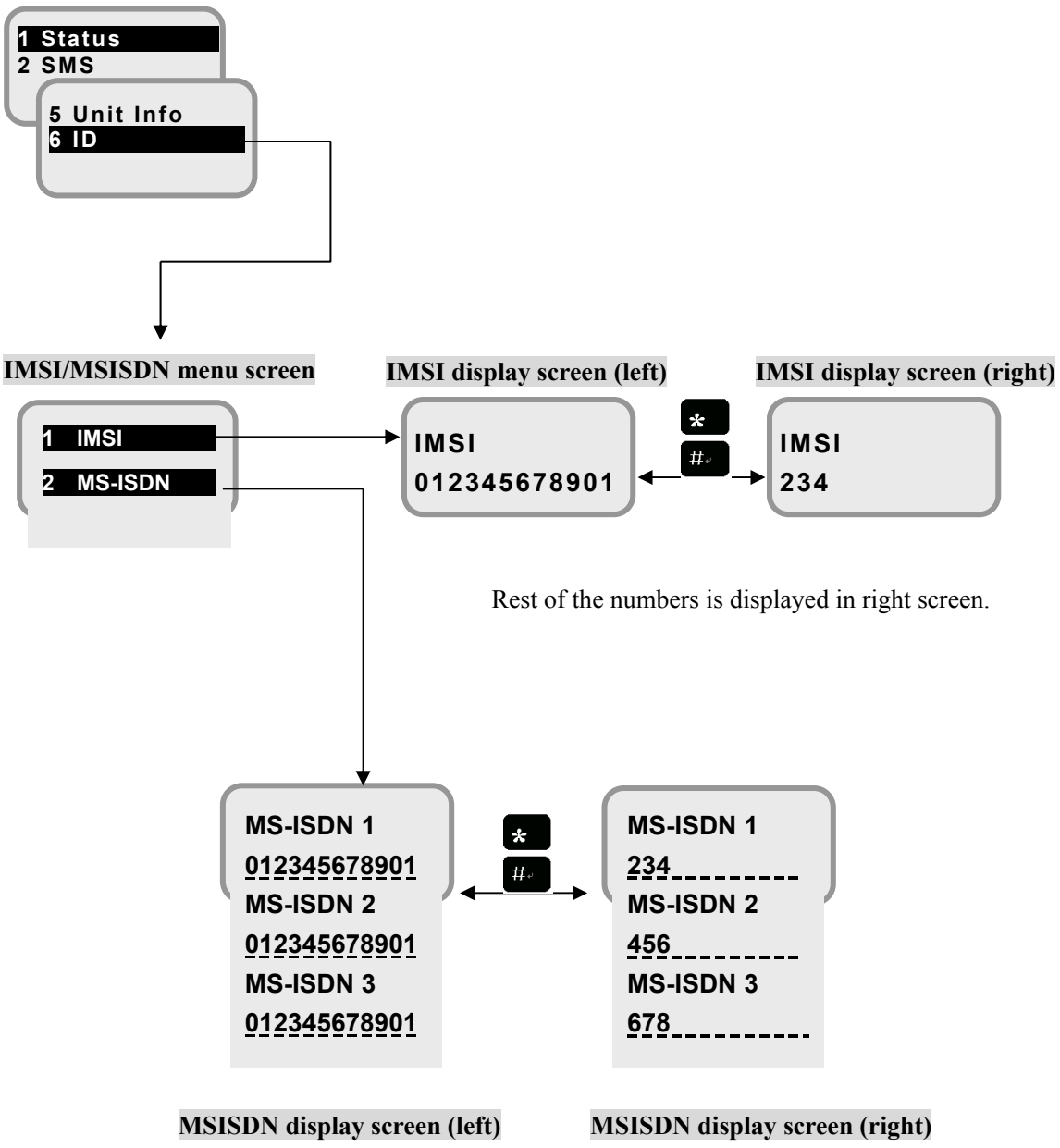


Fig. 7.1.5d Each status display screen of Unit Info(4/4)

7.1.6 ID menu (MENU+ 1 +6+ 1 to 2)

In this menu, user can display the ID of IMSI/MSISDN.



IMSI (International Mobile Subscriber Identity)

MSISDN (Mobile Subscriber ISDN Number)

Fig. 7.1.6 ID menu status display screens

7.2 SMS menu (MENU + 2)

In this menu, user can read, create, send, and delete SMS.

NOTE

Delete unnecessary message constantly because receiving SMS new message and sending message from Handset are become impossible when the memory usage amount becomes equal to total message capacity.

*Capacity confirmation method: refer to [7.2.5 Setting menu] (p7-20)

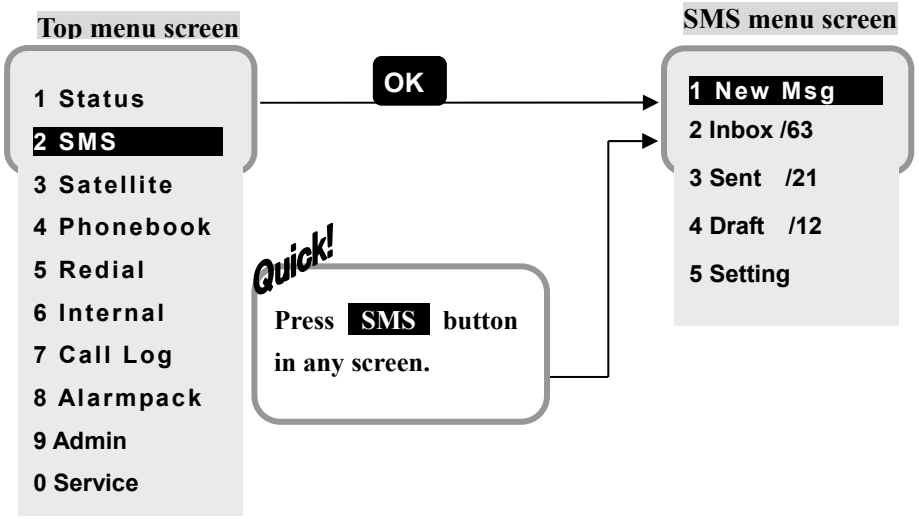


Fig. 7.2a SMS menu screen

How to input the message from Handset

- To toggle the input mode, press Aa button.

  Input mode is transited within Aa(Capital input mode), aA(alphabet input mode) , and (nothing is displayed, it is numeric mode).
  Refer to the next page about the detail of the characters applied by each mode.

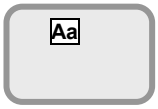
Fig. 7.2b To toggle the input mode

- To fix the input character, press #► key.

  Input character blinks and not fixes until #► key is pressed.

Fig. 7.2c To fix the input character

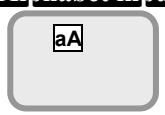
Capital input mode



When Aa is displayed in [Input mode] area, below characters are being input.

Pushed times	1	2	3	4	5	6	7	8	9	10	11	12	13
(Key) 0	.	,	—	?	!	“	‘	¥	$	&	:	;	#
1	*1	*2	@	□	(	)	<	>	%	+	*	/	=
2	A	B	C	a	b	c							
3	D	E	F	d	e	f							
4	G	H	I	g	h	i							
5	J	K	L	j	k	l							
6	M	N	O	m	n	o							
7	P	Q	R	S	p	q	r	s					
8	T	U	V	t	u	v							
9	W	X	Y	Z	w	x	y	z					

Alphabet input mode



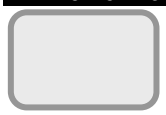
When aA is displayed in [Input mode] area, below characters are being input.

Pushed times	1	2	3	4	5	6	7	8	9	10	11	12	13
(Key) 0	.	,	—	?	!	“	‘	¥	$	&	:	;	#
1	*1	*2	@	□	(	)	<	>	%	+	*	/	=
2	a	b	c	A	B	C							
3	d	e	f	D	E	F							
4	g	h	i	G	H	I							
5	j	k	l	J	K	L							
6	m	n	o	M	N	O							
7	p	q	r	s	P	Q	R	S					
8	t	u	v	T	U	V							
9	w	x	y	z	W	X	Y	Z					

*1 =space Press 1 key once, a space is entered in cursor position.

*2 =new line Press 1 key twice, the linefeed is executed at cursor position.

Numeric mode



When nothing is displayed in [Input mode] (numeric mode) area, it is numeric mode.

7.2.1 New Msg menu (MENU+ 2+ 1)

In this menu, user can create, send, and save (as unsent) new messages. Unsent messages are saved in the [4. Draft] menu.

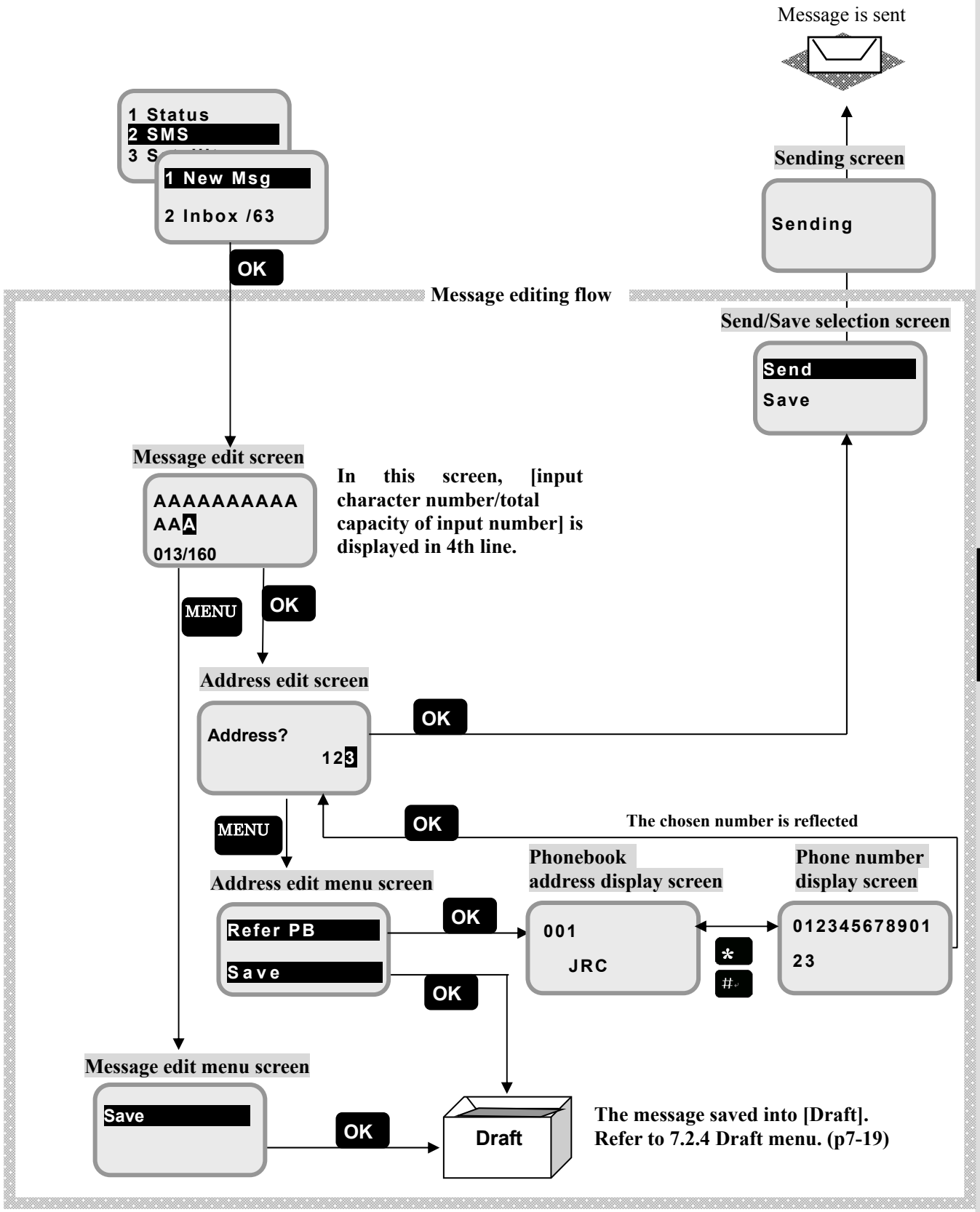
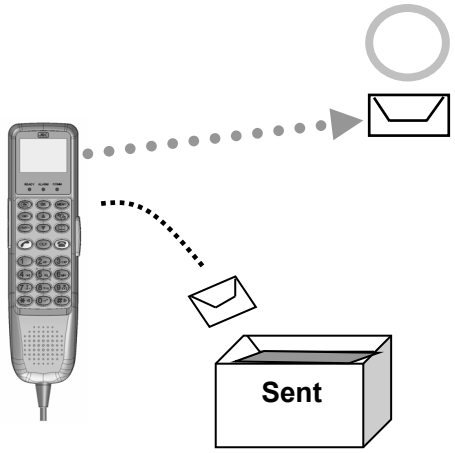
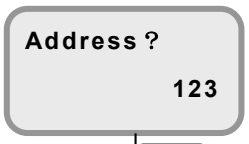


Fig. 7.2.1a New Msg menu

When the sending is succeeded: the sent message is saved in [Sent] of SMS menu



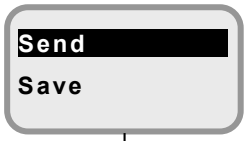
Address edit screen



When OK is pressed at the Address edit screen in the **[Message editing flow]** (p7-15), the screen transits to [Send/Save selection screen].

OK

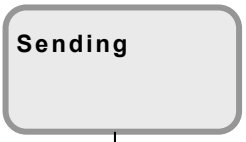
Send/Save selection screen



Select [Send] and press OK if you want to send the message.

OK

Sending screen



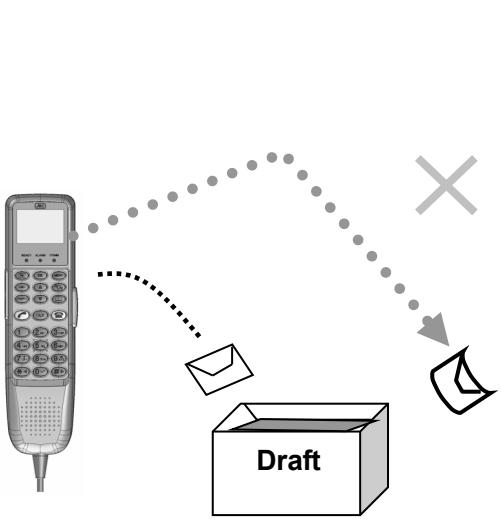
[Sending screen] is displayed in a few seconds.

SMS screen

Message sending is completed. SIM data is reloaded automatically and the screen returns to [SMS screen].The sent message is saved in [Sent] menu.

Fig. 7.2.1b
Screen transition of successful sending

When the sending is failed: the sent message is saved in [Draft] of SMS menu



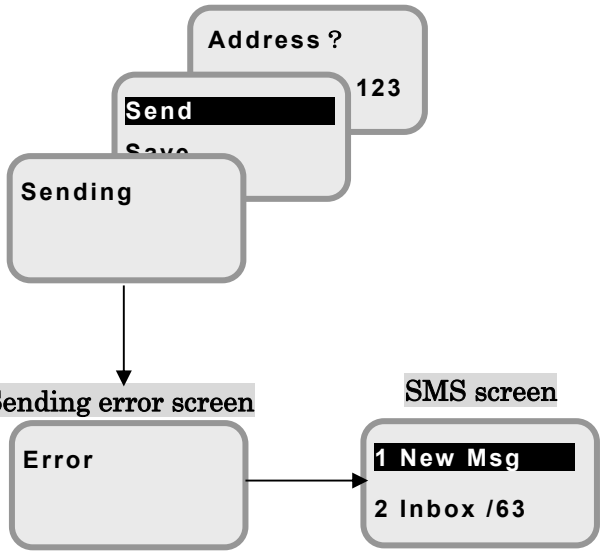


Fig. 7.2.1c
Screen transition of failed sending

When sending message is failed, [Error screen] is displayed.
Follow below procedure to resend the message:
[1. New Msg] OK->[Continue?] Yes->[Message editing screen] OK->[Address editing screen]-> [Send]OK.

7.2.2 Inbox menu (MENU + 2 + 2)

In this menu, user can read, reply, forward, and delete the received messages.

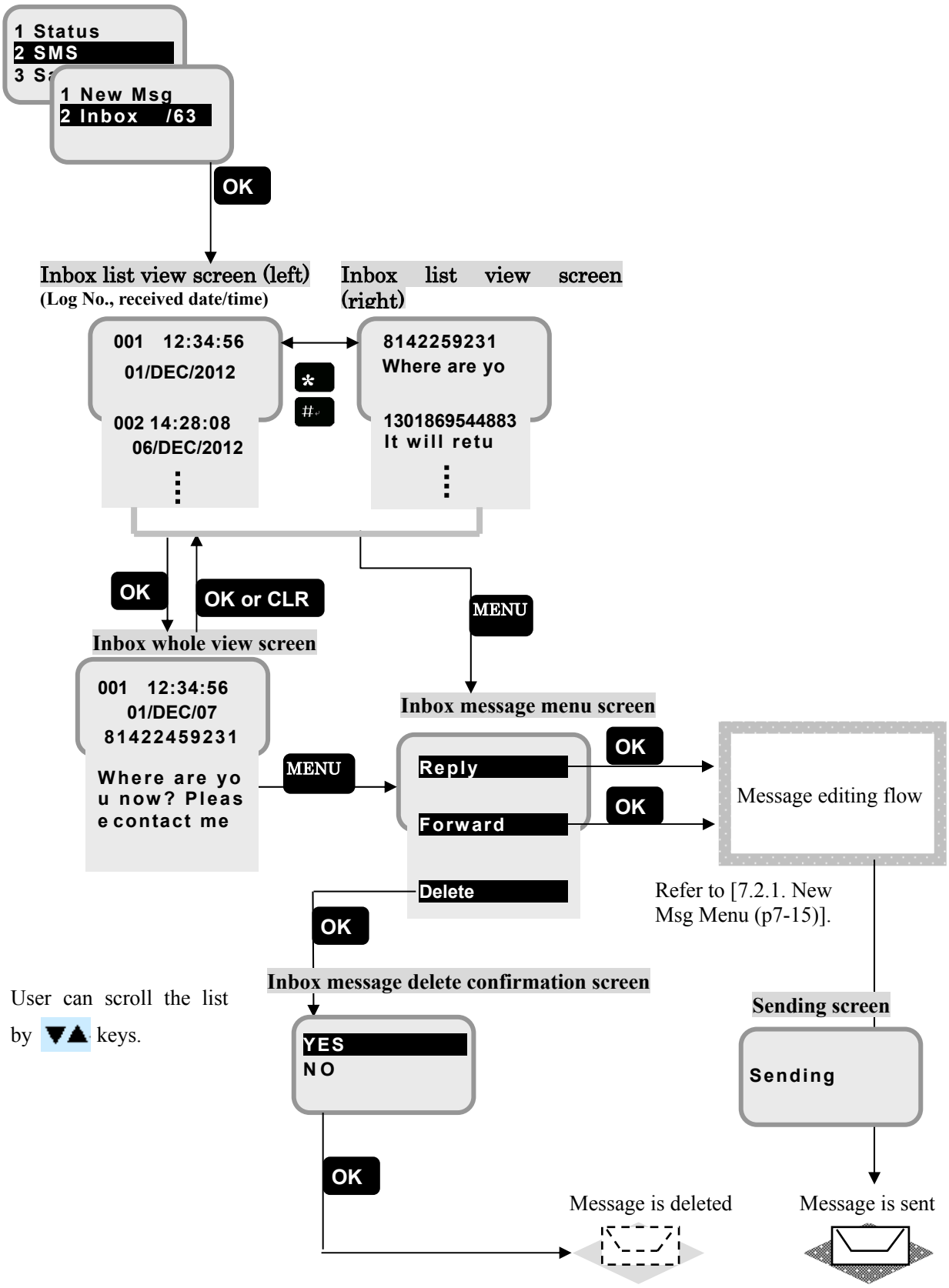


Fig. 7.2.2 Inbox menu

7.2.3 Sent menu (MENU + 2 + 3)

In this menu, user can read, resend, forward, and delete the sent messages.

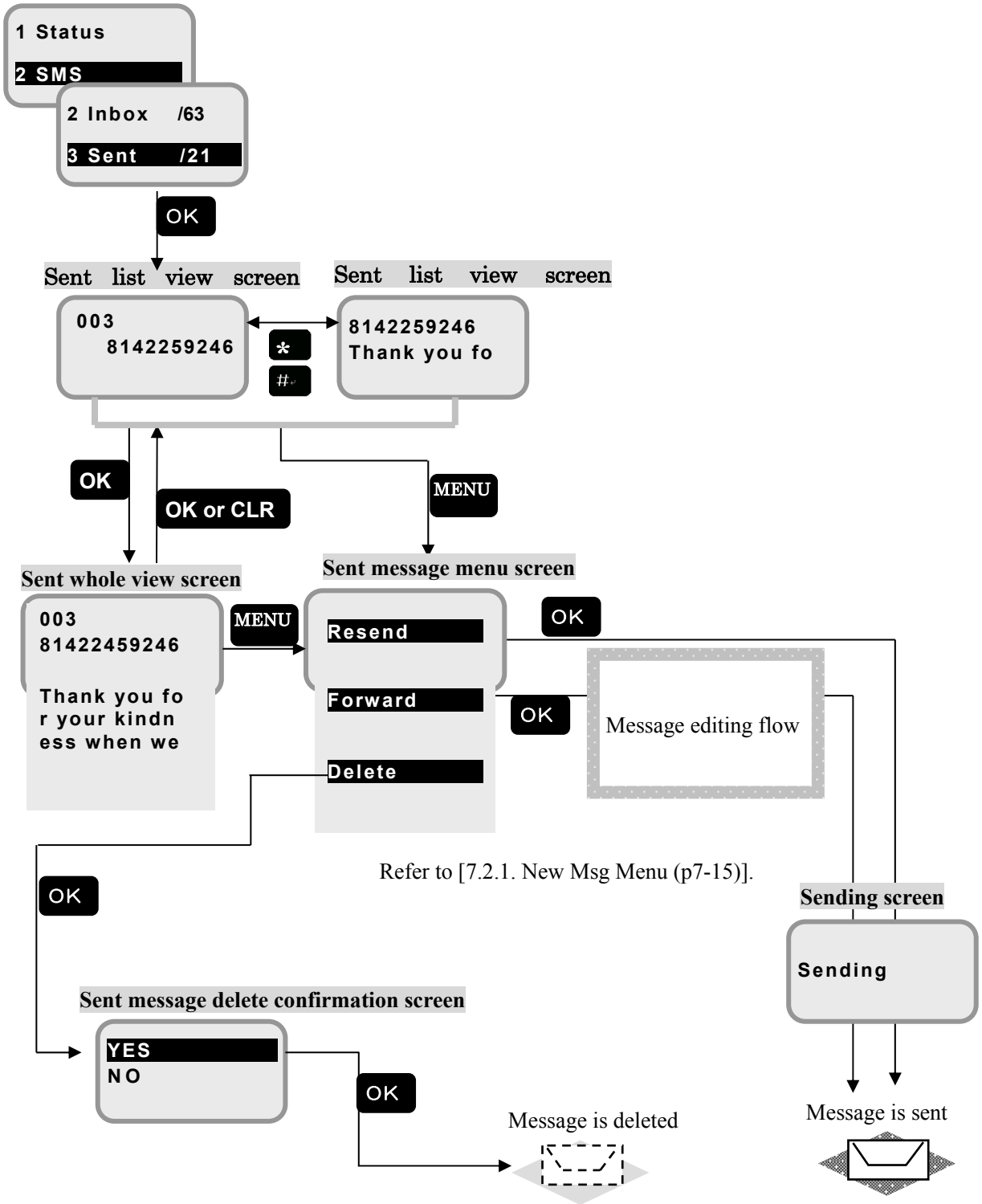


Fig. 7.2.3 Sent menu

7.2.4 Draft menu (MENU+ 2+4)

In this menu, user can read, edit, send, and delete the unsent messages.

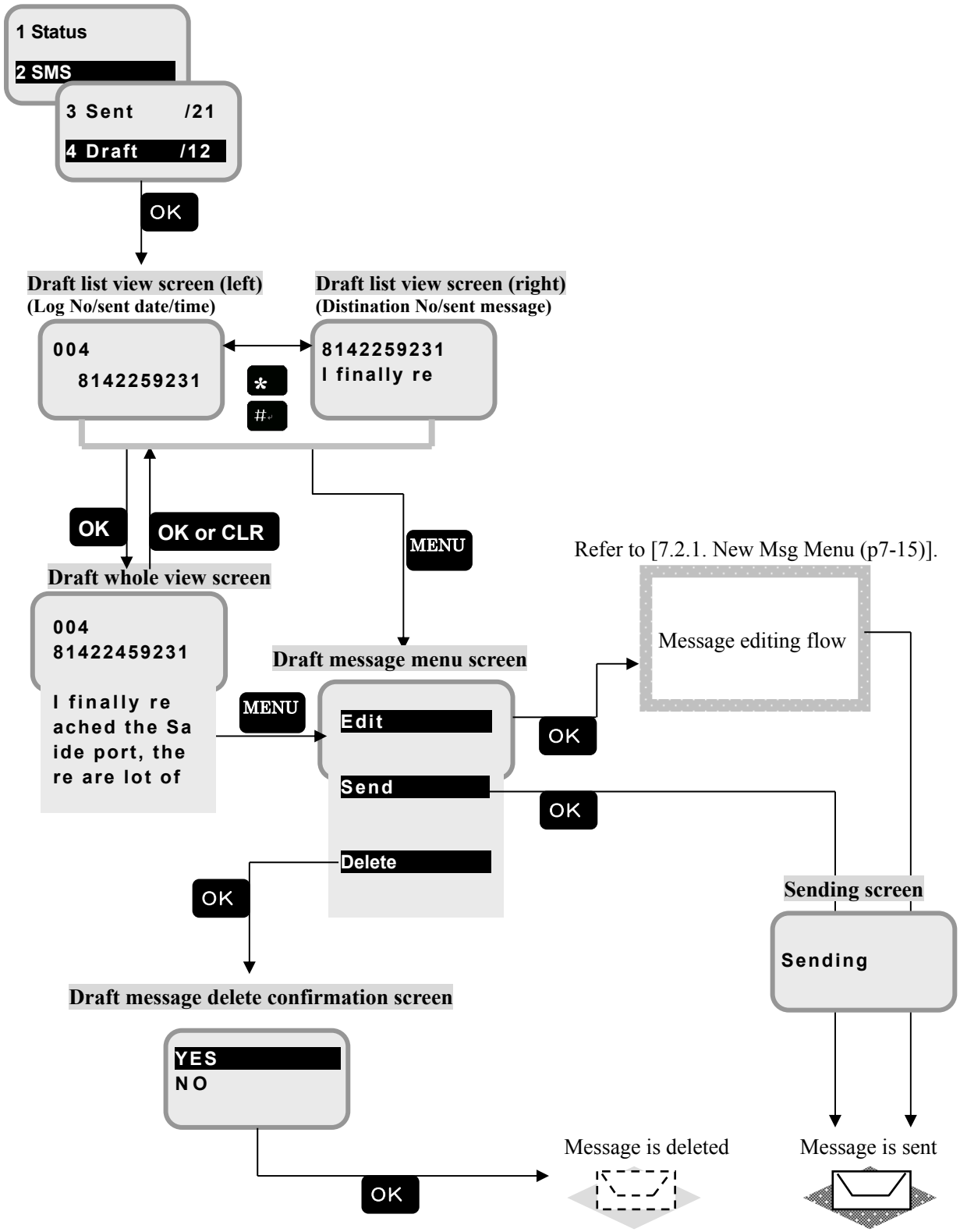


Fig. 7.2.4 Draft menu

7.2.5 Setting menu (MENU + 2 + 5)

In this menu, user can read the used amount of mailboxes, delete all messages at once, and set the details of SMS service.

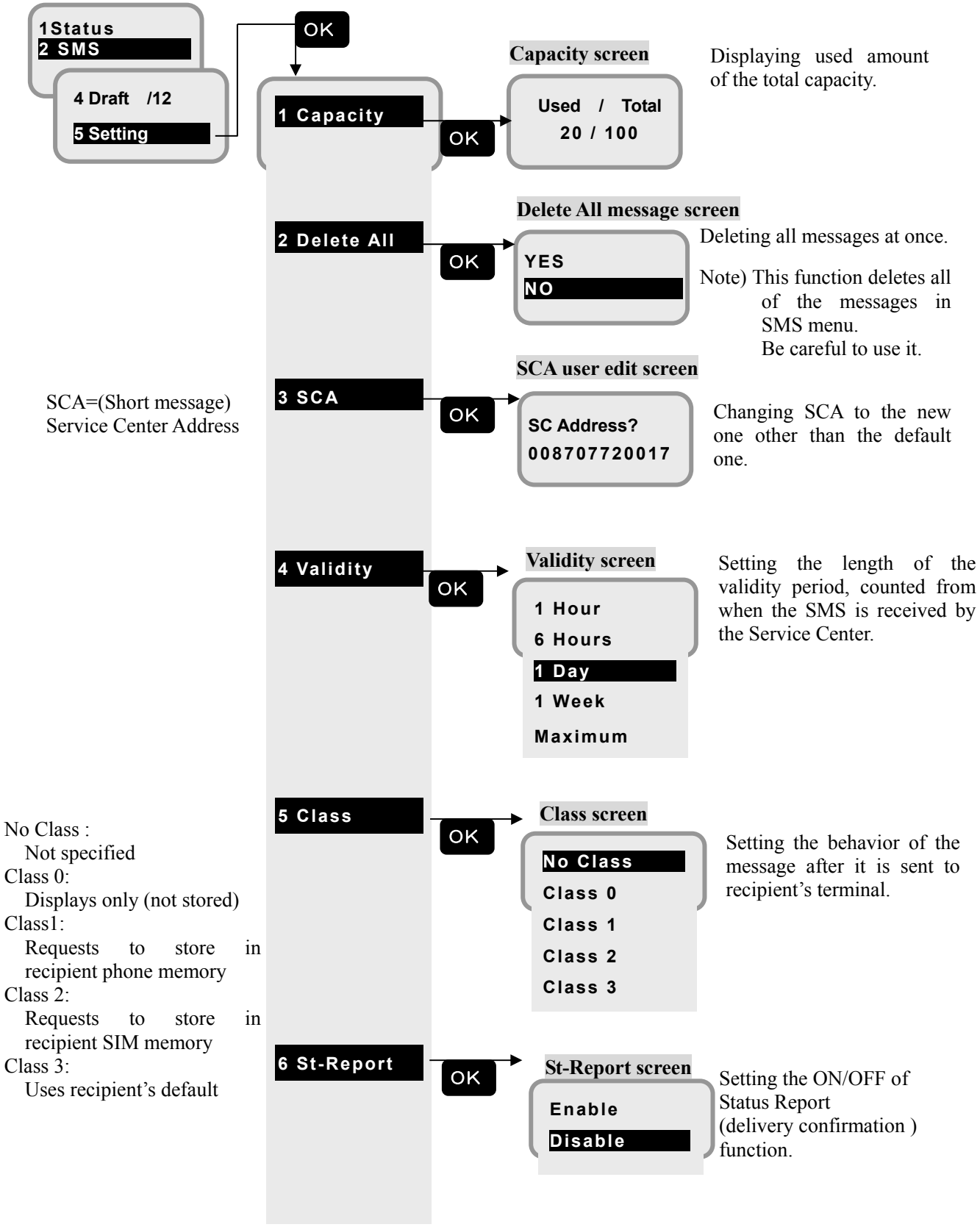


Fig. 7.2.5 Setting menu

7.3 Satellite menu (MENU + 3)

In this menu, user can display the information of satellite including ocean region and spot beam No.

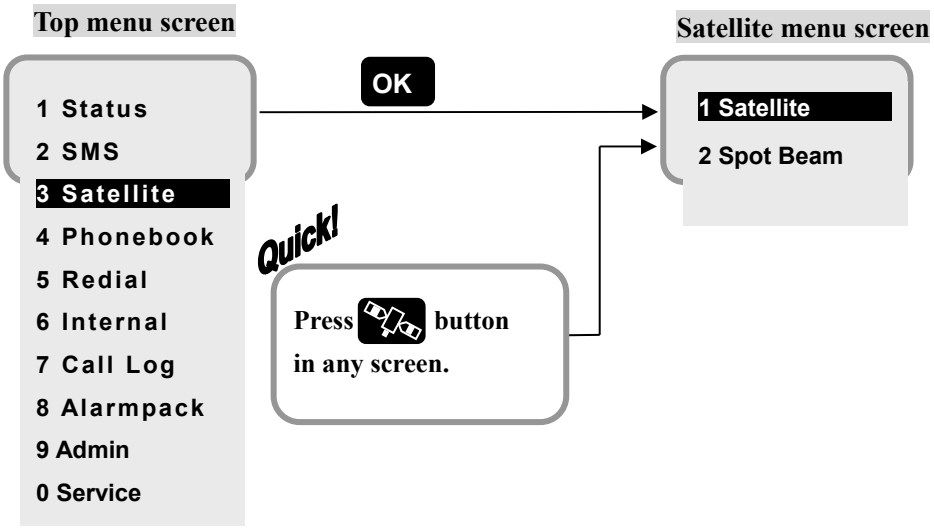


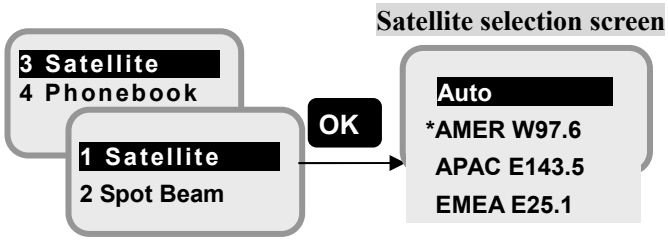
Fig. 7.3 Satellite menu screen

7.3.1 Satellite selection (MENU + 3 + 1)

In this menu, satellite can be changed. Currently selected satellite is denoted by "*".

Select the preferred satellite and press OK button. The JUE-501/JUE-251 will search the most suitable satellite if "Auto" is chosen.

* Although there is nothing wrong with JUE-501/JUE-251, selecting satellite makes some noise on ADE.



Handset will display the suitable satellites from the operating satellites.

AMER W97.6 (America satellite)
APAC E143.5 (APAC satellite)
EMAE E25.1 (EMEA satellite)

Fig. 7.3.1 Satellite selection screen

7.3.2 Spot Beam ID display (MENU + 3 + 2)

In this menu, user can display the ID of Spot Beam.

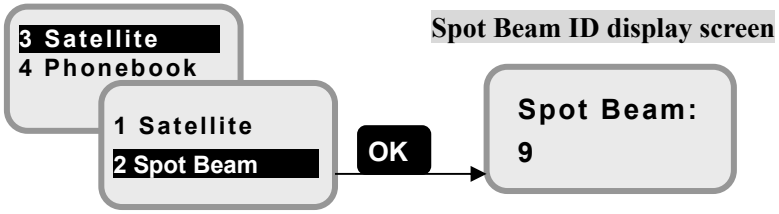


Fig. 7.3.2 Spot Beam ID display screen

7.4 Phonebook (Speed dial) menu (MENU + 4)

In this menu, the user can display and edit the Phonebook. Refer to [5.1.2 Using Phonebook (Speed dial)] (p5-7) about dial-up procedure. Maximum 200 speed dials can be set.

Press 📖 button from [Idle screen], or select [4.Phonebook] from Top menu screen, then [Address display screen] is displayed. This screen displays Speed Dial Number and person's name.

Press * or # to display the full number. The screen is switched to [Telephone number display screen].

Press MENU button with [Address display screen] or [phone number display screen] opened, to register, change, or delete the data. The screen is changed to [Operation selecting screen] (Press OK button at this step or off-hook the Handset, to go to [Dial-up screen]). However, Secret Code authentication screen is displayed prior to this screen, when you have not logged-in as Admin user. Enter the secret code to go to [Operation selecting screen]. Press CLR key, or On Hook button, to cancel the job and return to the previous screen.

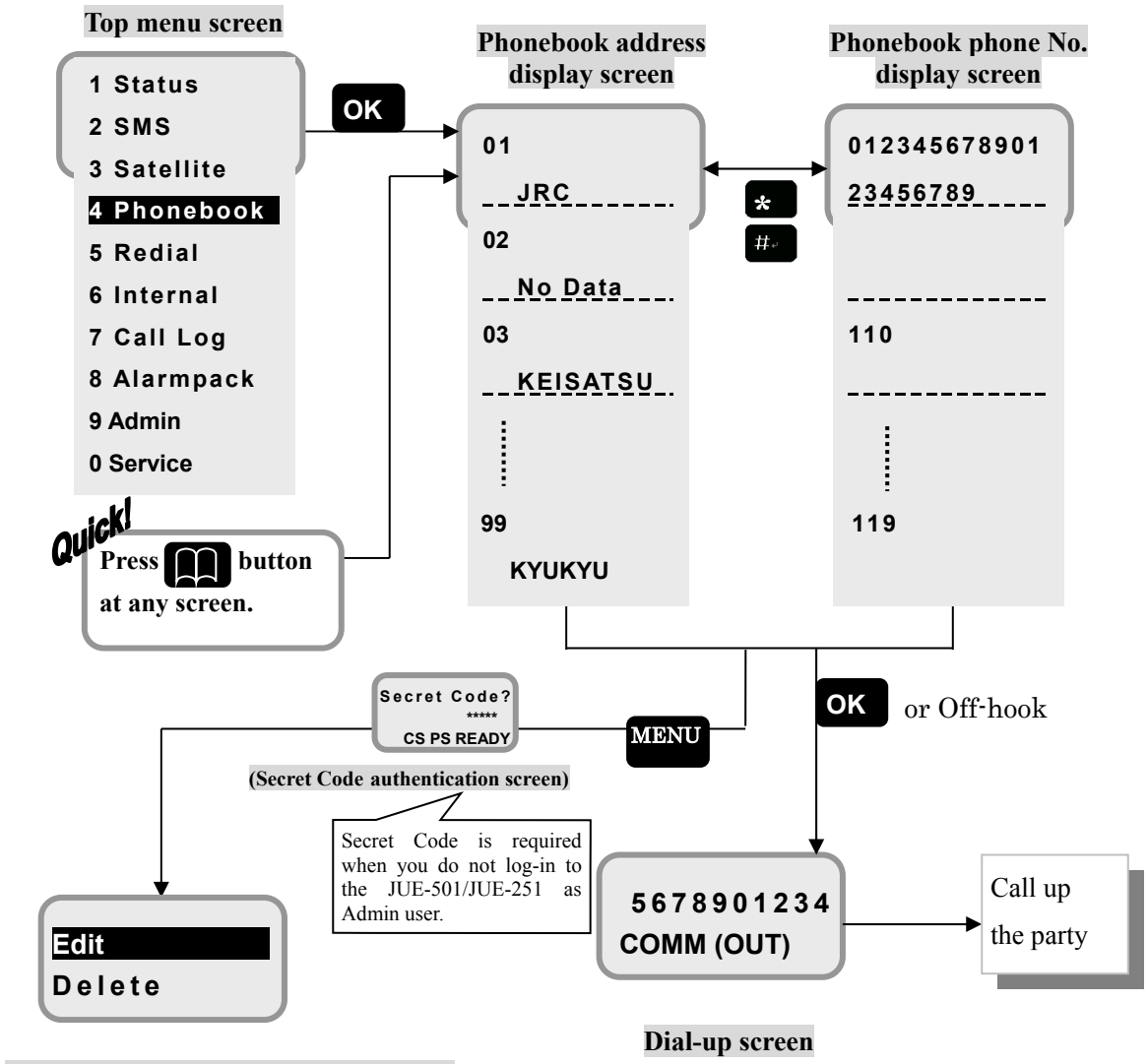


Fig. 7.4 Flow of Phonebook menu

7.4.1 Editing the Phonebook address (MENU + 4 + MENU)

In this menu, the user can register, change, and delete the address (name of party) and telephone number.

Press **MENU** button with the [Phonebook address display screen] or [Phonebook phone No. display screen] opened, then [Phonebook Operation selecting screen] is displayed.

Select [Edit] and press **OK**, selected party is changed to [Address/Phone number editing screen]. The blinking cursor let you to enter the new address.

Enter the new address and press **OK** then enter the new number with alphanumeric buttons.

If [Delete] is selected, the data is deleted instantly, and the screen is returned to [Address/Telephone number list display screen]. Only [No Data] is indicated for the address.

Example) Editing an existing address/ Phone number (blank address/phone number is displayed when data is filled in newly).

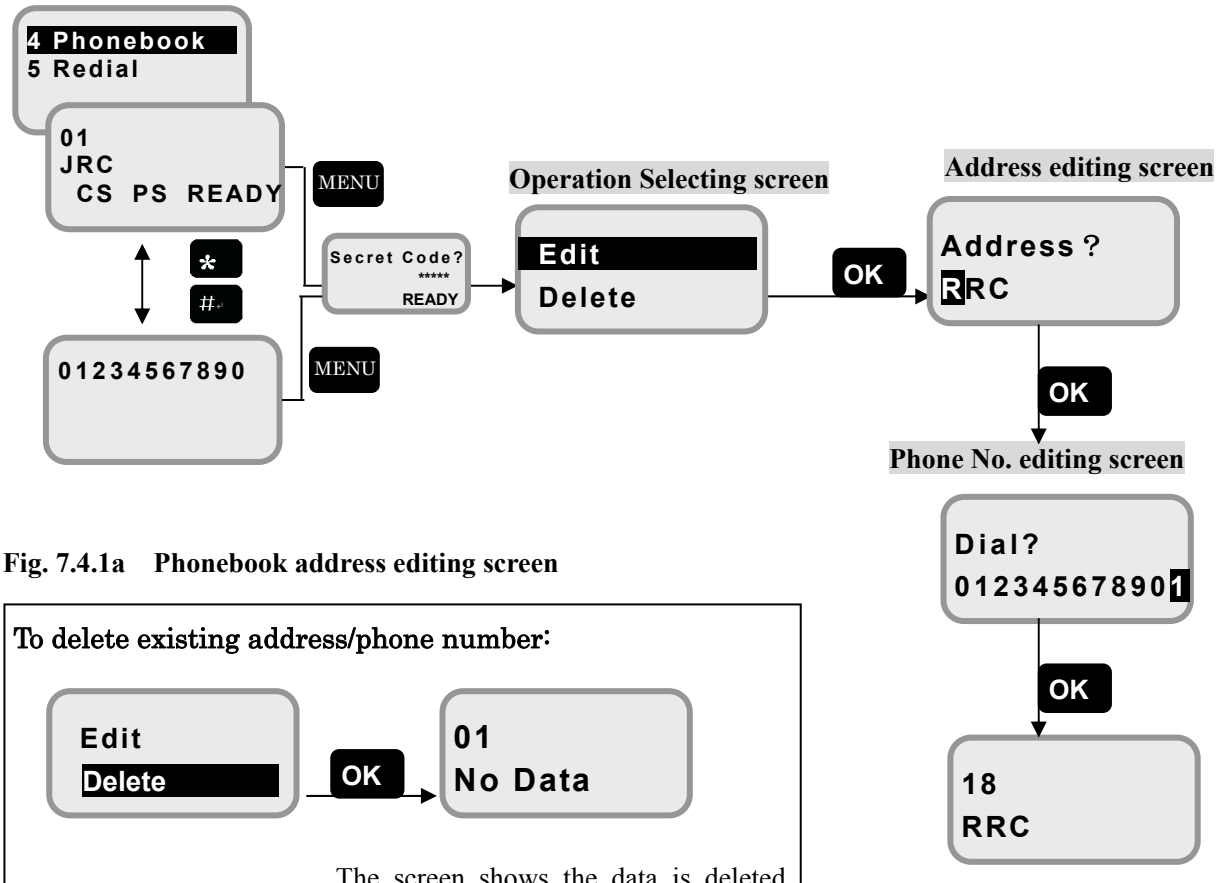


Fig. 7.4.1a Phonebook address editing screen

To delete existing address/phone number:

The screen shows the data is deleted.

Fig. 7.4.1b Phonebook data deleted screen

Overwritten screen is displayed.

7.5 Redial menu (MENU + 5)

In this menu, the user can display the Outgoing Calls List up to 50.

First, [Outgoing Calls List screen] is displayed.
The screen displays Outgoing Call number (01 to 50), telephone number (if the number is longer than 10-digit, first several digits are not displayed), and date and time.

Press the # button at Outgoing Calls List display screen, switch to the date and time display screen, press the # button again to switch to all phone numbers display screen. When you press the * button on all phone numbers display screen, it switches to date and time display screen, press the * button again to return Outgoing Calls List display screen.

Scroll the screen with ▼▲ button to display the number dialed before and after.

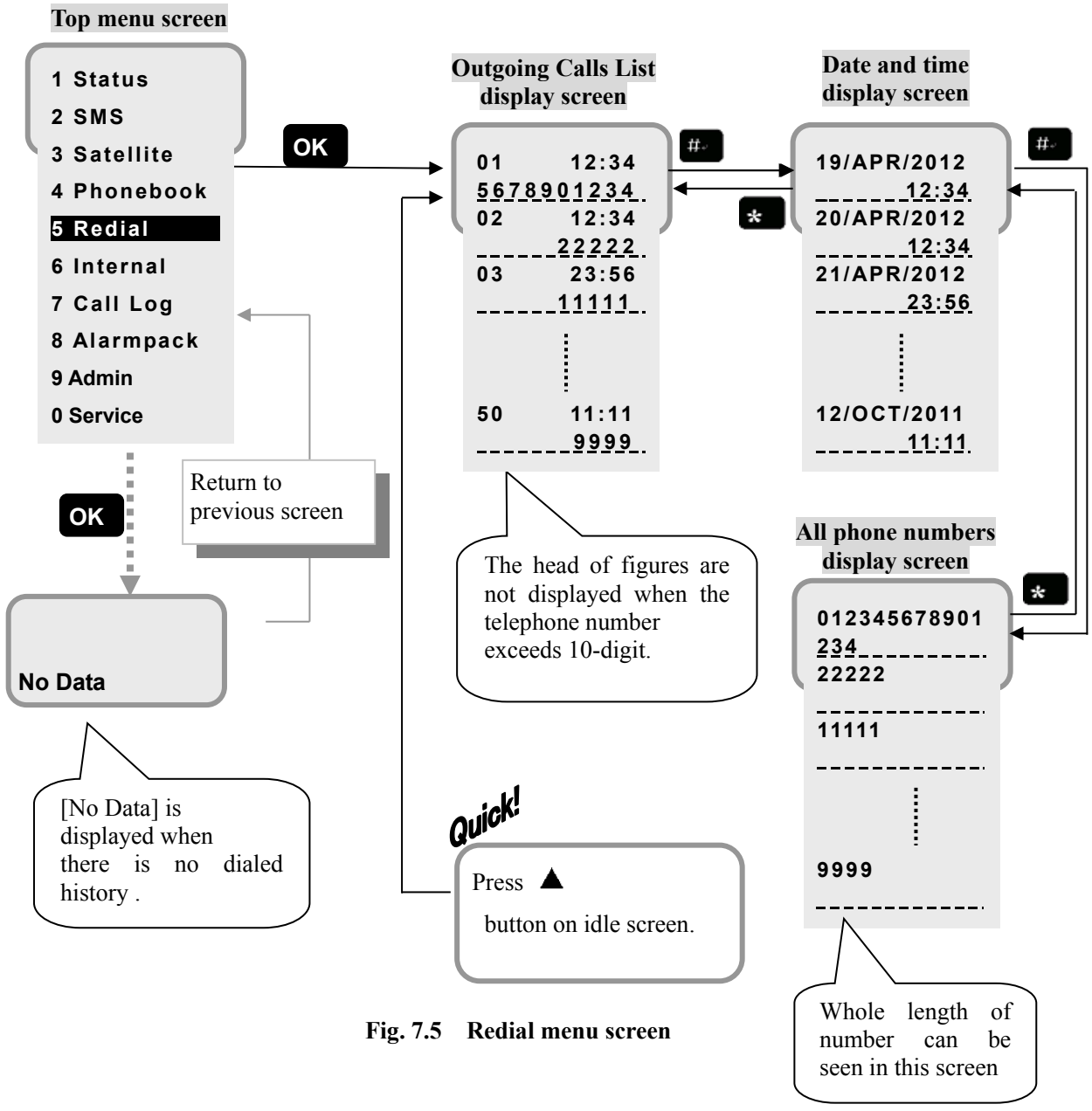


Fig. 7.5 Redial menu screen

7.6 Internal menu MENU+6+1～3

In this menu, user can call up Internal Phone.

Internal menu is displayed four service types, TEL, ISDN, IPTEL and All. Select the device you want to call by ▼▲ button and push OK.

When TEL or IPTEL is selected, [TEL select menu screen] or [IPTEL select menu screen] will be displayed. Select the telephone you want to call and push OK, then the extension number of the telephone will be displayed.

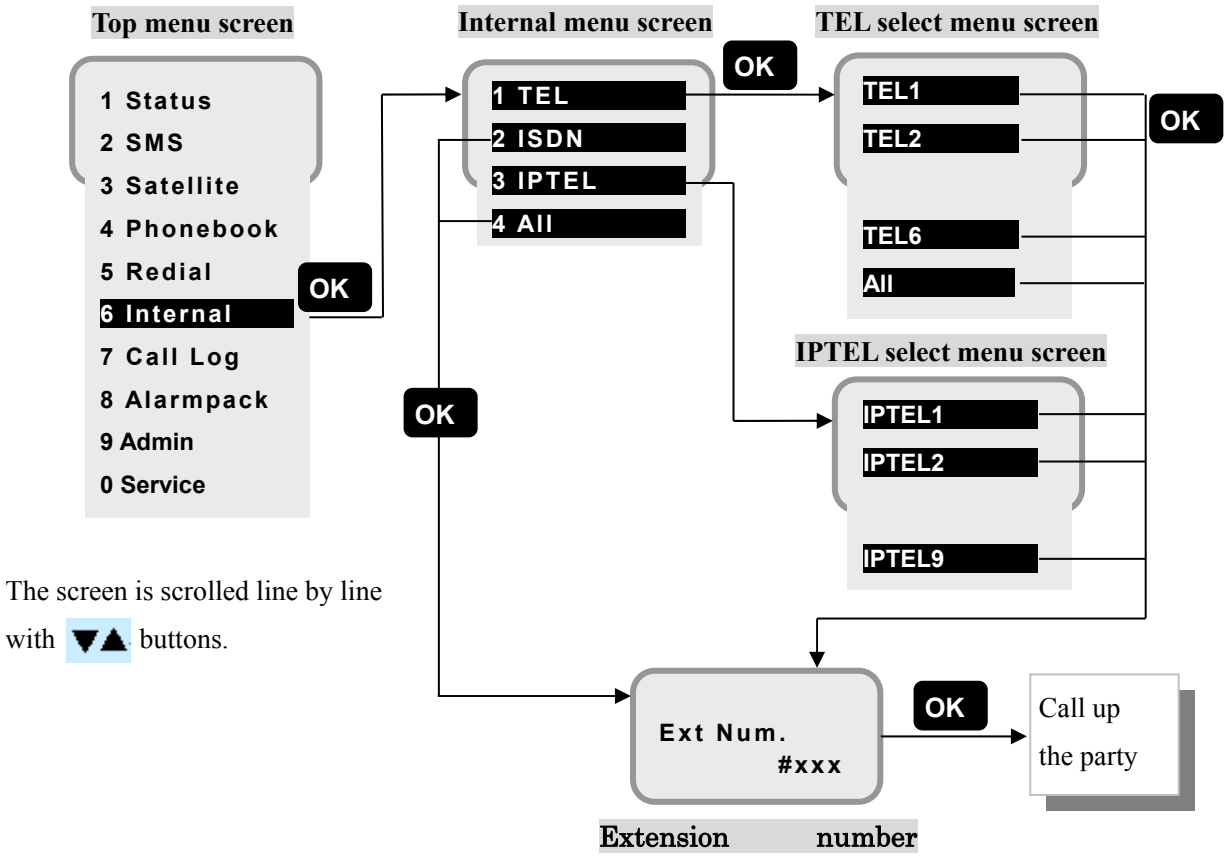
When ISDN or All is selected, the extension number will be displayed without [TEL select menu screen].

Push OK or off-hook button with the [Extension number screen] opened, and the internal call will be made.

Extension number is allocated following table 7.6.1.

Table 7.6.1 Allocated Extension Number

Device		Allocated number
Handset		000
TEL	TEL1~TEL6	001~006
	All	099
ISDN		401
IPTEL1~IPTEL9		501~509
All		999



The screen is scrolled line by line with ▼▲ buttons.

Fig. 7.6 Local Call menu screen

7.7 Call Log (Communication history) menu MENU+7+1～9

In this menu, user can display the Call Log (Communication history) of respective communication type.

Call Log is displayed in eight service types Voice, Fax, Audio, UDI, RDI, SMS, Standard and Streaming for JUE-501 and six service types Voice, Fax, Audio, SMS, Standard and Streaming for JUE-251. They are divided into three kinds of screens, Both (outgoing and incoming), Out (outgoing only), and In (incoming only).

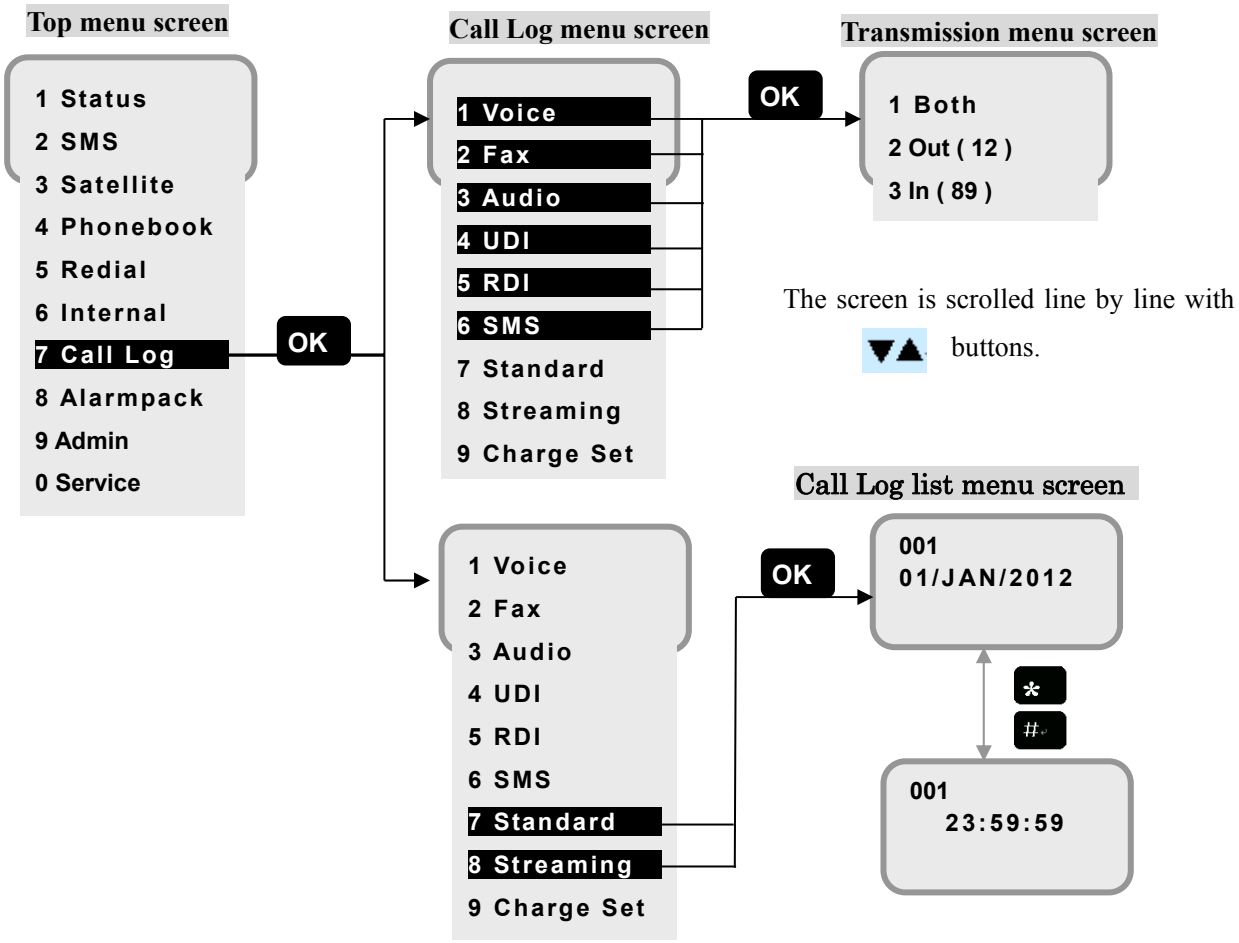
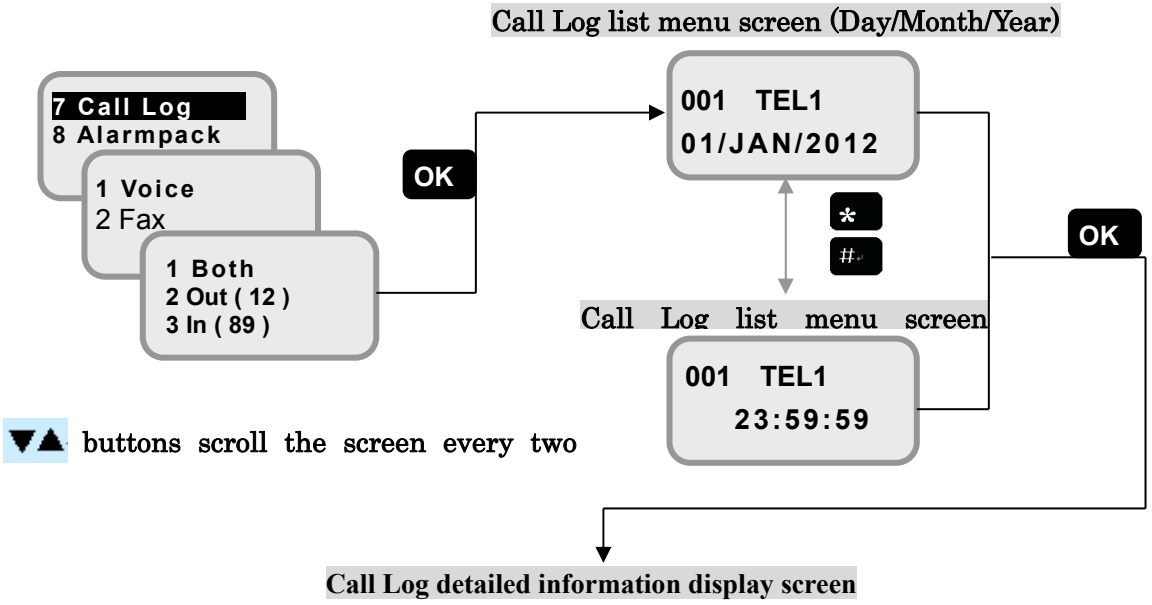


Fig. 7.7 Call Log menu screen (JUE-501)

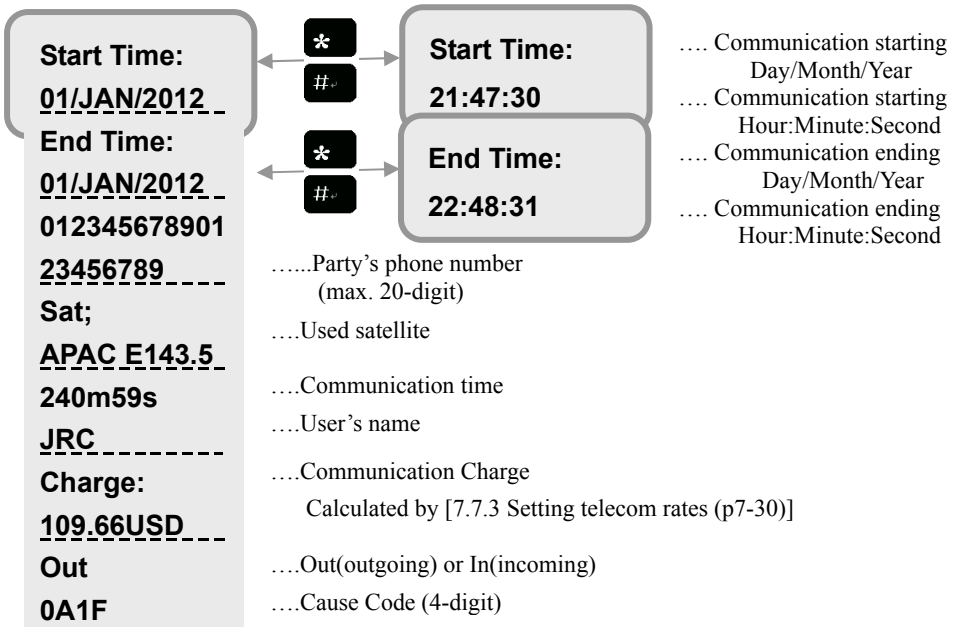
* [4 UDI] and [5 RDI] menus are not displayed for JUE-251.
* [Out] and [In] call log stores maximum 100 data, respectively.
  [Both] call log stores latest 100 data of above both directions.
* When [7 Standard] or [8 Streaming] is selected, [Transmission menu screen] is not displayed and the screen is transited to [List menu screen] directly, because they have no direction like [Out] or [In].
* When a voice service session has established by Multi-Voice function, logs of PS connections with those user name “Multi-Voice” will be recorded in addition to the voice-call log. The charges of these PS connections are free. Refer to Appendix J for Multi-Voice function.

7.7.1 Call Log list menu (MENU+7+1 to 8)

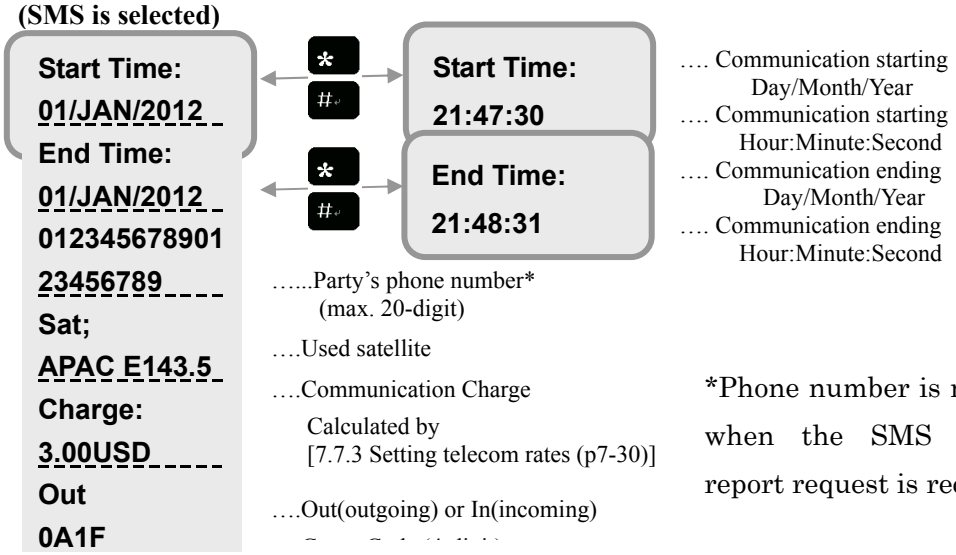
In this menu, user can display the detailed information of selected communication log.



(Voice/Fax/Audio/UDI/RDI are selected)

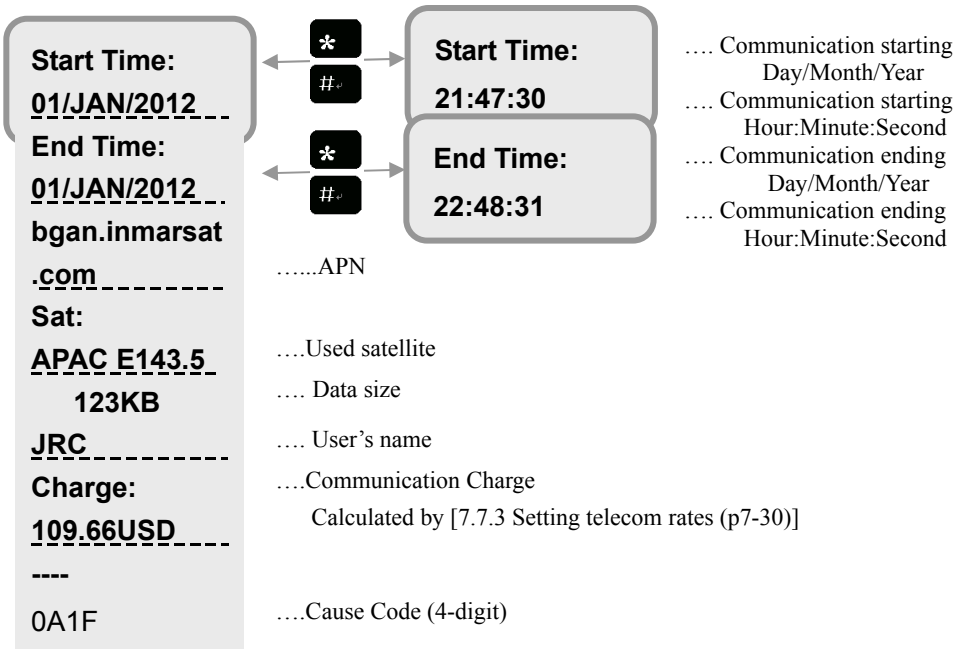


(SMS is selected)



*Phone number is not displayed when the SMS with status report request is received

(Standard is selected)



The screen is scrolled line by line with ▼▲ buttons.

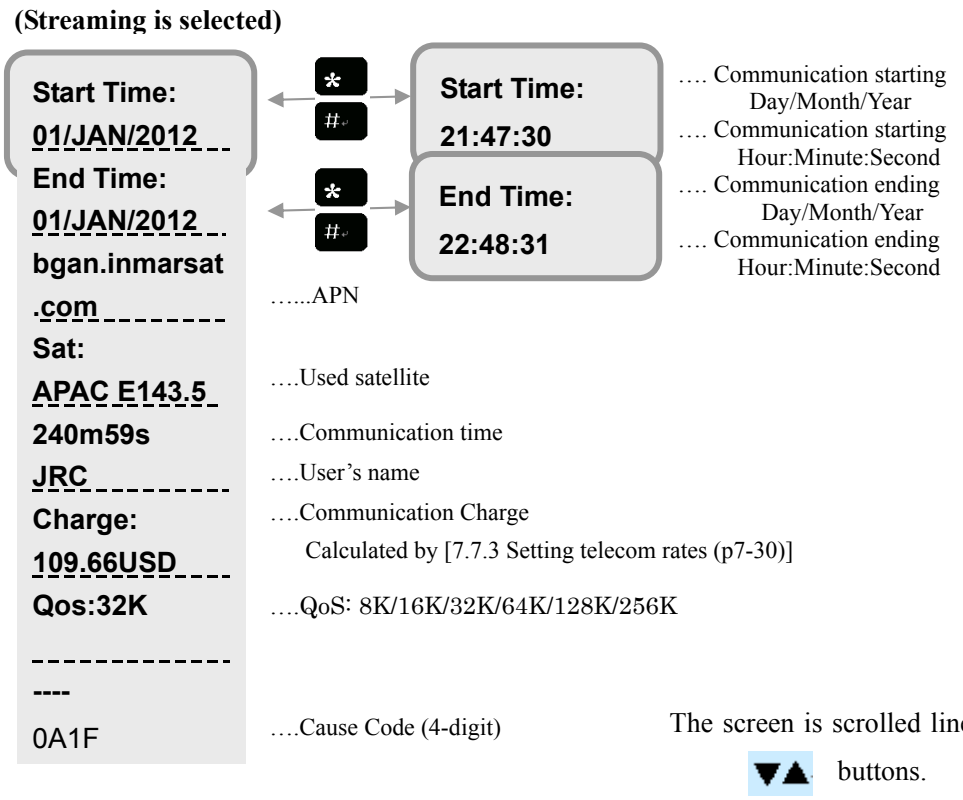


Fig. 7.7.1 Call Log list menu

7.7.2 Call Log authentication and deletion (MENU+7+MENU)

In this menu, Admin user can delete the Call Log. To delete Call Log, user must pass the [Call Log authentication screen] entering secret code.

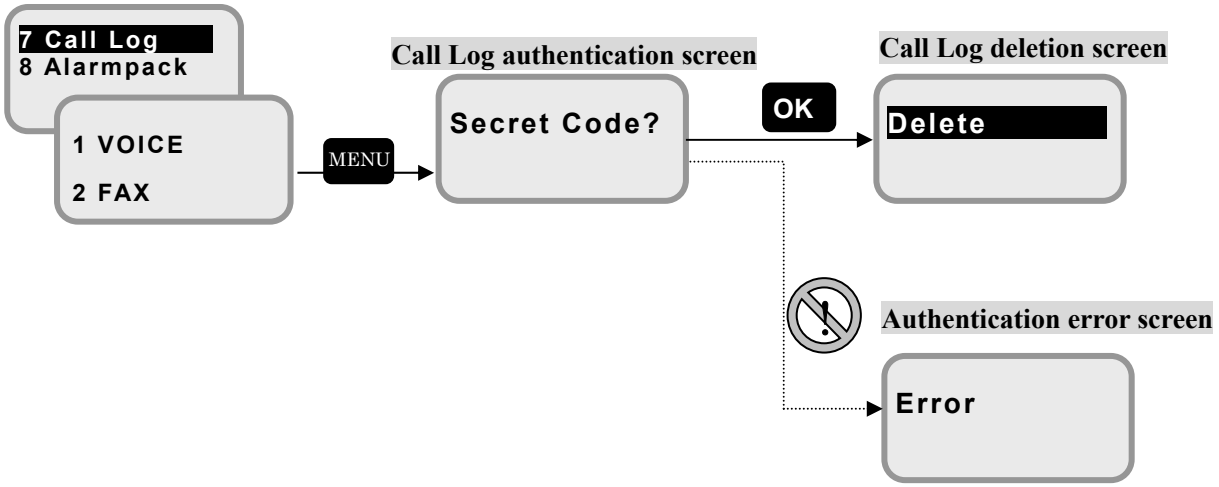


Fig. 7.7.2 Call Log authentication and deletion screen

7.7.3 Setting telecom rates (MENU+7+9+1 to 2)

In this menu, user can set call charge for each communication method. Select [9 Charge Set] at [Call Log menu screen] and [Charge Set menu screen] is displayed.

To set currency, select [1 Currency] and choose currency from USD, EUR and JPY.

To set charge rate for each communication method, Select [2 Unit] and [Unit menu screen] is displayed. Select the method and set charge rate per time (minute) for Voice, Fax/Audio, UDI, RDI, and Streaming IP connection (for each speed), per mail for SMS and per data size (MB) for Standard IP connection. [3 UDI] and [4 RDI] menus in [Unit menu screen] and [6 256K] in [Streaming Speed screen] are not displayed for JUE-251.

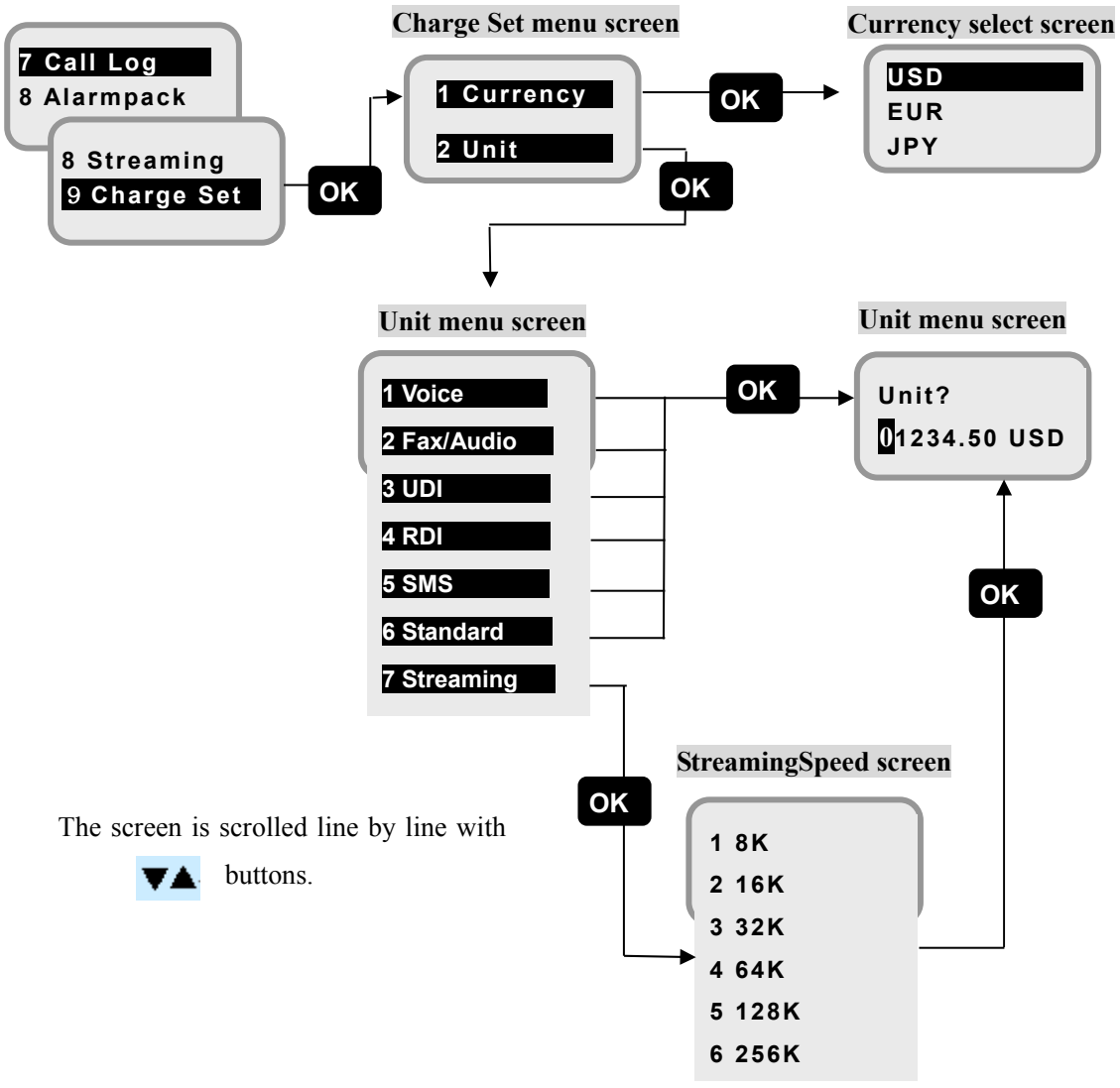


Fig. 7.7.3 Charge Set menu (JUE-501)

* [3 UDI] and [4 RDI] menus are not displayed for JUE-251.

7.8 Alarmpack menu (MENU+8)

In this menu, user can display the latest 50 alarms.

Select [Alarmpack] from Top menu screen and press OK button, then [Alarm history view menu screen] (Displays the Day/Month/Year) is displayed. It displays from the latest one.

To confirm the more detailed time, [Alarm history detailed menu] (displays recorded Hour/Minute/Second of each alarm) is displayed with the * or # button pressed.

In both screens, select the preferred number and press OK button with selecting history number by cursor.

Then [Unit selection menu] screen is displayed with the * placed on the device where alarm had occurred. Select the device then press OK button.

Then [alarm display screen] of respective unit is displayed.

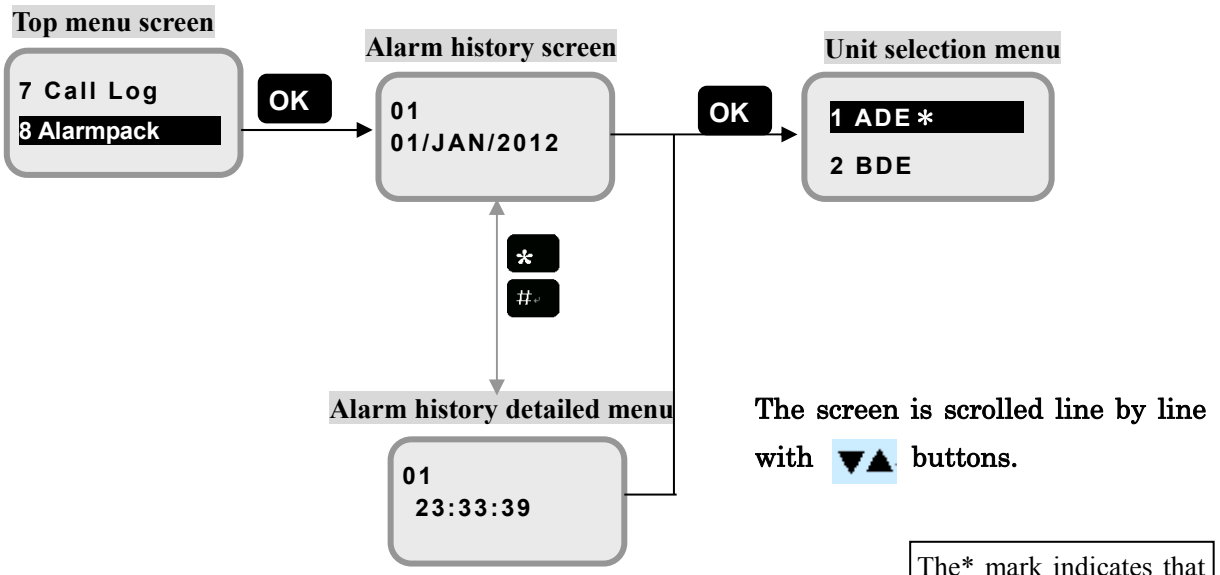
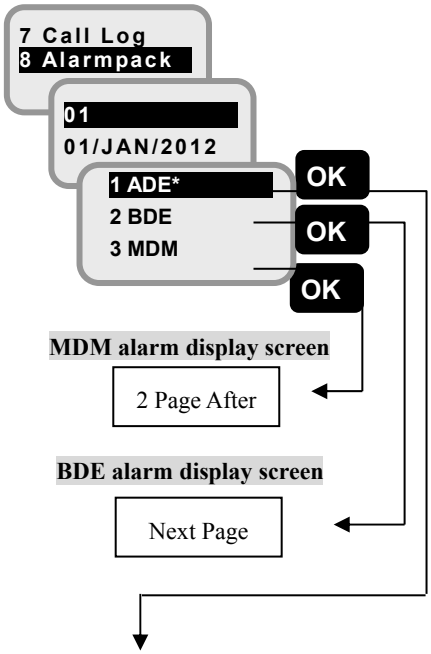


Fig. 7.8 Alarmpack menu screen

7.8.1 Unit selection menu for Alarm Pack (MENU+8)



1.ADE alarm display screen

EIRP: 15.0	….Transmitting output (dBw)
ADE: +0.0	….ADE temperature (degree) *
HPA: +45.0	….HPA temperature (degree)
Sat AZ: 173.5	….Satellite Azimuth
Sat EL: 48.0	….Satellite Elevation
BR: 163.9	….Antenna Bearing
EL: +46.0	….Antenna Elevation
Cross EL: -0.7	….Antenna Cross Elevation**
RSSI-1: 0	…..Radio wave tracking-signal value*
RSSI-2: 120	…..Radio wave step track signal value
ADE Search: 2	…..Satellite search status of ADE
GPS Status: 3D FIX	….Position acquisition status of GPS
GPSHD: 0.0	….GPS Heading value
Vib X Max: +0.0	….Maximum value of X vibration for last 6 min.
Vib X Ave: +0.0	…. Average value of X vibration for last 6 min.
Vib Y Max: +0.0	….Maximum value of Y vibration for last 6 min.
Vib Y Ave: +0.0	…. Average value of Y vibration for last 6 min.
Vib Z Max: +0.0	….Maximum value of Z vibration for last 6 min.
Vib Z Ave: +0.0	…. Average value of Z vibration for last 6 min.
Rol Max: +0.0	….Maximum value of Rolling for last 6 min.
Rol Ave: +0.0	…. Average value of Rolling for last 6 min.
Pit Max: +0.0	….Maximum value of Pitching for last 6 min.
Pit Ave: +0.0	…. Average value of Pitching for last 6 min.
PLL LockDet: ON	…..PLL Lock Detect
Global Beam: 242	…..Using Global beam
A:0000000000 00	
WRF Filter: Narrow	…..Using WRF filter
WRF Port: Disable	…..Using WRF Port
WRF Moni: 102	…..WRF Monitor
Track Mode: Auto(Signal)	…..Tracking Mode (Auto(Signal)/Auto(GpsHD) Auto(Sensor)/Gyro

Alarm bit display
(from left, displaying 1 means abnormal)

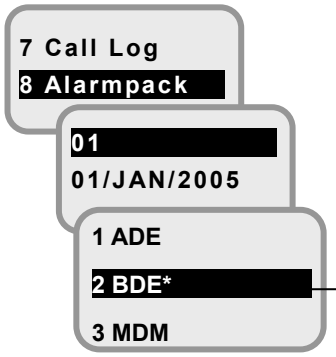
(1st line)
1. Axis control error
2. Acceleration sensor error
3. Rate sensor error
4. Memory error
5. Off power alarm
6. High power alarm
7. Burst error
8. Program error
9. Fan alarm
10. Internal GPS alarm

(2nd line)
11. External GPS alarm (Cold Start or Unfix)
12. PLL lock error

* is fixed to 0 for JUE-501 and JUE-251.

** is fixed to 0 for JUE-251.

Fig. 7.8.1a Unit selection menu for Alarmpack (ADE)



OK

2.BDE alarm display screen

Sat: **APAC E143.5**	…Using satellite
Spot Beam: **9**	….Spot Beam No.
RNC ID **0x00**	….Satellite Station ID
N 35.41 16 **E 139.34 16**	….Position
REC: **65**	….RECeiving level
Ch Type **T1Q**	….Received channel type
Cable loss: **10.0**	….Offset value of cable calibration
IMSI: **123789012345**	….IMSI value stored in SIM card
Tracking: **Auto**	…..Tracking Type (Auto, Auto(Gyro), Sync/Step, LAN, NMEA(4.8k), NMEA(38.4k))
GPS: **Int**	….Using GPS (Internal / External)
GPS Status: **3D FIX**	…. Position acquisition status of GPS
Ext GPS: **OFF**	…. External GPS (OFF/ON)
Ext GPS Data: **None**	…. Receiving GPS sentence (None / GGA / ZDA)
Calib Err: **0**	….Cable Calibration error

Update Error: **0**	…. Software updating error (Fixed to 0 for JUE-501/251)
NSK DIPSW: **0x00**	…. NSK Unit Dip-SW
BDE Status: **CS PS READY**	…. BDE Status
Buzzer: **0000**	….Buzzer Connection Status (0:Not connect, 1:Connect)
Button: **0000**	….Button Connection Status (0:Not connect, 1:Connect)
ATT: **2**	….BDE Attenuator (dB)
LAN: **000000**	….Ethernet port link Status (0:Not connect, 1:Connect)
SIP Status: **Registered**	….Connection status to Inmarsat SIP server
IPTEL: **110100011**	….IPTEL Connection Status (0:Not connect, 1:Connect)
A:0000000000 **00**	
23/MAR/2012	…. Date
12:44:30	…..The timer since system boot
Tick: **0x000849AE5**	

Alarm bit display
(from left, 1 is displayed when abnormal)

(1st line)

1. Cable Calibration error
2. ADE communication error
3. Handset communication error
4. GYRO communication error
5. Buzzer communication error
6. Button communication error
7. GYRO I/F interruption does not occur although Sync is selected
8. GYRO I/F detected non-existed signal when Sync is selected
9. GYRO I/F detected non-existed signal when Step is selected
10. GYRO I/F detected signal on R1 R2 when Step is selected

(2nd line)

11. GYRO I/F WDT over flow
12. GYRO I/F program memory error

Fig. 7.8.1b Unit selection menu for Alarmpack (BDE)

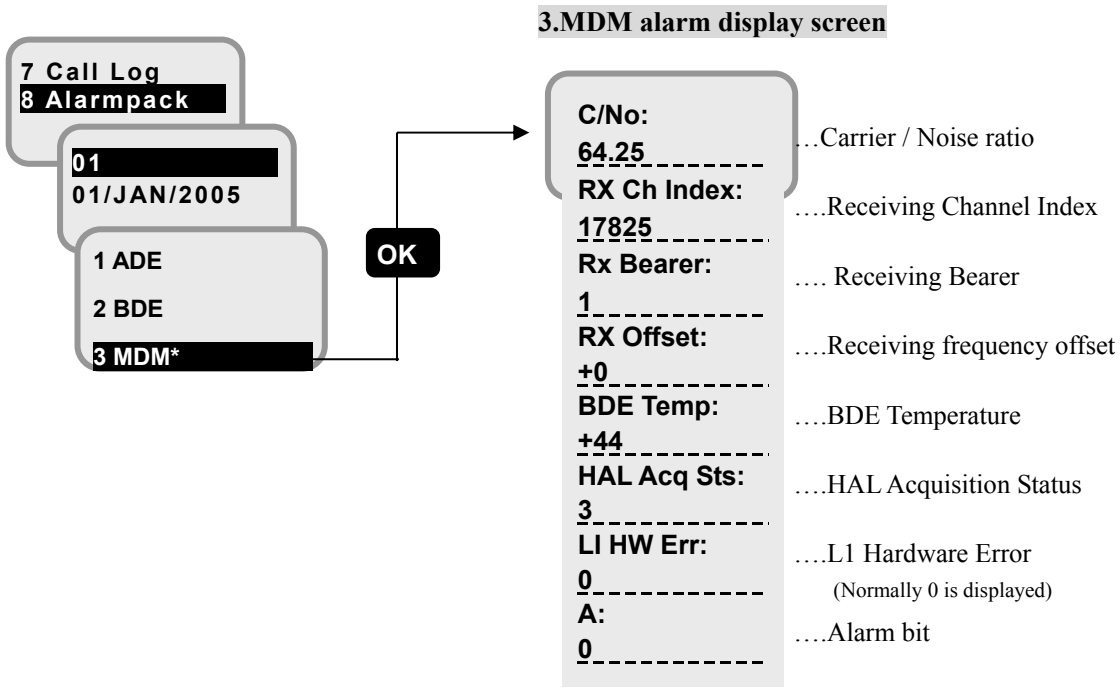


Fig. 7.8.1c Unit selection menu for Alarmpack (MDM)

7.9 Admin menu MENU+ 9

[Admin menu] which displays all menus for sets up status of the JUE-501/JUE-251.

Select [9 Admin menu] from [Top menu], and display each menu screen.

Identification screen is opened when user without Admin authority enters in this menu.

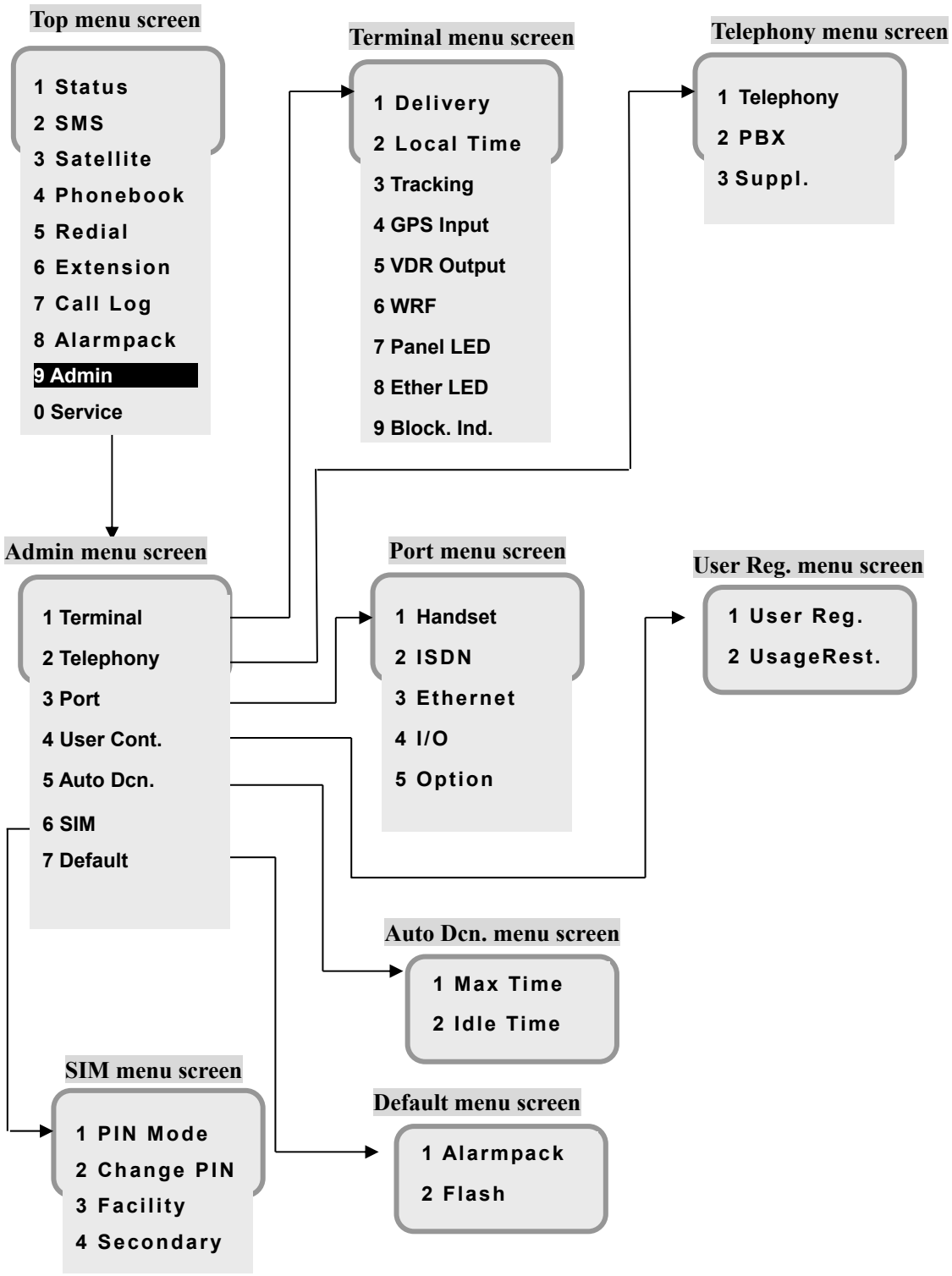


Fig. 7.9 Flow of Admin menu

7.9.1 Terminal menu (MENU + 9 + 1)

[Terminal menu] consists of;

1 **Delivery:** Delivery date of the JUE-501/JUE-251
2 **Local Time:** Time difference between Local time and Universal time
3 **Tracking:** Selection for tracking system, AUTO (signal tracking) or GYRO tracking
4 **GPS Input:** Selection for GPS input method
5 **VDR Output:** Selection for VDR output method
6 **WRF:** Enable/Disable using Wide-band Radio Frequency
7 **Panel LED:** Setting of ON/OFF of front panel LEDs
8 **Ether LED:** Setting of ON/OFF of ethernet LEDs
9 **Block. Ind.:** Setting of blocking area

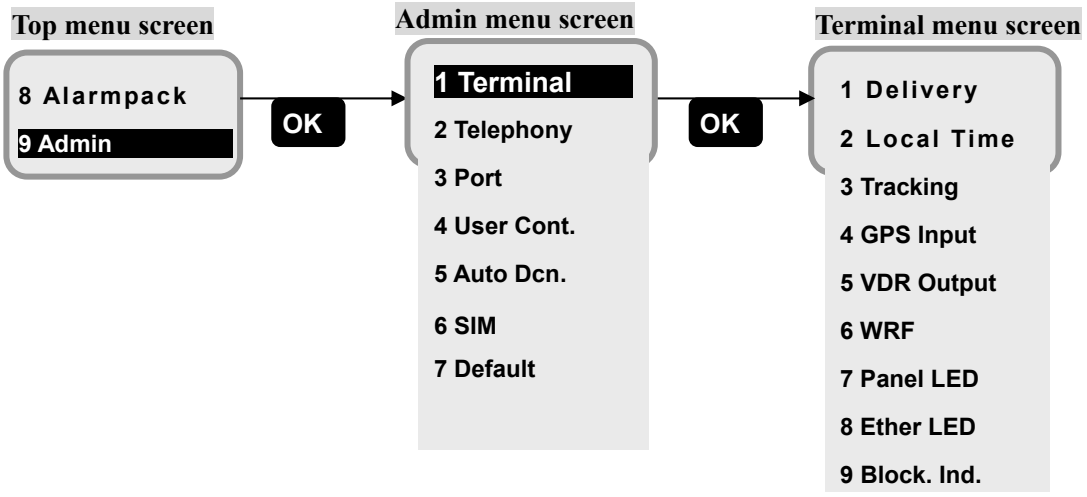
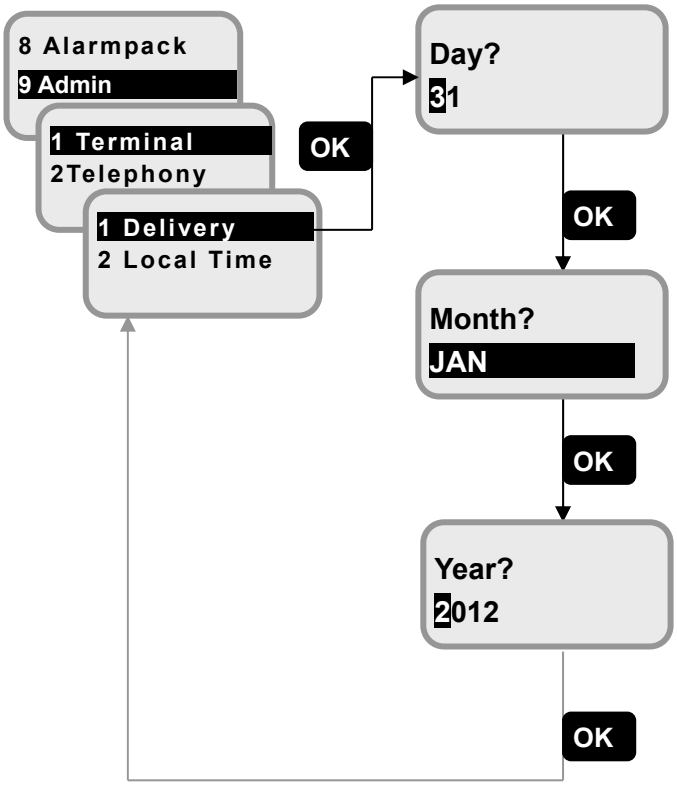


Fig. 7. 9.1 Terminal menu screen

7.9.1.1 Delivery setting (MENU+ 9 +1 +1)

In this menu, the user can set up the delivery date of the JUE-501/JUE-251.

Select [1.Delivery] from Terminal menu and display setting screens. They are arranged in a sequence of Day, Month, and Year.



Day setting screen

Enter the date by pressing numeric buttons.

Month setting screen*

Select the month by scrolling the screen pressing ▼▲ buttons.

Year setting screen

Enter the Year by pressing numeric buttons.

Screen display moves line by line with ▼▲ buttons.

Fig. 7.9.1.1 Delivery menu screens

* ▼ button displays Months in the order of [JAN-FEB-MAR-..] and the ▲ button reverses the order.

Delivery date does not only record the day when the JUE-501/JUE-251 was installed and communication commenced, but it helps to determine the guarantee term etc.

Accurate setting is recommended.

7.9.1.2 Local Time setting (MENU + 9 + 1 + 2)

In this menu, the user can set up the time differences between UTC (Universal Time Coordinated) and Local time.

To display screens, select [2 Local Time] from Terminal menu.

First, ± setting screen is displayed. Select [+] when Local time is faster than UTC, and [-] when it is slower. Then press **OK** button.

Next, enter the time difference in [Time difference setting screen] by hours /minutes, with numeric buttons.

To return the time display to UTC, set the time difference to +00.00.

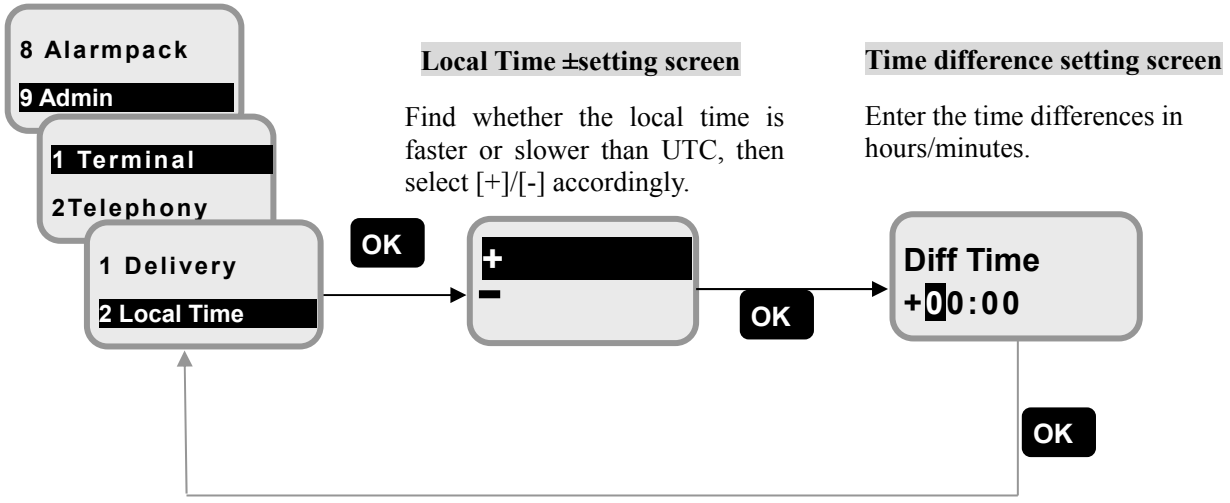


Fig. 7.9.1.2a Local Time menu screen

Example) Changing the display of Idle screen from UTC(14:03) to LT(23:03).

(Enter time difference +9hour)

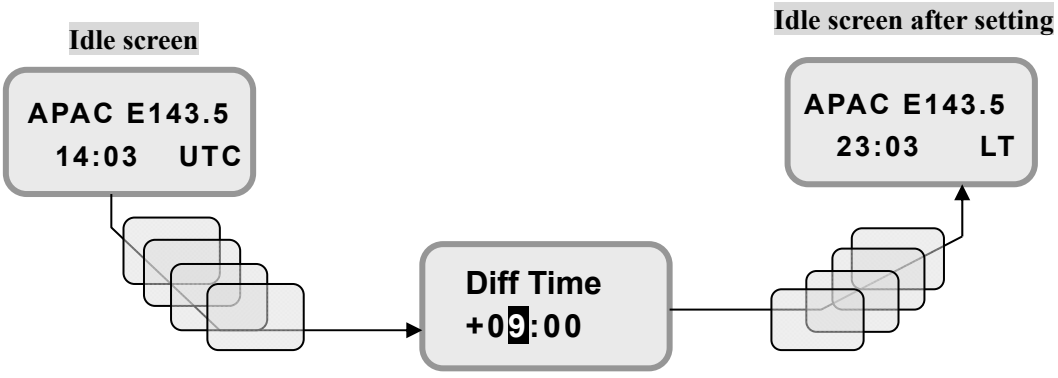


Fig.7.9.1.2b Example of setting Local Time

7.9.1.3 Tracking setting (MENU+ 9 +1 +3)

In this menu, user can set the tracking system from [Auto] (signal tracking) or [Gyro].
When [Gyro] is selected, setting screen of the Gyro type will be appeared. If NMEA(4.8k/38.4k) and LAN of Gyro type is selected, THS, HDT, VHW can be inputted to the terminal. To enable the setting, rebooting the terminal is required.

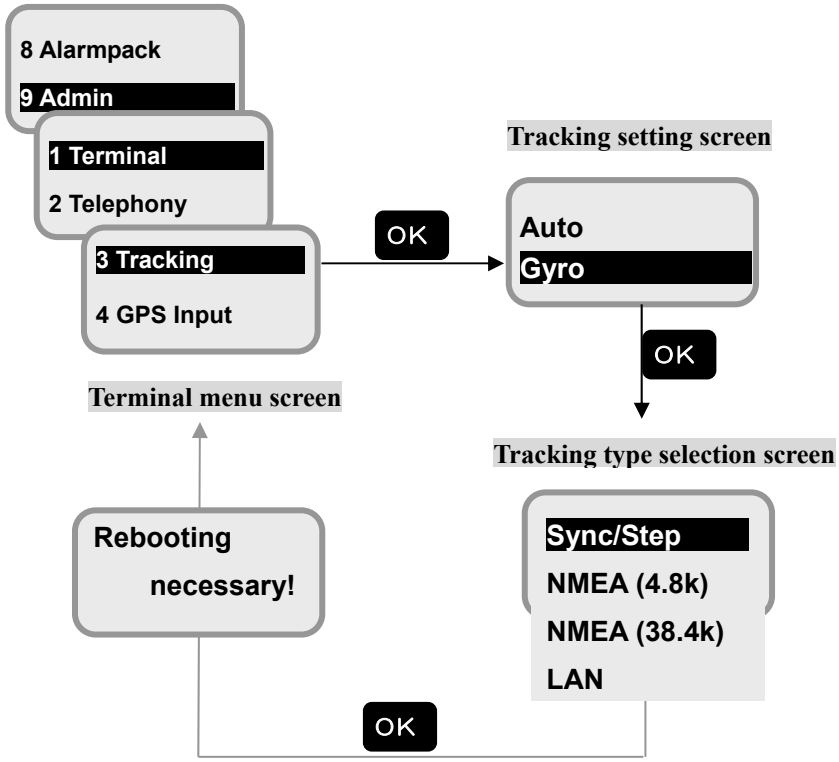


Fig. 7.9.1.3 Tracking Setting screen

7..9.1.4 GPS Input setting (MENU+ 9 +1 +4)

In this menu, user can set the input method of external GPS. Select one from "NMEA(4.8k)", "NMEA(38.4k)", "LAN" and "Disable". If "Disable" is selected, the built-in GPS is used. To enable the setting, rebooting the terminal is required.

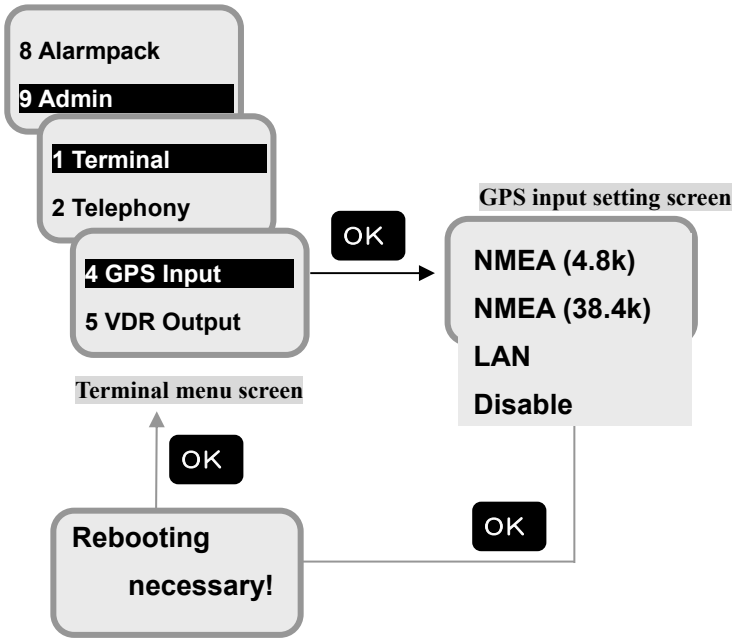


Fig. 7.9.1.4 GPS Input Setting screen

7.9.1.5 VDR Output setting (MENU+ 9 +1 +5)

In this menu, user can set the output method for sending alarmpack of JUE-501/JUE-251 to VDR. Select one from "LAN" and "Disable". To enable the setting, rebooting the terminal is required.

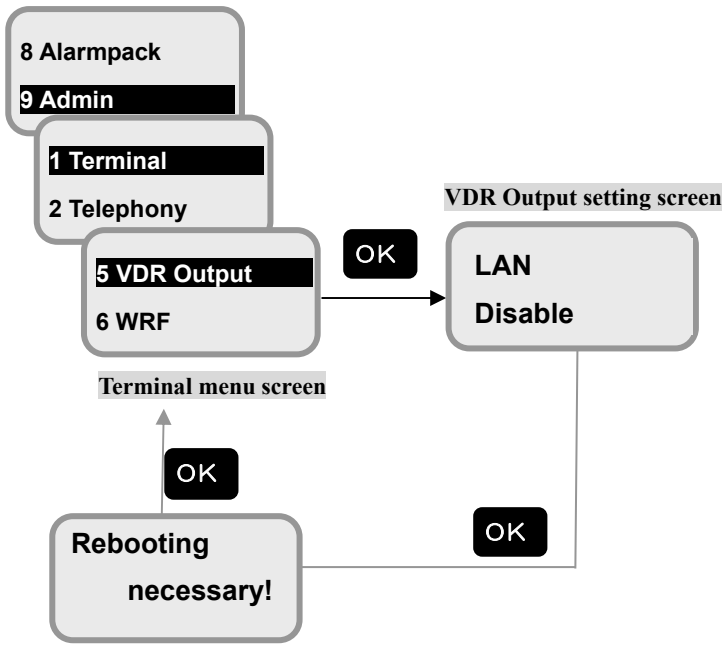


Fig. 7.9.1.5 VDR Output Setting screen

7.9.1.6 WRF setting (MENU+ 9 +1 +6)

In this menu, user can enable/disable using the WRF (Wide-band Radio Frequency) interface. The WRF interface outputs the satellite signal directly to the navigation equipment to receive position data. “Enable” uses wide band filter. “Disable” uses narrow band filter and prevents interference of any other radio waves. ”Auto” changes the using filter automatically.

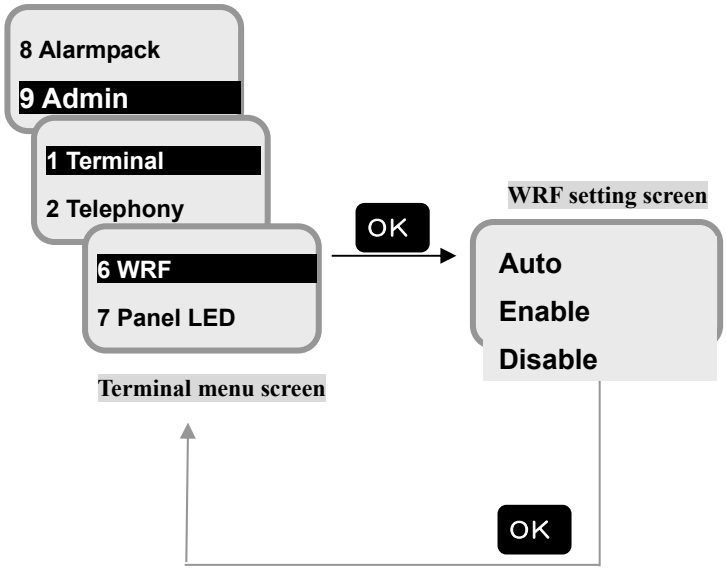


Fig. 7.9.1.6 WRF Setting screen

7.9.1.7 Panel LED setting (MENU + 9 + 1 + 7)

In this menu, user with Admin authority can set ON/OFF of the LEDs on front panel of main unit.

Select [7 Panel LED] from [Terminal menu]. Then present setting is displayed on [Panel LED setting screen].

To change the setting select ON or OFF by ▼▲ uttons and press OK .

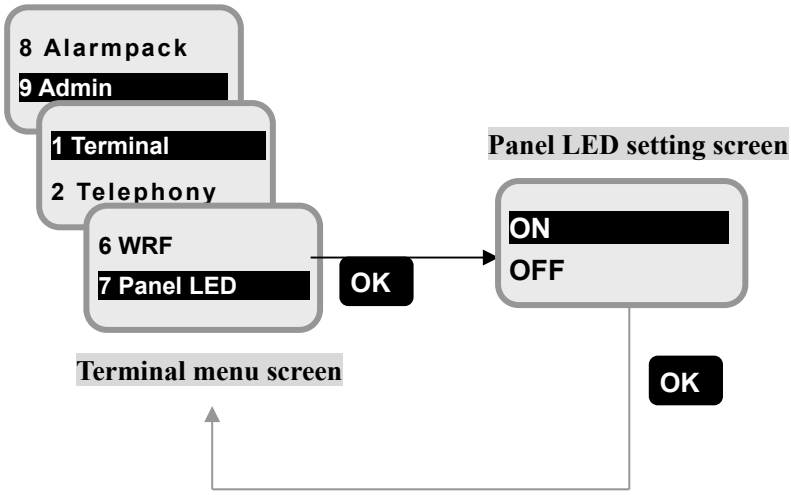


Fig. 7.9.1.7 Panel LED Setting screen

7.9.1.8 Ether LED setting (MENU + 9 + 1 + 8)

User with Admin authority can set ON/OFF of the LEDs on Ethernet connector also.

Select [8 Ether LED] from [Terminal menu]. Then present setting is displayed on [Ether LED setting screen].

To change the setting select ON or OFF by ▼▲ uttons and press OK .

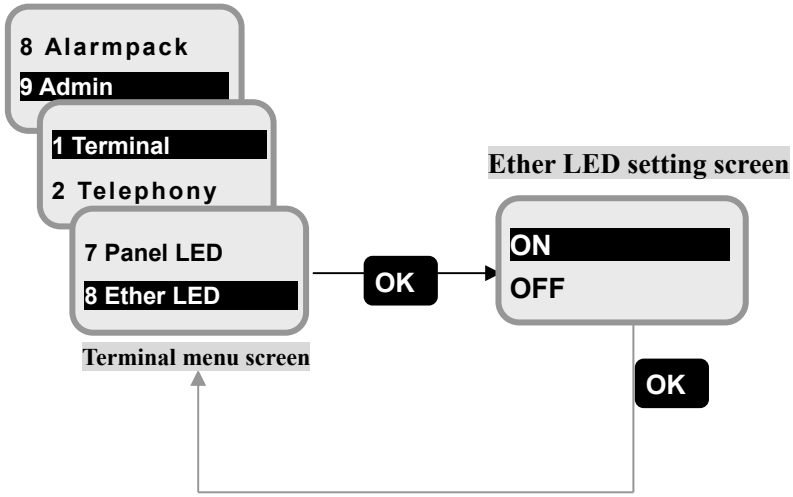


Fig. 7.9.1.8 Ether LED Setting screen

7.9.1.9 Block. Ind. setting (MENU+ 9 +1 +9)

In some area, communications on FBB system may be blocked because the antenna unit of JUE-501/JUE-251 is hidden from satellite by an obstruction like ship's mast or funnel.

In this menu, user can preset the area where the signal is blocked. Blocking indication will be shown when the antenna turns to the area. Blocking indication on Handset is blinking antenna bar icon, and on Web interface is changing color of antenna bar icon from green to orange.

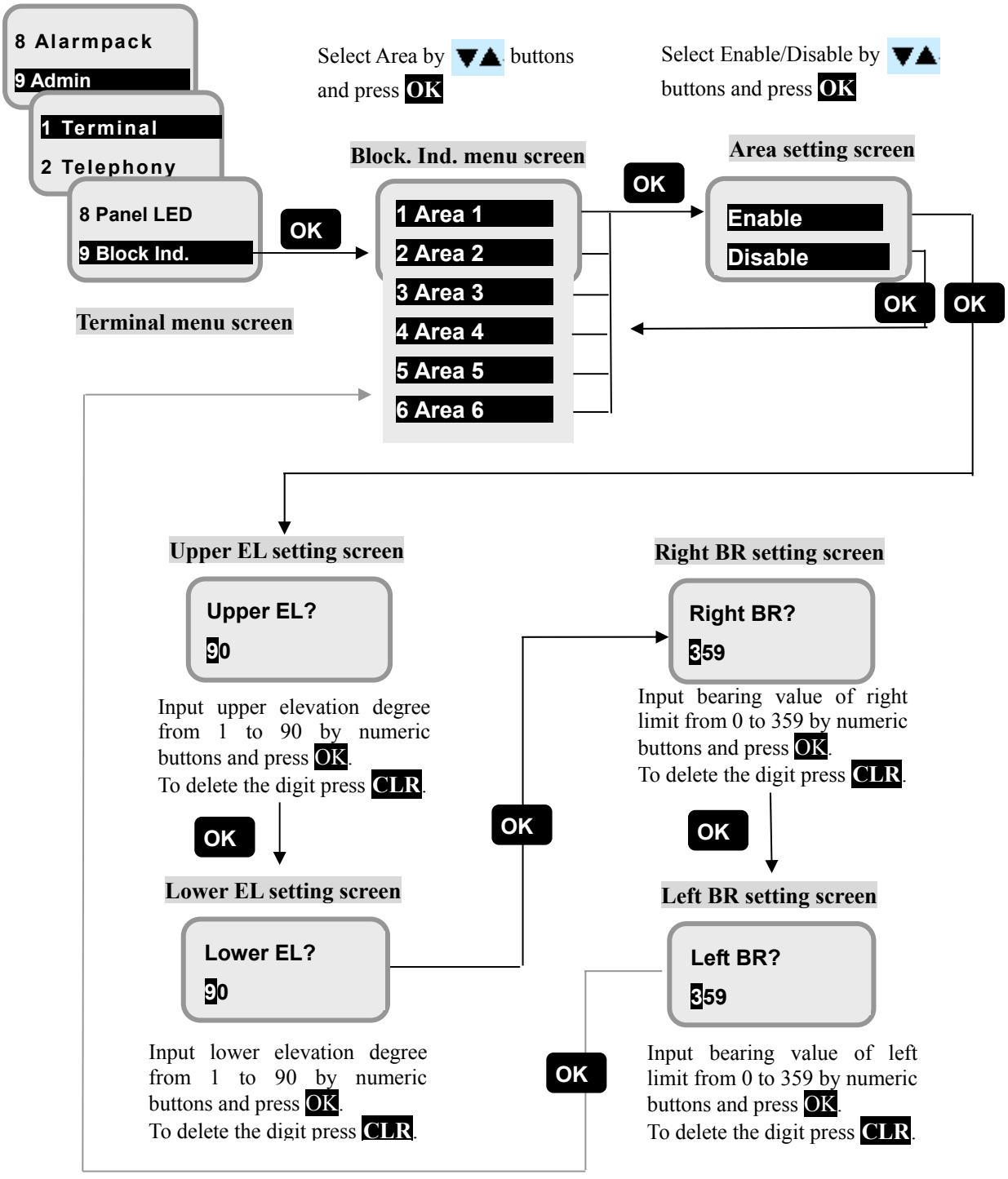


Fig. 7.9.1.9 Block. Ind. Setting screen

7.9.2 Telephony menu (MENU+ 9 +2)

In this menu, user can set Telephony setting, PBX setting and Suppl. setting. These functions can be set by Web interface also (refer to [6.5.2 Telephony Menus (p6-37)]).

7.9.2.1 Telephony (basic telephony function) setting

Settings for basic telephony function. User can set operation limit, voice volume, outgoing/incoming service type, restriction for outgoing call and call up time for each port (Handset/ TEL1~6/ ISDN).

7.9.2.2 PBX (auto answer function) setting

Settings for auto answer function. When auto answer is enabled, a fixed message (Please dial 3 digits extension number followed hash or dial aster for main number.) is reproduced automatically. The main unit waits for input from the caller for set time. If no input is recognized, the call will be forwarded to the default destination.

7.9.2.3 Suppl. setting

Settings for telephony supplementary function. This subsection contains displaying voice mail service number and settings for call forwarding, call waiting and call barring.

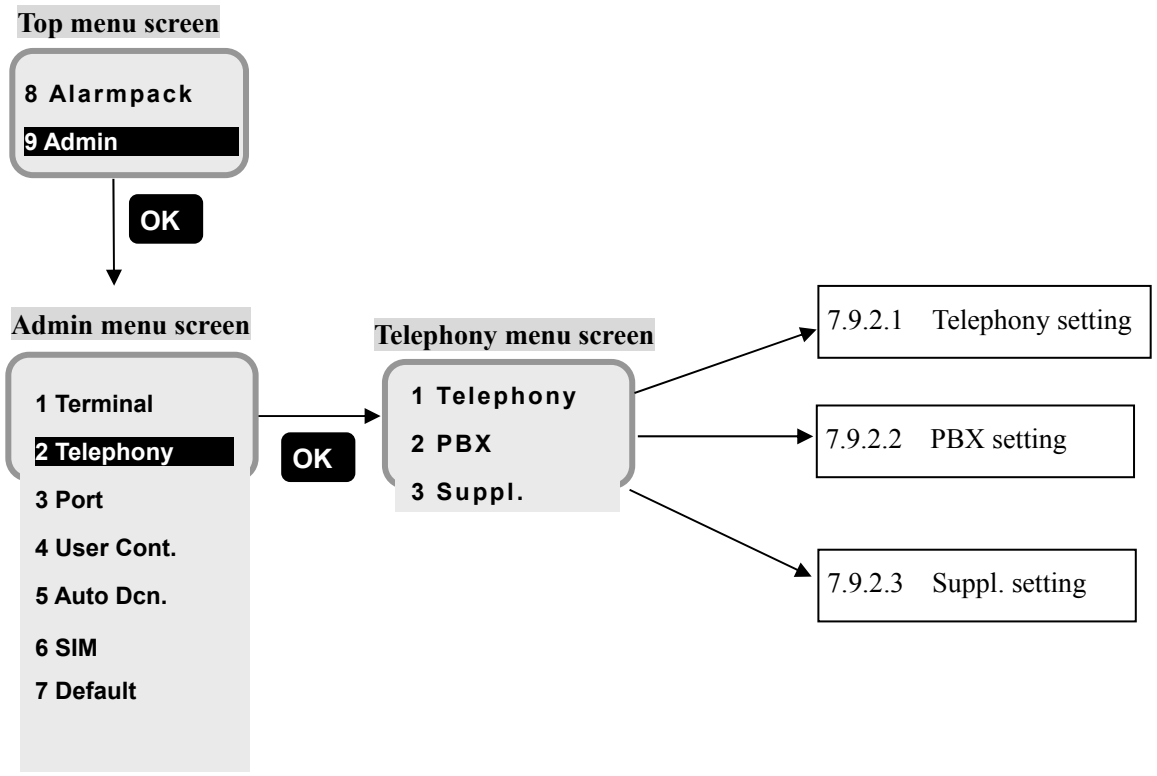


Fig. 7.9.2 Telephony menu screen

7.9.2.1 Telephony setting (MENU+ 9 +2 +1+1~8)

In this menu, the user can execute the various setting to communication ports (Handset, TEL1~6, and ISDN) respectively. Select setting port by ▼▲ button and press OK.

- Secret Code: Sets operation limit. This menu is not displayed when [8 ISDN] is selected at [Telephony setting item selection screen].

  "Enable" requires secret code to make an outside call from the terminal connected to the port.

  "Disable" doesn't require secret code so that anyone can make an outside call from the terminal connected to the port.
- Voice Vol.: Sets volume of voice output. This menu is not displayed when [8 ISDN] is selected at [Telephony setting item selection screen].

  "Normal" sets normal volume and "High" sets loud volume.
- Out Type/In Type: Sets Outgoing/Incoming service type (Voice /Fax/Audio). This menu is not displayed when [1 Handset] is selected at [Telephony setting item selection screen].

  "Voice" sets service type 4k AMBE service.

  "Fax" sets service type Fax.

  "Audio" sets service type 3.1 kHz Audio service.

  "Voice/Fax" sets service type 4k AMBE service and Fax.

  "Voice/Audio" sets service type 4k AMBE service and 3.1 kHz Audio service.
- Out Call: Sets the permission/prohibition of originating a call.

  "Enable" sets no limitation.

  "AllowedNum" permits making a call only to the allowed phone numbers. The allowed number list contains a maximum of four phone numbers. It also permits making a call to a phone number which begins with the listed number. (Setting 0081 permits making a call to 0081xxxx.)

  "Phonebook" permits making call to numbers registered in phonebook.

  "Disable" denies all outgoing call.

  * Making internal call is always allowed.
- In Call: Sets the call up time after a call arrived to main unit by the time (seconds) selection.

  "Enable" rings when a call arrives on main unit.

  "After Xs" rings after X seconds later since a call has arrived on main unit.

  "Disable" rings no sound.

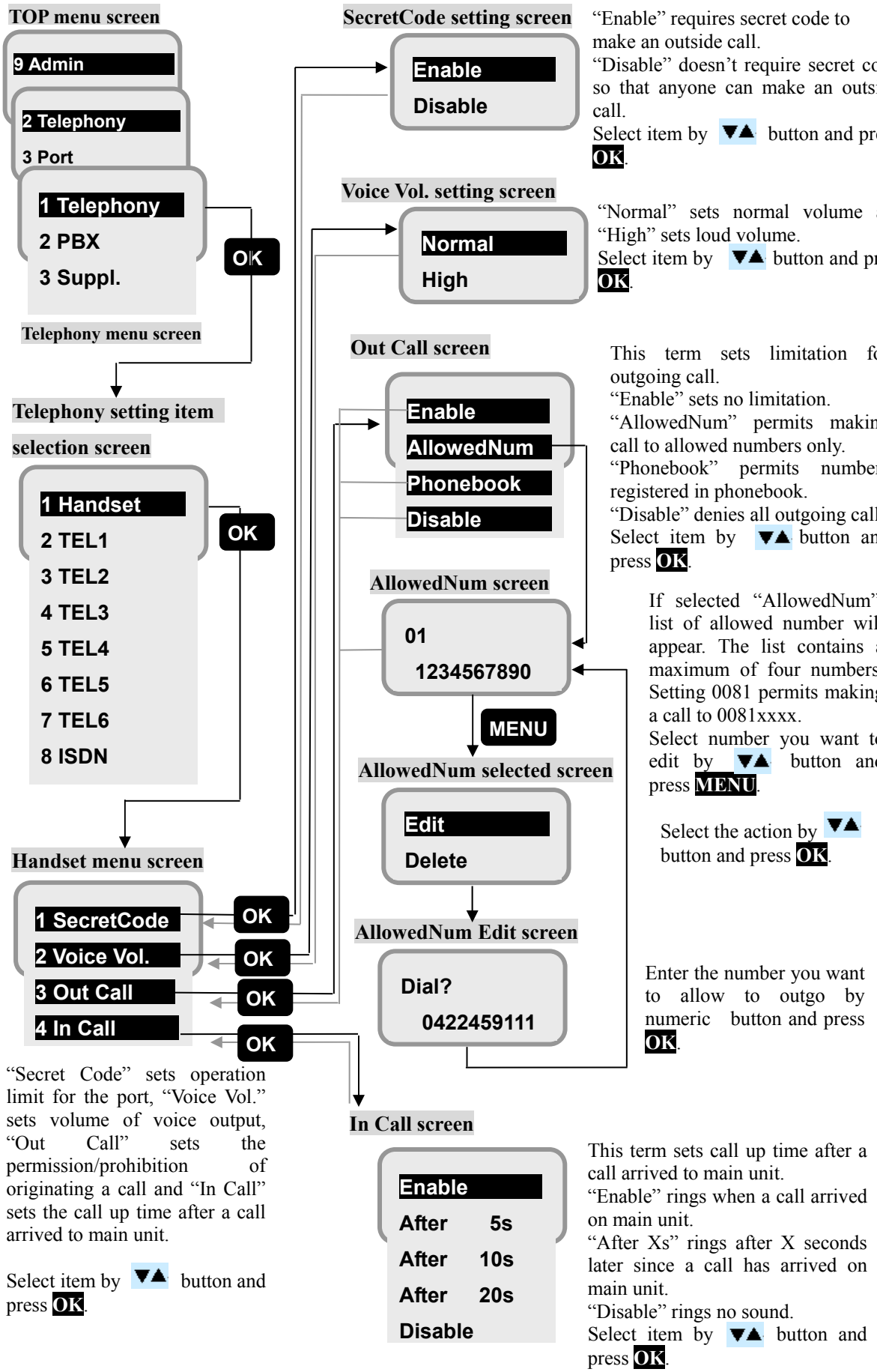


Fig 7.9.2.1a Flow of port setting (Handset)

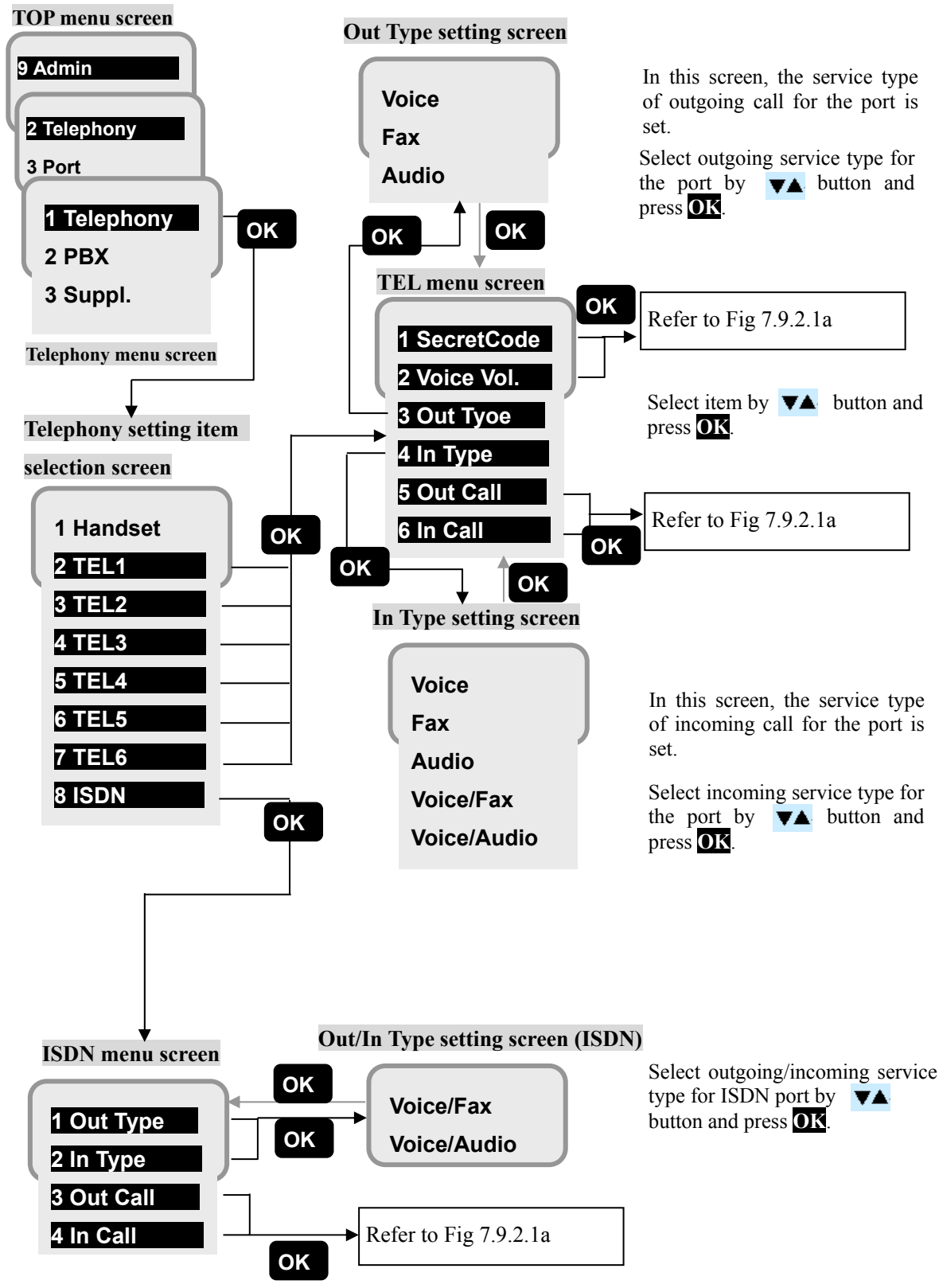
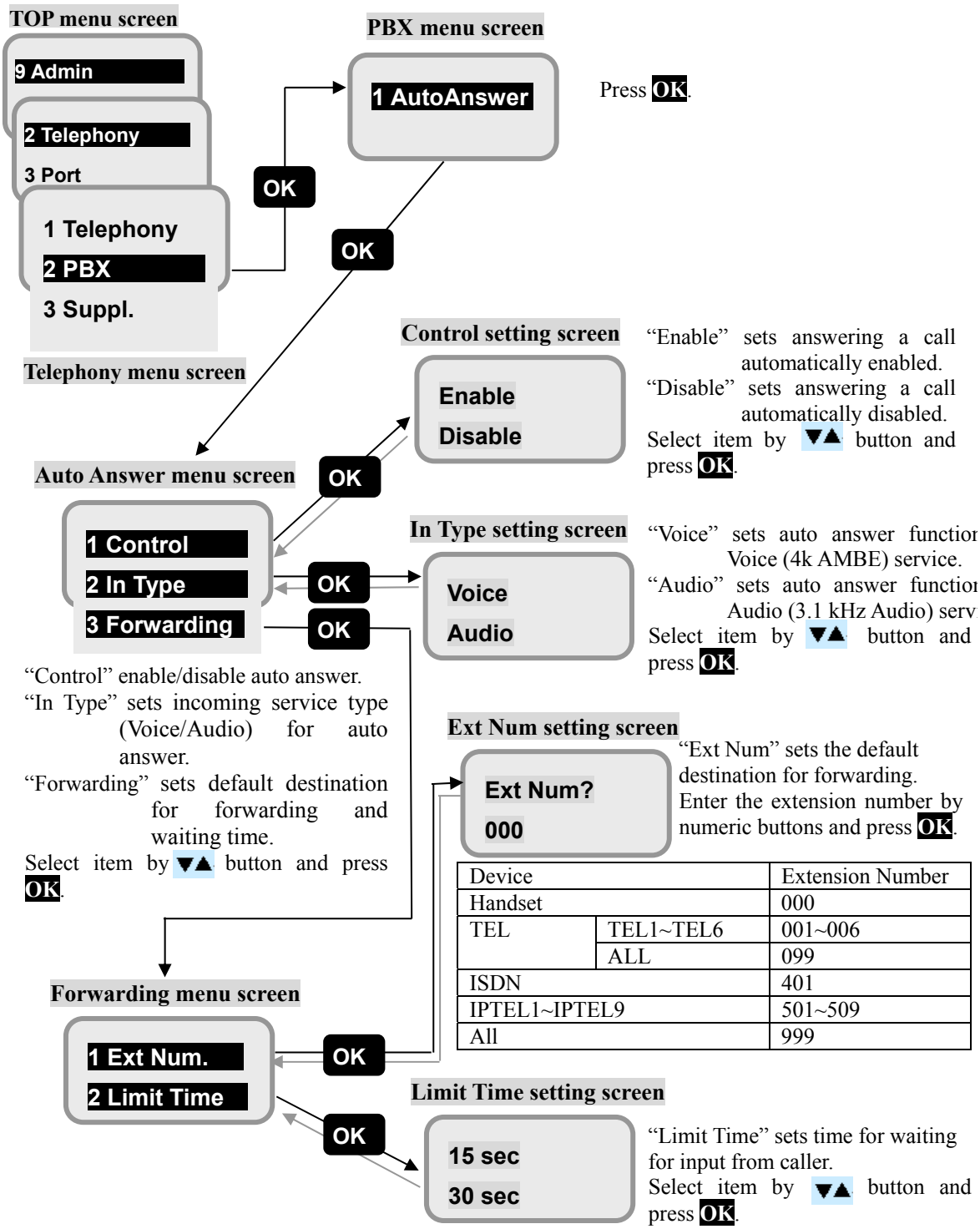


Fig 7.9.2.1b Flow of port setting (TEL ports and ISDN port)

7.9.2.2 PBX setting (MENU+ 9 +2 +2+1)

In this menu, user can set items about auto answer. When auto answer is enabled, a fixed message (Please dial 3 digits extension number followed hash or dial aster for main number.) is reproduced automatically. The main unit waits for input from the caller for set time. If no input is recognized, the call will be forwarded to the default destination.



Device		Extension Number
Handset		000
TEL	TEL1~TEL6	001~006
	ALL	099
ISDN		401
IPTEL1~IPTEL9		501~509
All		999

Fig 7.9.2.2 Flow of PBX setting screen

7.9.2.3 Suppl. setting (MENU+ 9 +2 +3+1~ 4)

In this menu, user can set telephony supplementary service. This subsection contains displaying voice mail service number and settings for call forwarding, call waiting and call barring.

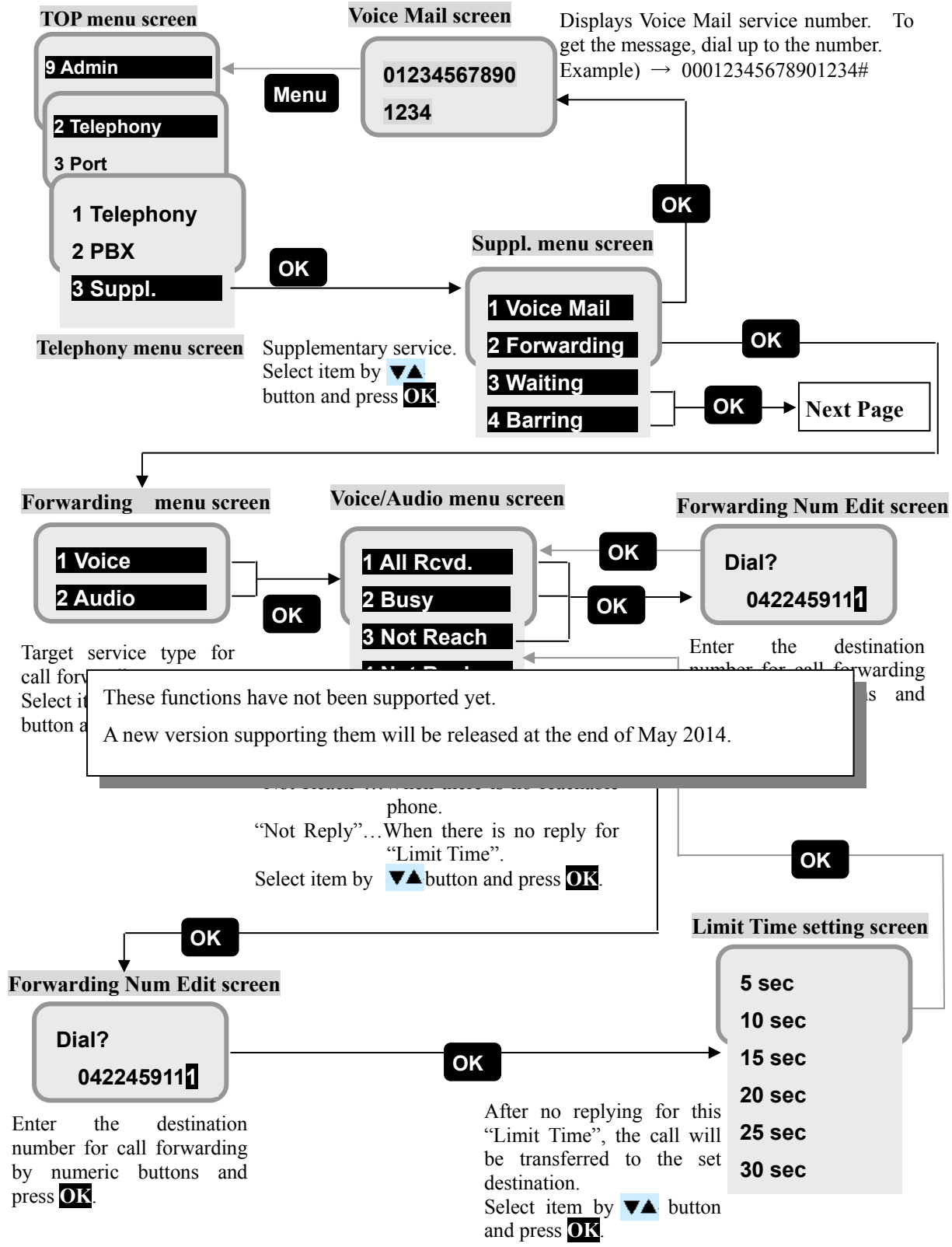


Fig 7.9.2.3a Flow of Voice Mail Number Displaying /Forwarding setting screen

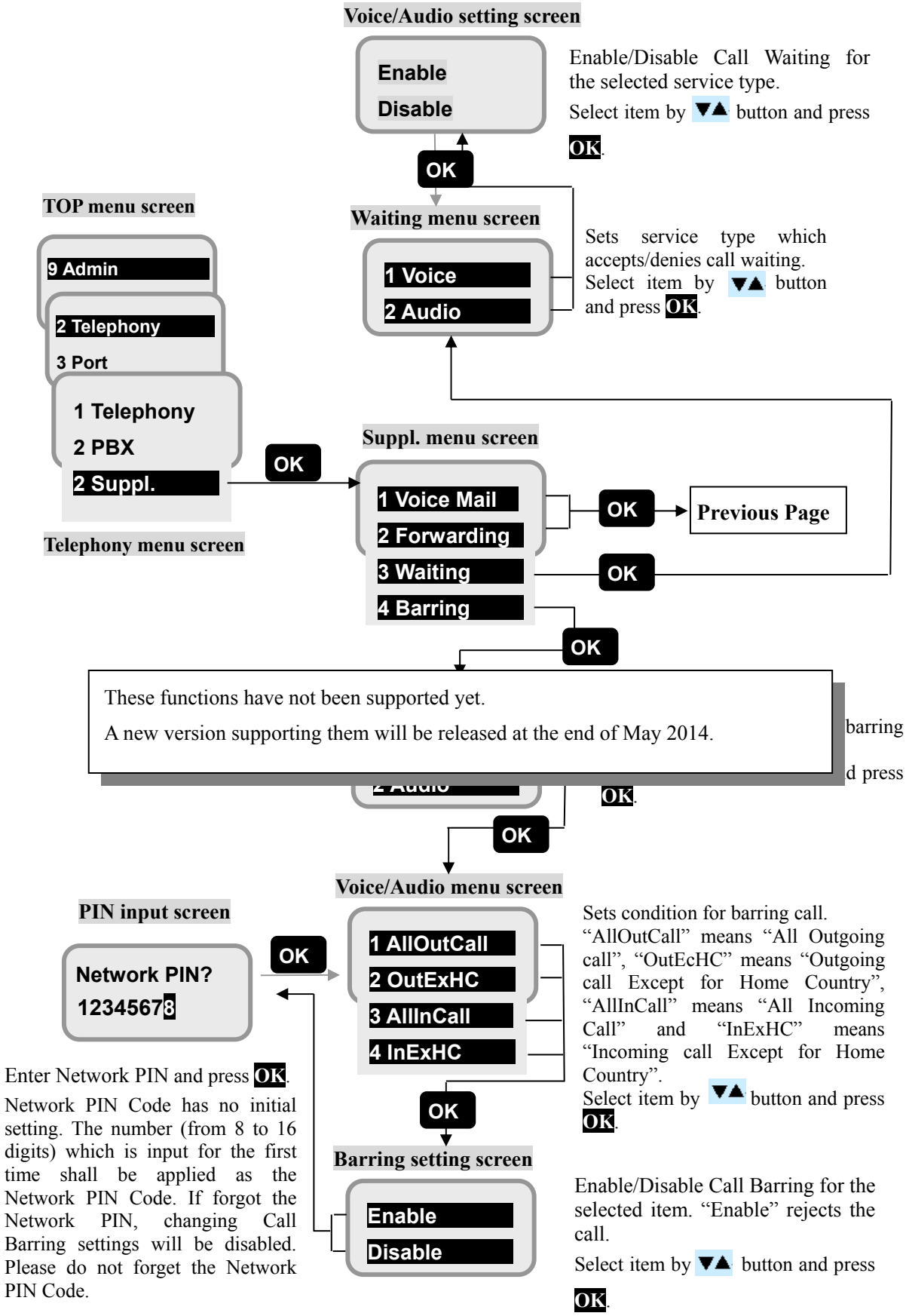


Fig 7.9.2.3b Flow of Waiting /Bariing setting screen

7.9.3 Port menu (MENU + 9 + 3)

In this menu, the user can set the advanced setting of Handset, ISDN port, Ethernet port, I/O port and Option port.

1. Handset (7.9.3.1)
   - Selecting brightness of Back Light
   - Selecting LED brightness
   - Selecting pattern of ringer type and volume
   - Selecting loudness of voice volume
   - Setting ON/OFF of key click sound

2. ISDN (7.9.3.2)
   - Assigning Multiple Subscriber's Number (MSN)

3. Ethernet (7.9.3.3)
   - Assigning User LAN IP address
   - Setting ON/OFF of DHCP function
   - Assigning Ext WAN IP address

4. I/O (7.9.3.4)
   - Output a ring indication to the port
   - Input a ring acknowledgement from the port
   - Enable/Disable the I/O port

5. Option (7.9.3.5)
   - Enable/Disable voice distress button
   - Enable/Disable option buzzer connected to Junction Board

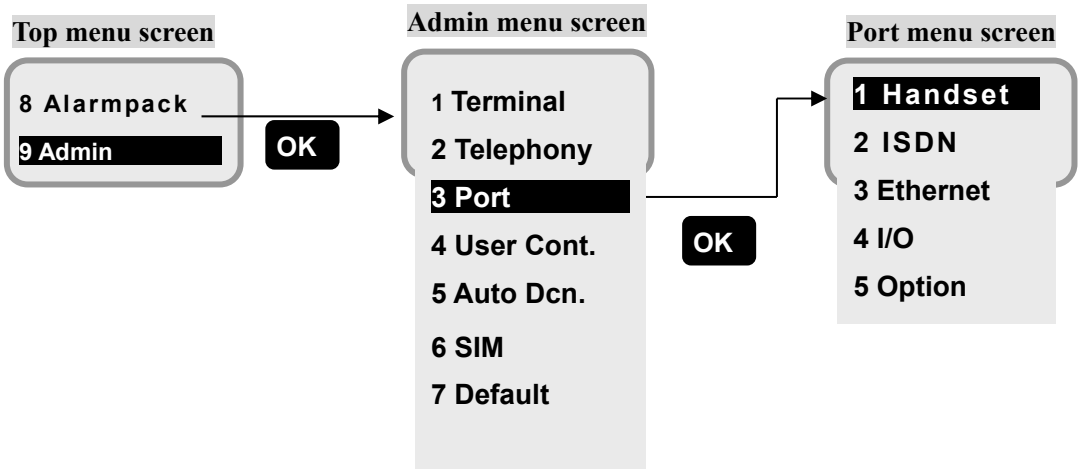


Fig. 7.9.3 Port menu screen

7.9.3.1 Handset advanced setting (MENU+9+3+1+1 to 6)

In this menu, the user can set the advanced settings of Handset (brightness of LCD screen backlight/LEDs, volume /pattern of ringer tone, voice volume, and key click sound).

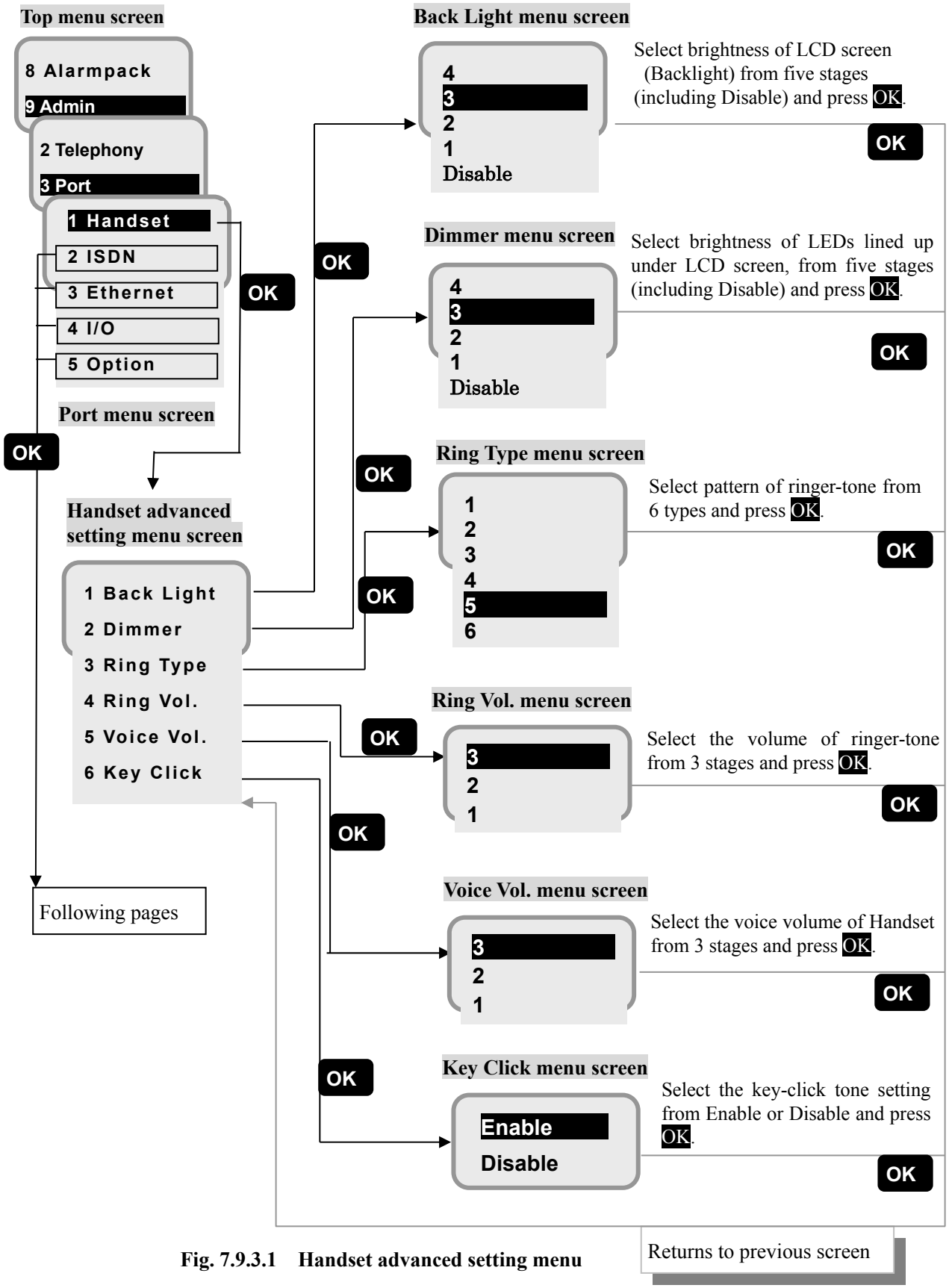
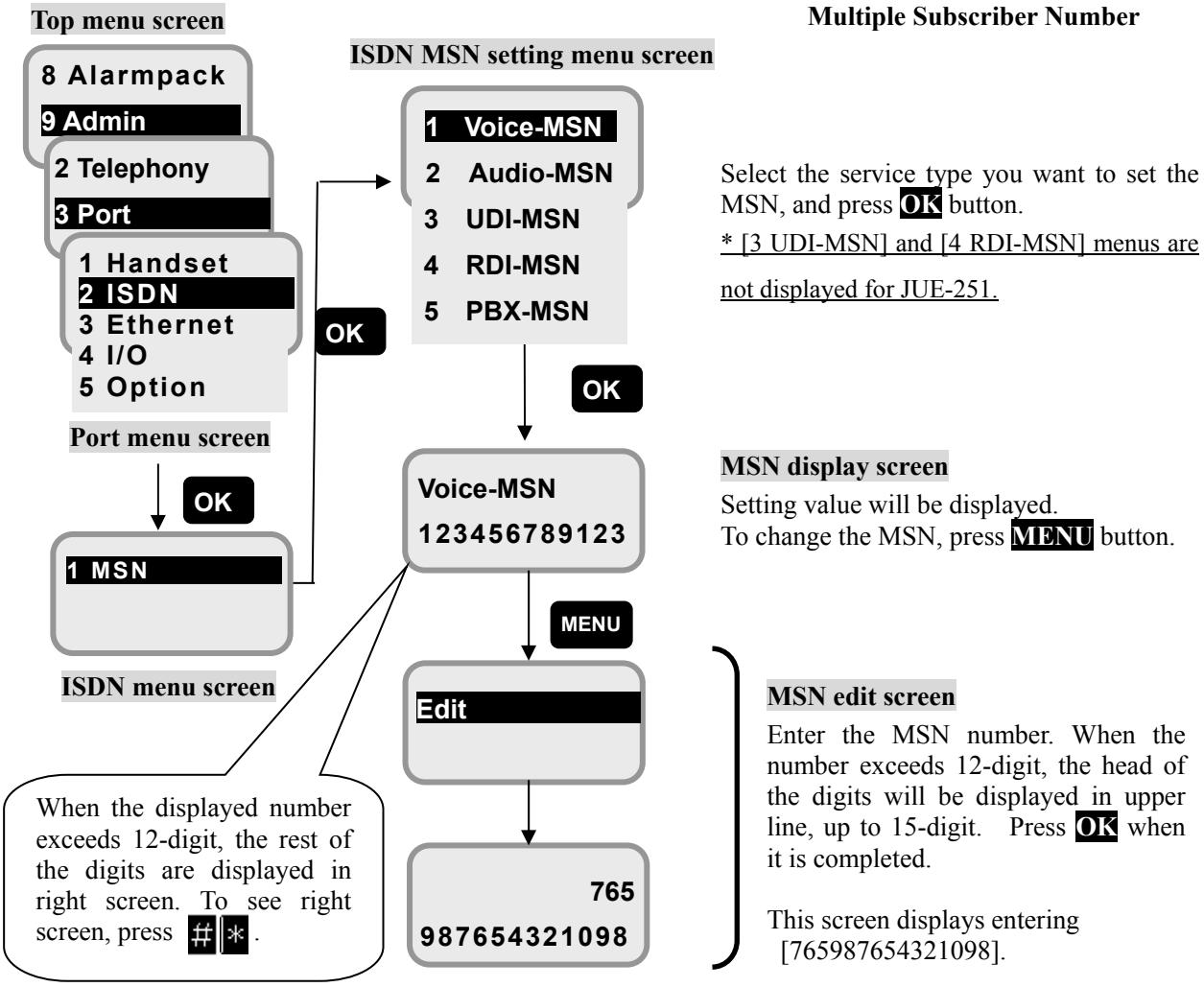


Fig. 7.9.3.1 Handset advanced setting menu

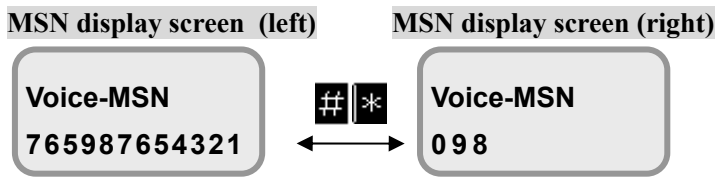
7.9.3.2 ISDN MSN setting (MENU+9+3+2+1)

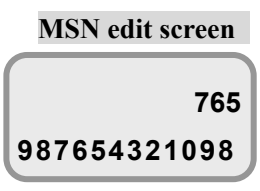
In this menu, the user can set the MSN of ISDN port.

MSN:
Multiple Subscriber Number



NOTE





MSN edit screen shows whole digits (even the number exceeds 12-digit) in single screen by showing 1st to 3rd digits in upper line, unlike the MSN display screen shows the 13th to 15th digits to next (right) screen.

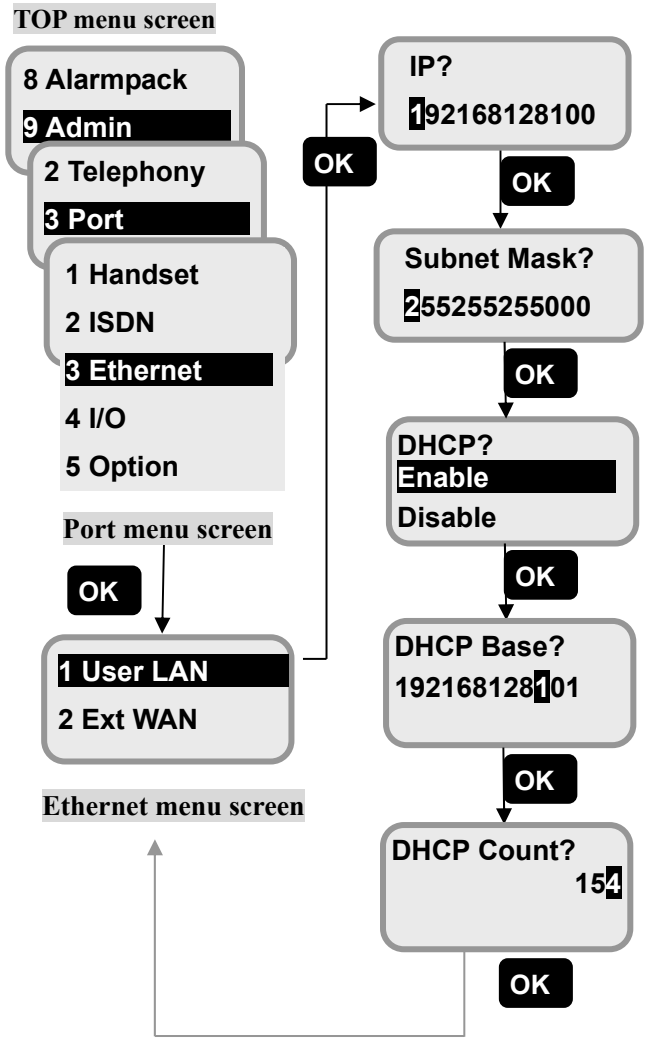
Fig. 7.9.3.2 ISDN MSN setting menu

7.9.3.3 Ethernet (User LAN / EXT WAN) setting (MENU+9+3+3+1~2)

A simple User LAN Setting and Ext WAN setting are executed on this menu.

The setting of User LAN registered here is reflected to VLAN1. For further information about VLAN, refer to [6.5.5.6 Further Setting for User LAN (p6-70)]. A maximum of total 32W PoE (Power over Ethernet) is available on User LAN.

User LAN Setting



IP address *1) editing screen

Press any numeric key, then initially displayed numbers are once erased altogether.

Then enter the new IP address and press OK button.

Subnet Mask editing screen

Set the SUBNET MASK and press OK button.

DHCP setting screen

Set the DHCP function use/non-use.

Select [Enable (use DHCP)] or [Disable (non-use DHCP)] by the cursor and press OK button.

DHCP*2) allocation setting screen

Enter the minimum IP address for the DHCP allocation and press OK button.

DHCP*2) range setting screen

Enter the total amount of the IP address number for the DHCP allocation and press OK button. Input the number from 1 to 254.

Fig 7.9.3.3a Flow of User LAN setting

For default settings, refer to Table 7.9.3.3

***1) About IP address input**

IP address is configured with 4 strings of 3 digits numbers, which delimitated by a period.
Add [0] or [00] for the string which is less than 3 digits.
Ex.) [192.168.128.1] shall be input as [192168128001]

Possible input range of IP address:
10. 0.0.1 – 10.255.255.254
172.16.0.1 – 172.31.255.254
192.168.0.1 – 192.168.255.254

- Use of "all ones" or "all zeros" for the host field of the IP address is not supported.
- 192.168.0.0/24 is used for EXT WAN and 192.168.60.0/24 is used for JRC LAN as a default. To set these addresses to User LAN, change the network address of EXT WAN or JRC LAN first and set the address to User LAN.

***2) About DHCP function**

. Maximum number for the [DHCP range setting screen] is [254].

Ext WAN means external WAN other than FBB system like VSAT. Setting of Ext WAN is necessary for using WAN Selector function. Refer to [6.5.5.9 Coexistence with Other WAN (p6-75)] for WAN Selector.

Ext WAN Setting

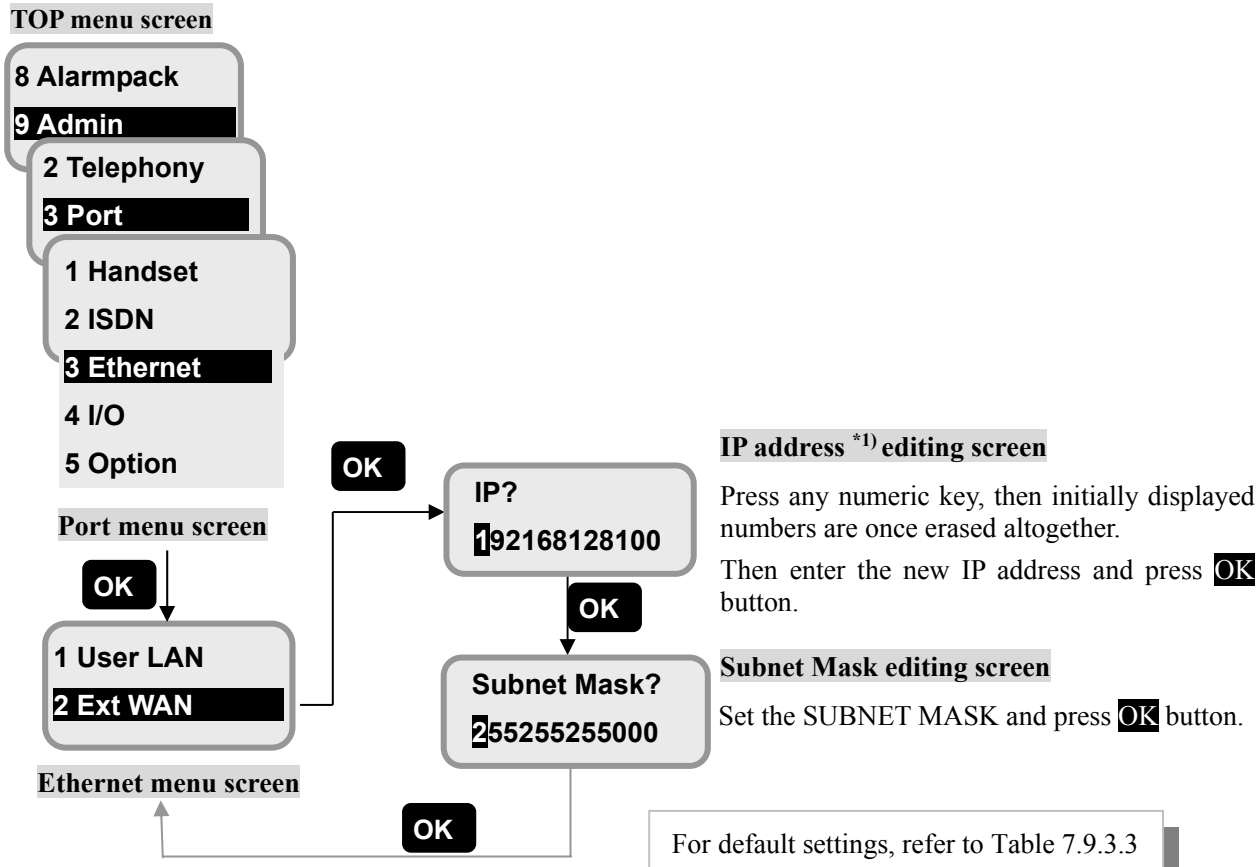


Fig 7.9.3.3b Flow of Ext WAN setting

***1) About IP address input**

IP address is configured with 4 strings of 3 digits numbers, which delimitated by a period.
Add [0] or [00] for the string which is less than 3 digits.
Ex.) [192.168.128.1] shall be input as [192168128001]

Possible input range of IP address:
10. 0.0.1 – 10.255.255.254
172.16.0.1 – 172.31.255.254
192.168.0.1 – 192.168.255.254

- Use of "all ones" or "all zeros" for the host field of the IP address is not supported.
- 192.168.0.0/24 is used for EXT WAN and 192.168.60.0/24 is used for JRC LAN as a default. To set these addresses to User LAN, change the network address of EXT WAN or JRC LAN first and set the address to User LAN.

Table 7.9.3.3 Initial Setting for Ethernet Port

Port	Parameter	Value
User LAN	IP	192.168.128.100
	Subnet Mask	255.255.255.0
	DHCP	Enable
	DHCP Base	192.168.128.101
	DHCP Count	16
Ext WAN	IP	192.168.0.4
	Subnet Mask	255.255.255.0

7.9.3.4 I/O setting (MENU+9+3+4+1~3)

In this menu, user can set input/output of ring acknowledgement/indication from/to the device connected to the Junction Board.

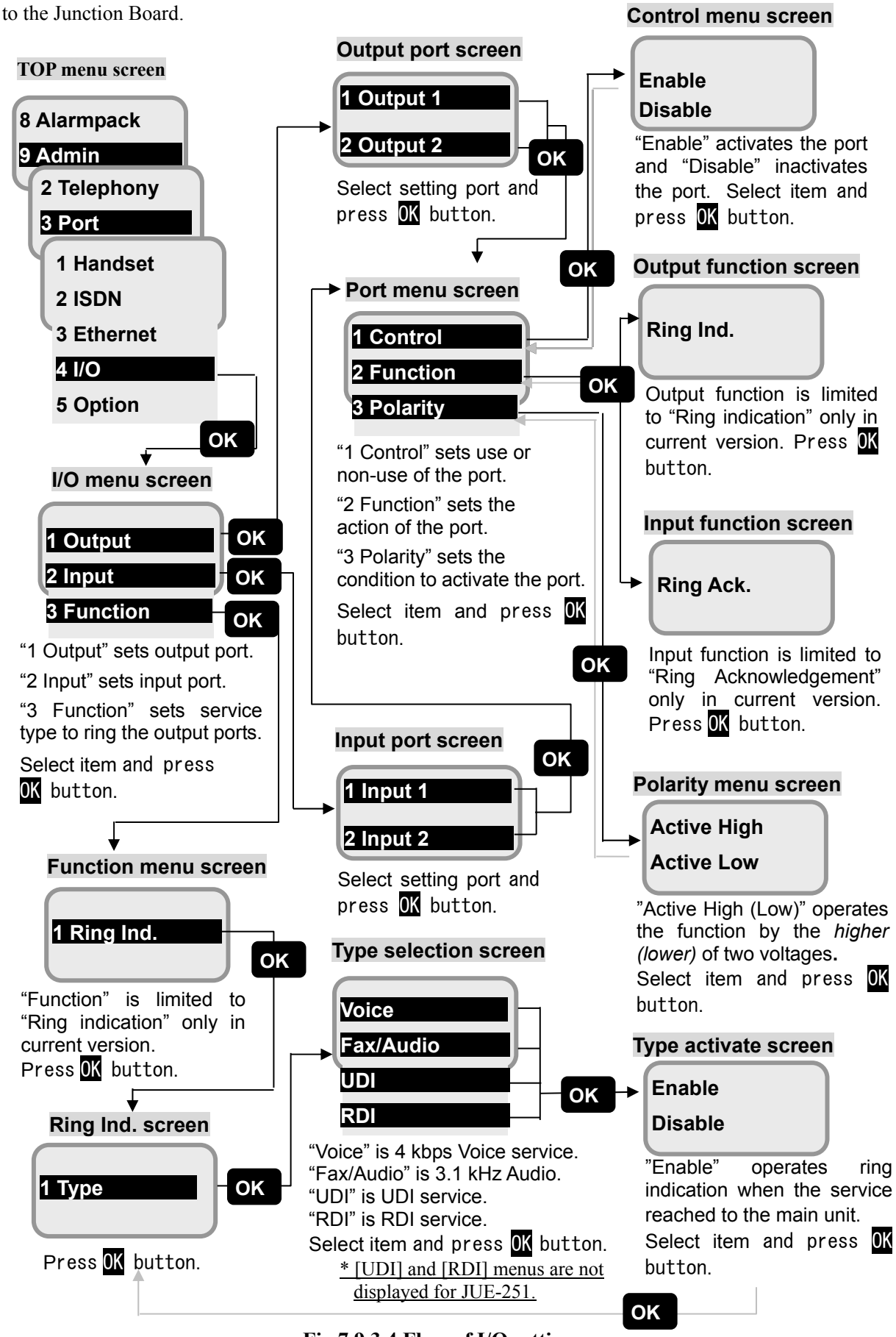


Fig 7.9.3.4 Flow of I/O setting

7.9.3.5 Option setting (MENU+9+3+5+1~2)

In this menu, the user can set Option Buzzer.

Option Buzzers are connected to the Junction Board and ring when a set service call arrived to the main unit. System reboot is required to change these settings.

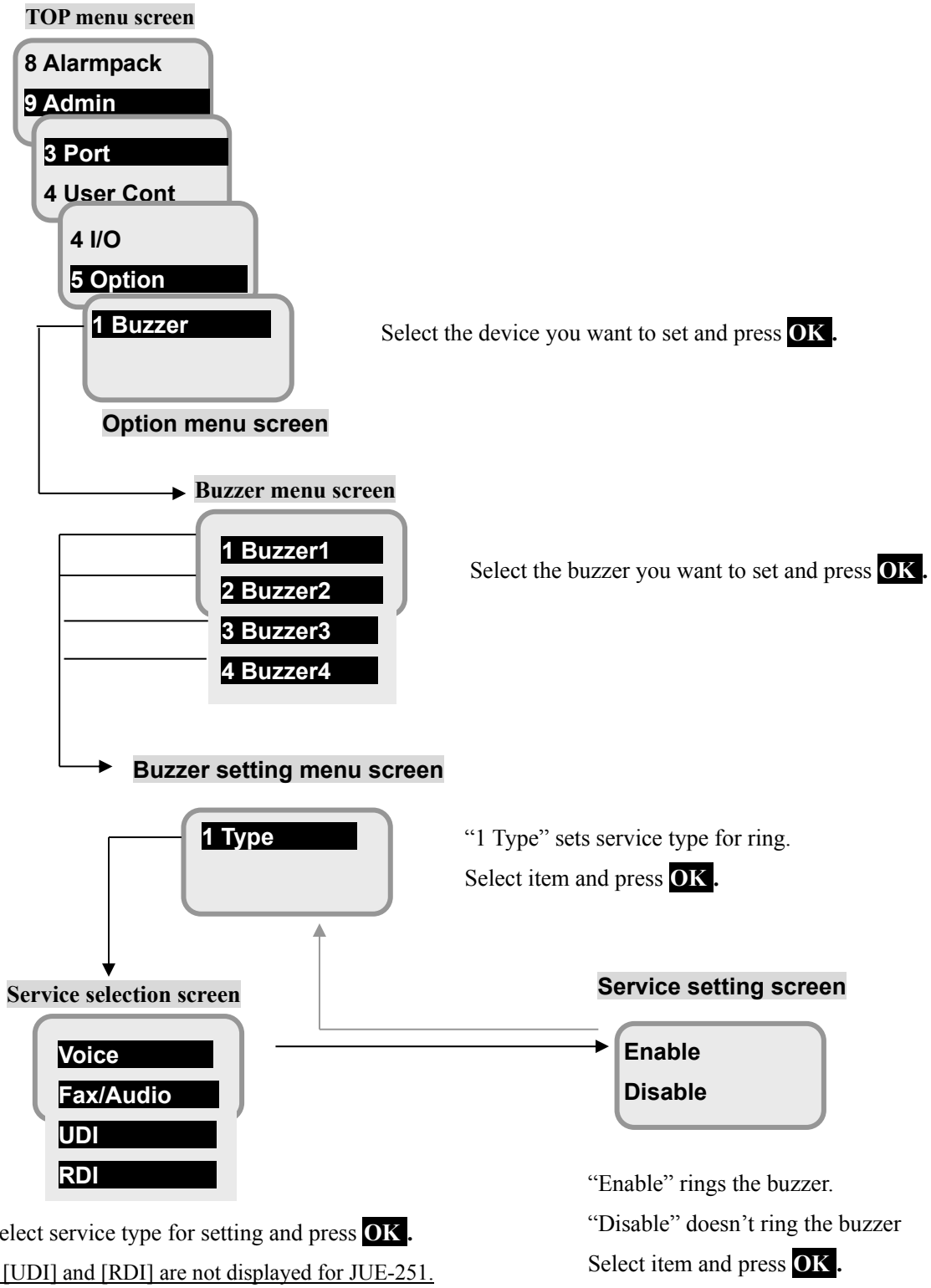


Fig 7.9.3.5 Flow of Buzzer setting

7.9.4 User Cont. menu (MENU + 9 + 4)

In this section, user registration and usage restriction is described.

7.9.4.1 User Reg. setting	Register new user, edit existing user and delete user. Maximum 50 users can be registered.
7.9.4.2 Usage Rest. setting	Set five Restriction group for communication. User can communicate within limitation of assigned Restriction group. This setting is used in [7.9.4.1 User Reg. setting (p7-61)].

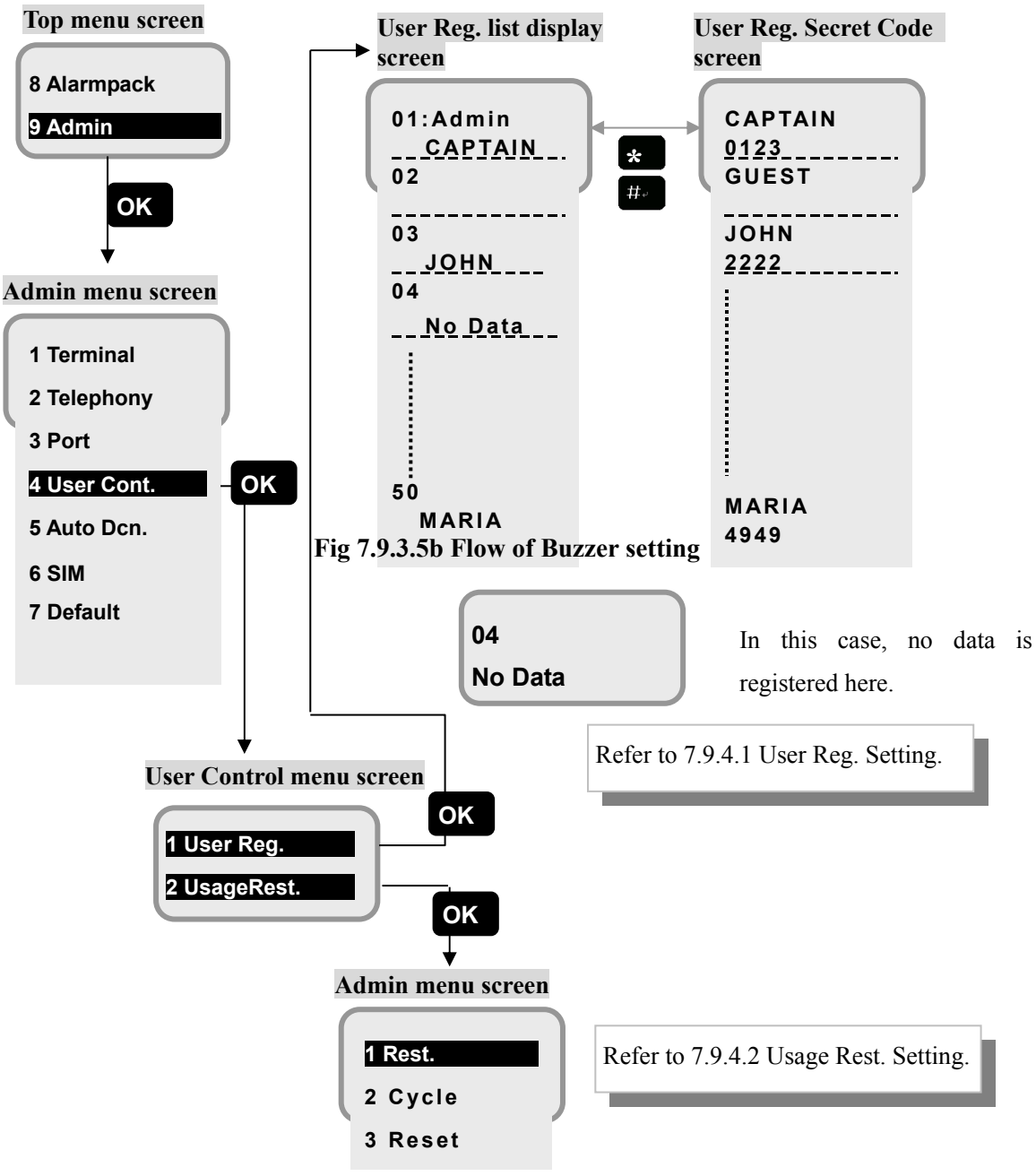


Fig 7.9.3.5b Flow of Buzzer setting

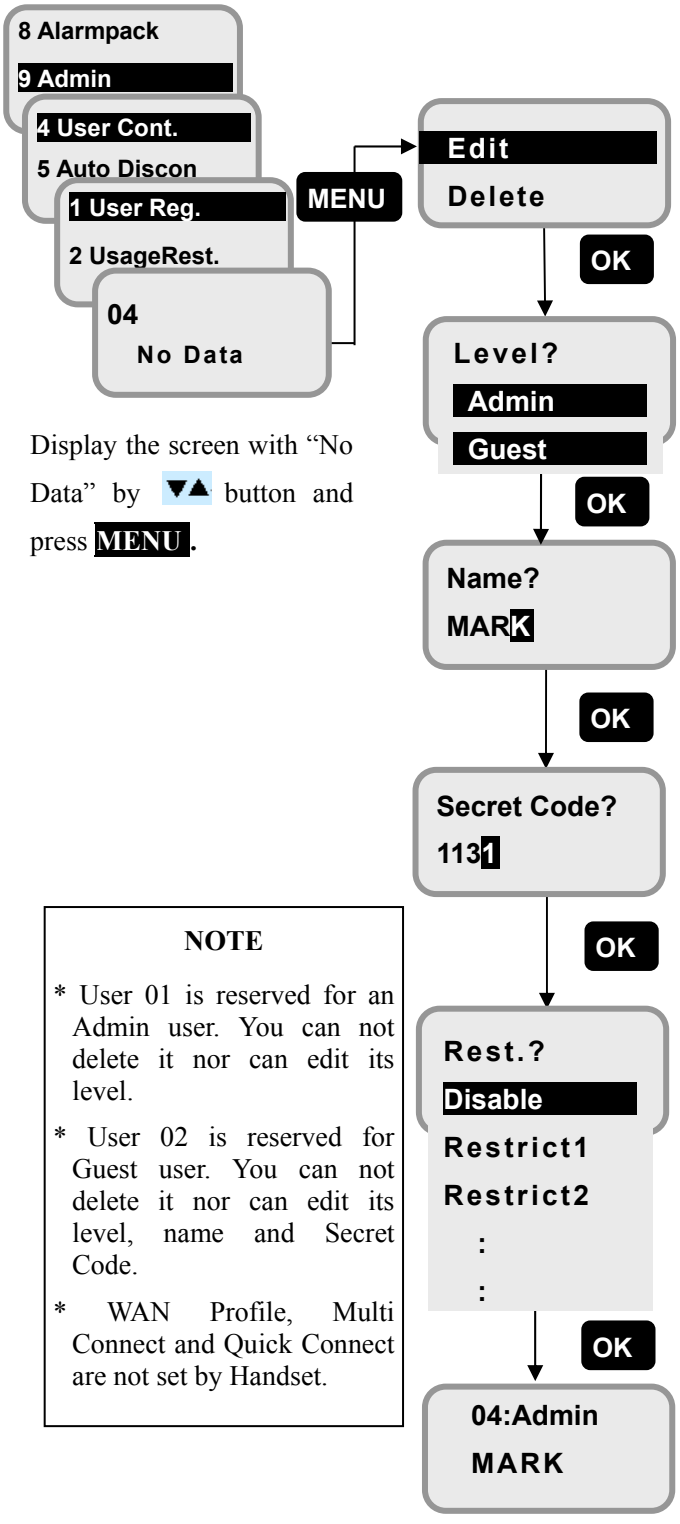
Fig. 7.9.4a User Reg. menu screen transition

7.9.4.1 User Reg. setting (MENU+ 9 +4 +1)

To register, edit, or delete the User level, name, Secret Code and restriction, press **MENU** with [User Reg. list display screen] or [User Reg. Secret Code screen] displayed (enter 4-digit Secret Code).

[Registering new user]

Example) Registering a new user MARK with his secret code 1131 on No.04.



Display the screen with "No Data" by ▼▲ button and press **MENU**.

User Reg. operation selection screen

Select [Edit] and press **OK**.

User Reg. Level selection screen

Select level and press **OK**.

User Reg. User Name editing screen

The cursor is blinking at the head of the line.
Enter User name and press **OK**.
To delete the character press **CLR**.

User Reg. Secret Code editing screen

The cursor is blinking at the head of the line.
Enter 4digits Secret Code and press **OK**.
Input range: 0001 to 9000.
To delete the character press **CLR**.

User Reg. Rest. selection screen

Select the restriction applied to the user and press **OK**.
The list shown here are the restrictions preset by user. Refer to [7.9.4.2 Usage Rest. setting] for detail.
"Disable" sets no restriction.

User Reg. list display screen

Newly entered name and Secret Code are stored firmly now.
Registrations finished.

NOTE

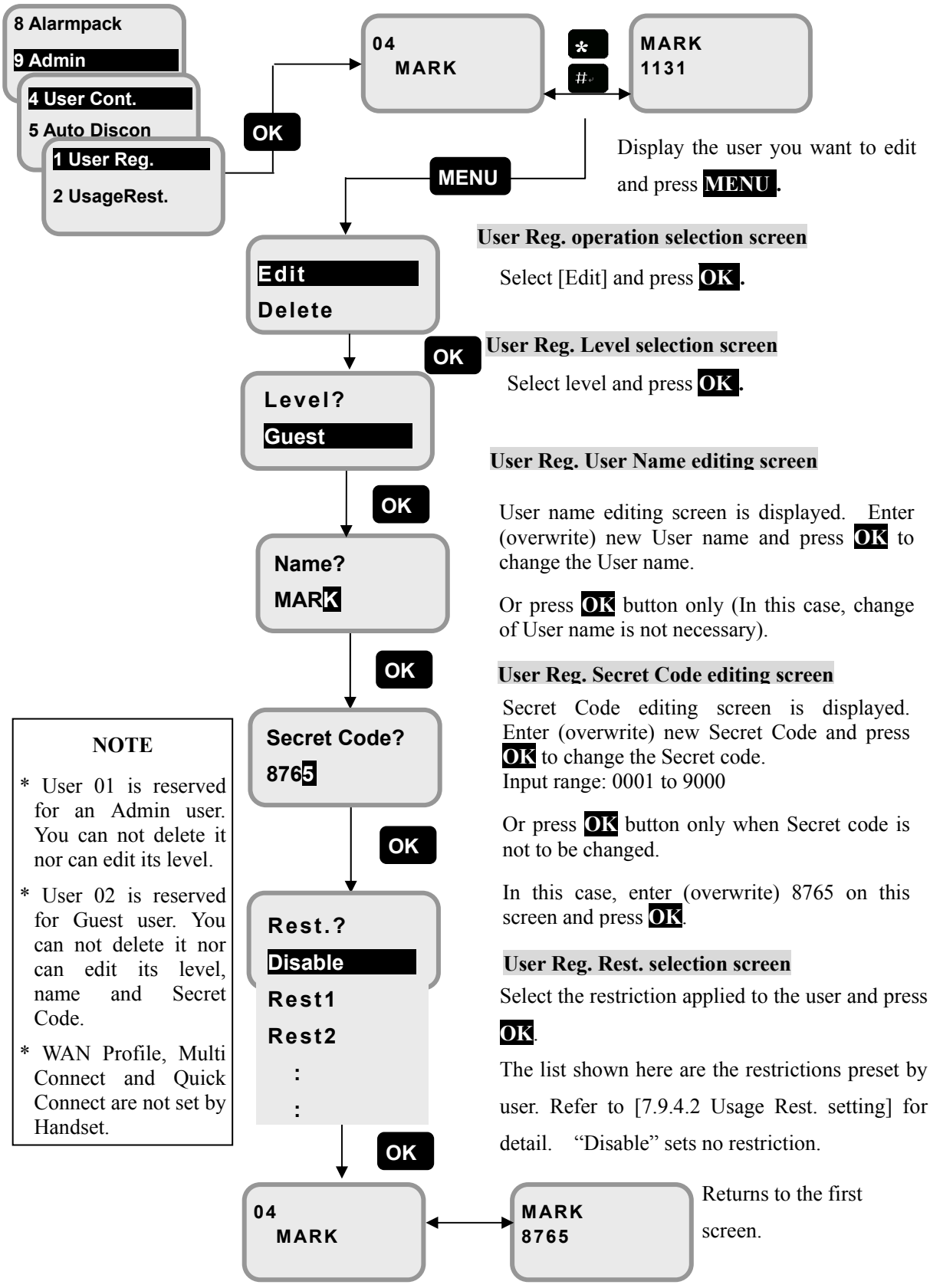
* User 01 is reserved for an Admin user. You can not delete it nor can edit its level.
* User 02 is reserved for Guest user. You can not delete it nor can edit its level, name and Secret Code.
* WAN Profile, Multi Connect and Quick Connect are not set by Handset.

Fig.7.9.4.1a Flow of new user registration

[Edit User name and/or Secret Code]

Even when one item is to be changed, edit screens of all items are displayed. On the edit screen where change is not necessary, just press OK button and go to the next screen.

Example)Changing the Secret Code of MARK (No.04), from 1131 to 8765.



Display the user you want to edit and press **MENU**.

User Reg. operation selection screen

Select [Edit] and press **OK**.

User Reg. Level selection screen

Select level and press **OK**.

User Reg. User Name editing screen

User name editing screen is displayed. Enter (overwrite) new User name and press **OK** to change the User name.

Or press **OK** button only (In this case, change of User name is not necessary).

User Reg. Secret Code editing screen

Secret Code editing screen is displayed. Enter (overwrite) new Secret Code and press **OK** to change the Secret code.
Input range: 0001 to 9000

Or press **OK** button only when Secret code is not to be changed.

In this case, enter (overwrite) 8765 on this screen and press **OK**.

User Reg. Rest. selection screen

Select the restriction applied to the user and press **OK**.

The list shown here are the restrictions preset by user. Refer to [7.9.4.2 Usage Rest. setting] for detail. "Disable" sets no restriction.

Returns to the first screen.

NOTE

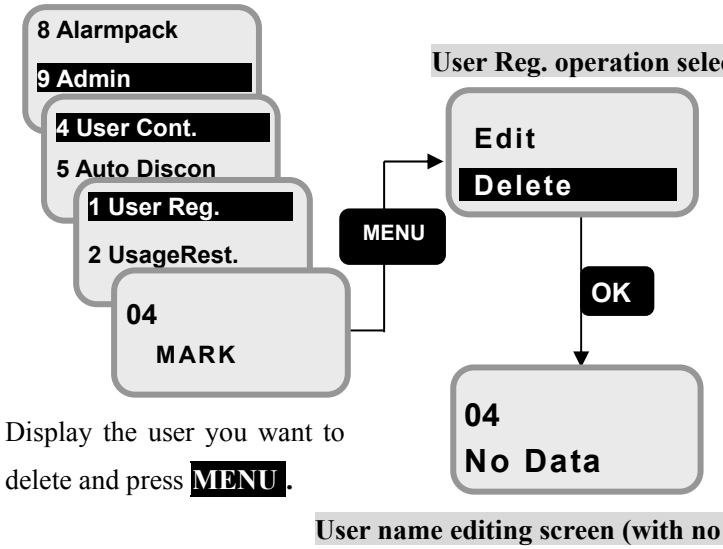
* User 01 is reserved for an Admin user. You can not delete it nor can edit its level.
* User 02 is reserved for Guest user. You can not delete it nor can edit its level, name and Secret Code.
* WAN Profile, Multi Connect and Quick Connect are not set by Handset.

Fig. 7.9.4.1b Overwriting procedure of User name and

[Deleting User]

Example) Deleting the data of No.04

Press **MENU** with the User Reg. list which displays No.04.



Display the user you want to delete and press **MENU**.

Select [Delete] by cursor and press **OK**.

The data of No.04 has already been deleted. The screen returns to [User Reg. list display screen].
[No Data] is indicated on No.02.

Fig. 7.9.4.1c Deleting User

NOTE

* Beware that once the data is deleted, it won't be recovered again.
* User 01 is reserved for an Admin user. You can not delete it nor can edit its level.
* User 02 is reserved for Guest user. You can not delete it nor can edit its level, name and Secret Code.

7.9.4.2 Usage Rest. setting (MENU+ 9 +4 +2+1~3)

Set Restriction group for communication up to five. The limitations are made by time (minutes) for Voice, Audio, UDI, RDI and Streaming IP service, by number for SMS and by size (Mbyte) for Standard IP service. User can communicate within the assigned restriction. These settings are used in [7.9.4.1 User Reg. setting (p7-61)]. Select the cycle to clear up the counting time and traffic from "Manually", "Monthly", "Weekly" or "Daily".

[Setting a Usage Restriction group]

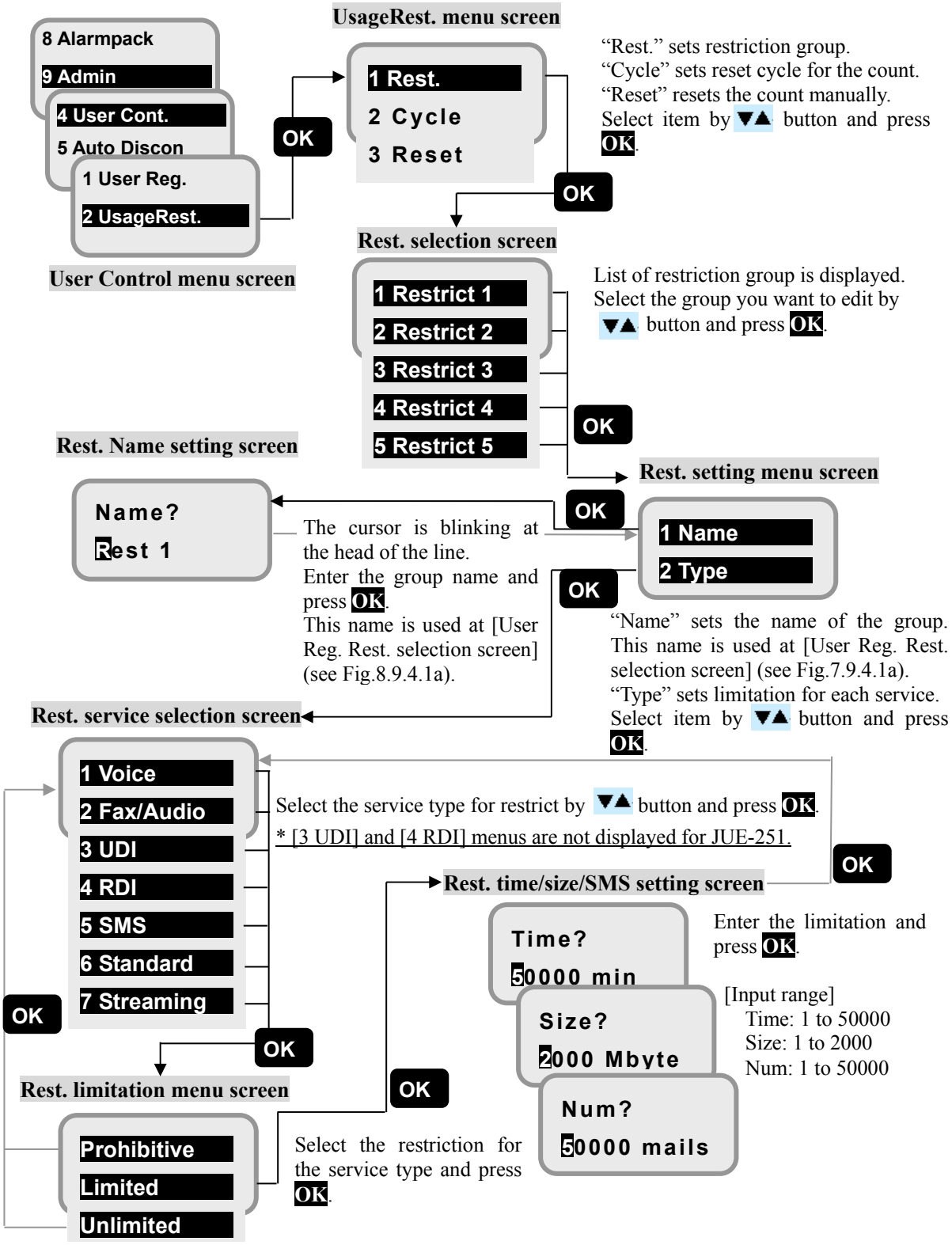


Fig. 7.9.4.2a Flow of Usage Restriction group setting

[Setting Clear up Cycle]

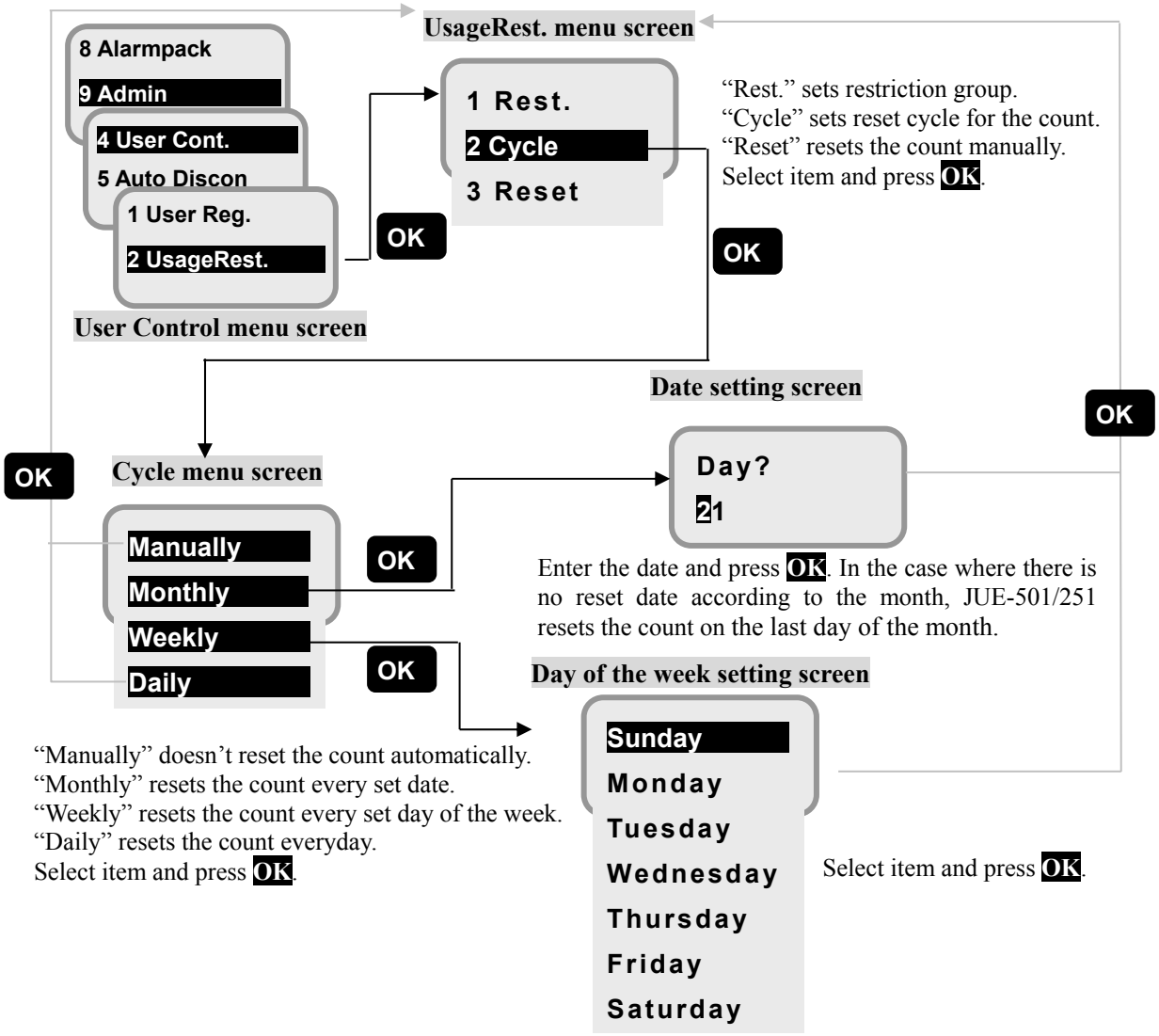


Fig. 7.9.4.2b Flow of Reset Cycle setting

[Reset the Count Manually]

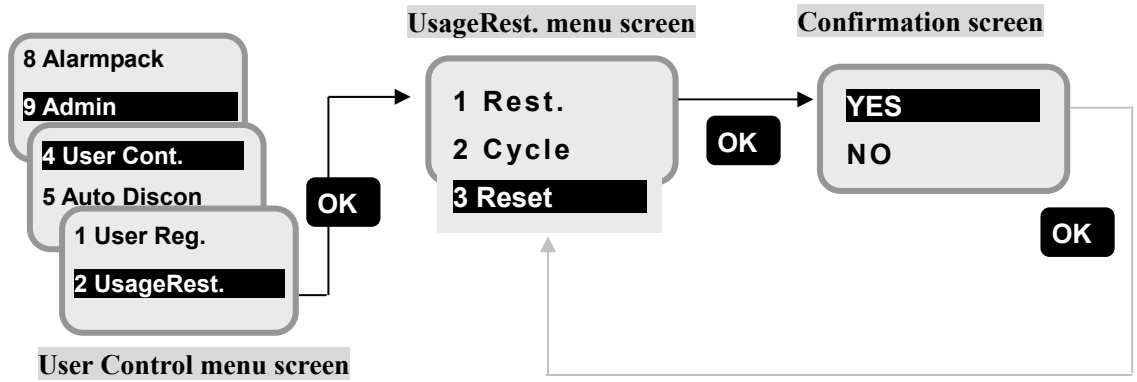


Fig. 7.9.4.2c Flow of Resetting the Count Manually

7.9.5 Auto Dcn.(Auto disconnection) menu (MENU + 9 + 5)

In this menu, user can set the auto disconnection time (Max Time / Idle Time).

Select [5. Auto Dcn.] menu from [Admin] menu. This menu is useful to prevent a user from accidentally forgetting to disconnect the line.

Setting of Max Time (Max connection time) is for the automatic disconnect of Handset, TEL1~6, ISDN, Streaming IP and Standard IP communication. Terminal will automatically disconnect the communications according to the settings with regardless of its communication state.

Setting of Idle Time (Idle connection time) is for the automatic disconnect of Standard IP communication. Terminal will automatically disconnect the communication by monitoring the Idle time.

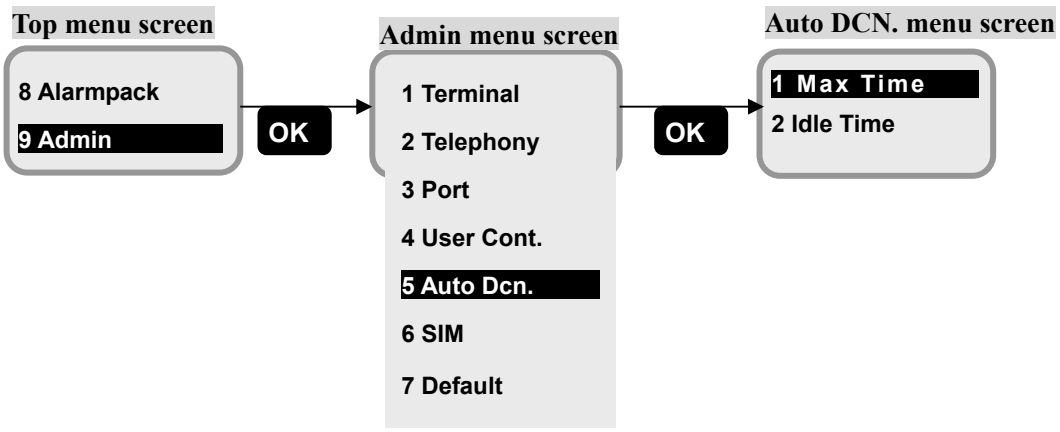


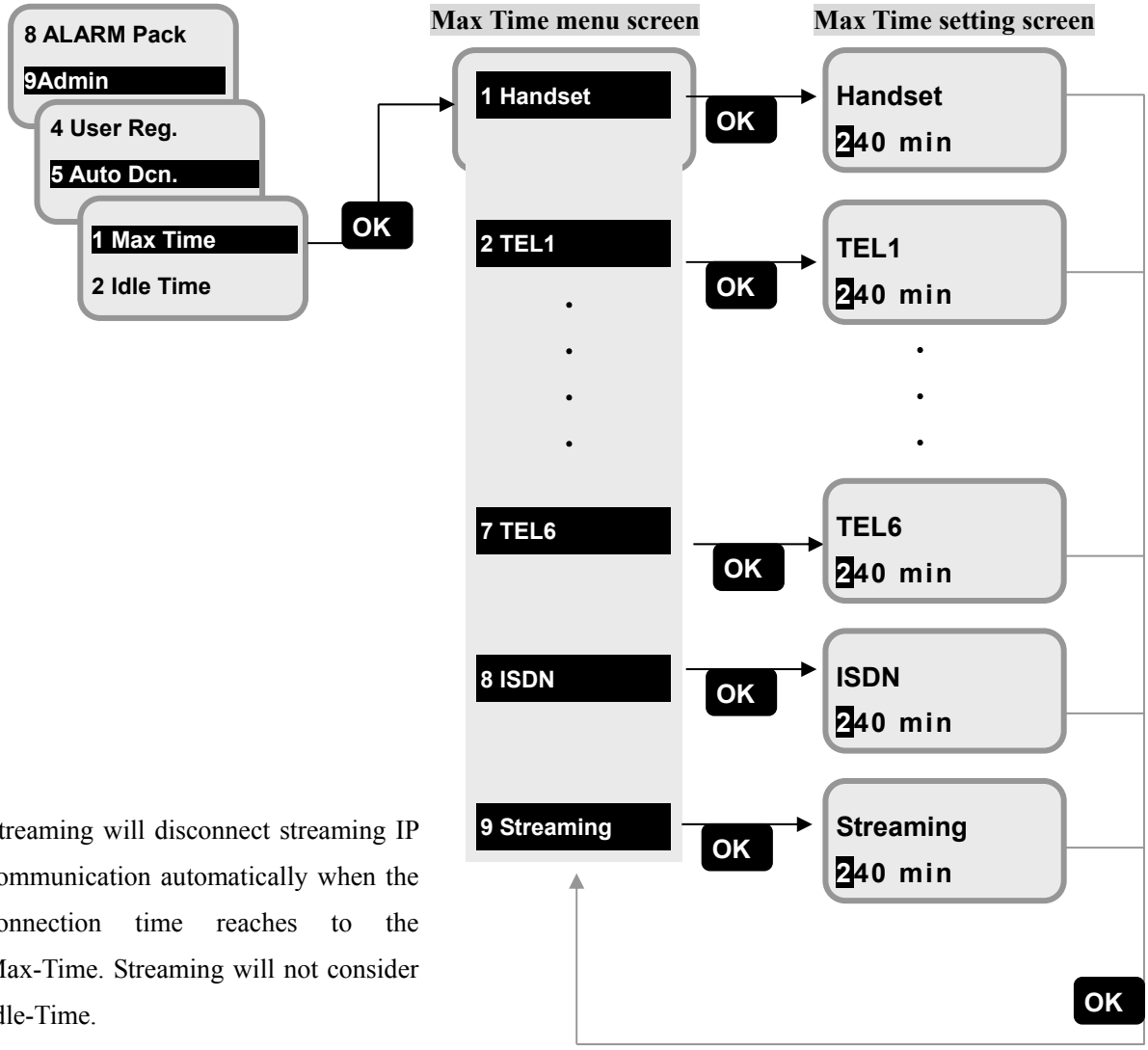
Fig. 7.9.5 Sequence of opening Auto Dcn. menu screen

Note

- Distribution partner of SIM card might charge a communication fee by only connecting and disconnecting Standard IP Connection.
- Auto Disconnect function never disconnects PS Connection connected by Always Activate function. Thus PS Connection connected by Always Activate function keeps the connection active.

7.9.5.1 Max Time setting (MENU+ 9 +5 +1 +1 ~ 9)

Setting screen of Max Time (max connection time limit) is displayed when service type is set at [Max Time menu] screen. Time unit is minute and the range is 0-240min. Set "0min." when unlimited connection is required. Enter 1 to 3-digit number and then press **OK**. Then the screen returns to previous one. To delete the digit, press **CLR**.



Streaming will disconnect streaming IP communication automatically when the connection time reaches to the Max-Time. Streaming will not consider Idle-Time.

Fig. 7.9.5.1 Max Time menu screen and Max Time setting screen

7.9.5.2 Idle Time setting (MENU+ 9 +5 +2 +1)

Setting screen of Idle Time (idle connection time limit) is displayed when service type is set at [Idle Time menu] screen. Time unit is minute and the range is 1-240min. Enter 1 to 3-digit number and then press **OK**. Then the screen returns to previous one. To delete the digit, press **CLR**.

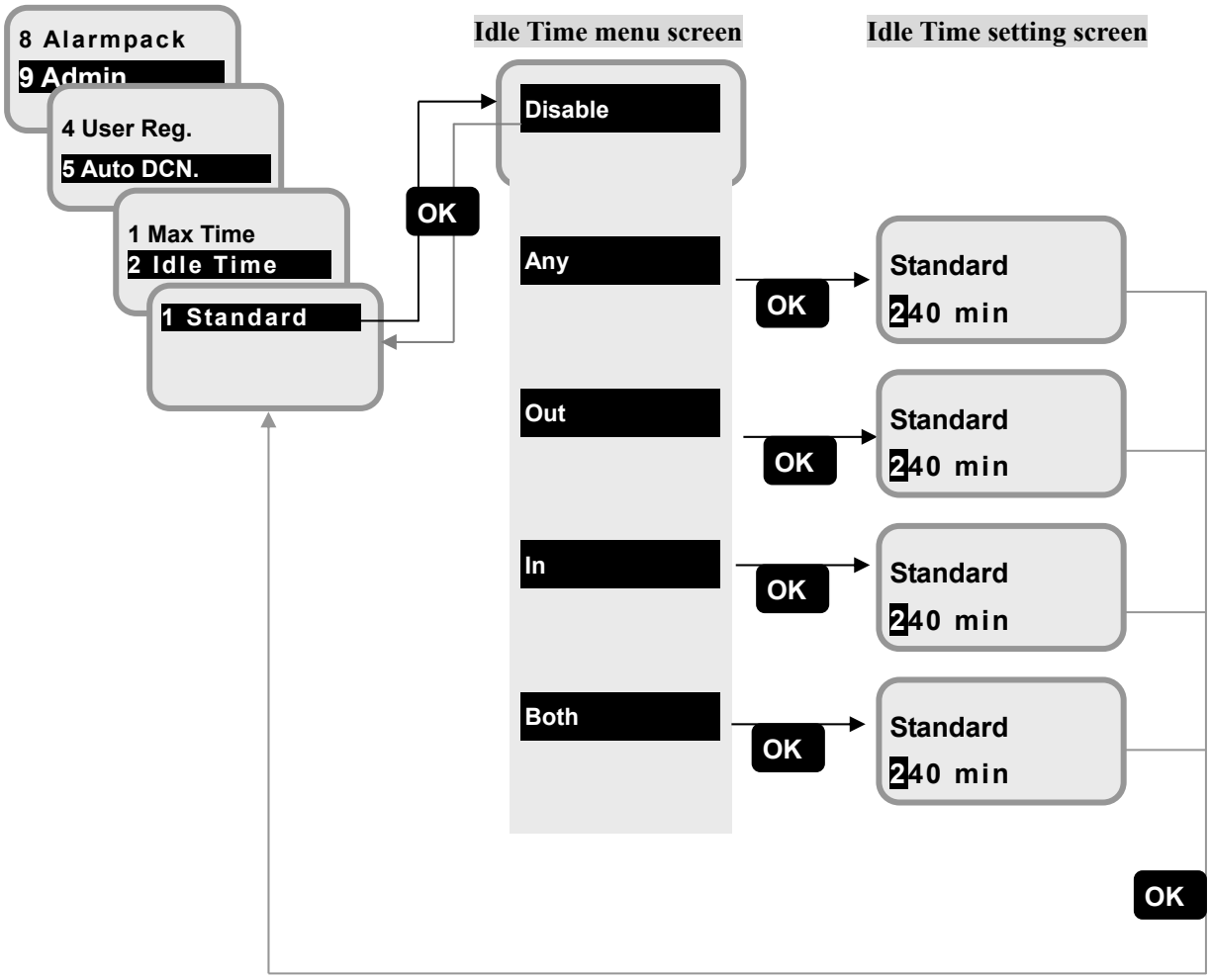


Fig. 7.9.5.2 Idle Time menu screen and Idle Time setting screen

Disable: It does not disconnect Standard IP connection automatically

Any: It disconnects Standard IP connection by the setting-time regardless of the existence of any packet data.

Out: It disconnects Standard IP connection by monitoring the upload idle time

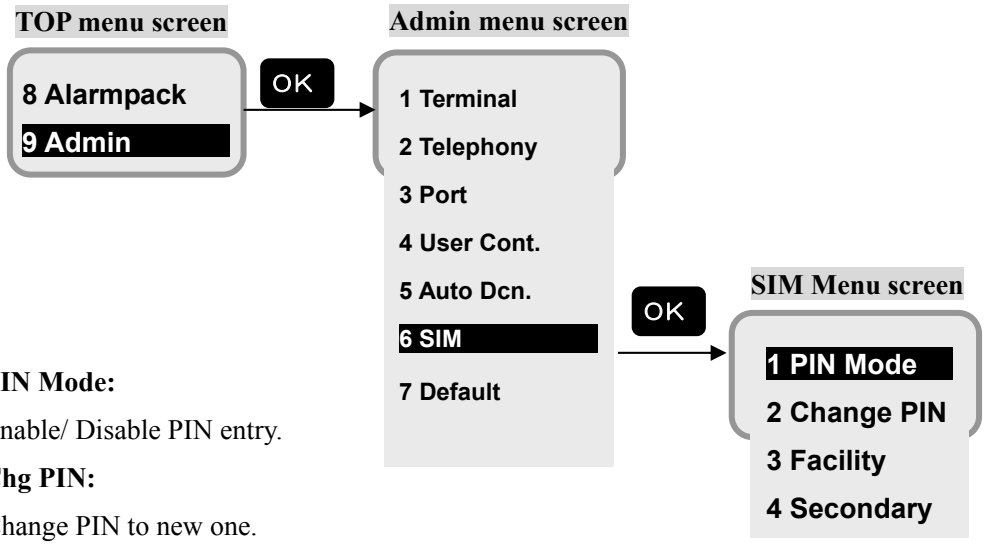
In: It disconnects Standard IP connection by monitoring the download idle time

Both: It disconnects Standard IP connection by monitoring the upload and download idle time

7.9.6 SIM Menu (MENU + 9 + 6)

In this menu, user can set up the items of SIM card.

The [SIM Menu screen] is displayed when [6 SIM] is selected from Admin menu.



PIN Mode:

Enable/ Disable PIN entry.

Chg PIN:

Change PIN to new one.

Facility:

Use facility lock.

Secondary:

Enable/Disable secondary SIM.

Fig. 7.9.6 SIM Menu screen

7.9.6.1 PIN Mode setting (MENU+ 9 +6+1)

In this menu, Enable/Disable of PIN entry can be set.
Setting [Enable], PIN entry is required when turning OFF/ON of the power source.
Setting [Disable], PIN entry is not required when turning OFF/ON of the power source.

Set [Enable] prior to changing the PIN at next subsection [7.9.6.2 Change PIN setting (p7-72)]

PIN Input setting procedure

1) Select [1 PIN Mode] and press **OK**, then PIN Input setting screen is displayed. Select Enable or Disable of PIN entry, and press **OK**.

2) SIM PIN input screen is displayed. Input exist PIN (4-digit) and then press **OK**.

About releasing method of PIN locking (it occurs when the input error exceeds three times), refer to [Releasing PIN locking and new PIN setting procedure (p7-71)].

PIN Input setting procedure

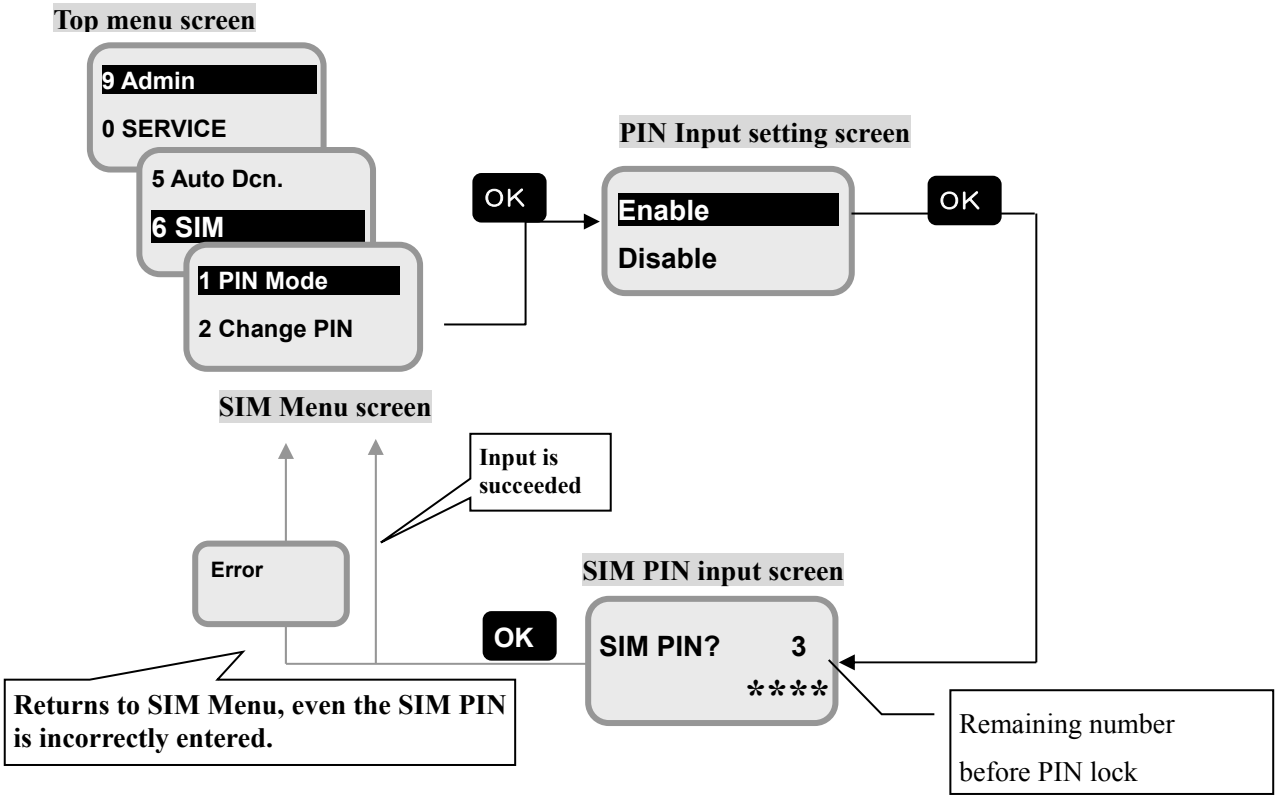


Fig. 7.9.6.1a PIN Mode menu

Releasing PIN locking and new PIN setting procedure

When the PIN is locked, SIM PUK (Personal Unblocking Key) input screen is displayed.

Input 8-digits of SIM PUK which you obtained at purchasing SIM card.

(If the input error of SIM PUK is occurred 10 times continuously, the SIM card is invalid.)

The screen transition hereafter is the same as **PIN changing procedure (7.9.6.2 Chg PIN setting).**

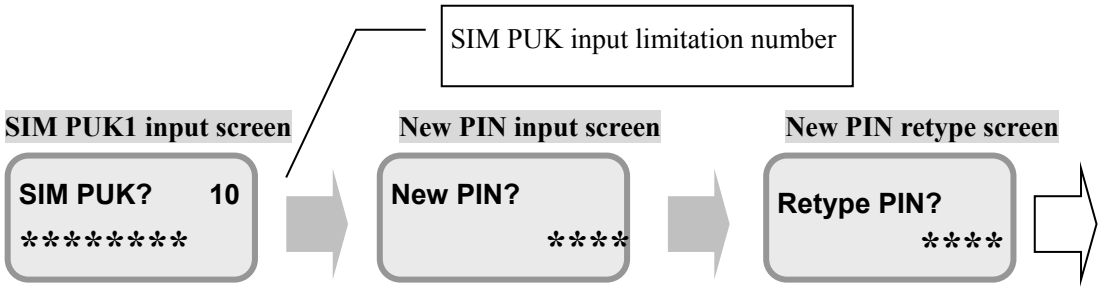


Fig. 7.9.6.2b Releasing PIN locking and new PIN setting procedure

7.9.6.2 Change PIN setting MENU+ 9 +6+2)

In this menu, user can change the Personal Identification Number (PIN), which is necessary for SIM card operation.

(To operate this menu, user should set PIN Input to [Enable] in [7.9.6.1 PIN Mode setting (p7-70)], preliminarily.)

PIN changing procedure

1) Select [2 Change PIN] at [SIM Menu screen] and press **OK**, then SIM PIN input screen is displayed. Input existed PIN (4-digit) and press **OK** **(entered figures are hidden by ****).**

2) New PIN input screen is displayed. Input new PIN and press **OK**.

3) New PIN retype screen is displayed. Retype new PIN again and press **OK**.

About releasing method of PIN locking (it occurs when the input error exceeds three times), refer to [Releasing PIN locking and new PIN setting procedure (p7-71)].

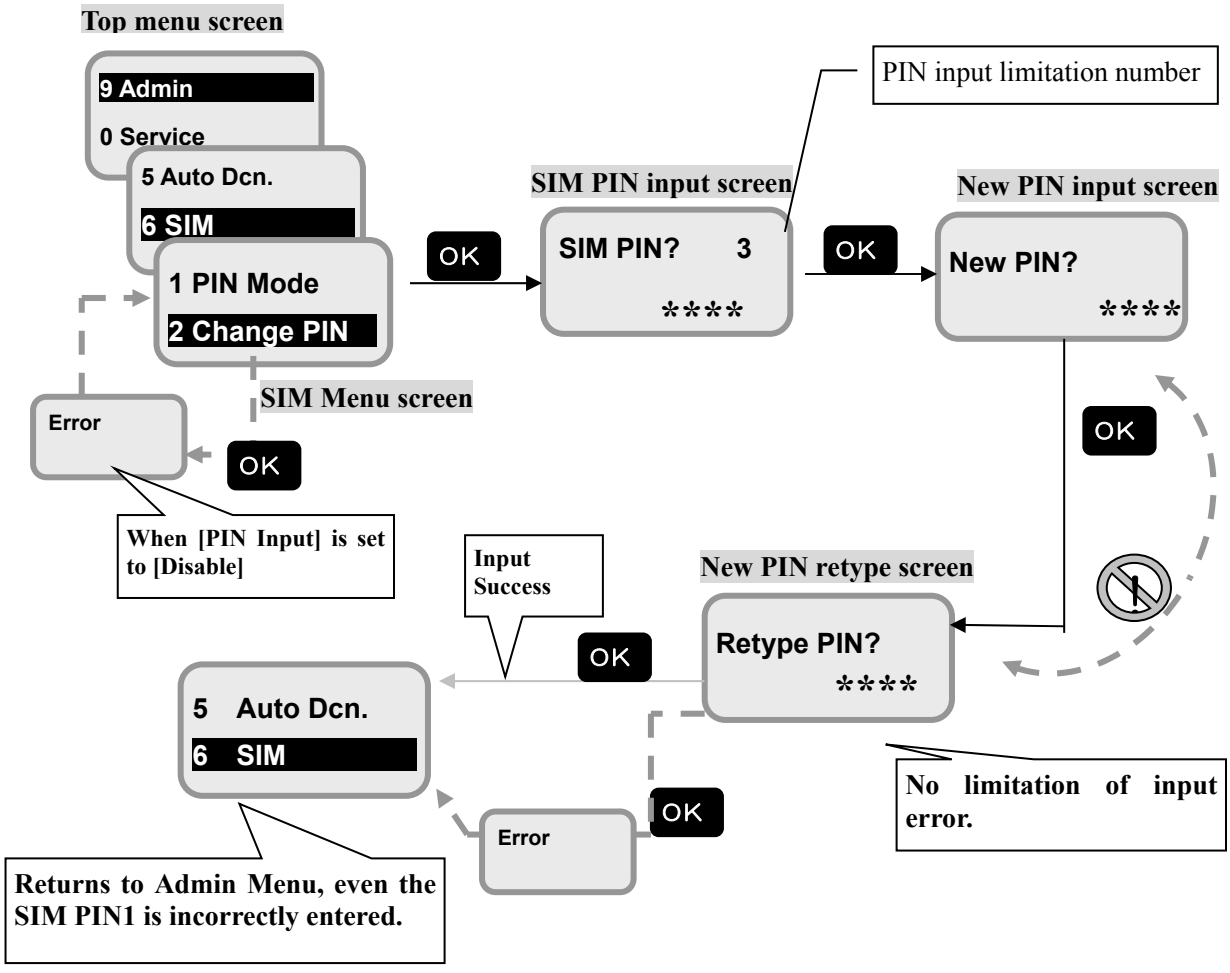


Fig.7.9.6.2 Chg PIN menu (changing procedure of PIN)

7.9.6.3 Facility setting MENU+ 9 +6+3+1~4)

In this menu, the user can use facility lock and change PINs for facility lock.

There are no initial Facility PIN Codes.

The number (from 8 to 16 digits) which is input for the first time shall be applied as the facility PIN Code. If forgot the facility PIN Codes, changing the status and changing the facility PIN Codes will be disabled. Please do not forget the facility PIN Codes.

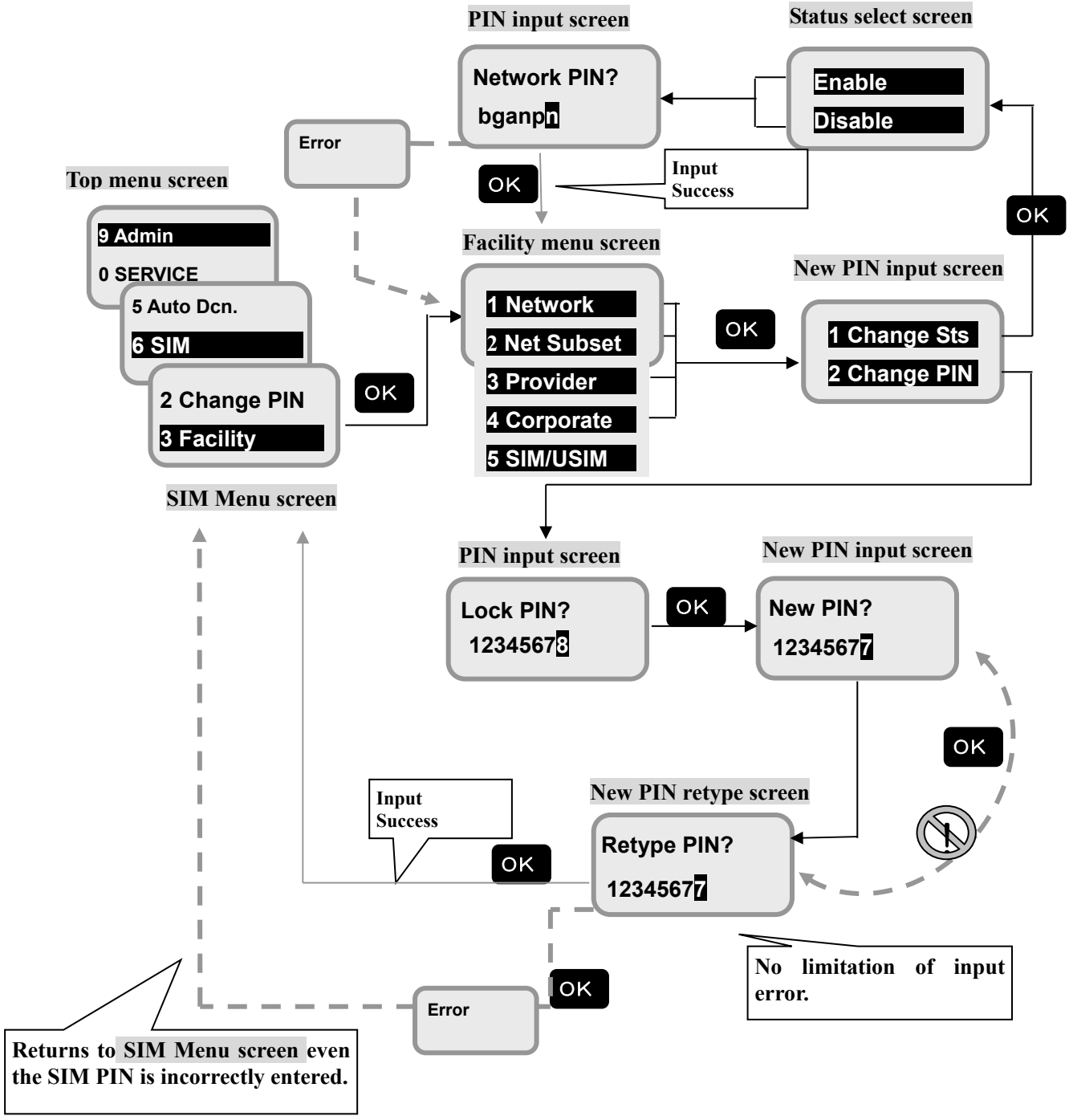


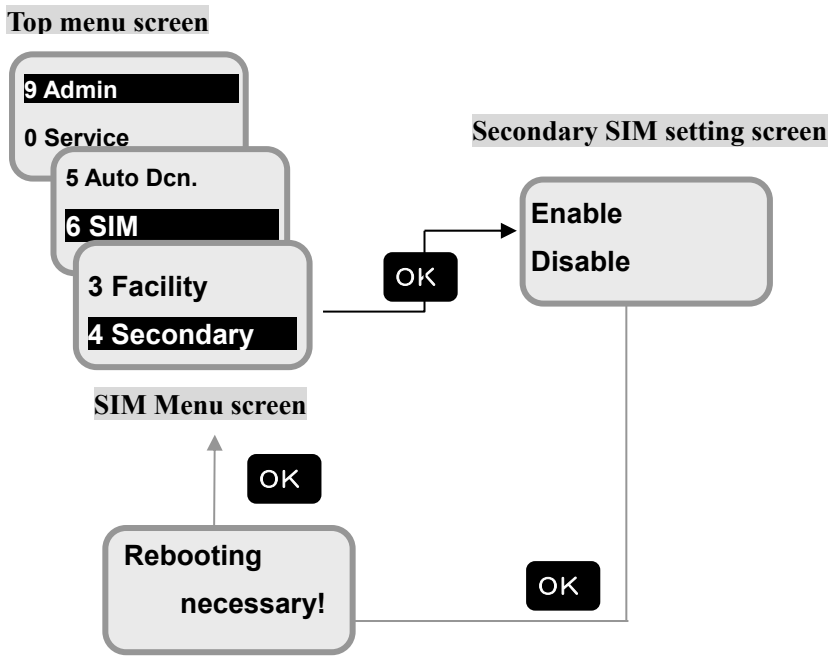
Fig.7.9.6.2 Chg PIN menu (changing procedure of PIN)

7.9.6.4 Secondary SIM setting (MENU+ 9 +6+4)

In this menu, the use or non-use of Secondary SIM can be set. The Secondary SIM is used for remote maintenance. System reboot is required to change setting.

1) Select [4 Secondary] at [SIM Menu screen] and press **OK**, and then select the setting for Secondary SIM. "Enable" uses Secondary SIM instead of user's SIM.

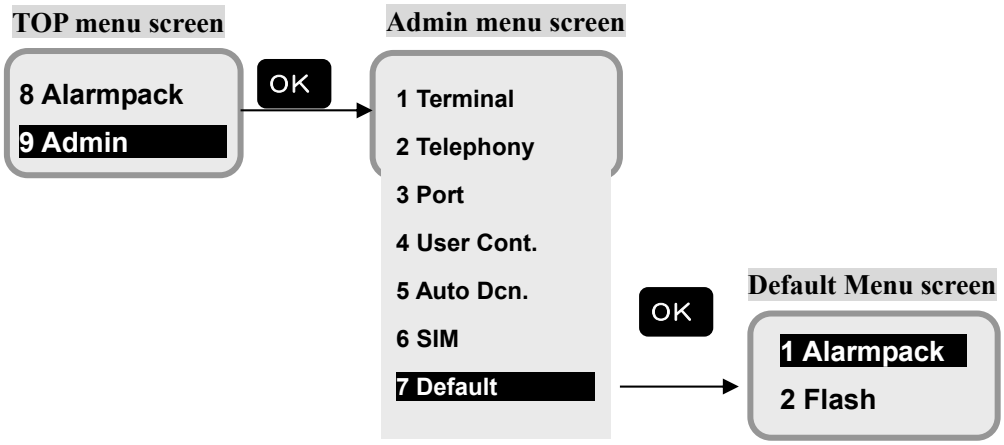
2) To enable the setting, reboot your system.



7.9.7 Default menu MENU+ 9 +7)

In this menu, user can initialize Alarmpack and Flash to the factory default.

The [Default Menu screen] is displayed when [7 Default] is selected from Admin menu.



Alarmpack:

Clear the Alarmpack memory.

Flash:

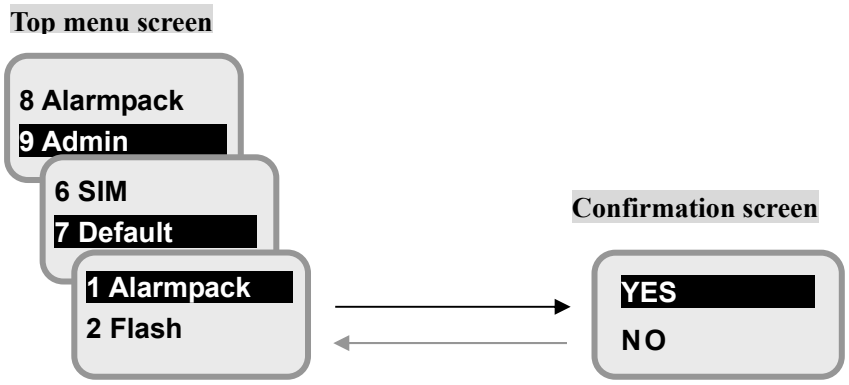
Clear the Flash memory including user setting and Alarmpack.

Fig. 7.9.6 SIM Menu screen

7.9.7.1 Alarmpack (MENU+ 9 +7+1)

In this menu, user can delete the memory of Alarmpack.

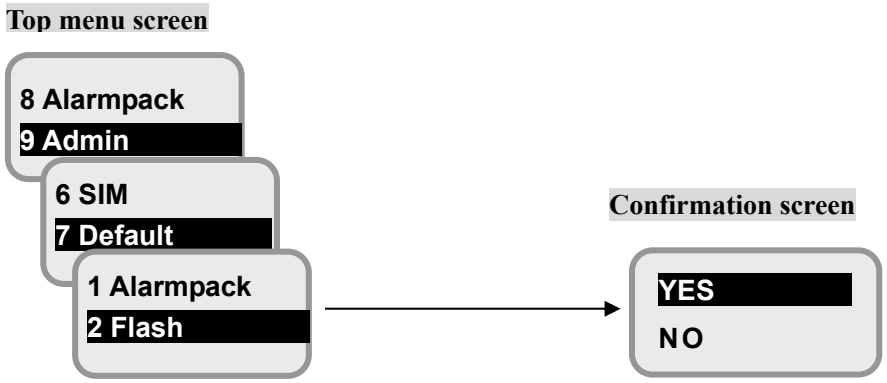
NOTE
Beware that once the data is deleted, it won't be recovered again.



7.9.7.2 Flash (MENU+ 9 +7+2)

In this menu, user can delete the flash memory including user setting and Alarmpack. JUE-501/JUE-251 will be reset to the factory default. System reboots automatically when [YES] is selected on [Confirmation screen].

NOTE
Beware that once the data is deleted, it won't be recovered again.



7. 10 Other screen (Short cut is not available)

This screen is displayed when a fault is detected.

TX alarm screen

The screen pops up when TX alarm (the transmission stopped because of a trouble in transmitting system) is generated.

Press **OK** to reset the alarm, the screen returns to [Idle screen].

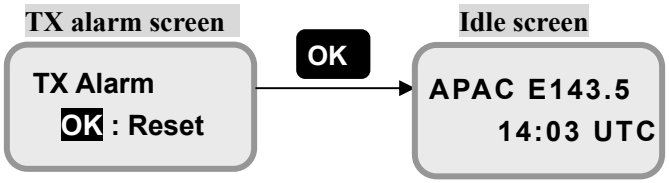


Fig.7.10 TX alarm screen

8. Using ISDN port

In this section, a continued setting for using telephone on ISDN port is explained.

Continued from [4.2 Initial setting for communication (p4-10)]

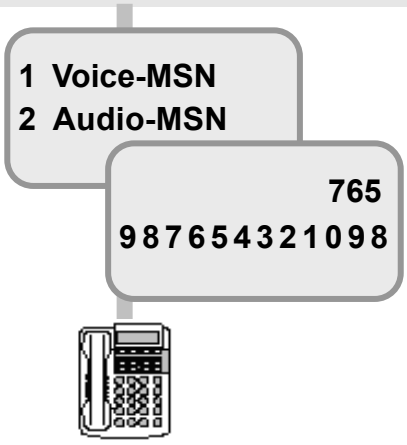


Fig. 8a Setting flow using telephone on ISDN port

ISDN port acts as a ISDN Basic Rate Interface (BRI) Network Termination (NT) and provides a S/T (SO) interface. (Note that only 1B channel (1 call) can be supported at any time). The specification of this port is shown in below table.

Item	Specification
Network Switch Type	Euro ISDN, INS
Coding Type of voice	A-law, μ-law
Max. number of unit	A maximum of 8 TE
Connector	RJ-45 (S/T Interface)
Supported service	-Inmarsat 4kbps Voice -Inmarsat 3.1kHz Audio -UDI -RDI

NOTE

- ISDN port and Ethernet port use the same connector type (RJ-45). Be careful not to connect the wrong port.
- 3.1khHz Audio services like fax is available for JUE-251 only when the satellite elevation angle (EL) is larger than 20 degrees. (Anytime for JUE-501 except for the high latitudes.)
- UDI/RDI service is not available for JUE-251.

When a TA (Terminal Adapter) originates a call, TA informs the "transfer capability" to JUE-501/JUE-251.

Then JUE-501/JUE-251 determines the transmission service type depending on that information.

This relationship is described in below table:

"Transfer capability" from a TA	Transmission service type determined by JUE-501/JUE251
Speech	Inmarsat 4kbps Voice
Audio	Inmarsat 3.1kHz Audio
UDI	UDI
RDI	RDI

* UDI/RDI service is not available for JUE-251.

When a call arrives to JUE-501/JUE-251, it informs a Multiple Subscriber Number (MSN) programmed by the user to TA. TA can identify an arriving service type using this MSN.

Setup following items:

(1) MSN of TA with following TA's manual

(2) MSN of JUE-501/JUE-251 with following below setting procedure.

[Connection sample]

Condition

- For telephone (MSN=1, transfer capability=Speech)
- For Fax (MSN=2, transfer capability=Audio)
- For PC (MSN=3, transfer capability=UDI･RDI)

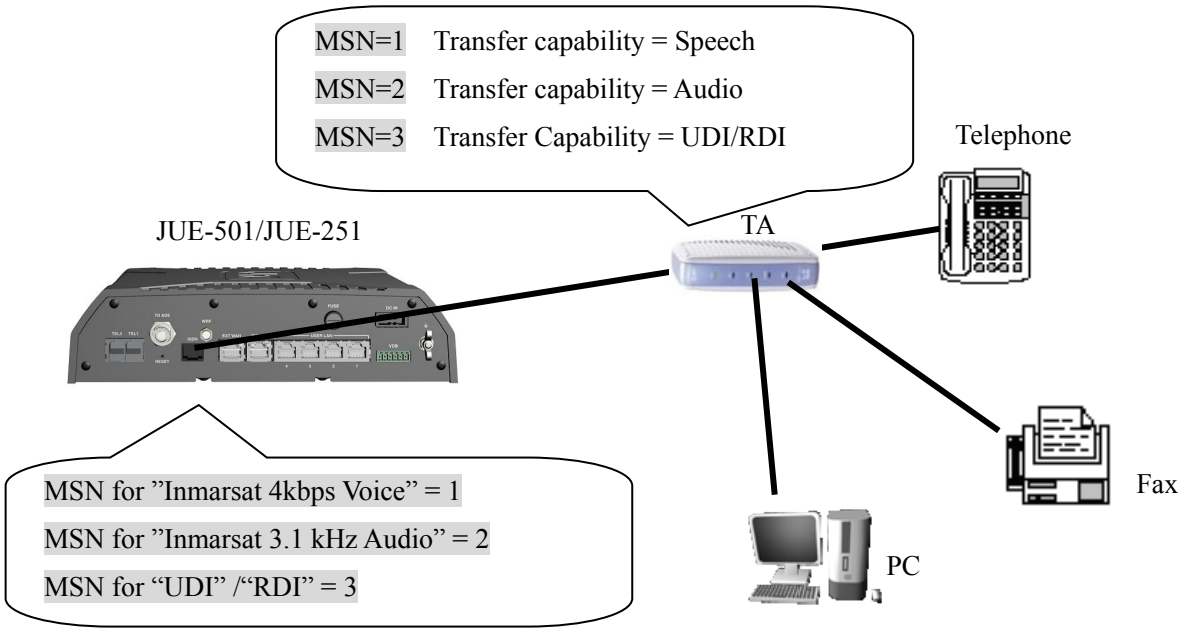


Fig.8b Connection sample of ISDN port

Setting MSN using Handset [MSN edit menu]

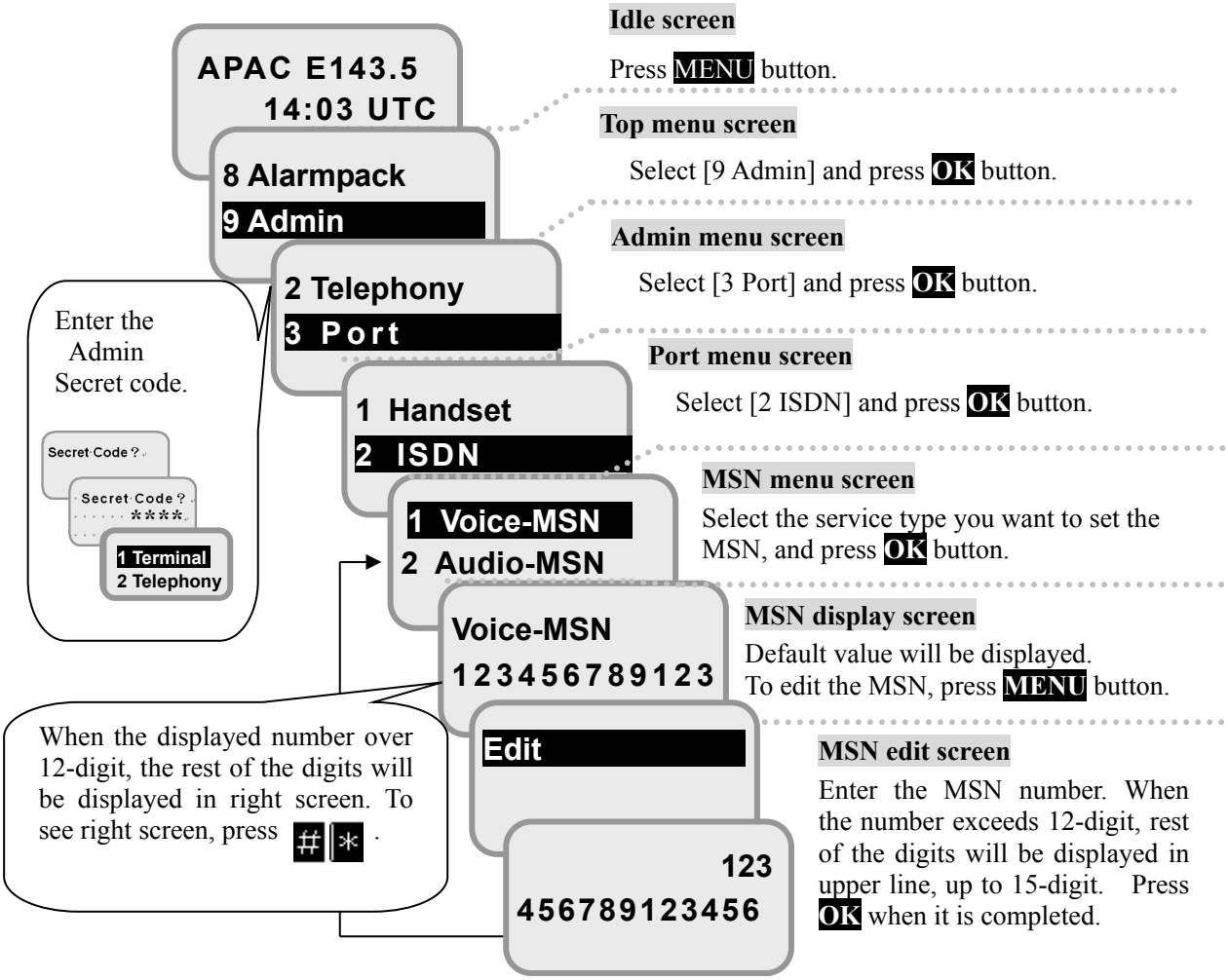


Fig. 8c Flow of Setting MSN using Handset [MSN menu]

NOTE

MSN display screen (left)

Voice-MSN
123456789123

MSN display screen (right)

Voice-MSN
456

MSN edit screen

123
456789123456

MSN edit screen shows whole digits (even the number exceeds 12-digit) in single screen by showing 1st to 3rd digits in upper line, unlike the MSN display screen shows the 13th to 15th digits to next (right) screen.

Fig. 8d Displaying digits of MSN display/edit screens

Setting MSN using Web Menu [MSN edit menu]

To set MSN using Web menu, refer to [Sec. 6.5.3.2 Set MSN and ISDN Service Type (ISDN Screen) (p6-43)].

Dial-up procedure from ISDN port

00 Country Code Area Code Subscriber's number #

Example) Placing a call to +81-422-45-9111, in Japan→**0081422459111 #**

NOTE

Making a call using Secret Code and forced setting service is not supported.

Regarding the Redial calling and the Speed Dialing, it is depending on the specification of your TA.

9. Maintenance

The life of the JUE-501/JUE-251 depends on how well the equipment is maintained. Check the following items from time to time to ensure the best performance of your JUE-501/JUE-251.

1) Keep the input voltage within the specified range (+21VDC to +31VDC).
2) Record the transmitting power (EIRP) and the receiving level (REC) once at the time when the equipment is in good order. During the operation, compare the EIRP and REC level with the recorded normal values. This deed helps you to remove a fault before it develops into a serious one.

Daily maintenance

The following table shows daily maintenance with general tools.

⚠ WARNING

Do not troubleshoot or repair the internal equipment of the JUE-501/JUE-251 by yourself.
Any electrical work by any person other than our trained maintenance staff may cause fire or abnormal operation of this equipment or electrical shock for you. This equipment meets the technical standard of the Ministry of Internal affairs and Communications.

Do not adjust the internal circuit without a calibrated measuring instrument or exchange the parts because the internal circuit has been adjusted finely to specifications. If the equipment works abnormally, please contact the purchasing dealer.

Table 9.1 Daily maintenance

No.	Item	Maintenance
1	Cleaning	Clean the panel, switch, top cover, and the button cover with a soft cloth.
2	Fastening	Fasten the loose screw, nut, switch, and the connector.

NOTE

Please access the URL below and register customer's information to get detailed technical information and to enable your warranty.
URL: http://www.registration.msd.jp/msdroot/FBB/FBB/Page/TopMenu.aspx
If accessing the Web site is unavailable, please send Installation Report (prepared by your agency) or Product Registration Sheet (attached on the last page of this manual) to JRC office.

This page is remained as a blank.

10. After-sales service

When ordering repair

When a fault has been detected, refer to the "Appendix M. Trouble shooting and FAQ". If it is not improved, turn OFF and ON the power switch of main unit to reboot. Still it persists, stop operation and contact the purchasing dealer.

During the guarantee term;

JRC will repair the equipment or exchange any parts proven to be malfunctioning under normal use. The user is requested to have operated the equipment as instructed in the instruction manual.

In the following cases, guarantee service is not accepted.

- Product Registration to JRC has not been made immediately after the JUE-501/JUE-251 was commissioned. Product Registration to JRC is made by accessing to "http://www.registration.msd.jp/msdroot/FBB/FBB/Page/TopMenu.aspx" or sending Installation Report (prepared by agency) or Product Registration Sheet (attached on the last page of this manual) to JRC.

-The equipment has been subjected to accident, abuse, or misuse, shipping damage, alternations, incorrect and/or non-authorized service.

-The trouble, failure, malfunctioning and whatever is due to Act of God, fire, flood, explosion, accident, strikes, labor troubles or other industrial disputes, war (declared or undeclared), armed conflict, civil disturbance, embargoes, blockades, legal restrictions, riots, insurrections or any other cause beyond the control of JRC and the purchaser.

Service out of the guarantee term;

If the function is recoverable by a repair, JRC will arrange a charged service on customer's demand.

To request a guarantee or non-guarantee service, please inform us of;

+Ship's name, model name, date of manufacture, serial number, and MES ID.

+How trouble arose. Go into details as much as possible.

+Name of the office, organization etc of the vessel, the contact place and the telephone/fax number.

Recommendation of professional maintenance

The performance of the set may degrade due to the aging of parts and so on, although the rate depends on how the equipment is used.

Maintenance by professional service engineer other than daily check by ship's crew is recommended.

For this professional maintenance, please contact the purchasing dealer. This is a charged service.

Disposal of the JUE-501/JUE-251

Follow the rule of the pertinent local government when you abandon the JUE-501/JUE-251 (ADE).

For details, contact the dealer, our service office (Refer to the list of offices at the end of the volume) or a concerned local government.

11. Specification

JUE-501 (ADE, BDE)

1. Inmarsat FleetBroadband MES type		Class 8
2. Frequency	Transmission	1626.5 to 1660.5 MHz, 1668.0 to 1675.0 MHz
	Reception	1518.0 to 1559.0 MHz
3. Maximum E.I.R.P		+22.0dBW + 1/-2dB
4. G/T (Reception capacity)		-7.0dBK
5. Antenna	Type	54cmΦ flat
	Polarization	Right-Hand Circular Polarization (RHCP)
	Beam width	22degrees, in 3dB down direction
	Radome	Glass Fiber Reinforced Plastics (GFRP)
6. Modulation	O-QPSK π/4-QPSK 16QAM	For voice
7. Primary power	Voltage	Connecting with EXT PSU:100/110 or 89VAC to 266VAC +21.6VDC to +31.2VDC
	Current	2 A or less in reception
	Maximum	6.5A or less in transmission with connecting option
	Compass Safe Distance	Standard Compass : 0.6m Steering Compass: 0.7m
8. Dimension	ADE	Φ630mm × h683mm
	BDE	h65mm × w262mm ×d275mm
9. Mass	ADE	20kg
	BDE	4.5kg
10. Environmental conditions		
1) Temperature	ADE	-25˚C to +55˚C
	BDE	-25˚C to +55˚C (Handset -15˚C to +55˚C)
2) Relative humidity		Up to +40˚C, 95%
3) Oscillation		Compliance with IEC60945 4th edition

4) Ship's motion	Motion	Amplitude	Period
	Roll	+30˚	8 s
	Pitch	+10˚	6 s
	Yaw	+8˚	50 s
	Surge	+0.2g	
	Sway	+0.2g	
	Heave	+0.5g	

	Turning Rate Headway	+6˚ /s 30knots	1deg/s^2
5) Solar Radiation (ADE)	Infrared Radiation 500 watts / m^2 Ultraviolet Radiation 54watts / m^2		
6) Icing (ADE)	Up to 25mm		
7) Precipitation (ADE)	Up to 100mm / hour		
8) Wind (ADE)	Up to 100knots in operation		

JUE-251 (ADE, BDE)

1. Inmarsat FleetBroadband MES type		Class 9	
2. Frequency	Transmission Reception	1626.5 to 1660.5 MHz, 1668.0 to 1675.0MHz 1518.0 to 1559.0 MHz	
3. Maximum E.I.R.P		+15.1dBW + 1/-2dB	
4. G/T (Reception capacity)		-15.5dBK	
5. Antenna	Type Polarization Beam width Radome	25cm Φ flat Right-Hand Circular Polarization (RHCP) 40degrees, in 3dB down direction Acrylonitrile Butadiene Styrene (AES)	
6. Modulation	O-QPSK π /4-QPSK 16QAM	For voice	
7. Primary power	Voltage Current Maximum Compass Safe Distance	Connecting with EXT PSU:100/110 or 89VAC to 266VAC +21.6VDC to +31.2VDC 2 A or less in reception 6.5A or less in transmission with connecting option Standard Compass: 0.6m Steering Compass: 0.7m	
8. Dimension	ADE BDE	Φ285mm × h364mm h65mm × w262mm ×d275mm	
9. Mass	ADE BDE	4.7kg 4.5kg	
10. Environmental conditions			
1) Temperature	ADE BDE	-25˚C to +55˚C -25˚C to +55˚C (Handset -15˚C to +55˚C)	
2) Relative humidity		Up to +40˚C, 95%	
3) Oscillation	Compliance with IEC60945 4th edition		
4) Ship's motion	Motion	Amplitude	Period

	Roll	+30˚	8 s
	Pitch	+10˚	6 s
	Yaw	+8˚	50 s
	Surge	+0.2g	
	Sway	+0.2g	
	Heave	+0.5g	
	Turning Rate	+6˚ /s	1deg/s^2
	Headway	30knots	
5) Solar Radiation (ADE)	Infrared Radiation 500 watts / m^2 Ultraviolet Radiation 54watts / m^2		
6) Icing (ADE)	Up to 25mm		
7) Precipitation (ADE)	Up to 100mm / hour		
8) Wind (ADE)	Up to 100knots in operation		

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Appendix A Handset menu tree

A.1 JUE-501/JUE-251 Handset menus for all users (1)

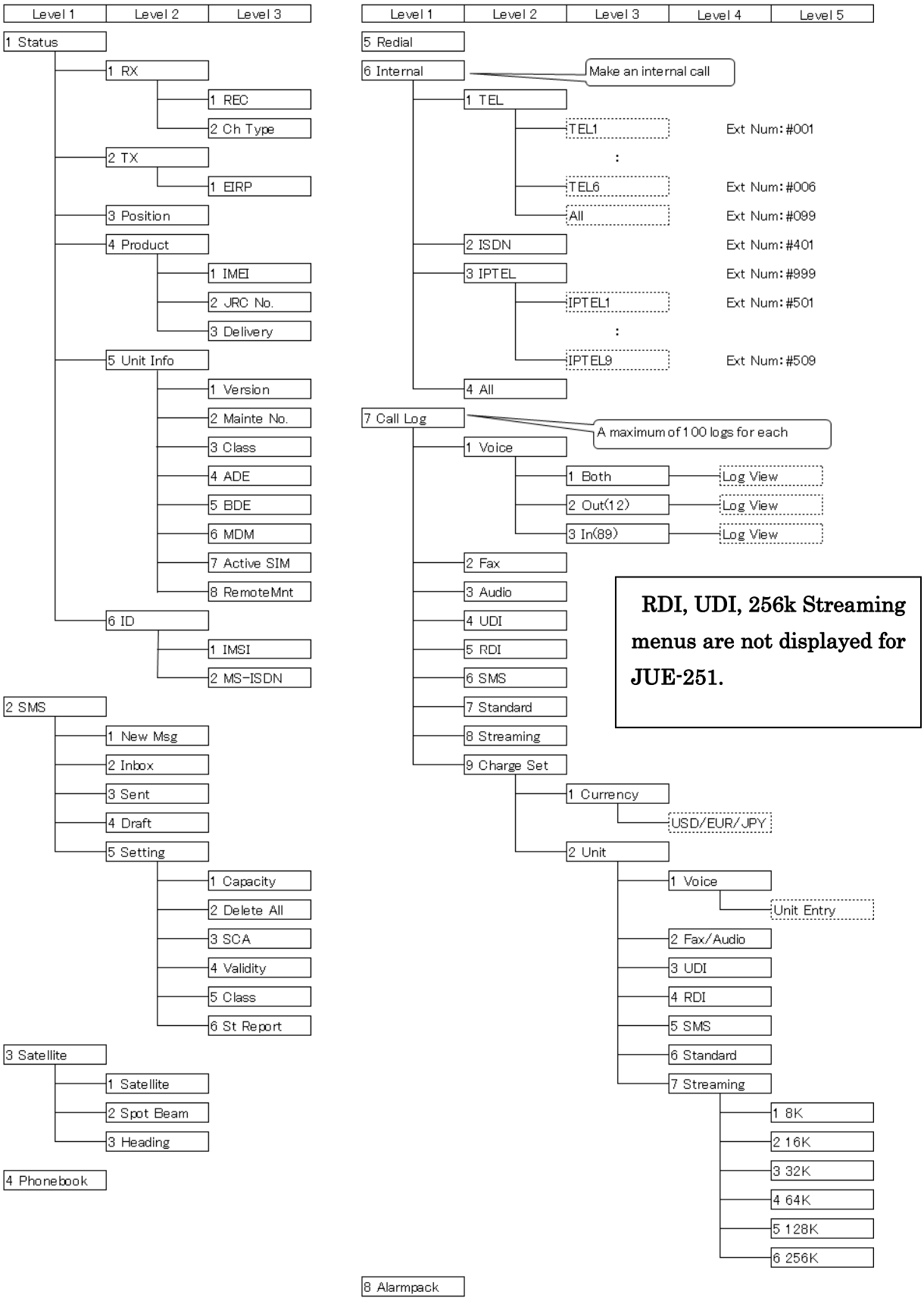


Fig.A.1 Handset menus for all users (1) menu tree

A.2 JUE-501/JUE-251 Handset menus for all users (2) SMS menu detail

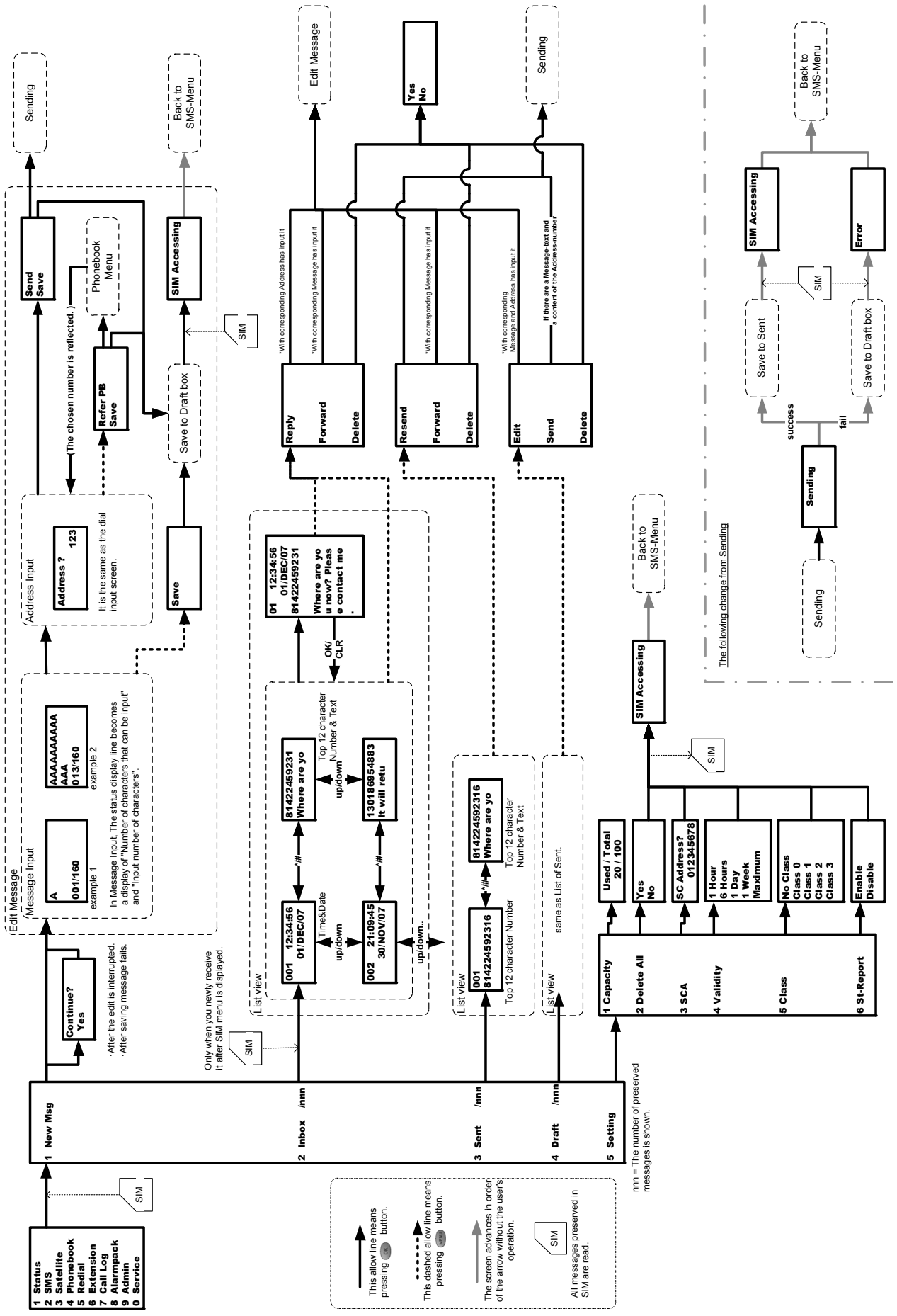


Fig. A.2 Handset menus for all users (2) SMS menu detail

A.3 JUE-501/JUE-251 Handset menus for Admin users

Fig A.3.1

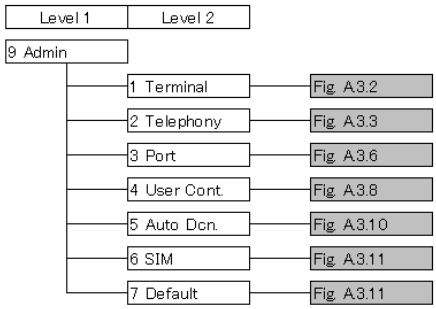


Fig A.3.2

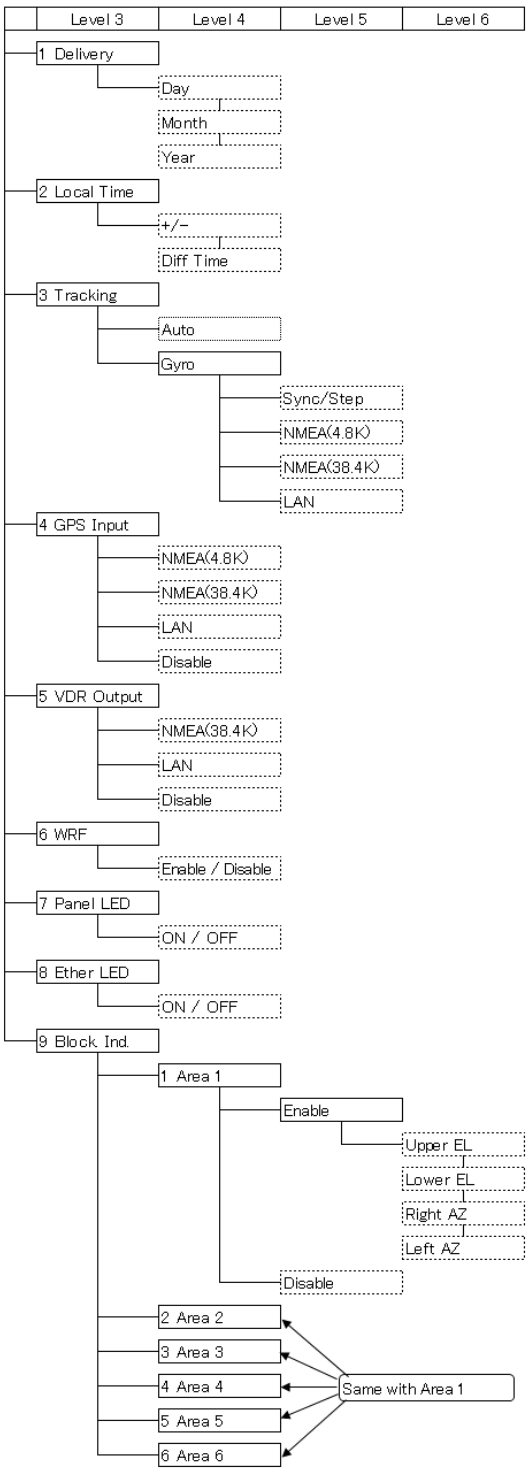
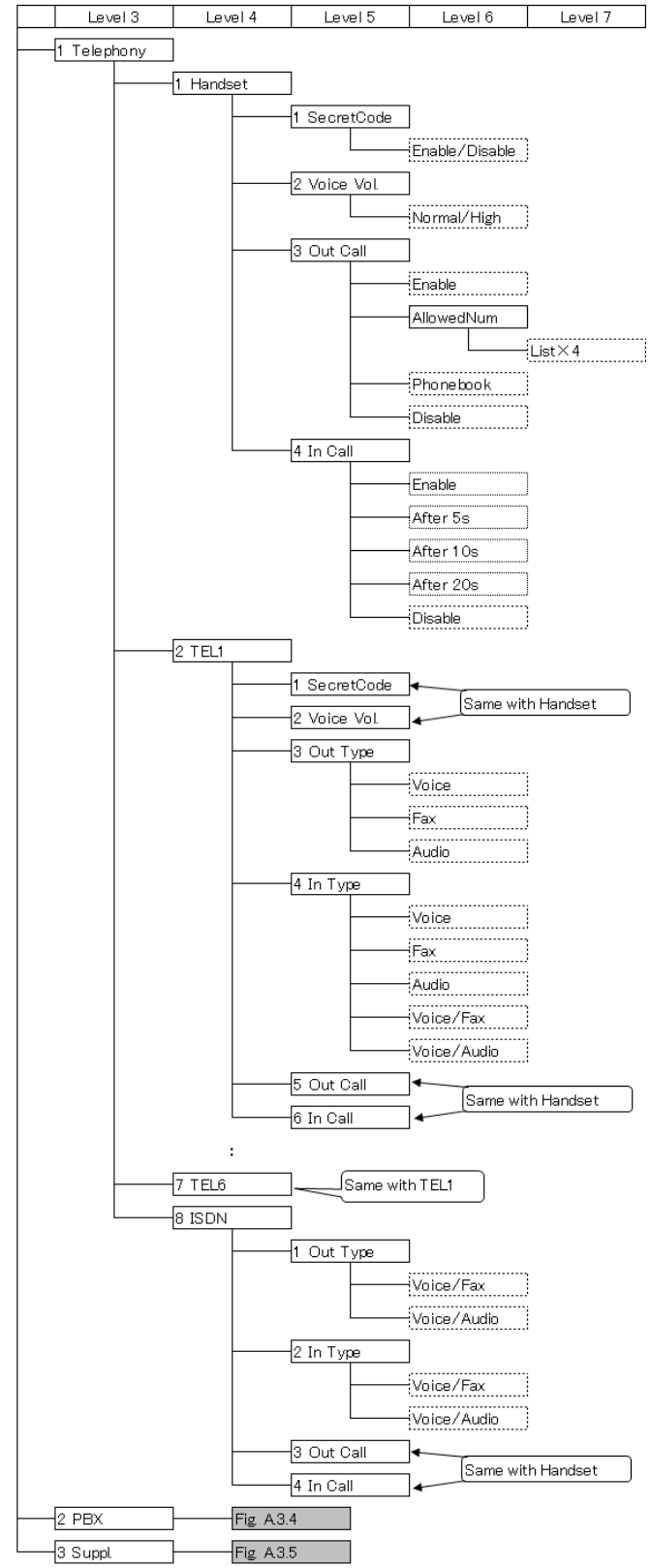


Fig A.3.3



RDI, UDI, 256k Streaming menus are not displayed for JUE-251.

Appendix A Handset menu tree

Fig A3.4

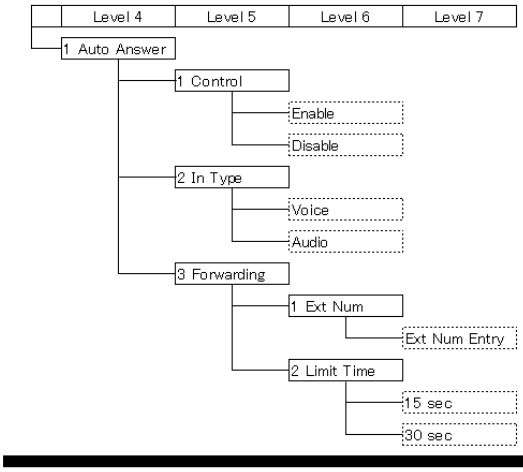


Fig A3.5

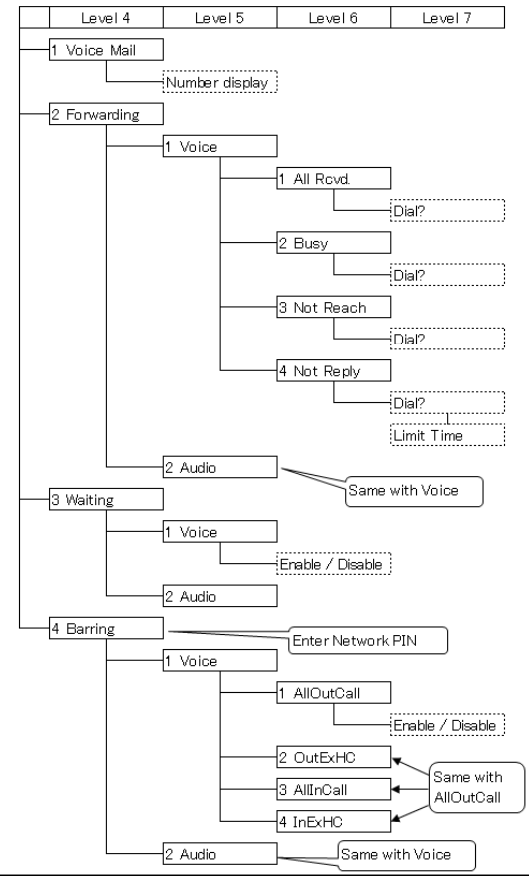


Fig A3.8

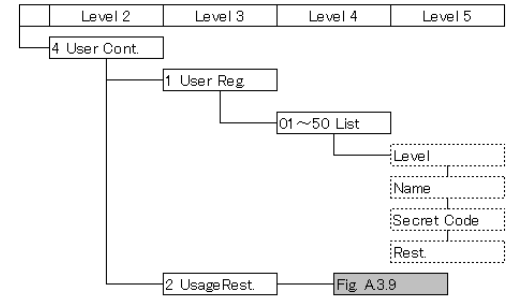
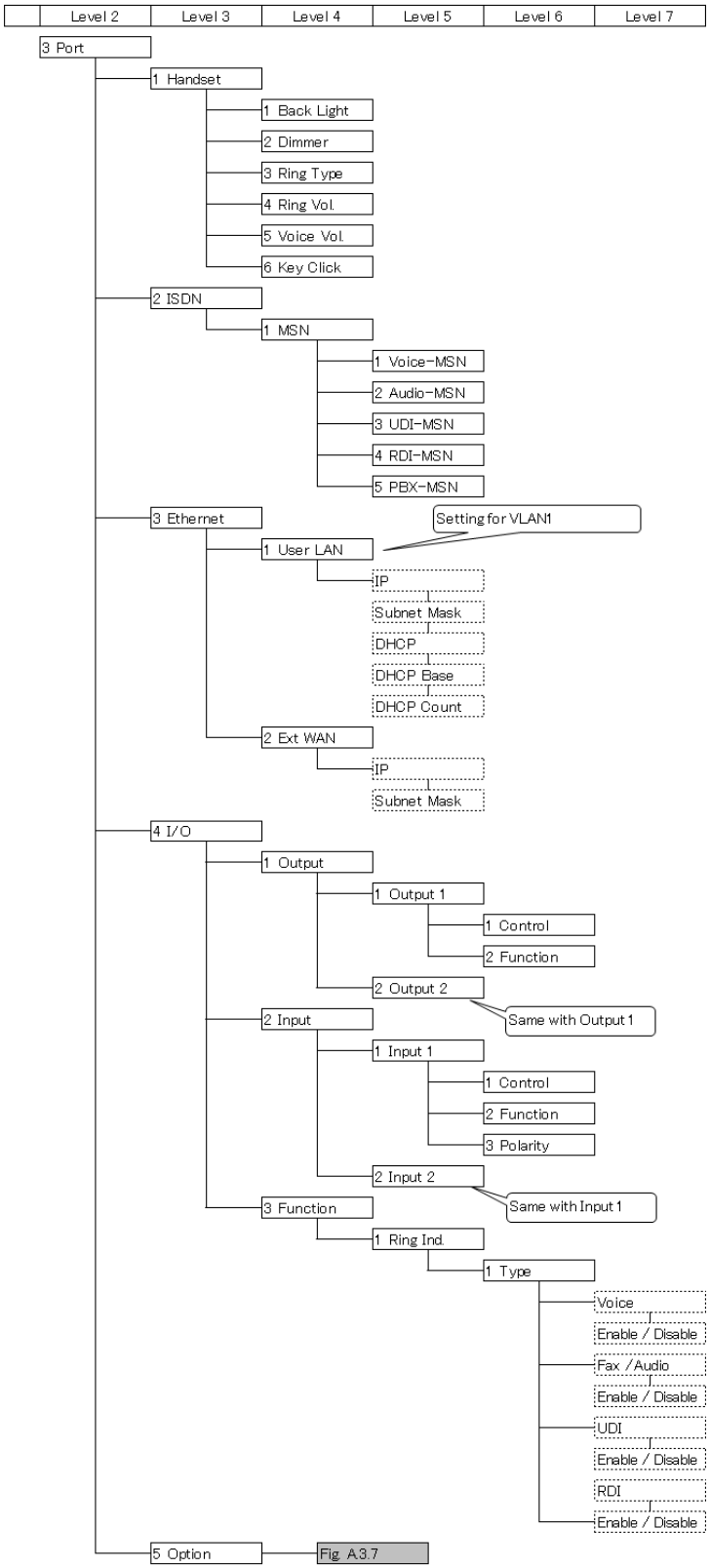
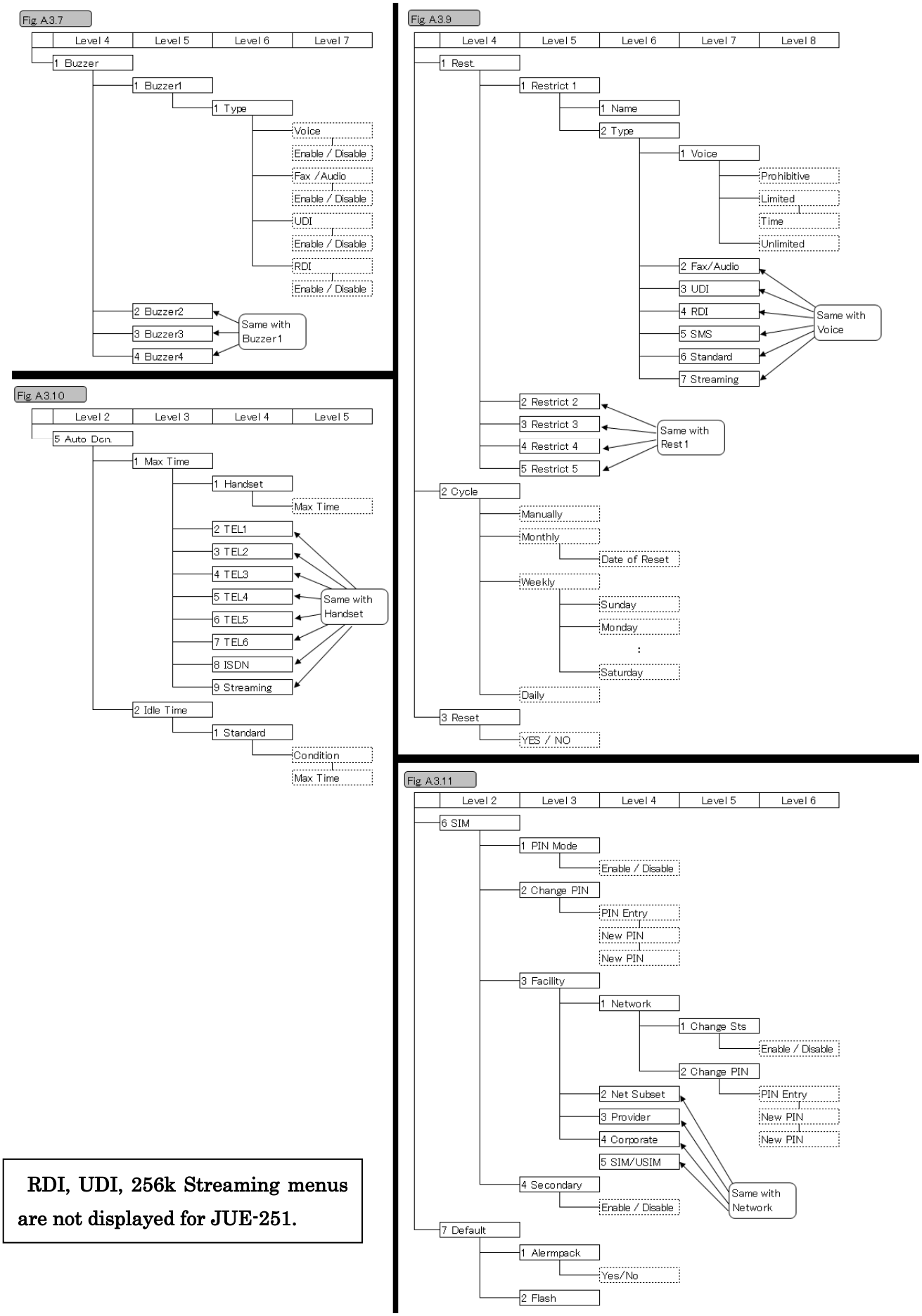


Fig A3.6





RDI, UDI, 256k Streaming menus are not displayed for JUE-251.

Fig. A.3 Handset menus for Admin users

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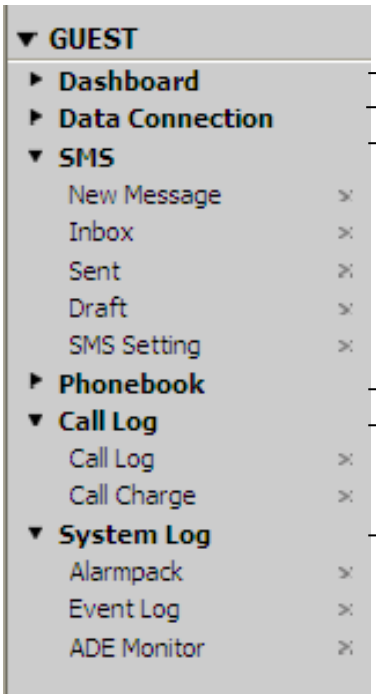
Appendix B Web menu tree

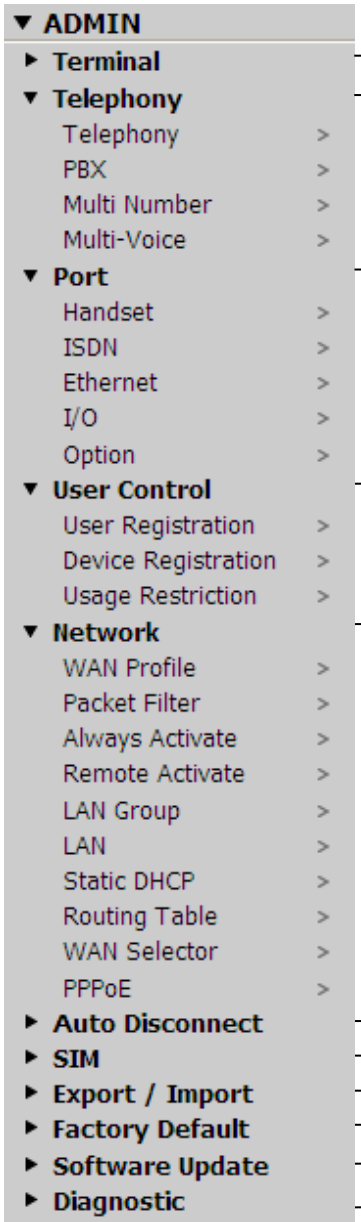
B.1 For JUE-501/JUE-251 all user



*******Guest Menu*******

- Dashboard screen
  - Check status of JUE-501/JUE-251.
  - Connect to the internet quickly.
  - Check active sessions and call.
  - Set communicating satellite.
  - Set Web screen.
- Data Connection screen
  - Check connection list and cut other connection.
  - Connect to the internet.
- SMS menu
  - Write and send new SMS message.
  - Check received message
  - Check sent message.
  - Check saved message
  - Check message capacity, delete all messages and set the details of SMS Service.
- Phonebook screen
  - Check, file, edit and delete parties on Phonebook.
- Call Log menu
  - Check and file Call Log.
  - Set Call Charge calculation.
- System Log menu
  - Check and file Alarmpack.
  - Check and file Event Log.
  - Check ADE and file the status.

B.2 For JUE-501/JUE-251 Admin user



*******Admin Menu*******

- Terminal screen
  - Set basic data of JUE-501/JUE-251.
- Telephony menu
  - Set up each port.
  - Set auto answering telephone.
  - Set Multi Number.
  - Set Multi-Voice.
- Port menu
  - Adjust Handset.
  - Set MSN for ISDN port.
  - Set User LAN and Ext WAN.
  - Set Input/Output signal.
  - Set option buzzers.
- User Control menu
  - Register users and devices.
  - Restrict communication of users and devices.
- Network menu
  - Set WAN Profiles.
  - Set Packet Filter
  - Set permanent connection.
  - Establish remote connection.
  - Set LAN Groups.
  - Further settings for User LAN.
  - Use static IP address.
  - Set routing table.
  - Coexistence with other WAN.
  - Set PPPoE Server.
- Auto Disconnect screen
  - Disconnect automatically by time.
- SIM screen
  - Change PIN mode and code.
  - Use facility lock.
- Export / Import screen
  - Export or Import files.
- Factory Default screen
  - Reset to the factory default.
- Software Update
  - Update software of JUE-501/JUE-251.
- Diagnostic
  - Perform diagnostic test.

Appendix C Junction Board

C.1 Junction Board appearance

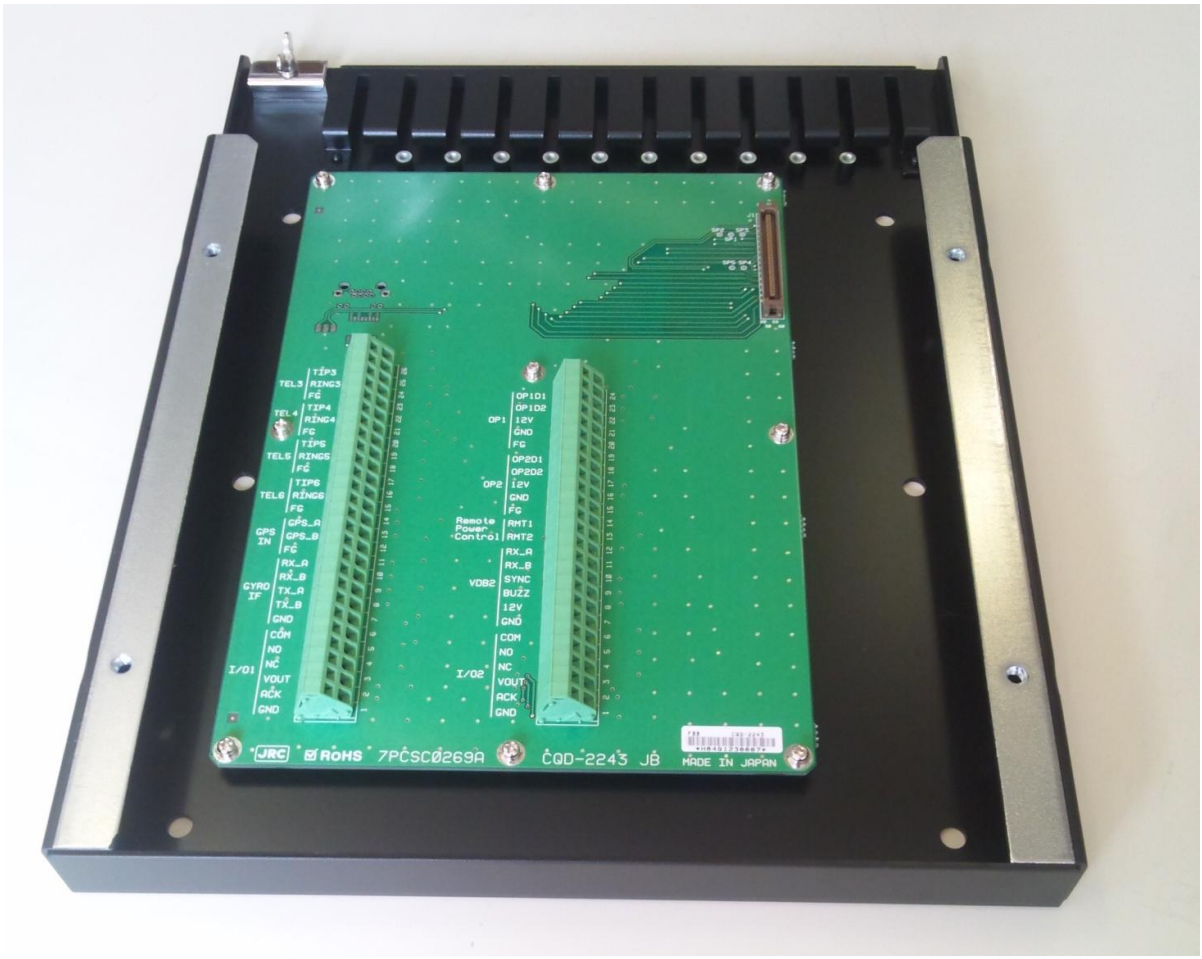
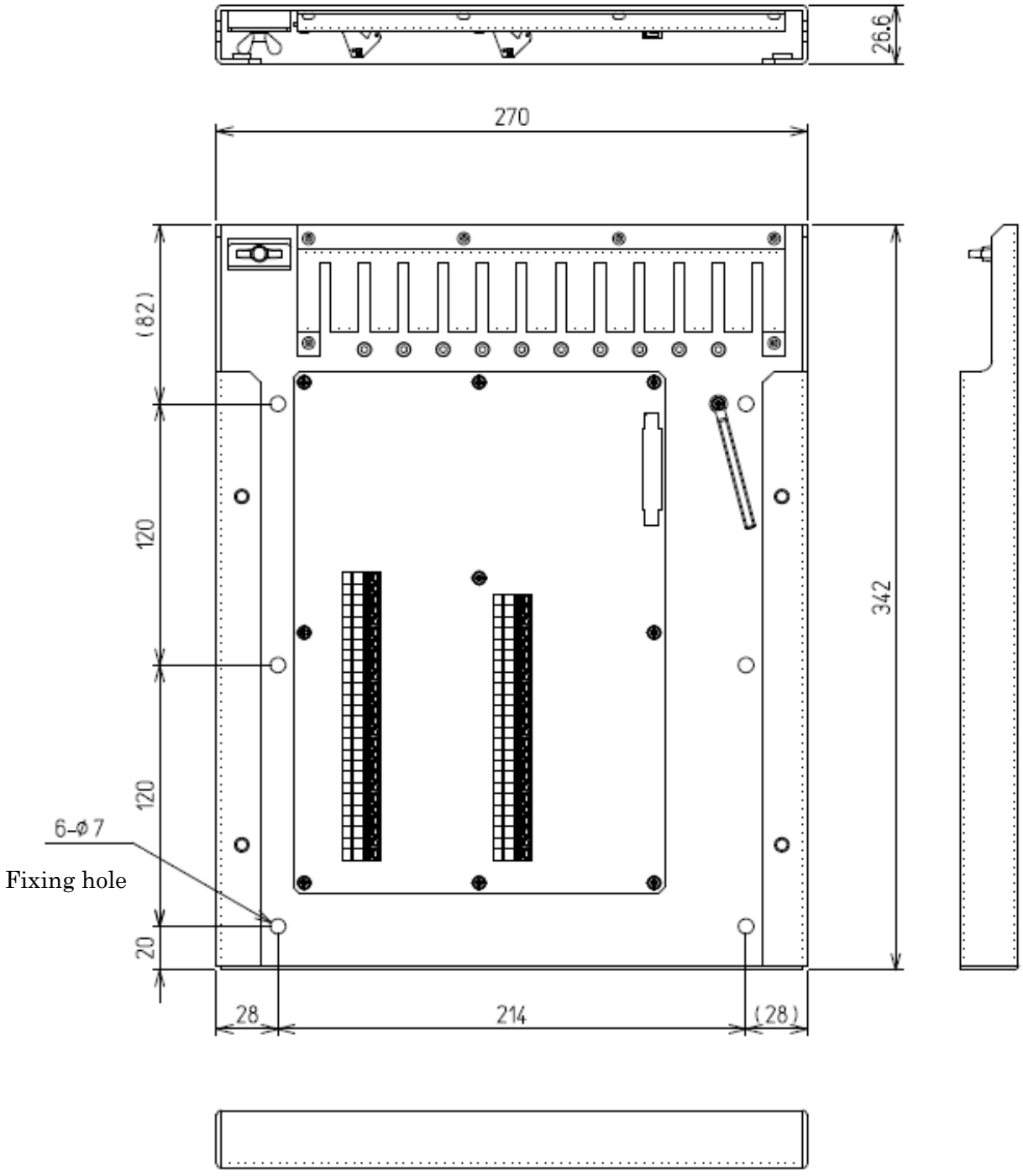


Fig. C.1 Junction Board

C.2 Dimensional drawing of JB



Unit: mm

Mass. approx. 2.0 kg

Fig. C.2 Dimensional drawing of JB

C.3 Screen display of Handset , when JB /GYRO are used (Corresponded to Chapter 4.1.4)

Turn on JUE-501/JUE-251 by pushing power switch of Main unit.

Initializing

Initialize

A LED of Main unit starts blinking.
About 90 seconds later, initializing is started and blinking [Initialize] text is displayed.

Changed

Initial Heading value requesting

Heading ?

Input Heading value when it is required.
Note) this screen appears when:

- GYRO type is SYNC/STEP, and an initial Heading value is not set yet.
- GYRO type is NMEA, and JUE-501/JUE-251 cannot obtain Heading information from GYRO.

Satellite searching

APAC E143.5
14:03 UTC
SAT SEARCH

[SAT SEARCH] text is displayed in the lowest, [Status] line. Satellite search is started.

Registering to network

APAC E143.5
14:03 UTC
REGISTERING

Satellite search is terminated and then [REGISTERING] text is displayed.
Registering to Inmarsat network is started.

Communication available status

JRC
APAC E143.5
14:03 UTC
CS PS READY

[READY] lamp lit.

READY ALARM COMM

Registering is terminated and [CS PS READY] text is displayed.
Various services are available. (About the operation after this screen, refer to chapter 4.1.4 or later).

Fig.C.3 Screen display of Handset (when JB/GYRO are used)

C.4 Unit Info menu , when JB/GYRO are used (Corresponded to Chapter 7.1.5)

In this menu, user can display the software version, maintenance No. and status of ADE/BDE.

By set to GYRO tracking, [4 BDE] screen is changed.

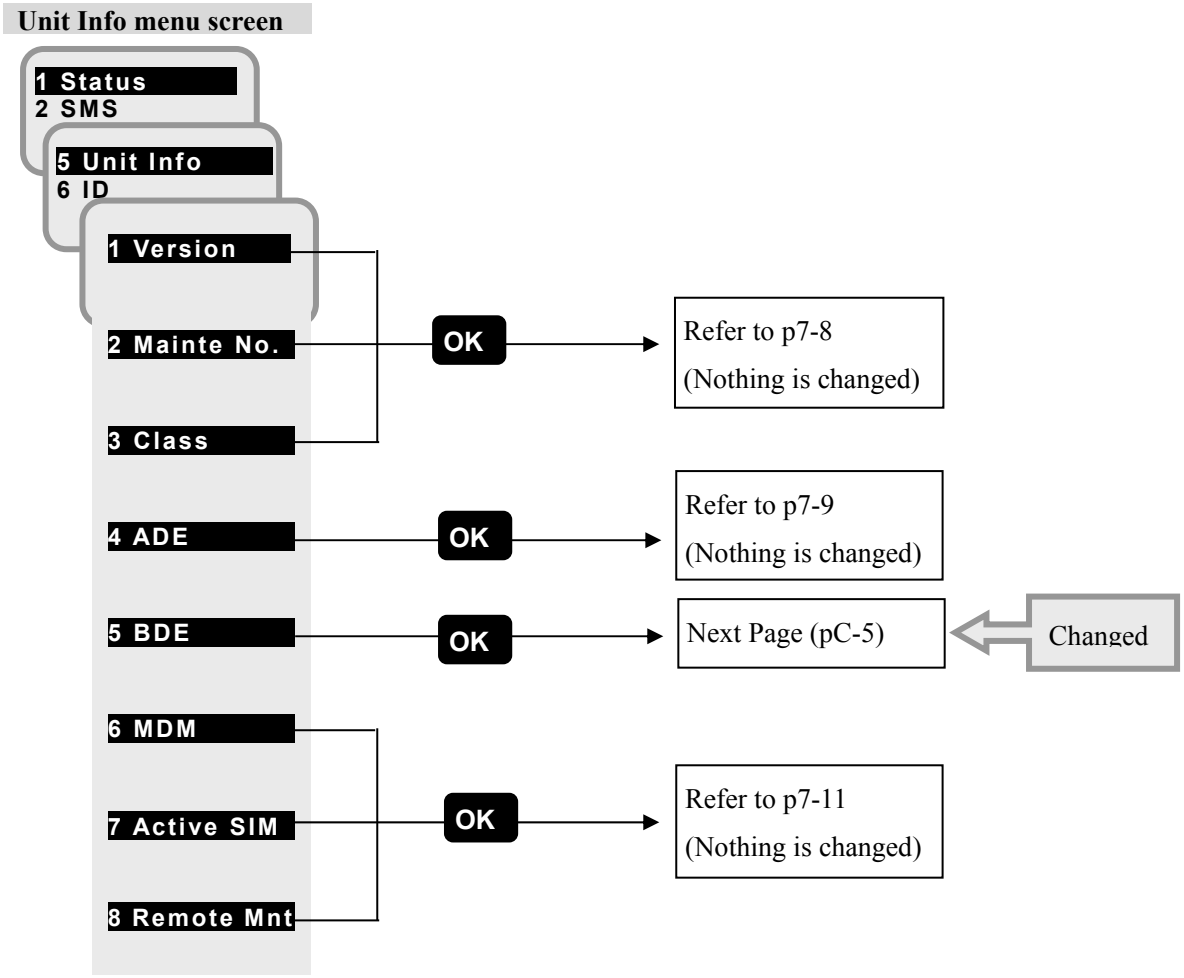
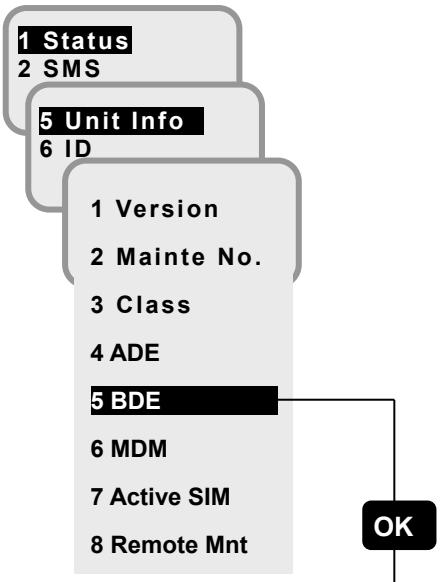


Fig.C.4a Unit Info menu



Unit Info menu screen

5.BDE status display screen

Heading: 0.0	…Heading value (only when GYRO is used)
Sat: APAC E143.5	…Using satellite
Spot Beam: 9	….Spot Beam No.
RNC ID 0x00	….Stellite Satioin ID
N 35.41 16 E 139.34 16	….Position
REC: 65	….RECeiving level
Ch Type T1Q	….Received channel type
Cable loss: 10.0	….ADE-BDE cable loss
IMSI: 12378-901234-5	….IMSI number stored in SIM card
Tracking: NSK	…..Satellite tracking type (Auto, Auto(Gyro), Sync/Step, LAN, NMEA(4.8k), NMEA(38.4k))
GPS: Int	….Using GPS (Internal / External)
GPS Status: 3D FIX	…. Position acquisition status of GPS
Ext GPS: 0	…. External GPS (OFF/ON)
ExtGPS Data: None	…. Receiving GPS sentence (None / GGA / ZDA)
Calib Err: 0	…. Cable Calibration error

Changed

Update Err: 0	….Software updating error
NSK DIPSW: 0x00	….NSK unit Dip switch
BDE Status: CS PS READY	…. BDE Status
Buzzer: 0000	….Buzzer Connection Status (0:Not connect, 1:Connect)
Button: 0000	….Button Connection Status (0:Not connect, 1:Connect)
ATT: 2	….BDE Attenuator (dB)
LAN: 000000	…. Ethernet port link Status (0:Not connect, 1:Connect)
SIP Status: Registered	…. Connection status to Inmarsat SIP server
IPTEL: 110100001	…. IPTEL Connection Status (0:Not connect, 1:Connect)
A:0000000000 00	Alarm bit display Contents are not changed from p7-10.
23/MAR/2012 12:44:30	…. Date
Tick: 0x000849AE5	…..The timer since system boot

*About [Unit selection menu for Alarm Pack (corresponded to Chapter 8.8.1), the screen is changed in the same way.

Fig.C.4b BDE status display screen (when JB/GYRO are used)

C.5 Satellite menu, when JB/GYRO are used (Corresponded to 7.1.3) (MENU+ 3)

Editing the Heading value is required after changed to GYRO tracking system.

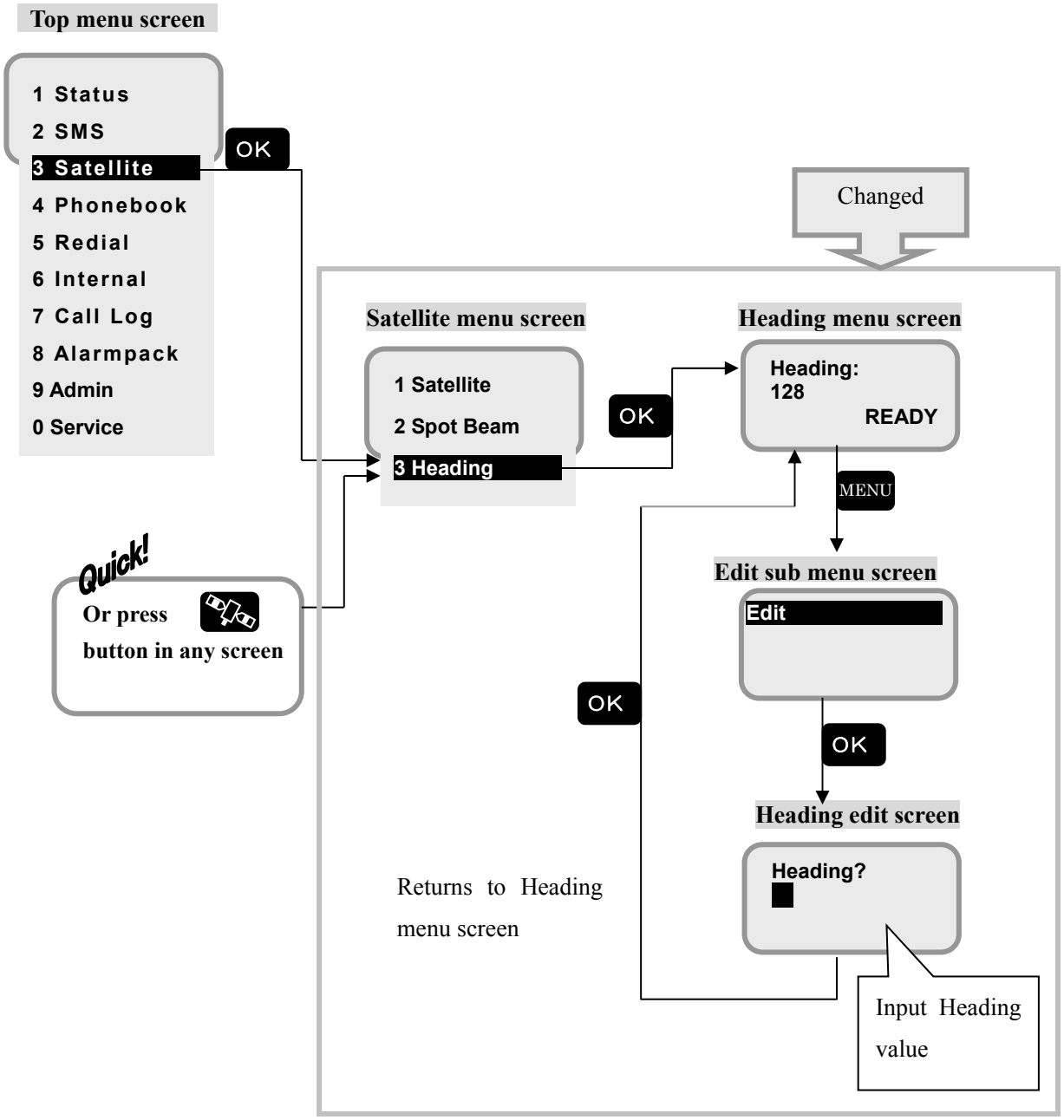


Fig.C.5 Heading menu screen of Satellite menu (when JB/GYRO are used)

Appendix D Software updating procedure

NOTE

We recommend you to backup your settings before updating software though it doesn't reset your settings.

Update JUE-501/JUE-251 software with following procedure a) to d).

* Do not connect any router or other equipments. Connect your PC directly to JUE-501/JUE-251.

a) Download the latest software for JUE-501/JUE-251

Confirm the website to check whether the latest software is uploaded or not, from the PC connected to Internet. Download if the latest software is uploaded. (For details, refer to "D.1. Downloading the latest software")

b) Open Software Update screen

Connect your PC directly to JUE-501/JUE-251 with Ethernet cable and launch JUE-501/JUE-251 Web menu system. Refer to [Sec. 6.1 Connect your PC to JUE-501/JUE-251] for details.
Open Software Update screen on your Web browser by selecting [Software Update] from menu panel.

c) Update the software of JUE-501/JUE-251

Select the file downloaded for software updating in step a) and click "Update" button. It may take more than 3 minutes to update software. Do not operate Web browser while you are updating software. (For details, refer to "D.2. Update software")

d) Confirm the updated software version

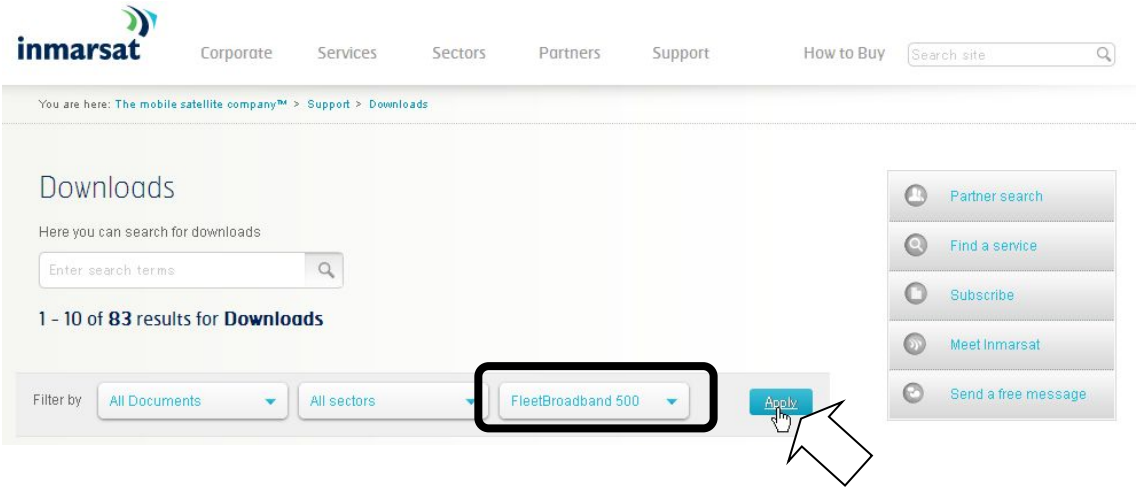
Confirm the software version after updating, to check that JUE-501/JUE-251 software is correctly updated or not. (For details, refer to "D.3. Confirm the update software version")

D.1. Downloading the latest software

The latest software of JUE-501/JUE-251 is uploaded on the HP of Inmarsat.

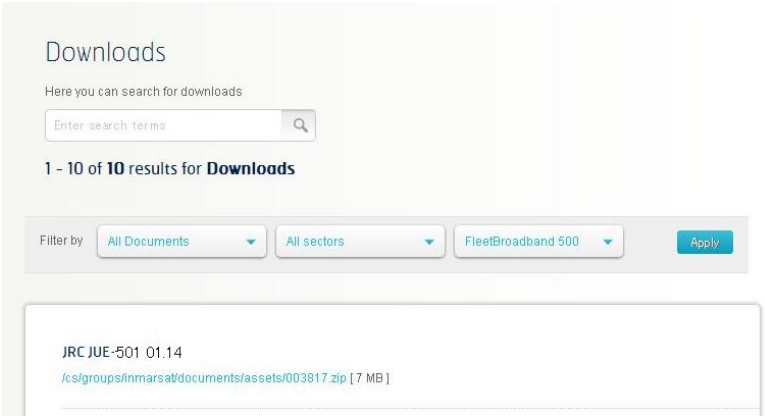
The URL is as follows:

http://www.inmarsat.com/Support/Downloads/index.htm



Select service and click [Apply] button.

Software available on the selected service is displayed.



If the software's version on the HP is larger than your JUE-501/JUE-251's software version, download the software from HP.

Software version of JUE-501/JUE-251 can be displayed on the Handset screen with following operation:

<1> Status - <5> Unit Info - <2> Mainte No.- BDE-App

D.2. Update software

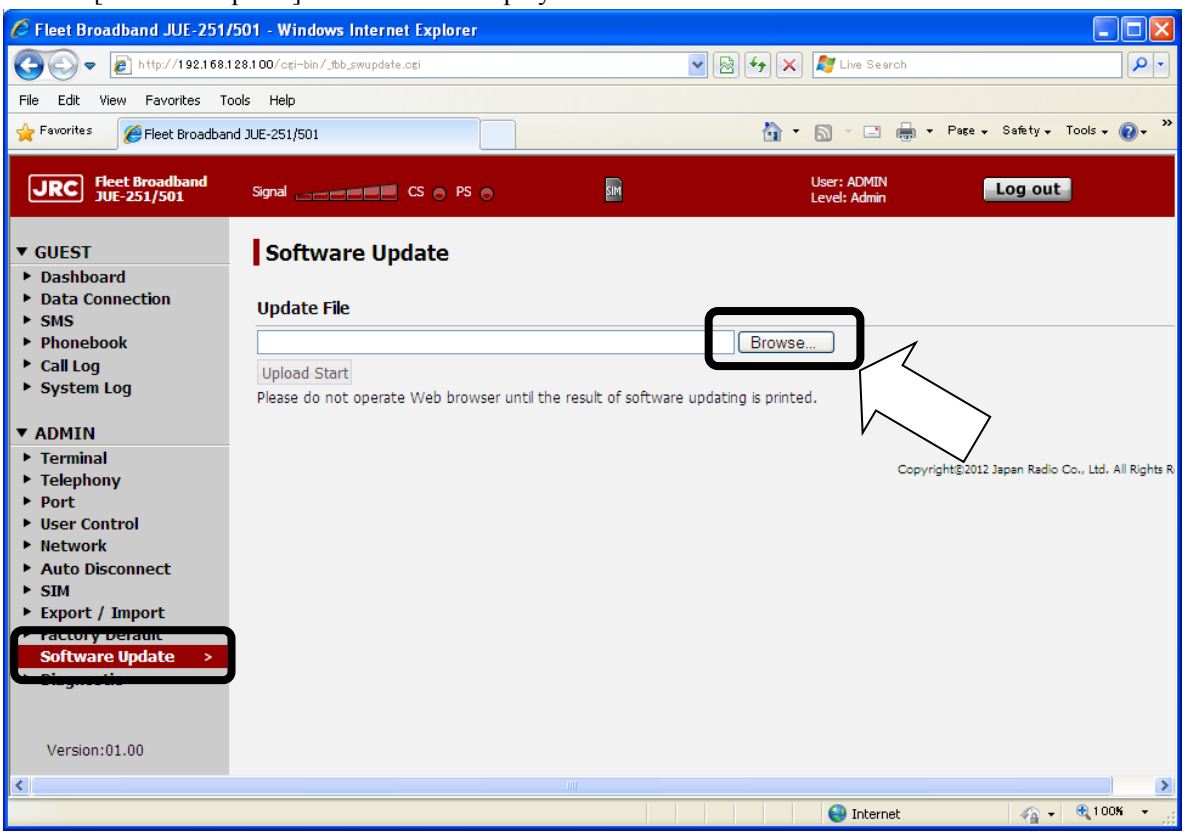
Note

・Do not turn OFF the power supply of JUE-501/JUE-251 and/or PC during the software forwarding or updating

・Application-software forwarding or updating takes up to 3 minutes.

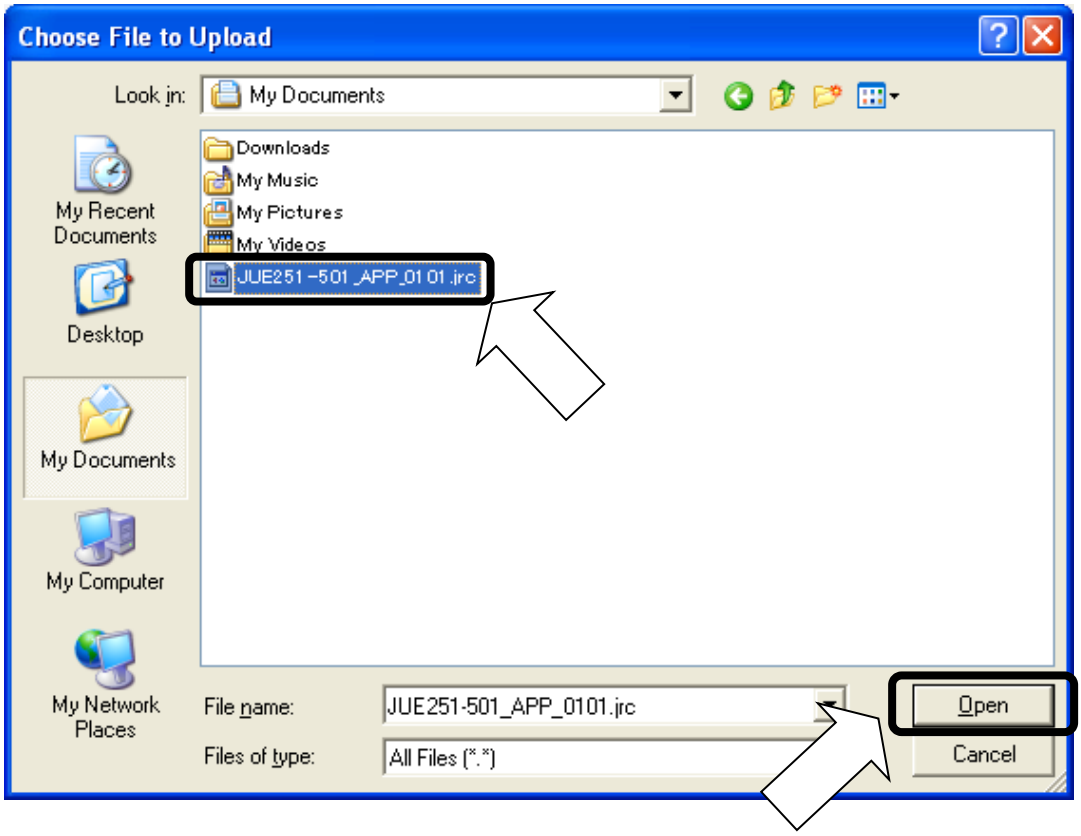
・Main-software updating can not be performed in main mode.

1. Click [Software Update] on the left [menu] panel.
   - [Software Update] screen will be displayed.

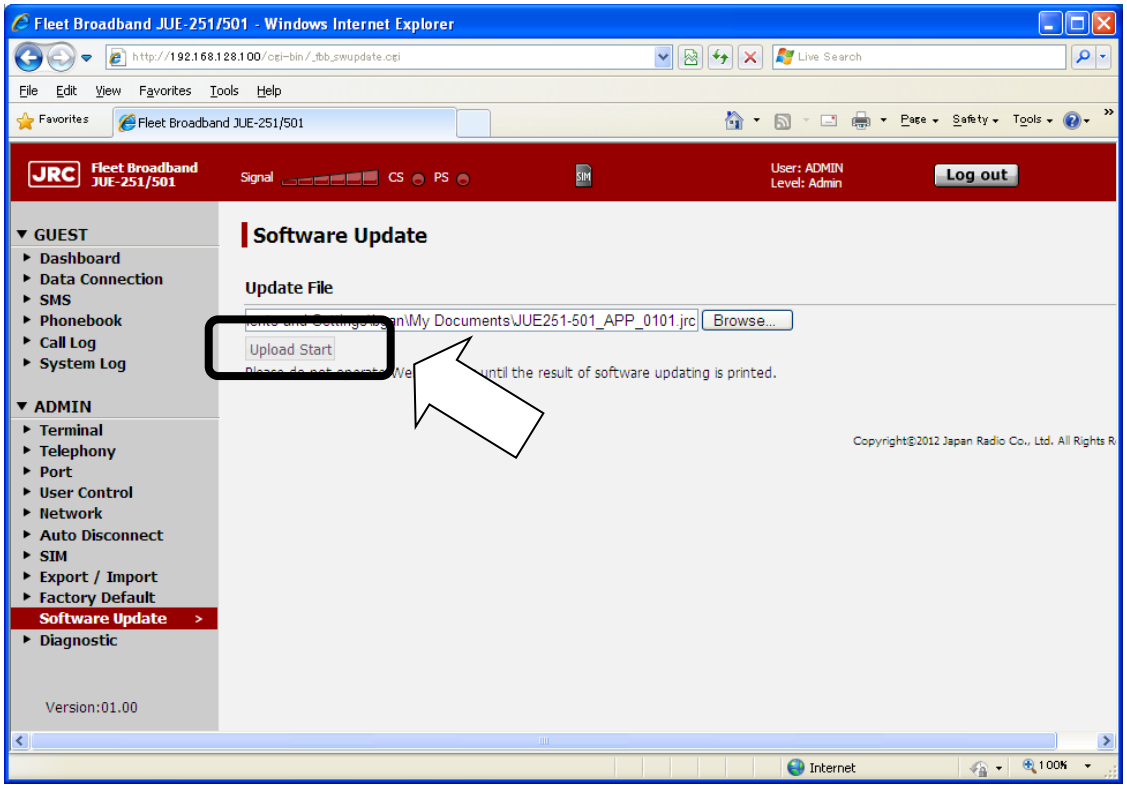


2. Click [Browse] button. Then file selection dialog will appear.

3. Select the file you have downloaded at the step a) or [D.1 Download the latest software] and click [Open].



4. Click [Upload Start] button.
   - The [Upload Start] button changes into disable (gray).
   - Wait until the update was completed and the result is printed.

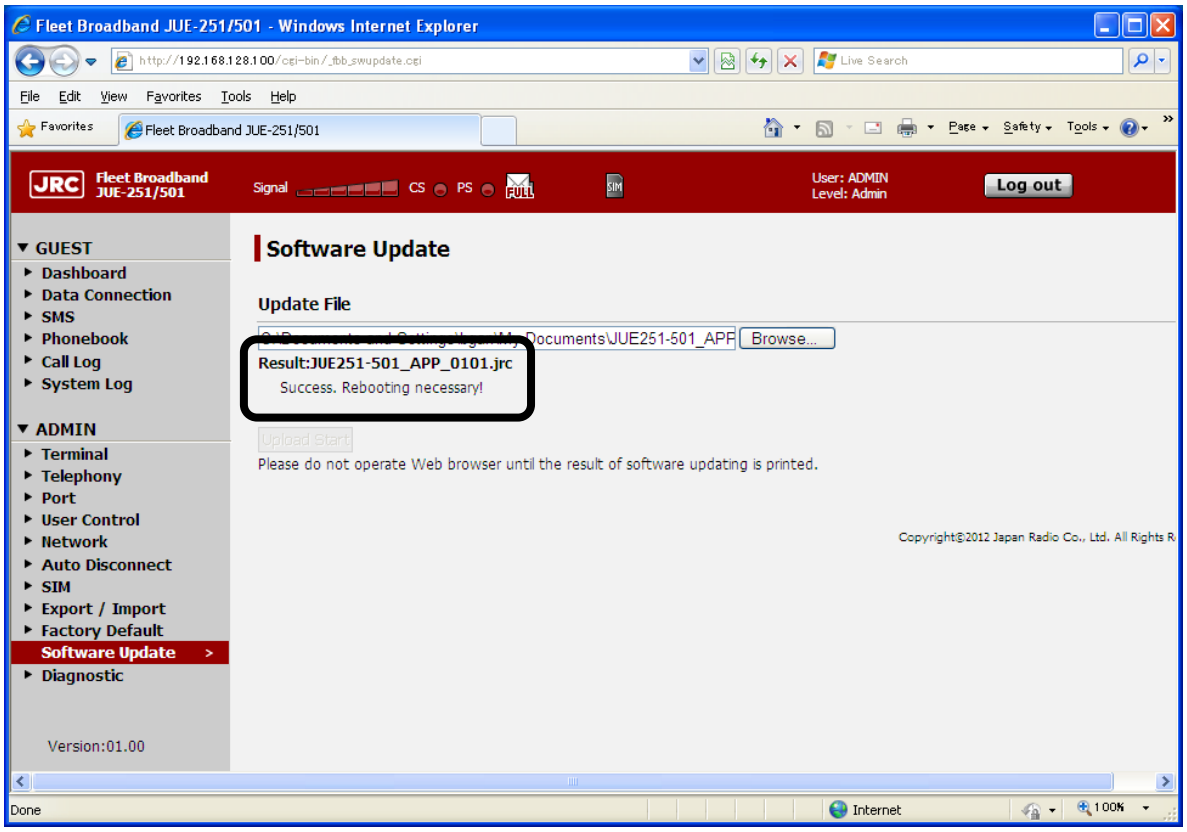


5. Check the result.

NOTE

- Please do not operate your Web browser until the result is printed on the screen.
- It may take more than 3 minutes.
- In the case of unresponsiveness in 5 minutes, please reload the Web page and retry software updating with following the software updating procedure (on page D-1 of this manual) from a) to d).

- [Success] is displayed when the update finished successfully. Then, reboot your system.
- [Error] is displayed when the update has failed. Go to the next page.



When software update is failed

Update is failed when “Update Error” is printed on your Web browser.

Check the error code below. Reboot your JUE-501/JUE-251 and retry updating with following the software updating procedure (on page D-1 of this manual) from a) to d).

If software updating fails continuously or the system would not boot, try to software update in safe mode. (Refer to “D.4. Software Updating Procedure in Safe Mode” for details.)

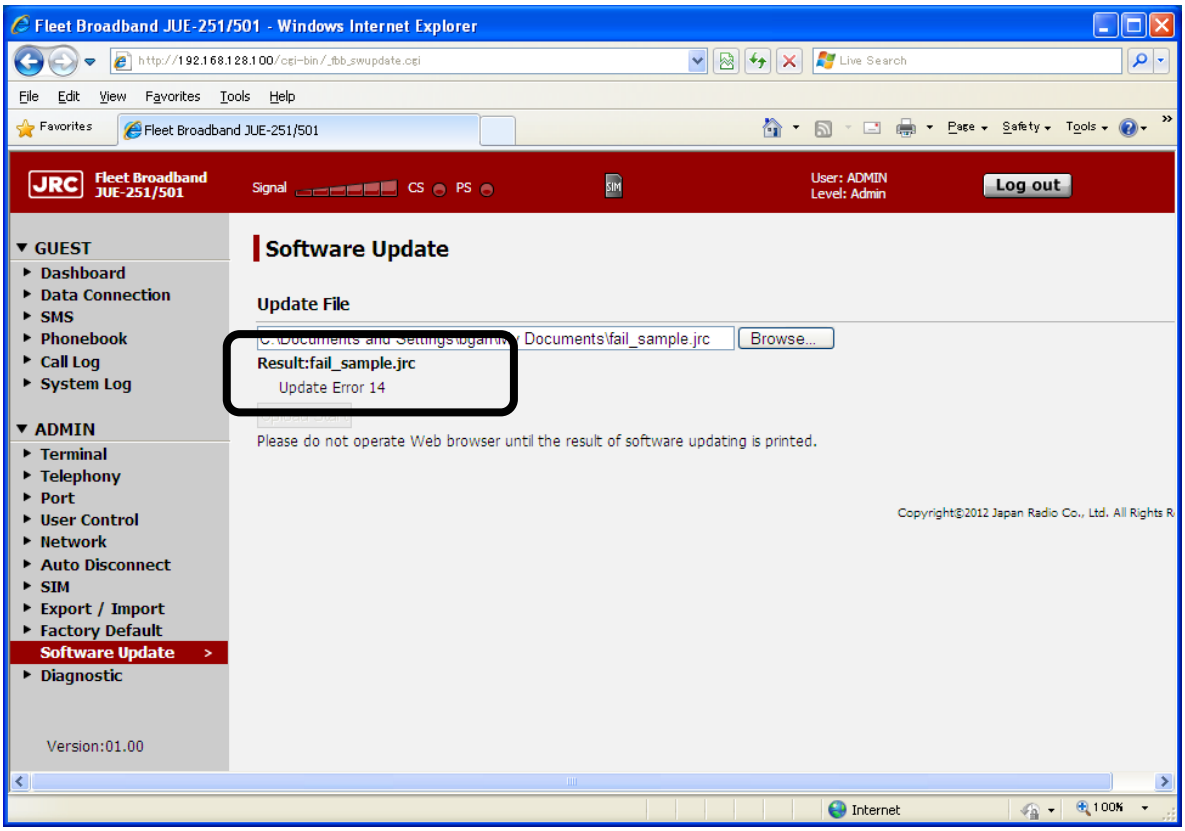


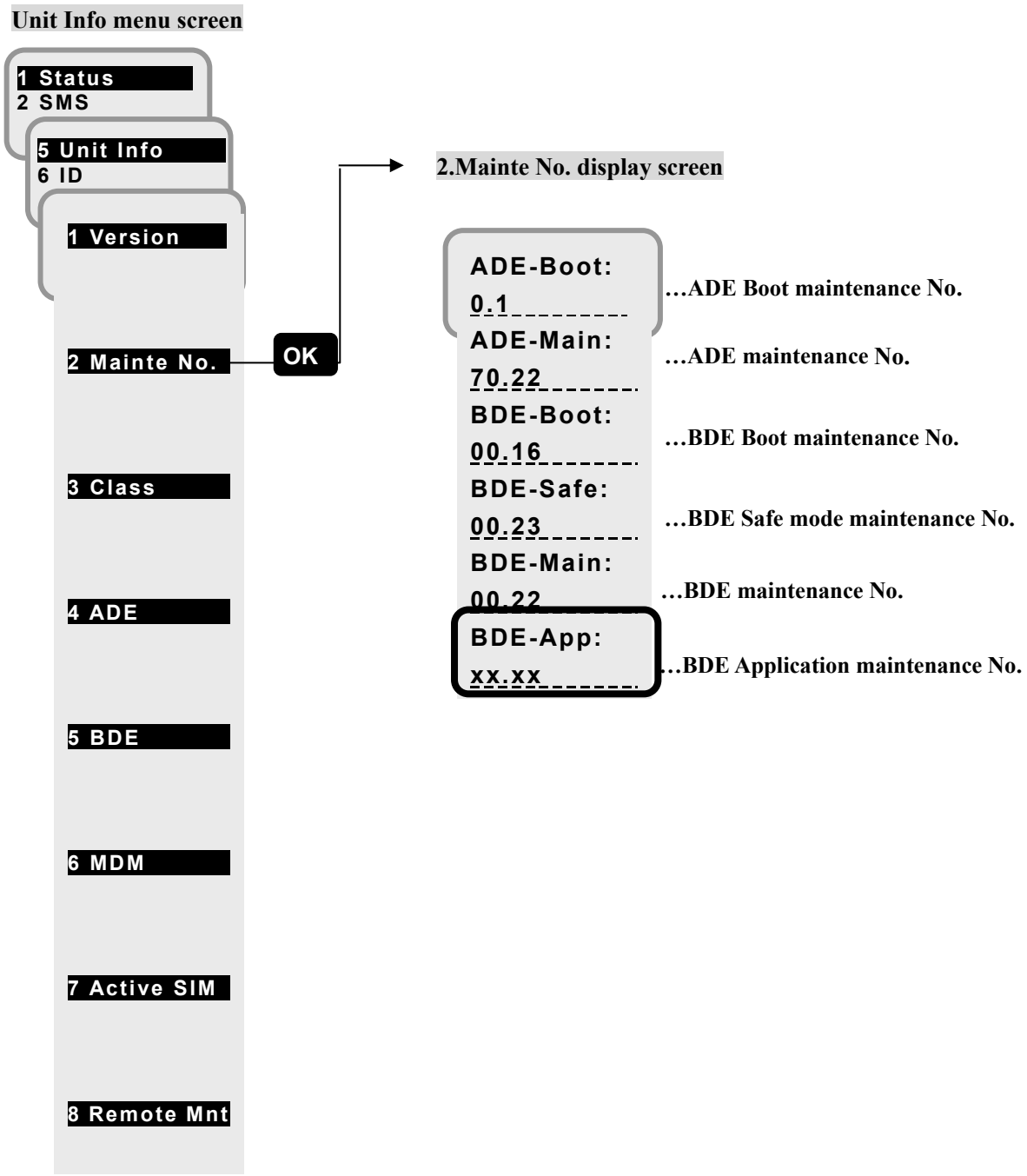
Table D.2 Software updating error code

Code	Supposed cause
1	The system is under the software updating already.
2~13 and 17	Internal error.
14~16	The file you uploaded is wrong file.
21~31	It failed in uploading the file.

D.3. Confirm the updated software version

Check that the software version is correctly updated or not, from the following the Handset menu, <1> Status - <5> Unit Info - <2> Mainte No. – BDE-App

When the update is succeeded, BDE-App No. is changed to the same number as the [xxxx] of the software file [JUE251-501_App_xxxx.jrc]



D.4. Software Updating Procedure in Safe Mode

If the system would not boot or software updating fails continuously, try to software update in safe mode with following procedure A) to E).

* Do not connect any router or other equipments. Connect your PC directly to JUE-501/JUE-251.
The IP address of the main unit is set to "192.168.128.100" in Safe Mode even when you have changed it in Main Mode.

NOTE

We recommend you to backup your settings before updating software though software update doesn't reset your settings.

A) Download the latest software for JUE-501/JUE-251

Confirm the website to check whether the latest software is uploaded or not, from the PC connected to Internet. Download if the latest software is uploaded. (For details, refer to "D.1. Downloading the latest software")

B) Start JUE-501/JUE-251 in Safe Mode

Safe mode is available by turning on the power supply with the FN (function) button (right side button of the Handset) pressed. (For details, refer to "D.4.1. Start in Safe Mode".)

C) Confirm the connection

JUE-501/JUE-251 software updating is executed by Web browser on your PC.
Prepare a PC and connect it to your JUE-501/JUE-251.
* Windows XP/Vista/7 32bit OS is required.
The IP address of the main unit is set to "192.168.128.100" in Safe Mode even when you have changed it in Main Mode. To connect your PC with JUE-501/JUE-251, refer to [Sec. 6.1 Connect your PC to JUE-501/JUE-251].

D) Update software

Launch your Web browser* and enter "192.168.128.100" to the URL box. The Safe Mode screen will appear. Click [Software Update] on the left [menu] panel. Then, Update the software by the downloaded software. (For details, refer to "D.4.3 Update software in safe mode")

* While JUE-501/JUE-251 officially supports Microsoft Internet Explorer7 and Mozilla Firefox3.6, their upper version can be available when they have compatible system.

E) Confirm the updated software version

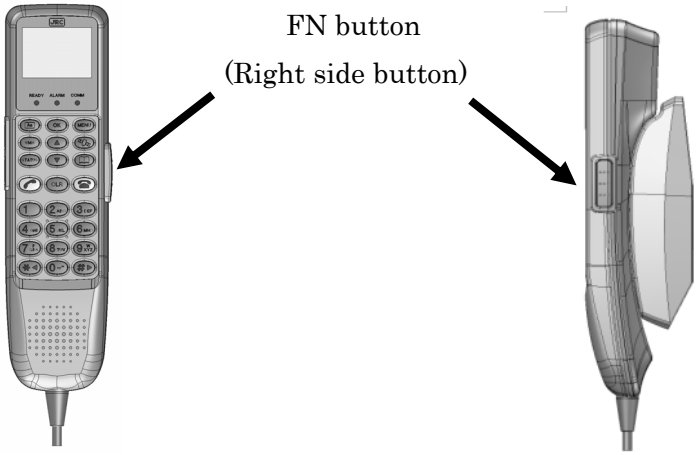
Confirm the software version after updating, to check that JUE-501/JUE-251 software is correctly updated or not. (For details, refer to "D.3. Confirm the update software version")

D.4.1 Start in Safe Mode

In this subsection, the way of starting JUE-501/JUE-251 in safe mode is described. Software updating and factory resetting is available in safe mode.

1. Turn OFF the power supply of JUE-501/JUE-251.

2. Turn ON the power supply of JUE-501/JUE-251 with pressing the FN (function) button (right side button of the Handset).



3. Leave your finger from FN button when Ready LED lamp of BDE lit in red.

* Nothing is displayed on Handset when the system has been booted in safe mode.

D.4.2 Set your PC

The IP address of the main unit is set to “192.168.128.100” in Safe Mode even when you have changed it in Main Mode. Do not connect any router or other equipments. Connect your PC directly to JUE-501/JUE-251.

For more information about connecting your PC with JUE-501/JUE-251, refer to [Sec.6.1 Connect Your PC to JUE-501/JUE-251 (p6-2)].

D.4.3 Update software in safe mode

Note

・Do not turn OFF the power supply of JUE-501/JUE-251 and/or PC during the software forwarding or updating

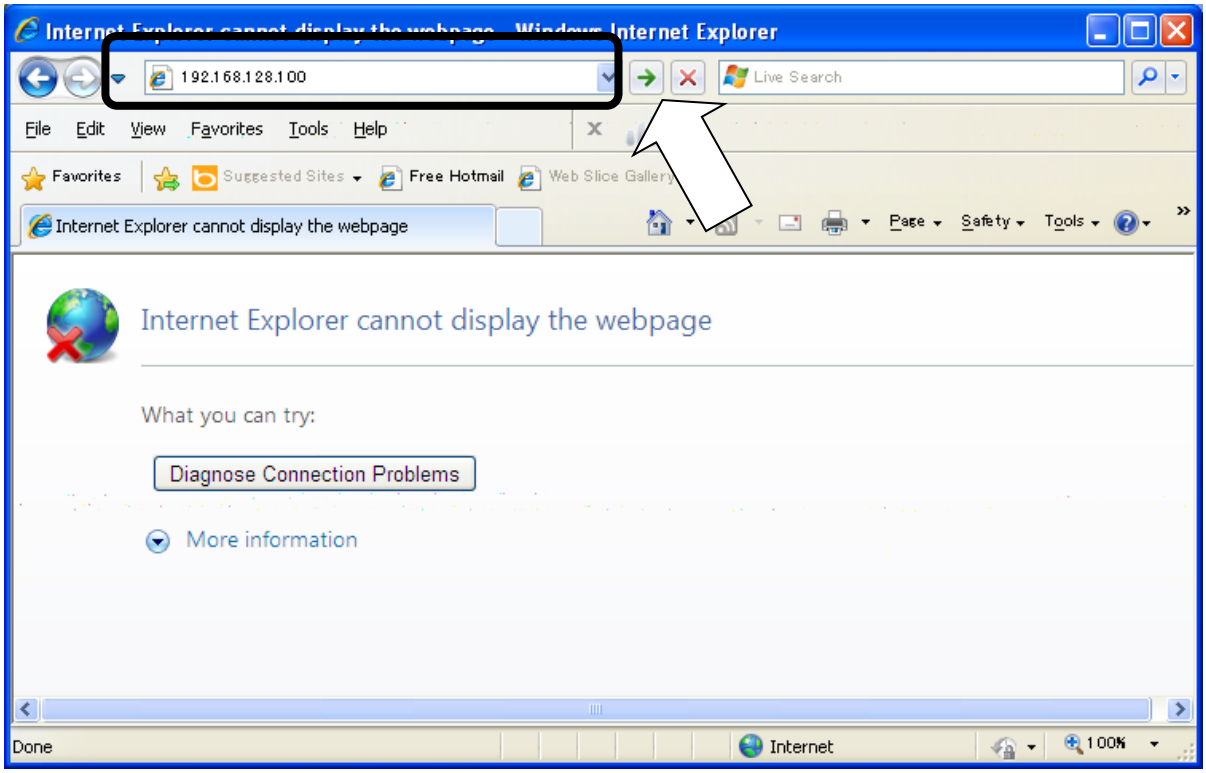
・Application-software forwarding or updating takes up to 3 minutes.

・Main-software forwarding or updating takes up to 10 minutes.

1. Launch your Web browser* and enter the URL box “192.168.128.100”.

   * While JUE-501/JUE-251 officially supports Microsoft Internet Explorer7 and Mozilla Firefox3.6, their upper version can be available when they have compatible system.

   ・ The Safe Mode screen will appear.

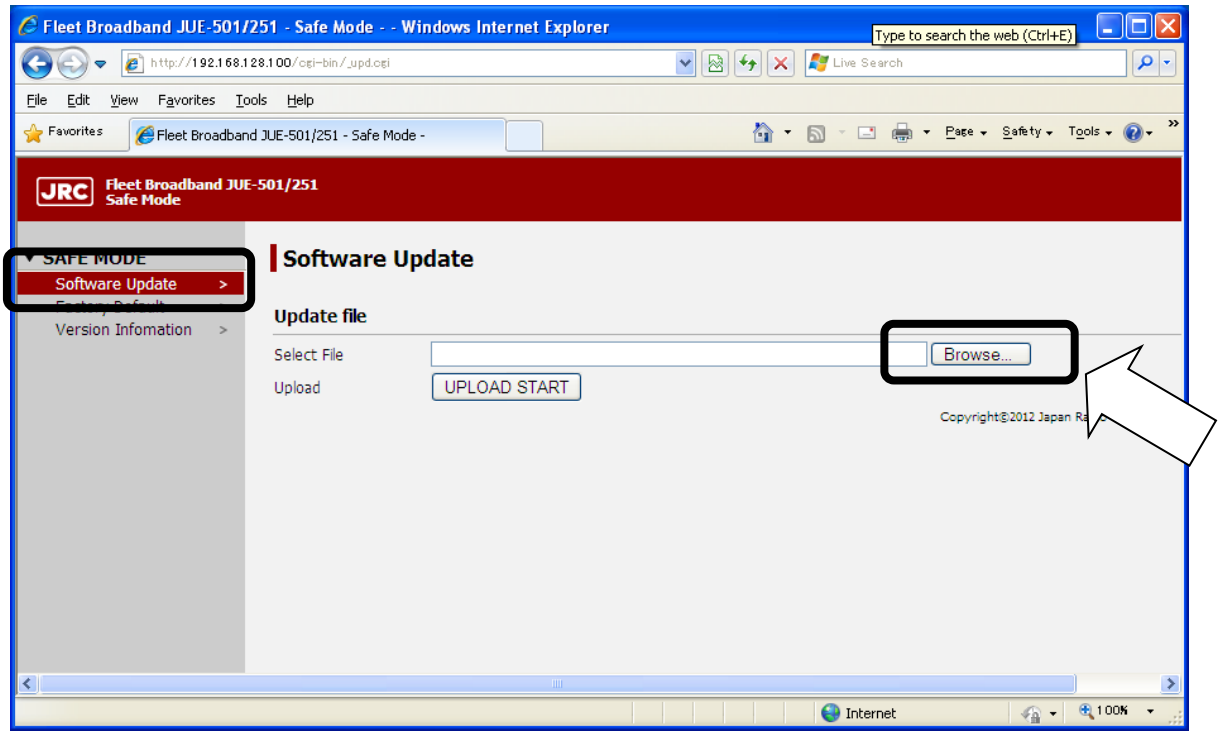


If you can not access the main unit, please check the IP address of your PC.

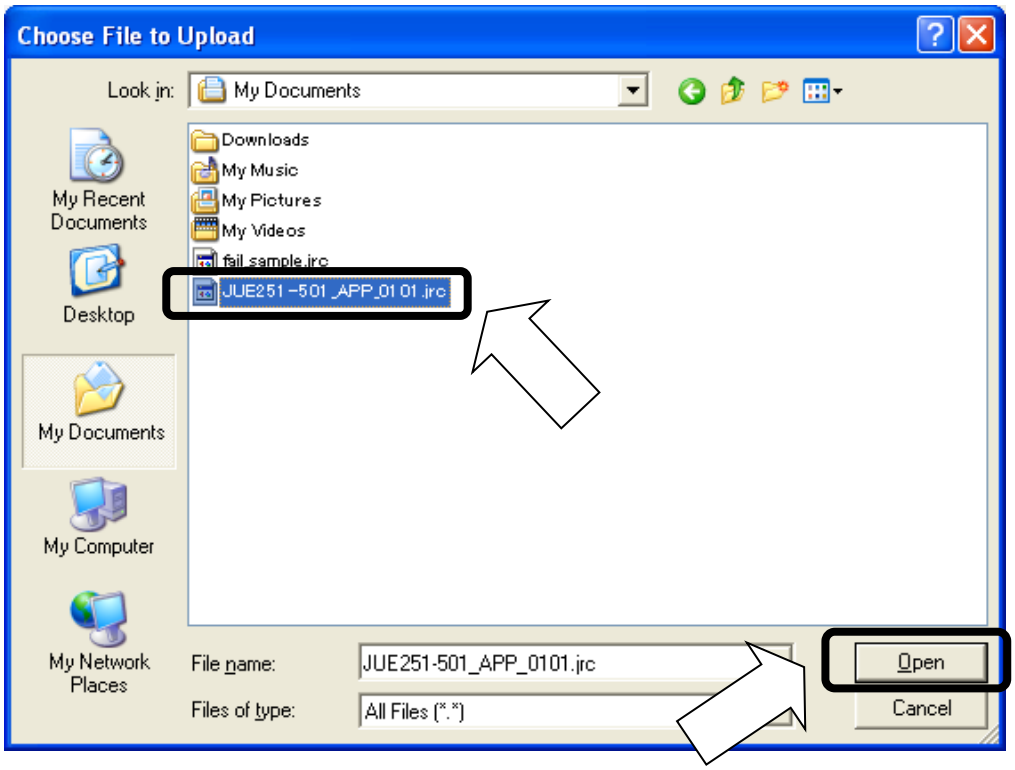
2. Click [Software Update] on the left [menu] panel.

   ・[Software Update] screen will be displayed.

3. Click [Browse] button. Then file selection dialog will appear.

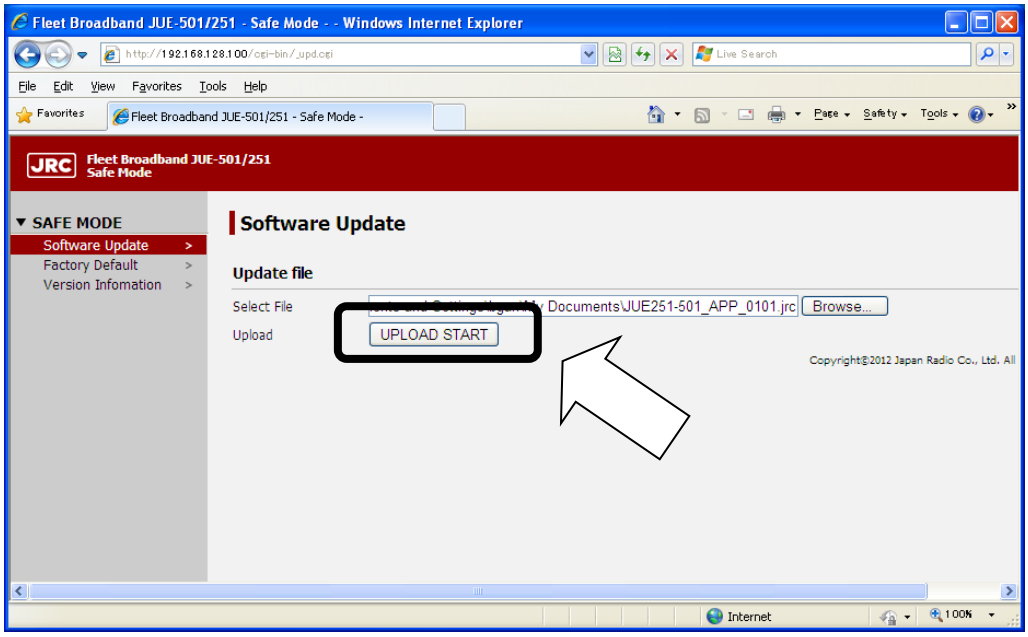


4. Select the file you have downloaded at the step a) or [D.1 Download the latest software] and click [Open].



5. Click [Update] button.

- The [Update] button changes into disable (gray).
- Wait until the [Update] button recovered and the update was completed.



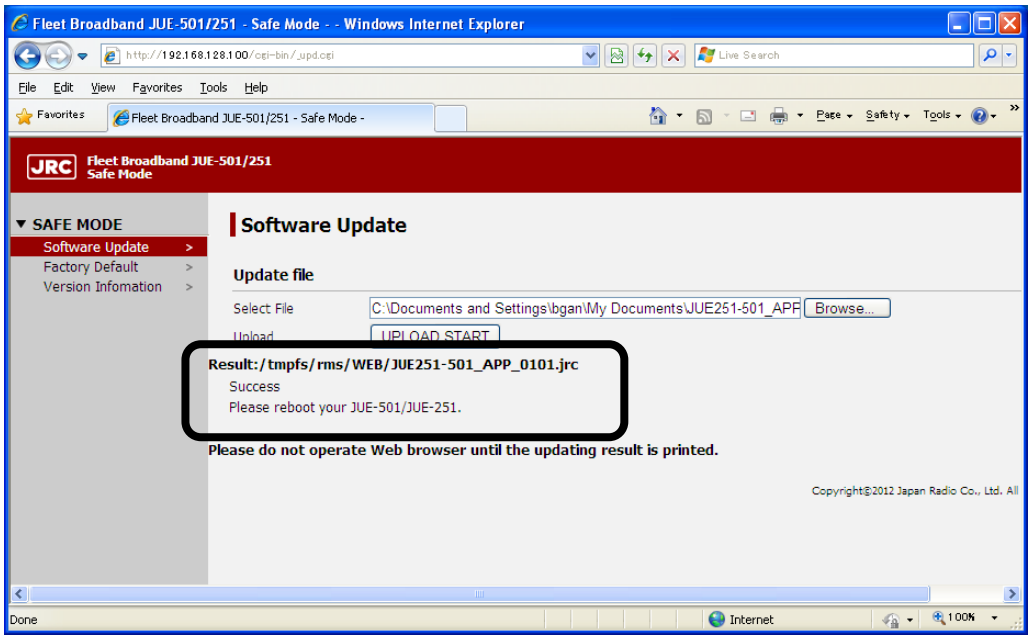
6. Check the result.

NOTE

* Please do not operate your Web browser until the result is printed. It may take more than 3 minutes.

* In the case of unresponsiveness in 5 minutes, please retry software updating with following page D-8 of this manual from A) to E).

- [Success] is displayed when the update finished successfully. Then, reboot your system.
- [Update Error] is displayed when the update has failed. Go to the next page.



When software update is failed

Update is failed when “Update Error” is printed on your Web browser.

Check the error code below. Turn off your JUE-501/JUE-251 and retry updating by following the Software Updating Procedure in Safe Mode (on page D-8 of this manual) from A) to E).

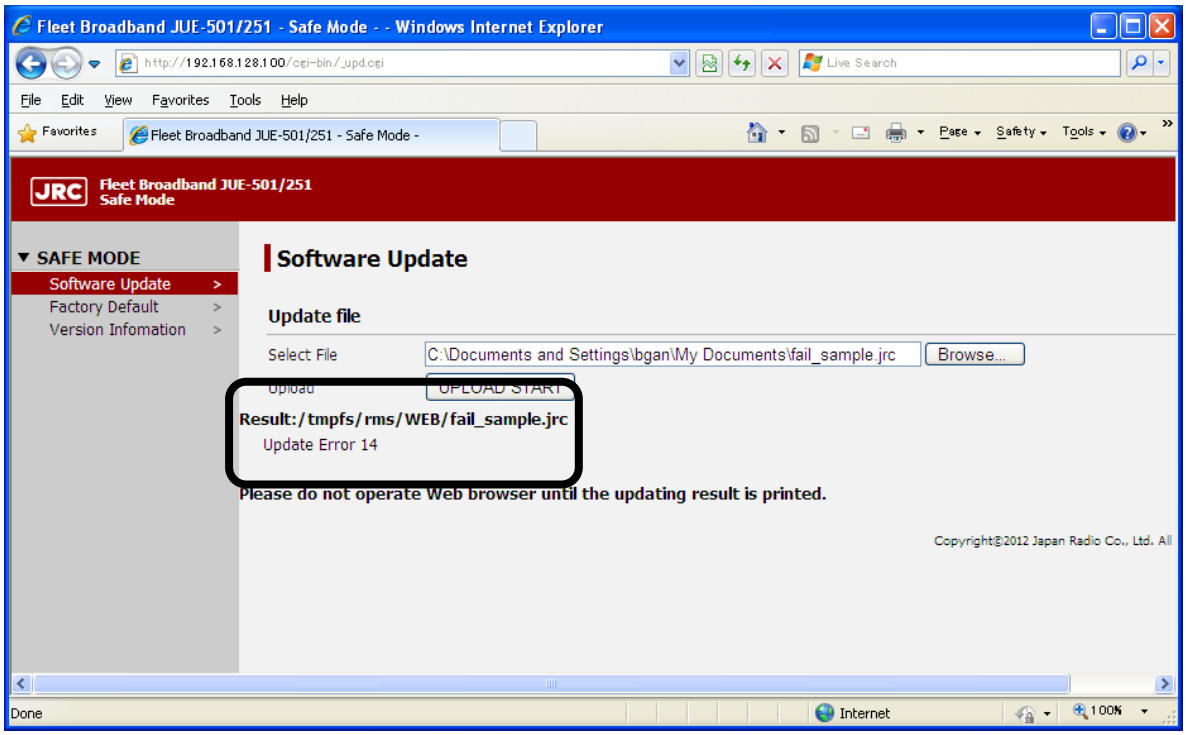


Table D.4 Software updating error code

Code	Supposed cause
1	The system is under the software updating already.
2~13 and 17	Internal error.
14~16	The file you uploaded is wrong file.
21~31	It failed in uploading the file.

Recovery procedure when software update is failed

1. Turn OFF the power supply of JUE-501/JUE-251.

2. Repeat from the 2nd step ([D.4.1 Start in Safe Mode]) of software updating procedure in safe mode (on page D-8 of this manual).

Software downgrading procedure

If you have any problems caused by upgrading, you can downgrade the software.

A) Turn OFF the power supply of JUE-501/JUE-251.

B) Repeat from the 2nd step ([D.4.1 Start in Safe Mode]) of software updating procedure in safe mode (on page D-8 of this manual). Use [JUE251-501_APP_xxx.jrc] in CD-ROM, instead of the downloaded file [JUE251-501_APP_xxx.jrc].

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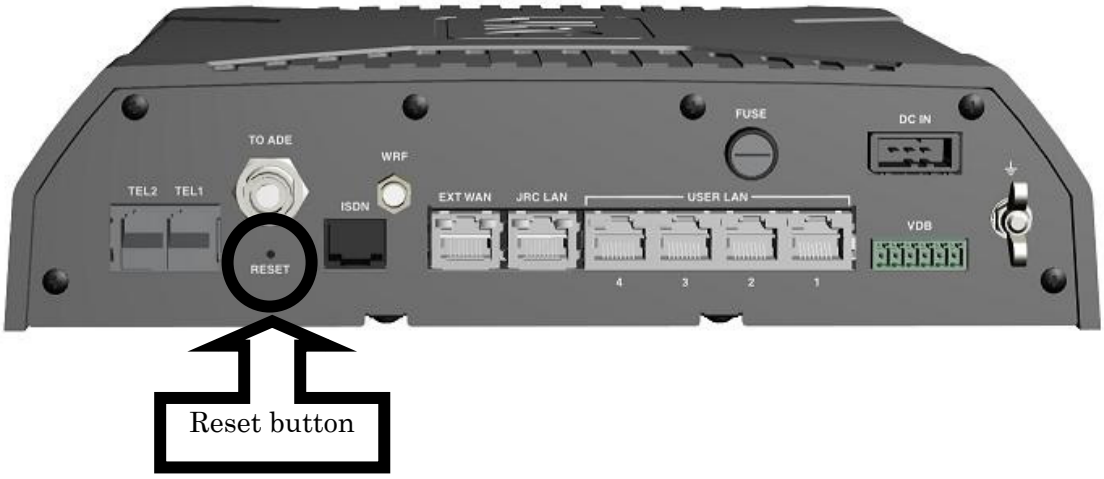
Appendix E Return to the factory default

Return JUE-501/JUE-251 to the factory default with following a) to c) bellow.

a) Turn off JUE-501/JUE-251.

b) Turn on JUE-501/JUE-251 with reset button pressed. The reset button is on the back panel.
Press reset button with ball point pen, paperclip or something of that nature.
* Please do not press reset button forcefully. It may case a trouble.



c) Release the reset button after the Ready LED on front panel lit in orange.

* Returning to the factory default is also available on Web interface with Admin users. For more information, refer to [Sec. 6.5.9 Reset to Factory Default (p6-80)].

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Appendix F Default value list (BDE-App 01.45)

Item	Default	Setting from Web Interface	
		Chapter	Title
SMS Service Center Address (SCA)	00870772001799	6.4.3.5	Service Center Address
Validity date of the message	1 Day		Validity
Behavior of the message after it delivered to the destination	Class 3		Service Class
Delivery confirmation function	Disable		Status Report
Character Code for sending SMS	GSM7		Send Character Code
Currency for calculating Communication fee	USD	6.4.5.2	Currency
Communication fee for unit time (minute)	All zero		Rate for Unit
Delivery date of the JUE-501/JUE-251	01/JAN/2012	6.5.1	Delivery Date
Time differences from UTC	+0:00		Local Time
Selection of satellite tracking method	Auto		Tracking
Input from external GPS	Disable		GPS Input
Output the Alarmpack to VDR	LAN		VDR Output
WRF (Wide-band Radio Frequency) port	Disable		WRF
Turn on/off the LED lamps on front panel	ON		Panel LED
Turn on/off the Ethernet LED lamps on back panel	ON		Ethernet LED
Blockage Area	All Disable		Blockage Area
Use of Secret code for a call from Handset port	Disable	6.5.2.1	Handset – Secret Code
Volume level of Handset port	Normal		Handset – Voice Volume
Making a call from Handset	Enable		Handset – Outgoing Call
Making a call from Handset (Allowed Number)	None		Handset – Allowed Number
Call Reception setting of Handset port	Enable		Handset – Incoming Call
Outgoing service type of TEL1~6	Voice		TEL1~6– Outgoing Type
Incoming service type of TEL1~6	Voice		TEL1~6– Incoming Type
Use of Secret code for a call from TEL1~6 port	Disable		TEL1~6– Secret Code
Volume level of TEL1~6 port	Normal		TEL1~6– Voice Volume
Making a call from TEL1~6 port	Enable		TEL1~6– Outgoing Call
Making a call from TEL1~6 port (Allowed Number)	None		TEL1~6– Allowed Number
Call Reception setting of TEL1~6 port	Enable		TEL1~6– Incoming Call
Outgoing service type of ISDN port	Voice & Fax		ISDN – Outgoing Type
Incoming service type of ISDN port	Voice & Fax		ISDN – Incoming Type
Making a call from ISDN port	Enable		ISDN – Outgoing Call
Making a call from ISDN port (Allowed Number)	None		ISDN – Allowed Number
Call Reception setting of ISDN port	Enable		ISDN – Incoming Call
Outgoing service type of IPTEL1~9	Voice		
Incoming service type of IPTEL1~9	Voice		
Use of Secret code for a call from TEL1~9 port	Disable		
Making a call from IPTEL1~9 port	Enable		
Making a call from IPTEL1~9 port (Allowed Number)	None		
Call Reception setting of IPTEL1~6 port	Enable		
Use of Auto Answer function	Disable	6.5.2.2	Control
Targeting service type for Auto Answer function	Voice		Incoming Type
Default Extension number	000		Extension Number
Waiting time for number input	15 sec		Limit Time
Backlight dimmer of Handset	4	6.5.3.1	Back Light
Brightness of Handset LED lamps	4		Dimmer
Ringer pattern of Handset	1		Ring Type
Ringer volume of Handset	3		Ring Volume
Voice volume of Handset	3		Voice Volume
ON/OFF of key click sound of Handset	Enable		Click Tone

Item	Default	Setting from Web Interface	
		Chapter	Title
MSN output type of ISDN	Fixed MSN	6.5.3.2	Output
Voice-MSN of ISDN	None		Voice-MSN
Audio-MSN of ISDN	None		Audio-MSN
UDI-MSN of ISDN	None		UDI-MSN
RDI-MSN of ISDN	None		RDI-MSN
PBX-MSN of ISDN	None		PBX-MSN
Type of ISDN	ETSI		Service Type
IP Address of User LAN	192.168.128.100	6.5.3.3	IP Address
Subnet Mask of User LAN	255.255.255.0/24		Subnet Mask
Use of DHCP server	Enable		DHCP
Minimum allocation IP address for DHCP	192.168.128.101		DHCP Start Address
Total amount of allocatable IP address number	16		DHCP Count
IP Address of external WAN	192.168.0.4		IP Address
Subnet Mask of external WAN	255.255.255.0/24		Subnet Mask
Use of Output 1~2	Disable	6.5.3.4	Output 1~2 - Control
Function of Output 1~2	Ring Indication		Output 1~2 - Function
Use of Input 1~2	Disable		Input 1~2 - Control
Function of Input 1~2	Ring Acknowledge		Input 1~2 - Function
Condition for the function of Input 1~2	Active High		Input 1~2 - Polarity
Service type for Output (Ring Indication)	All		Ring Indication - Type
Buzzer indication when Voice call has arrived	Enable	6.5.3.5	Option Buzzer 1~4 Voice
Buzzer indication when Fax/Audio call has arrived	Enable		Option Buzzer 1~4 Fax/Audio
Buzzer indication when UDI call has arrived	Enable		Option Buzzer 1~4 UDI
Buzzer indication when RDI call has arrived	Enable		Option Buzzer 1~4 RDI
User Level for the No.1 user	Admin	6.5.4.1	1 – Level
User Name for the No.1 user	ADMIN		1 – Name
Secret Code for the No.1 user	0001		1 – Secret Code
Restriction for the No.1 user	Disable		1 – Restriction
WAN Profile for the No.1 user	Profile 1		1 – WAN Profile
Multi Connect authority for the No.1 user	Enable		1 – Multi Connect
Quick Connect authority for the No.1 user	Enable		1 – Quick Connect
User Level for the No.2 user	Guest		2– Level
User Name for the No.2 user	GUEST		2– Name
Secret Code for the No.2 user	None		2– Secret Code
Restriction for the No.2 user	Disable		2– Restriction
WAN Profile for the No.2 user	Profile 1		2– WAN Profile
Multi Connect authority for the No.2 user	Enable		2– Multi Connect
Quick Connect authority for the No.2 user	Enable		2– Quick Connect
User Level for the No.3 or latter user	Guest		3～50 – Level
User Name for the No.3 or latter user	No Data (Unregistered)		3～50 – Name
Secret Code for the No.3 or latter user	No Data (Unregistered)		3～50 – Secret Code
Restriction for the No.3 or latter user	Disable (Unregistered)		3～50 – Restriction
WAN Profile for the No.3 or latter user	Disable (Unregistered)		3～50 – WAN Profile
Multi Connect authority for the No.3 or latter user	Disable (Unregistered)		3～50 – Multi Connect
Quick Connect authority for the No.3 or latter user	Disable (Unregistered)		3～50 – Quick Connect

Item	Default	Setting from Web Interface	
		Chapter	Title
IP Address for the device (from No.1 to No.50)	No Data (Unregistered)	6.5.4.2	1～50 – IP
Name of the device (from No.1 to No.50)	No Data (Unregistered)		1～50 – Device Name
Restriction for the device (from No.1 to No.50)	No Data (Unregistered)		1～50 – Restriction
WAN Profile for the device (from No.1 to No.50)	Disable (Unregistered)		1～50 – WAN Profile
Multi Connect authority for the device (from No.1 to No.50)	Disable (Unregistered))		1～50 – Multi Connect
Quick Connect authority for the device (from No.1 to No.50)	Disable (Unregistered)		1～50 – Quick Connect
Restriction Name	Restriction 1~5	6.5.4.3	Restriction Name
Permission for each service type	Unlimited		Permission
Limitation value for each Service Type	No Data (Unregistered)		Time/Size
Reset Cycle for the limitation count	Manual		Term
Updated date	No Data (Unregistered)		Closing Day
Name of the Profile	Profile 1~5	6.5.5.1	Group Name
Service Type for PS connection	Standard&Streaming		Service Type
Authority of editing APN manually	Permit		Edit
APN for PS connection	SIM default		APN
APN User name and Password	No Data (Unregistered)		APN User / Password
Global IP Address for PS connection	Dynamic		Global IP
Connection mode	1 by 1 NAT		Connection Mode
Use of Packet Detect Activate function	Disable		Packet Detect Activate
Use of WAN Filter	Disable		WAN Filter
Use of VPN	Disable		VPN
Service type for Secondary Service	Standard&Streaming		Secondary Service Type
Profile used for Always Activate	Disable	6.5.5.3	1~3 – Profile
Local IP Address connected by Always Activate	No Data (Unregistered)		1~3 – Local IP
Service Type used by Always Activate	Standard (fix)		1~3 – Service
Use of Remote Activate	Disable	6.5.5.4	Remote Activate
User name of Remote Activate	No Data (Unregistered)		User
Password of Remote Activate	No Data (Unregistered)		Password
Profile used for Remote Activate	Profile 1		Profile
Local IP Address used by Remote Activate	No Data (Unregistered)		Local IP
Service Type used by Remote Activate	Standard (fix)		Service
Name of LAN Group	Group 1~5	6.5.5.5	Group Name
Range of LAN Group	VLAN 1		LAN Group
Setting for DMZ	Disable		DMZ
Setting for Port Forward	Disable		Port Forward
Port Tagging setup for User LAN (Port1~4)	VLAN1 for all port	6.5.5.6	Port 1~4
Use of VLAN 1	Enable		VLAN1 – VLAN
IP Address of VLAN1	192.168.128.100		VLAN1 – IP Address
Subnet Mask of VLAN1	255.255.255.0/24		VLAN1 – Subnet Mask
Use of DHCP for VLAN1	Enable		VLAN1 – DHCP
Minimum allocation IP address for DHCP	192.168.128.101		VLAN1 – Start IP
Total amount of allocatable IP address number	16		VLAN1 – Count

Item	Default	Setting from Web Interface	
		Chapter	Title
Use of VLAN 2~4	Disable	6.5.5.6	VLAN2~4 – VLAN
IP Address of VLAN2~4	No Data (Unregistered)		VLAN2~4 – IP Address
Subnet Mask of VLAN2~4	No Data (Unregistered)		VLAN2~4 – Subnet Mask
Use of DHCP for VLAN2~4	Disable		VLAN2~4 – DHCP
Minimum allocation IP address for DHCP	No Data (Unregistered)		VLAN2~4 – Start IP
Total amount of allocatable IP address number	No Data (Unregistered)		VLAN2~4 – Count
Use of MAC Filter	Disable		MAC Filter
IP Address allocated by Static DHCP	No Data (Unregistered)	6.5.5.7	Setting List – IP Address
Targeting MAC address for Static DHCP	No Data (Unregistered)		Setting List – MAC Address
Target IP Address for Routing (No.1~No.20)	No Data (Unregistered)	6.5.5.8	Target IP
Subnet Mask for Routing (No.1~No.20)	255.255.255.0/24 (Unregistered)		Subnet Mask
Gateway IP Address for Routing (No.1~No.20)	No Data (Unregistered)		Gateway IP
Use of WAN Selector	Disable	6.5.5.9	WAN Selector
Destination IP Address for sending ping packet	No Data (Unregistered)		Ping Destination
Gateway IP Address for External WAN	192.168.0.1		Gateway IP
Use of PPPoE function	Enable	6.5.5.10	PPPoE
Server Name of PPPoE	JUE-501 (JUE-501) JUE-251 (JUE-251)		Server Name
Server IP of PPPoE	192.168.10.1		Server IP
Maximum connecting time of Handset port (Auto DCN.)	Disable (not disconnected)	6.5.6	Handset
Maximum connecting time of TEL1 port (Auto DCN.)	Disable (not disconnected)		TEL1
Maximum connecting time of TEL2 port (Auto DCN.)	Disable (not disconnected)		TEL2
Maximum connecting time of TEL3 port (Auto DCN.)	Disable (not disconnected)		TEL3
Maximum connecting time of TEL4 port (Auto DCN.)	Disable (not disconnected)		TEL4
Maximum connecting time of TEL5 port (Auto DCN.)	Disable (not disconnected)		TEL5
Maximum connecting time of TEL6 port (Auto DCN.)	Disable (not disconnected)		TEL6
Maximum connecting time of ISDN port (Auto DCN.)	Disable (not disconnected)		ISDN
Maximum connecting time of Streaming IP connection (Auto DCN.)	Disable (not disconnected)		Streaming
Maximum connecting time of Standard IP connection (Auto DCN.)	Disable (not disconnected)		Standard
Maximum connecting time of IPTEL1~9 port (Auto DCN.)	Disable (not disconnected)		IPTEL1~9
Request for PIN Code	Disable	6.5.7	PIN Mode
Facility Lock	All Disable		Facility Lock – Change Status
Use of Secondary SIM	Disable		Secondary SIM
Use of Syslog	Disable	6.5.11	Enable/Disable
Log Server IP Address	No Data (Unregistered)		Syslog Server IP
Level for logging	ERR		Log Level

Item	Default	Setting from Web Interface	
		Chapter	Title
Use of Multi Number	Disable	Appendix J	Multi Number
MSISDN for Voice	No Data (Unregistered)		MSISDN – Voice
MSISDN for Audio	No Data (Unregistered)		MSISDN – Audio
MSISDN for UDI	No Data (Unregistered)		MSISDN – UDI
MSISDN for RDI	No Data (Unregistered)		MSISDN – RDI
MSISDN for Voice #2~#9	No Data (Unregistered)		Additional Voice MSISDN – Voice #2~#9
MSISDN for Handset	All		Terminal Setting for Voice call – Handset
MSISDN for TEL1~6	All		Terminal Setting for Voice call – TEL1~6
MSISDN for ISDN	All		Terminal Setting for Voice call – ISDN
MSISDN for IPTEL1~9	All		Terminal Setting for Voice call – IPTEL1~9
MSISDN for PBX	All		Terminal Setting for Voice call – PBX
Use of Multi-Voice	Disable		Multi-Voice
APN for Multi-Voice	multivoice.bgan .inmarsat.com		Multi-Voice – APN
SIP Domain Name for Multi-Voice	sip.fbb.inmarsat .com		Multi-Voice – SIP Domain Name

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Appendix G JUE-501/251 VPN setting

JUE-501/JUE-251 supports IPsec VPN. JUE-501/JUE-251 Web Menu System allows user to set parameters only for remote access. Others are provided as fixed value.

JUE-501/JUE-251 VPN specification is shown below.

Fig JUE-501/251 VPN Specification

	Setting parameter	Spec/Value
1)	IPsec protocol mode	ESP tunnel (Network-to-Network VPN)
2)	IPsec encryption mode	3DES(Triple DES) AES(Advanced Encryption Standard)
3)	IPsec authentication method	HMAC_SHA1 HMAC_MD5
4)	IPsec data compression mode	Deflate
5)	IKE(Internet Key Exchange) mode	Main, Aggressive
6)	IKE encryption mode	3DES
7)	IKE Authentication	Pre-Shared Key
8)	Diffie-Hellman group	Group 2 (1,024 bit)
9)	NAT traversal	Force (always enabled)
10)	IKE retry interval	5[sec]
11)	IKE retry number	5
12)	IKE Phase1 timeout	20[sec]
13)	IKE Phase2 timeout	20[sec]
14)	IKE Lifetime	3600[sec]
15)	IPsec Lifetime	3600[sec]

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Appendix H How to connect PPPoE Connection

H.1 About PPPoE Connection

JUE-501/JUE-251 provides PPPoE server. You can use the Inmarsat Standard IP/Streaming IP service via PPPoE connection on your PPPoE client—PC or Router.

Set PPPoE server information listed below to your PPPoE client.

Parameter	Configuration
User Name	void
Password	void
Authentication method	“Any” or “CHAP”

NOTE

- Your PPPoE client has a possibility to receive invalid packets from the internet because PPPoE connection assigns the global IP address allocated from the inmarsat network directly on your PC or router.
- WAN Filter is not applied for PPPoE connections.
- The PS connection is made by PPPoE client’s connecting/disconnecting action.
- APN settings for PPPoE Connection (APN name, APN username and password) are set on the “Network->WAN Profile” screen. WAN profile of “GUEST” user is applied for PPPoE connection. For more information, refer to [Sec.6.5.5.1 Set WAN Profile] and [Sec. 6.5.4.1 Register Users]. When WAN profile is used, only standard IP service can be used. The streaming IP service cannot be used in PPPoE connection even if the service type in WAN profile is set to “Streaming Only”.[
- AT command can be specified to the detailed option of PPPoE connection. When AT command is specified, WAN Profile is not referred. Streaming IP service can be used by specifying AT command. Please refer to Sec. H.5 for detailed.
- PPPoE connection on Streaming IP service is not available. Confirm that “Streaming only” is not assigned to the “GUEST” user’s WAN Profile.
- PPPoE connections always use Inmarsat Standard IP service even if WAN Selector of JUE-501/JUE-251 is enabled.

H.2 Connect your PPPoE Client to User LAN port

Connect your PPPoE client (PC or Router) to User LAN port with LAN cable.

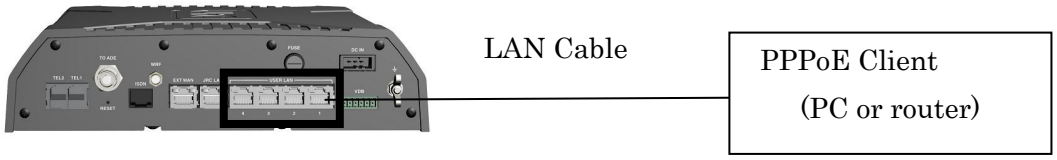


Fig.H.2.1 PPPoE Connection diagram

For more information about connecting PC or router to the main unit, refer to [Sec.6.1 Connect Your PC to JUE-501/JUE-251].

H.3 Settings for PPPoE Client (Windows XP)

(1) Click [Start] and select [Control Panel].

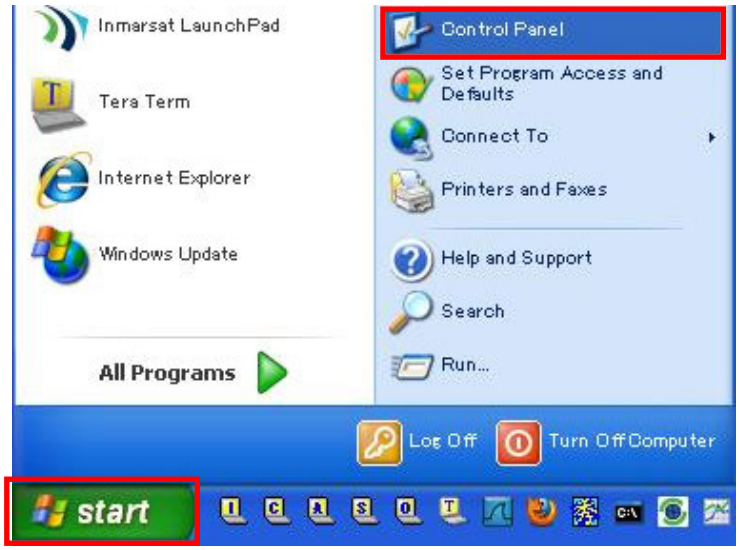


Fig.H.3.1 Windows XP Start Menu

(2) Click [Network and Internet Connections].

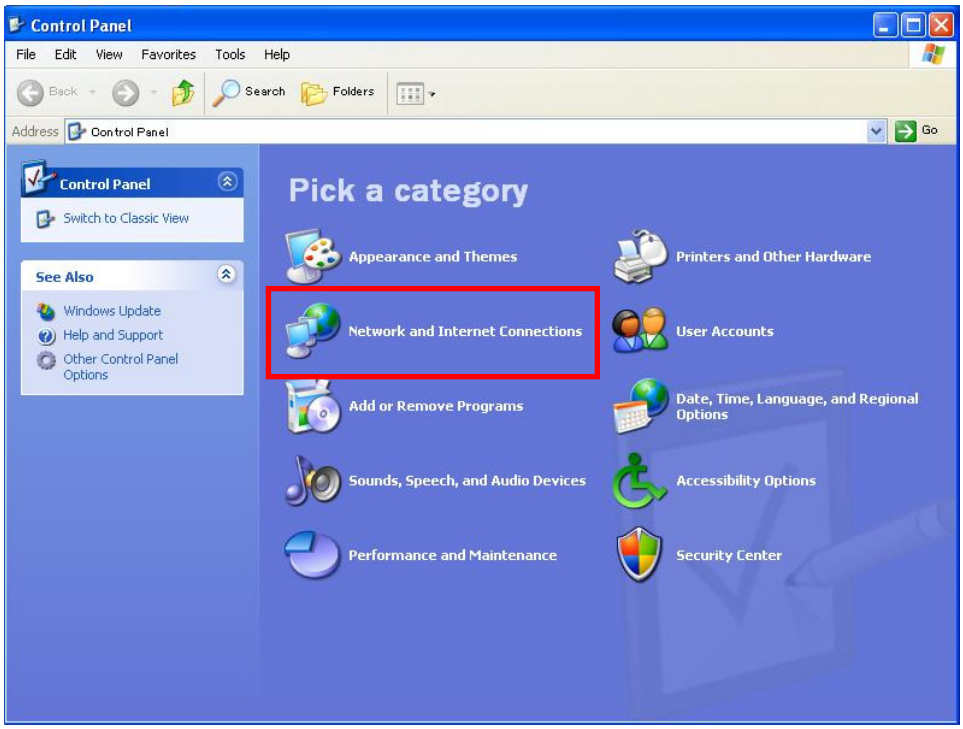


Fig.H.3.2 Control Panel Menu

(3) Click [Set up or change your Internet connection].

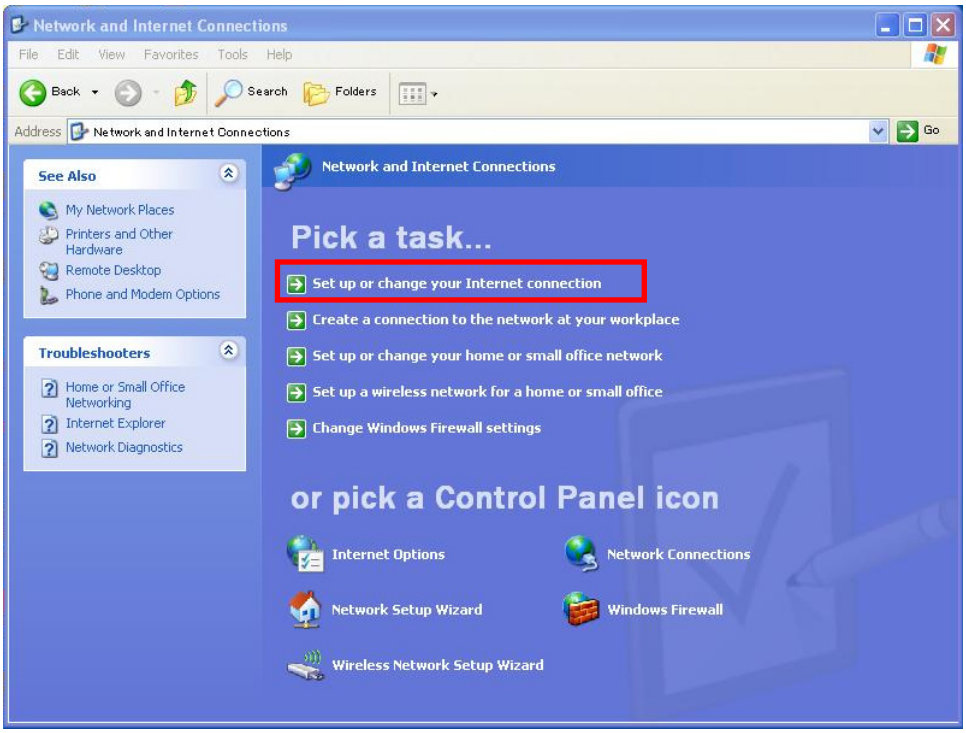


Fig.H.3.3 Network and Internet Connections Menu

(4) [Internet Properties] dialog appears. Select [Connections] tab and click [Setup].

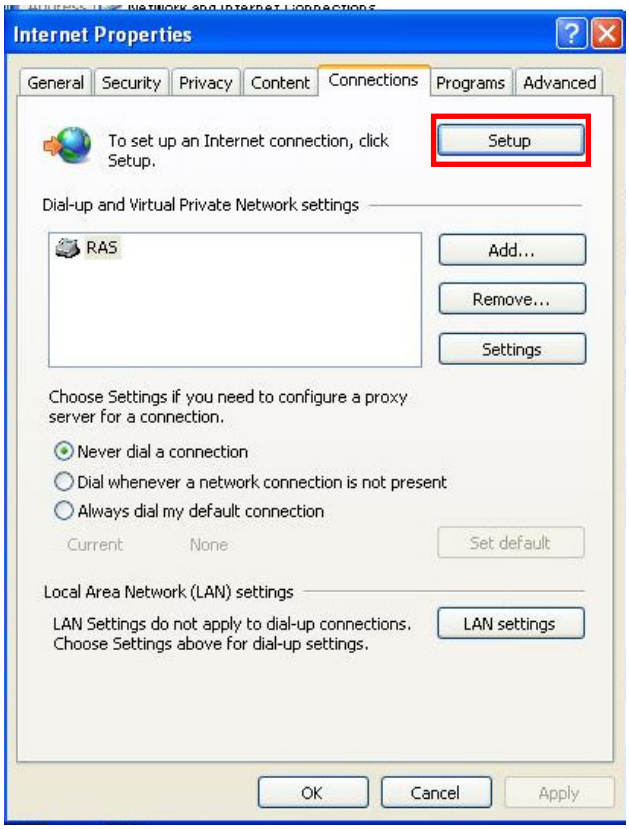


Fig.H.3.4 Internet Properties Menu

(5) [New Connection Wizard] appears. Click [Next.]

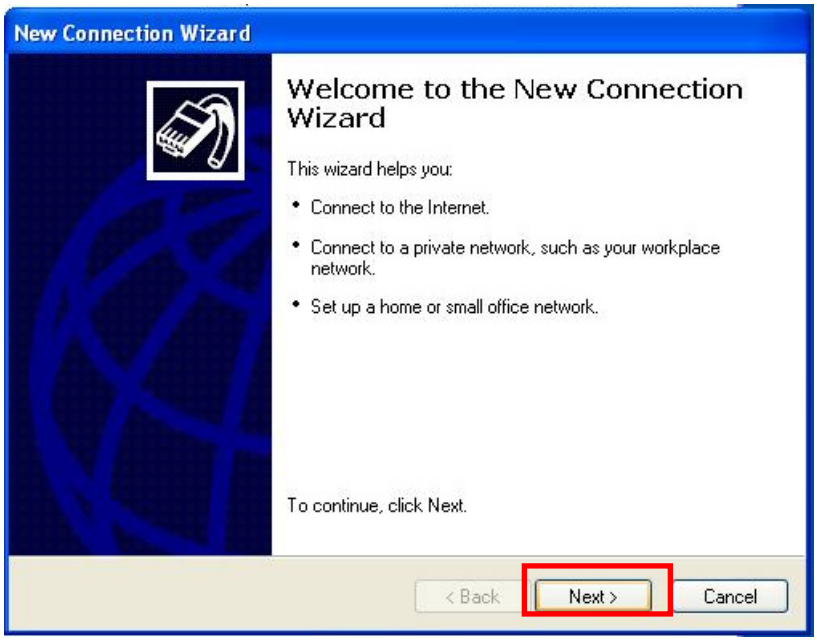


Fig.H.3.5 New Connection Wizard

(6) Select [Connect to the Internet], and then click [Next].

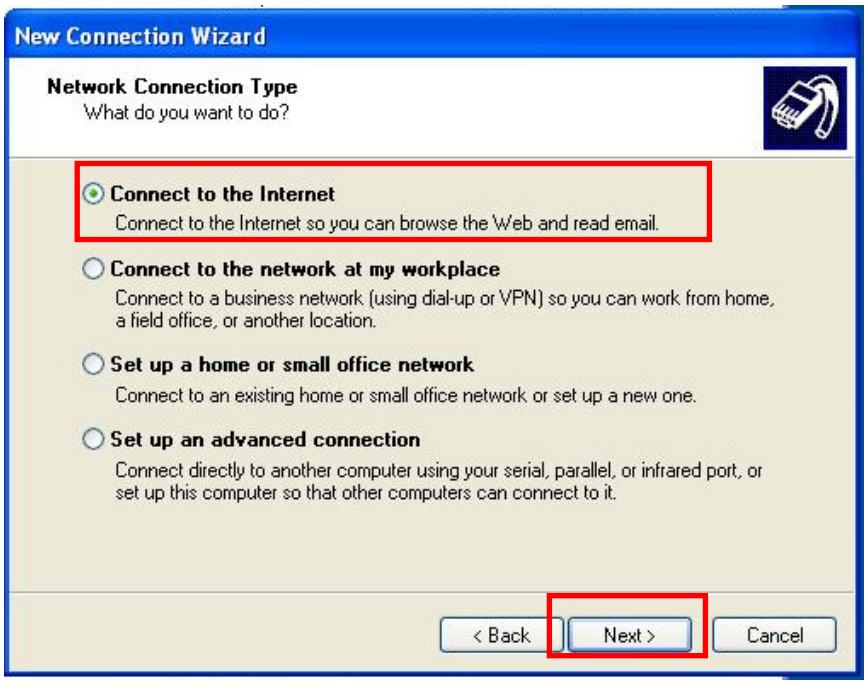


Fig.H.3.6 Network Connection Type Menu

(7) Select [Set up my connection manually], and click [Next].

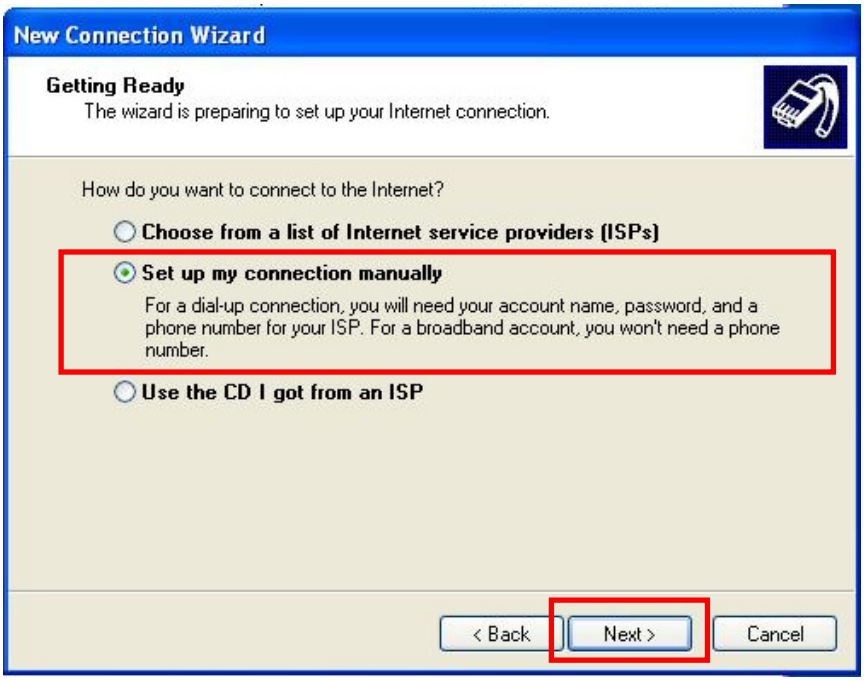


Fig.H.3.7 Getting Ready Menu

(8) Select [Connect using a broadband connection that requires a user name and password], and click [Next].

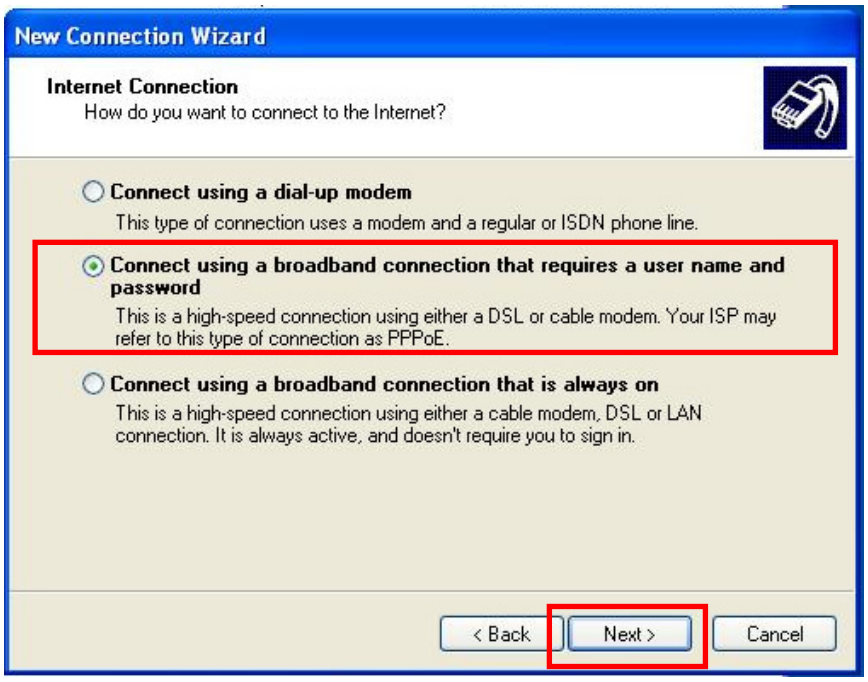


Fig.H.3.8 Internet Connection Menu

(9) Enter an arbitrary [ISP Name], and click [Next].

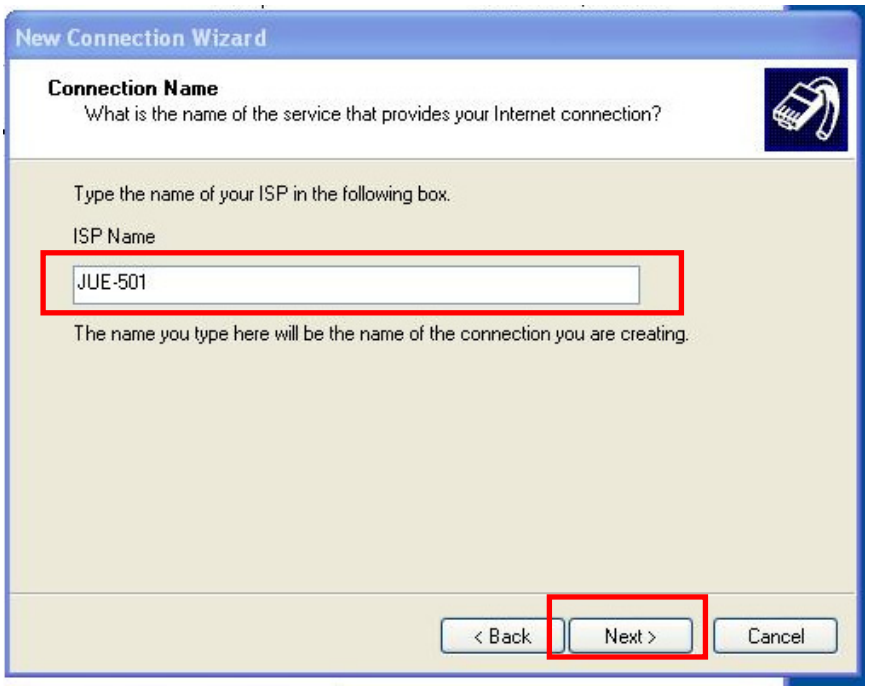


Fig.H.3.9 Connection Name

(10) Enter [User Name] and [Password] and click [Next].

Parameter	Configuration
User Name	void
Password	void

If you need PPPoE connection as default internet connection, check [Make this the default Internet connection] before clicking [Finish] button.

Fig.H.3.10 Internet Account Information

Remarks

If your PPPoE client is not Windows PC, “PPP Authentication method” may be required. Set “PPP Authentication method” to [any] or [CHAP].

(11) Click [Finish]

If you need a shortcut icon on your desktop, check [Add a shortcut to this connection to my desktop] before clicking [Finish] button.

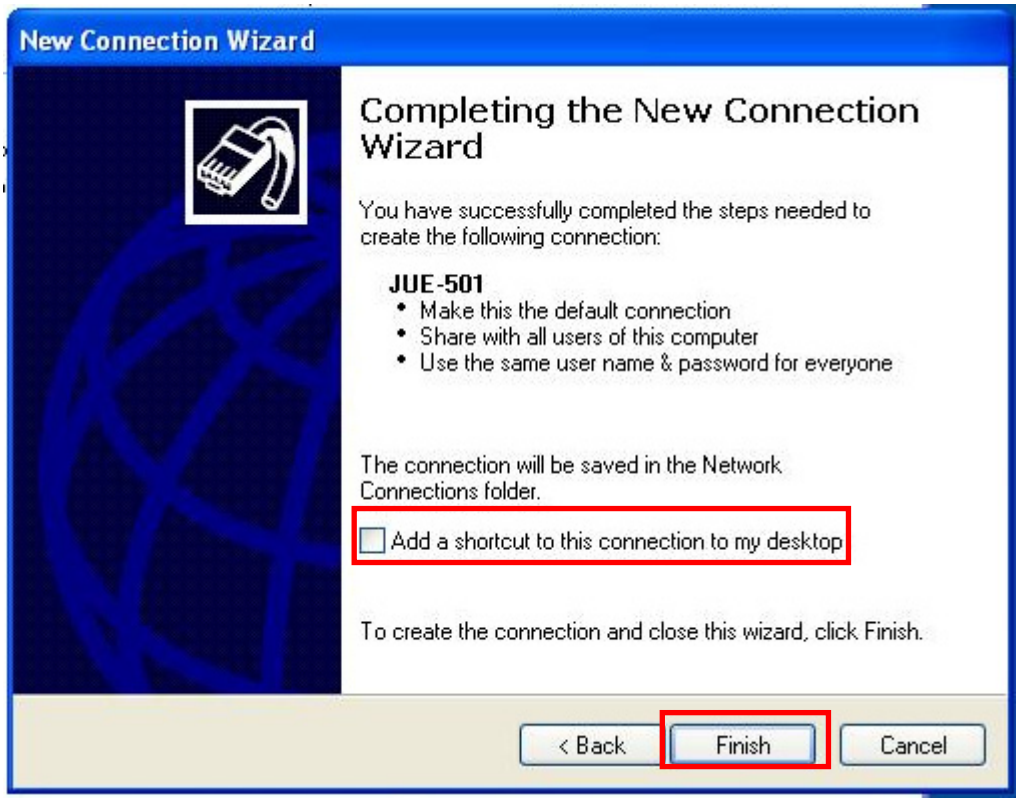


Fig.H.3.11 Completing the New Connection Wizard

H.4. Connection and Disconnection from your PPPoE client (Windows XP)

H.4.1 Connect PPPoE

(1) Click [Start], and select PPPoE connection you have made.

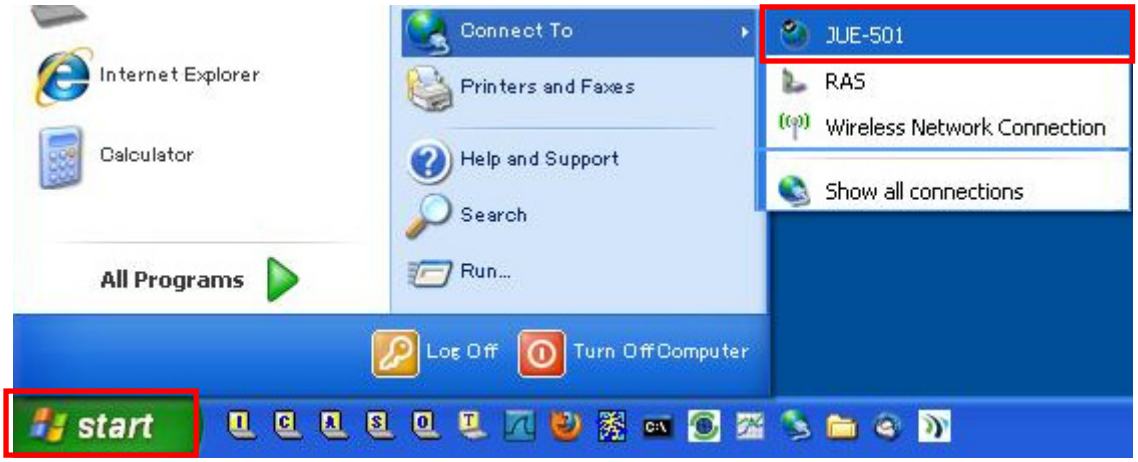


Fig.H.4.1.1 Windows XP Start menu

(2) [Connect] dialog will appear. And then click [Connect].

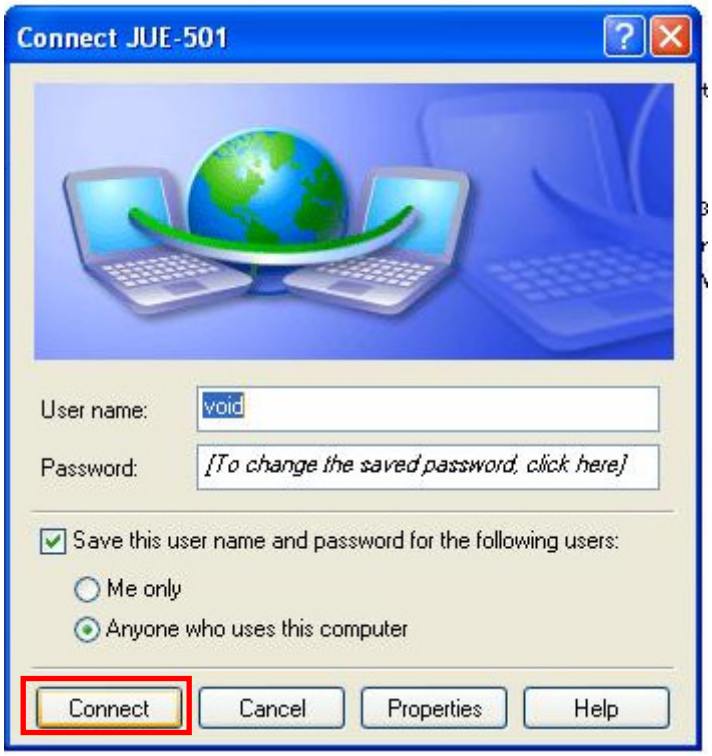


Fig.H.4.1.2 Connect menu

(3) [Connecting] dialog appears and JUE-501/JUE-251 starts Standard IP connection through PPPoE.

Fig.H.4.1.3 Connecting Dialog

(4) An information message will be displayed on the task tray after the connection has been established.

Fig.H.4.1.4 Connected Dialog

H.4.2 Disconnect PPPoE

(1) Make a right-click on your PPPoE-connection-icon, and select [Disconnect]. And then, the PPPoE connection will be disconnected.

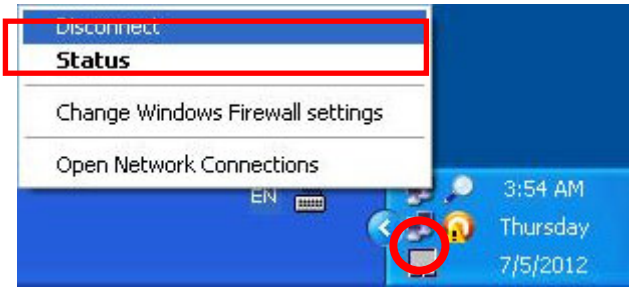


Fig.18 Disconnect Dialog

H.4.3. Check the PPPoE connection

Check the PPPoE connection by sending ping packets or browsing Web pages.

If you cannot receive ping packets nor can browse Web pages, disconnect PPPoE connection and retry PPPoE connection procedure.

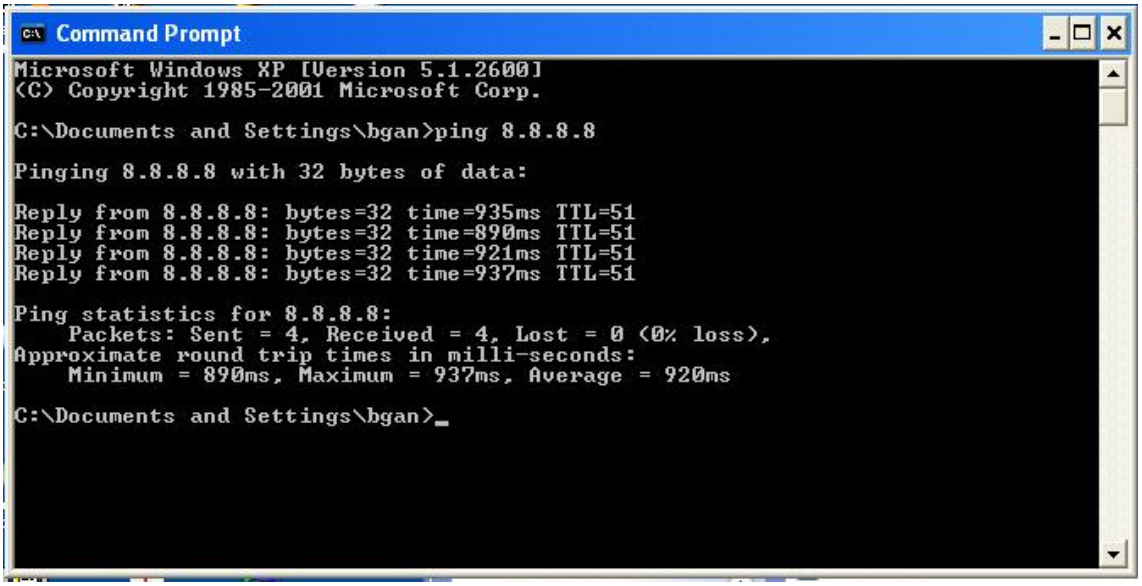


Fig.H.4.3.1 Windows Command Prompt

H.5. PPPoE client option setting (Windows XP)

In the procedure of section H.4.1. (2), when Properties button is pressed, “Service name” in the “General” tab is displayed. The detailed option can be specified for PPPoE connection in Service name. The option is memorized by PC once it is specified.

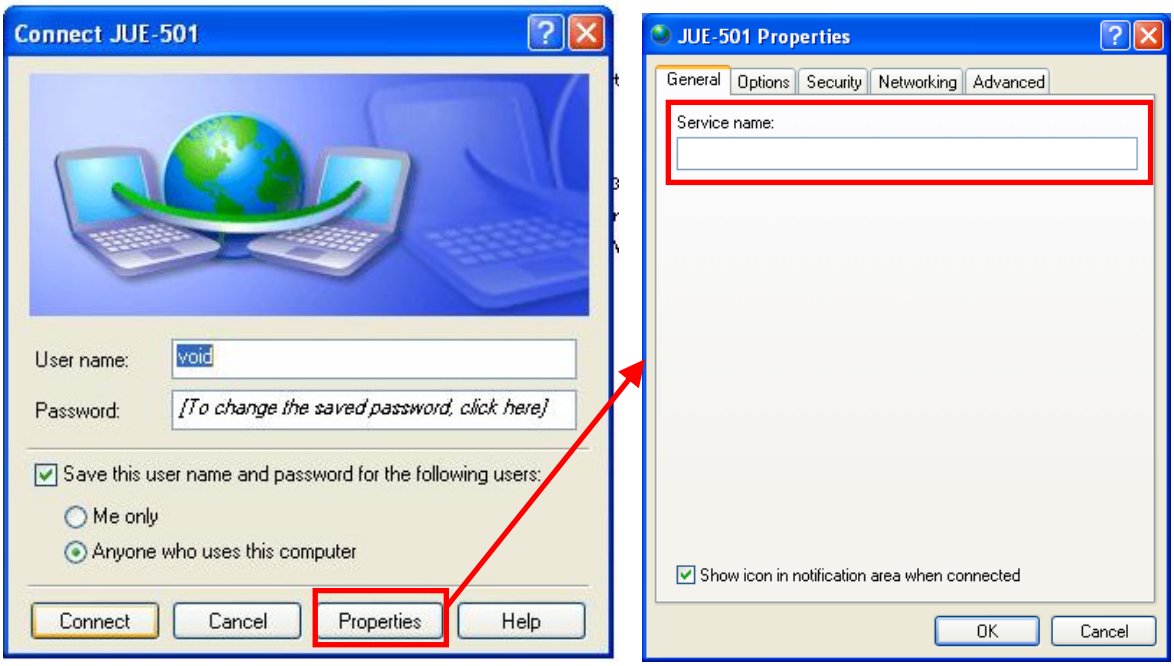


Fig.H.5 PPPoE Client Properties dialog

The PPPoE Server Name of JUE-251/501 and AT command can be specified in Service name.

The Server Name is used to choose the terminal connected from PC when two terminals, JUE-251/501, are equipped and connected with the same LAN. The default of Server Name is “JUE-251” (For JUE-251), “JUE-501” (For JUE-501), but it can be changed by PPPoE server setting menu (Section 6.5.5.10).

The AT command can be inputted AT+CGDCONT, AT+CGEQREQ, AT+CGEQMIN, AT+CGDSCONT, AT+CGTFT, and AT_ITFT. Please refer to another document “AT COMMAND” (document number: 7ZPSC0500) enclosed to CD-ROM for the details of AT command specification.

The specification formats for Server Name and AT command are as follows:

Only Server Name:
(Server Name)¥
Only AT command:
(AT command 1);(AT command2);(AT command3);...;(AT command n)
Server Name and AT command:
(Server Name)¥(AT command 1);(AT command2);(AT command3);...;(AT command n)

Table H.5. Example of PPPoE connection option

Purpose	String of Service Name
Connect Standard IP via JUE-251 (Use WAN Profile for GUEST user)	JUE-251¥
Connect Standard IP with APN	AT+CGDCONT=1,"IP","bgan.inmarsat.com",,0,0,,,
Connect Standard IP specified with APN, User name and Password via JUE-501	JUE-501¥AT+CGDCONT=1,"IP","bgan.inmarsat.com",,0,0,"User","Pass",
Connect Streaming IP specified with APN via JUE-251	JUE-251¥AT+CGDCONT=1,"IP","bgan.inmarsat.com",,0,0,,,;+CGEQREQ=1,1,128,128,128,128;+CGEQMIN=1,1,128,128,128,128
Connect Standard IP with Primary and Streaming IP 128k with Secondary to send/receive UDP.	AT+CGDCONT=1,"IP","bgan.inmarsat.com",,0,0,,,,;+CGDSCONT=2,1;+CGEQREQ=2,1,128,128;+CGEQMIN=2,1,128,128;+CGTFT=2,1,,,17;_ITFT=2,1,,,17

NOTE

The max number of characters which can be input to “Service name” is 128 characters in the case of Windows XP and 99 characters in the case of Windows 7.

Appendix I How to connect Bridge Connection

I.1 About Bridge Connection

In Bridge mode, the global IP address (IP address obtained from the Inmarsat network) will be directly assigned to the user terminal connected to the User LAN Port.

Unlike PPPoE mode (Appendix H), Bridge mode uses inter-LAN communication to connect to the internet. In case the user terminal is a router, the communication between the LAN under the router (Framed Route Subnet of Fig.I.1) and the internet will be executed by local IP (without NAT or IP Masquerade). In order to use Bridge mode, your SIM distribution partner need to support "Framed Route function" (The function to transmit IP packets which are originated from any IP address other than the IP address assigned by Inmarsat.).

Only one Bridge connection is available for one VLAN. In other word, JUE-251/501 can hold a maximum of four Bridge connections. Fig. I.1 shows an example of two Bridge connections on VLAN2 and VLAN3.

NOTE

Do not connect 1by1NAT connection or IP Masquerade connection on a VLAN where a Bridge connection is being activated.

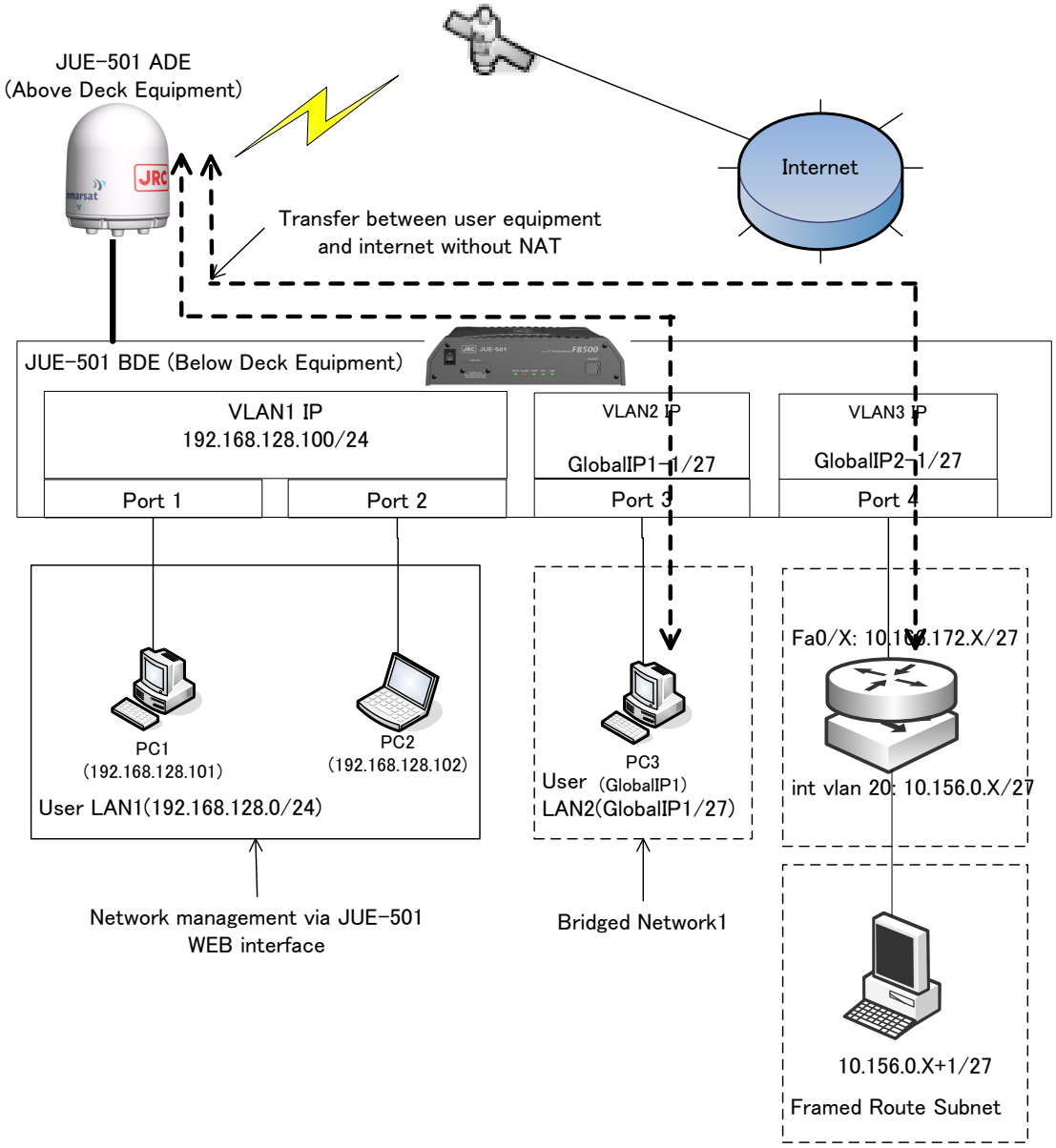


Fig. I.1　Internet Connection mode（Bridge）

In case of making your Bridge connection by your own terminal, the Web menu will be unavailable from your terminal because the connection between your terminal and JUE-501/251 will be cut (because you need to change the IP address of your terminal).

Please make Bridge connection by any other terminals（User LAN1 of Fig. I.1） than the terminal to be connected.

I.2 Set and Connect JUE-501/JUE-251 (Bridge)

1. Open WAN Profile screen and select a Profile to be set.

2. Set [Connection Mode] in [Advance Mode] to [Bridge]. VLAN selection menu will appear. Select a VLAN and click [Set] button.
   In Bridge mode, following menus are unavailable.
   - Packet Detect Activate
   - WAN Filter
     (Packet Filter/MAC Filter works properly. However the MAC filter is not adapted to the Framed Route subnet because it is adapted to the terminals connected to the User LAN directly.)
   - VPN
   - Secondary Service
   - SMS Remote Activate in Bridge mode

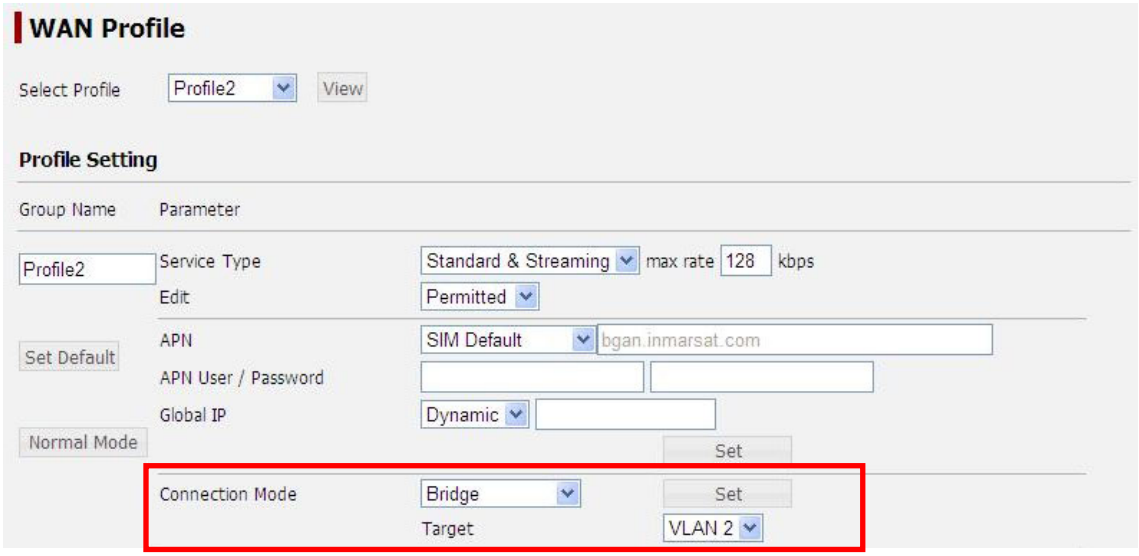


Fig.I.2 WAN Profile screen (Bridge)

3. Open LAN screen and set the VLAN selected in the step 2. As an example, here we set VLAN2 and assign Port3 for the VLAN2.

   * An attempt to connect disabled VLAN (VLAN=Disable) to the internet will fail. Even when the VLAN has been enabled, communication between LAN (PC) and the internet is unavailable when no port has been assigned to the VLAN.

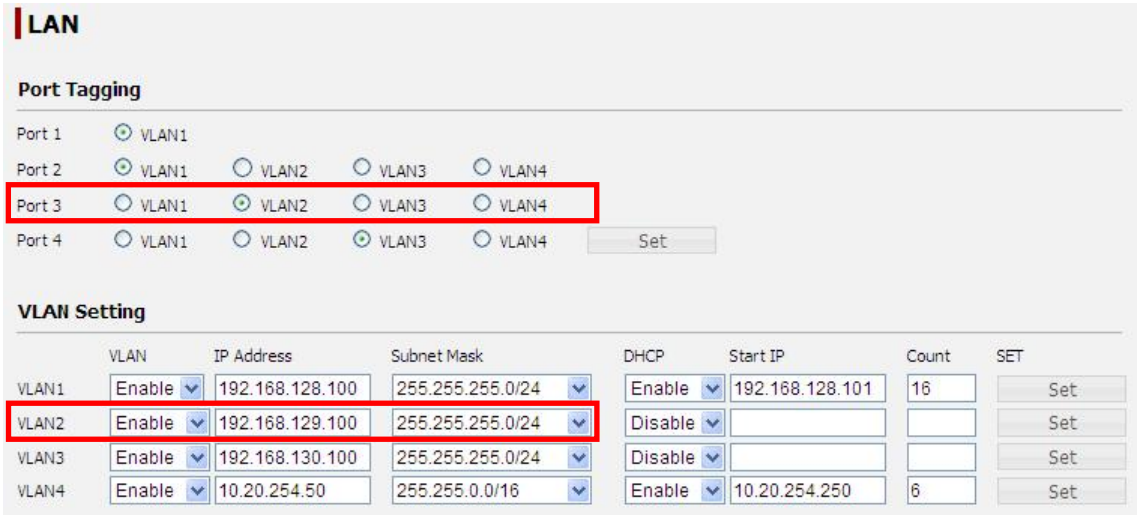


Fig. I.3 LAN screen

4. Open User Registration screen and register a dedicated user to control the Bridge connection. Please assign the WAN profile registered in the step 2 to the user. As an example, we make a user who has the name ADMIN2, Secret Code 0002 and Profile2.

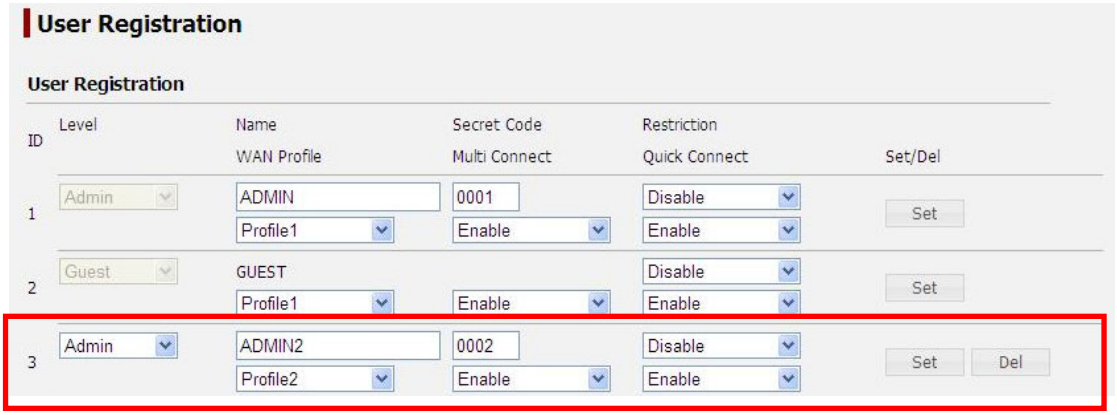


Fig. I.4 User Registration screen

5. Log out of the Web menu, and log in with the user made in the step 4.

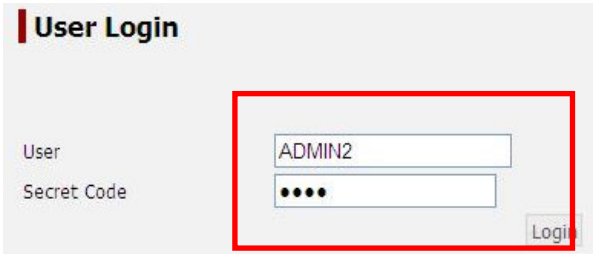


Fig. I.5 Login screen

6. Make a PS connection on Data Connection screen or Dashboard screen.

7. The result will be printed on Data Connection screen and Dashboard screen after it has been connected.

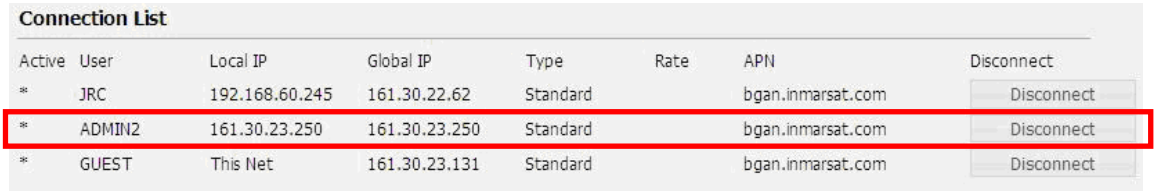


Fig. I.6 Data Connection screen（After Bridge connected）

In a Bridge connection, the IP address of [Local IP] will be the same with that of [Global IP].

I.3 Settings for Clients (Bridge)

1. Set the IP address of client PC (or router) connected to the VLAN2（Port3 for the Fig.I.3） to the Local IP（=Global IP） printed on the Fig.I.6.

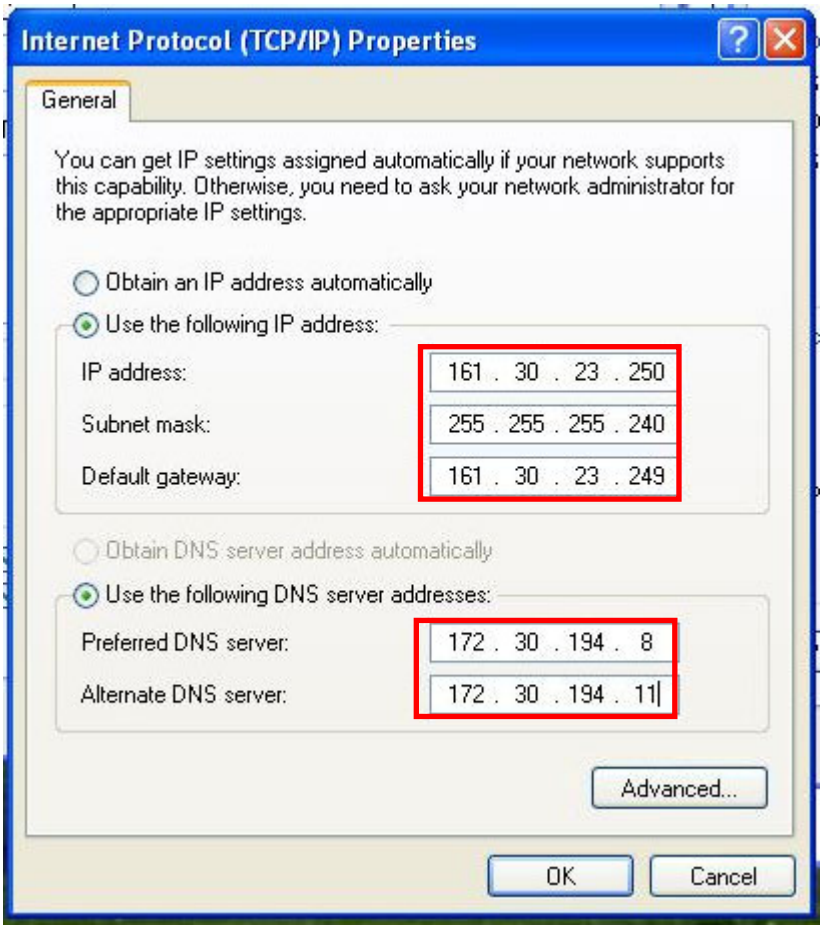


Fig. I.7 PC Settings for Bridge (Windows XP)

（1） IP address

Set the global IP address assigned for the Bridge connection. As an example here, we set [161.30.23.250].

（2） Subnet Mask

Set [255.255.255.240]. In some case (according to the assigned global IP address), a warning will appear when you set [255.255.255.240]. In that case, please extend the range of Subnet Mask to [255.255.255.224], [255.255.255.192], [255.255.255.128]… until the warning stops coming out.

（3） Default Gateway

Set the IP address subtracted one from the assigned global IP address. As an example here, we set [161.30.23.249].

In the case where the assigned IP address was [xxx.xxx.xxx.1] (xxx means a number from 1 to 255), set the IP address added one to the assigned global IP address. It means [xxx.xxx.xxx.2].

（4） DNS Server

Set any DNS server or the DNS server assigned from Inmarsat network. As an example, we set [172.30.194.8] and [172.30.194.11].

The DNS server assigned from Inmarsat network can be confirmed on the Diagnostic screen of Web menu.

DNS

Local IP	Global IP	Primary DNS	Secondery DNS
192.168.60.245	161.30.22.62	172.30.194.8	172.30.194.11
161.30.23.0	161.30.23.250	172.30.194.8	172.30.194.11
192.168.128.0	161.30.23.131	172.30.194.8	172.30.194.11

Fig.I.8　Diagnostic screen

* In Bridge mode, the Proxy DNS function of JUE-501/JUE-251 is unavailable. You need to set DNS server by manually.

2. Confirm the connection. Send some packet data from the connected terminal (the terminal you set the global IP address at the Fig.I.7 or the terminals on the Framed Route network which located under the router you set the global IP address) to the Internet.
3. To cut the Bridge connection, log in to the Web menu with the control user on a control PC and click Disconnect button on Data Connection screen or Dashboard screen.

Appendix J Multi-Voice/Multi Number function

J.1 Multi-Voice function

The Multi-Voice function can be used existing Voice call with CS service (CS-Voice, 1 call) and Voice call with PS service (PS-Voice, up to 8 calls) simultaneously.

Note

* A contract with your SIM distribution partner is needed to use Multi-Voice function.

* The maximum number of concurrent calls depends on the FB type (FB250/500), available bandwidth, network conditions, and terminal settings.

*The number of concurrent calls using Handset, telephone (connected to TEL1-TEL6), and ISDN is 1 CS-Voice and 1 PS-Voice. Use IP telephone when you want more Voice call simultaneously.

*The maximum number of terminal (Handset, telephone connected to TEL1-TEL6, ISDN, and IP telephone) which be used simultaneously is 9 including external, internal and forwarding call. For example, when you use 4 lines with internal call (8 terminals are used), you can use 1 line for external call (1 terminal is used).

* When Multi-Voice function is enabled, JUE-501/251 activates PS connection with CID 10 and 11 automatically. So the application which use fixed CID needs to use CID expect 10 and 11.

* When Multi-Voice function is enabled, only “Announced forwarding” is available. The “Quick forwarding” is unavailable.

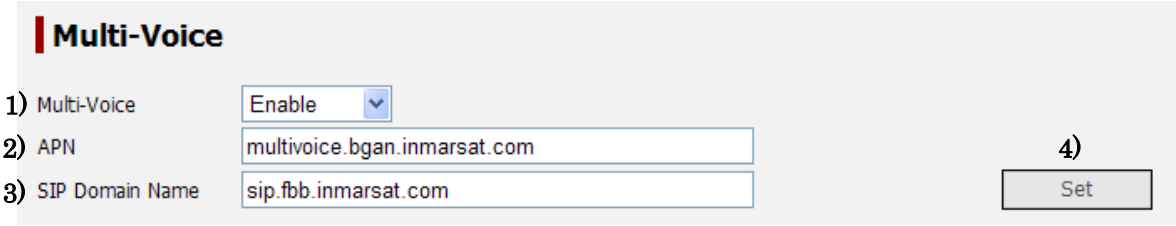
* PS-Voice works same as Voice (CS-Voice) in following item,

  - Indicate Dashboard and Call log
  - Set Call Charge Rate (Sec. 6.4.5.2)
  - Set up Ports (Sec. 6.5.2.1)
  - Set Auto Answering the Telephone (Sec. 6.5.2.2)
  - Set Input/Output signal (Sec.6.5.4.3)
  - Set Option Button and Buzzer (Sec. 6.5.3.5)
  - Restrict User Connection (Sec. 6.5.4.3)

J.1.1 Setting for Multi-Voice function (Multi-Voice screen)

Setting for Multi-Voice function is made on “Multi-Voice” screen of Web menu. How to use Web menu system is explained in [Sec.6 Web menu System].

To enter the “Multi-Voice” screen, open “Telephony” menu on the left [menu] panel and select “Multi-Voice”. These settings require Admin privileges.



Display		Contents
1)	Multi-Voice	Enable / Disable of Multi-Voice function
2)	APN	Access Point Name for Multi-Voice
3)	SIP Domain Name	SIP Domain Name for Multi-Voice
4)	SET	Registers the setting. The reboot of JUE-501/251 is required to apply the setting.

The procedure for enabling the Multi-Voice function

(1) Set Multi-Voice to “Enable”.
(2) Set the APN for Multi-Voice.
(3) Set the SIP Domain Name for Multi-Voice.
(4) Click the “SET” button.
(5) Reboot the JUE-501/251.

J.1.2 The behavior on Multi-Voice function enabled

When the Multi-Voice function is enabled, the following icons appear in headline of Web menu.

Icon	Description
PS-Voice	The icon for indicate of PS-Voice status. Green : PS-Voice is active. None : PS-Voice is not active.
	The icon for indicating that Multi-Voice function is available.
	The icon for indicating that Multi-Voice function is not available.

After "CS PS Ready", JUE-501/251 secures CID 10 and 11 and then activates PS communication automatically to use Multi-Voice function. The CID 10 and 11 are fixed value and the connections cannot be disconnected by user.

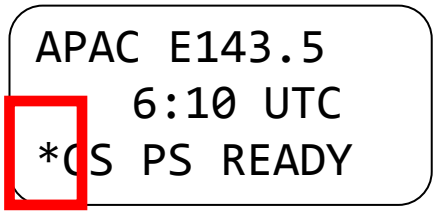
Data Connection

Connection List

Active	CID	User	Local IP	Global IP	Type	Rate	APN
*	10	Multi-Voice			Streaming	18k	
*	11	Multi-Voice		10.127.[redacted]	Standard		multivoice.bgan.inmarsat.com

CID	Describe
11	Standard IP for Multi-Voice control. The connection is always activated automatically.
10	Secondary Streaming IP for PS-Voice. The connection is activated (indicate "*" in "Active" line) only when PS-Voice is activated.

And then, when Multi-Voice function is available, the icon is displayed in headline of Web menu and "*" mark is display in the Status line of the Handset.



J.2 Multi Number function

An existing Primary Voice MSISDN and max 8 Additional Voice MSISDN are available in Multi-Voice function.
When assigning Primary/Additional Voice MSISDN to each terminal (Handset, TEL1-TEL6, ISDN, IPTEL1-IPTEL9, PBX), the specific terminal can be rung using assignment MSISDN on Voice incoming call.

Also when Multi-Voice function is enabled, on Voice outgoing call, the terminal which is assigned Primary Voice MSISDN communicates with CS-Voice or PS-Voice (CS-Voice or PS-Voice is selected automatically by JUE-501/251), and the terminal which is assigned Additional Voice MSISDN communicates with only PS-Voice.
(The outgoing/incoming call of Audio/UDI/RDI service is always used CS connection.)

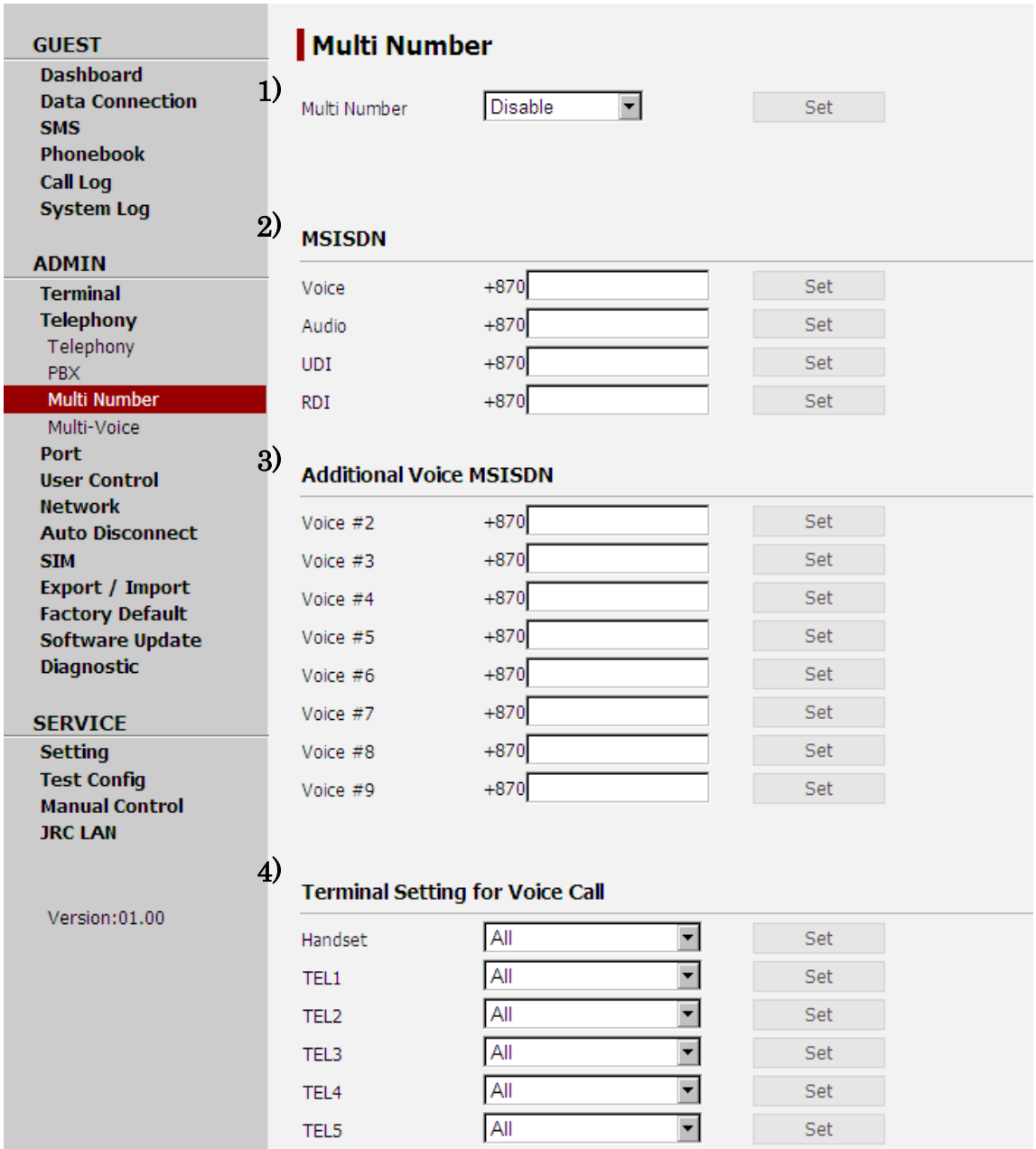
Note

* On following conditions, all terminals rings regardless of Multi Number setting according to terminal setting,
  - The called number (MSISDN) is not notified in incoming announcement from Inmarsat network.
  - Incoming service type is Audio/UDI/RDI.

J.2.1 Assignment a Voice MSISDN to each Terminal (Multi Number screen)

Assignment a Voice MSISDN to each Terminal is made on “Multi Number” screen of Web menu. How to use Web menu system is explained in [Sec.6 Web menu System].

To enter the “Multi Number” screen, open “Telephony” menu on the left [menu] panel and select “Multi Number”. These settings require Admin privileges.



Display		Contents
1)	Multi Number	Enable/Disable of “Multi Number” function. When selecting “Disable”, the MSISDN setting for each Terminals is “All”.
2)	MSISND	Set the (Primary) MSISDN for each service assigned to your SIM card.
3)	Additional Voice MSISDN	Set the Additional Voice MSISDN.
4)	Terminal Setting for Voice Call	Assign the Voice MSISDN to each Terminal. When selecting the “Primary/Additional MSISDN”, the terminal rings only when the MSISDN is called on incoming call. Also the MSISDN is used as calling number on outgoing call. When selecting the “All”, the terminal rings regardless of the called number. Also Primary MSISDN (or IMSI) is used as the calling number on outgoing call.

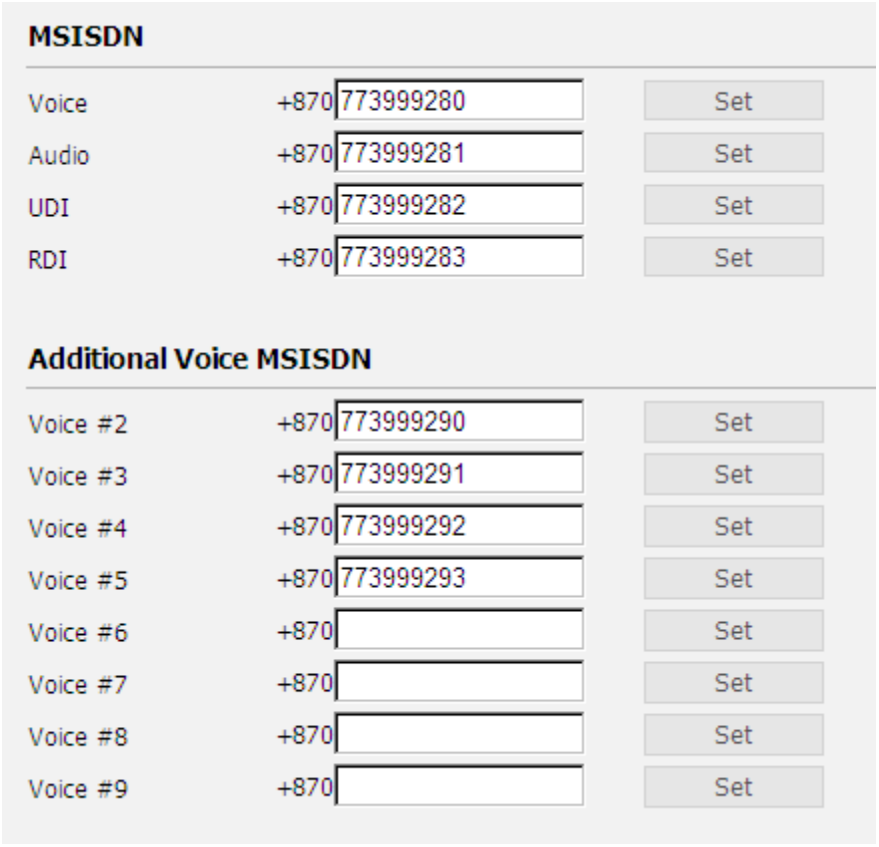
Note

* Multi Number setting is available on Voice outgoing/incoming call. Refer to “Terminal” of “Terminal” menu about the detail of outgoing/incoming setting for each Terminal.

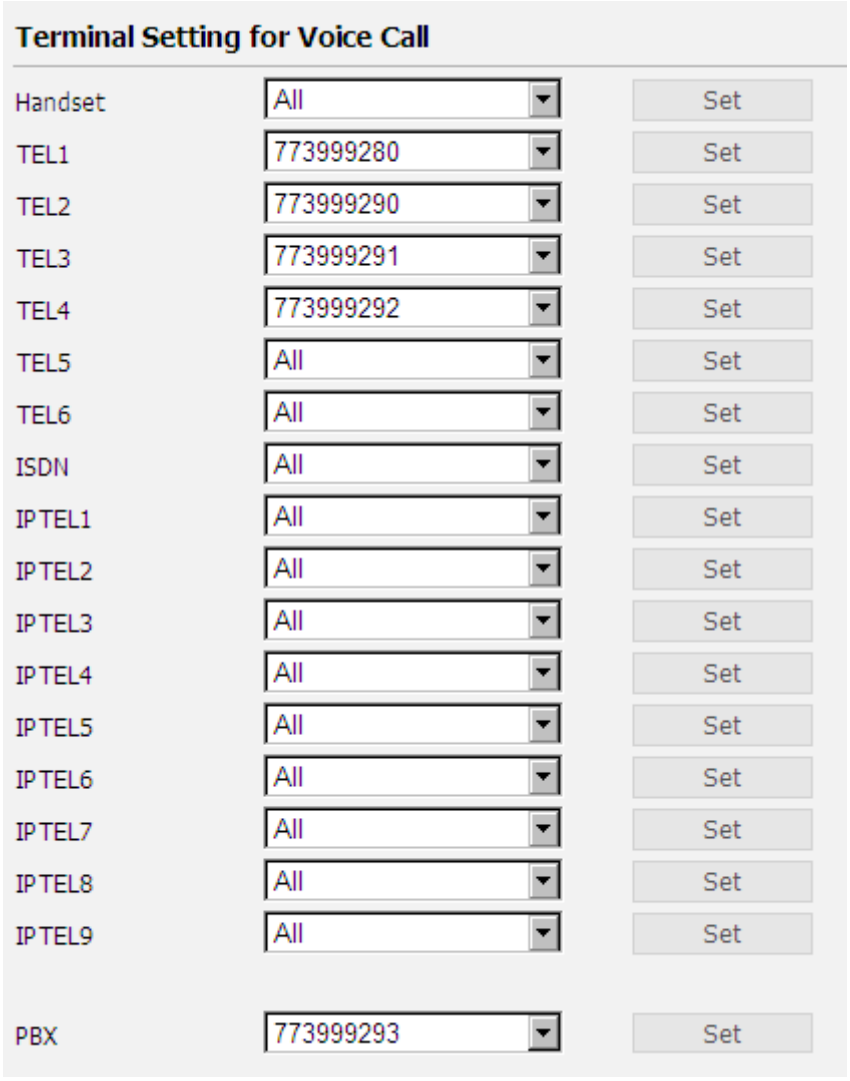
The procedure for assigning a Voice MSISDN to each Terminal

(1) Select Multi Number to “Enable” to assign the Voice MSISDN to each Terminal, and then click “SET” button.

(2) Set (Primary) MSISDN and Additional Voice MSISDN and then click “SET” button.



(3) Select the Voice MSISDN of each Terminal and then click “SET” button.



Appendix K FB LaunchPad Installation Procedure

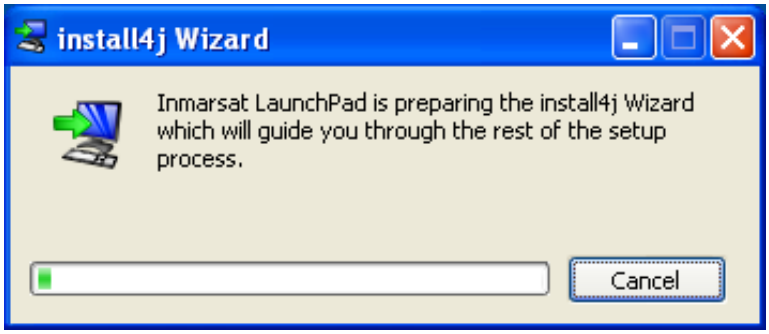
Note

- Launch Pad can be running on Windows XP/Vista/7 32bit.
- If the FB LaunchPad 1.0.x version or 1.1.x version is installed to your PC, uninstall it prior to this installation.

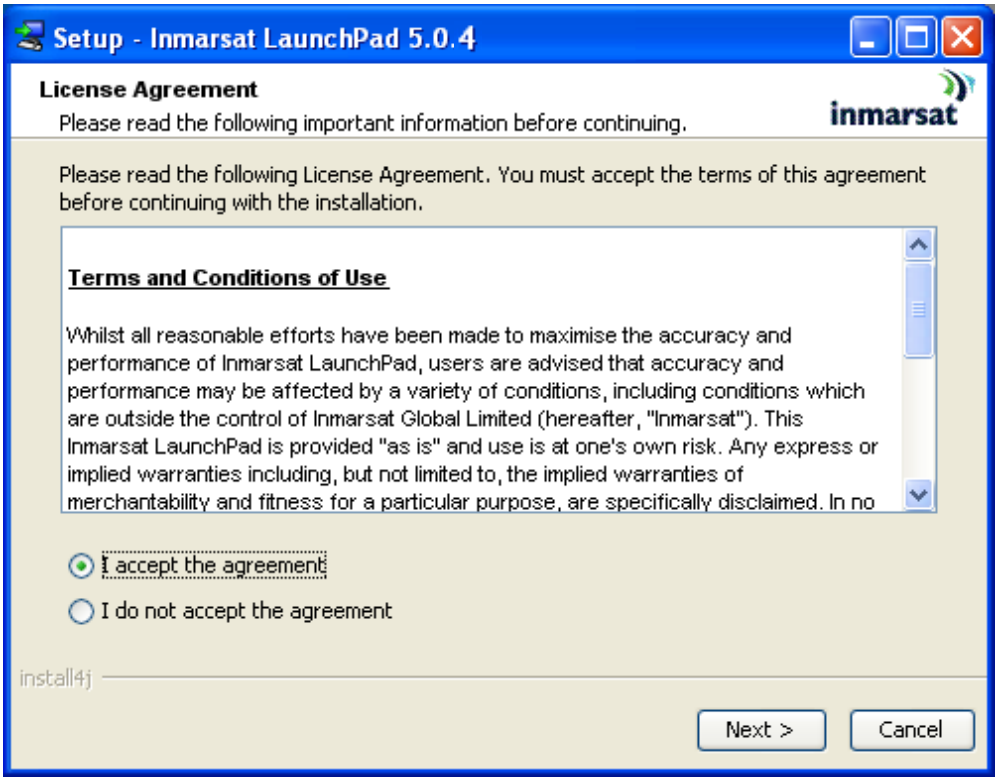
K.1. If there is no FB LaunchPad already installed.

1. Double-click the icon to open the FB LaunchPadInstaller.exe, which is stored in the attached CD-ROM:

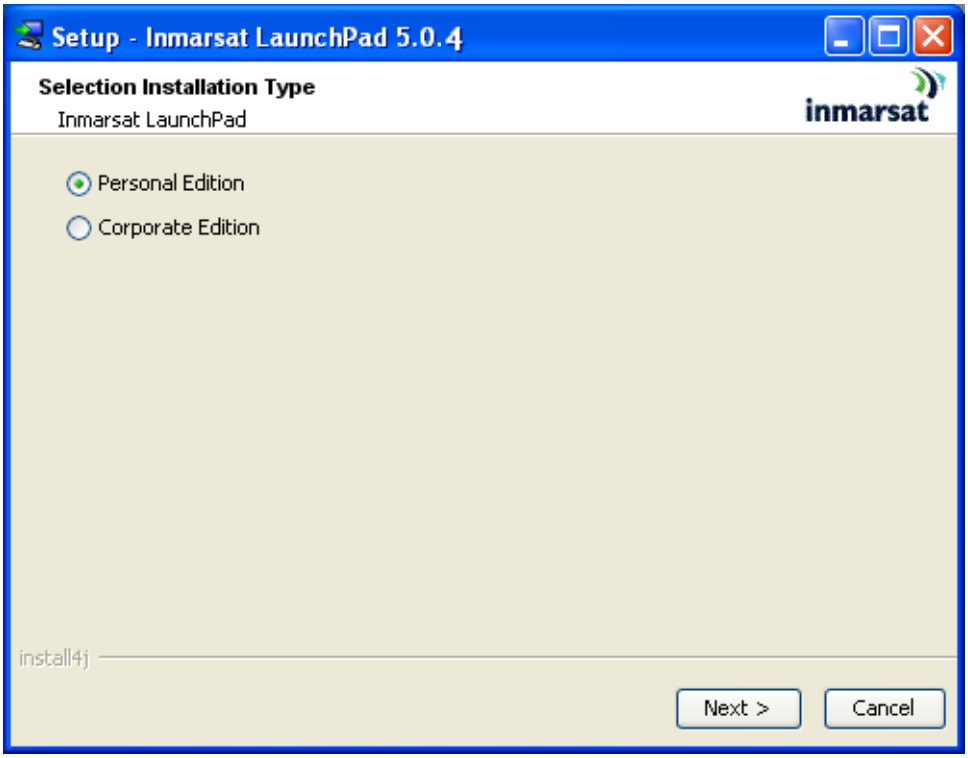
2. Following screen is displayed when setup installation is started:



3. Following screen is displayed when setup installation is completed. Click the radio button next to "I accept the agreement", then click **Next**.

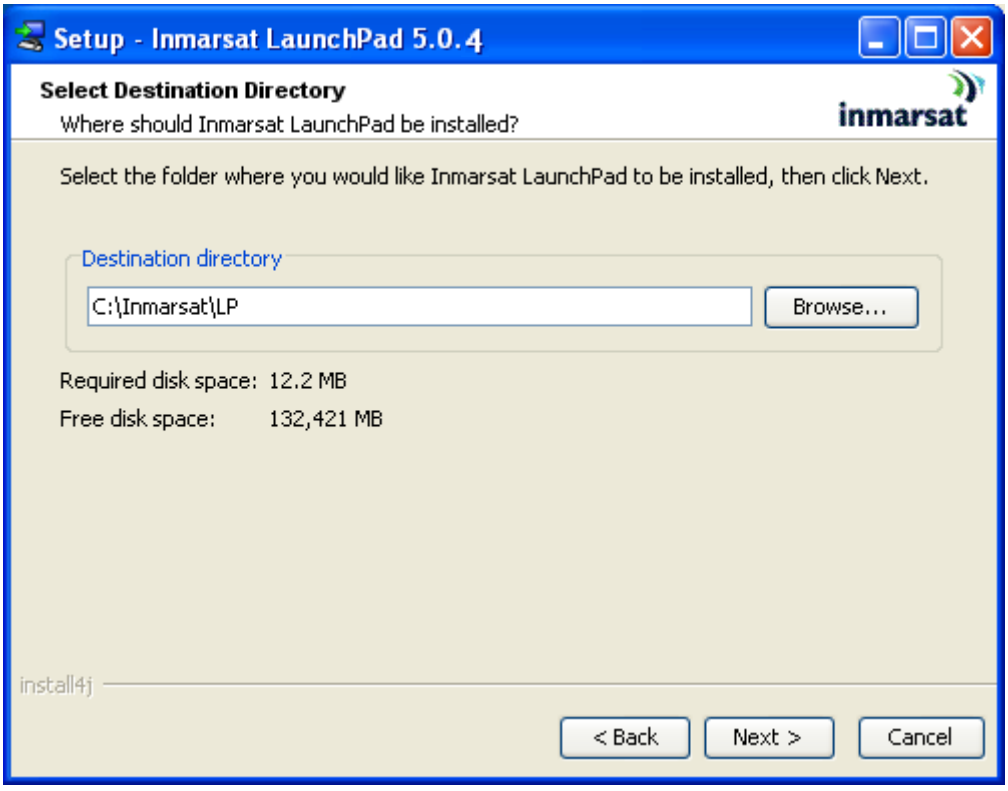


4. Select the edition. Click the radio button next to ”Personal Edition”, then click **Next**.

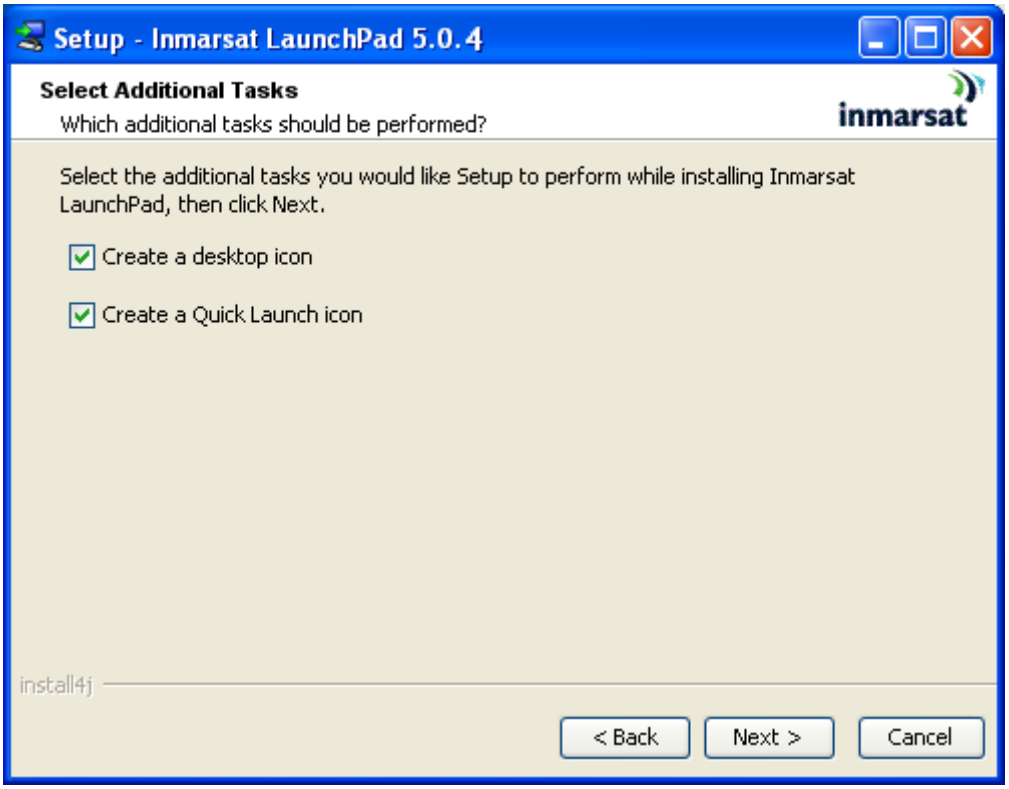


5. Select the install folder. Click **Next**.

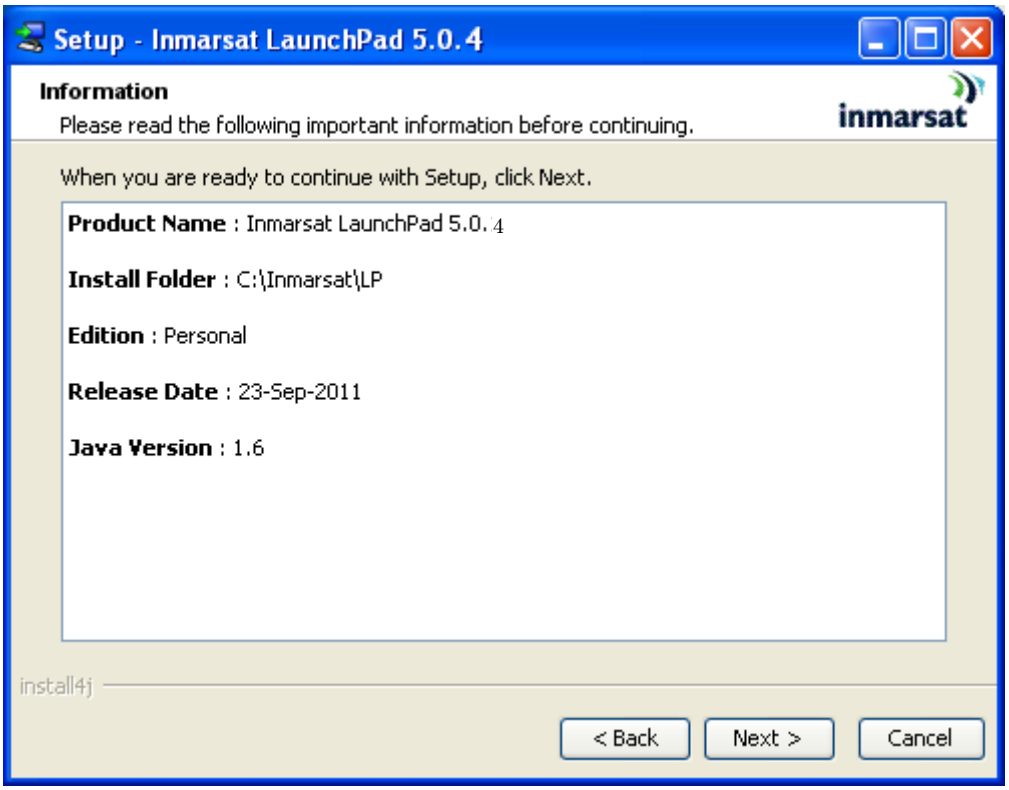
Note
Don’t change the default install folder.



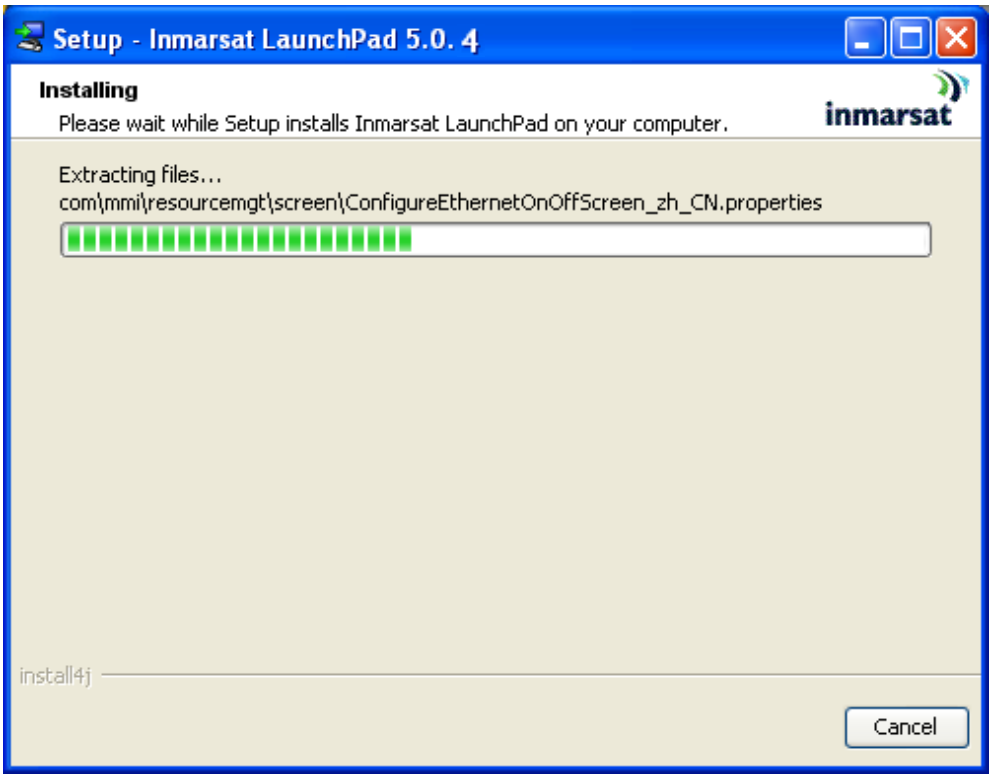
6. Click **Next**.



7. Following screen is displayed and Pre-installation summary is shown. Click **Install** if the summary is acceptable.



8. Following screen is displayed when installation is started.



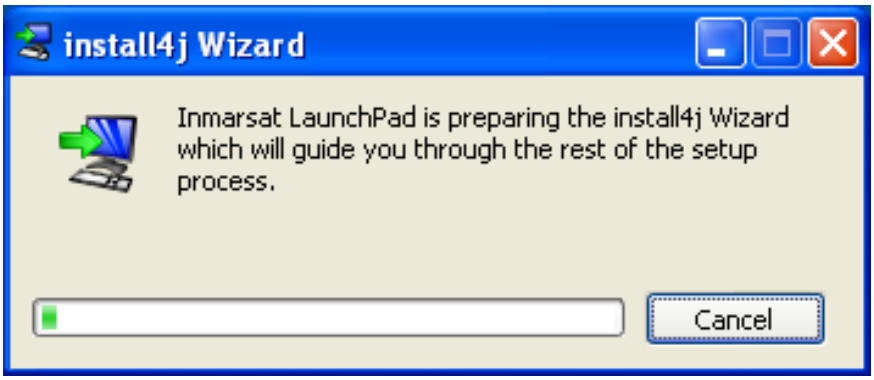
9. Following screen is displayed when the installation is completed. Click **Finish** to close the installer. Now, FB LaunchPad installation is completed.

K.2. If FB LaunchPad 1.4.X version is already installed

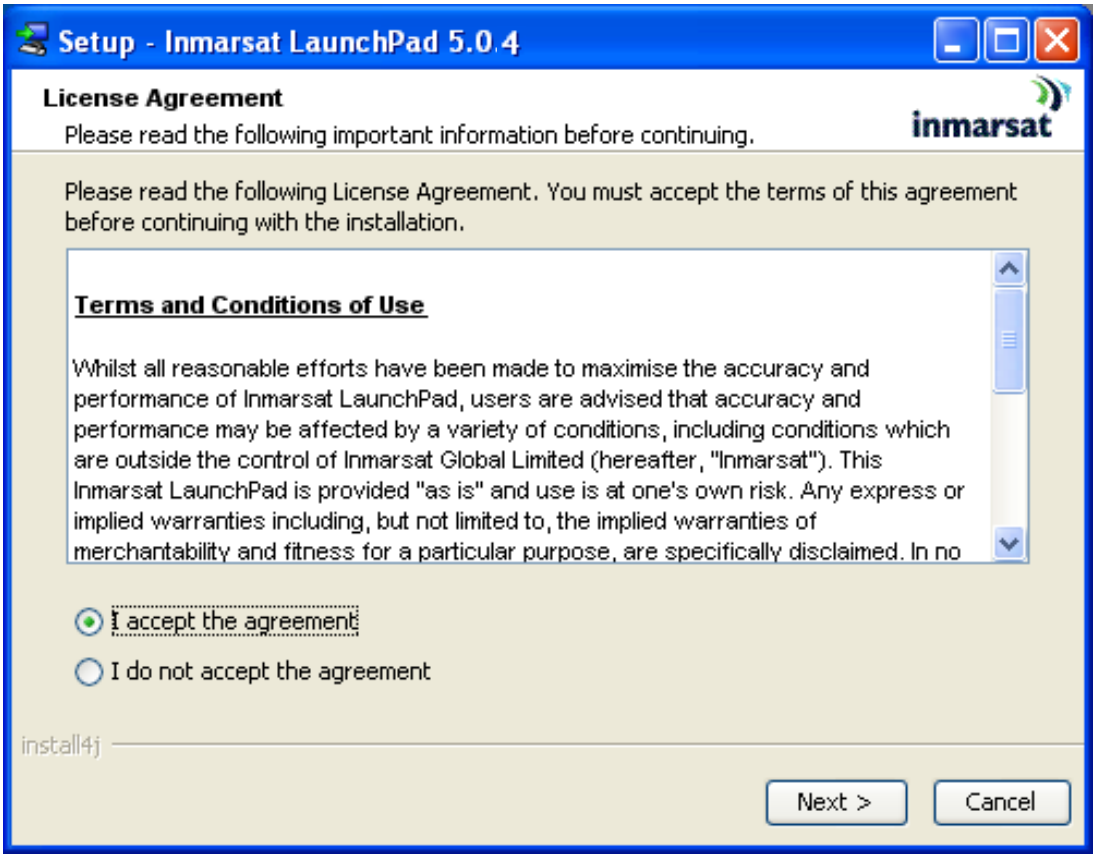
The user data in the LaunchPad later than or equal to 1.4.0 version can be retained by this procedure.

1. Double-click the icon to open the FB LaunchPadInstaller.exe, which is stored in the attached CD-ROM:

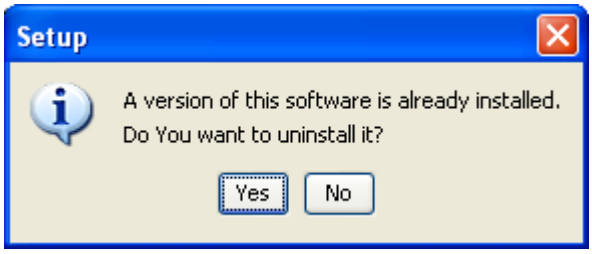
2. Following screen is displayed when setup installation is started:



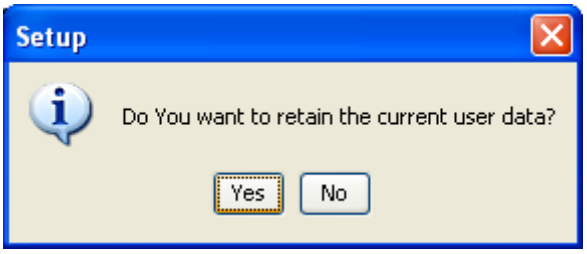
3. Following screen is displayed when setup installation is completed. Click the radio button next to "I accept the agreement", then click **Next**.



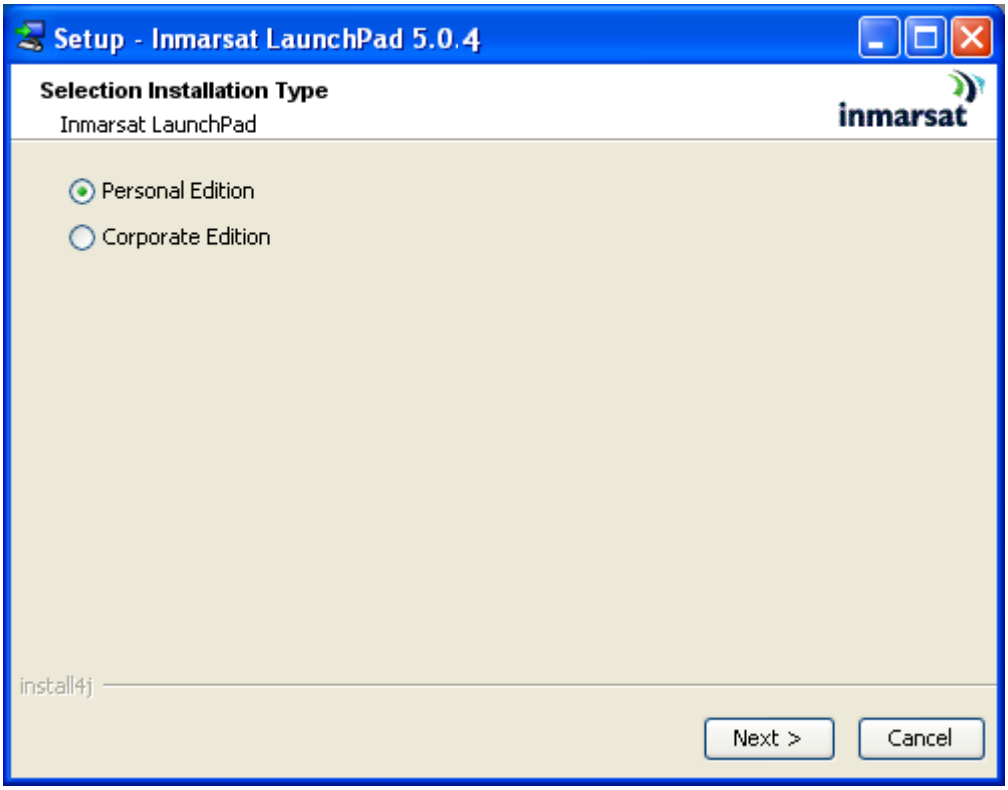
4. Select “Yes”. Uninstaller will activate to uninstall the old version.



5. Click ”Yes” to retain the current data.

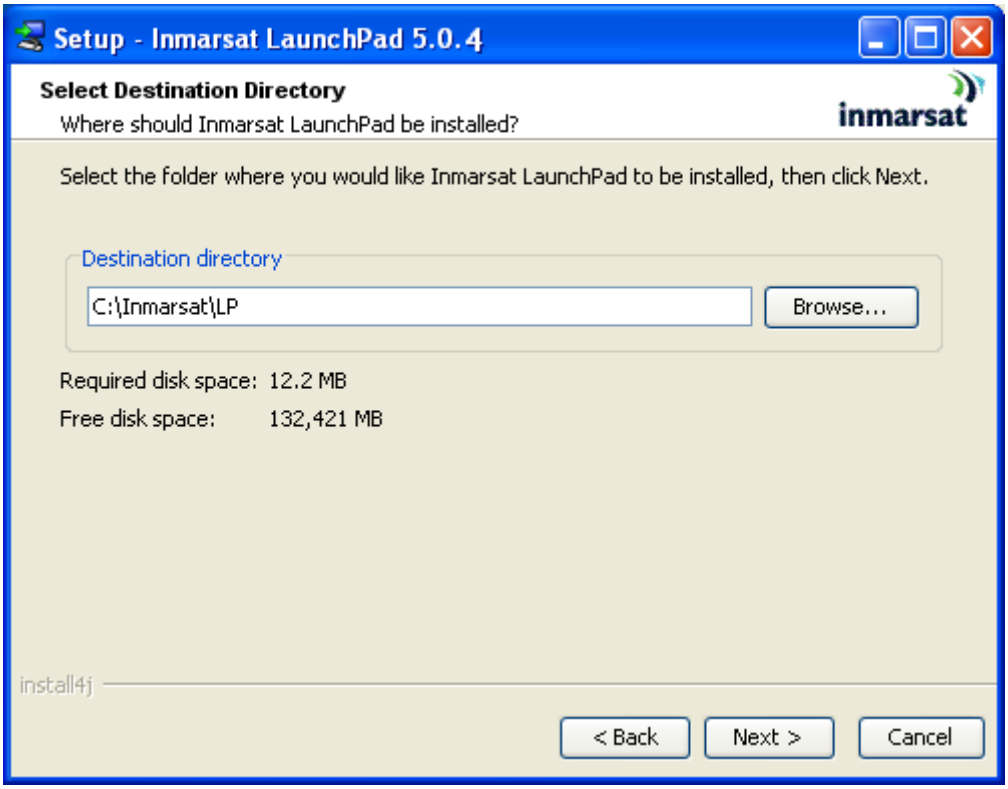


6. Select the edition. Click the radio button next to ”Personal Edition”, then click **Next**.

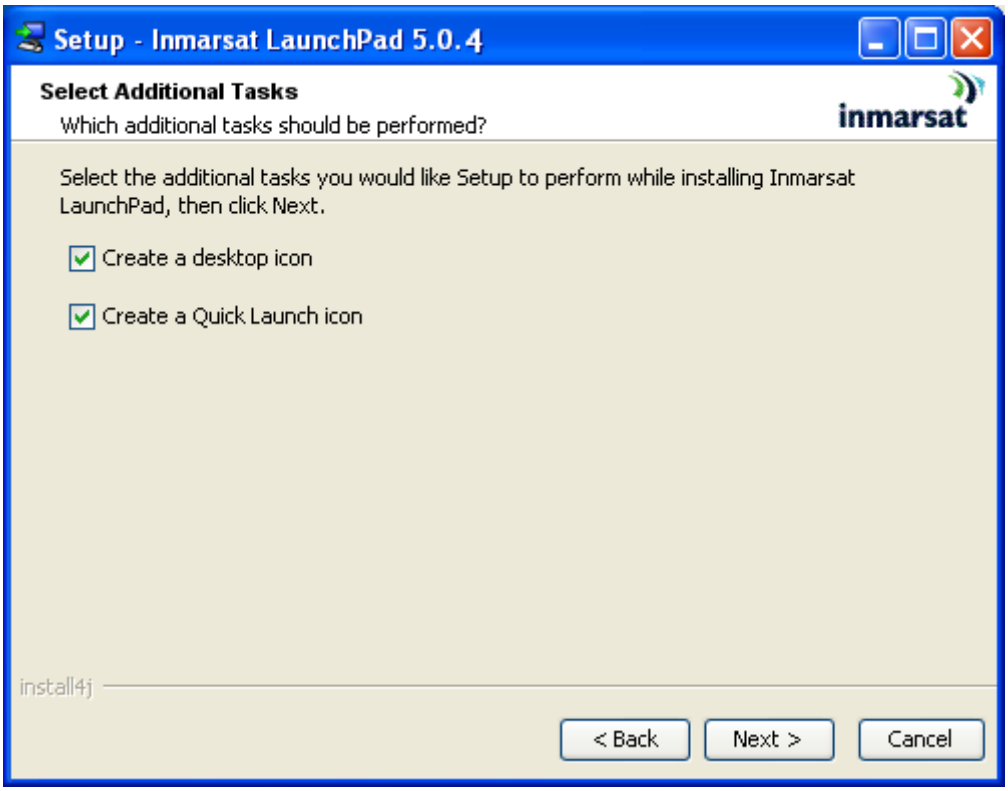


7. Select the install folder. Click **Next**.

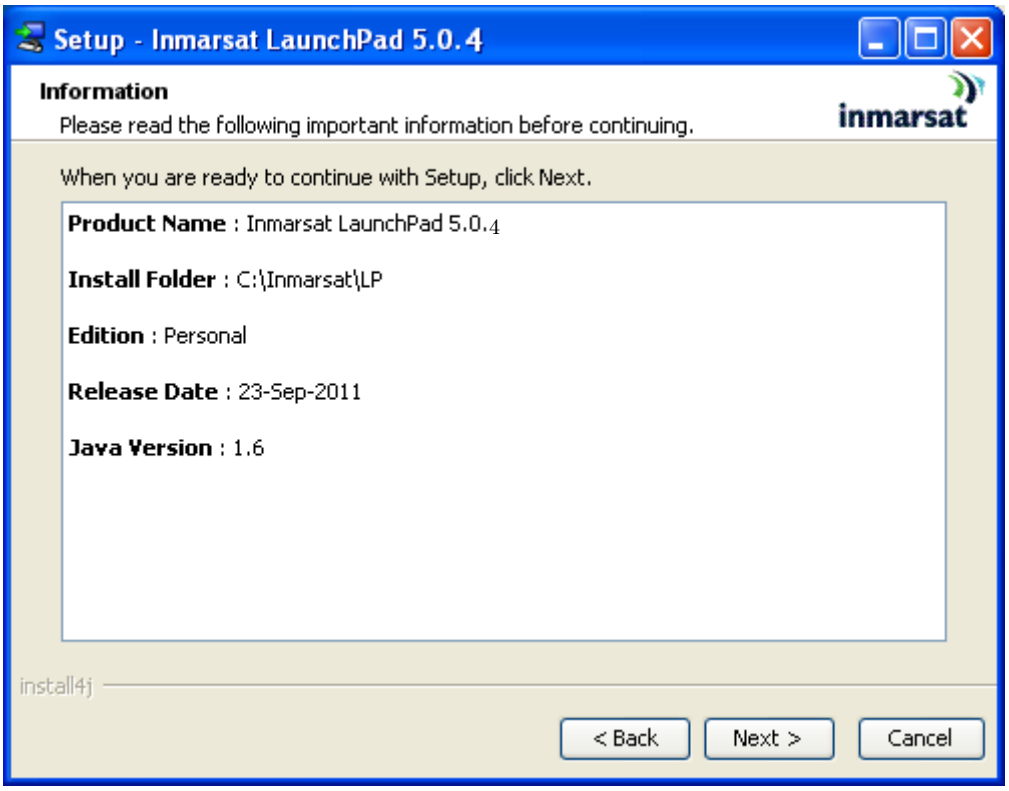
Note
Don't change the default install folder.



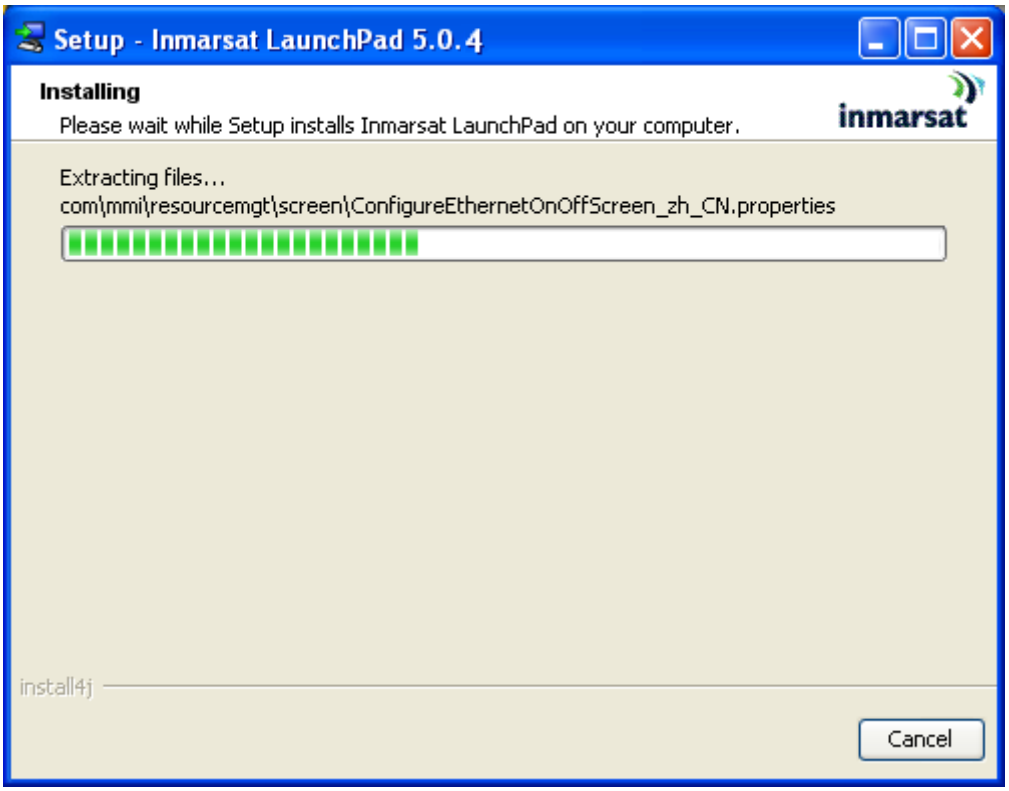
8. Click **Next**.



9. Following screen is displayed and Pre-installation summary is shown. Click **Install** if the summary is acceptable.



10. Following screen is displayed when installation is started.



11. Following screen is displayed when the installation is completed. Click **Finish** to close the installer. Now, FB LaunchPad installation is completed.

This page is remained as a blank.

Appendix L Use LaunchPad

This section explains how to use LaunchPad. Install the LaunchPad into your PC from attached CD-ROM, before you use LaunchPad. (For details, refer to "Appendix J FB LaunchPad Installation Procedure".)

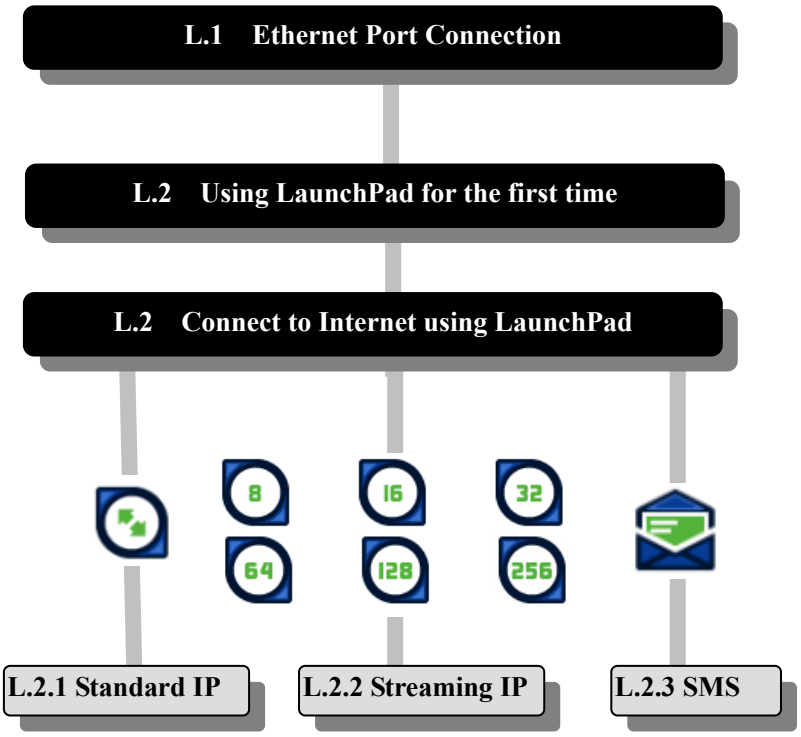


Fig.La Flow of [Connecting to Internet using LaunchPad]

In this Chapter, Windows XP is supposed to be used.

L.1 Ethernet Port Connection

The JUE-501/JUE-251 provides the DHCP server function, which allocates necessary IP address to the PC connected by Ethernet, to make Ethernet communication with Main Unit possible.

User is requested to setup [Obtain an IP automatically] and [Obtain DNS server address automatically] on the PC, to make use of the function.

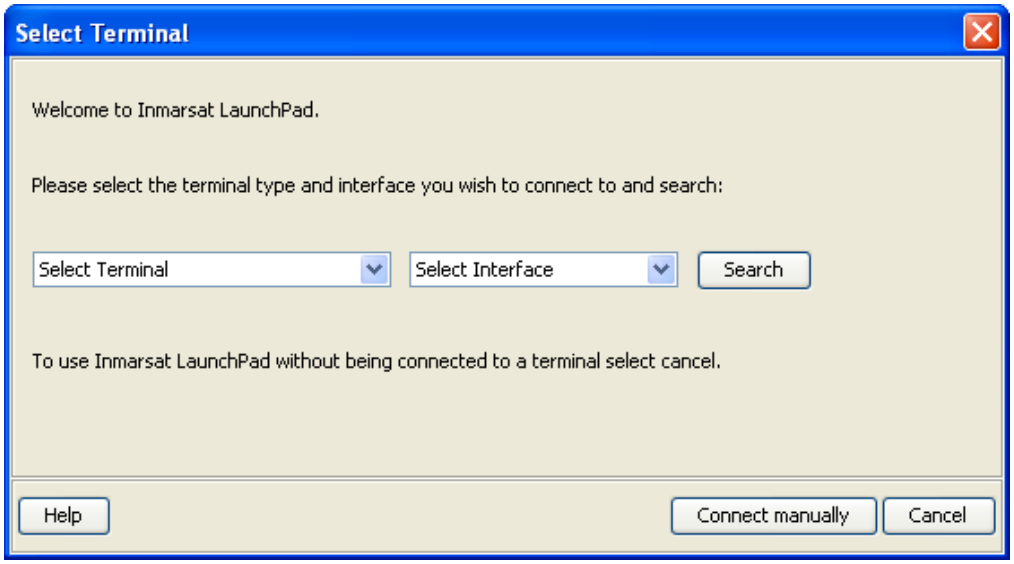
For details, refer to [Sec.6.1 Connect Your PC to JUE-501/JUE-251].

L.2 Using LaunchPad for the first time

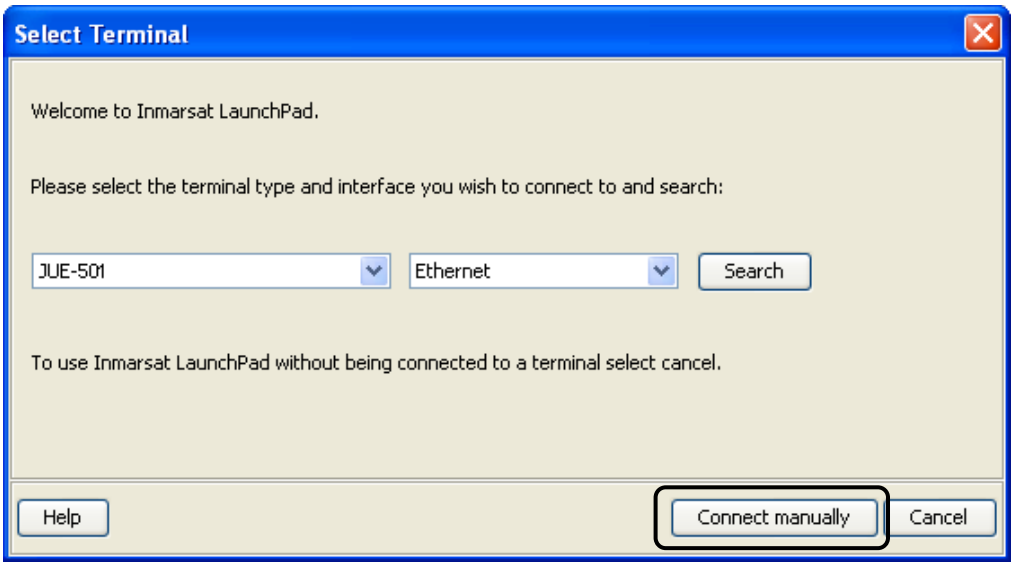
Setting for terminal is required for using LaunchPad for the first time.

1. Start LaunchPad by double-clicking LaunchPad icon。

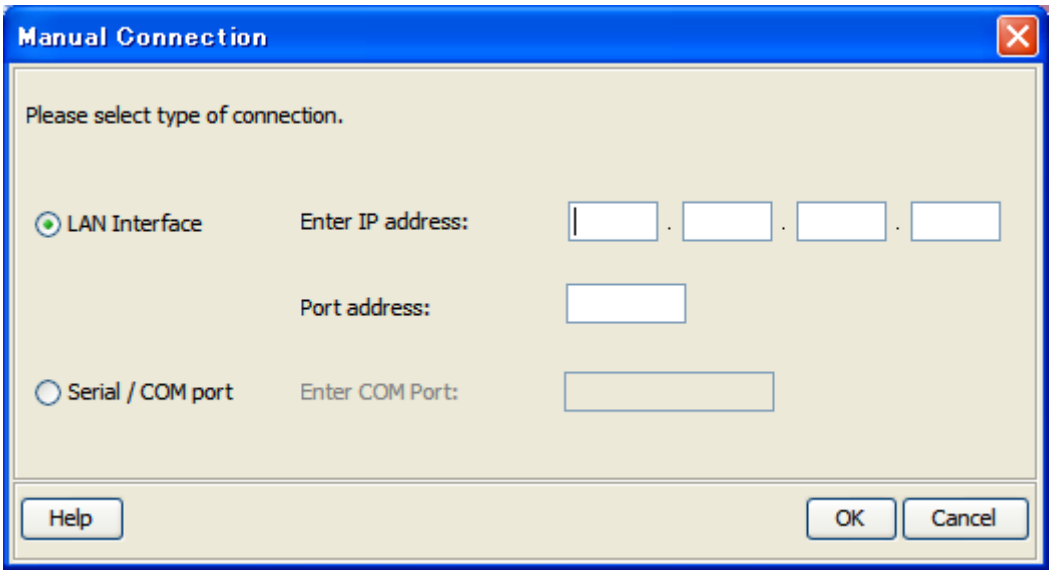
2. Dialog below will be poped-up.



3. Select your terminal and click [Connect manually] button.

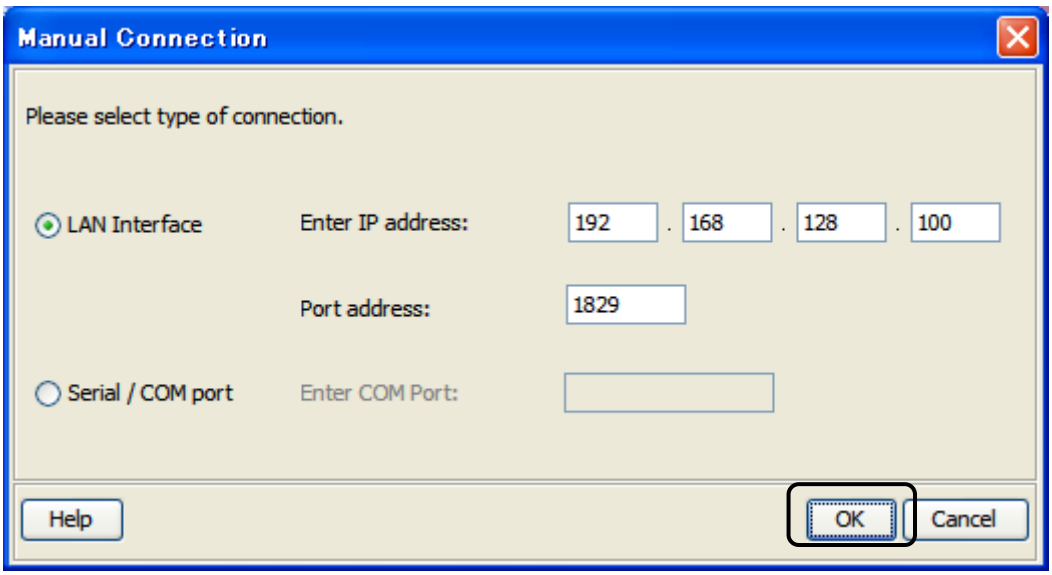


4. A dialog box of Manual Connection appears.



5. Enter IP address of JUE-501/JUE-251 and Port number. Then, click [OK] button.

The initial IP address is 168.128.100 and the LaunchPad uses TCP1829 port.



L.3 Connect to Internet using LaunchPad

By using LaunchPad, communications with services of Standard IP, Streaming IP, or SMS can be used very easily and quickly. Installation of LaunchPad is preliminarily required for this chapter, set the attached CD into your PC and install it.

L.3.1 Standard IP

Standard IP Connection/Disconnecting procedures are mentioned below.

[Connection]

1. Open LaunchPad by double clicking on the LaunchPad-short cut icon on your desktop, and then click [Data] icon.

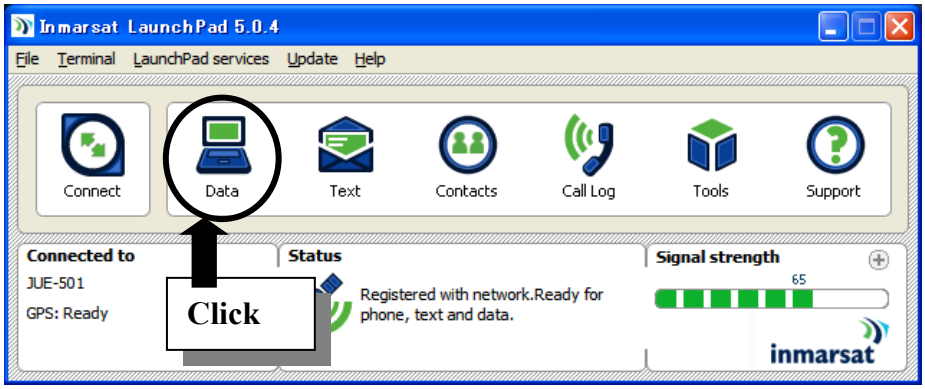


Fig.L.3.1a Main window of LaunchPad

2. Below screen is displayed. Click [Connect Standard] icon, and then connection to Standard IP service is started.

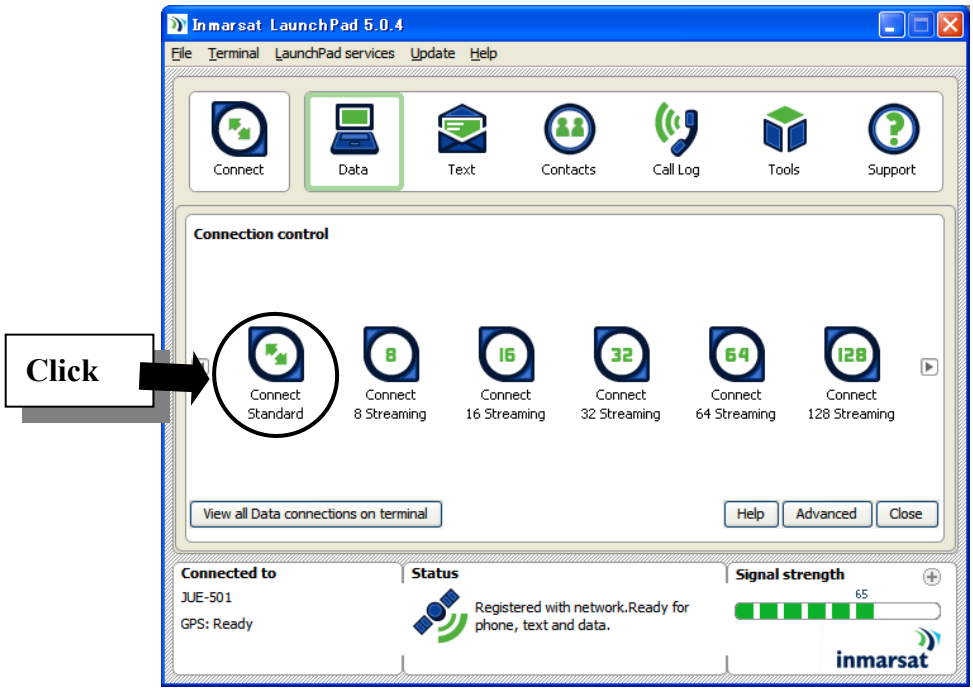


Fig.L.3.1b [Connection control] window

[Connecting] screen is displayed during Standard IP Data connection is requesting.

Fig.L.3.1c [Connecting] window

3. If connection is succeeded, [Connect] icon is changed to [Disconnect], [Connect Standard] icon is changed to [Disconnect Standard], and text of [Status] column is changed to [Standard Data connection open...].

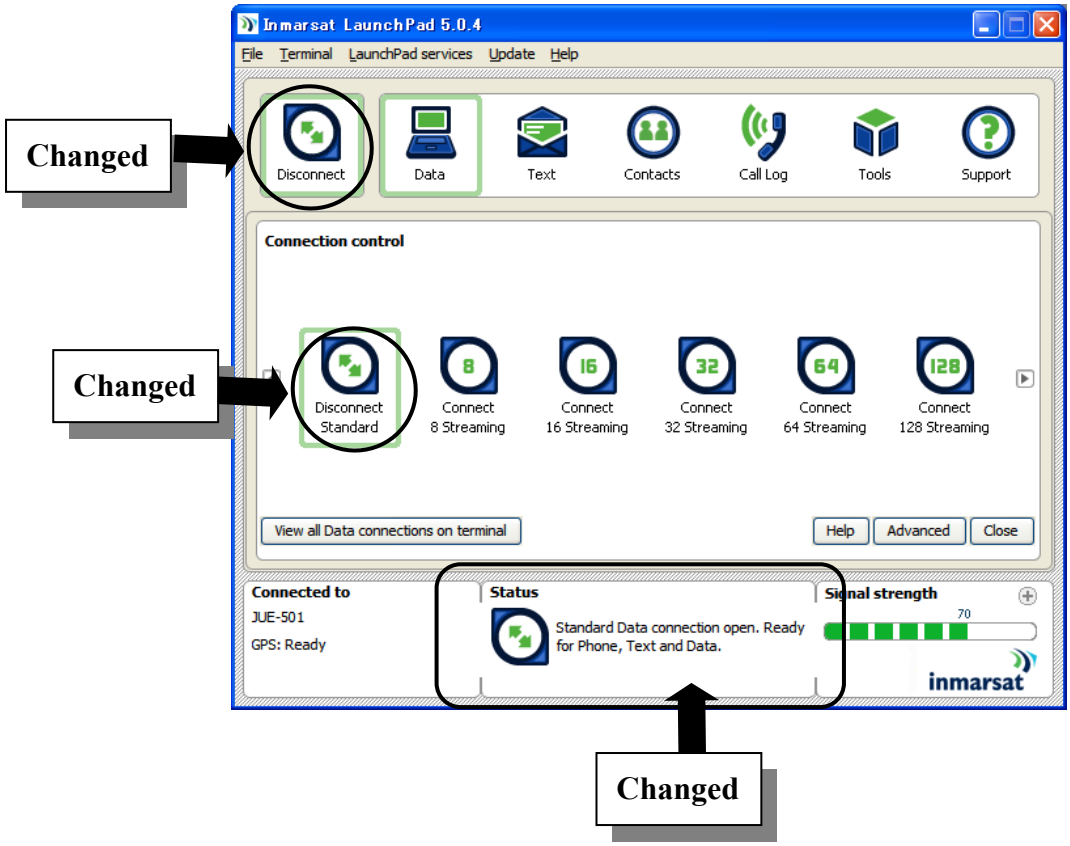


Fig.L.3.1d [Connection control] window (connection succeeded)

[Connecting to Internet]

Standard Data connection is established. Use your desirable tool.

[Disconnection]

Click [Disconnect] icon.

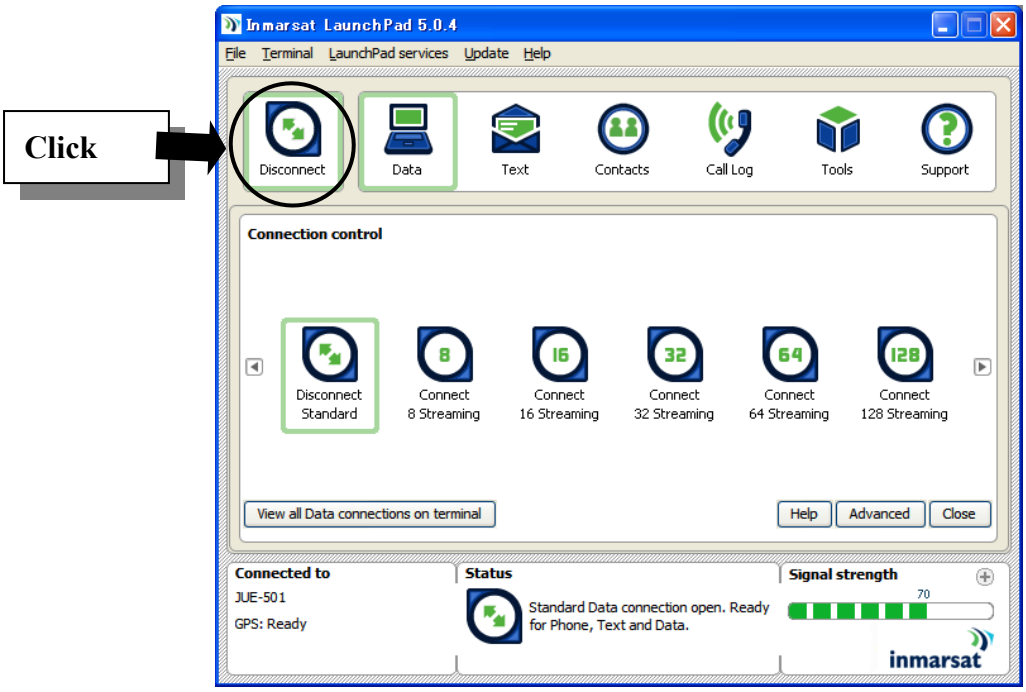


Fig.L.3.1e [Connection control] window (disconnection)

L.3.2 Streaming IP

Below procedure is for 32kbps Streaming IP service. For 8kbps, 16kbps, 64kbps, 128kbps, or 256kbps, the difference is using icons only. (256kbps Streaming IP service is available only for JUE-501.)

[Connection]

1. Open LaunchPad by double-clicking on the LaunchPad icon on your desktop, and then click [Data] icon.

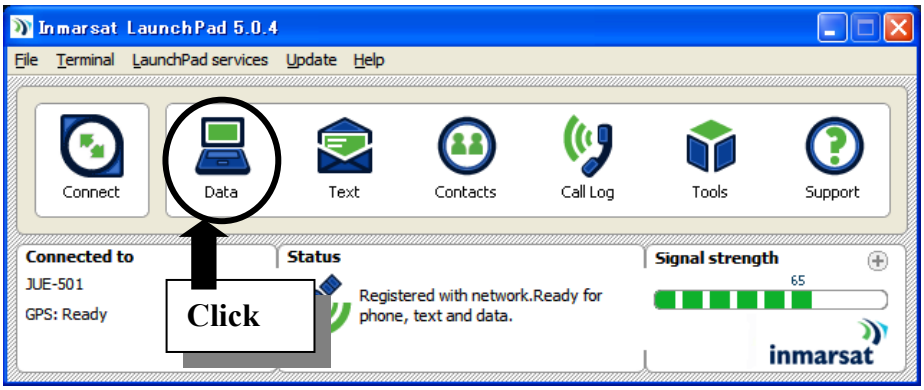


Fig.L.3.2a Main window of LaunchPad

2. Click [Connect 32 Streaming] icon, then connection to Streaming 32kbps IP service is started.

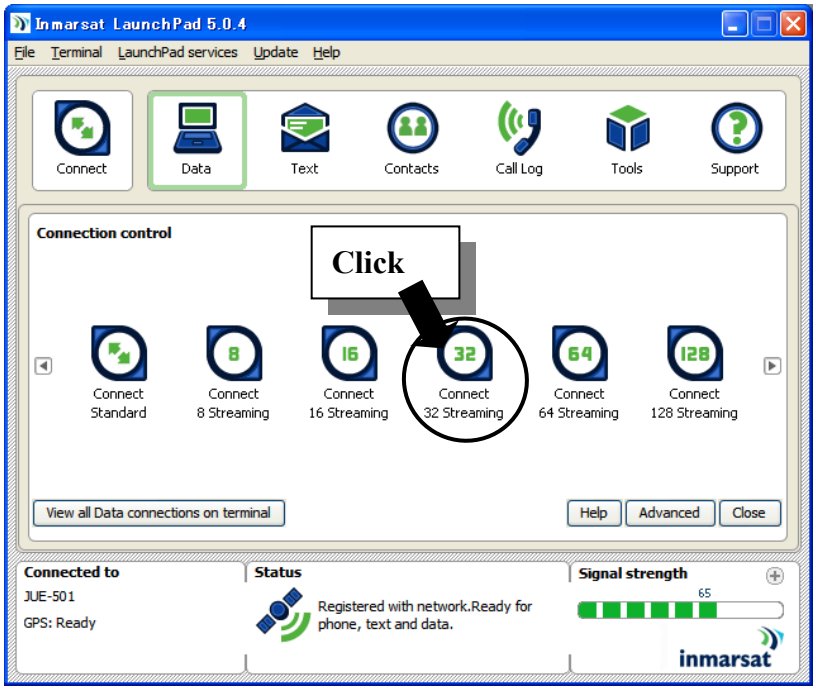


Fig.L.3.2b [Connection control] window

3. Confirmation window is displayed, then click [Yes].

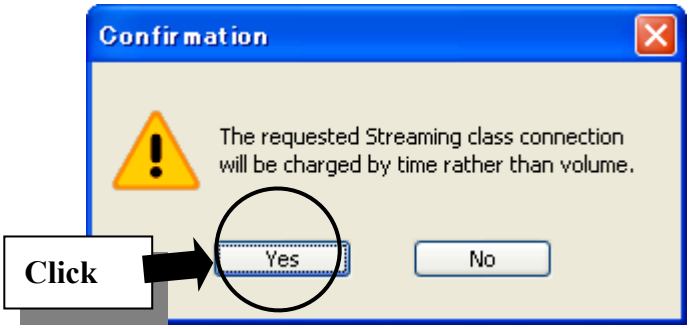


Fig.L.3.2c Confirmation window

[Connecting] screen is displayed during Streaming IP Data connection is requesting.

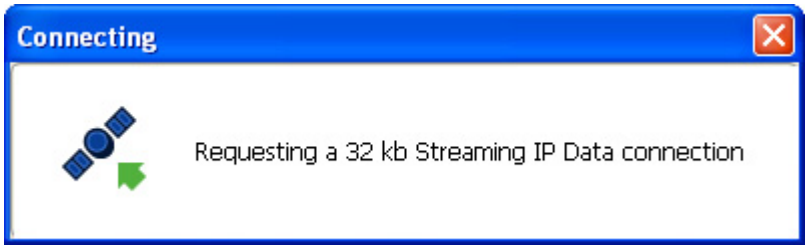


Fig.L.3.2d [Connecting] window

4. If connection is succeeded, [Connect] icon is changed to [Disconnect], [Connect 32 Streaming] icon is changed to [Disconnect 32 Streaming], and text of [Status] column is changed to [Streaming Data connection open...].

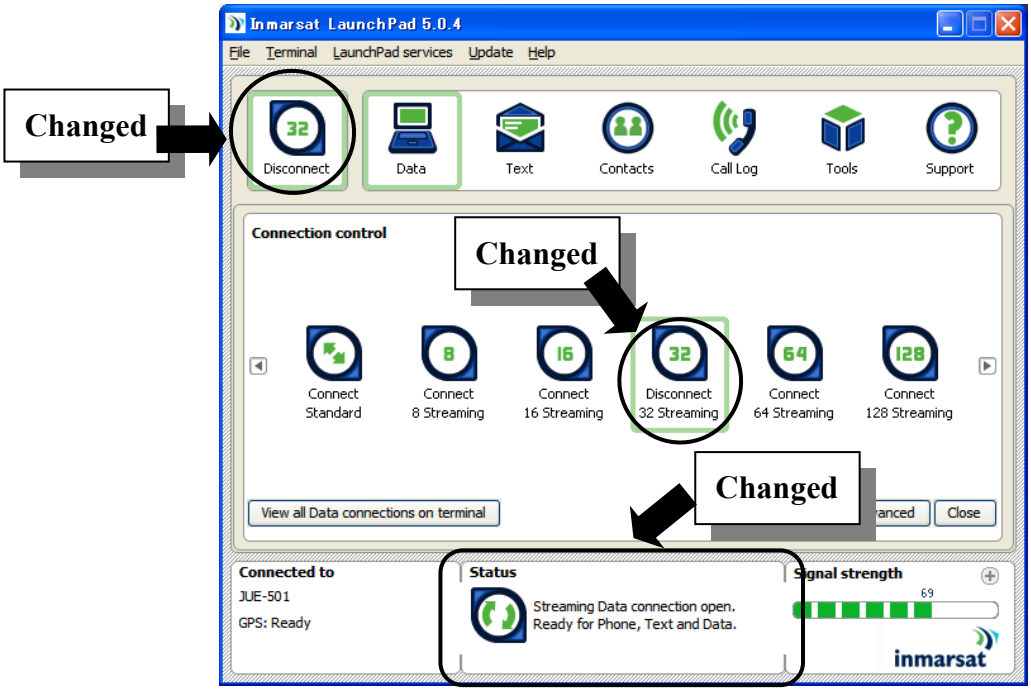


Fig.L.3.2e [Connection control] window (connection succeeded)

[Connection]

Streaming Data connection is established. Use your desirable tool.

[Disconnection]

Click [Disconnect] icon.

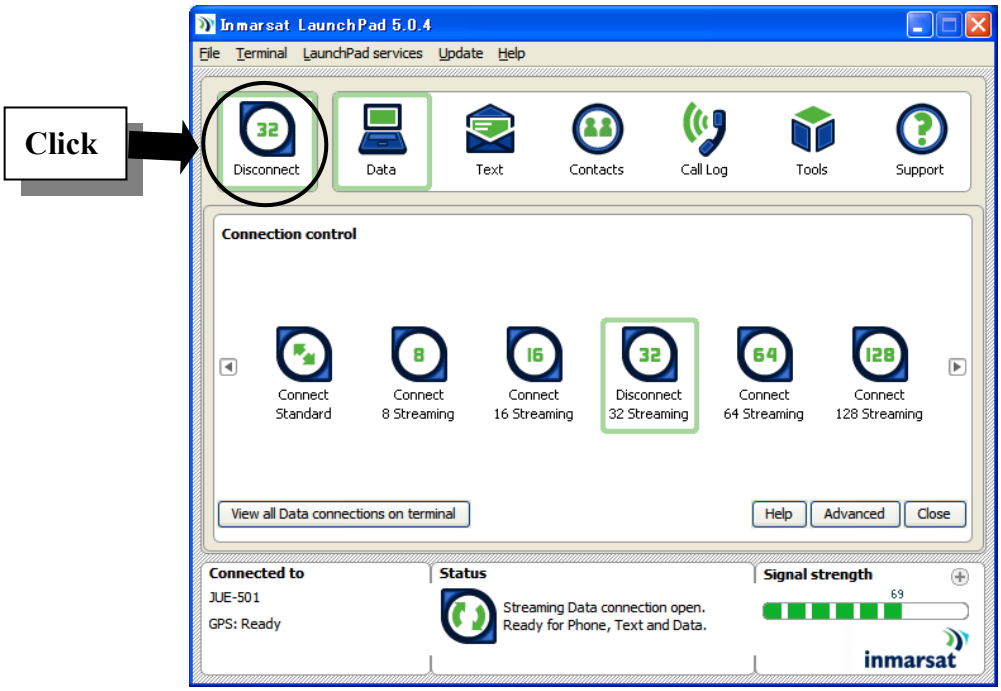


Fig.L.3.2f [Connection control] window (for disconnection)

L.2.3 SMS

Sending SMS procedures are mentioned below.

[Sending]

1. Open LaunchPad by double clicking on the LaunchPad-short cut icon on your desktop, and click [Text] button.

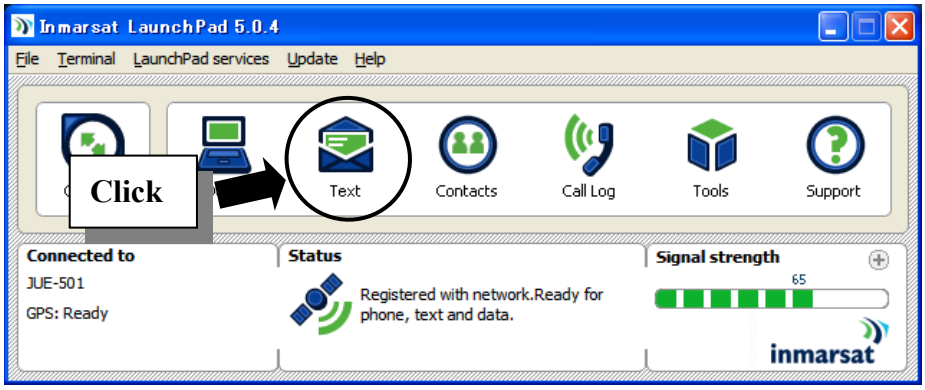


Fig.L.2.3a Main window of LaunchPad

2. Position the cursor to the large column of [Compose new message] field, and create the message. And position the cursor to [To.....] column and enter the distination number. Finally, click [Send] button.

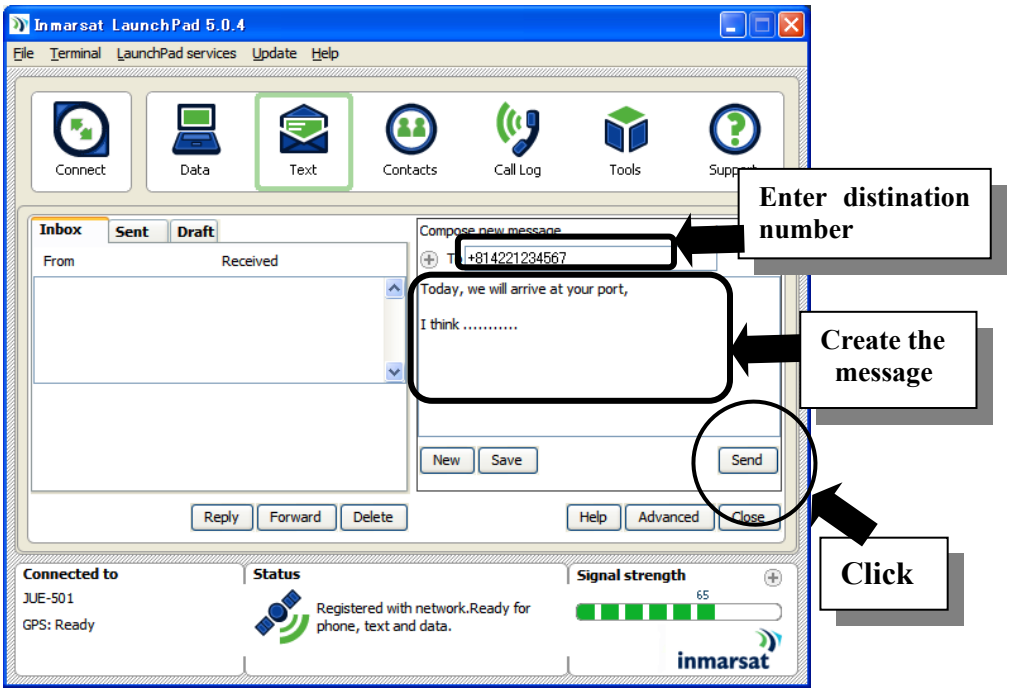


Fig.L.2.3b Text window

Appendix M TCP Accelerator Installation Procedure

M.1. About TCP Accelerator

TCP Accelerator (also known as TCP PEP) is a free software which has been tested and proven to improve the performance of TCP applications over the FleetBroadband network. TCP Accelerator boosts the upload speed of all TCP traffic by up to 300% (depending on file size), with an average increase across all applications of 40% - 80%.

TCP Accelerator is of particular benefit to activities which send short bursts of data over the network, such as Internet browsing and email.

The adjustments made by TCP Accelerator include:

- Modifying TCP window settings by changing the window size to allow a larger amount of data to be carried at any point in time over the network.
- Optimising the MTU size for the FleetBroadband network
- Negating TCP slow start behaviour, further deteriorated by the round trip time between the terminal, satellite and ground segment.

M.2. Installing and configuring TCP Accelerator

M.2.1 Minimum system requirements

The following are the mandatory hardware and software requirements for successful installation of TCP Accelerator on your computer:

Hardware requirements

- Intel Pentium IV, or equivalent.
- 256 MB RAM.
- 20 MB hard disc space.

Software requirements

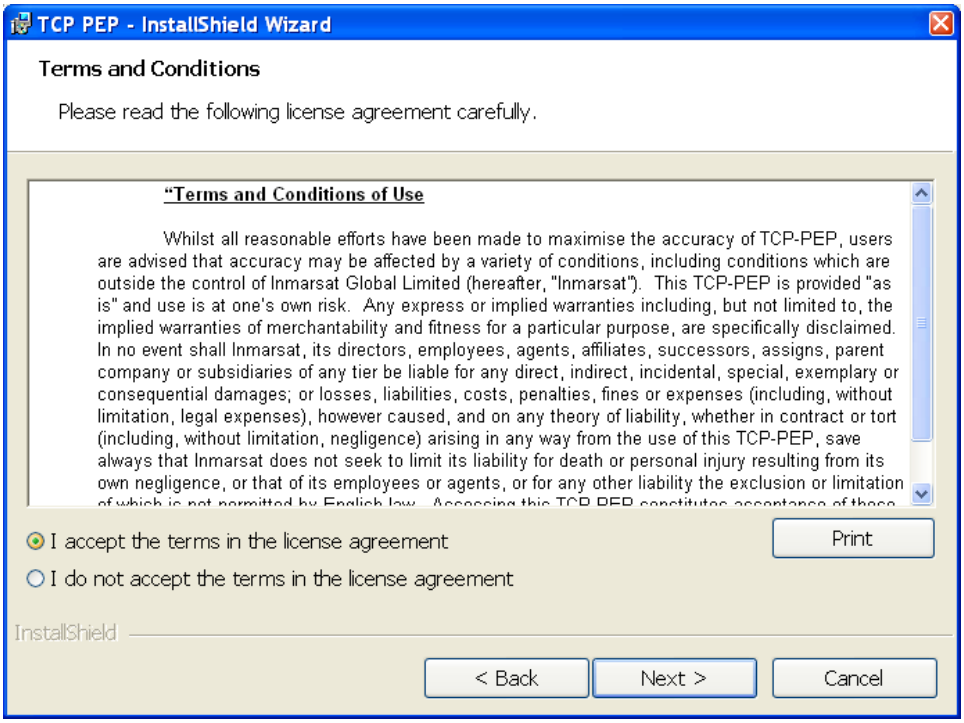
- Windows XP/Vista/7 32bit installed on your computer.
- NOTE: Windows XP/Vista/7 64bit is not supported

M.2.2 Installing TCP Accelerator

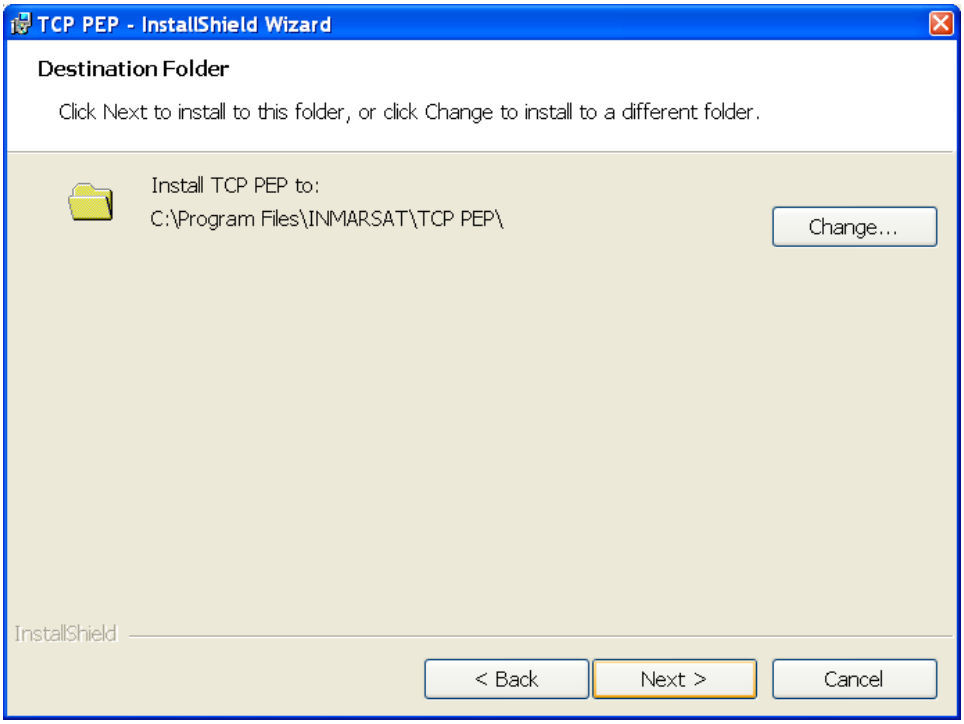
1. Unzip SetupXP-Rxx.x-xxx.zip or SetupVista-Rxx.x-xxx.zip in the CD-ROM, and execute .exe file in unzippped file. The Setup Wizard launches automatically, and the following screen is displayed:

2. Click on Next. The “Welcome to the InstallShield Wizard for TCP PEP” screen is displayed, as shown below:

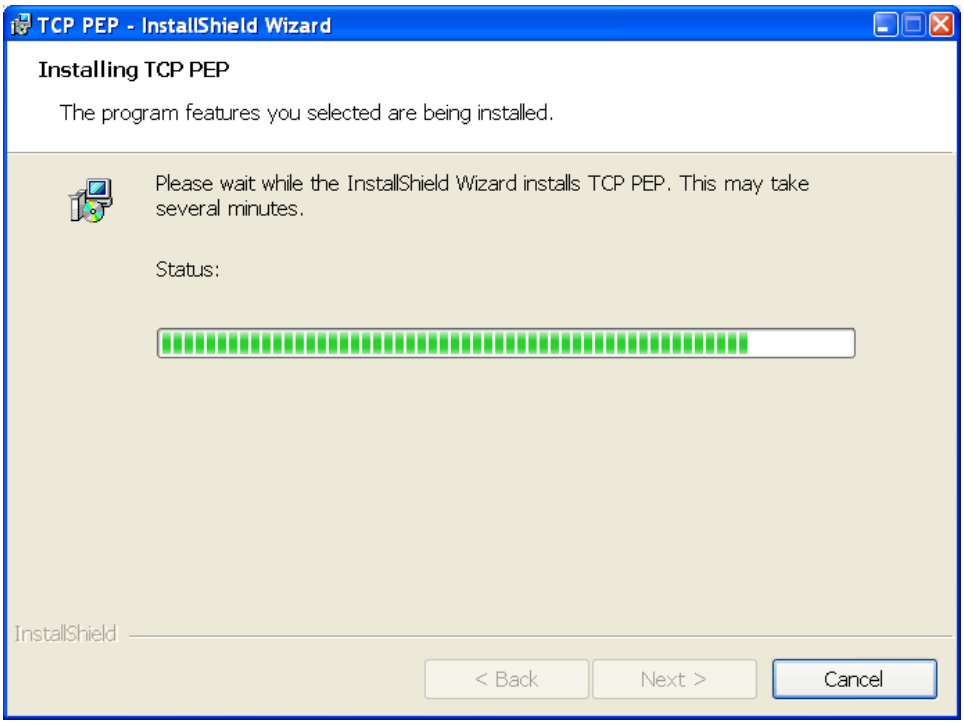
3. Click on Next. The "Terms and Conditions" screen is displayed, as shown below:



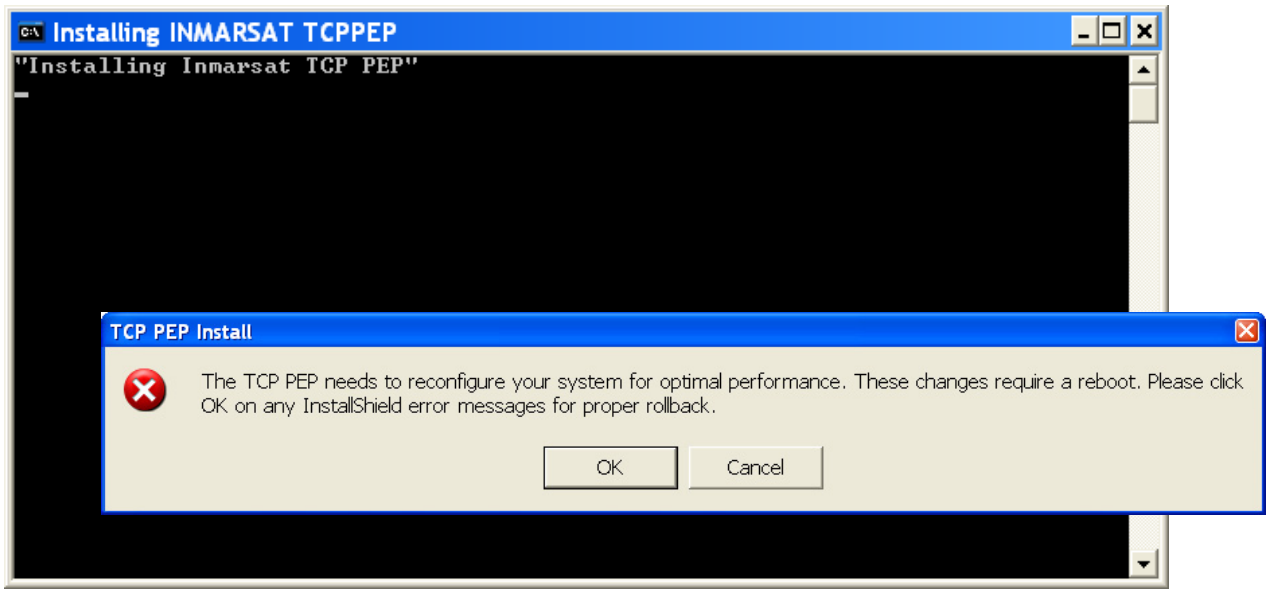
4. Select the "I accept the terms in the license agreement" radio button, and click Next. The Destination Folder screen is displayed, as shown below:



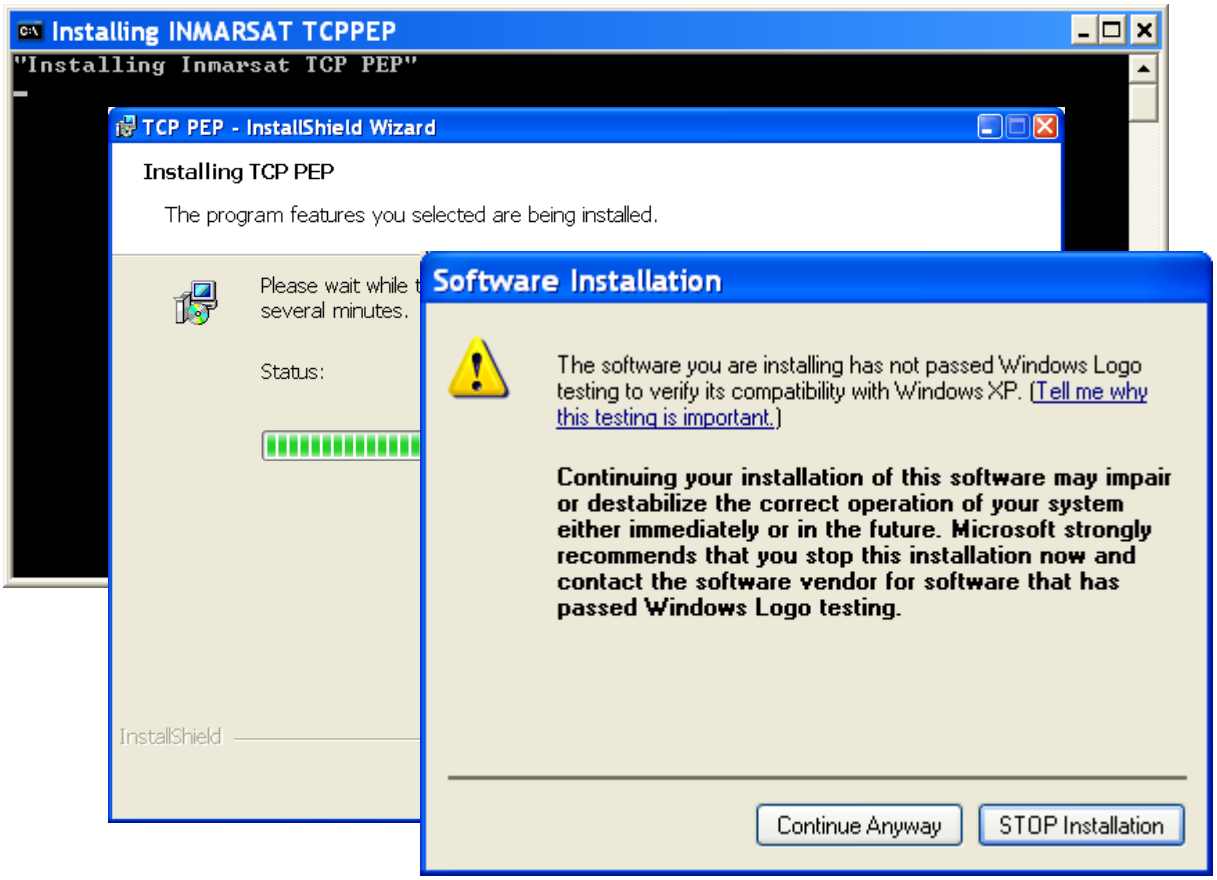
5. If you want the program files to be installed in the default directory, click on Next. To select a different directory, click on Change…, and select the required directory, then click on Next. The "Preparing to Install" screen is displayed, as shown below, and TCP Accelerator performs pre-installation checks:



If the program detects that your computer is not fully optimized for TCP Accelerator, the following screen is displayed: If you see this screen, click on OK when prompted to reboot your computer. This is a one time optimization, and is not repeated for subsequent TCP Accelerator releases. After rebooting your computer, do from step 1 again.

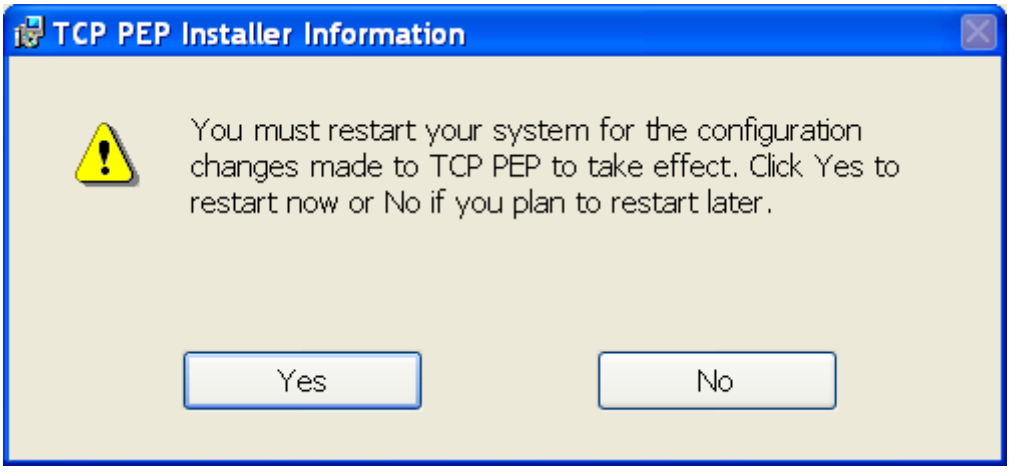


If the program fails Windows Logo testing, the following screen is displayed: If you see this screen, click on Continue Anyway. Note that you may see this screen more than once: click on Continue Anyway each time. (This screen displays if the driver is yet to formally complete the certification procedure for Windows.)



6. When the installation is complete, the following screen is displayed:

7. Click on Finish to complete the installation. The following screen is displayed:



8. Click on Yes to restart the computer.

Appendix N Trouble shooting and FAQ

When a fault has been detected, operate according to the FAQ. If it is not improved, turn OFF and ON the power switch of main unit to reboot. Rebooting the main unit doesn't delete your settings and data. Still it persists, stop operation and contact the purchasing dealer.

FAQ Contents

N.1. Power supply, Start up		
Problem (P)	Possible cause	Confirmation item
BDE does not start up	The circuit breaker is thrown.	Turn the circuit breaker on.
	External power is not supplied.	Turn the external power on.
	Fuse is blown.	Pick up the fuse from the fuse box and make sure if the fuse is blown. When the fuse is blown, please replace the fuse with a spare.
	If the problem is not solved with above countermeasures, disconnect external power, and please contact the dealer you purchased JUE-501/JUE-251 from.	

N.2. Reception of radio wave from a satellite		
Problem (P)	Possible cause	Confirmation item
[Not Ready] is displayed and communication is impossible.	Satellite is not selected correctly.	Select the correct satellite at [Satellite] menu.
	Blocking.	Check if there is obstruction between the antenna and the satellite. Select another satellite when there is an obstacle, to turn the antenna to the clear view direction. Or wait until the ship changes her course. *If the Blocking Area has been set correctly in [Terminal] menu, the antenna icon on Handset screen starts blinking and that on Web menu screen changes into orange color.
	Out of satellite cover area	Check your ship is existing inner the cover area of satellite or not. If your ship is out of the cover area, use JUE-501/JUE-251 after your ship has entered into the cover area of the satellite.
	If the problem is not solved with above countermeasures, turn OFF and ON the power source of main unit to reboot JUE-501/JUE-251.	
Received signal strength is weak.	Blocking	Execute Satellite Search (selecting the satellite again). Also, check if there is obstruction between the antenna and the satellite. Select another satellite when there is an obstacle, to turn the antenna to the clear view direction. Or wait until the ship changes her course. *If the Blocking Area has been set correctly in [Terminal] menu, the antenna icon on Handset screen starts blinking and that on Web menu screen changes into orange color.

N.3. Web Menu System		
Problem (P)	Possible cause	Confirmation item
[Terminal] screen can not be displayed when the IP address of main unit was entered to the URL box on Web browser.	Cable is not connected.	Check that PC is connected to the main unit with Ethernet cable firmly. If there is a link between the main unit and PC, the Link LED of the Ether port on back panel will blink.
	Although the setting of the TCP/IP of the PC is set to “Automatic access”, the PC could not access the IP from the DHCP server.	Before starting the PC, check that the cable between the main unit and the PC is connected correctly. If the PC has been started not connected to the main unit, restart the PC after hooking up the main unit.
	TCP/IP is not set.	Check that the network IP, subnet mask and default gateway that are set in the PC match those set in the main unit. *If you have set VLANs, each “User LAN Port” may have different network.
	URL is not correct.	Check that the IP address entered in URL box is that of main unit. *If you have set VLANs, each “User LAN Port” may have different network.
	The local area connection of the PC is disabled. (Win2000 or later)	Check that the local area connection is set to ‘enable’ in the property specification of the local area connection.
	The local area connection of the PC is a bridge connection.	Delete the bridge by clicking the right mouse button on the icon of the local area connection.
Error page is displayed when a button was clicked on Web menu screen.	The version of Web browser is not supported.	JUE-501 / JUE-251 officially supports Microsoft Internet Explorer7 and Mozilla Firefox3.6, their upper version can be available when they have compatible system.

N.4. LaunchPad		
Problem (P)	Possible cause	Confirmation item
[Select Terminal] screen is displayed after starting LaunchPad and cannot connect with main unit of JUE-501/JUE-251.	Cable is not connected.	Check that PC is connected to the main unit with Ethernet cable firmly.
	Although the setting of the TCP/IP of the PC is set to “Automatic access”, the PC could not access the IP from the DHCP server.	Before starting the PC, check that the cable between the main unit and the PC is connected correctly. If the PC has been started not connected to the main unit, restart the PC after hooking up the main unit.
	TCP/IP is not set.	Check that the network IP that is set in the PC matches the IP set in the main unit.
		Verify that the subnet mask, default gateway, and priority DNS server that are set in the PC match those set in the main unit.
	The local area connection of the PC is disabled. (Win2000 or later)	Check that the local area connection is set to ‘enable’ in the property specification of the local area connection.
	The local area connection of the PC is a bridge connection.	Delete the bridge by clicking the right mouse button on the icon of the local area connection.
[CIF_0010] error is generated on the LaunchPad and the connection between the LaunchPad and main unit is lost.	Ethernet connection is abnormal	Execute [Search for terminal] by LaunchPad and connect with main unit again.

N.5. TEL		
Problem (P)	Possible cause	Confirmation item
Communication is impossible	Cable is not connected.	Check that the main unit or JB and the communication terminal are connected correctly. Check also that the power is supplied.
	Since a secret code type of originating call is set, input of a secret code is necessary.	Check the setting of Secret Code on the [Telephony] screen. When secret code is set to “Enable”, originate a call referring to this Instruction manual.
	Communication is occupied by another port.	Check that communication is not being carried out by another TEL port or ISDN port. Check also that the telephone set is properly on-hooked.
	The # button is not pressed following the destination number.	When originating a call using a TEL port, press the # button following the destination dial number.
	If the problem is not solved with above countermeasures, turn OFF and ON the power source of main unit to reboot JUE-501/JUE-251.	
Communication is impossible with specific destination.	System failure	Ask your service provider.
Speed Dial calling and Redial calling is impossible.	Dialing sequence is incorrect.	Speed Dial calling : Speed dial number (2 digits or 3 digits) *# Redial calling : 00*#
The line can not be disconnected by on-hook	Turn OFF and ON the power switch of main unit to reboot.	

N.6. FAX		
Problem (P)	Possible cause	Confirmation item
Communication is impossible.	Cable is not connected.	Check that the main unit or JB and the communication terminal are connected correctly. Check also that the power is supplied.
	Since a secret code type of originating call is set, input of a secret code is necessary.	Check the setting of Secret Code on the [Telephony] screen. When secret code is set to “Enable”, originate a call referring to this Instruction manual.
	Communication is occupied by another port.	Check that communication is not being carried out by another TEL port or ISDN port. Check also that the telephone set is properly on-hooked.
	The # button is not pressed following the destination number.	When originating a call using a TEL port, press the # button following the destination dial number.
	Service setting is incorrect.	Check that the service type is set to FAX or Audio on [Telephony] screen.
	Fax is out of service (for JUE-251).	Fax service is available for JUE-251 when the antenna EL >20 degrees.
	If the problem is not solved with above countermeasures, turn OFF and ON the power source of main unit to reboot JUE-501/JUE-251.	
Communication is impossible with specific destination.	System failure	Ask your service provider.
The line can not be disconnected by on-hook	Turn OFF and ON the power switch of main unit to reboot.	

N.7. Packet Switch(Standard IP, Streaming IP) service		
Problem (P)	Possible cause	Confirmation item
Standard IP transfer rate is slow in the communication	TCP/IP application might be a cause.	Install the TCP accelerator (TCP PEP) in the attached JUE-501/JUE-251 CD-ROM, and try it. Transfer rate may be improved. However, depends on the application which has been used, the transfer rate may be downgraded.
Communication is impossible.	The line is busy.	Retry after several minutes.
	Out of the service area	256Kbps Streaming can be utilized in the area which elevation angle is 10 degrees or upper, for JUE-501 only. Also, the maximum level of Streaming service which can be utilized with Voice or FAX in the same time, is 128kbps in the area where elevation angle is 10 degrees or upper, and 64kbps in the other areas.
	If the problem is not solved with above countermeasures, turn OFF and ON the power source of main unit to reboot JUE-501/JUE-251.	
The line can not be disconnected by on-hook	Turn OFF and ON the power switch of main unit to reboot	

N.8. SMS		
Problem (P)	Possible cause	Confirmation item
Message cannot be delivered to destination.	Incorrect number is dialed.	Check the correct destination number.
Message cannot be delivered to specific destination.	System failure	Ask your service provider.
Message cannot be received.	Incorrect number is dialed.	Check that the destination terminal (land side) dialed correct number or not.
	Reception overflow	Reception is impossible when received messages exceeded the maximum number which can be saved in SIM card. Delete the received message properly.
Message cannot be received from specific destination.	System failure	Ask your service provider.

N.9. ISDN		
Problem (P)	Possible cause	Confirmation item
Communication is impossible	Cable is not connected.	Check that the main unit and the communication terminal are connected correctly. Check also that the power is supplied.
	Communication is occupied by another port.	Check that communication is not being carried out by another TEL port. Check also that the telephone set is properly on-hooked.
	The # button is not pressed following the destination number.	When originating a call using a ISDN port, press the # button following the destination dial number.
	If the problem is not solved with above countermeasures, turn OFF and ON the power source of main unit to reboot JUE-501/JUE-251.	
Communication is impossible with specific destination.	System failure	Ask your service provider.
The line can not be disconnected by on-hook.	Turn OFF and ON the power switch of main unit to reboot.	

N.10. Actions to be taken when abnormal status is indicated on Handset

Table I1. Displayed character strings and contents

Status	Display	Contents
Abnormal	ADE? ***1)**	**ADE abnormal.**
Abnormal	POSITION? ***2)**	**GPS dose not receive the signal from satellite.**
Abnormal	SIM ? ***3)**	SIM is not mounted
Abnormal	SEARCH NG***4)**	**Searching Satellite is failed.**
Abnormal	GYRO? ***5)**	**GYRO input is abnormal.**
Abnormal	HEADING ? ***6)**	Input of HEADING value is required

＊1）Countermeasure for ADE?

Confirm the connection of the coaxial cable.

＊2）Countermeasure for POSITION?

Built-in GPS has not fixed position information. Check the existence of blocking.

If this phenomenon is repeatedly occurred, GPS failure can be considered.

＊3）Countermeasure for SIM?

Confirm that the SIM card is correctly mounted or the card is not broken.

＊4）Countermeasure for SEARCH NG

Execute satellite search again.

＊5）Countermeasure for GYRO?

Heading information has not input from the GYRO interface although JUE-501/JUE-251 is set as GYRO tracking.

Confirm the GYRO interface or the power supply of GYRO connected to the GYRO interface is turned on.

（This abnormal status is only appeared when optional GYRO interface is connected）

＊6）Countermeasure for HEADING?

This message is displayed when entry of initial HEADING value is required with the status of [GYRO signal input setting].

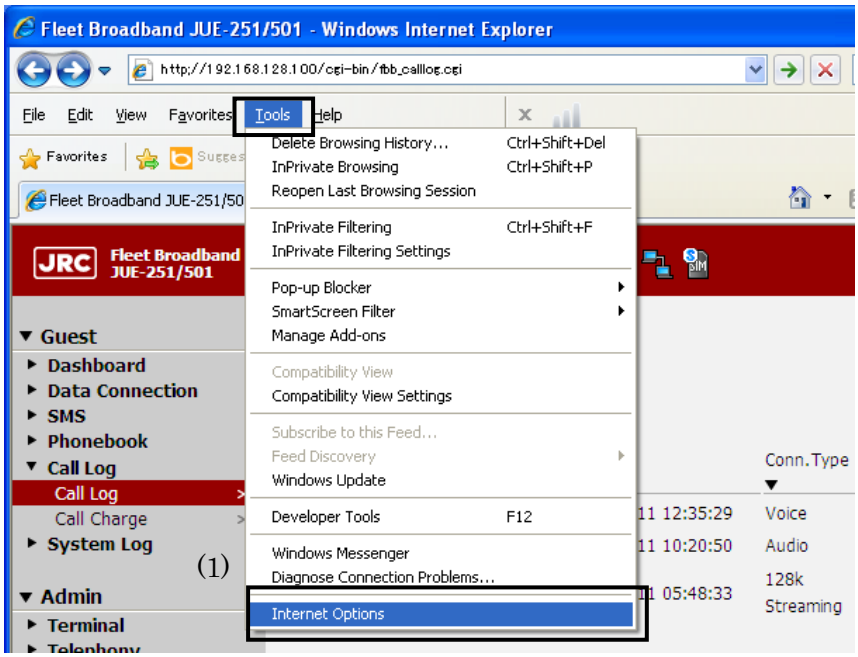
Follow [Appendix C.5 Satellite menu, when JB/GYRO are used] in this manual and set exact heading azimuth for your ship. Communication on JUE-501/JUE-251 may fail due to the error of the heading value.

（This abnormal status is only appeared when optional GYRO interface is connected）

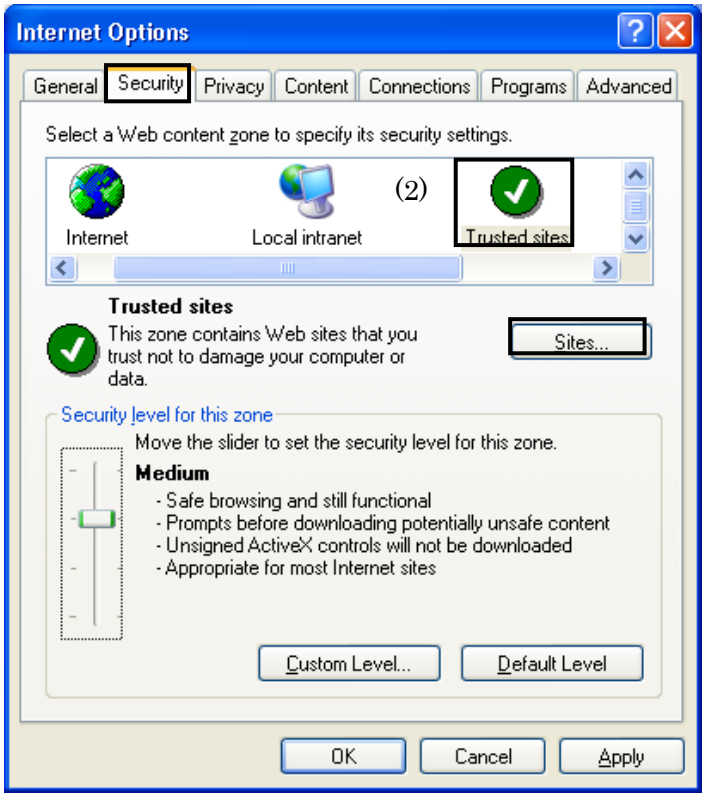
N.11. When the call log sort function is not working

When using the Internet Explorer 6, call log sort function will not work without the following Internet Explorer settings. **Please confirm the settings with network engineer.**

1) Select the [tool] toolbar of the Internet Explorer and select the [Internet Options…].



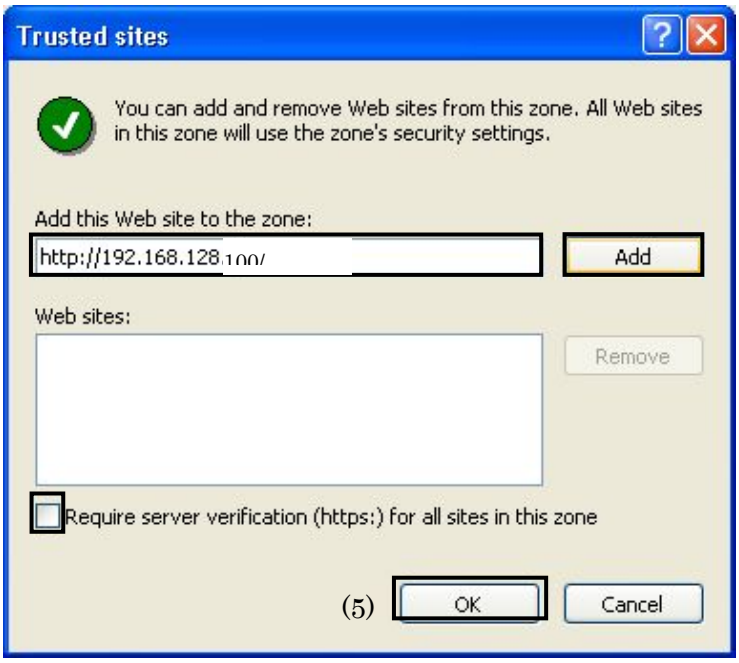
2) Select the [Security] tab of the [Internet Options] dialog, click [Trusted sites] icon and select the [Sites…] button.



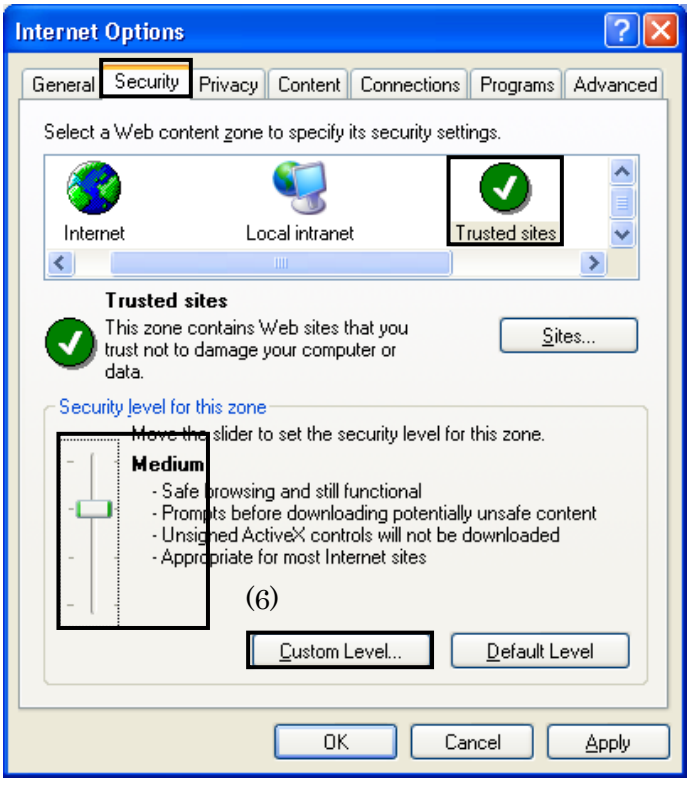
3) Take off a check at [Require server verification (http:) for all sites int this zone].

4) Add the main unit IP address (default:http://192.168.128.100/) in [Add this Web site to the zone:] test box and click [Add] button.

5) Confirm the main unit IP address is added to [Wdb sites:] textbox, click [OK] button and close the [Trusted sites] dialog.



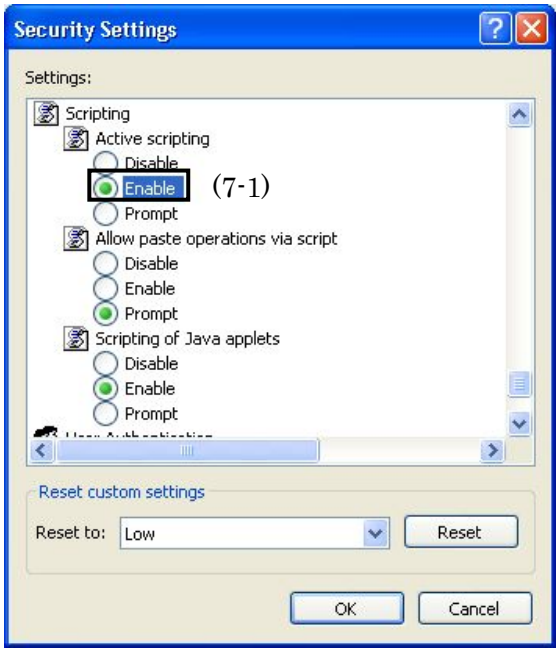
6) Select the [Security] tab of the [Internet Options] dialog, click [Trusted sites] icon and set [Security lever for this zone] slider lower than [High] or click [Custom Level…] enable 2 settings.

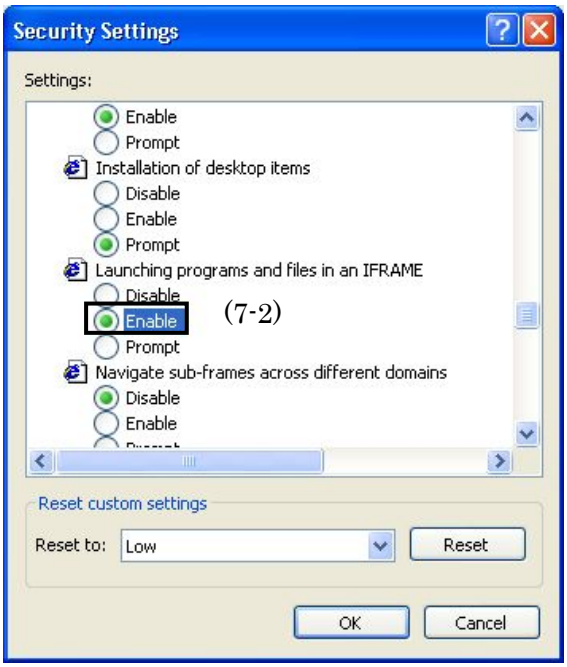


7) Chage the following setting in [Security settings] dialog.

Table L2. Setting in the [Security Settings] dialog

Sections		Settings
Scripting section	Active scripting	Enable
Miscellaneous section	Lanching pragrams and files in an IFRAME	Enable





8) Click [OK] button twice and close [Security Settings] dialog and [Internet Option] dialog and finish Internet Explorer.

9) Call log sort function will work after the next start up of Internet Explorer.

N.12. Other problems

Turn OFF and ON the power switch of main unit to reboot.

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Appendix O Cause Code

Cause code indicates cause of disconnection of the communication.

O.1 Cause Code for CS communication (TEL, FAX)

*--These Cause codes are quoted from **3GPP TS24.008 Annex H and Annex G***

Normal class

No. (HEX)	Reason	No. (HEX)	Reason
0001	Unassigned (unallocated) number	0016	Number changed
0003	No route to destination	0019	Pre-emption
0006	Channel unacceptable	001A	Non-selected user clearing
0008	Operator determined barring	001B	Destination out of order
0010	Normal call clearing	001C	Invalid number format (incomplete number)
0011	User busy	001D	Facility rejected
0012	No user responding	001E	Response to STATUS ENQUIRY
0013	User alerting, no answer	001F	Normal, unspecified
0015	Call rejected		

Resource unavailable class

No. (HEX)	Reason	No. (HEX)	Reason
0022	No circuit/channel available	002B	Access information discarded
0026	Network out of order	002C	Requested circuit/channel not available
0029	Temporary failure	002F	Resource unavailable, unspecified
002A	Switching equipment congestion		

Service or option not implemented class

No. (HEX)	Reason	No. (HEX)	Reason
0031	Quality of service unavailable	0041	ACM (Accumulated Call Meter) equal to or greater than ACMmax
0032	Requested facility not subscribed	0044	Bearer service not implemented
0037	Incoming calls barred within the CUG (Closed User Group)	0045	Request facility not implemented
0039	Bearer capability not authorized	0046	Only restricted digital information bearer capability is available
003A	Bearer capability not presently available	004F	Service or option not implemented, unspecified
003F	Service or option not available, unspecified		

Invalid message (e.g., parameter out of range) class

No. (HEX)	Reason	No. (HEX)	Reason
0051	Invalid transaction identifier value	005B	Invalid transit network selection
0057	User not member of CUG(Closed User Group)	005F	Semantically incorrect message
0058	Incompatible destination		

Protocol error (e.g., unknown message) class

No. (HEX)	Reason	No. (HEX)	Reason
0060	invalid mandatory information	0064	conditional IE error
0061	message type non-existent or not implemented	0065	message not compatible with protocol state
0062	message type not compatible with protocol state	0066	recovery on timer expiry
0063	information element non-existent or not implemented	0067	protocol error, unspecified

Interworking class

No. (HEX)	Reason	No. (HEX)	Reason
007F	Interworking, unspecified		

Mobility Management

No. (HEX)	Reason	No. (HEX)	Reason
800B	PLMN not allowed	8022	Service option temporally out of order
800C	Location area not allowed	8026	Call cannot be identified
800D	Roaming not allowed in this location area	8030-803F	Retry upon entry into a new cell
800F	No suitable cells in location area	805F	Semantically incorrect message
8011	Network failure	8060	Invalid mandatory information
8014	MAC failure	8061	Message type non-existent or not implemented
8015	Synch failure	8062	Message not compatible with protocol state
8016	Congestion	8063	Information element non-existent or implemented
8017	GSM authentication unexpected	8064	Conditional IE error
8020	Service option not supported	8065	Message not compatible with protocol state
8021	Request service option not subscribed	806F	Protocol error, unspecified.

O.2 Cause Code for PS communication

*--These Cause codes are quoted from **3GPP TS24.008 Annex I***

Causes related to nature of request

No. (HEX)	Reason	No. (HEX)	Reason
0008	Operator Determined Barring	0024	Regular PDP context deactivation
0016	Congestion	0025	QoS (Quality of Service) not accepted
001A	Insufficient resources	0026	Network failure
001B	Unknown or missing access point name	0027	Reactivation requested
001C	Unknown PDP address or PDP type	0028	Feature not supported
001D	User authentication failed	0029	Semantic error in the TFT(Traffic Flow Template) operation
001E	Activation rejected by GGSN	002A	Syntactical error in the TFT operation
001F	Activation rejected unspecified	002B	Unknown PDP context
0020	Service option not supported	002C	Semantic errors in packet filter(s)
0021	Requested service option not subscribed	002D	Syntactical error in packet filter(s)
0022	Service option temporarily out of order	002E	PDP context without TFT already activated
0023	NSAPI(Network Service Access Point Identifier) already used		

Causes related to invalid messages

No. (HEX)	Reason	No. (HEX)	Reason
0051	Invalid transaction identifier value	0063	Information element non-existent or not implemented
005F	Semantically incorrect message.	0064	Conditional IE error
0060	Invalid mandatory information	0065	Message not compatible with protocol state
0061	Message type non-existent or not implemented	006F	Protocol error, unspecified
0062	Message not compatible with protocol state		

O.3 Cause code for Short Messaging Service

*--These Cause codes are quoted from **3GPP TS24.011 Annex E***

If the cause code is 004E, it means “Not supported of SMS cause code”.

CP-cause definition

Following cause codes are used for mobile originating short message and mobile terminating short message.

No. (HEX)	Reason	No. (HEX)	Reason
0017	Network failure	0097	Message type non-existent or not implemented
0022	Congestion	0098	Message not compatible with short message protocol state
0081	Invalid mandatory information	0099	Information element non-existent or not implemented
0095	Semantically incorrect message	0111	Protocol error, unspecified
0096	Invalid mandatory information		

RP-cause definition mobile originating SM-transfer

Following cause codes are used for only mobile originating short message.

No. (HEX)	Reason	No. (HEX)	Reason
0001	Unassigned (unallocated) number	0026	Network out of order
0008	Operator determined barring	0029	Temporary failure
000A	Call barred	002A	Congestion
0015	Short message transfer rejected	002F	Resources unavailable, unspecified
001B	Destination out of service	0032	Requested facility not subscribed
001C	Unidentified subscriber	0045	Requested facility not implemented
001D	Facility rejected	007F	Interworking, unspecified
001E	Unknown subscriber		

RP-cause definition mobile terminating SM-transfer

Following cause code is used for mobile terminating short message.

No. (HEX)	Reason	No. (HEX)	Reason
0016	Memory capacity exceeded		

O.4 Internal cause code

--These Cause codes are defined by JRC

Internal-cause definition

No. (HEX)	Reason	No. (HEX)	Reason
1000	No cause value	1005	Timeout RelInd ignored incoming
1001	Timeout RelInd	1040	Shortage BPSM session
1002	Timeout SetupCompleteInd	1041	No CC cause value
1003	Timeout SetupCnf	1042	No MM cause value
1004	Timeout RelInd could not answered incoming		

O.5 Cause code for PS-Voice

--These Cause codes are defined by Q.931 and JRC

Q.931 cause definition

No. (HEX)	Reason	No. (HEX)	Reason
2E01	Unallocated or unassigned number	2E39	Bearer capability not authorized
2E02	No route to specified transit network (Transit Network Identity)	2E3A	Bearer capability not presently available
2E03	No route to destination	2E3F	Service or option not available, unspecified
2E06	Channel unacceptable	2E41	Bearer service not implemented
2E07	Call awarded and being delivered in an established channel	2E42	Channel type not implemented
2E10	Normal call clearing	2E45	Requested facility not implemented
2E11	User busy	2E46	Only restricted digital information bearer capability is available
2E12	No user responding	2E4F	Service or option not implemented, unspecified
2E13	T.301 expired: - User Alerted, No answer from user	2E51	Invalid call reference value
2E14	subscriber absent	2E52	Identified channel does not exist
2E15	Call rejected	2E53	A suspended call exists, but this call identity does not
2E16	Number changed to number in diagnostic field.	2E54	Call identity in use
2E1A	Non-selected user clearing	2E55	No call suspended
2E1B	Destination out of order	2E56	Call having the requested call identity has been cleared
2E1C	Invalid number format or incomplete address	2E57	Called user not member of CUG
2E1D	EKTS facility rejected by network	2E58	Incompatible destination
2E1E	Response to STATUS ENQUIRY	2E5B	Invalid transit network selection (national use)
2E1F	Normal, unspecified	2E5F	Invalid message, unspecified
2E22	No circuit/channel available	2E60	Mandatory information element is missing
2E26	Network out of order	2E61	Message type non-existent or not implemented
2E29	Temporary failure	2E62	Message not compatible with call state or message type non-existent or not implemented
2E2A	Switching equipment congestion	2E63	Information element nonexistent or not implemented
2E2B	Access information discarded	2E64	Invalid information element contents
2E2C	Requested circuit/channel not available	2E65	Message not compatible with call state
2E2F	Resource unavailable, unspecified	2E66	Recovery on timer expiry
2E31	Quality of service unavailable	2E6F	Protocol error, unspecified
2E32	Requested facility not subscribed	2E7F	Internetworking, unspecified

Internal cause definition

No. (HEX)	Reason	No. (HEX)	Reason
2000	Call canceled	2400	Secondary PDP activation failure (state failure)
2200	Secondary PDP activation failure (BPS failure)	2500	Secondary PDP activation failure (Multi-Voice function disable)
2210	Call cleared, power-off	2600	Secondary PDP activation failure (Multi-Voice Signaling connection failure)
2211	Call cleared, auto disconnect	2700	Secondary PDP activation failure (Multi-Voice SIP not registered)
2212	Call cleared, usage restriction	2800	Call cleared, MT pTime value is abnormal
2213	Call cleared, the secondary PDP is deactivated	2900	Number of lines is full
2214	Call cleared, MO pTime value is abnormal	2A00	AGI internal error
2215	Call cleared by terrestrial circuit during transfer	2B00	Incoming check error
2216	Call cleared, SIP Not Registered	2E00	Call can not be connected for any reason
2300	Secondary PDP activation failure (internal failure)		

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Appendix P Front Panel LED lamps

Ready lamp: displays communication status (available/non-available)

Green light: All communication services are available.

Blinking Green: No service is available (starting system, calibrating cable, searching satellite or registering SIM).

Orange light: Registration failure or SIM card is not inserted.

Blinking Orange:

- Starting system with initialization.
- After power switch is turned off, until the power is run out completely.

Red light: System is in Safe Mode.

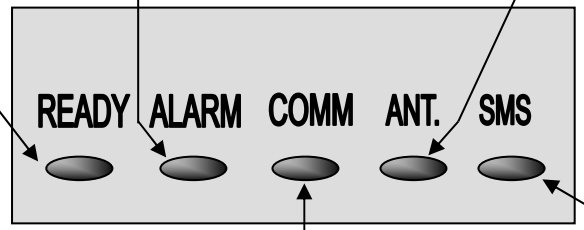
Blinking Red: Failure has been detected in starting system.

(**No light:** power switch is OFF)

ALARM lamp: indicates failure alert

Red light: Failure has occurred in the system.

(**No light:** The status is normal)



ANT. lamp: indicates the status of antenna

Green light: Tracking is being performed normally. (Antenna is ready.)

Blinking Green: Searching satellite.

Orange light: Fail to search satellite.

Blinking Orange: Antenna has been blocked by obstruction.

(**No light:** power switch is OFF)

COMM lamp: indicates communication starting.

Green light: In CS service communication

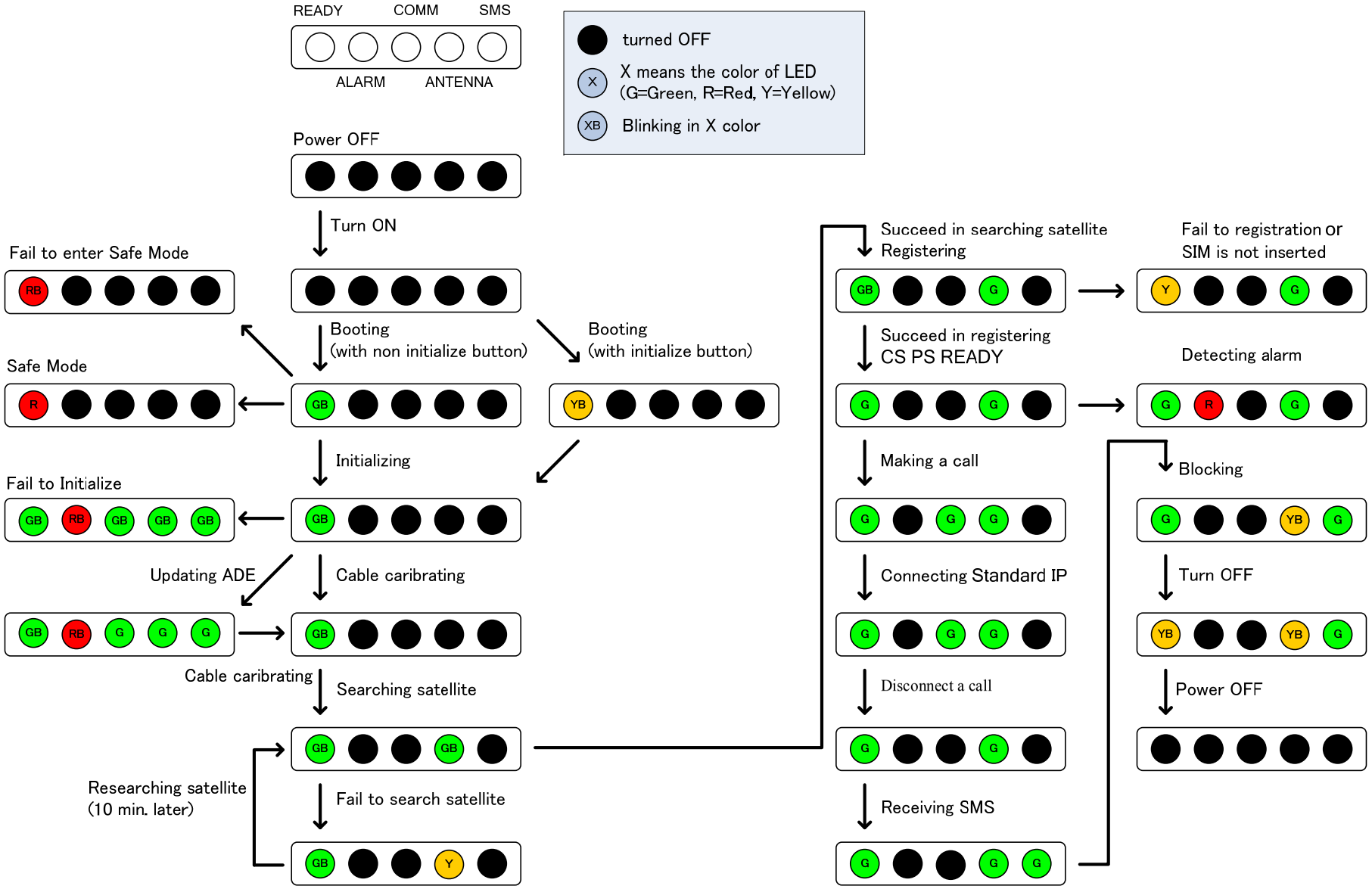
(**No light:** In PS service communication, or no CS service communication is on the way now.)

SMS lamp: indicates receiving new SMS

Green light: New SMS has arrived.

(**No light:** No new SMS has arrived.)

The transition of LED panel on the front panel of the main unit is shown here.



Appendix Q Quick Chart

By using this quick chart, the satellite elevation and azimuth angle from the ship's position can be obtained immediately. The symbol: ● on the equator of this quick chart indicates a position of I-4 satellite.

Q.1 How to obtain the SAT EL or SAT AZ angle

1. Locate the ship's position (Latitude, Longitude) on the map.
2. The intersection point of ship's position and the equal EL or AZ line obtains SAT EL or SAT AZ angle from the ship's position.

Q.2 Quick chart of each ocean region

Europe, Middle East, Africa Ocean Region EMEA E25.0

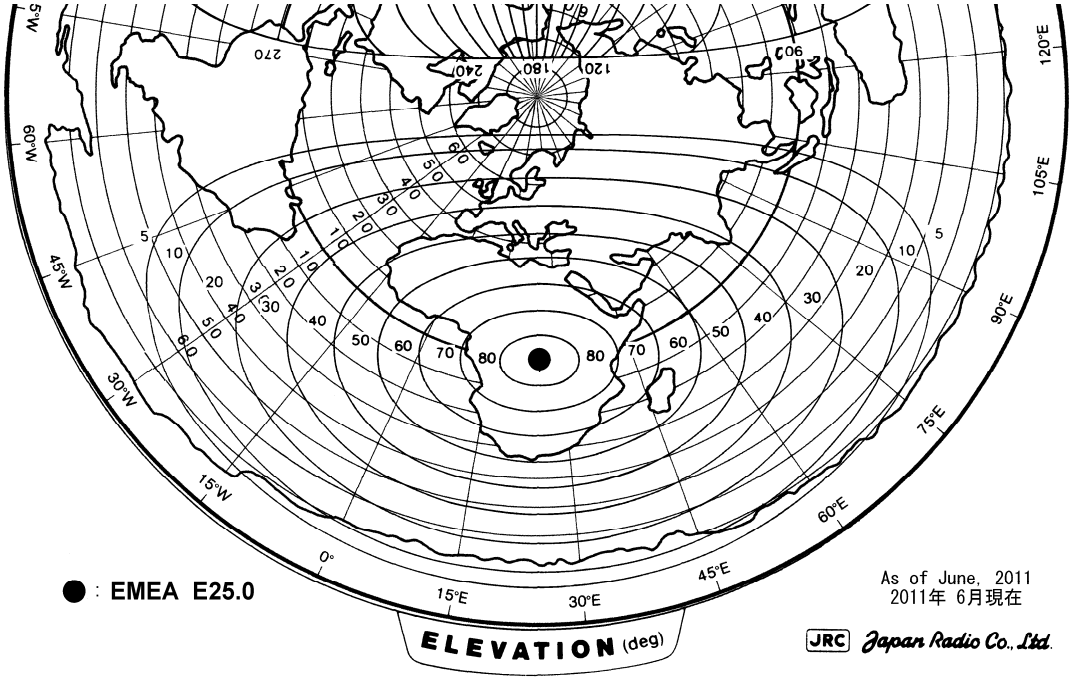


Fig.Q.2.1 Equal EL line for EMEA E25.0

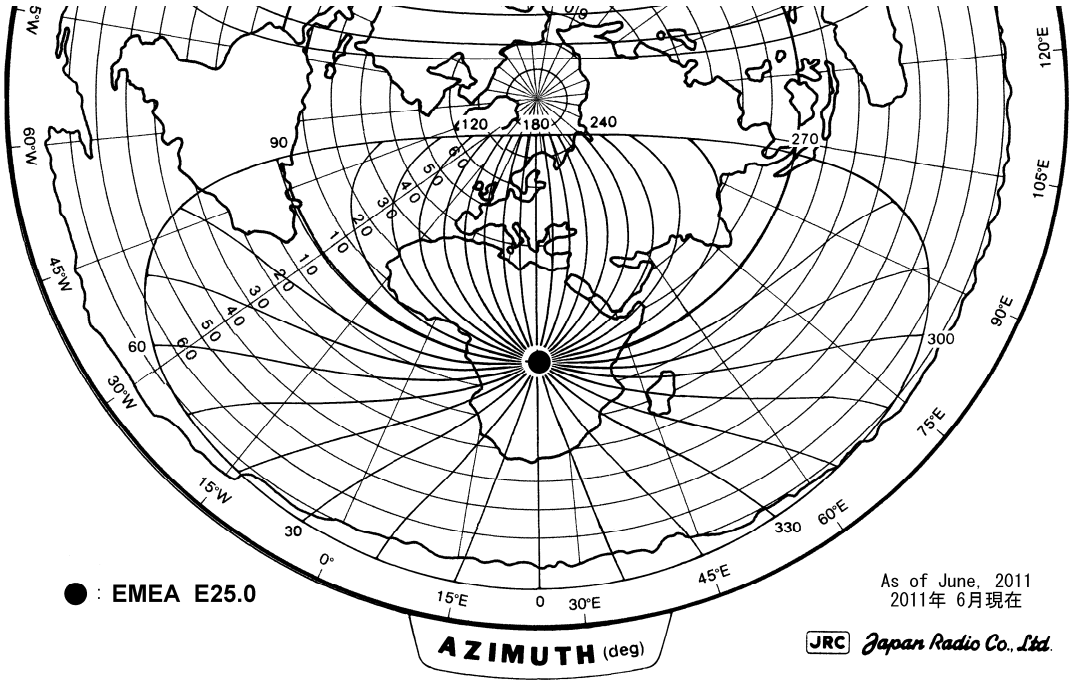


Fig.Q.2.2 Equal AZ line for EMEA E25.0

Asia-Pacific Ocean Region APAC E143.5

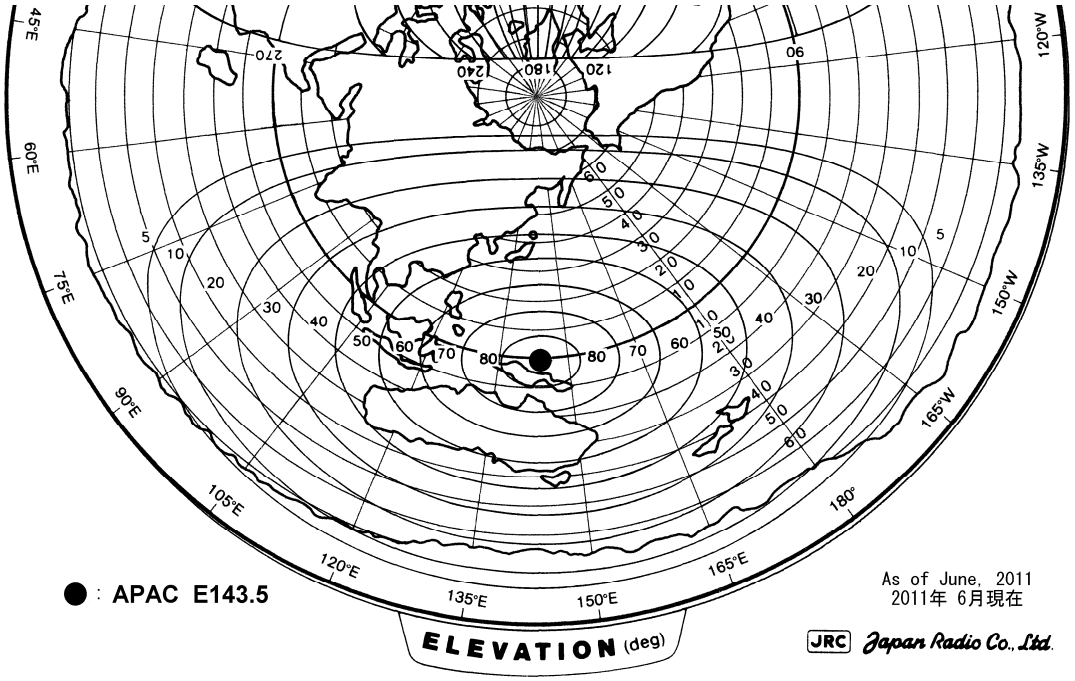


Fig.Q.2.3 Equal EL line for APAC E143.5

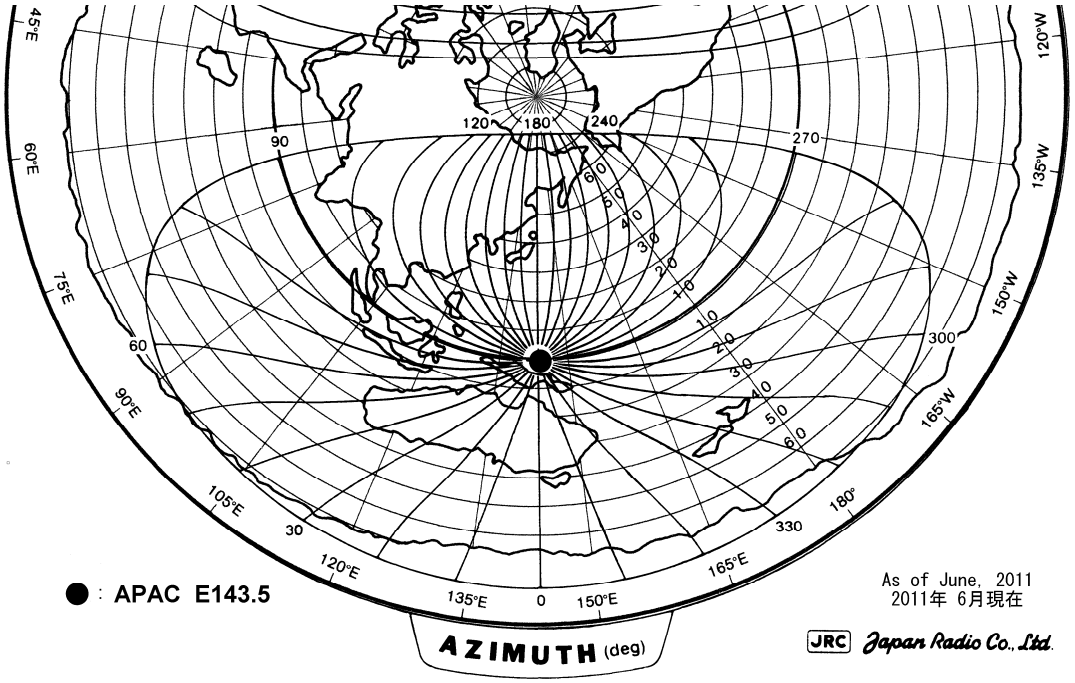


Fig.Q.2.4 Equal AZ line for APAC E143.5

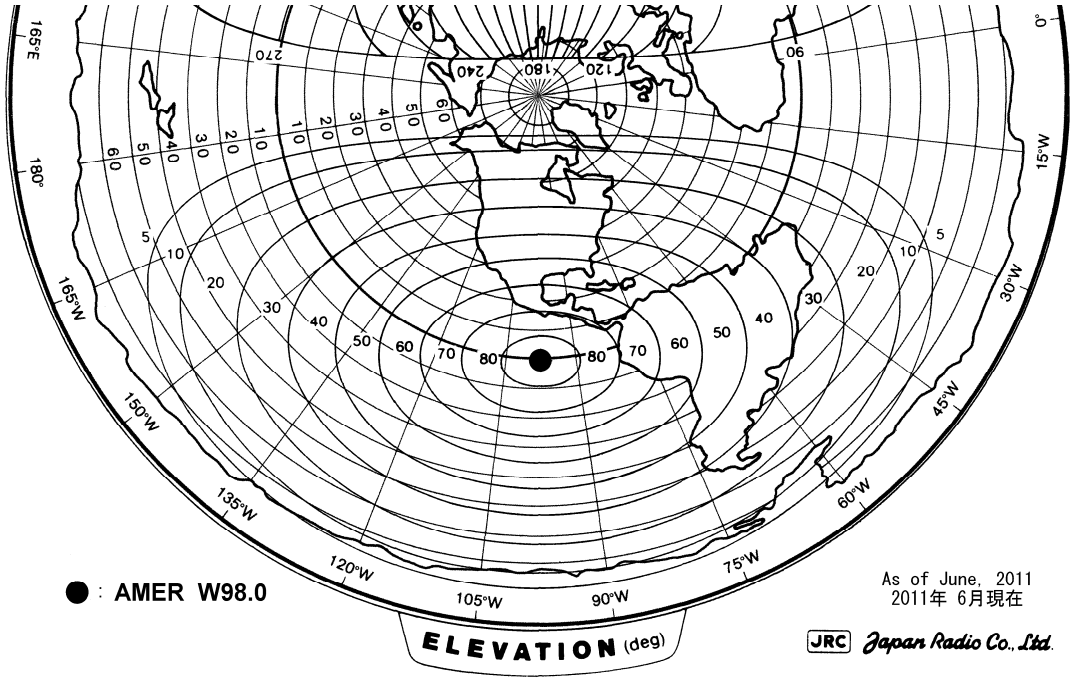


Fig.Q.2.5 Equal EL line for AMER W98.0

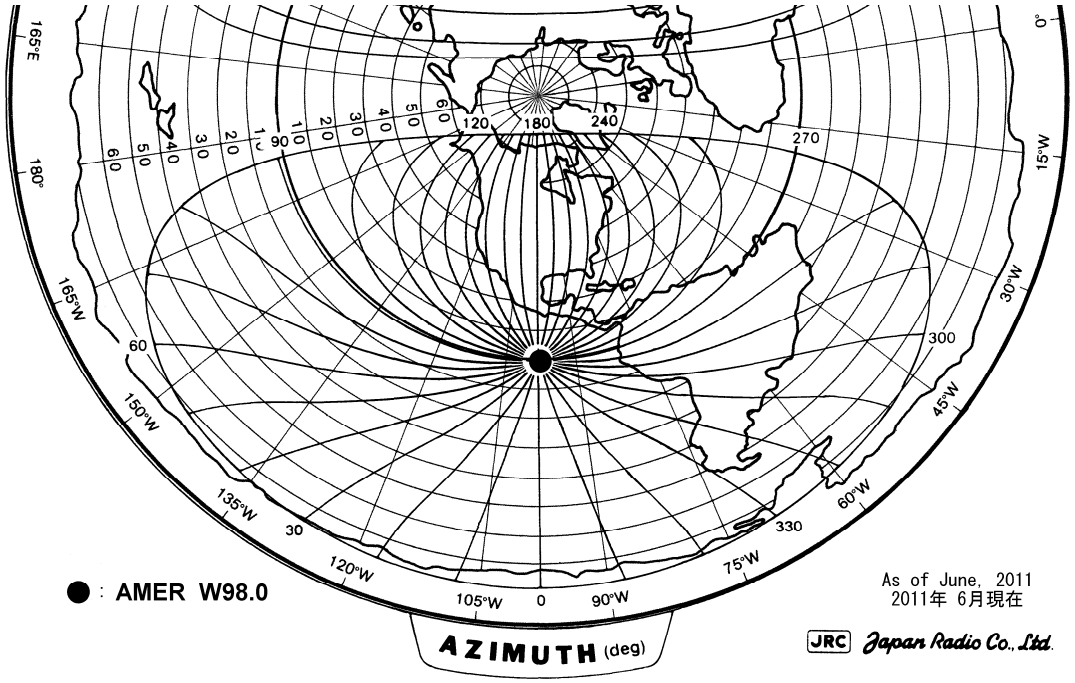


Fig.Q.2.6 Equal AZ line for AMER W98.0

Appendix R Glossary

A

ADE ..... Above Deck Equipment

AOR ..... Atlantic Ocean Region

APN ..... Access Point Name

ASCII ..... American Standard Code for Information Interchange

*A standard alphanumeric character set based on 7-bit codes.

AZ ..... Azimuth

B

BDE ..... Below Deck Equipment

Bit ..... The basic unit of digital communications; may be either 1 or 0.

BPS (bit per second) ..... A unit of measurement for speed of data transfer or throughput.

BR ..... BeaRing

Bulletin Board (in a TDM channel)

*A data packet transmitted in each frame of a TDM channel which contains information about the status of the Inmarsat B/M, mini-M and C network configurations and the current frame number, used by the MES as a timing reference.

Byte *One byte comprises eight bits and may represent either one alphanumeric character or numeric information.

C

CCIR ..... Consulting Committee of International Radio communications

CCITT ..... Consulting Committee of International Telegraph & Telephone

Character *One element of an alphanumeric character set. One character is equivalent to one byte or 8 bits.

COMM ..... Communication

CPU ..... Central Processing Unit

Command *The generic name for anything you tell a computer program to do.

CS ..... Circuit Switched

D

dB ..... Decibel

DC ..... Direct Current

DCN ..... Disconnection

DEC ..... Decoder Circuit

DEL ..... Delete

DEM ..... Demodulator Circuit

DHCP ..... Dynamic Host Configuration Protocol

DMZ ..... DeMilitarized Zone

DNS ..... Domain Name System

DP ..... Distribution Partner

DTE ..... Data Terminal Equipment

E

EEPROM (Electrically Erasable and Programmable ROM)

*Read only Memory that is able to delete and rewrite electrically.

EIA ..... Electronic Industries Association

EIRP ..... Effective Isotropically Radiated Power

*A measure of transmitted power.

EL ..... ELevation

EXT ..... External

F

FN ..... Function

G

GMDSS (Global Maritime Distress and Safety Service)

*The Global Maritime Distress and Safety System: the Inmarsat-A/B and C systems are the only Inmarsat networks included in the GMDSS by the IMO International Maritime Organization.

GPRS ..... General Packet Radio Service

GPS ..... Global Positioning System

*System which provides the geographic location of a vessel. This service uses American military satellites which have been made available for civilian use.

H

HD ..... HeaDing

HPA ..... High Power Amplifier

I

IMEI ..... International Mobile Equipment Identity

IMN ..... Inmarsat Mobile Number

IMO ..... Internally Maritime Organization

IMSI ..... International Mobile Subscriber Identity number

INFO ..... Information

INMARSAT ..... International Maritime Satellite Organization

*The operator of global mobile satellite communications, part of the Inmarsat

Ventures Ltd group of companies.

I/O.....Input/Output

IOR.....Indian Ocean Region

IP .....Internet Protocol

ISDN.....Integrated Services Digital Network

ISO.....International Organization for Standardization

ITU .....International Telecommunication Union

K

Kbytes ..... 1024 bytes

L

LAN ..... Local Area Network

LCD..... Liquid Crystal Display

LED ..... Light Emitting Diode

LMSS.....Land Mobile Satellite Service

LNA..... Low Noise Amplifier

LT ..... Local Time

M

MAC Address ..... Media Access Control Address

MDM / Modem .....MODulator/DEModulator

*A device used to transmit digital data, by converting (modulating) a digital signal into an analogue form and re-converting (demodulating) the analogue signal into digital form at the receiving end.

MES..... Mobile Earth Station

*The generic name used to describe an Inmarsat-approved terminal which is allowed to access the network, and applicable to both maritime and land mobile communications.

Message channel

*A channel assigned by the NCS for an MES to send a message through an SAS to its required destination.

MSISDN.....Mobile Subscriber ISDN

MSN .....Multiple Subscriber Number

N

NCS Common Signaling Channel

*Also known as the NCS Common Channel. A TDM channel used by the NCS to transmit system information and message announcements to MESs.

NMEA .....National Marine Electronics Association

O

Ocean Region

*The coverage area of an Inmarsat satellite within which an MES may send and receive messages.

OSC ..... Oscillator

P

Packet

*An envelope or block of data sent over a network; each packet contains addressing information as well as the data being sent.

PBX ..... Private Branch eXchanger

PC ..... Personal Computer

PDP ..... Packet Data Protocol

PIN ..... Personal Identification Number

PoE ..... Power over Ethernet

POR ..... Pacific Ocean Region

PPP ..... Point-to-Point-Protocol

PPPoE ..... PPP over Ethernet

Protocol

*A defined set of communications standards which lay down the parameters to which all users must abide. Protocols in general use are X.25 and X.400.

PS ..... Packet Switched

PSDN ..... Packet Switched Data Network

PSTN ..... Public Switched Telephone Network

PSU ..... Power Supply Unit

PUK ..... PIN Unblocking Key

R

RAM ..... Random Access Memory

REC ..... Receiving level

ROM ..... Read Only Memory

RSSI ..... Received Signal Strength Indicator

RX ..... Receive/Receiver

S

SAS ..... Satellite Access Station

SCA ..... Service Centre Address

SDM ..... System Definition Manual

SIM ..... Subscriber Identity Module

SMS ..... Short Message Service

SOLAS ..... Safety of Life at Sea

Space segment ..... Consists of the communications satellites operated by Inmarsat

Special access code

*A destination address code used in a ship-to-shore or shore-to-ship message to access a special service provided by a service provider. The two-digit codes are examples of special access codes.

SYNC ..... Synchronization

T

TDM ..... Time Division Multiplex

*The process by which multiple signals can share the same communication channel, each using a different time slot.

TDMA ..... Time Division Multiple Access

*The process by which MESs communicate with an SAS or NCS.

TX .....Transmit/Transmitter

U

USB..... Universal Serial Bus

UTC .....Universal Coordinated Time

A term which, for practical purposes, has the same meaning as Greenwich Mean Time (GMT).

V

VDB .....Voice Distress Button

VLAN ..... Virtual LAN

VPN ..... Virtual Private Network

W

WAN .....Wide Area Network

WRF .....Wide-band Radio Frequency

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Appendix S　JRC Network

If your JUE-501/JUE-251 has problems in operation, please contact the dealer you purchased it from.
For assistance in finding a Service Center, please access one of the following web sites.

JRC web site

JRC Japan	http://www.jrc.co.jp
JRC Amsterdam	http://jrc.am/
JRC Seattle	http://jrc.am/

Ver1.8
2017.07.19

JRC Japan Radio Co., Ltd.

电子信息产品有害物资申明
日本无线株式会社

Declaration on toxic & hazardous substances or elements
of Electronic Information Products
Japan Radio Company Limited

有毒有害物质或元素的名称及含量
(Names & Content of toxic and hazardous substances or elements)

名称(Name): INMARSAT FleetBroadband FB500/FB250
Maritime Satellite Communication Terminal

形式名(Type): JUE-501/JUE-251

部件名称 (Part name)	有毒有害物质或元素 (Toxic and Hazardous Substances and Elements)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr^{6+})	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
卫星通信天线设备(Above Deck Equipment)	–	–	–	–	–	–
・天线罩(Antenna Radome)	○	○	○	○	○	○
・底座(Pedestal)	○	○	○	○	○	○
・天线控制单元(Antenna Control Unit)	○	○	○	○	○	○
・无线电单元(Radio Frequeny Unit)	○	○	○	○	○	○
卫星通信主机设备(Below Deck Equipment)	–	–	–	–	–	–
・机壳(Chasis)	○	○	○	○	○	○
・主板(Interface Board)	○	○	○	○	○	○
・电源板(Power Board)	○	○	○	○	○	○
外部设备(Pheripherals)	–	–	–	–	–	–
・特殊手持电话(Handset)	○	○	○	○	○	○
・电缆组件(Cables)	○	○	○	○	○	○
・手册(Documents)	○	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11306-2006 标准规定的限量要求以下。
(Indicates that this toxic, or hazardous substance contained in all of the homogeneous materials for this part is below the requirement in SJ/T11363-2006.)

×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。
(Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T 11363-2006.)

RE: 中华人民共和国电子信息产品污染控制管理办法
Management Methods on Control of Pollution from Electronics Information Products of the People's Republic of China

cut

Inmarsat Fleet Broadband

Product Registration

製品登録用紙

このたびは、JRCインマルサットフリートブロードバンド船舶地球局をお買い上げいただきまして、誠にありがとうございます。今後、ソフトウェアアップデート等に関するご案内を迅速にお届けするため、下記項目をご記入の上電子メールまたはFAXでご返送下さいますようお願いいたします。

Thank you for purchasing the JRC Inmarsat FleetBroadband Mobile Earth Station.
To keep up-to-date with firmware updating information, please fill out following (*) items completely in block capitals and mail or FAX it to JRC.

Fax **+81 3 3492 2777**

Email **tmsc @ jrc.co.jp**

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Product Information;

Product (*): ☐ FB250 JUE-251 ☐ FB500 JUE-501 ☐ JB

Serial Number (*): GV_____

SIM Card distributor: _____

IMEI (*): _____

Manufacture Date _____

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Ship Information;

Ship's Name (*): _____ Flag: _____

IMO Number: _____

Type of vessel: _____

E-mail: _____

TEL: _____

FAX: _____

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Installation Information;

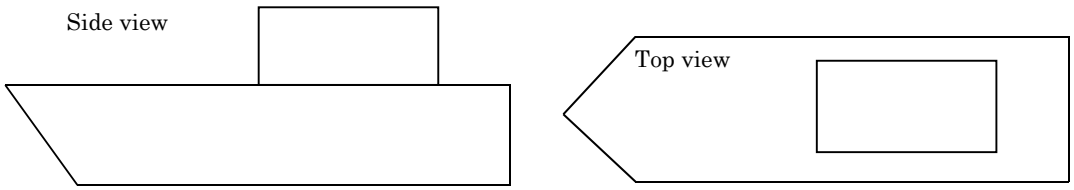
Installation port (*): _____ Country: _____

Installation date(*): _____

Agent (*): _____

Person name (*): _____

Installation location:



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http://www.jrc.co.jp/jp/privacy.html

Japan Radio Co., Ltd.

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Not use the asbestos

For further information,contact:

JRC Japan Radio Co., Ltd.
Since 1915

URL Head office : http://www.jrc.co.jp/eng/
Marine Service Department
1-7-32 Tatsumi, Koto-ku, Tokyo 135-0053, Japan
e-mail : tmsc@jrc.co.jp
One-call : +81-50-3786-9201

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