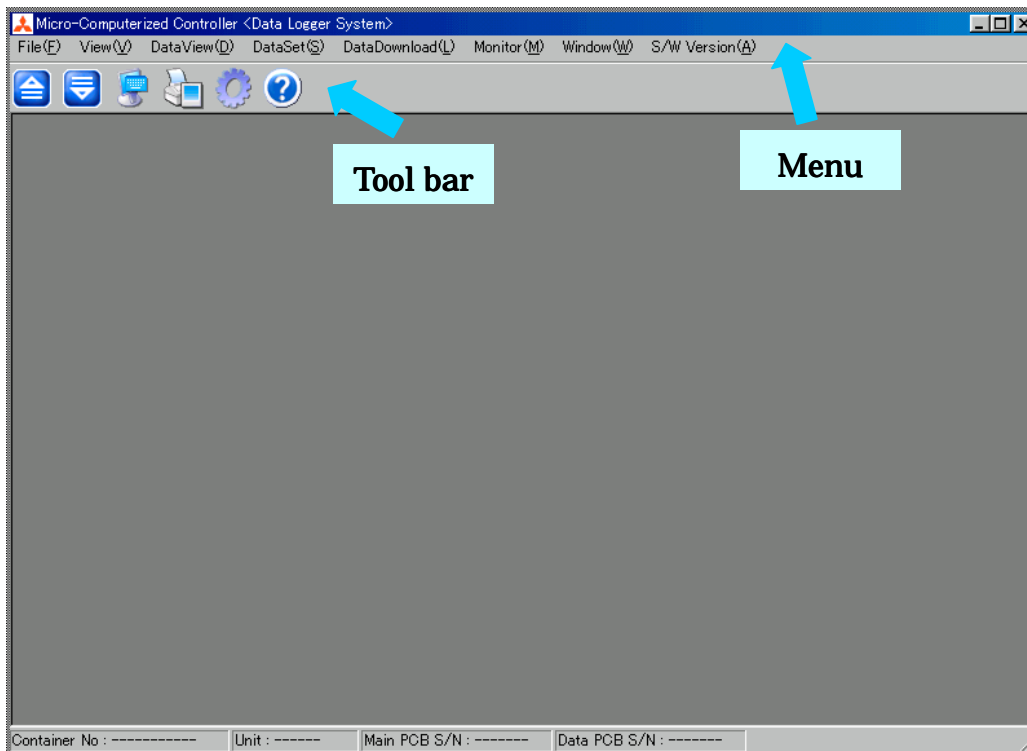


## MHI Reefer Data control System (Ver.5.03)

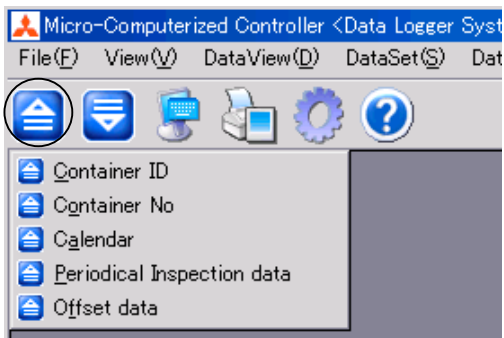
### 1. MHI Reefer Data control System basic operation

Main menu window includes menu bar and tool bar, and all function is operated by menu bar or tool bar.



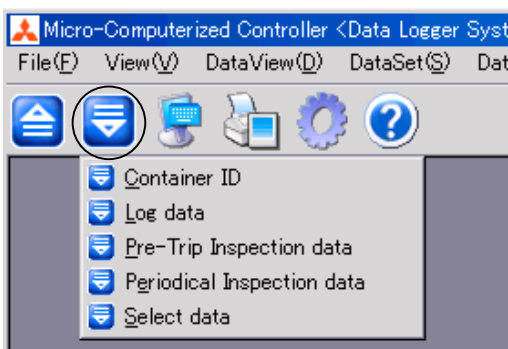
#### 1.1 Data set button

By clicking data set button on tool bar, data set menu such as calendar setting is displayed.



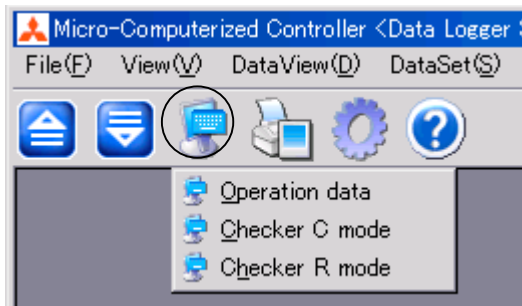
#### 1.2 Data Download button

By clicking data download button on tool bar, data download menu is displayed.



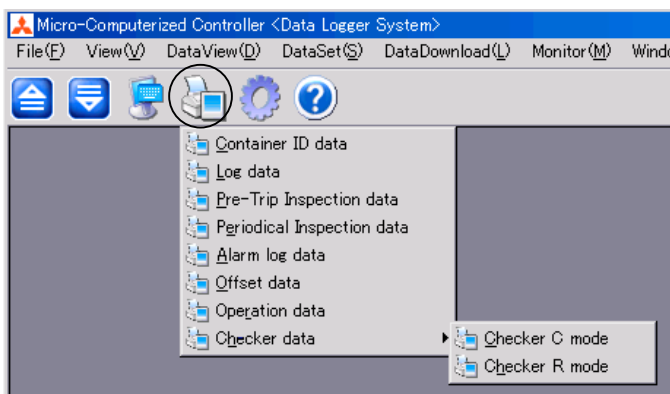
### 1.3 Monitor button

By clicking monitor button on tool bar, monitor menu is displayed.



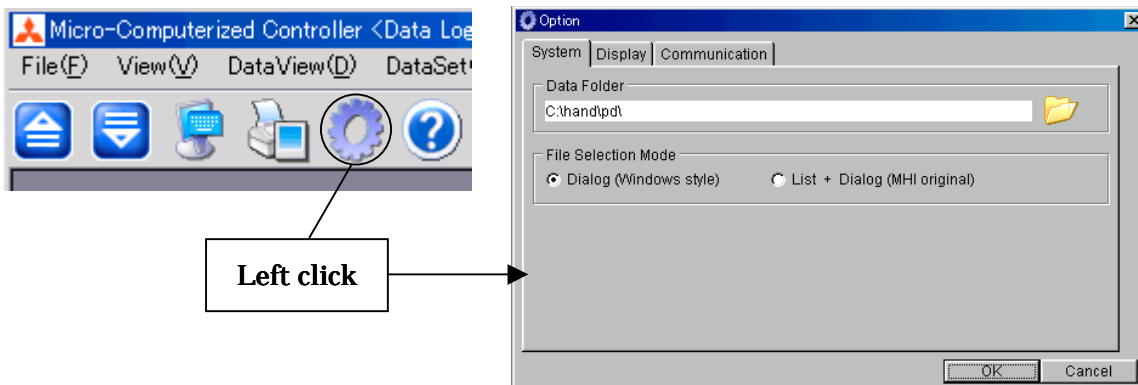
### 1.4 Data view button

By clicking data view button on tool bar, data view menu is displayed.



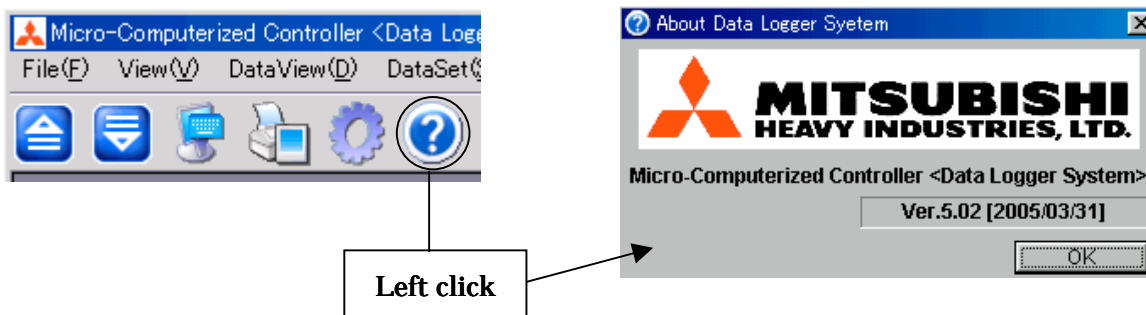
### 1.5 Option button

By clicking option button on tool bar, option menu is displayed.

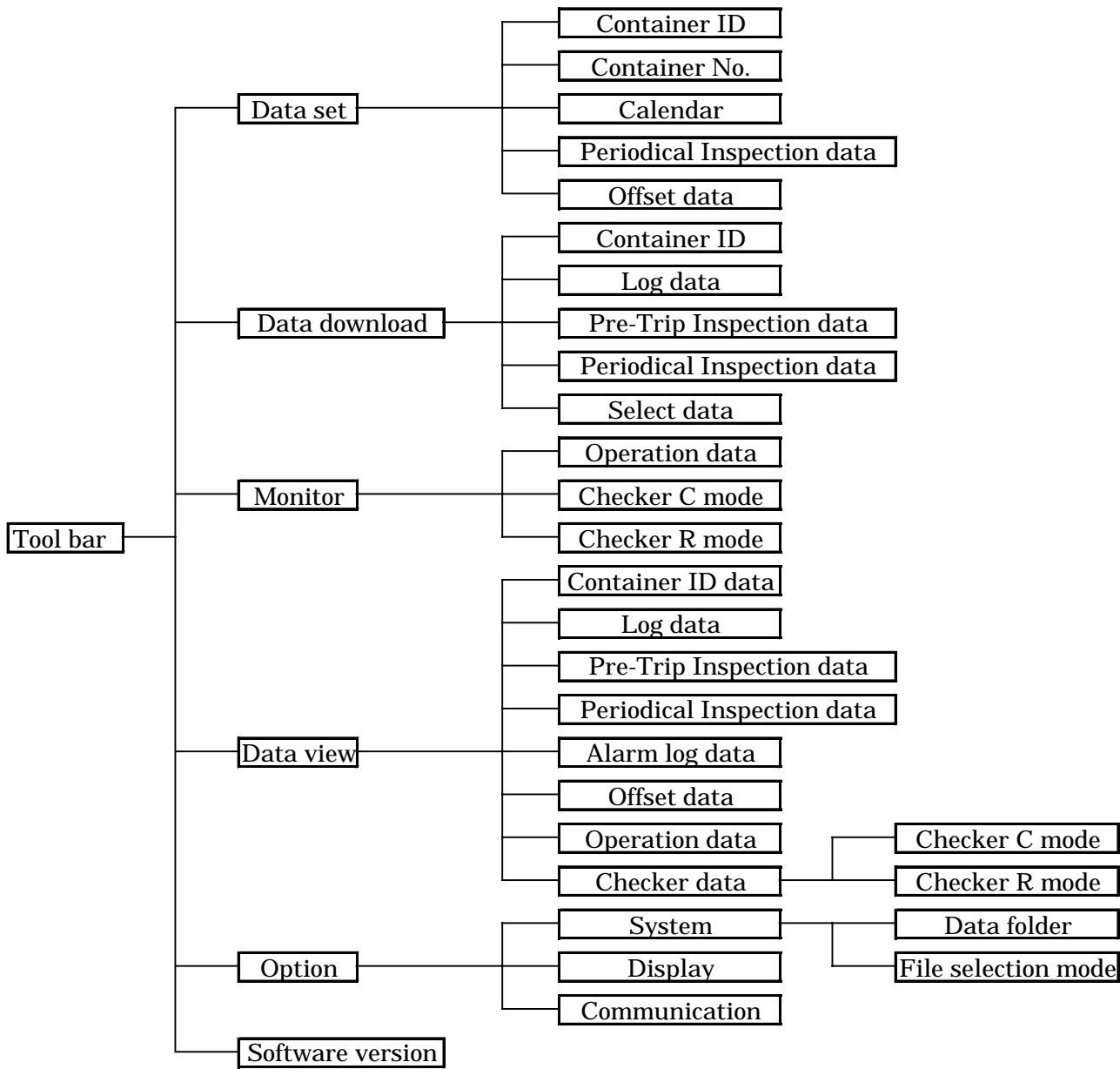


### 1.6 Software version button

By clicking software version button, software version is displayed.



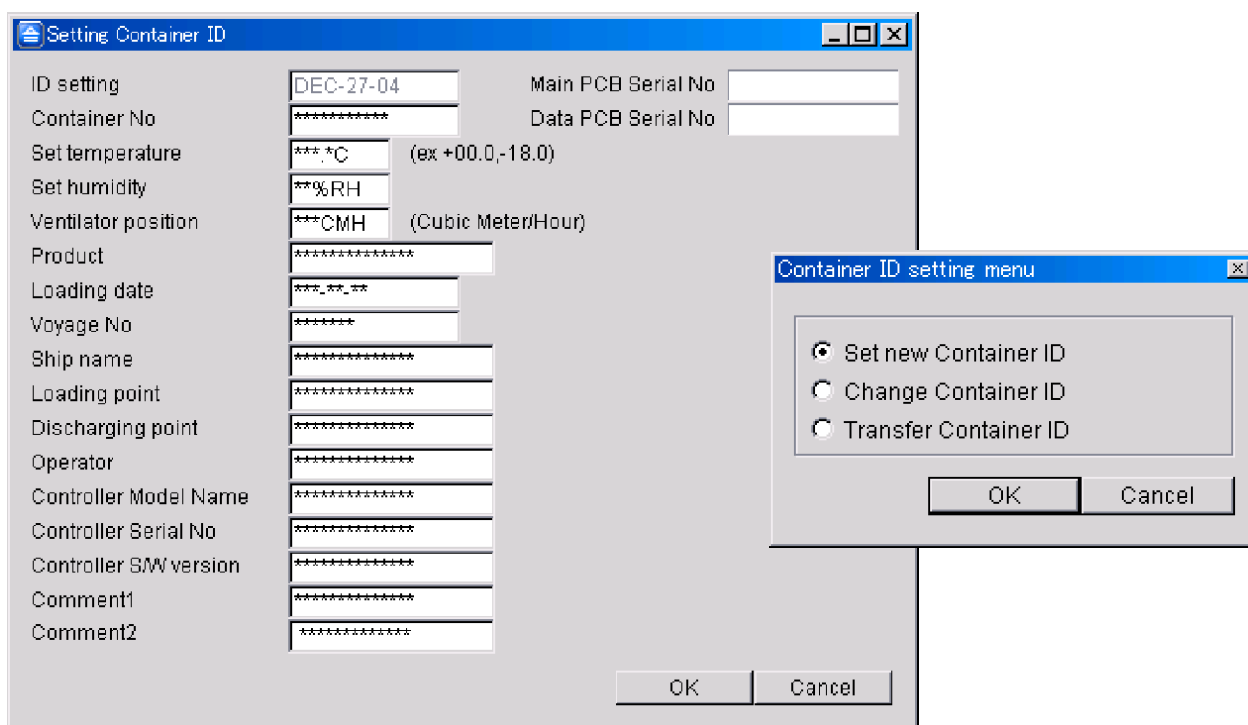
Structure of tool bar




## 2. Operating procedure for each menu

### 2.1 Data set

#### 2.1.1 Container ID



By clicking container ID on data set menu , setting container ID and container ID setting menu is displayed. After selecting container ID setting menu, you can input ID.

Set new container ID: Set new ID, and you can input all the data

Change container ID: Use the current container ID, and you can input all the data except container No

Transfer container ID: Use the storage data that has same controller serial No in your hard disk, and you can input data except container No

By clicking O.K button after completion of data input, ID is transferred to controller.

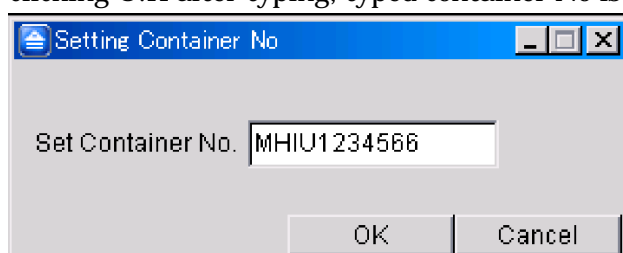
By clicking cancel button, close the window.

#### 2.1.2 Container No

By clicking container No on , setting container No menu is displayed.

If the typed container No is wrong, error message is displayed.

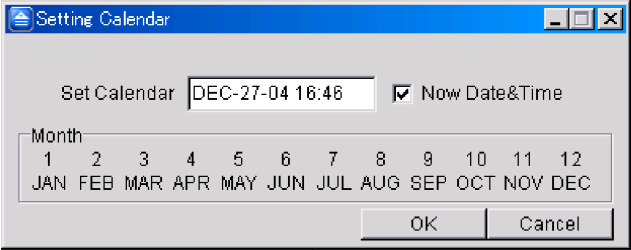
By clicking O.K after typing, typed container No is transferred to the controller.



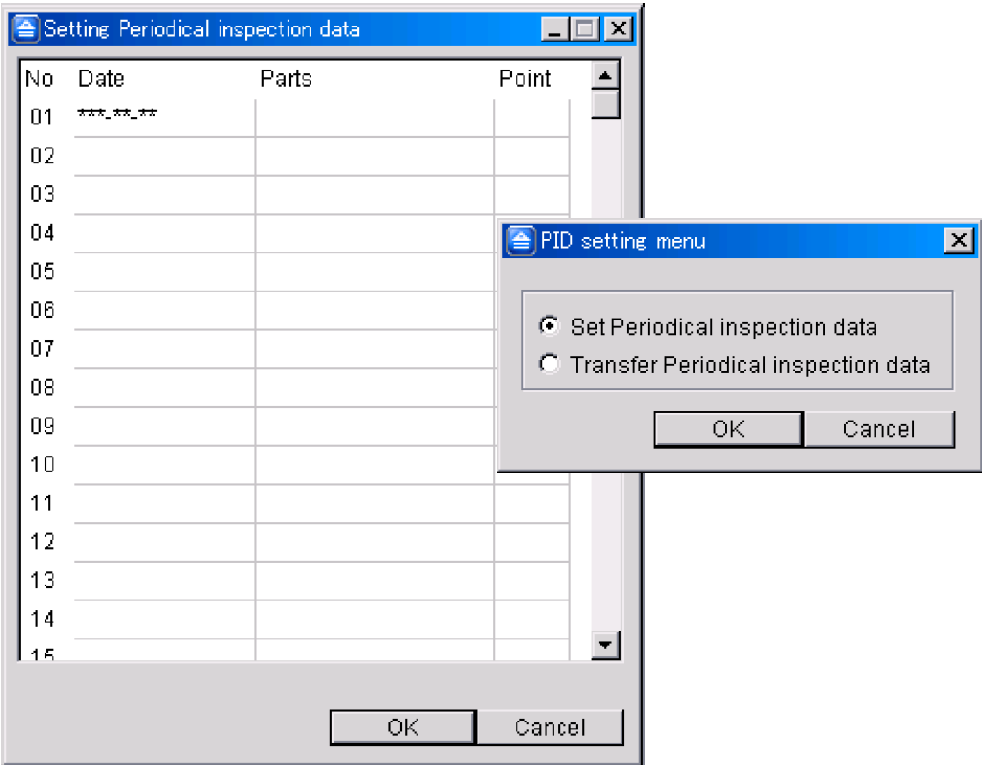
2.1.3 Calendar


By clicking calendar on  , setting calendar menu is displayed.

By clicking O.K after typing, typed calendar is transferred to the controller.



2.1.4 Periodical inspection data



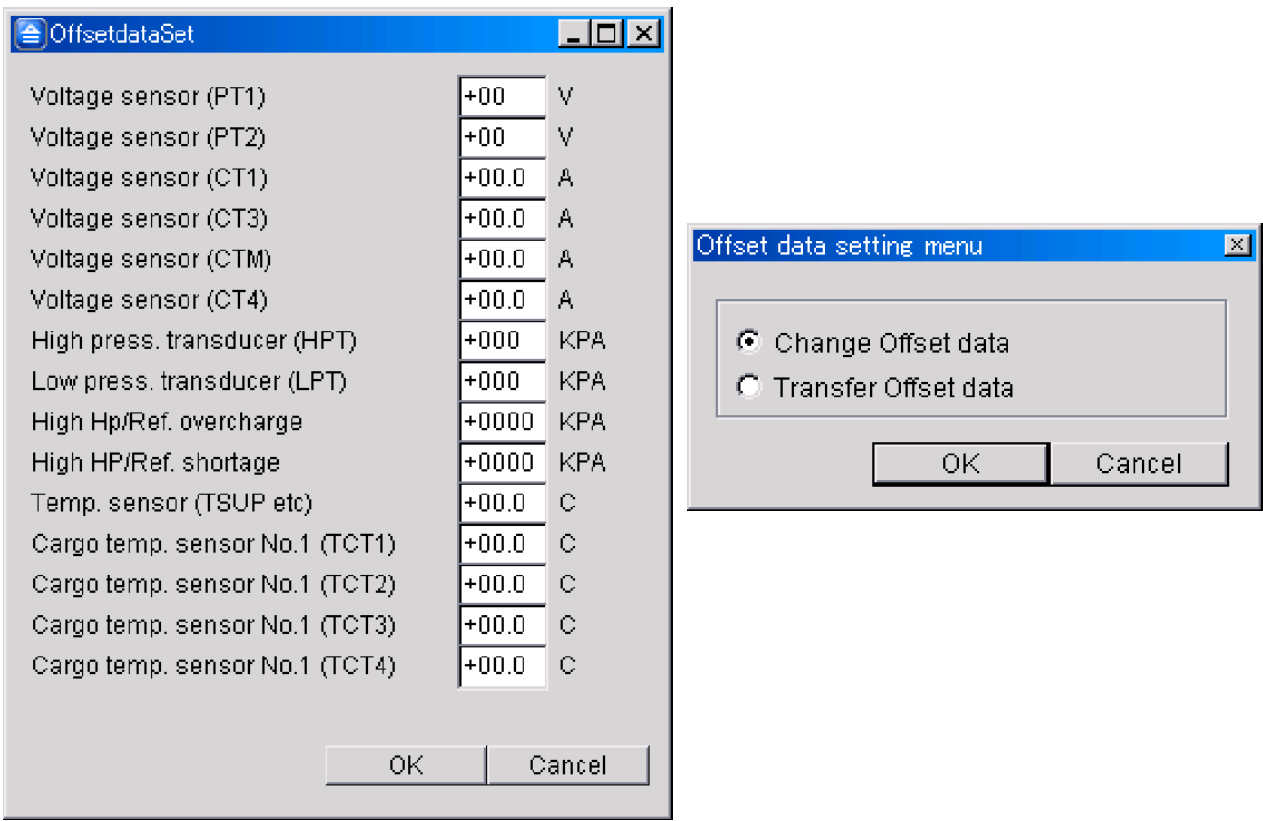
By clicking periodical inspection data on  setting periodical inspection data and PID setting menu is displayed. After selecting PID setting menu, you can input PID data.


Set Periodical inspection data: Use the data that is stored in the controller.

Transfer Periodical inspection data: Use the storage data that has same controller serial  
No in your hard disk

By clicking O.K button after completion of data input, PID is transferred to controller.

### 2.1.5 Offset data




By clicking offset data on , offset data set and offset data setting menu is displayed. After selecting offset data setting menu, you can input offset data.

- Change offset data: Use the data that is stored in the controller.
- Transfer offset data: Use the storage data that has same controller serial No in your hard disk

By clicking O.K button after completion of data input, ID is transferred to controller.

## 2.2 Data download

### 2.2.1 Container ID

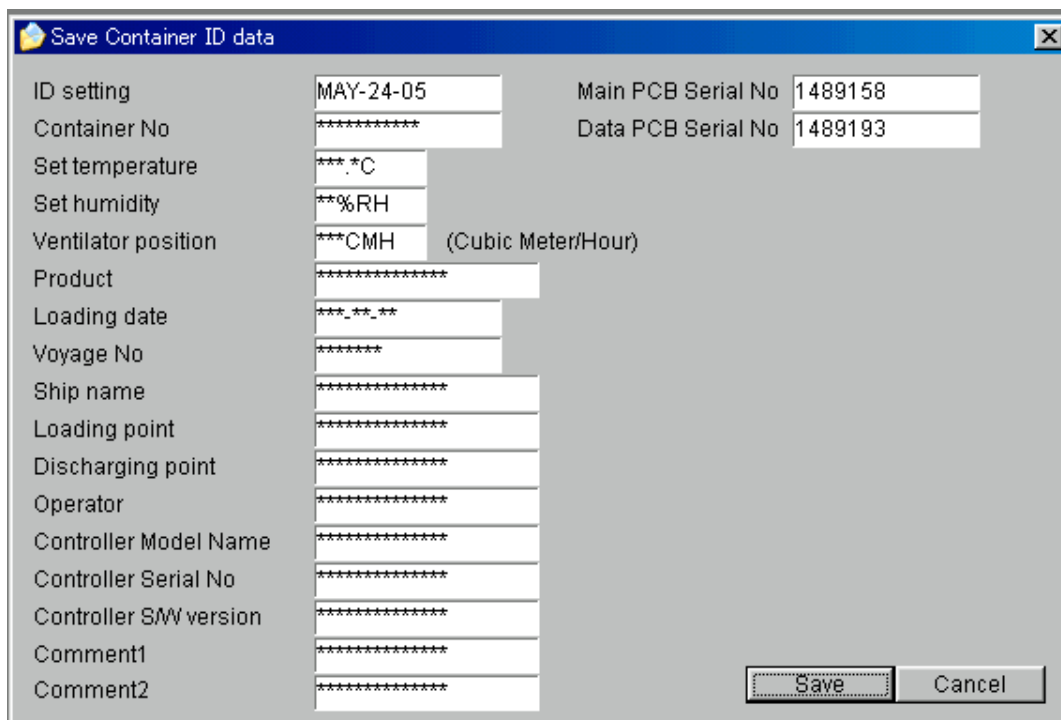
(1) Click Container ID on Data download 

(2) Data download dialogue is displayed.



In case you click cancel button, data download will be canceled.

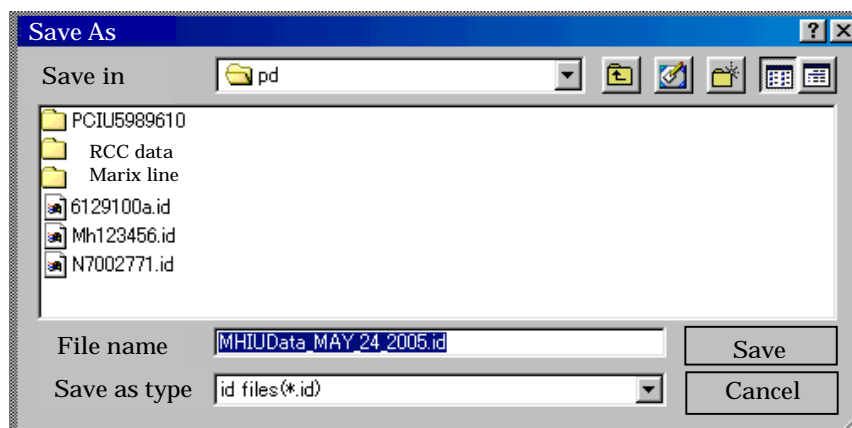
(3) After retrieval process has been completed, click save button


 A "Save Container ID data" dialog box with a blue header bar and a close button (X). It contains a list of fields for saving data:
 

ID setting	MAY-24-05	Main PCB Serial No	1489158
Container No	*****	Data PCB Serial No	1489193
Set temperature	***.°C		
Set humidity	**%RH		
Ventilator position	***CMH	(Cubic Meter/Hour)	
Product	*****		
Loading date	***_**_**		
Voyage No	*****		
Ship name	*****		
Loading point	*****		
Discharging point	*****		
Operator	*****		
Controller Model Name	*****		
Controller Serial No	*****		
Controller SW version	*****		
Comment1	*****		
Comment2	*****		

 At the bottom right, there are "Save" and "Cancel" buttons.

(4) Save screen is displayed, and you can save data wherever you want to keep



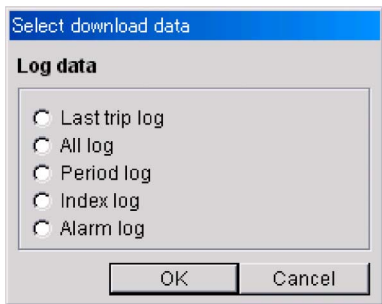
### 2.2.2 Log data

(1) Click Log data on Data download 

(2) Data download dialogue is displayed

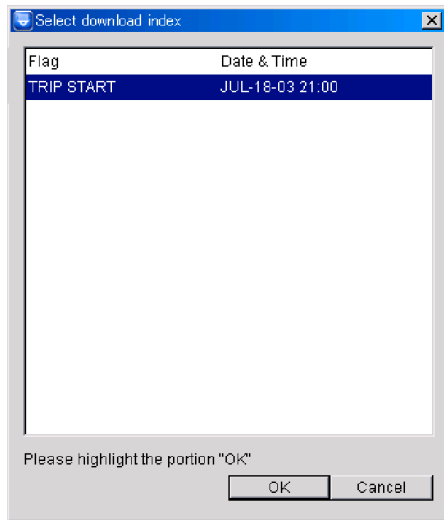


(3) Select download data menu is displayed

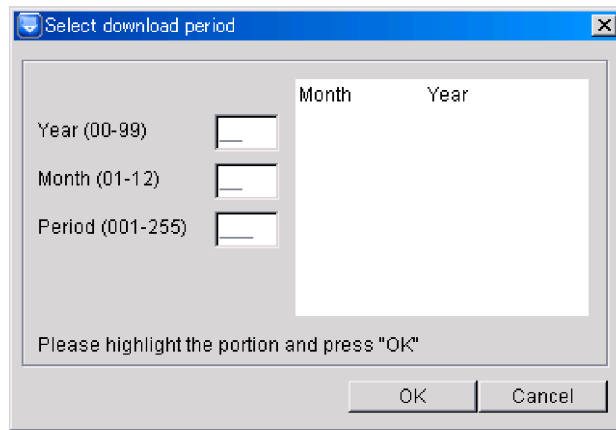


Last trip log: Only last trip data will be retrieved  
All log: All log data stored in controller will be retrieved  
Period log: Desired period data can be retrieved  
Index log: Desired trip data that start from "Trip start" can be retrieved  
Alarm log: Detailed alarm data (1 minutes operation data before alarm occurred) can be retrieved

In case you select index or period log, below menu is displayed.



Index log



Period log

(4) Data download dialogue is displayed again

(5) After retrieval process has been completed, click save button same as ID data

(6) Save screen is displayed, and you can save data wherever you want same as Id data



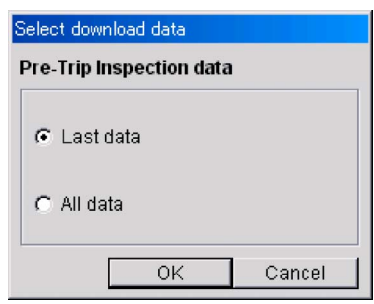
### 2.2.3 Pre-Trip Inspection data

(1) Click Pre-Trip Inspection data on Data download 

(2) Data download dialogue is displayed



(3) Select download data menu is displayed



Last data: Last PTI data will be retrieved


All data: All 3 PTI data will be retrieved

(4) Data download dialogue is displayed again

(5) After retrieval process has been completed, click Save button same as ID data

(6) Save screen is displayed, and you can save data wherever you want same as Id data

### 2.2.4 Periodical Inspection data

(1) Click Periodical Inspection data on Data download 


(2) Data download dialogue is displayed



(3) After retrieval process has been completed, click Save button same as ID data

(4) Save screen is displayed, and you can save data wherever you want same as Id data

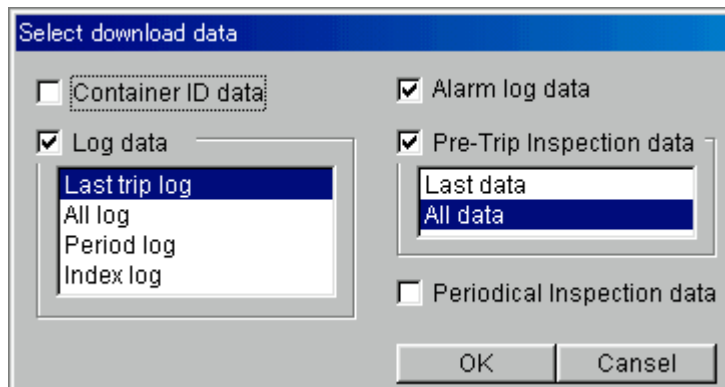
### 2.2.5 Select data

(1) Click select data on Data download 

(2) Data download dialogue is displayed



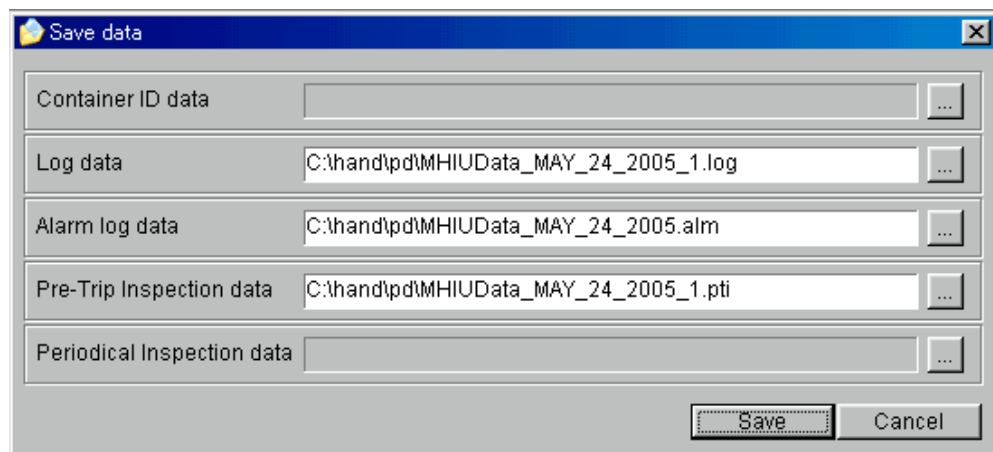
(3) Select download data menu is displayed




You can download ID data, Log data, Alarm log data and periodical inspection data at one time when you check the check box and select desired data.

(4) Data download dialogue is displayed again

(5) After retrieval process has been completed, click Save button

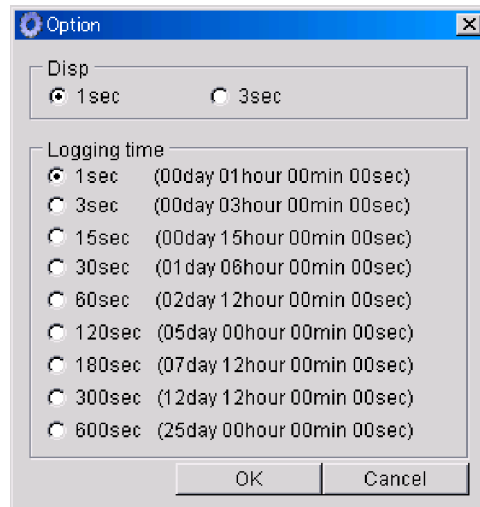



If you want to change the data storage place, click  button.

Save screen same as ID data is displayed and you can save data wherever you want.

## 2.3 Monitor

### 2.3.1 Operation data

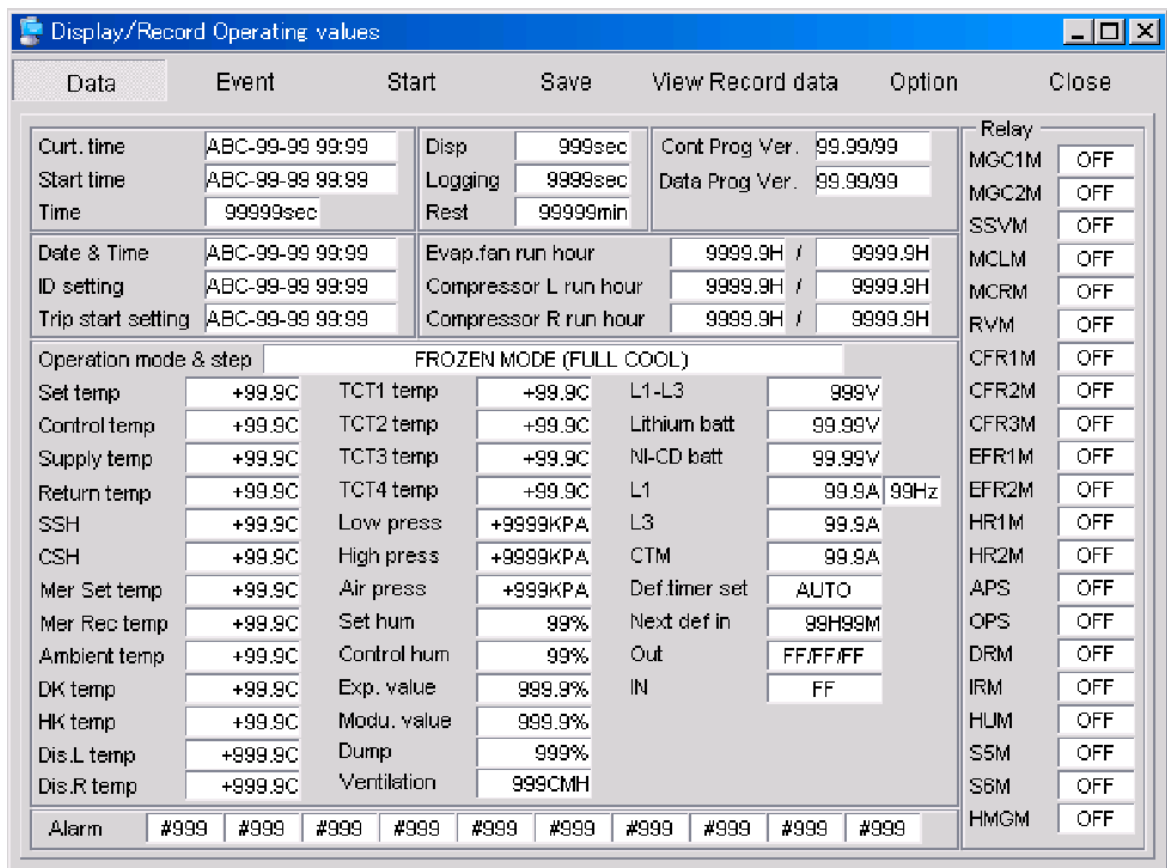


By clicking operation data on monitor menu , option screen is displayed.

Disp: Select data renewal interval, 1 second or 3 seconds

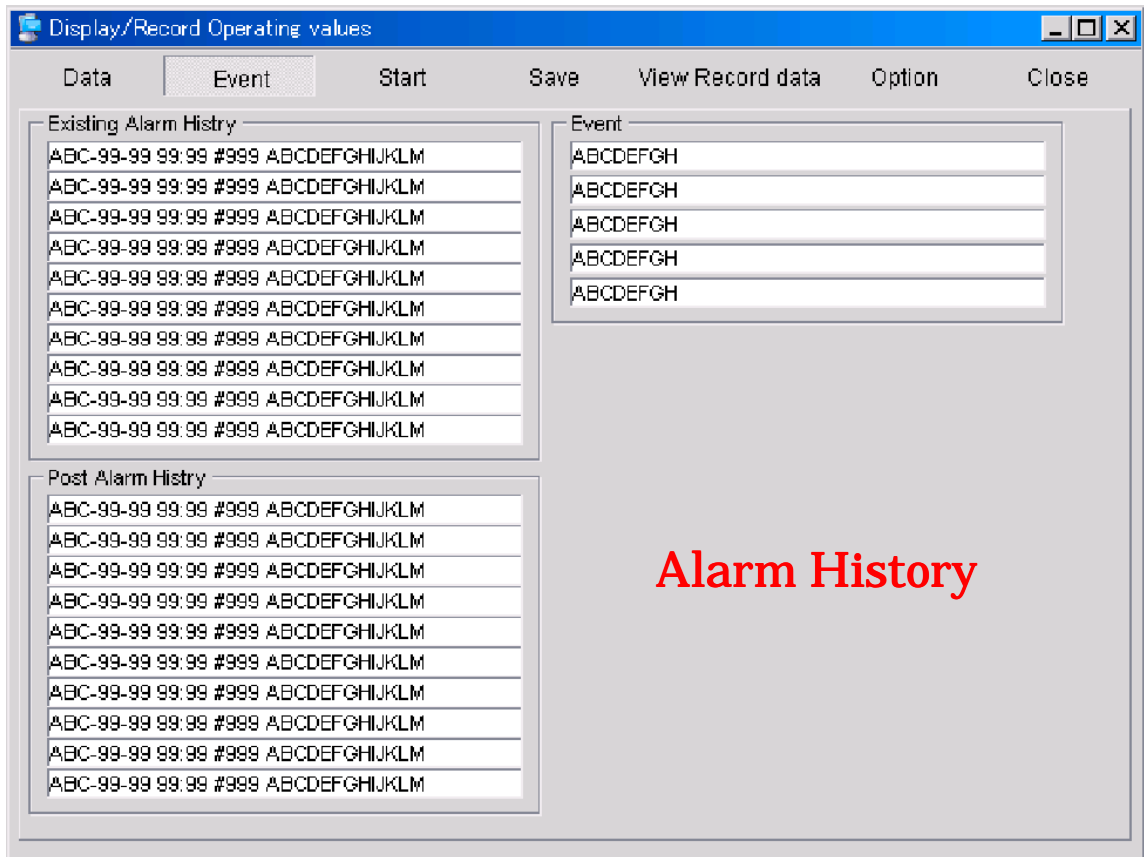
Logging time: Select data storage interval, from 1 second to 600 second

After clicking O.K button, display / record operating values screen is displayed.



By clicking start button on display / record operating values, renewal of display and data recording starts.

By clicking Event button, alarm history is displayed.



By clicking Data button, operating value is displayed again.




By clicking Stop button, data retrieval will be finished.

By clicking save button, recorded data can be saved.

By clicking Option button, option screen written on Page 11 is displayed.

By clicking View record data, you can view retrieved data using below button.



-  Displayed data is proceeded
-  Displayed data is returned
-  Close the screen


### 2.3.2 Checker C mode

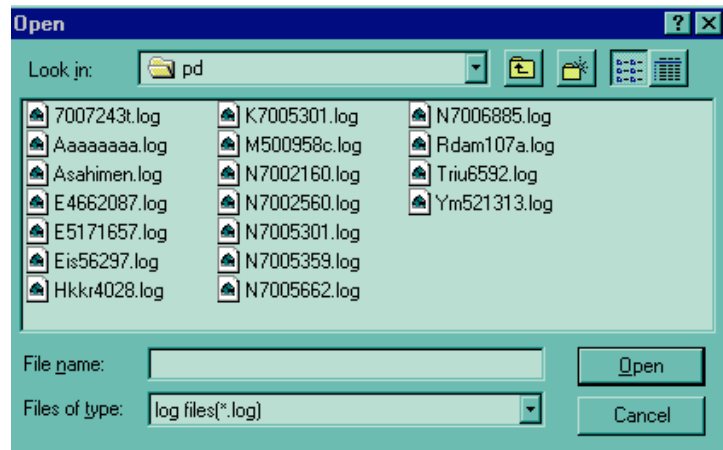
### 2.3.3 Checker R mode

These 2 functions are used only for factory test.

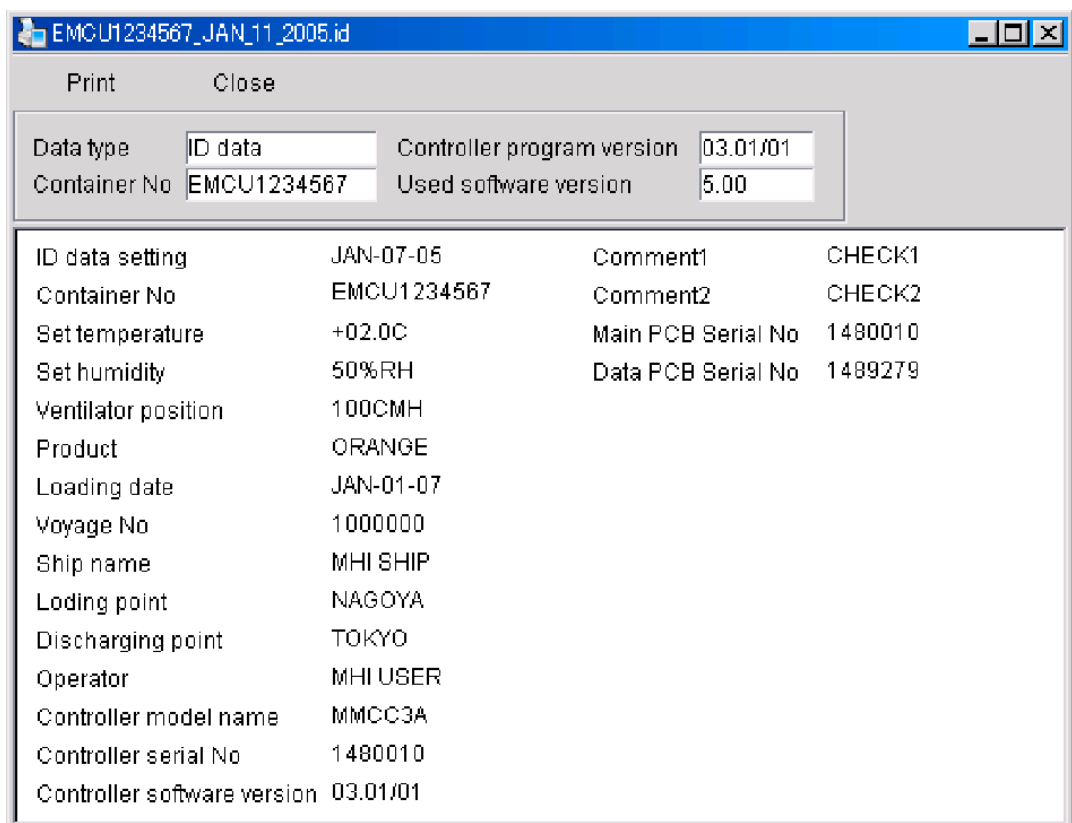
## 2.4 Data view

### 2.4.1 Container ID data

(1) Click container ID data on Data view 



(2) Select the desired data and click open



Print: Print displayed ID data

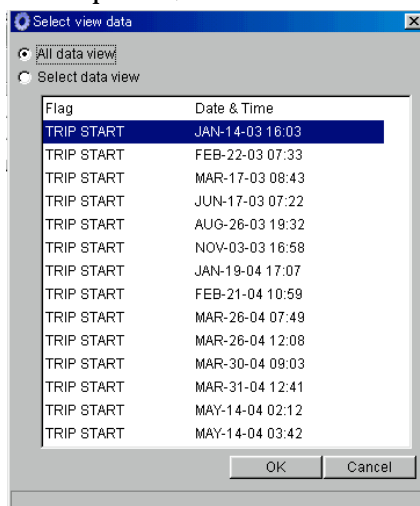
Close: Close the window

## 2.4.2 Log data

(1) Click container ID data on Data view  , and data select window is displayed.

Select the desired data and click open

(2) Select the desired trip data, all data or selected data



All data view: All the retrieved data will be displayed

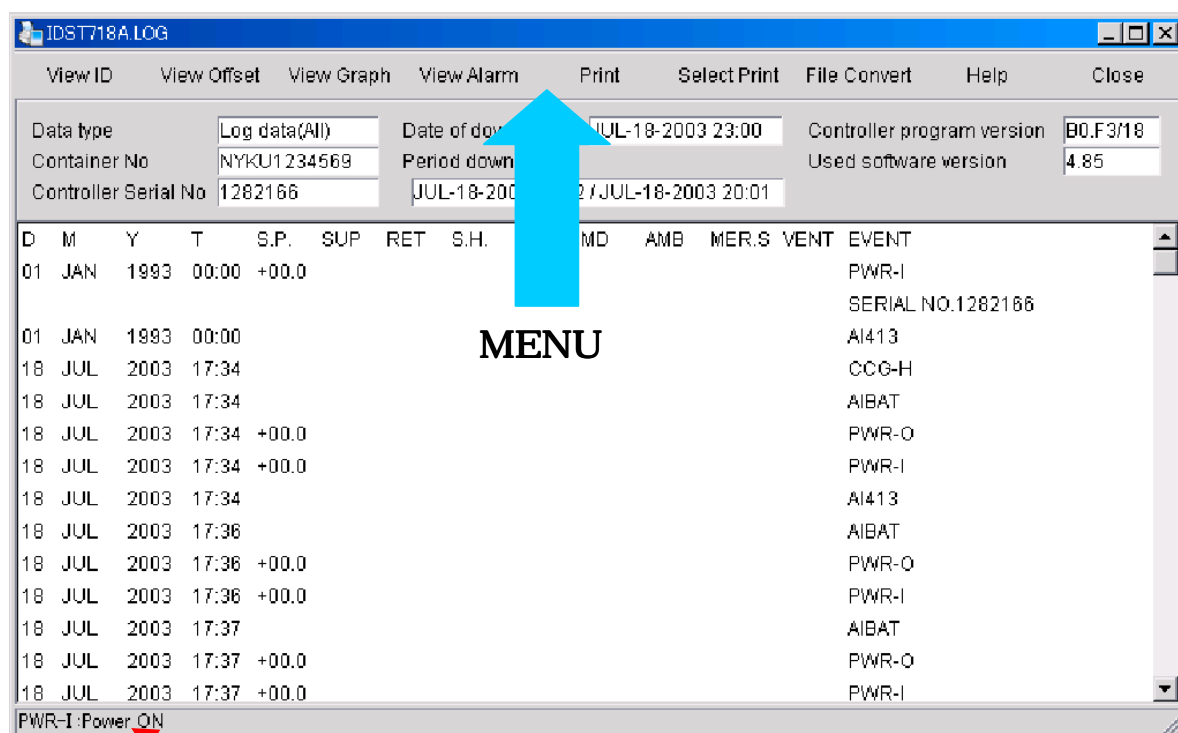
Select data view: Only highlighted desired trip data will be displayed

You can select one or several trip data, but in case of several trip data, selected data should be in a row

(3) Selected trip data is displayed

By clicking menu on LOG data, several data such as alarm and graph are displayed.

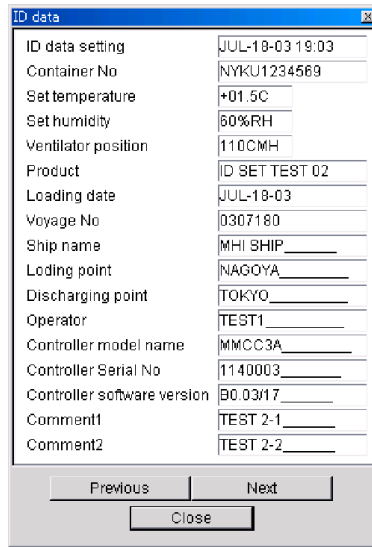
You can also print and convert the data to CSV file.



In case mouse cursor is on the event, explanation is displayed on status bar

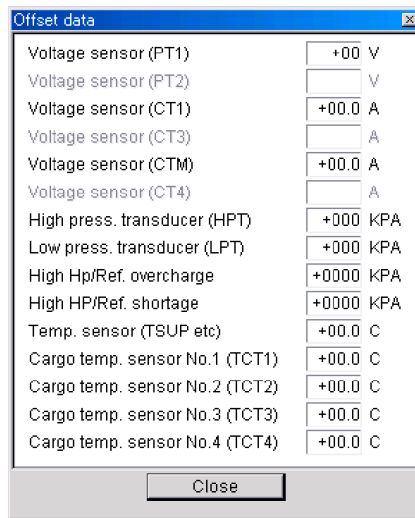
(a)View ID

By clicking view ID on log data menu, ID data is displayed.



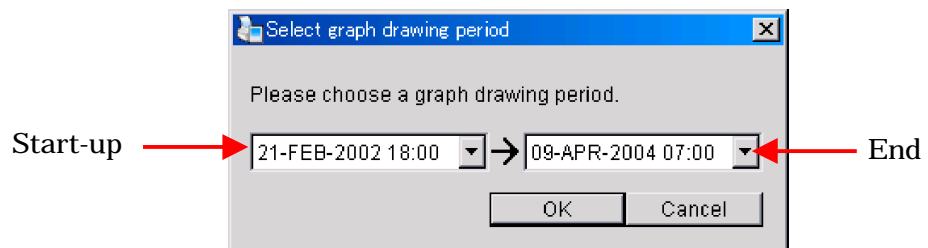
(b)View Offset

By clicking offset data on log data menu, Offset data is displayed.

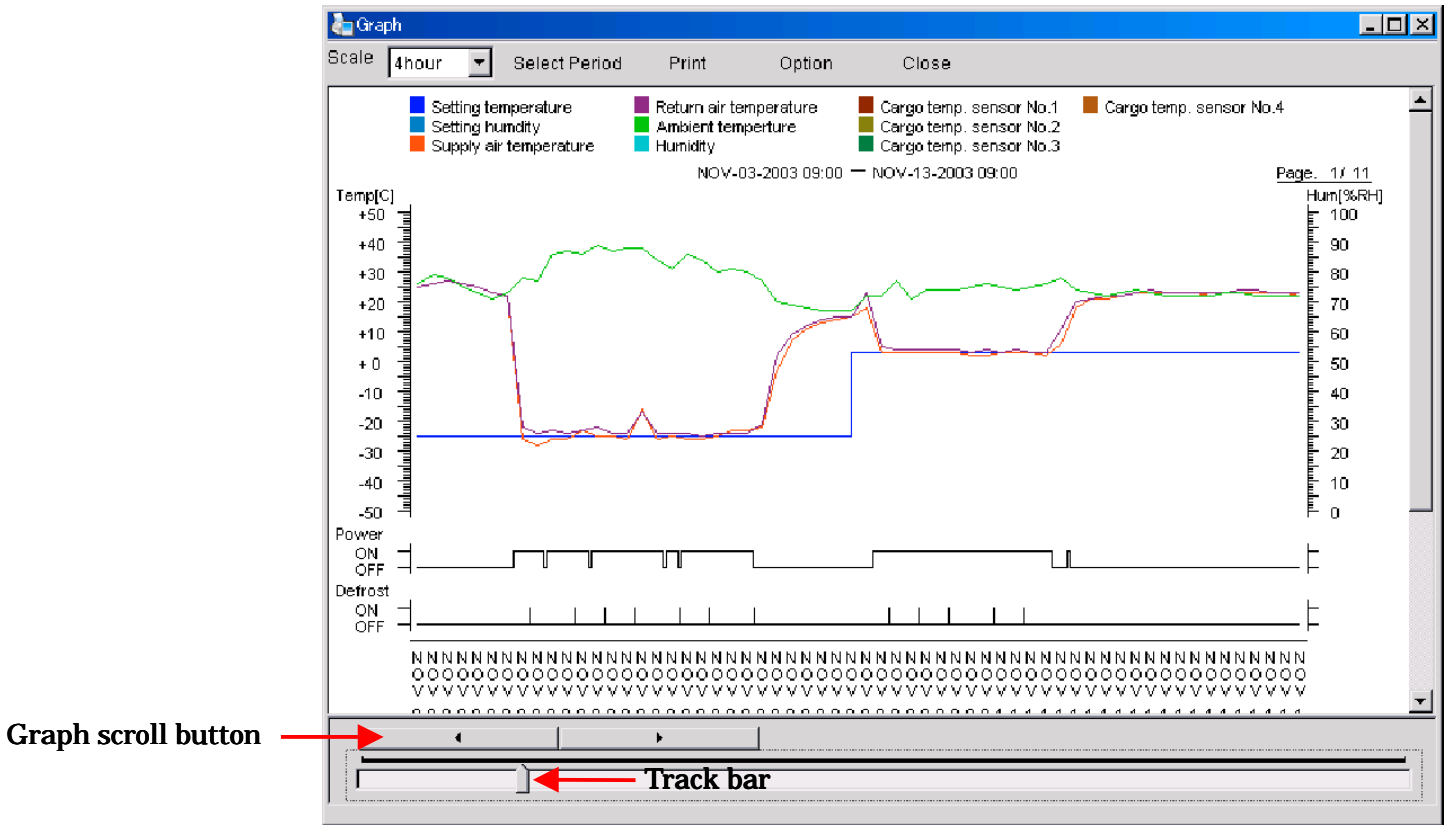


(c)View Graph

(i) Click on view graph on Log data menu, and select graph drawing period menu is displayed. Select necessary period for graph display



(ii) Selected period of graph is displayed



Scale: Graph display interval (1,4,8, 12 hour or 1 day) can be selected

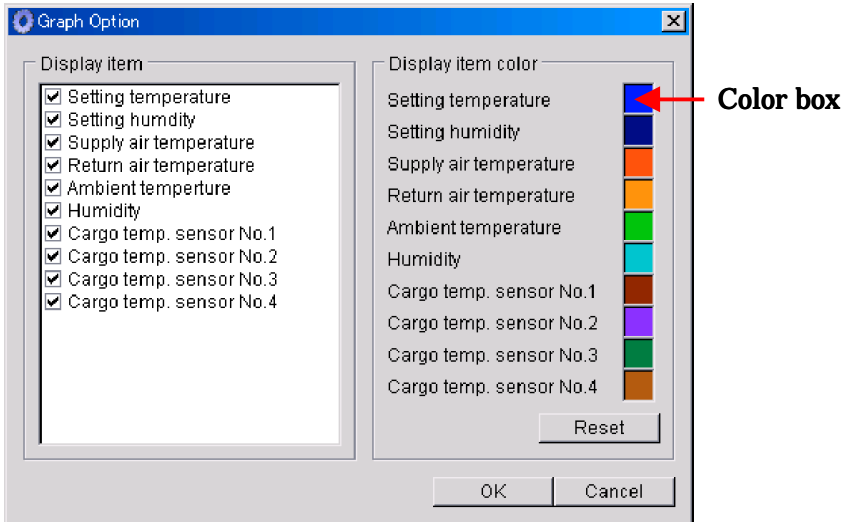
Select period: Graph display period can be selected same as (c)-(i)

Print: Print all the selected period of graph (Print all page)

In case you need only displayed period of graph, click Print with Ctrl key

Option: Displayed graph item can be changed by checking the check box

Displayed graph color also can be changed by clicking color box

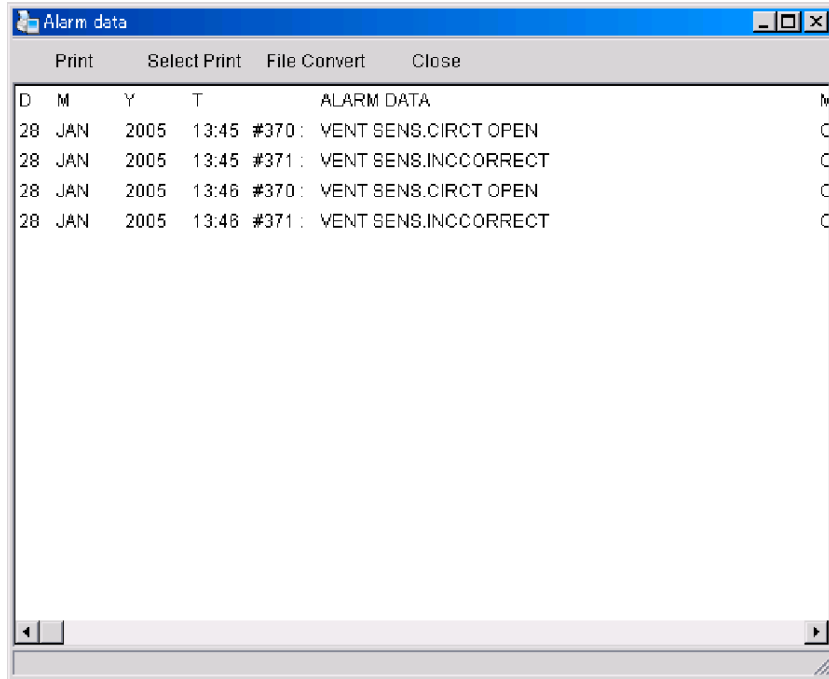


Close:Close the graph window



(d)View Alarm

By clicking view Alarm on log data menu, alarm data that is recorded in the log data is displayed

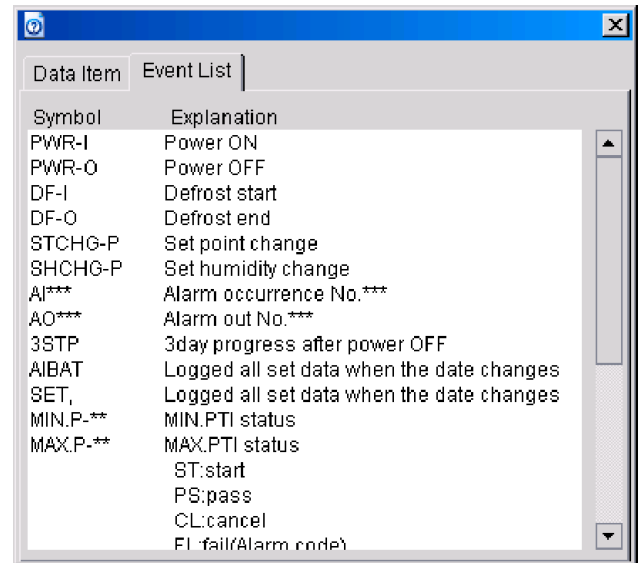
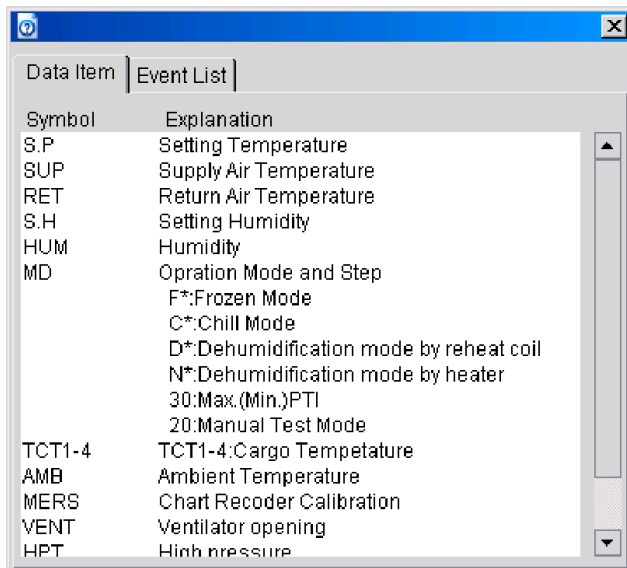


(e)Print: All the data is printed

(f)Select print: Only highlighted period is printed

(g)File convert: Log data is converted to CSV file

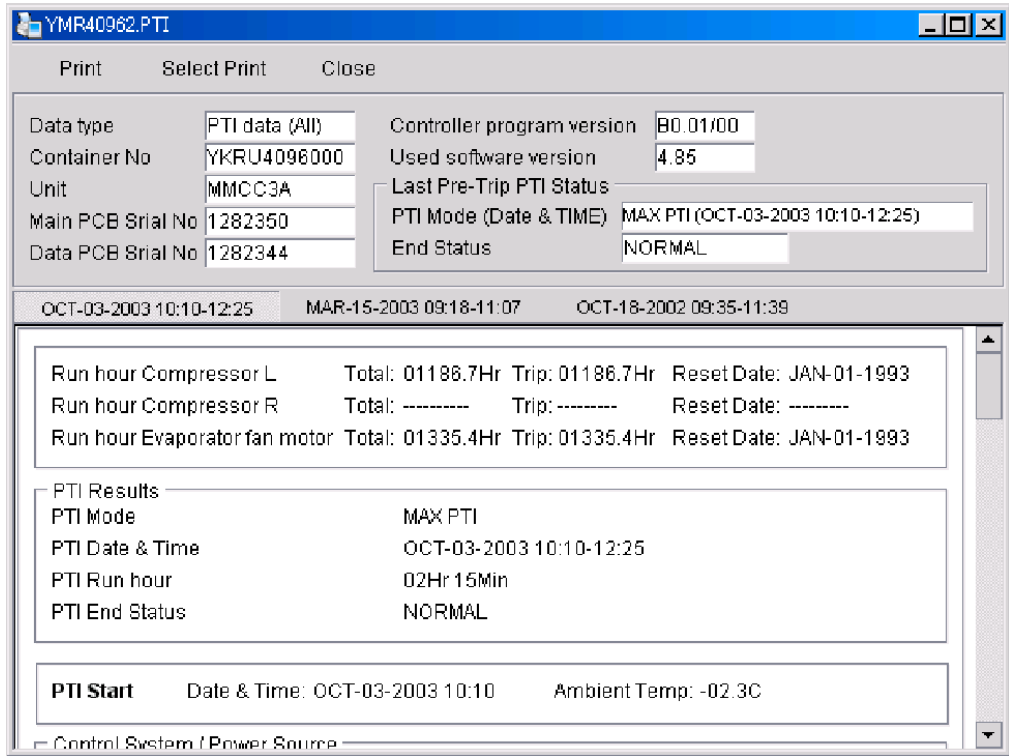
(h)Help: Explanation of symbol and event is displayed.



Help window


2.4.3 Pre-Trip Inspection data

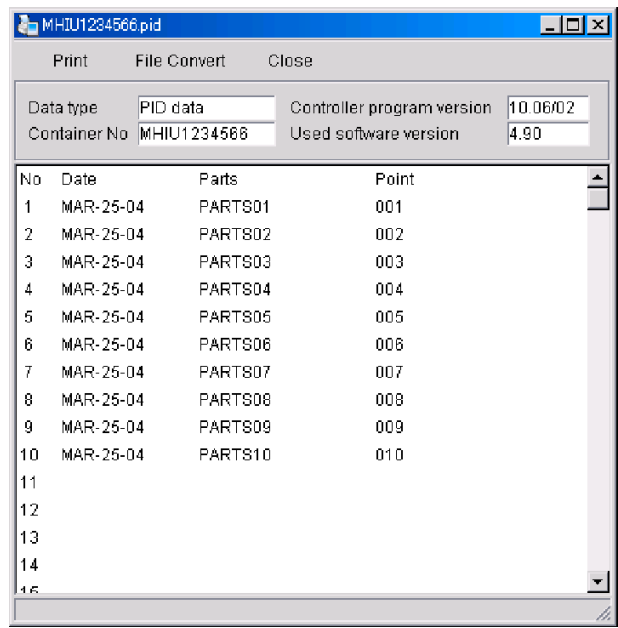
Click on Pre-Trip Inspection data on Data view , and data select window is displayed. Select the desired data and click open



- Print: All PTI data (Maximum 3) is printed
- Select print: Only displayed PTI data is printed
- Close: Close the PTI data view window

2.4.4 Periodical Inspection data

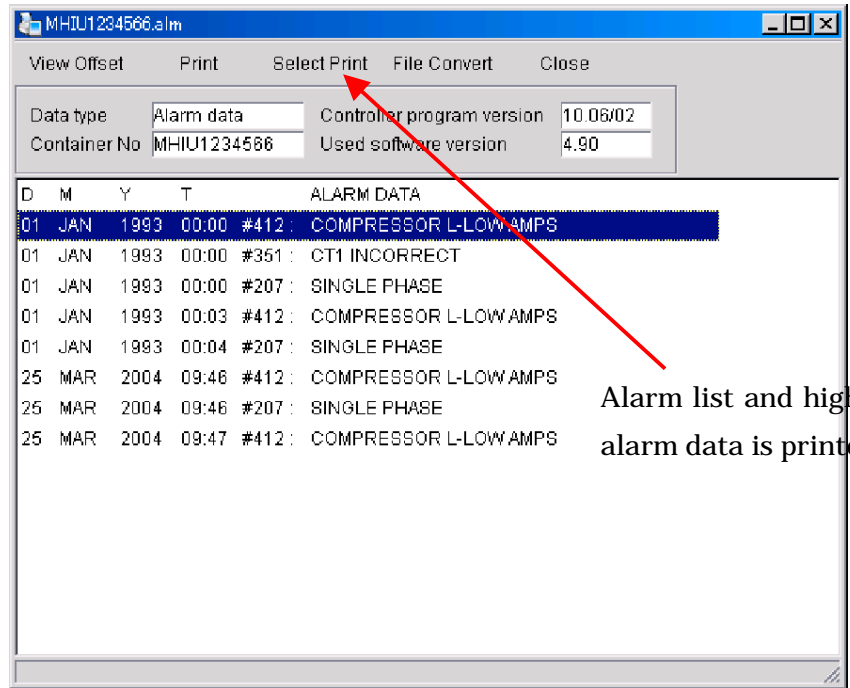
Click on Periodical Inspection data on Data view , and data select window is displayed. Select the desired data and click open



### 2.4.5 Alarm log data

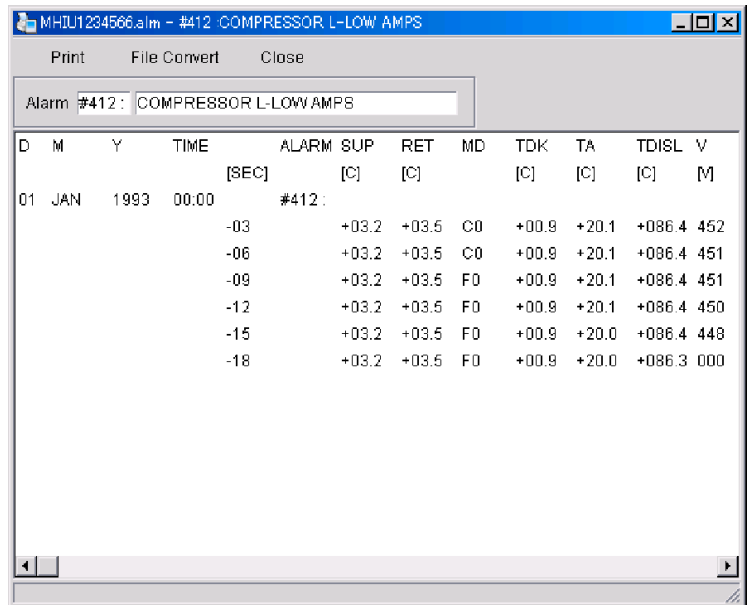
(1)Click on container ID data on Data view  , and data select window is displayed.

Select the desired data and click open




Alarm list and highlighted detailed alarm data is printed

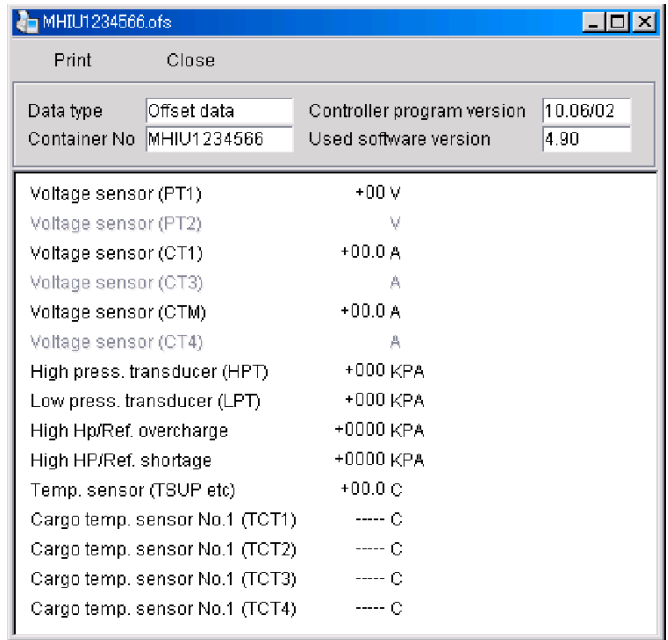
(2)Double click the desired alarm data from alarm list, and detailed alarm data is displayed



### 2.4.6 Offset data

Click on offset data on Data view  , and data select window is displayed.

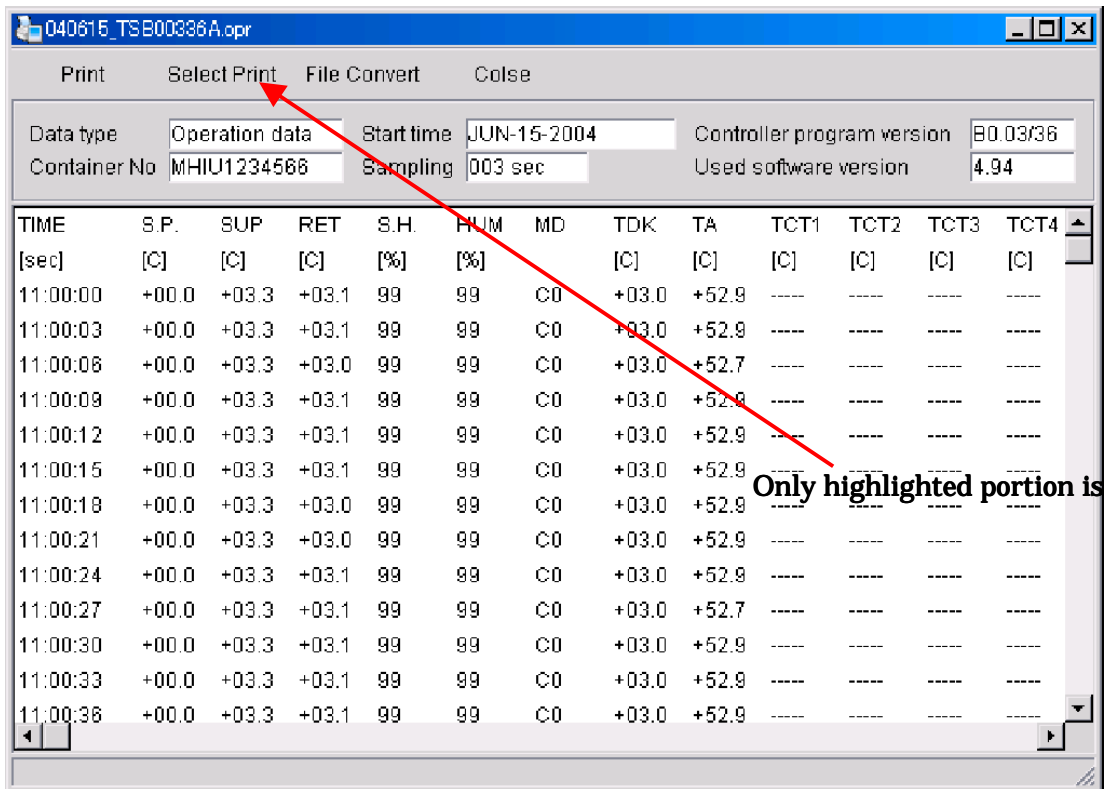
Select the desired data and click open



### 2.4.7 Operation data

Click on Operation data on Data view  , and data select window is displayed.


Select the desired data and click open

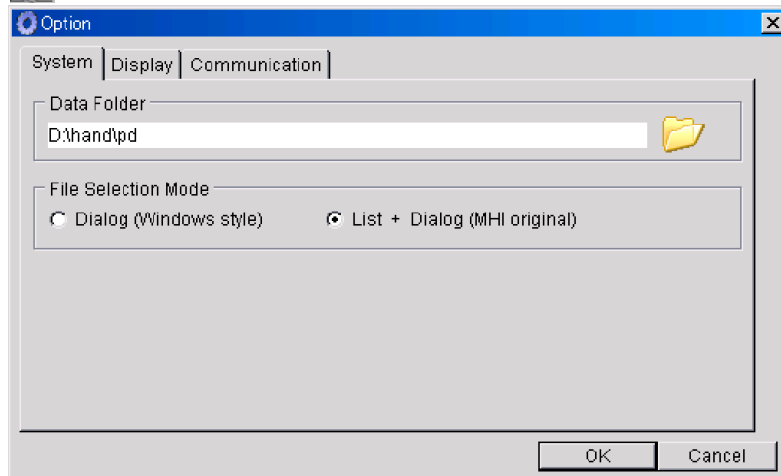


### 2.4.8 Checker data

This function is used only for factory test.


### 2.5 Option

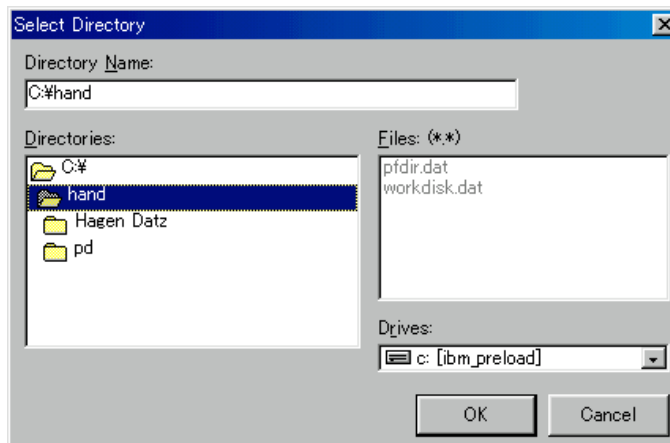
Click option  on tool bar, and option menu is displayed



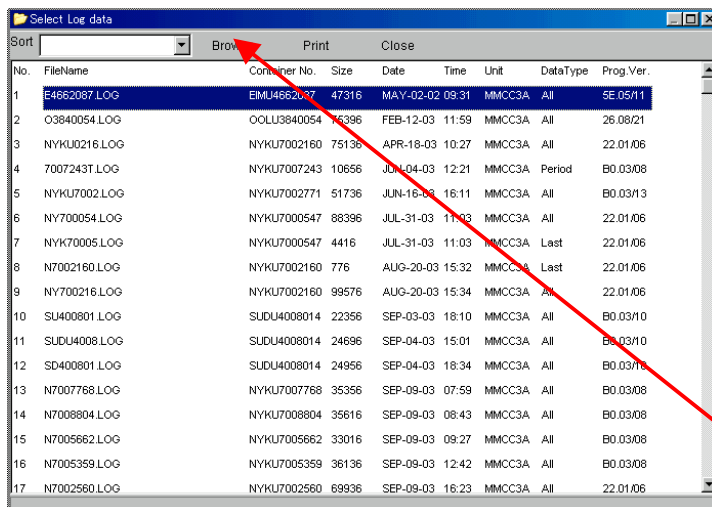
(1)System: Data folder and file selection mode can be selected

(a)Data folder: Data storage place during retrieval and data open place during viewing

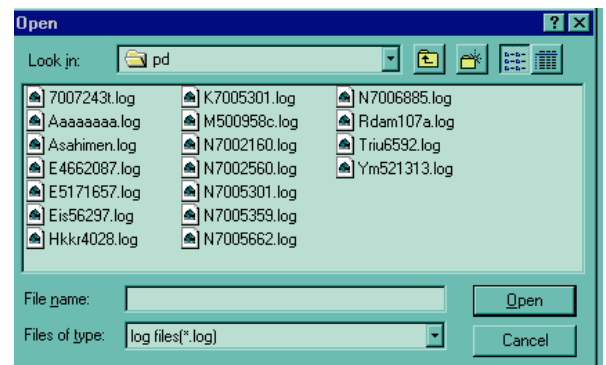
By clicking  button, you can select data folder as below.



(b)File selection mode:File display during data choice can be selected, MHI style or windows style



MHI style



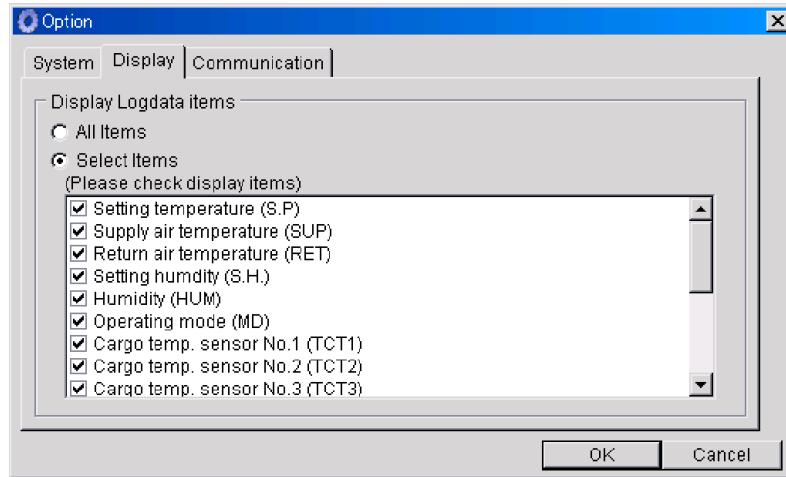
Windows style

By clicking browse, windows style menu is displayed

### (2) Display

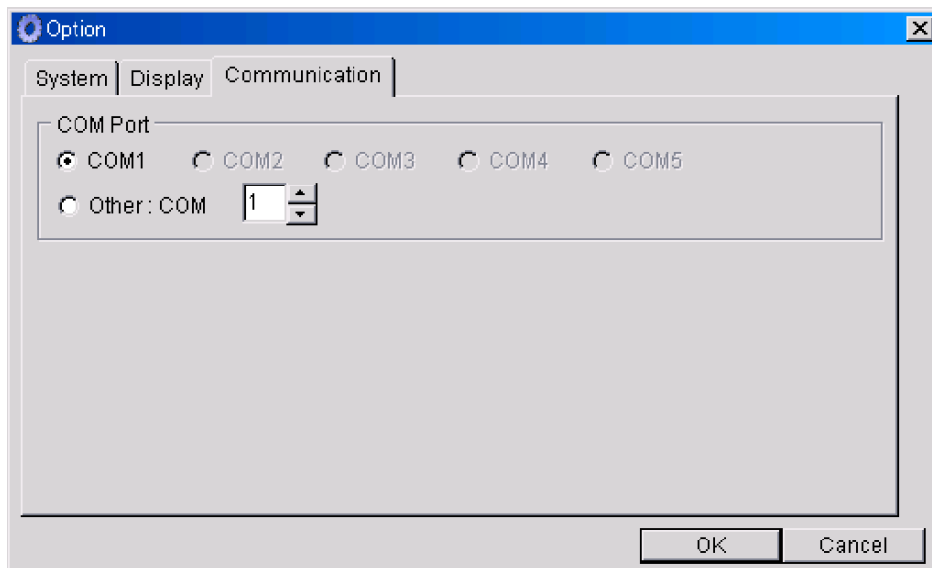
By clicking display on option menu (P21), log item menu is displayed

You can select necessary display item on Log data




### (3) Communication

By clicking communication on option menu, communication port can be selected



### 2.6 S/W version

By clicking S/W version  on tool bar, S/W version is displayed

