Users Manual – LINE Checker software –

- Contents -

Remarks

The connection of the line checkers is to one of them in one link.

1. Start up & Quit the checker software

1.1 Model selection & Start up window

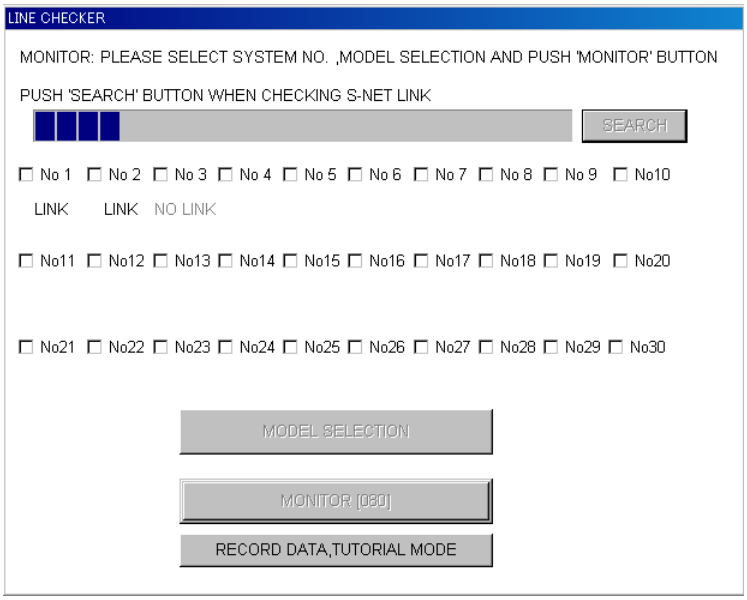
(1) Execute the software

Double Click the icon “LINE_CHECKER.EXE” on the PC display.

-> First window will open.

Check the system No. which is requied monitoring.

*When it needs to find the connected system No., press [SEARCH] button.

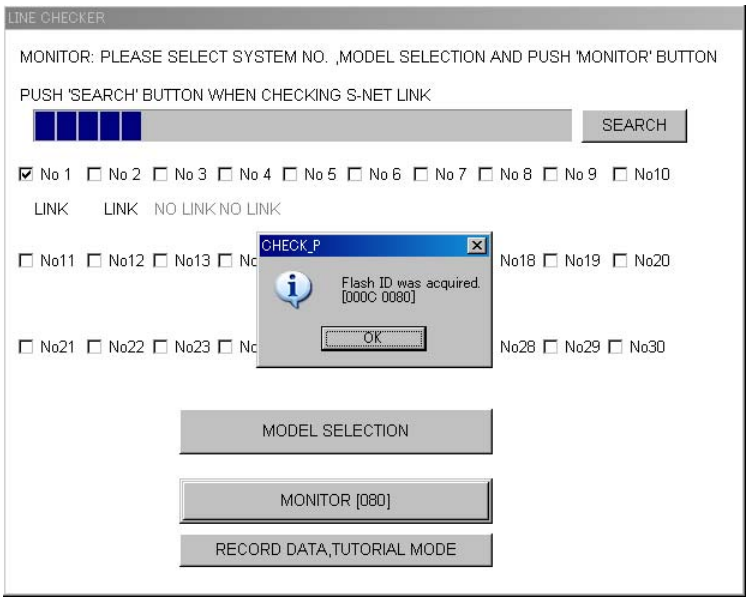


After select the system No., press [MODEL SELECTION] to check the outdoor unit type.

After checking, outdoor type ID will be shown on the display.

The last 3 digits are shown on the buttom [MONITOR [xxx]], too.

When press [MONITOR [xxx]] buttom, the window will change to the Initial window.

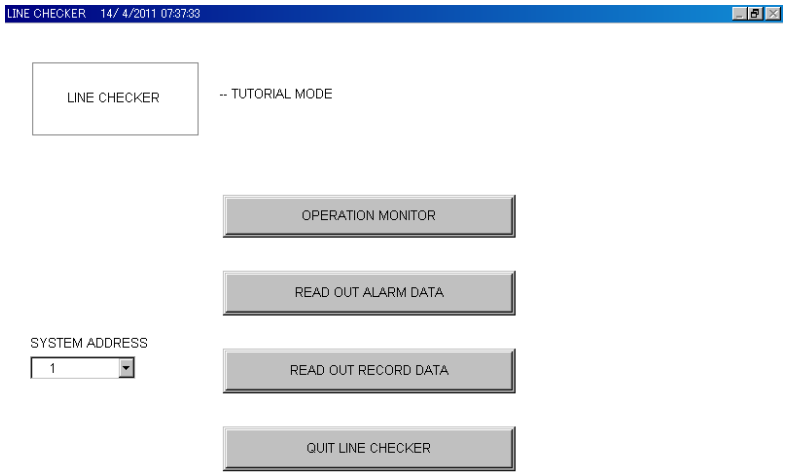


* If the right model type is not selected, the monitor display does’t show correct values of the system.

(2) Initial window

(a) Start monitoring

When press [MONITOR [xxx]] on the first window, the Initial window comes up as below.



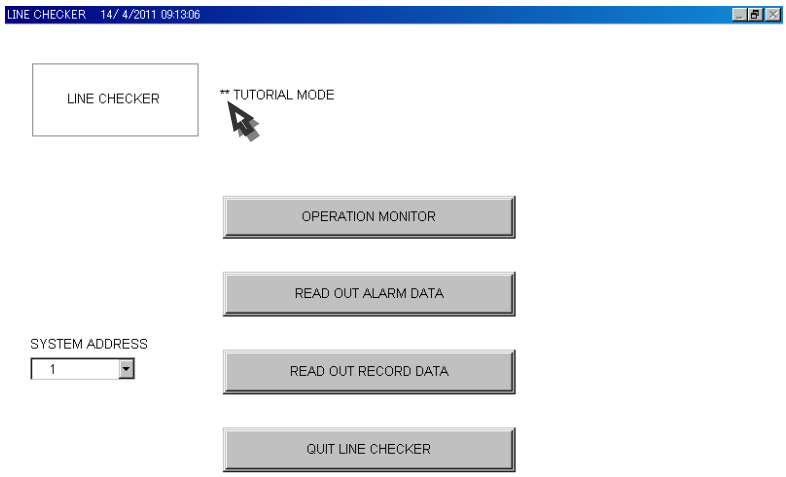
(b) Tutorial Mode function

Monitor display can be opened as Tutorial Mode when no system is connected to the PC.

It can be used for the training and learning for the operation of USB checker software.

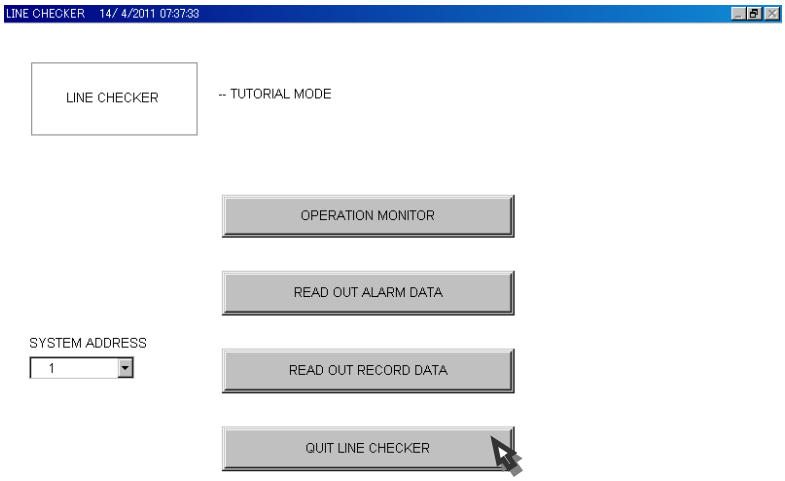
To activate Tutorial Mode, click the “--“ part. Then it will change to “**”, and Tutrial mode is in active.

When click “**” part again, it becomes to “--“ and Tutorial mode is cancelled.



1.2 Quit the software

Press [QUIT LINE CHECKER] to quit the software on the Initial window.



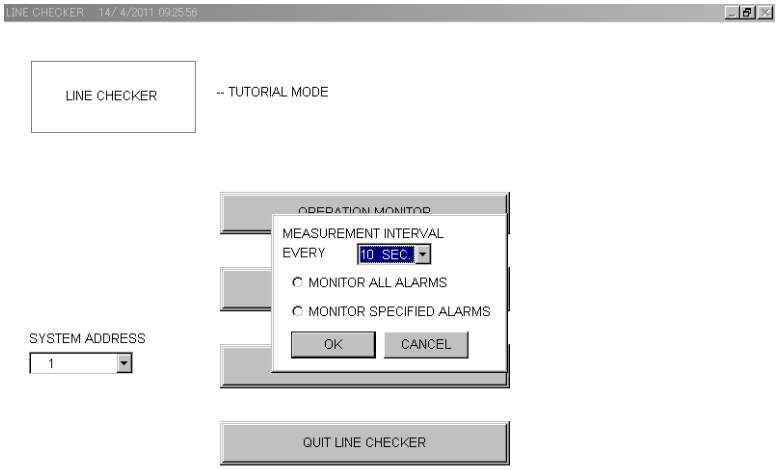
2. Monitoring

2.1 Operation data display

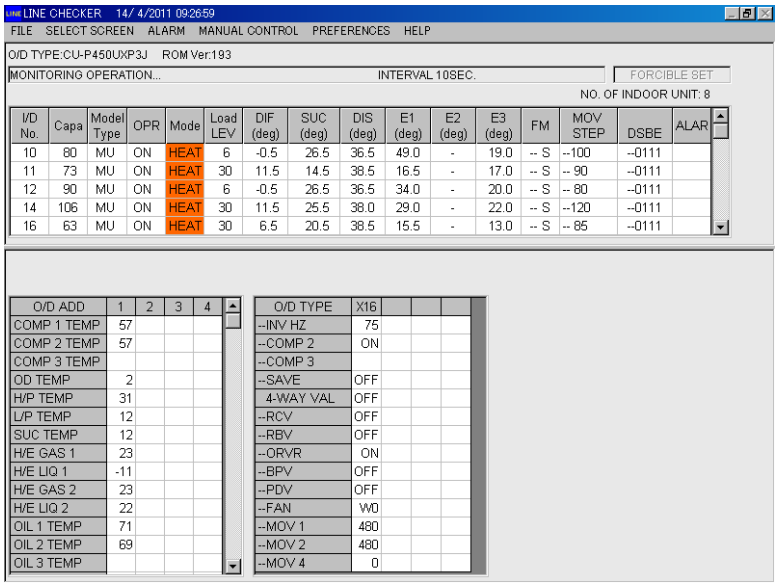
(1) Press [OPERATION MONITOR] on the Initial window.

(2) Select the time interval for monitoring, then press [OK].

10 sec, 15 sec, 30 sec, 1min can be selected as demand.



(3) Monitor display will open and start monitoring. In every time, the operation data display opens at first.



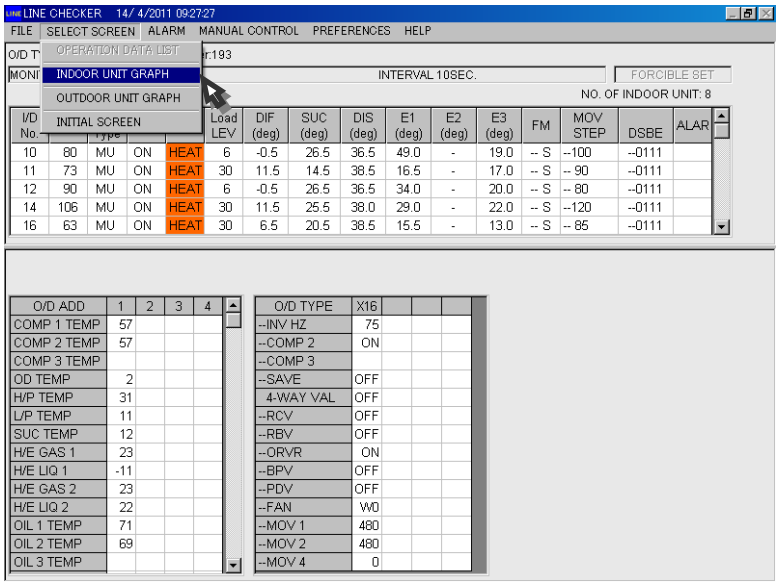
I/D No.	Capa	Model Type	OPR	Mode	Load LEV	DIF (deg)	SUC (deg)	DIS (deg)	E1 (deg)	E2 (deg)	E3 (deg)	FM	MOV STEP	DSBE	ALAR
10	80	MU	ON	HEAT	6	-0.5	26.5	36.5	49.0	-	19.0	-- S	--100	--0111	
11	73	MU	ON	HEAT	30	11.5	14.5	38.5	16.5	-	17.0	-- S	-- 90	--0111	
12	90	MU	ON	HEAT	6	-0.5	26.5	36.5	34.0	-	20.0	-- S	-- 80	--0111	
14	106	MU	ON	HEAT	30	11.5	25.5	38.0	29.0	-	22.0	-- S	--120	--0111	
16	63	MU	ON	HEAT	30	6.5	20.5	38.5	15.5	-	13.0	-- S	-- 85	--0111	

O/D ADD	1	2	3	4
COMP 1 TEMP	57			
COMP 2 TEMP	57			
COMP 3 TEMP				
OD TEMP	2			
H/P TEMP	31			
L/P TEMP	12			
SUC TEMP	12			
H/E GAS 1	23			
H/E LIQ 1	-11			
H/E GAS 2	23			
H/E LIQ 2	22			
OIL 1 TEMP	71			
OIL 2 TEMP	69			
OIL 3 TEMP				

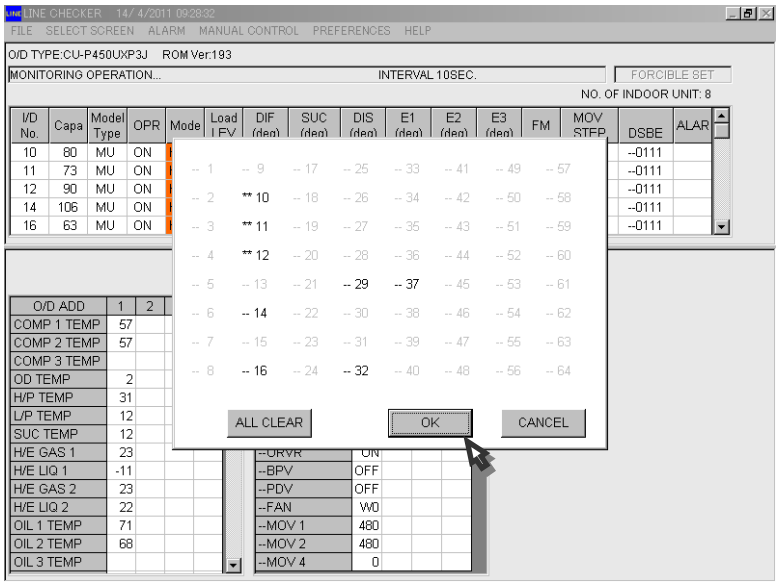
O/D TYPE	X16
--INV HZ	75
--COMP 2	ON
--COMP 3	
--SAVE	OFF
4-WAY VAL	OFF
--RCV	OFF
--RBV	OFF
--ORVR	ON
--BPV	OFF
--PDV	OFF
--FAN	W0
--MOV 1	480
--MOV 2	480
--MOV 4	0

2.2 Indoor unit operation graph display

(1) Select the menu <SELECT SCREEN> → <INDOOR UNIT GRAPH>. The display will change to the indoor unit operation graph display.



(2) Select the indoor unit number for monitoring, then press [OK]. (Several units can be selected at once.)



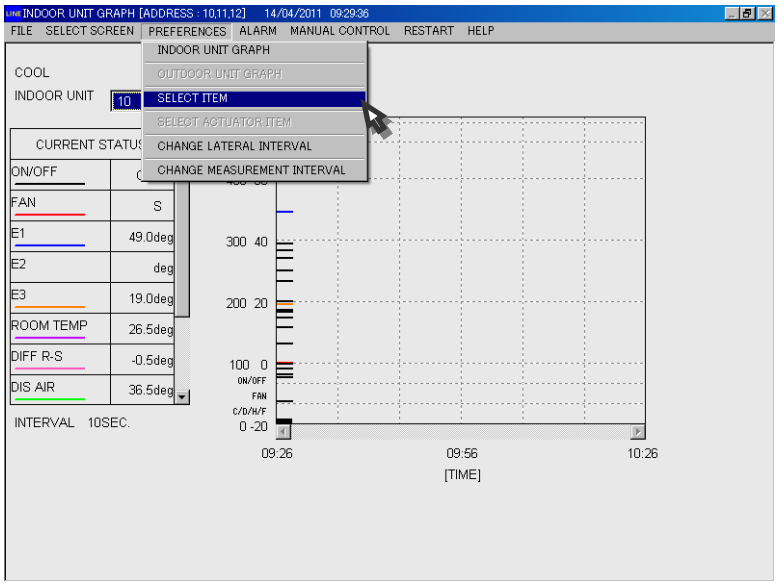
(3) Select display items on the graph

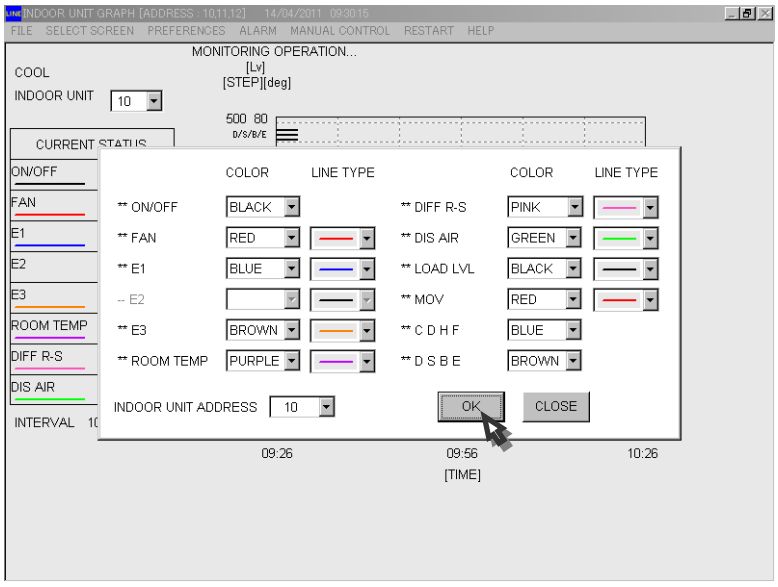
When it is difficult to see by many lines in the graph, specified parameters can be choosen for the graph drawing. Select the menu <PREFERENCES> → <SELECT ITEM>.

The display changes alternately as “--“⇔"**” at every time it clicks check items in the table.

“**” is a displayed item and “--” is a hidden item.

When choosing more than one indoor unit for graph drawing, you choose the number of "INDOOR UNIT ADDRESS".





(4) Change the monitoring Indoor unit

Select the menu <PREFERENCES> → <INDOOR UNIT GRAPH>.

(5) Change the Time Scale of the graph (30 min., 1 hour, 5hours)

Select the menu <PREFERENCES> → <CHANGE LATERAL INTERVAL>.

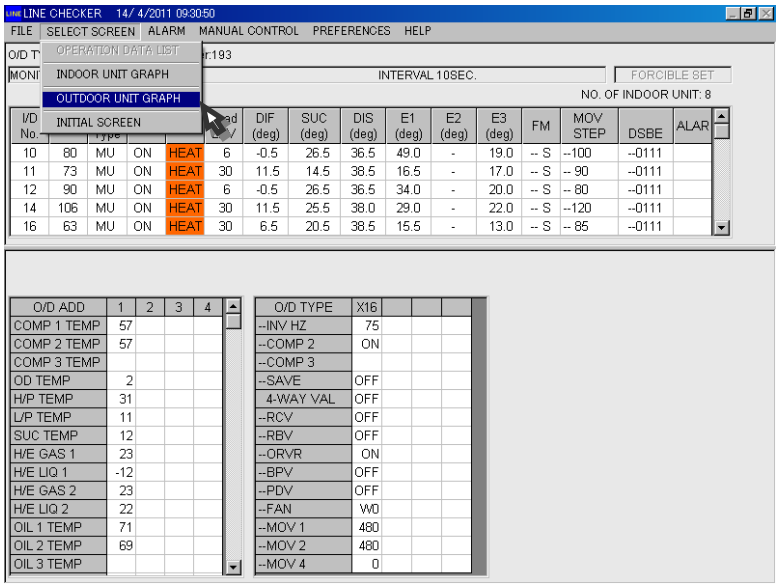
*When the mesurement time interval is set as 10 or 15 sec., “5 HOURS” scale can’t be selected.

(6) Change the display to [OPERATION DATA LIST] or [OUTDOOR UNIT GRAPH]

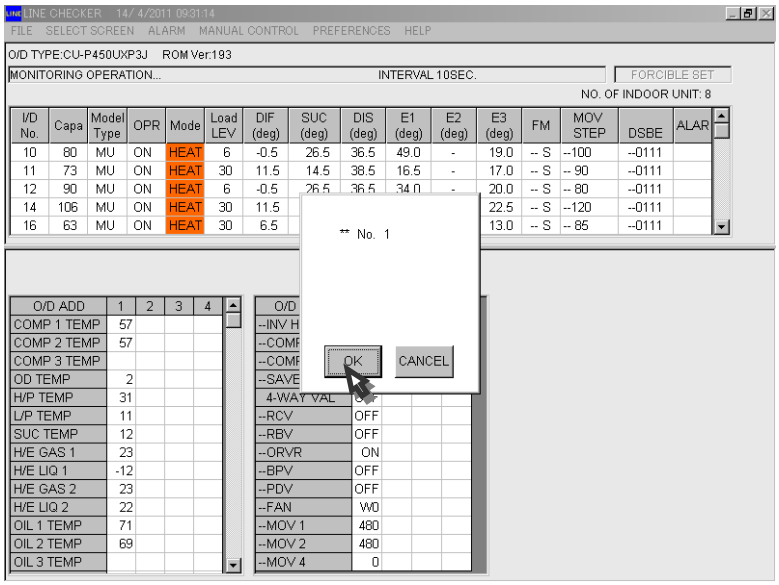
Select the menu <SELECT SCREEN> → <OPRATION DATA LIST> or <OUTDOOR UNIT GRAPH>.

2.3 Outdoor unit operation graph display

(1) By selecting the item <SELECT SCREEN> → <OUTDOOR UNIT GRAPH>, the display will change to the outdoor unit operation graph display.

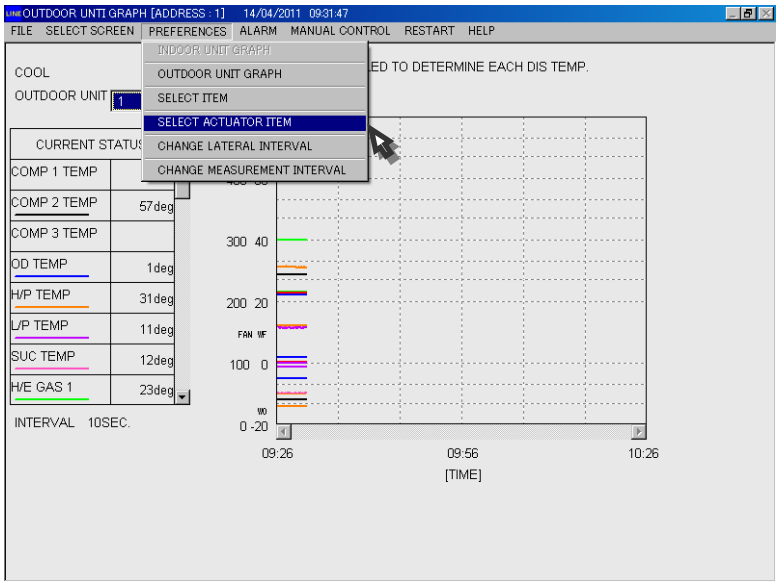


(2) Select the outdoor unit No. for the graph drawing. (Several units can be selected.) Then press [OK].



(3) Select display items on the graph

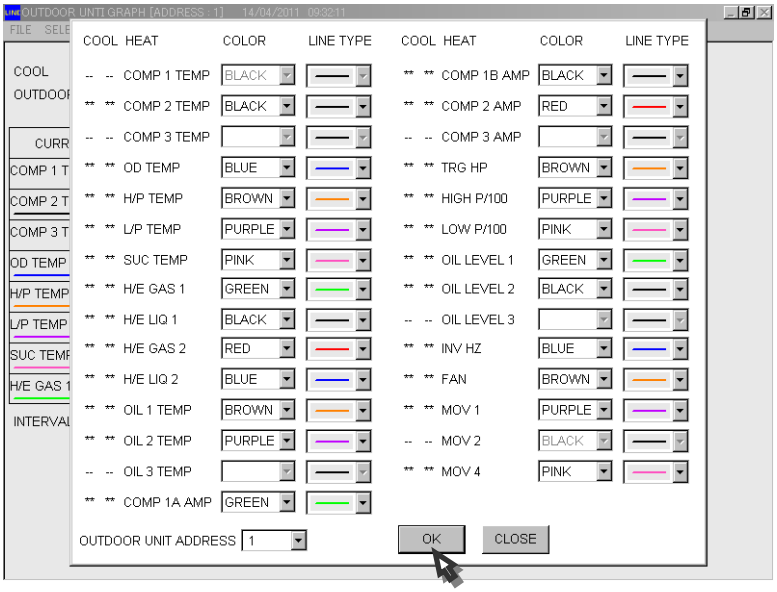
When it is difficult to see by many lines in the graph, specified parameters can be choosen for the graph drawing. Select the menu <PREFERENCES> → <SELECT ITEM> or <SELECT ACTUATOR ITEM>.



The display changes alternately as “--“⇔"**” at every time it clicks check items in the table.

“**” is a displayed item and “--” is a hidden item.

When choosing more than one outdoor unit for graph drawing, you choose the number of "OUTDOOR UNIT ADDRESS".



(4) Change the monitoring outdoor unit

Select the menu <PREFERENCES> → <OUTDOOR UNIT GRAPH>.

(5) Change the Time Scale of the graph (30 min., 1 hour, 5hours)

Select the menu <PREFERENCES> → <CHANGE LATERAL INTERVAL>.

*When the mesurement time interval is set as 10 or 15 sec., “5 HOURS” scale can not be selected.

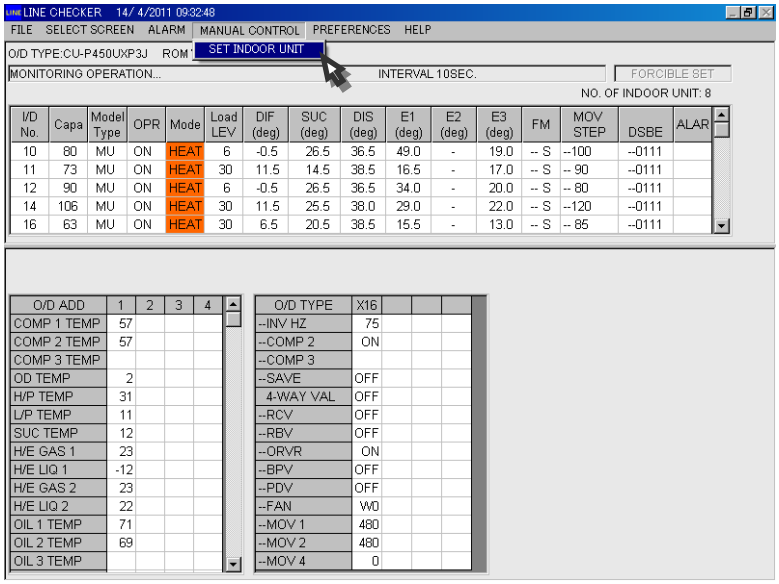
(6) Change the display to [OPERATION DATA LIST] or [INDOOR UNIT GRAPH]

Select the menu <SELECT SCREEN> → <OPRATION DATA LIST> or <INDOOR UNIT GRAPH>.

2.4 Remote controller function

(1) Open the Remote controller display

Select the menu <MANUAL CONTROL> → <SET INDOOR UNIT>. The window for the remote controller function opens.



I/D No.	Capa	Model Type	OPR	Mode	Load LEV	DIF (deg)	SUC (deg)	DIS (deg)	E1 (deg)	E2 (deg)	E3 (deg)	FM	MOV STEP	DSBE	ALAR
10	80	MU	ON	HEAT	6	-0.5	26.5	36.5	49.0	-	19.0	-- S	--100	--0111	
11	73	MU	ON	HEAT	30	11.5	14.5	38.5	16.5	-	17.0	-- S	-- 90	--0111	
12	90	MU	ON	HEAT	6	-0.5	26.5	36.5	34.0	-	20.0	-- S	-- 80	--0111	
14	106	MU	ON	HEAT	30	11.5	25.5	38.0	29.0	-	22.0	-- S	--120	--0111	
16	63	MU	ON	HEAT	30	6.5	20.5	38.5	15.5	-	13.0	-- S	-- 85	--0111	

O/D ADD	1	2	3	4
COMP 1 TEMP	57			
COMP 2 TEMP	57			
COMP 3 TEMP				
OD TEMP	2			
H/P TEMP	31			
L/P TEMP	11			
SUC TEMP	12			
H/E GAS 1	23			
H/E LIQ 1	-12			
H/E GAS 2	23			
H/E LIQ 2	22			
OIL 1 TEMP	71			
OIL 2 TEMP	69			
OIL 3 TEMP				

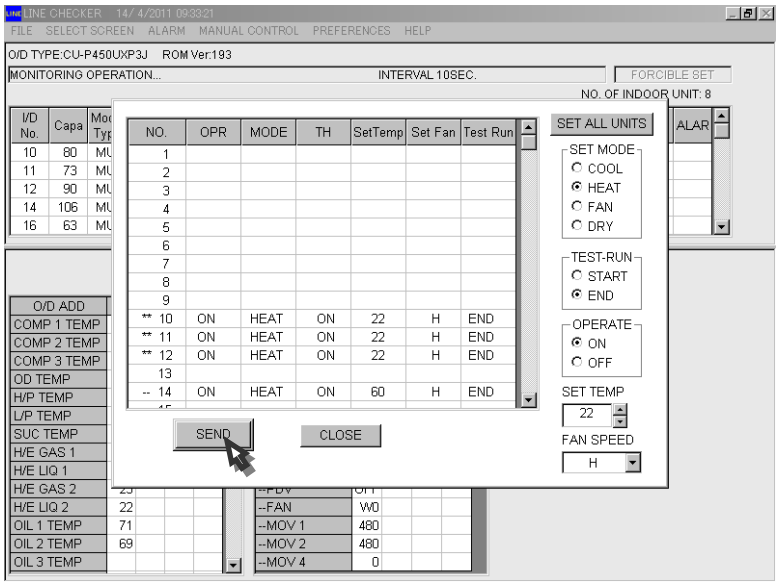
O/D TYPE	X16
--INV HZ	75
--COMP 2	ON
--COMP 3	
--SAVE	OFF
4-WAY VAL	OFF
--RCV	OFF
--RBV	OFF
--ORVR	ON
--BPV	OFF
--PDV	OFF
--FAN	W0
--MOV 1	480
--MOV 2	480
--MOV 4	0

(2) Select indoor units for control

Indoor units that are indivisual operaion unit or the main unit of the group contol have check item “--“. (Sub indoor units of the group control don’t have this check item.)

Select units for operation setting by clicking the check item. The check item changes tha status alternately “--“ ⇔ “**” by every click. The remote control function works for units that have “**” status.

By pressing [SET ALL UNITS], all units are selected.



NO.	OPR	MODE	TH	SetTemp	Set Fan	Test Run
1						
2						
3						
4						
5						
6						
7						
8						
9						
** 10	ON	HEAT	ON	22	H	END
** 11	ON	HEAT	ON	22	H	END
** 12	ON	HEAT	ON	22	H	END
13						
-- 14	ON	HEAT	ON	60	H	END

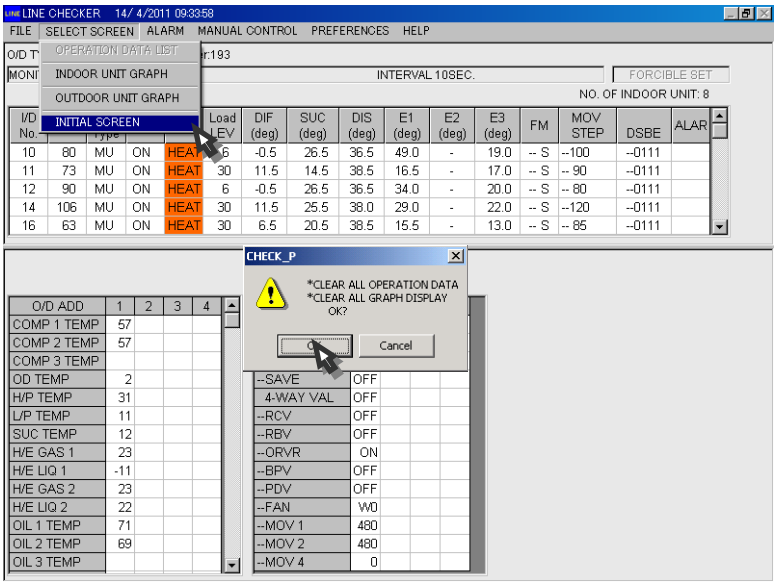
(3) Send the control command to indoor units

Set values for SET MODE / TEST-RUN / OPERATE / SET TEMP / FAN SPEED, then press [SEND] to send the command to selected indoor units. (It takes around 30~60 seconds for changing the status of indoor units on the monitor display to this new setting.)

Press [CLOSE] to close this window.

2.5 Quit the monitoring

Select the menu <SELECT SCREEN> → <INITIAL SCREEN>, then press [OK] in the small pop-up window.

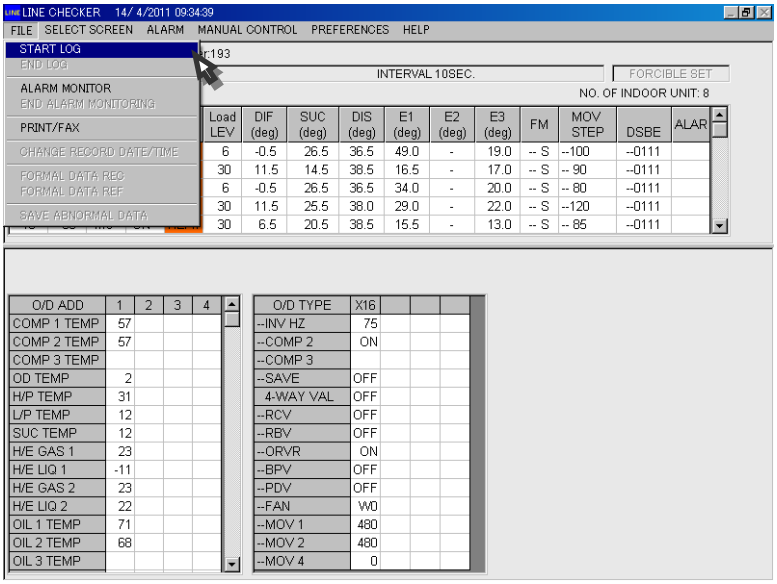


3. Data Recording

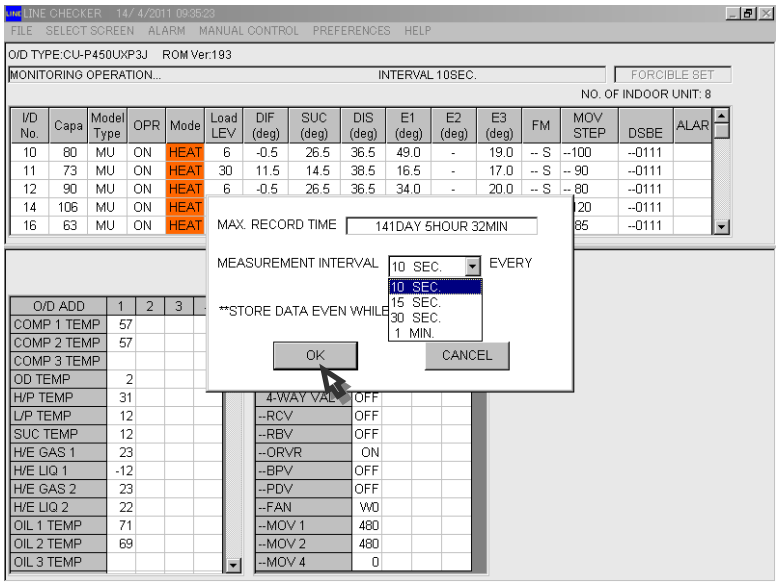
3.1 Start recording

(1) Start monitoring.

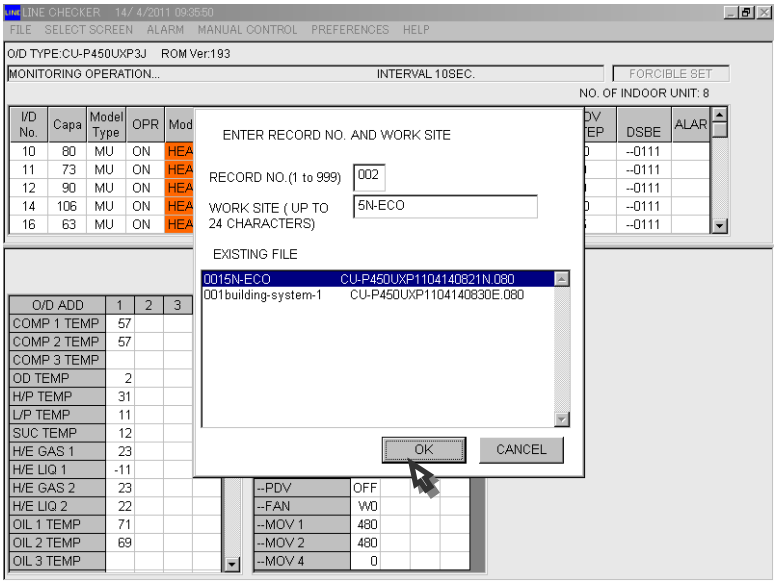
(2) Select the menu item <FILE> → <START LOG>.



(3) Check the MAX. RECORD TIME, and select the mesurement time interval for recording, then press [OK].



(4) Input the data record number (001~999), and reference information (Site name, System No, etc.).



*Rule for the name of the record data

The record data is named with following rule.

(a) Data number (for first 3 digits): It starts from 001 to 999

(b) Object/site name (for next 24 digits): It can be set as demand.

(c) System information (for next 10 digits): It is named automatically with outdoor unit name.

(d) Record date (for next 10 digits): It is named automatically.

Ex. In the case of the recording started at 13:52 on 9th, April 2007, it is named as “0704091352”.

(e) Data type (for next 1 digit): It is named automatically, and must not be changed.

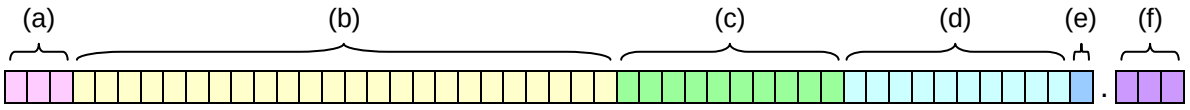
Type “N”: The file recorded by the normal record mode.

Type “A”: The file recorded by the alarm watching mode at the time of the system had alarm.

Type “F”: The file recorded by the alarm watching mode without any alarm.

Type “E”: The file recorded by the reading out of alarm history data.

(f) File type (for next 3 digits after period): It is named automatically with the Outdoor unit ID code.



3.2 Stop recording（I have it of two ways）

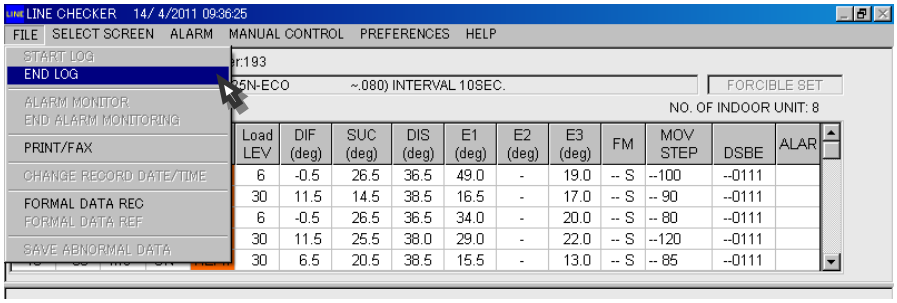
2 types of the procedure to stop recording. Please choose the way that you want.

Type-1. Select the menu <FILE> → <END LOG> to stop recording the operation data.

The record file will be **compressed automatically** to “ZIP” type file.

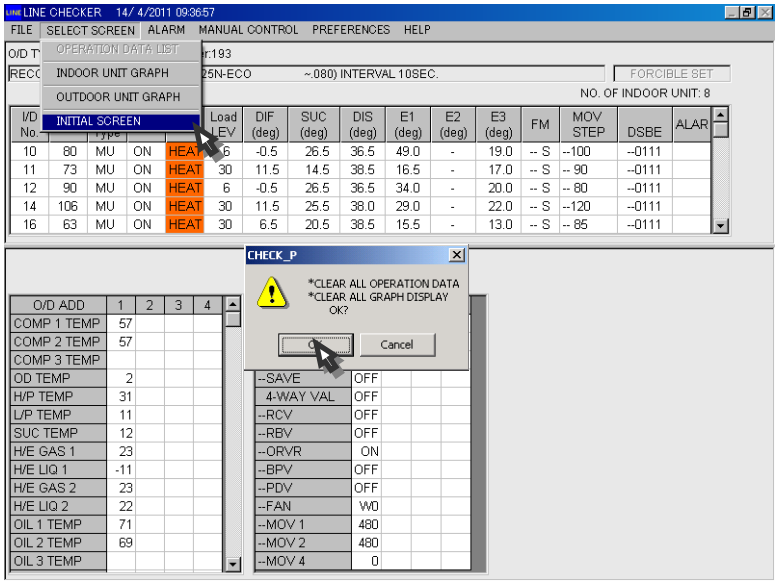
(This type of the data is useful for transfering by E-mail.)

Please un-compress it to use for “READ OUT RECORD DATA” function.



Type-2. Select the menu <SELECT SCREEN> → <INITIAL SCREEN>, then press [OK] in the small pop-up window.

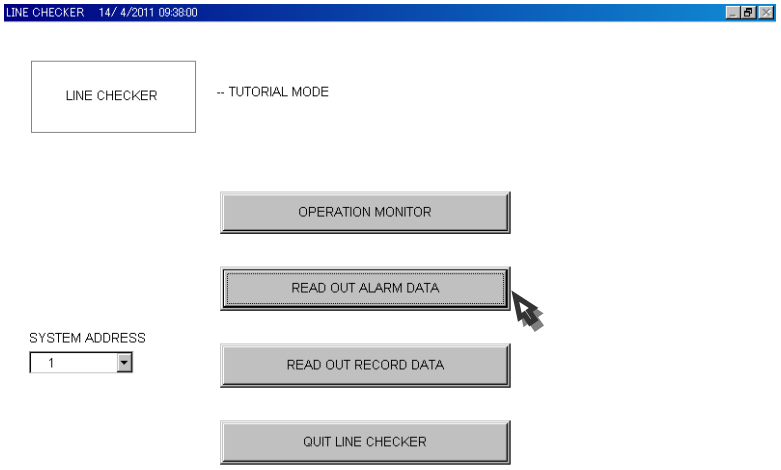
This recorded data is not compressed.



3.3 Read out the alarm history

This function is to find alarm histories in the system, and save the data to PC.

(1) Press [RAED OUT ALARM DATA] on the initial window.

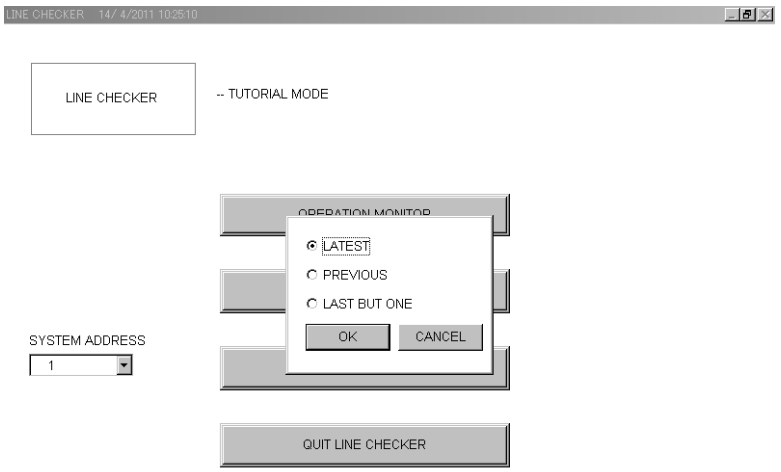


(2) Select the alarm history data in the system

Latest 3 alarm history data can be read out from the system by this function.

Select the one of the latest 3 data, and press [OK].

* If all 3 data are reqired to check/record, select the item in order from “LATEST” → “PREVIOUS” → “LAST BUT ONE”.



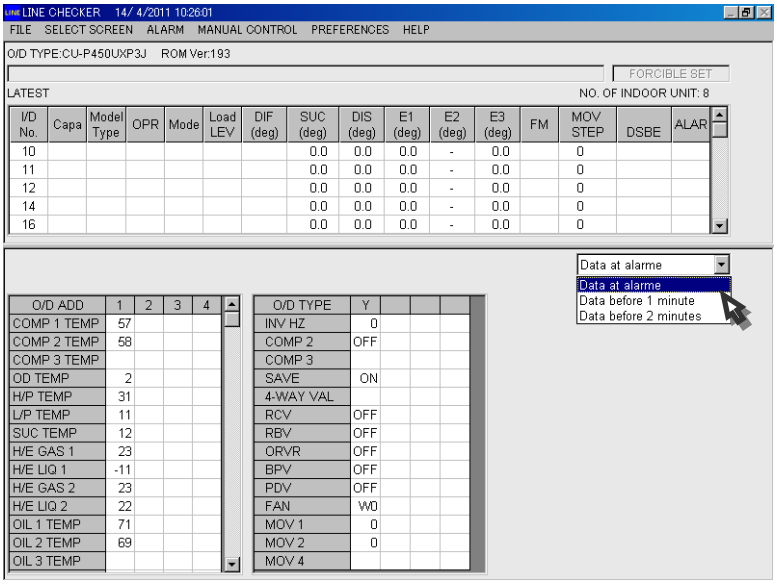
(3) The alarm history data display

The below picture is the example of “LATEST” alarm history.

*Data of indoor units is recorded only on the “LATEST” data.

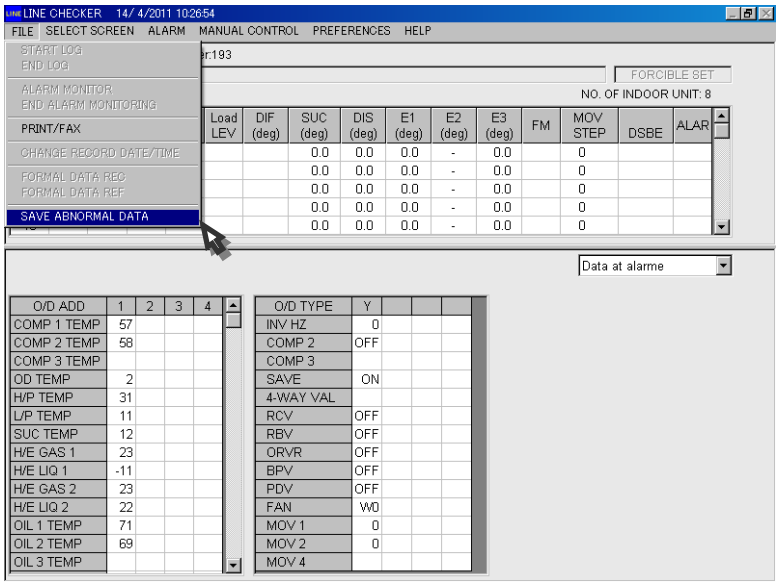
(It is not recorded on “PREVIOUS” and “LAST BUT ONE” data.)

The data of 1 or 2 min. before can be checked also on the display.



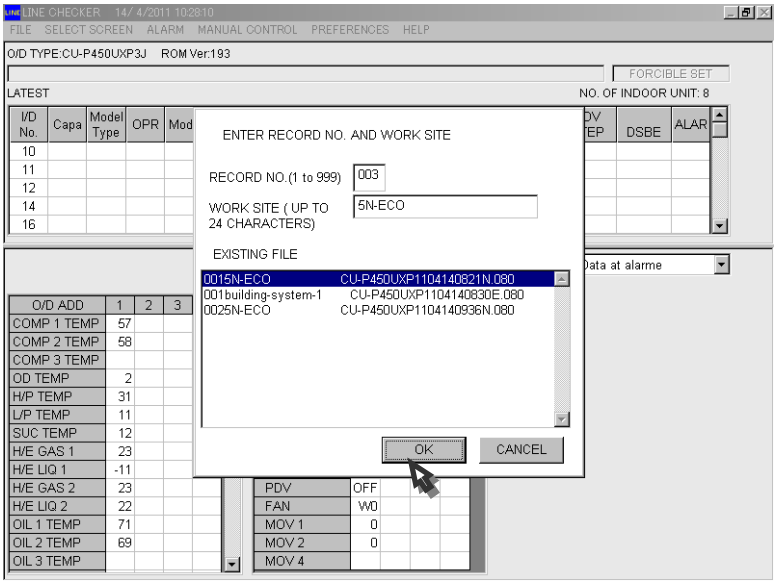
(4) Record the displayed alarm history data

Select the menu <FILE> → <SAVE ABNORMAL DATA> to save the displayed data.



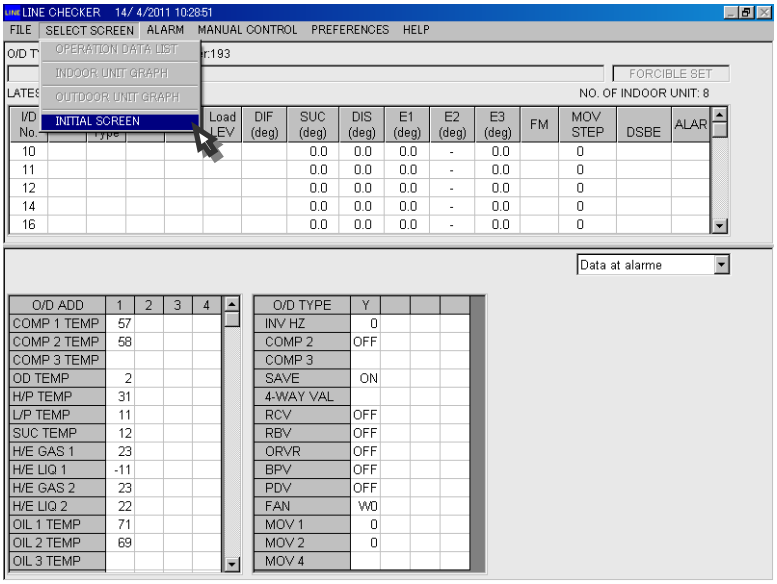
Input the data record number (001~999), and reference information (Site name, System No, etc.).

It is used to the file name. *Rule of the file name: Refer to Chapter 3.1-(4).



(5) Quit read out alarm history

Select the menu <SELECT SCREEN> → <INITIAL SCREEN>, then press [OK] in the small pop-up window.



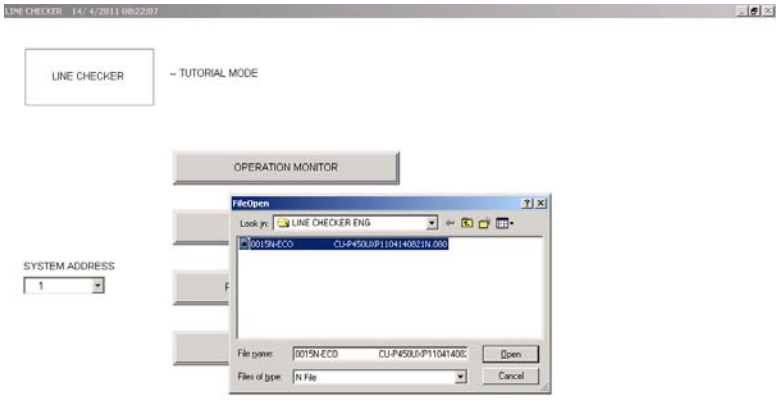
4. Read out the record data

4.1 Read out the record data

(1) Select [READ OUT RECORD DATA] on the Initial window.

(2) Select the data file

Choose the data for reading out, and then press [OK].



File type can be selected for each type or all types as demand on the file reference display.

Type “N”: The file recorded by the normal record mode.

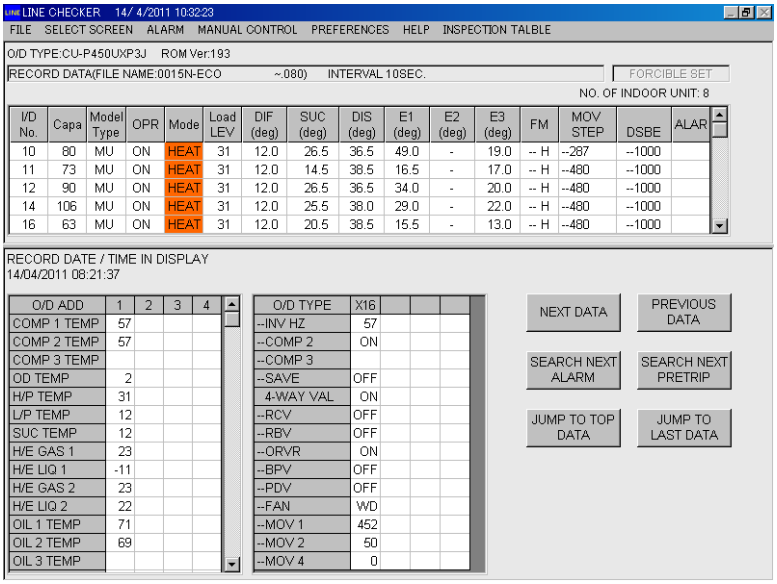
Type “A”: The file recorded by the alarm watching mode at the time of the system had alarm.

Type “F”: The file recorded by the alarm watching mode without any alarm.

Type “E”: The file recorded by the reading out of abnormal data.

4.2 Record data display

(1) Operation data display



(2) Graph display for Indoor unit & Outdoor unit

To change the screen, use the <SELECT SCREEN> menu as well as monitor function.

4.3 Close record data display

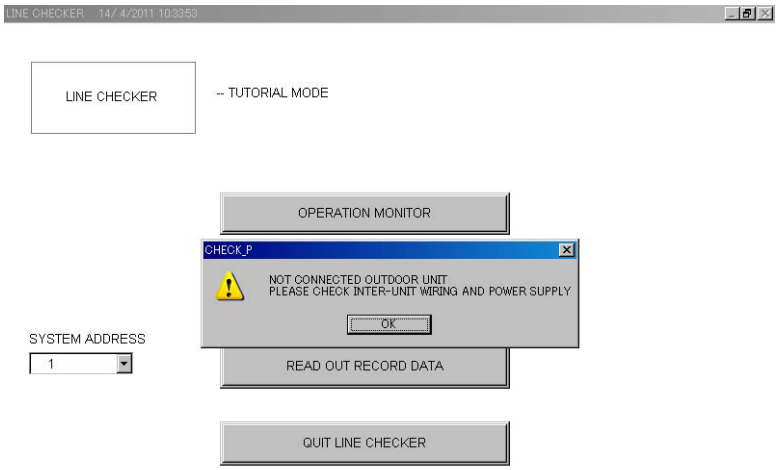
Select the menu <SELECT SCREEEN> → <INITIAL SCREEN> to go back to the initial window.

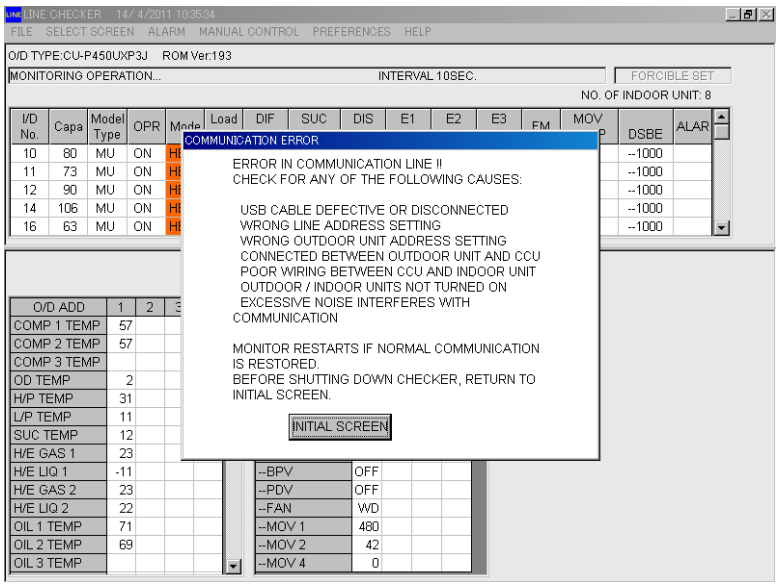
5. Trouble shooting

5.1 Communication error

- Check the power supply for outdoor & indoor units turns ON.
- Check the wiring connection from/to USB interface, if it is collect or not?
- Check the outdoor unit type, if this unit type is covered by the checkersoftware.

  If different type is selected, plesae restart the software and set the proper model type setting.





5.2 Error message “INI FILE NOT FOUND!!…”

When the error message “INI FILE NOT FOUND!!” is displayed, it means that the software version become old. Please get the new version by contact to SANYO office.