GS2065/TL265GS
Technical Training Guide

NA Version

GS2065

Overview:
The GS2065 provides primary or backup GSM/GPRS communication for the PC9155 2-way wireless security suite

Specifications:
- Dimensions : 3.937"x5.875"x0.625" (100mmx150mmx15mm)
- Weight : 68 g
- Input Voltage : 10 to 13.8 V (from the PC-Link header)
- Current Draw : 100 mA at 12V (400 mA during the GSM transmission)
- Operating Environment : 40 to 104 F (5 to 40 C)

Features:
- Back up and primary GSM/GPRS alarm communication
- Panel remote uploading/downloading support via GSM/GPRS
- Supervision heartbeats via GSM/GPRS
- 128-bit AES encryption over GSM/GPRS
- Full event reporting
- SIA format
- PC-Link connection
- SIM card included
- Signal strength and trouble display
- Activating and initializing through Connect 24
- Quad-Band: 850 MHz, 1900 MHz, 900 MHz and 1800 MHz

Compatible Receivers:
- Sur-Gard System I Receiver: version 1.10 and higher
- Sur-Gard System II Receiver: version 2.00 and higher
- Sur-Gard SG-DRL3-IP: version 2.20 and higher (for Sur-Gard System III Receiver)
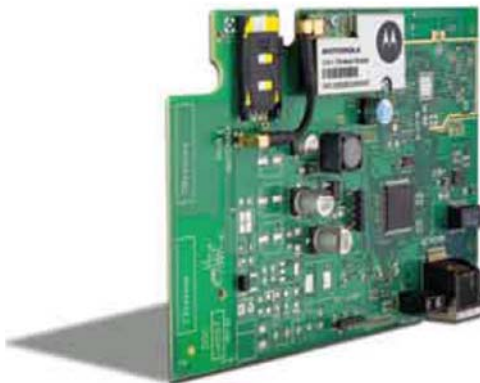
TL265GS

Overview:
The TL265GS is an Internet and GSM/GPRS Dual-Path alarm communicator for the PC9155 2-way wireless security suite

Specifications:
- Dimensions : 3.937"x5.875"x0.75" (100mmx150mmx18mm)
- Weight : 78 g
- Input Voltage : 10 to 13.8 V (from the PC-Link header)
- Current Draw : 100 mA at 12V (400 mA during the GSM transmission)
- Operating Environment : 40 to 104 F (5 to 40 C)

Features:
- Fully redundant Internet and GSM/GPRS dual-path alarm communication
- Integrated call routing
- Panel remote uploading/downloading support via GSM/GPRS and Internet
- Supervision heartbeats via GSM/GPRS and Internet
- 128-bit AES encryption via GSM/GPRS and Internet
- Full event reporting
- SIA format
- PC-Link connection
- SIM card included
- Signal strength and trouble display
- Activating and initializing through Connect 24
- Quad-Band: 850 MHz, 1900 MHz, 900 MHz and 1800 MHz

Compatible Receivers:
- Sur-Gard System I Receiver: version 1.10 and higher
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Installation – GS2065/TL265GS

BEFORE YOU BEGIN

Have the following ready before installation:

- Control panel backup battery
- Battery connection harness
- Batteries for WT5500 2-way wireless keypad
- Screwdriver

Prior to installing a GS2065 and TL265GS, contact your monitoring station to determine if it is a master reseller or visit www.connect24.com and become an authorized dealer. In both instances, you will acquire a Profile Number, Installer ID Number and an Installer Password.

PLEASE NOTE: You need to activate the SIM card and initialize the communicator 24 HOURS BEFORE INSTALLATION (Steps 1).

Summary of Installation Steps

Step 1 – Initialize an account via Connect 24 Website (www.connect24.com)

Step 2 – Install and wire the communicator to the control panel (on-site)

Step 3 – Load the programming and test for best signal strength location

Step 4 – Program communication options on the control panel via keypad

Step 5 – Test communicator

Installation

Step 1

Step 1 – Initialize an account via Connect 24 Website (www.connect24.com)

Login to Connect 24 website by using Installer ID and Password and initialize an account

- Select Profile Number
- Select Product Module
- Enter SIM card number
- Enter DNIS number (if necessary)
- Enter Account Code
- Select Supervisory Type (if necessary)
- Enable DHCP (if necessary)
- Enter IP Address (TL260GS/TL265GS only)
- Enter Subnet Mask Address (TL260GS/TL265GS only)
- Enter Gateway Address (TL260GS/TL265GS only)
- Select Rate Plan
- Confirm information and submit activation application

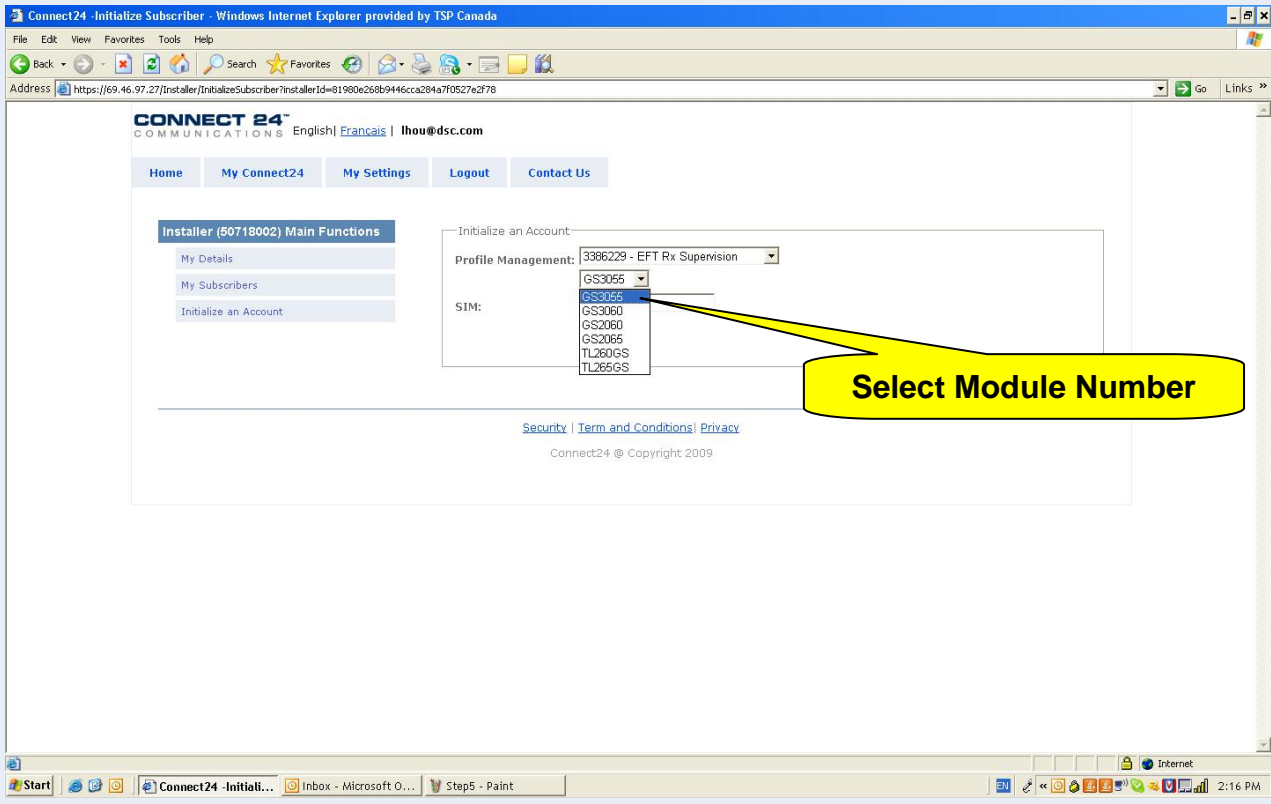# Installation

Step 1

Step 1 – 1

- Select Profile Number
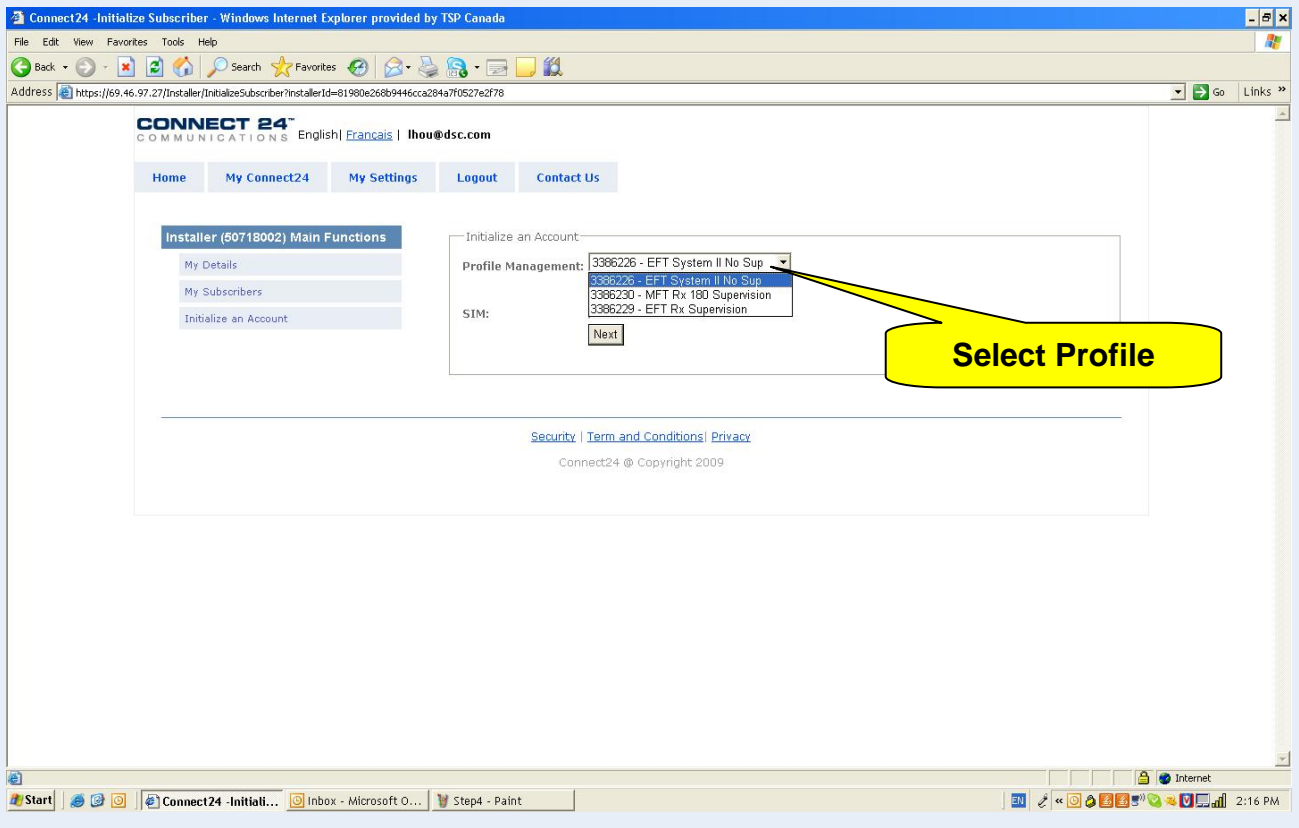
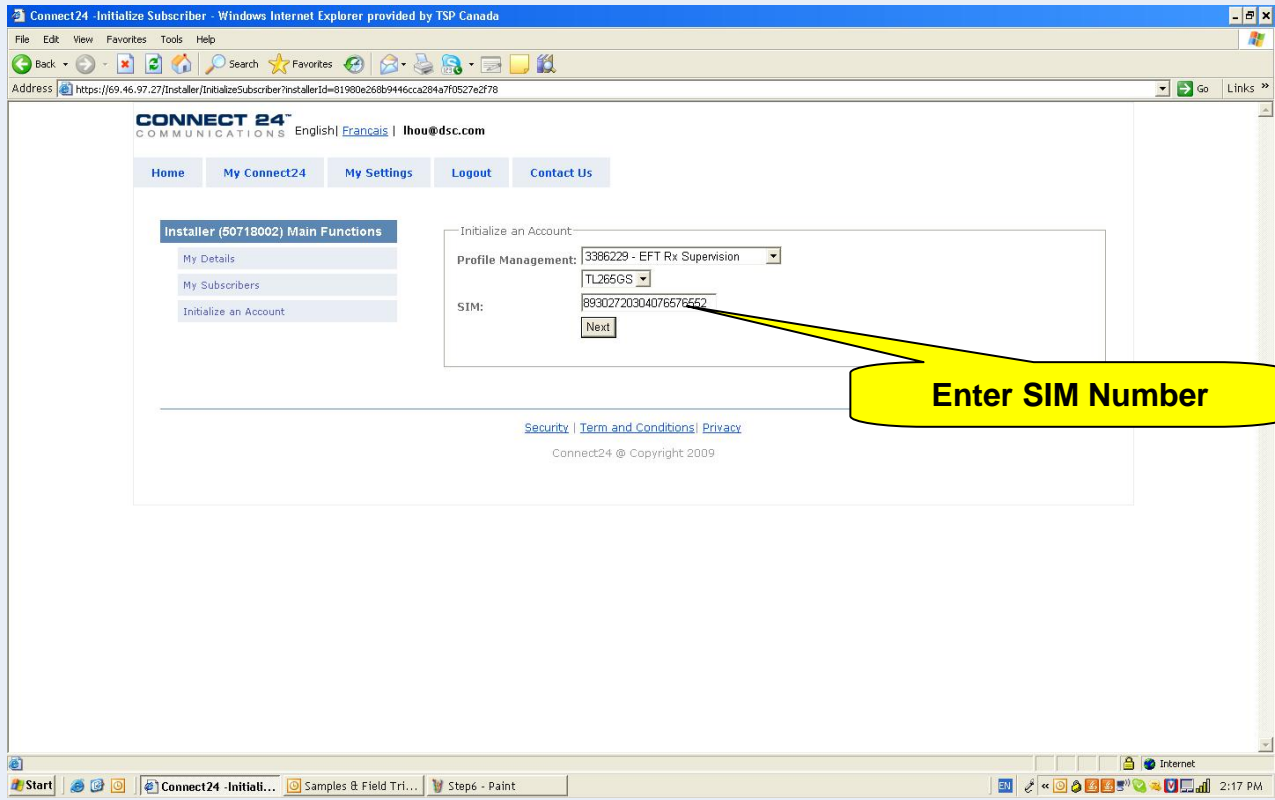# Installation

Step 1

Step 1 – 2

- Select Product Module

Select Module Number

Installation

Step 1

Step 1 – 3

- Enter SIM card number

Enter SIM Number

Installation

Step 1

Step 1 – 4

- Enter DNIS number (if necessary)
- Enter Account Code
- Select Supervisory Type (if necessary)
- Enable DHCP (if necessary)

Note: If DHCP is not selected, manual entries of the IP Address, Subnet Mask Address and Gateway Address are required (next page).

Enter DNIS

Enter Account Code

Select Supervisory Type

DHCP Option

Installation

Step 1

Step 1 – 5 (only available if DHCP is not selected)

- Enter IP Address (TL265GS only)
- Enter Subnet Mask Address (TL265GS only)
- Enter Gateway Address (TL265GS only)

IP Address

Subnet Mask

Gateway
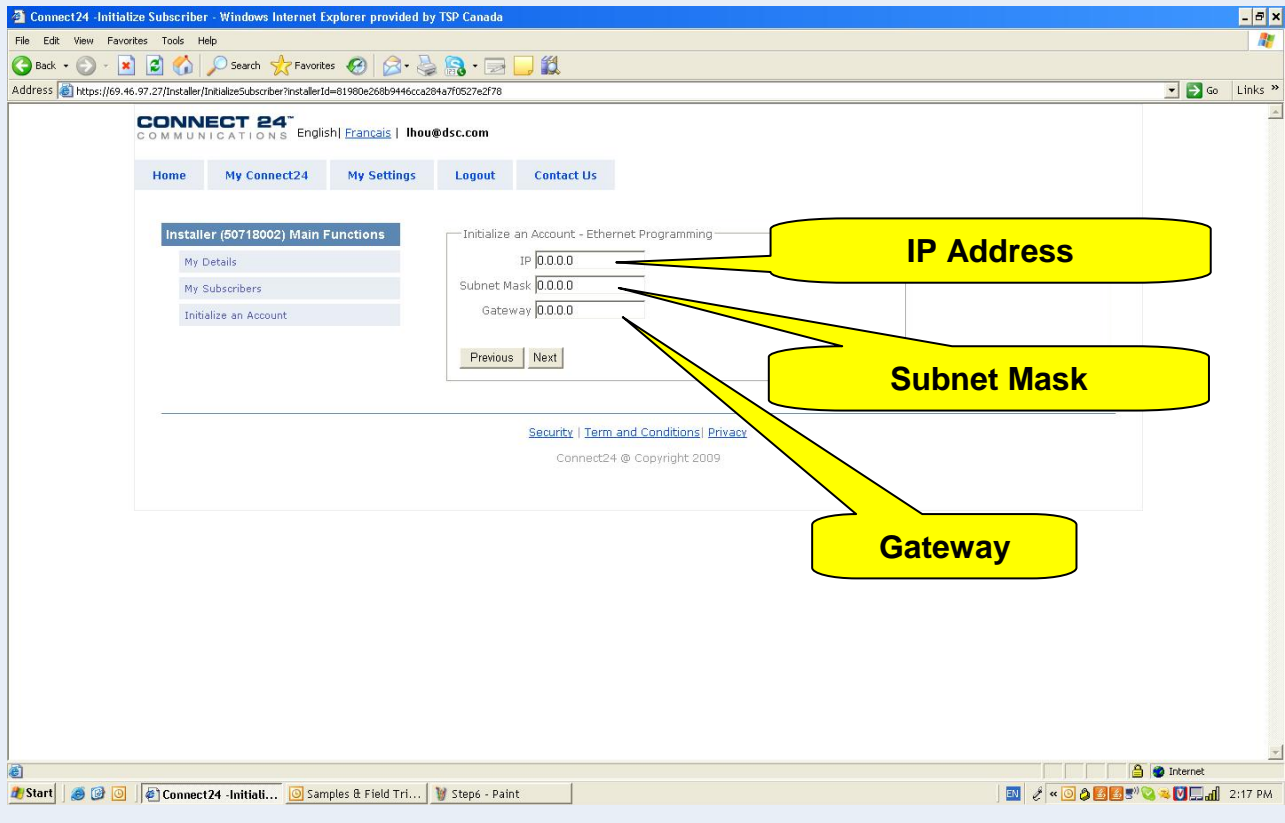
Installation

Step 1

Step 1 – 4

- Select Rate Plan

Installation

Step 2

Step 2 – Install and wire the communicator to the control panel (on-site)

GS2065/TL265GS: See details in product manual for PC9155 control panel
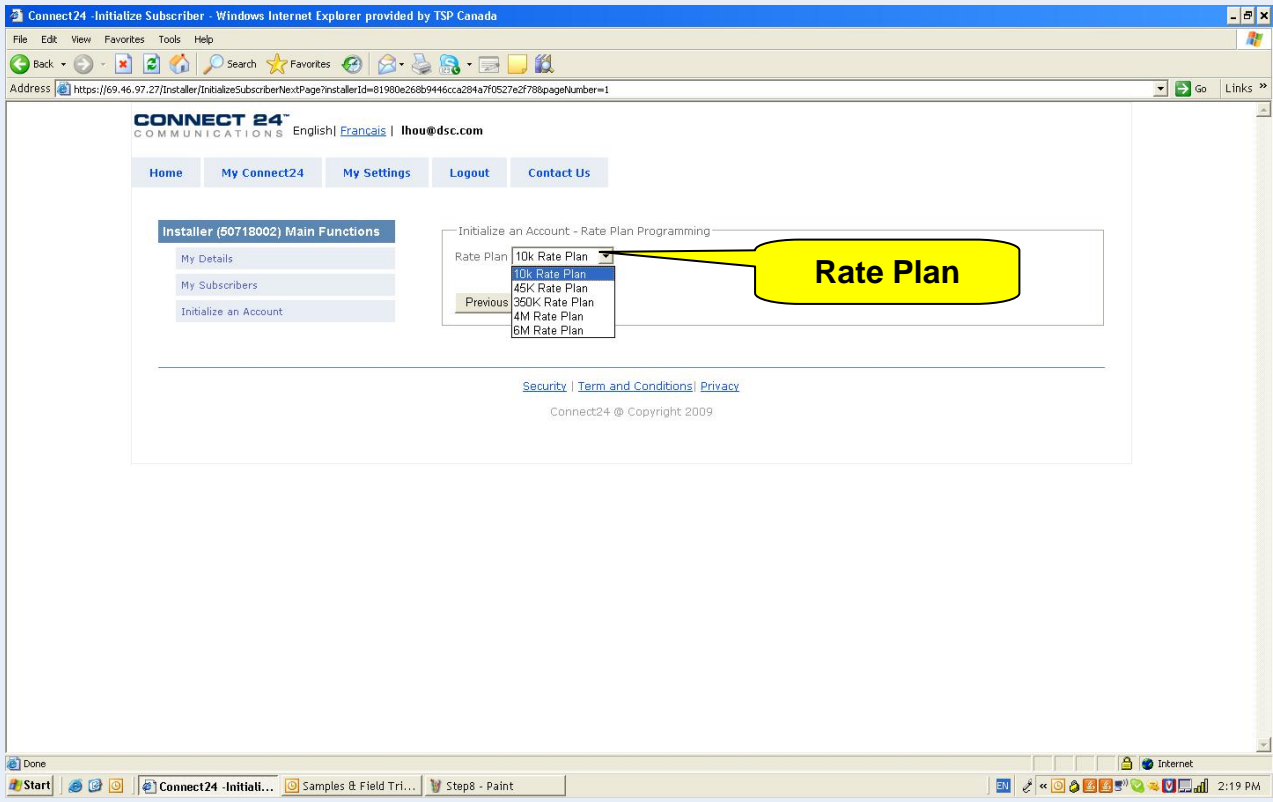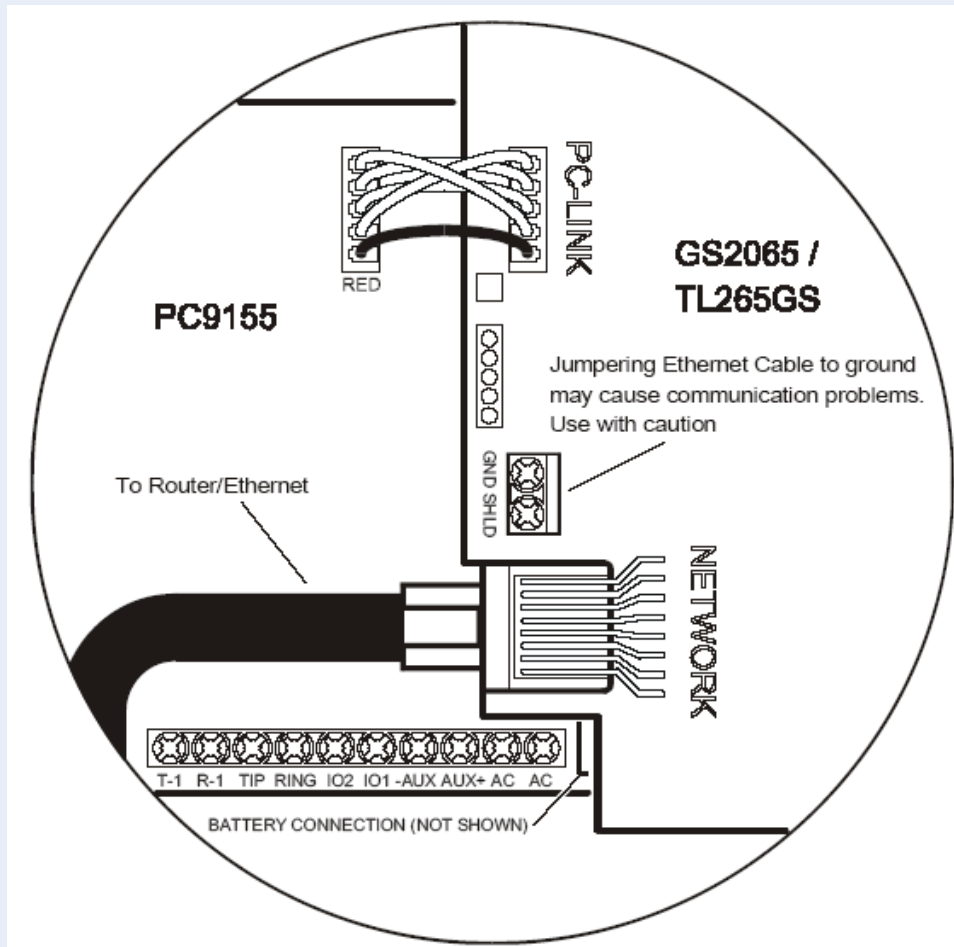
Installation

Step 3

Step 3 – Load the programming and test for best signal strength location

Ensure the SIM card is inserted
Power up the control panel

The communicator will be programmed by loading the pre-programmed configuration from Connect 24 automatically

Check Green LEDs. You must achieve full or medium signal strength. See details in product manual
If signal strength is poor, must relocate the control panel or use an external extension antenna kits
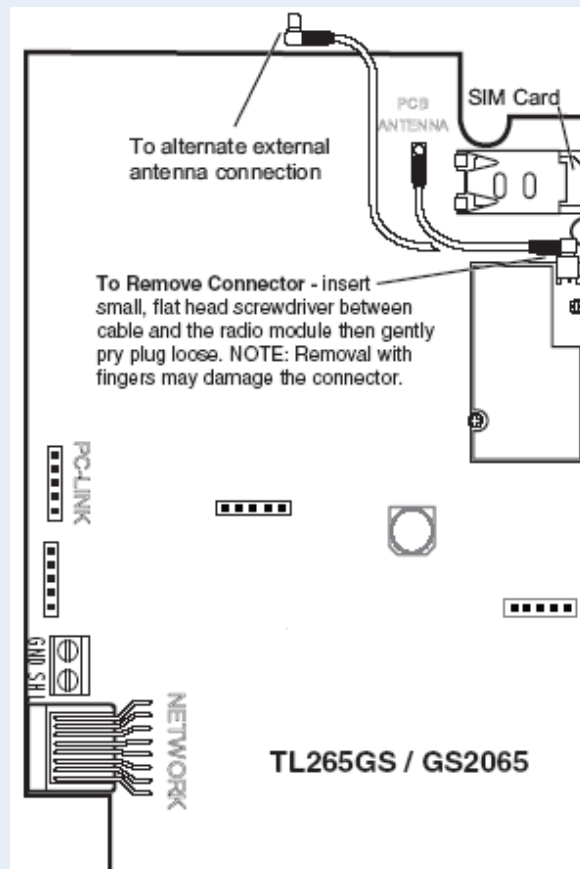
Installation

Step 4

Step 4 – Program communication options on the control panel via keypad

GS2065/TL265GS with PC9155 control panel

o [301], [302], [303], [305]   Program Communication Path
- DCAA - Internal (Ethernet 1, Ethernet 2, GPRS 1, GPRS 2)
- DCBB - Ethernet Receiver 1
- DCCC - Ethernet Receiver 2 (backup)
- DCDD - GPRS Receiver 1
- DCEE - GPRS Receiver 2 (backup)

o [350] option: Program Communication Format (Communicator)
- (If Option [301] (above) is set to DCAA, Option [350] must be set to SIA, sub-option 5)

o [351] to [376] options: Program Call Direction
o [382] option: Enable T-LINK Interface (Option [5])
o [383] option: Program Back up Communication
o [167] option: Enable Communication Wait For ACK (Set to 60 seconds)
o [401] option: Enable DLS Session Through GPRS or Ethernet (Option [1])

Installation

Step 5

Step 5 – Test communicator

1. Disconnect incoming phone line from TIP and RING on the control panel
2. Verify that LED 2 is on, this indicate that the unit is active
3. Create an alarm transmission
4. Verify alarm transmission by calling monitoring station
5. Re-connect the phone line, if necessary

For back-up communication applications, perform steps 1 to 5
For primary communication applications, perform steps 3 and 4 only

Call Routing

Communicator Controlled Call Routing

– Backup (dual-path)
– Redundant (dual-path)

Required Programming

Panel Sections [301], [302],[303] and [305]
•Any of them could be programmed as DCAA

Communicator Sections [005]
Option [4] - Primary and backup path
[ON]: GPRS path primary, Ethernet path backup
[OFF]: Ethernet path primary, GPRS path backup

Option [5] - Redundant between GPRS path and Ethernet path
[OFF]: Disable redundancy
[ON]: Enable redundancy

Backup Mode 1:
Ethernet Primary, 4 Receivers

Ethernet Receiver 1	TX 1 →	IP Receiver* 1
Ethernet Receiver 2	Tx 1 failed, Tx2 →	IP Receiver 2
GPRS Receiver 1	Tx 2 failed, TX3 →	IP Receiver 3
GPRS Receiver 2	Tx 3 failed, Tx4 →	IP Receiver 4
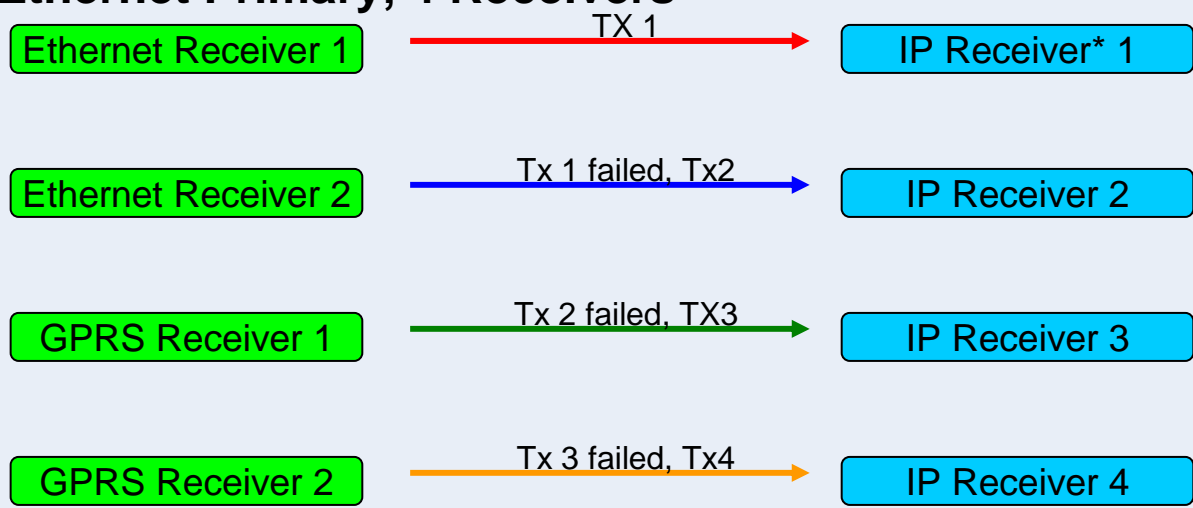
Call Routing

Backup Mode 2:
Ethernet Primary, 2 Receivers

Ethernet Receiver 1 — TX 1 → IP Receiver 1

Ethernet Receiver 2 — Tx 1 failed, Tx2 → IP Receiver 1

GPRS Receiver 1 — Tx 2 failed, TX3 → IP Receiver 2

GPRS Receiver 2 — Tx 3 failed, Tx4 → IP Receiver 2
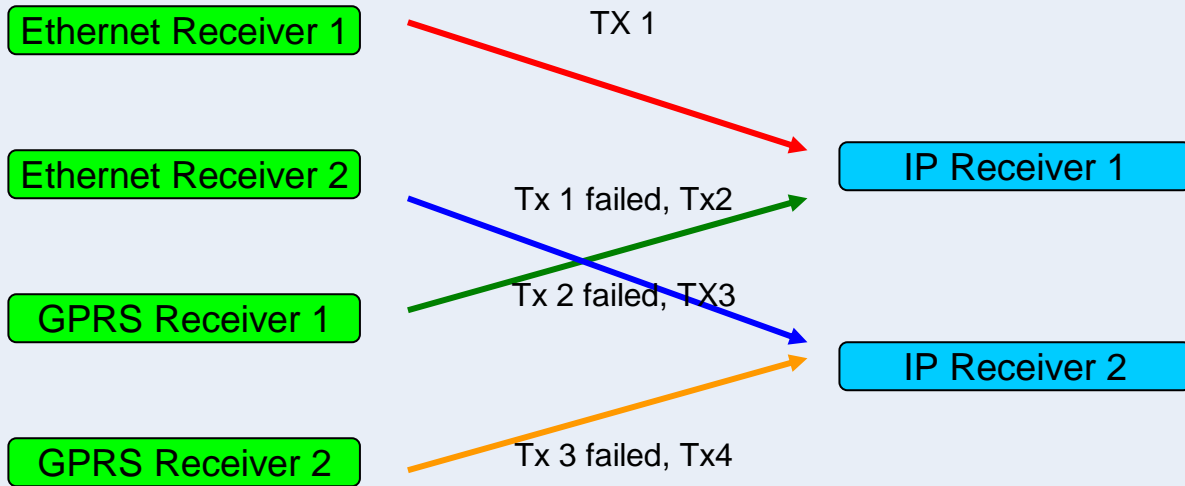
Backup Mode 3:
GPRS Primary, 4 Receivers

Ethernet Receiver 1 — Tx 2 failed, TX3 → IP Receiver 1

Ethernet Receiver 2 — Tx 3 failed, Tx4 → IP Receiver 2

GPRS Receiver 1 — TX 1 → IP Receiver 3

GPRS Receiver 2 — Tx 1 failed, Tx2 → IP Receiver 4
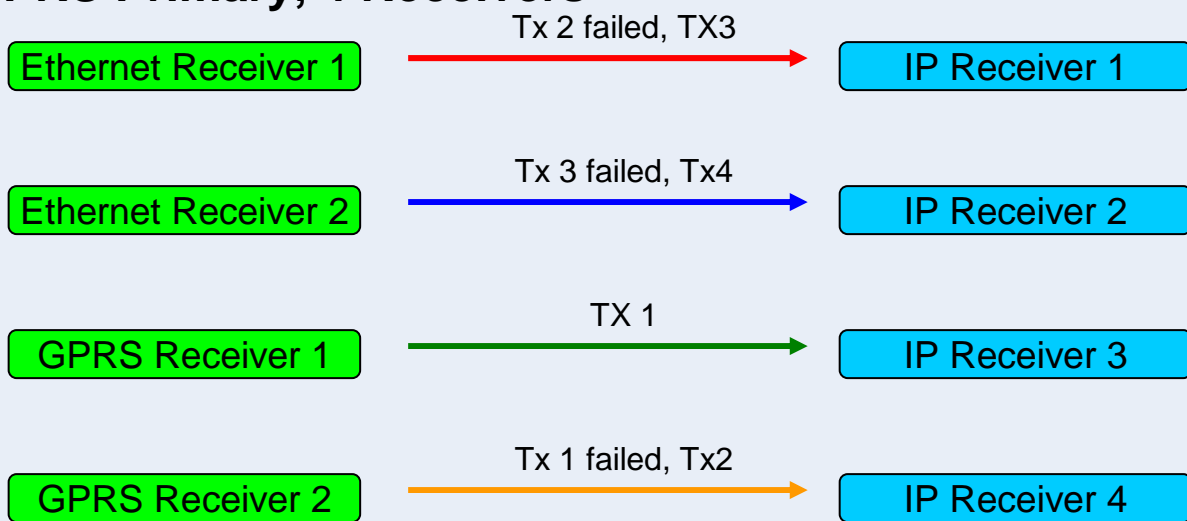
Call Routing

Backup Mode 4:
GPRS Primary, 2 Receivers
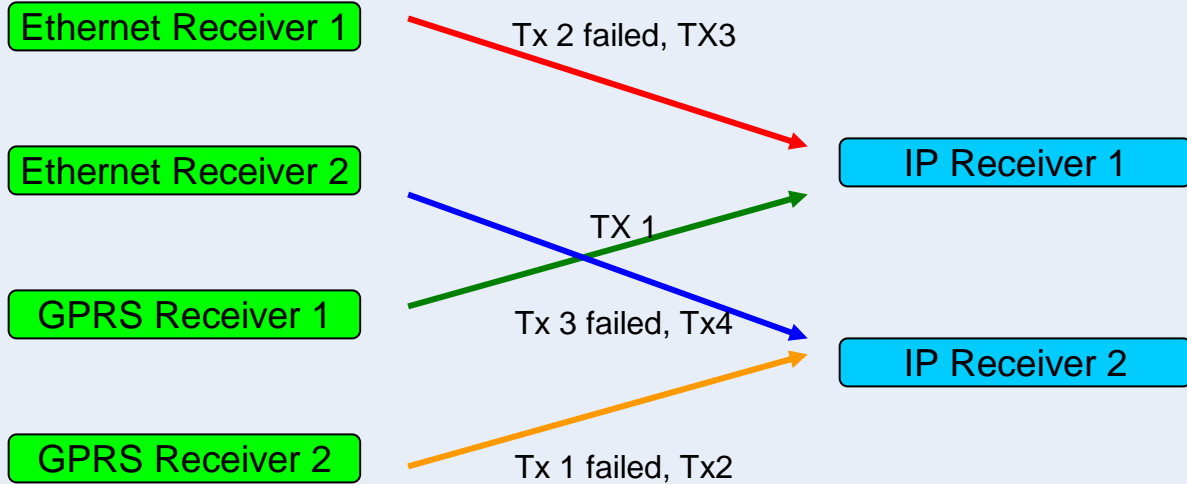
Redundant Mode 1: 4 Receivers
– (Redundancy between GSM/GPRS path and Ethernet/Internet path)
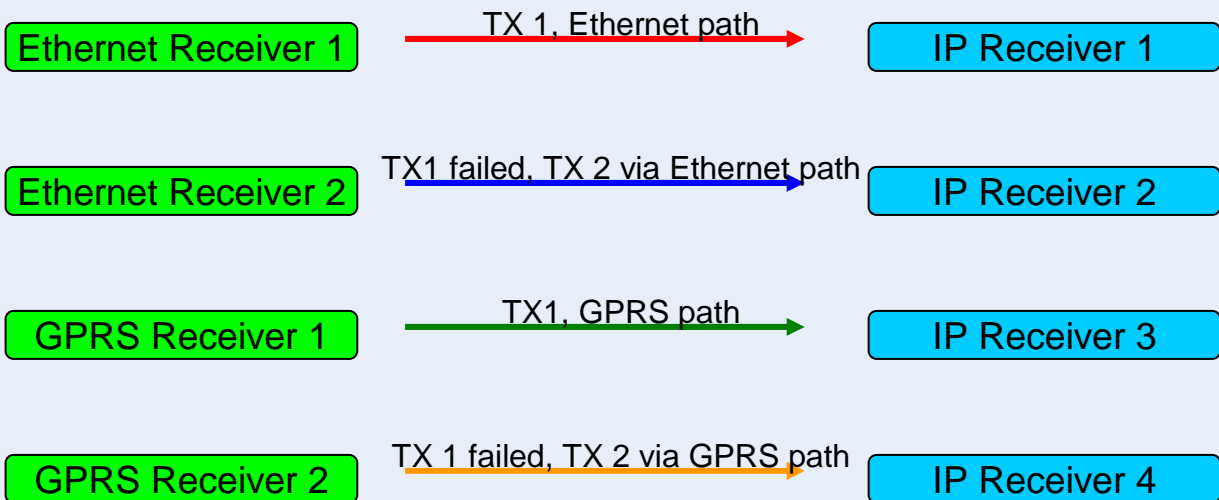
Call Routing

Redundant Mode 2: 2 Receivers
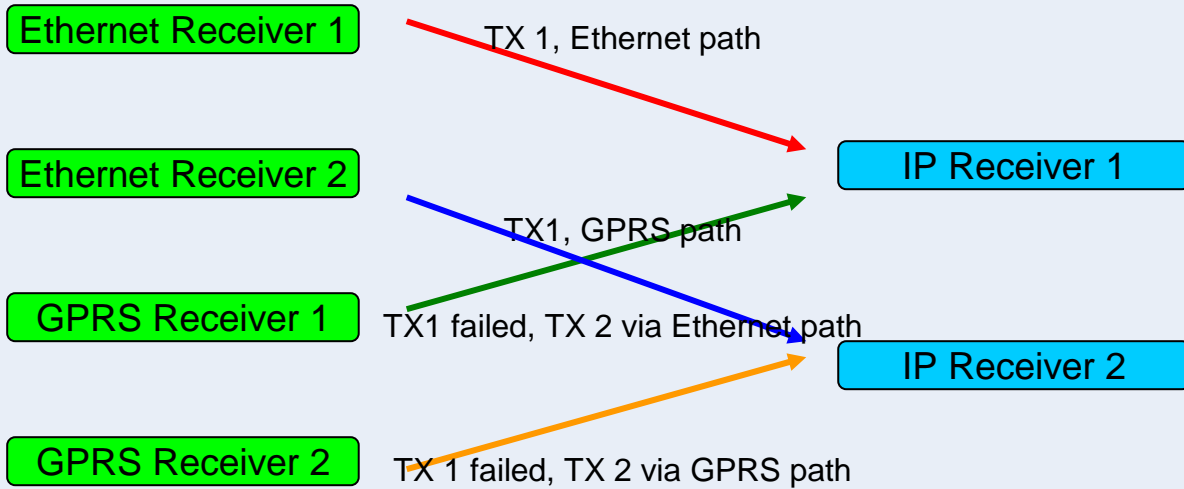– (Redundancy between GSM/GPRS path and Ethernet/Internet path)

| Ethernet Receiver 1 | TX 1, Ethernet path |

| Ethernet Receiver 2 | IP Receiver 1 |

TX1, GPRS path

| GPRS Receiver 1 | TX1 failed, TX 2 via Ethernet path | IP Receiver 2 |

| GPRS Receiver 2 | TX 1 failed, TX 2 via GPRS path |

Call Routing

PC9155 Panel Controlled Call Routing

Backup (triple-path)
- **P**anel section [383] – Options [2],[3] and [4] enabled
- **Panel section [380], Option [6] disabled**

Redundant (triple-path)
- **P**anel sections [351] – [376] Options enabled

Alternate (triple-path)
- **P**anel section [380] – Option [6] enabled

Required Programming
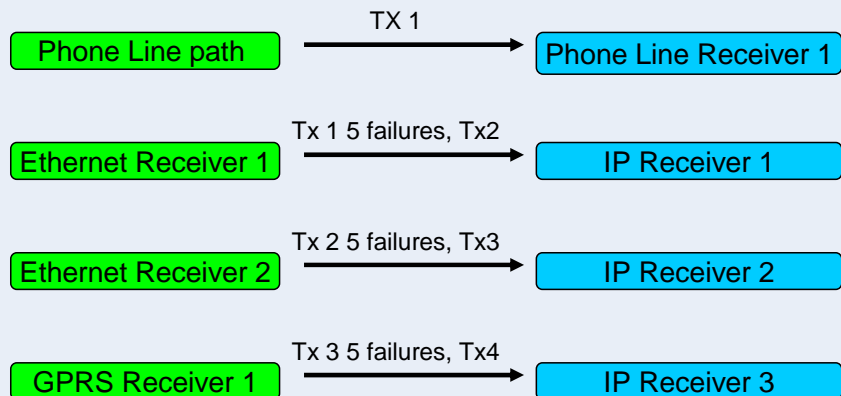**Panel Sections [301], [302],[303] and [305]**
- Phone #: Phone number of the receiver
- DCBB: Ethernet Receiver 1
- DCCC: Ethernet Receiver 2
- DCDD: GPRS Receiver 1
- DCEE: GPRS Receiver 2

PC9155 Panel Controlled Call Routing
–**Backup: Panel Section [383] – Options [2],[3] and [4] enabled**

Example

[301]	1-800-xxxxxxx
[302]	D C B B
[303]	D C C C
[305]	D C D D

Phone Line path → TX 1 → Phone Line Receiver 1

Ethernet Receiver 1 → Tx 1 5 failures, Tx2 → IP Receiver 1

Ethernet Receiver 2 → Tx 2 5 failures, Tx3 → IP Receiver 2

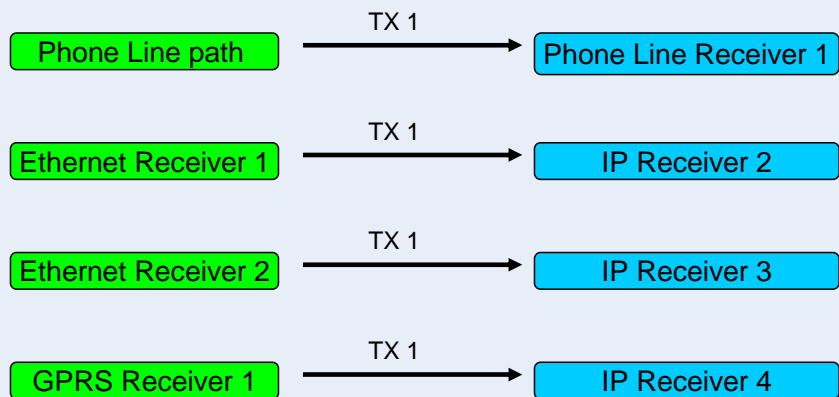GPRS Receiver 1 → Tx 3 5 failures, Tx4 → IP Receiver 3

Call Routing

PC9155 Panel Controlled Call Routing
–Redundant: Panel Sections [351] – [376] Options enabled

Example

[301]	1-800-xxxxxxx
[302]	DCBB
[303]	DCCC
[305]	DCDD

Phone Line path → TX 1 → Phone Line Receiver 1

Ethernet Receiver 1 → TX 1 → IP Receiver 2

Ethernet Receiver 2 → TX 1 → IP Receiver 3

GPRS Receiver 1 → TX 1 → IP Receiver 4

PC9155 Panel Controlled Call Routing
–Alternate: Panel section [380] – Option [6] enabled

Example

[301]	1-800-xxxxxxx
[302]	DCBB
[303]	DCCC
[305]	DCDD

Phone Line path → TX 1 → Phone Line Receiver 1

Ethernet Receiver 1 → Tx 1 1 failure, Tx2 → IP Receiver 1

Ethernet Receiver 2 → Tx 2 1 failure, Tx3 → IP Receiver 2

GPRS Receiver 1 → Tx 3 1 failure, Tx4 → IP Receiver 3

5 rounds total