SERVICE CHECKER TYPE 3.1
INSTRUCTION MANUAL



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Introduction

i) Thank you for purchasing our Service Checker TYPE 3.1.
This Instruction Manual explains operation methods on how to use the Service Checker TYPE 3.1 and the TYPE 3 software.
Read carefully the Manual before using correctly the Service Checker TYPE 3.1 and the TYPE 3 software to use this checker correctly.
If improper handling of the Service Checker TYPE 3.1 and the TYPE 3 software is made without observing correctly the notes specified in the Manual, it may cause accidents to human bodies or failures of air conditioning systems.
Utilize fully the Manual with keeping it carefully in a proper place adjacent to the Service Checker TYPE 3.1.

ii) Notes on safety :
Notes in the Manual of which negligence to observe may cause fatal or serious injuries to human bodies are headed “WARNING”.
On the other hand, notes in the Manual of which negligence to observe may cause failures of the air-conditioning systems are headed “CAUTION”.

iii) The Service Checker TYPE 3.1 has been developed for enhancing customer-service capabilities of Daikin’s air- conditioners. It is a personal computer- monitored device which is connected to an air-conditioner and reads out operation data (by temperature sensors, pressure sensors, several kinds of solenoid valves, operating modes, etc.).

iv) The Service Checker TYPE 3.1 is possible to measure six temperature measurement points and two pressure measurement points to monitor.

v) The contents of the Manual are subject to change without notice.
No part of this publication may be transmitted in any form without the prior permission of the publisher.
We shall not have any responsibilities and liabilities on the results arising from operating the Service Checker TYPE 3.1.
The contents of this Manual are valid as of Nov, 2012 and they may be modified for improvement without any advance notice.

vi) CE marking
This is a group 1, class B product according to EN 55011. This means that this product does not generate and/or use intentionally radio-frequency energy, in the form of electromagnetic radiation, inductive and/or capacitive coupling, for the treatment of material or inspection / analysis purpose and that it is suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Outline of the Manual

1. Firstly, read carefully the section of “Introduction”. Then, confirm the contents of the packaged items by following the procedures of “Confirming of packaged items”. Then, prepare for a personal computer.
2. Install the checker TYPE 3 software(English) into the personal computer by following the procedures of “Chapter 1 Installing of TYPE 3 software”. Perform this installing at the time of purchasing the Service Checker TYPE 3.1 and every version-up of the TYPE 3 software. Refer to the “1.2 Deleting of TYPE 3 software” when the TYPE 3 software needs to be deleted from the computer.
3. Refer to the “Chapter 2 Connection to air-conditioner” on the connecting between an air-conditioner and the Service Checker TYPE 3.1 and the personal computer.
4. Refer to the “Chapter 3 Starting- up and ending of TYPE 3 software” on the starting- up and ending of the TYPE 3 software and the setting of customer data and others.
5. After connecting the Service Checker TYPE 3.1 to the air-conditioner and the personal computer, operation data and network map(linking between an indoor unit and an outdoor unit) can be displayed by following the procedures of the “Chapter 4 Recording of operation data”. Also, following the procedures of the “4.2 Setting of recording”, it is possible to record data after setting to record them into the hard disc of the personal computer.
6. When recording, operation data and network map are recorded, while in playing back, the operation data and network map are played back by following the procedures of the “5.1 Playing back of operation data” and the “5.2 Playing of network map” respectively.

Over view of service checker TYPE3



Confirming of packaged items

The Service Checker TYPE III consists of five standard items packaged as follows. Check up the contents in the package.(See optional items in the " Specification" at the end of the Manual.)

1. Service Checker TYPE 3.1

(1) **Service Checker TYPE 3.1**



(2) **RS-232C cable**

D-sub 9 pin female - D-sub 9 pin female straight (2m)



Caution
Please always use the cable (2m) originally attached to the Checker TYPE 3.1

(3) **USB cable**

A-B connector cable (2m) : only for power supply (DC 5V)



Caution
Please always use the cable (2m) originally attached to the Checker TYPE 3.1

2. TYPE 3 Software-2 (Parts Number : 999151T)

CD-ROM : software, manual, and information



Preparation

Prepare the following

(1) Personal computer with the following specifications.
PC type :
MS Windows base PC
OS :
Windows 95/98/98SE/NT4.0/Xp/Vista/7 (32bit)
Serial Port :
RS-232C or USB-RS232C / PC card-RS232C adapter

(2) If the Checker TYPE 3 is connected to DIII-NET terminal for VRV-system air conditioners for building, make up DIII-NET connecting cables as follows.

Procedures

Prepare the following signal wires. (Refer to the below notes.)
When connecting to an outdoor unit, it is appropriate for the signal wires to have 2 m in length. When connecting to an indoor unit or wiring indoor from the outdoor unit, it is possible to lengthen the signal wires within the limits of the DIII-NET length.

For control signal wiring, use vinyl cords or cables with two-core and sheathed as follow.

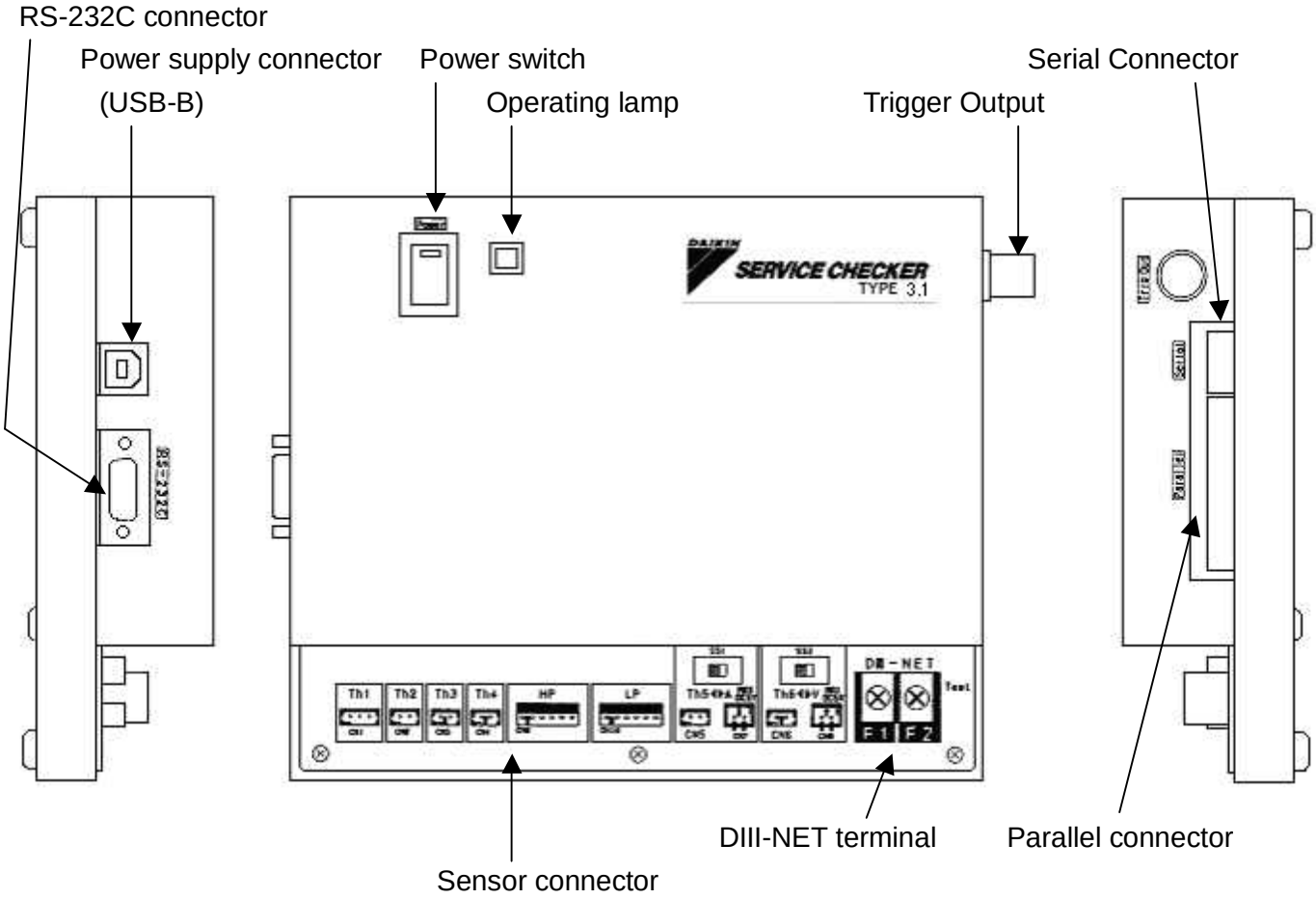
Vinyl cabtyre cylindrical cord	VCTF	JISC3306
Vinyl-insulated vinyl sheathed cable for control	CVV	JISC3401
Vinyl-insulated vinyl sheathed, cylindrical cable for control	CVS	JISC3401
Vinyl-insulated vinyl sheathed, cylindrical cable	VVR	JISC3342
600V vinyl cabtyre cable	VCT	JISC3312

(Note) Please do not use shielded cable.

Cautions:

1. Do not use multiple-cored wires with 3 cores or more.
2. Use wires with a cross section of 0.75mm^2 -1.25mm^2.
3. Do not make wires bound in control- signal wiring. Do not make long-distance wiring by having signal wires bound packed with tapes, tie-laps and the like.
4. Wire the signal wires away from power lines to prevent the effects of electric noise. Since Daikin's air conditioners and related products will generate much lower electric noises, it allows to have a distance of minimum 50mm between the power lines and the control signal wires.

Name of each part



RS-232C connector	A personal computer is connected by using RS-232C cable. (Use RS-232C cable originally attached to the Checker TYPE 3.1)
USB B-connector	USB cable connector for power connection. (DC 5V) (Use USB cable originally attached to the Checker TYPE 3.1)
Power switch	When switching on, the red lamp is lit.
Operating lamp	When the Checker TYPE 3 is normally operated, the green lamp is flashed.
Serial Connector	Not use
Parallel connector	Not use
Trigger Output	Not use
Sensor connector	This connector is used for connecting the optional sensor kit .(Parts Number : 999107T)
DIII-NET terminal	This terminal is for connecting the connecting cable made based on the DIII-NET prepared in (2), the section of the “Preparation”.

Chapter 1 Installing of TYPE 3 software

1.1 Obtaining Service Checker TYPE3 software

Obtaining Service checker TYPE3 software

1) CD-ROM (service parts 999151T)
2) Download from Internet Web Page (Only the case of Version UP)
   http://airnet.jpn.org/chk/

software installer module : checker3_eng_v150.msi (V150 is version)

1.2 Installing of Checker TYPE 3 software

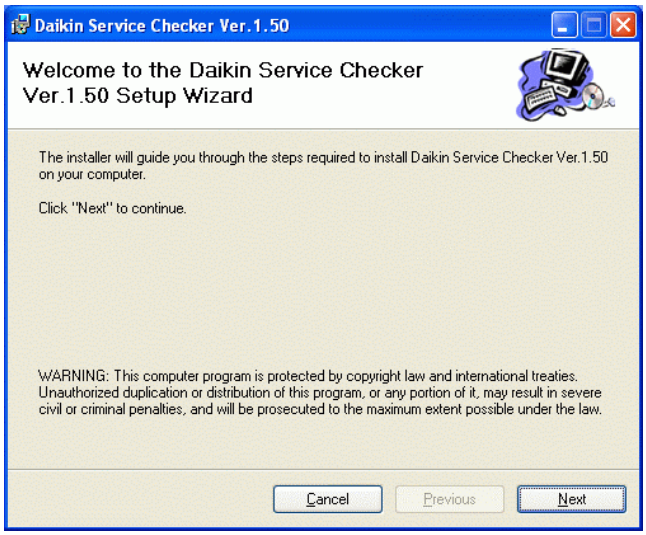
When the Service Checker TYPE 3.1 is newly purchased, or the version-up of the TYPE 3 software (English) is made , install the new version of TYPE 3 software into the personal computer.

(Note) When the version-up of the TYPE 3 software is made , be sure to delete the old version in accordance with the procedures of the “1.2 Deleting of TYPE 3 software” before installing the new version of the software.

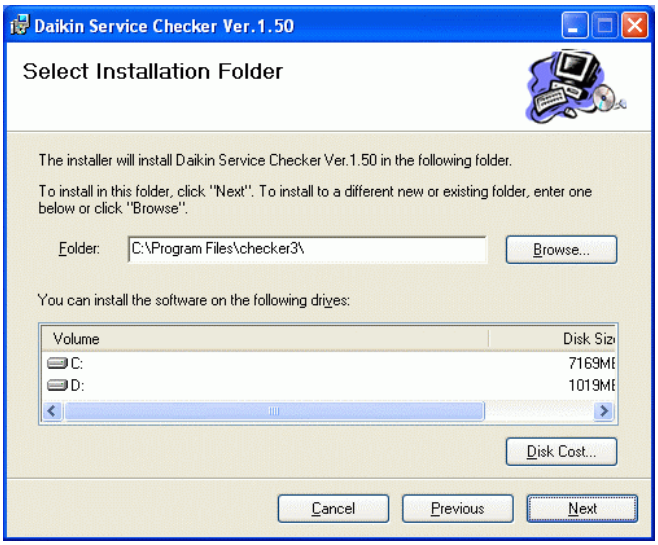
Procedures

1) Executing installer module. (file double click.)

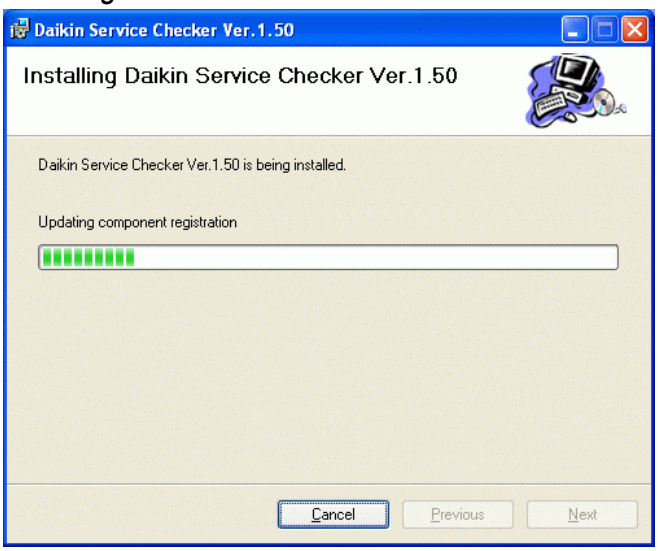
checker3_eng_v1xx.msi



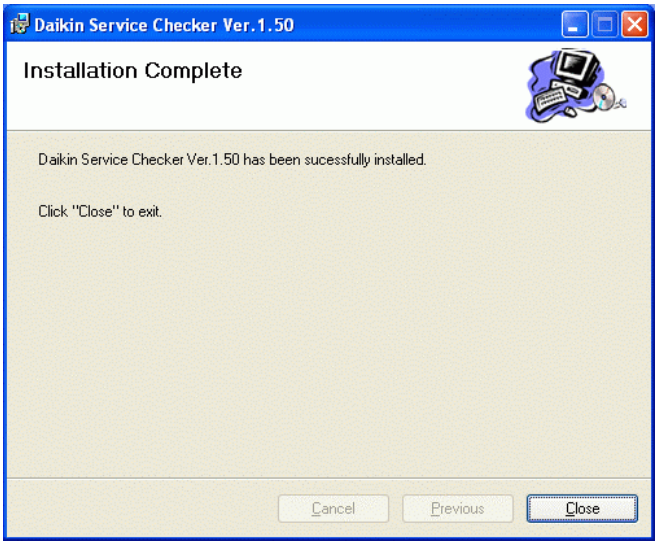
2) Select installation folder



3) Installing software



4) Complete



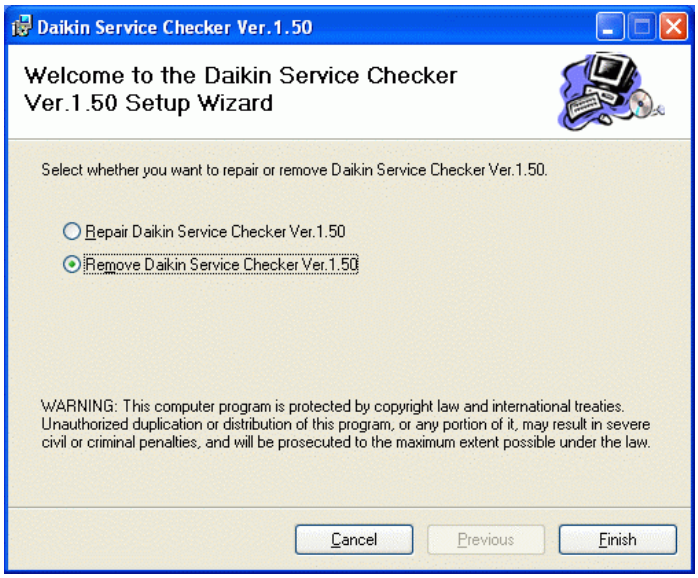
1.3 Removing Checker TYPE 3 software

When removing (uninstalling) the checker TYPE 3 software(English), follow the procedures described below.

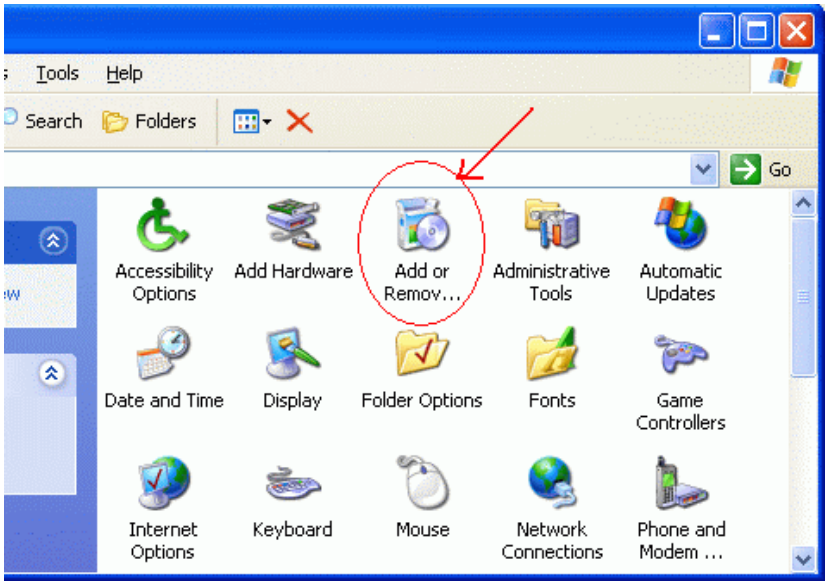
1) Use Installer module.
2) Use Control panel of Windows

Procedures

1) Use Installer module.
   Fallowing screen is displayed when the old version is already installed.
   Please select “Remove Daikin Service Checker Ver.1.xx”.



2) Using Control panel of Windows



Click “Add or Remove Programs”,
Select “checker TYPE3 software” and remove it.

Chapter 2 Connection to air-conditioner

WARNING:

1. When using the Service Checker TYPE 3.1 in outdoor at rainy weather, be sure to protect it from rain so that it becomes free from the danger of electric shock and fires.
2. When leaving the Checker for a long time as it is, take proper measures against leak current and rain water which may cause fires.

The connecting method between the Checker TYPE 3 and Daikin's air-conditioning systems consists of three : [DIII-NET connection] and [Sensor connection]. Select an appropriate one depending on their features.

2.1 DIII-NET connection

Features of DIII-NET connection

- Possible to monitor simultaneously the operation data of multiple outdoor and indoor units on the DIII-NET by connecting to VRV-system air-conditioners for building and chillers conforming to the DIII-NET in internal and external data transmission.
  Units conforming to the DIII-NET are shown in the [List of applicable units] at the end of this Manual.

  (Note) The range exceeding the limits of the DIII-NET expansion adapter (DTA109A1) is not possible to monitor.

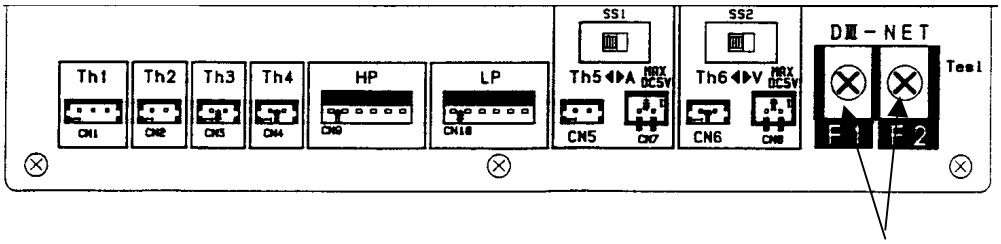
- To connect to the DIII-NET terminals(F1, F2) located on the PCB of an outdoor unit or an indoor unit.

  (Note) In case of an indoor unit, connect the end of the indoor unit not so as to create sub-branching.

- When the Service Checker TYPE 3 is connected to the DIII-NET for the first time, be careful to note that air conditioners on the DIII-NET will be set to restart standby for several minutes.
  In performing customer management, unless PCBs are replaced or the number of air conditioners has changed, the air conditioners will not be set to the standby state from the second time on by utilizing the previously recorded data of network map.
- The intervals of monitoring operation data are different depending on data items. Besides, be careful to note that the operation data of an indoor unit are monitored at intervals of several minutes.
- If the length of a connecting cable for the DIII-NET is within the limits of the DIII-NET, it is possible to lengthen the cable.
- Not possible to use in combination with PCB connection but Sensor connection.

Procedures

1) Screw tightly the clip-free end of DIII-NET connection cable made up by following the item (3) of the “Preparation” at DIII-NET terminals(F1, F2) of the Checker TYPE 3. (If an air-conditioner side is first connected and the resultant short-circuit should occur, it may cause the failures of the air-conditioner.)



DIII-NET terminals

2) Connect the clipped side of the DIII-NET connection cable to the air conditioner.

WARNING : Be sure to connect the clipped side to the transmission terminal board (F1, F2) of the air conditioner(outdoor unit or indoor unit). If wrongly connected to power terminals of centralized equipment and the like, it may cause fatal injuries by electrical shock to human bodies and failures of equipment.

CAUTIONS :

1. In case of connecting to an indoor unit, connect the end of the indoor unit in consideration of not creating sub-branching. If sub-branching is created, communication errors may occur.
2. Do not need to correspond F1, F2 of the transmission terminal board of the air conditioner to F1, F2 of the Checker TYPE 3 like F1-F1 or F2-F2 respectively.

Connect the clip-attached side of the DIII-NET connection cable to the transmission terminal board (F1, F2) of the air conditioner.

If sensor connection is needed, proceed to the section of [2.3 Sensor connection], otherwise, proceed to the section of [2.4 Switching on of the Checker TYPE 3].

2.2 Sensor connection

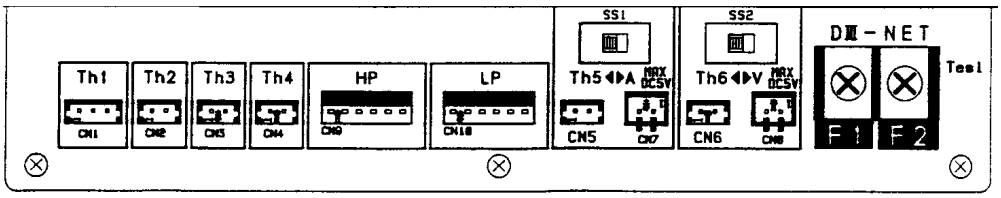
Features of sensor connection

- In case of air conditioners not conforming to the DIII-NET connection, it becomes possible to measure temperature and pressure by connecting the optional sensor kit (Parts Number: 999107T).
- Six temperature points and two pressure points are possible to measure. Among these points, two measurement points of temperature can be monitored as a signal of DC 0-5V or DC 0-1V via measuring instrument by shifting the switch.
- Possible to use in combination with either the DIII-NET connection.

Procedures

1) Connect the sensors of a sensor kit to the Sensor connector at the front side of the Checker TYPE 3.

WARNING : When measuring current and voltage, be sure to input a signal of 0-5VDC or 0-1VDC via measuring instrument to [A] and [V] terminals. Do not connect these terminals to directly an object to be measured current or voltage or add more than 5VDC to these terminals since fatal injury to human bodies by electric shock or fires and failures of air conditioning systems may be caused.



Connector	Cable of sensor kit
Th1	Connect air temperature thermistor (for outdoor) Th1(white).
Th2	Connect pipe temperature thermistor Th2(white).
Th3	Connect discharge pipe temperature thermistors Th3(red). Since the discharge pipe temperature thermistors differs from other thermistors in a converting (resistance value to temperature value) method, be sure to use the thermistor Th3.
Th4	Connect pipe temperature thermistor Th4(blue).
HP	Connect high pressure sensor, HP(blue). Do not connect LP since HP differs from LP in a converting(resistance value to pressure value) method.
LP	Connect low pressure sensor, LP(red). Do not connect HP since LP differs from HP in a converting(resistance value to pressure value) method.
Th5	Connect air temperature thermistor(for indoor), Th1(white). To make Th5 valid, place the upper switch in Th5 side. A and Th5 are not possible to use simultaneously.
A	Using optional cable A(red), connect to measuring instrument, To make A valid, place the upper switch in A side. A and Th5 are not possible to use simultaneously. The conversion of a voltage signal from measuring instrument into current is set by periodical recording in the “4.2 Setting of records” of the TYPE 3 software.
Th6	Connect air temperature thermistor (for indoor), Th4(blue). To make Th6 valid, place the upper switch in Th6 side. V and Th6 are not possible to use simultaneously.

V	Using optional cable V (blue), connect to measuring instrument. To make V valid, place the upper switch in V side. V and Th6 are not possible to use simultaneously. The conversion of a voltage signal from measuring instrument into voltage value is set by periodical recording in the “4.2 Setting of records” of TYPE 3 software.

(Note)
In case of shifting [Th5] to [A] or [Th6] to [V] by using the switch of the Checker TYPE 3, shift at a screen before the screen of [Display of network map], otherwise, operation data will not be correctly recorded.

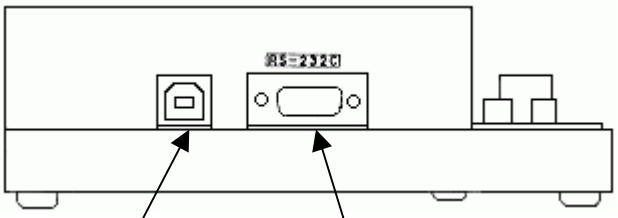
2) Set the sensor part to air conditioning systems.
   * When measuring current and voltage, be sure to input a voltage signal of 0-5VDC or 0-1VDC via the measuring instrument to the sensor connectors of the Checker TYPE 3.

CAUTION
Please always use the sensors of Sensor Kit (Parts Number: 999107T)

2.3 Switching on the power supply of Checker TYPE 3

Procedures

1) Connect the RS-232C cable attached to the Checker TYPE 3.1 to the RS-232C connector of the Checker TYPE 3.1 and the Serial connector of a personal computer.



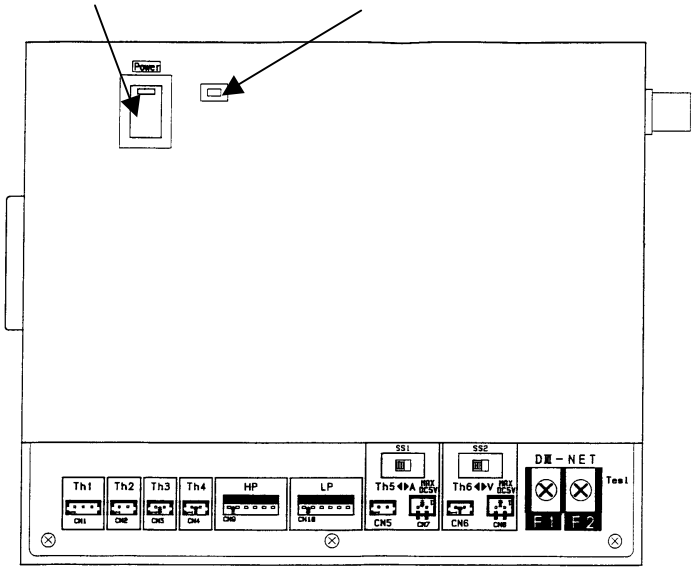
RS-232C connector (D-sub 9 pin)

USB cable (Power Supply) connector

2) Connect the Power Supply (PC, AC-adapter, battery) use USB cable, Power Supply connector of the Checker TYPE 3. [DC-5V]

3) Turn on the Power Switch of the Checker TYPE 3.1. The red lamp of the Power Switch lights. When the Checker TYPE 3 is normally operating, the green lamp flashes.

Power Switch Operation Lamp



Chapter 3 Starting up and ending of TYPE 3 software

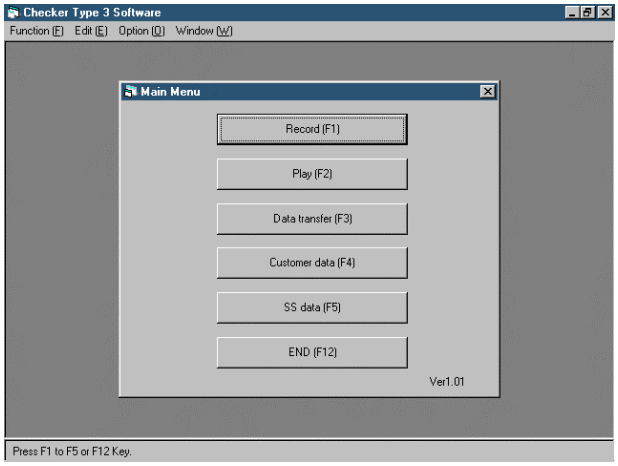
3.1 Starting up of TYPE 3 software

Procedures

1) Start Service Checker software by start menu.



2) After the Service Checker software is started, the following main menu is displayed.



[Record(F1)] : Press when recording.(Refer to Chapter 4 Recording of operation data)

[Play(F2)] : Press when monitoring recorded operation data. (Refer to 5.1 Play of operation data.)

[Data transfer(F3)] : Recorded operation data and customer data are transferred to a another folder. (Refer to 5.4 Data transfer.)

[Customer data(F4)] : Customer data are input and edited (Be sure to input customer ID .) Recorded network map data are possible to see here.(Refer to 3.2 Setting of customer data and 5.2 Playing back of network map.)

[SS data(F5)] : SS data are normally input. (Refer to 3.3 Setting of SS data.)

[END(F12)] : The TYPE 3 software is ended. (Refer to 3.5 Ending of TYPE 3 software.)

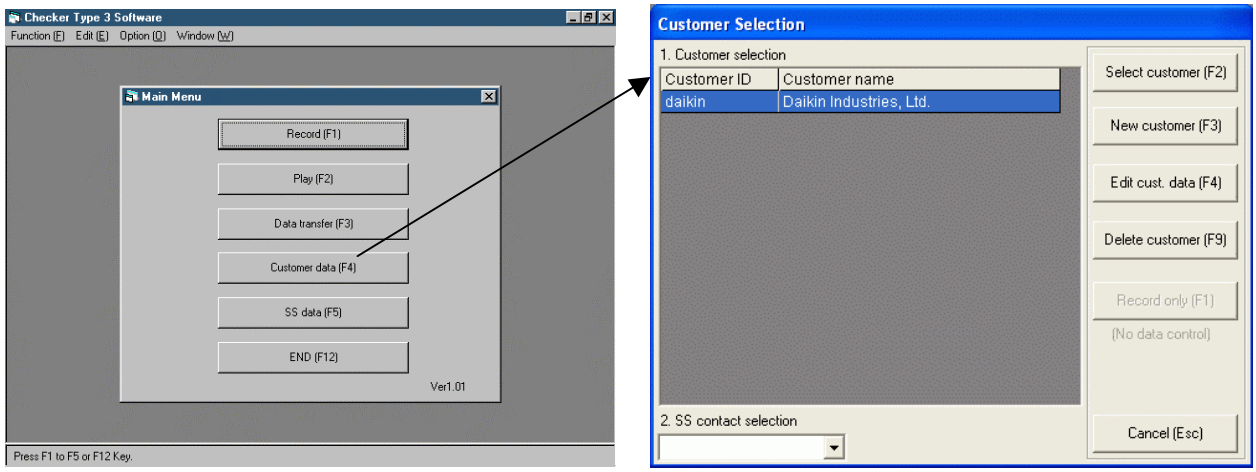
3.2 Setting of customer data

The TYPE 3 software manages the operation data of every customer. For that reason, be sure to input customer ID at least. If the [Record only] without customer data management is used in the DIII-NET connection, since restart standby is applied every time at the side of an air conditioner, input customer data as much as possible.

(Note)
Other than input from the following step of [Customer data] menu, the input of customer data is possible by selecting the [Record(F1)] of the [Main menu].

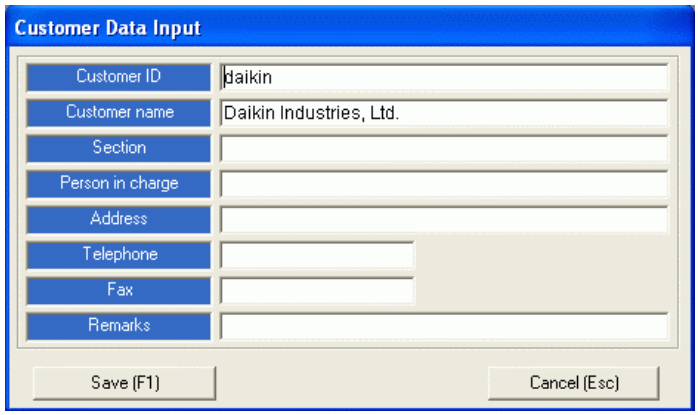
Procedures

1) Press the [Customer data(F4)] in the [Main menu] to display the window of the [Customer selection].



2) When customer data are newly input, press the [New customer(F3)] to display the window of the next [Input customer data].

- When the current customer data need to be changed, select the customer by cursor, then, press the [Edit customer data(F4)] to display the window of the next [Input customer data].
- When customer data need to be deleted, press the [Delete customer(F9)]



3) Be sure to input the [Customer ID] with alphanumeric letters to identify customers.

4) Input the [Customer name] as much as possible to display in the windows of the [Selection of operation data] and others.

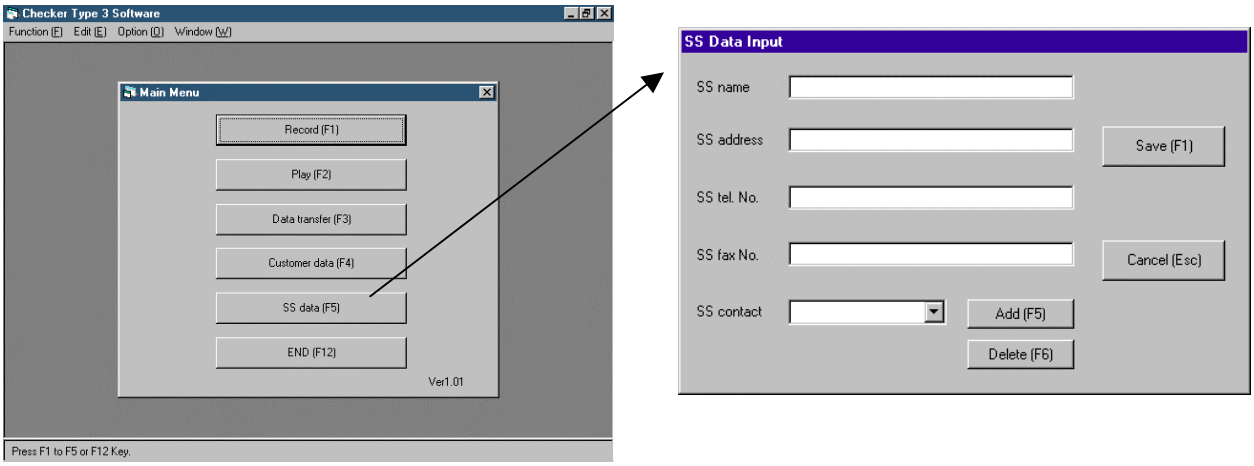
5) Other items are only for memos.

6) When ending, press the [Record(F1)] button. When returning to previous state (input waiting state) without recording, press the [Cancel(ESC)] button.

3.3 Setting of SS data

Procedures

1) Press the [SS data(F5)] in the window of the [Main menu] to display the window of the [Input SS data].



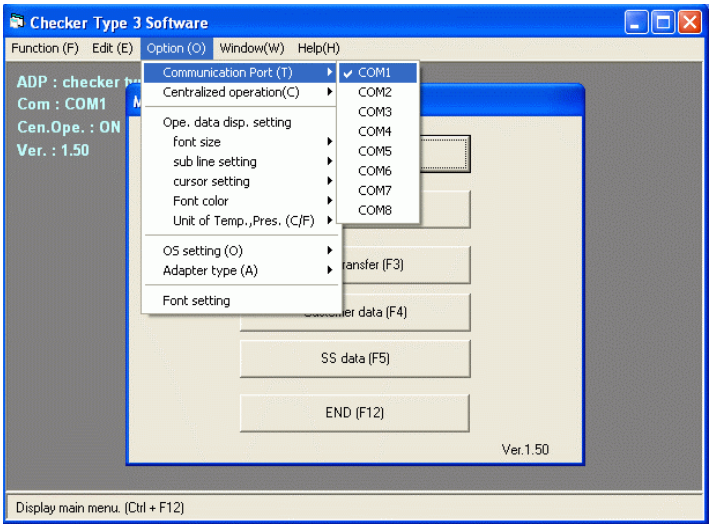
2) Input each item. Other than the item of [In charge of], use as memos.

- Input the name of the [Person in charge of SS] before pressing the [Add(F5)] button. When deleting, select the name to be deleted by cursor before pressing the Delete(F6)].
- After completing the input, press the [Record(F1)] button.
- When returning without recording, press the [Cancel(ESC)].

3. 4 Setting of RS-232C(COM) port

The personal computer is equipped with the setting of RS-232C ports No. (COM1 to COM8). Default setting is COM1.
Setup of PC MS-Windows setting.

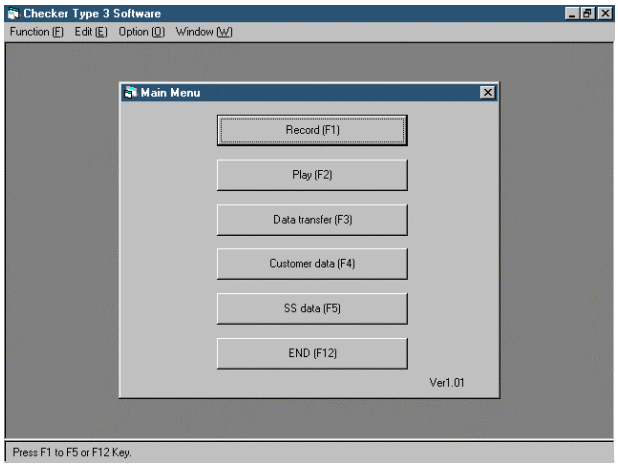
If changing the ports, change by pressing the [Communication port(T)] in the menu of the [Option].



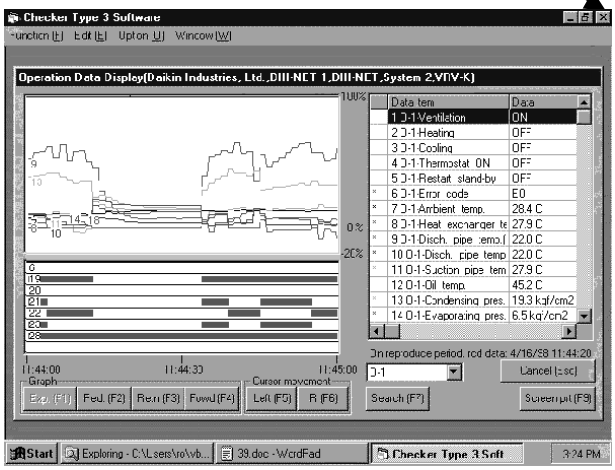
A USB-RS232C adapter uses COM4 or more than it in many cases.

3. 5 Ending of TYPE 3 software

1) When ending the TYPE 3 software, press the [End(F12)] button in the window of the [Main menu].

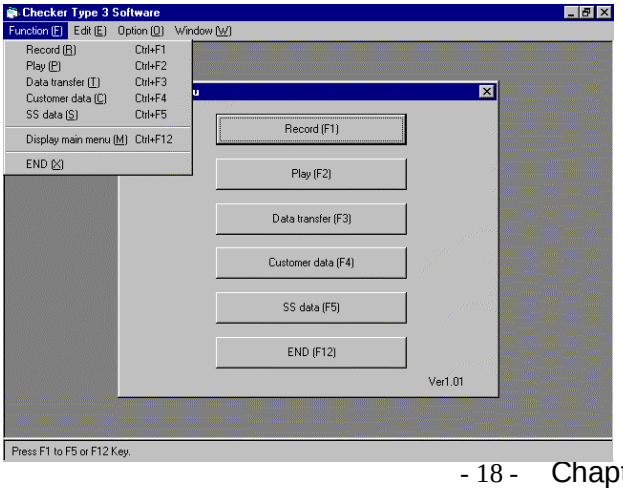


2) In case of ending the TYPE 3 software after recording and playing back, it is necessary to repeat several times pressing the [Cancel(ESC)] to return to the window of the [Main menu]. In this case, by pressing the [X] button in the extreme upper right of the window, the TYPE 3 software will end at once.



[Example of the display of operation data]

3) Also, by selecting the [End(X)] of the menu of [Function (F)] located in the extreme upper left of the window, the TYPE 3 software will end at once.



Chapter 4 Recording of operation data

The TYPE 3 software manages data by the hierarchy structure of [customer-network map-operation data].

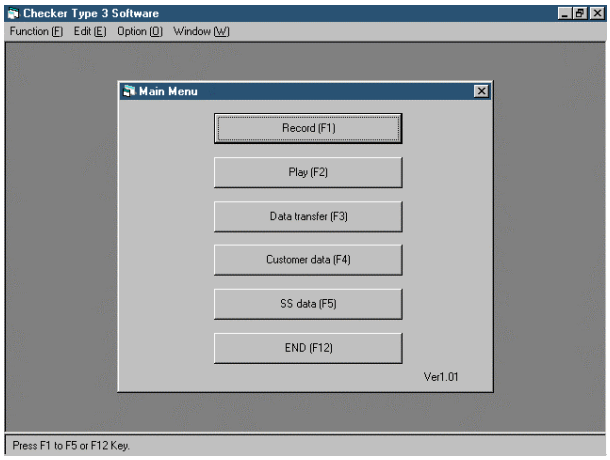
Customer	Network map	Operation data
A customer	A building 1F	System 1: Mar. 23
		System 2: Mar. 23
		System 1: Feb. 11
		:
	A building 2F	System 1: Apr. 2
		:
	:	:
B customer	:	:
:	:	:

4.1 Displaying of operation data

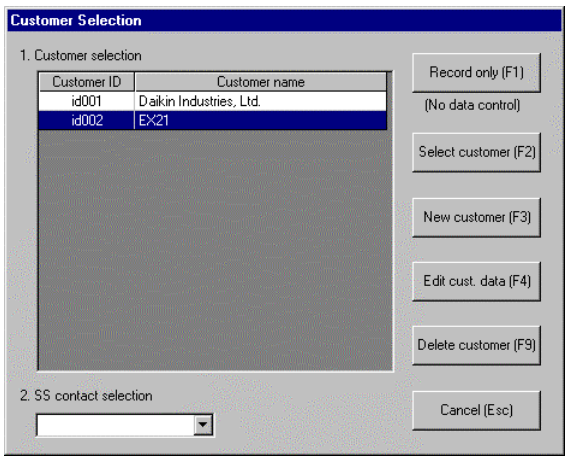
4.1.1 Selecting of customer data and others

Procedures

(1) Press the [Record(F1)] in the [Main menu] to display the window of the [Customer selection].



(2) In this window of the [Customer selection], input customer-related data. Recording data only without relating to customers is also possible.



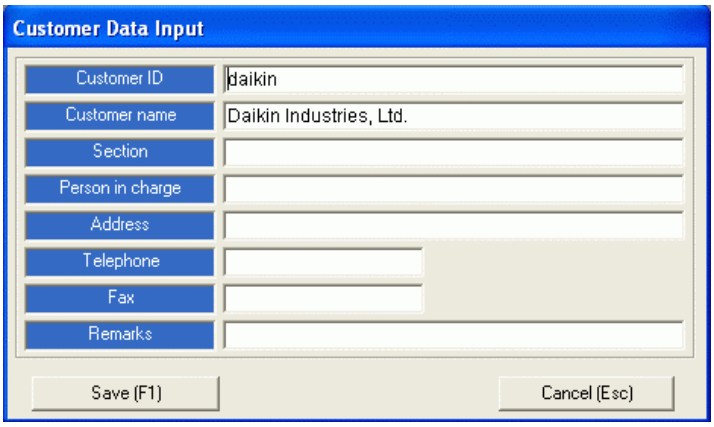
- In case of recording operation data after inputting customer data for a new customer, press the [New customer(F3)] and display proceeds to the [Input customer data] window. Proceed to (3).
- In case of recording operation data for a previously input customer, press the [Settlement customer(F2)] by placing the cursor in the customer name and display proceeds to the [Network map selection] window. Proceed to (4).
- In case of recording operation data for a previously input customer after changing customer data, press the [Edit customer data(F4)] by placing the cursor in the customer name and display proceeds to the [Input customer data] window. Proceed to (3).
- In case of recording only operation data without customer management, press the [Record only(F1)], and display proceeds to the [Access Method selection]. Proceed to (5).

(Notes)

1. In case of [Record only], be careful to note that operation data are overwritten every time.
2. In case of recording customer data by the [Record only] in the DIII-NET connection, input customer data as much as possible since an air conditioner will be set to restart standby every time.

- When deleting a customer data, press the [Delete customer(F9)]
- When returning to the [Main menu], press the [Cancel(ESC)].

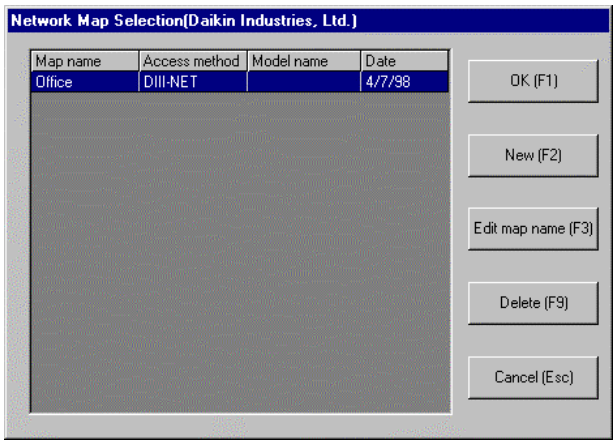
(3) In this window of the [Input customer data], input customer data.



- Be sure to input the [Customer ID] with alphanumeric letters to identify customers.
- Input the [Customer name] as much as possible to display in the windows of the [Selection of operation data] and others.
- Use as memos items other than [Customer ID] and [Customer name].

When ending, press the [Record (F1)] button, and display proceeds to the [Network map selection] window. Proceed to (4).
When returning to previous state(input waiting state) without saving the data, press the [Cancel(ESC)] button.

(4) This is the window of the [Network map selection].

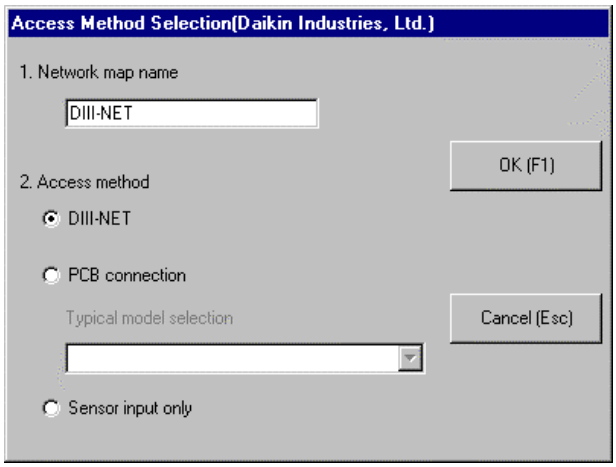


(Notes)

1. For one customer, multiple network maps can be managed.
2. On the unit of network map,
   (1) In case of the DIII-NET connection, construct by every object, or even if the objects are same, construct separately each network map for both sides divided by DIII-NET expansion adapter(DTA109A1).

- In case of being same network map for a customer with operation data recorded previously, press the [O.K.(F1)] by placing the cursor in the corresponding network map. Proceed to the window of the [Network Map Display]. (Refer to “4.1.2 Network Map Display”.)
- In case of being different network maps (for DIII-NET connected objects, different DIII-NET expansion adapter, different PCB connected outdoor units) for a customer with operation data recorded previously, press the [New(F2)] , and proceed to the [Access Method Selection] window. Proceed to (5).
- In case of changing the name of network map, press the [Edit map name (F3)], and proceed to the [Access Method Selection] window. Proceed to (5).
- When deleting a network map, press the [Delete customer(F9)]
- When returning to the previous stage, press the [Cancel(ESC)] button

(5) This is the window of the [Access Method Selection].



(a) Be sure to input the [1. Network map name].

(b) Select the [2. Access method].

- [DIII-NET] : Possible to use only DIII-NET connection or in combination with Sensor input. Possible to use air conditioners conforming to the DIII-NET in internal and external transmission method. Possible to identify and select automatically the type of an air conditioner, so, selection is not necessary.
- [PCB connection] : do not use.
- [Sensor input only] : Select this when monitoring the temperature and pressure of an air conditioner in not conformity with DIII-NET connection by an optional sensor kit.

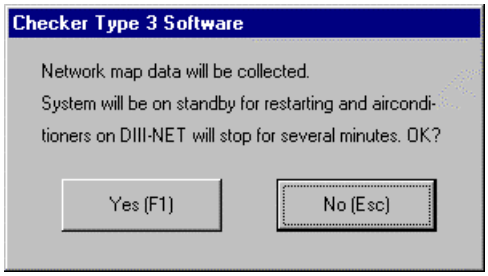
(c) If the selection is OK, press the [O.K.(F1)]. Proceed to the window of the [Network Map Display]. (Refer to “4.1.2 Network map display.”) When returning to the previous stage, press the [Cancel(ESC)].

4.1.2 Displaying of network map

(Notes)

If time setting of the personal computer is made after the window of the [Network Map Display], the order of data to be recorded is changed, resulting in not recording data correctly. Do not make time setting of the personal computer after the window of the [Network Map Display].

* When the Checker TYPE 3 is connected to the DIII-NET for the first time, air conditioners on the DIII-NET will be set to restart standby for several minutes, displaying the following message.

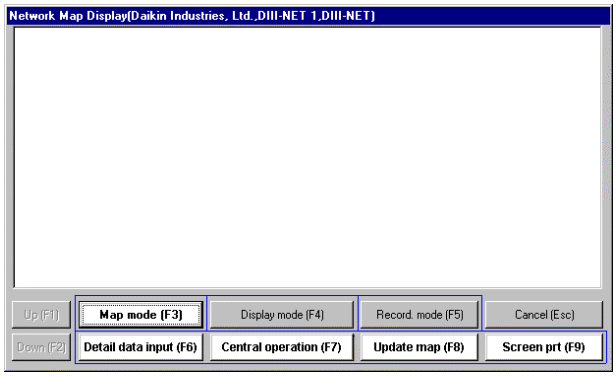


* If the restart-standby is allowed, press the [Yes(F1)].

(Notes)

1. When pressing the [Yes(F1)], air conditioners on the DIII-NET are set to restart standby, making the thermostat switched off for several minutes.
2. If using the previous network data by customer management, no such message in the window will be displayed again from the second time.

Then, air conditioners on the DIII-NET are automatically searched for several minutes.

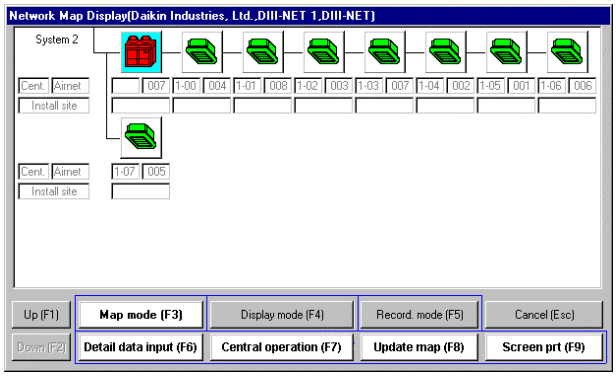


(Note)

When the wiring-change button on the PCB is not pressed after adding or removing an outdoor unit, an indoor unit, and BS unit and changing PCB, the network map may not be displayed. In such a case, press the wiring-change button.

* If the restart-standby is not allowed, press the [No(ESC)] to return to the previous stage and monitor every outdoor unit by PCB connection.

This is the window of the [Network Map Display].



(1) Reading of window.

* The window displays outdoor units and indoor units in order of each auto-address by using icons.
* The colors of the icons are changed depending on the state of an air conditioner.

Color	Description
Red	Error state * In case of VRV PLUS series, if any of outdoor units are not normal, all of outdoor units and function units are displayed “Red”.
Purple	Transmission error. * Chillers exceeding the range of the DIII-NET expansion adapter are displayed “Purple” even if they are normally operating.
Green	Indoor unit : operating state Outdoor unit : thermostat-ON state
Gray	Indoor unit : not operating state Outdoor unit : thermostat-OFF state
White	When air conditioners connected to the DIII-NET exist, but their types have not been identified automatically, this color icon is displayed while identifying the types automatically for a few minutes.

(Notes)

1. Be careful to note that Super Multi and room air conditioners connected to the PCB cannot be correctly displayed in distinguishing between an indoor unit and an outdoor unit.
2. If nine or more indoor units are connected by using an expanding adapter for indoor units, be careful to note that the display of operation data on the units is limited to on one indoor unit with average data.
3. The [system] displayed at the upper left in the window denotes a unit of an outdoor unit In the VRV-PLUS, one system is constructed by the overall system including the function units. The DIII-NET connection can take in the data of multiple systems at the same time.

- The [Central] column in the window indicates “Centralized address” input by the [Detail data input], while the [Installation site] column indicates “Installation site” input by the [Detail data input].
- In the DIII-NET connection, the “AIRNET address” automatically taken in by the TYPE 3 software is displayed in the [AIRNET] column in the window.

(2) When the number of systems or air conditioners is too much to display in one window, press the [Up(F1)] or the [Down(F2)] at the left below side of the window to scroll the window.

(3) In the group of buttons displayed at the bottom of the window, by shifting a mode with the upper 3 buttons, the bottom 4 buttons can execute each function.

A. Map mode(F3)

Map mode(F3)			
Detail data input(F6)	Centralized control(F7)	Update map(F8)	Print screen (F9)

[Detail data input(F6)]: In case of inputting detailed data such as types, installation sites, press this button. Proceed to the “4. 1. 3 Inputting of detailed data”.

[Centralized control(F7)] : In case of DIII-NET connection, the centralized control of indoor units is possible. Proceed to the “4. 3 Centralized control”.

[Update map(F8)] : If the number of air conditioners has changed or PCBs are replaced in the DIII-NET connection, press this button to search the data of network map.

(Notes)
When pressing the [Yes(F1)], air conditioners on the DIII-NET are set to standby for restart, making the thermostat switched off for several minutes.

[Print screen (F9)] : Press this button to print the screen of network map.

B. Display mode(F4)

	Display mode(F4)	
Display operation data(F6)	Start DIIIdata recording(F7)	Display number of units(F8)

[Display operation data(F6)] : By proceeding to the window of [Display operation data], system operation data are displayed. Proceed to the “ 4.1.4 Displaying of operation data”.

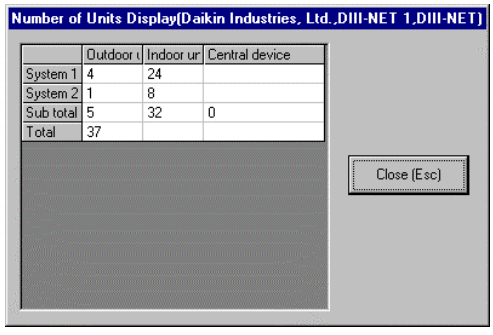
(Note)
In case of the DIII-NET connection, after all icons of the system to be seen have become colors other than white, display the operation data.

[Start DIIIdata recording(F7)] : Do not press the button since this function is not used.

(Note)
If pressing this button, the indication is changed to [End DIIIdata recording(F7)]. If so, press again to return to [Start DIIIdata recording(F7)].

[Display number of units(F8)] : The number of connected outdoor units and indoor units is displayed.

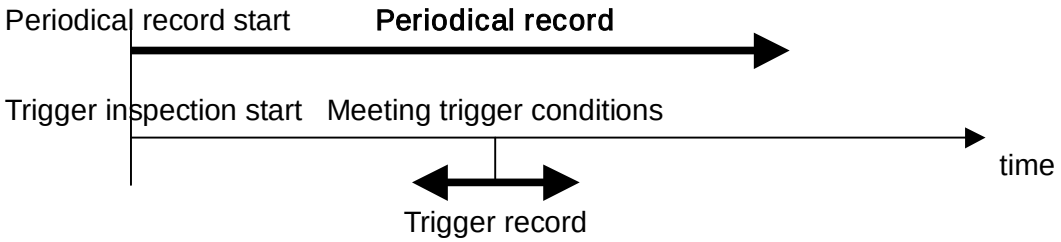
(Note)
In the PCB connection, the number of units of Super Multi and room air conditioners is not displayed correctly.



C. Recording mode(F5)

		Recording mode(F5)	
Periodical record setting(F6)	Periodical record start(F7)	Trigger record setting(F8)	Trigger inspection start(F9)

The method of recording operation data consists of two: one is the [Periodical recording] which records successively for a constant time, and another is the [Trigger recording] which records before and after meeting trigger conditions (conditions of digital data ON/OFF). The TYPE 3 software can set the method separately.

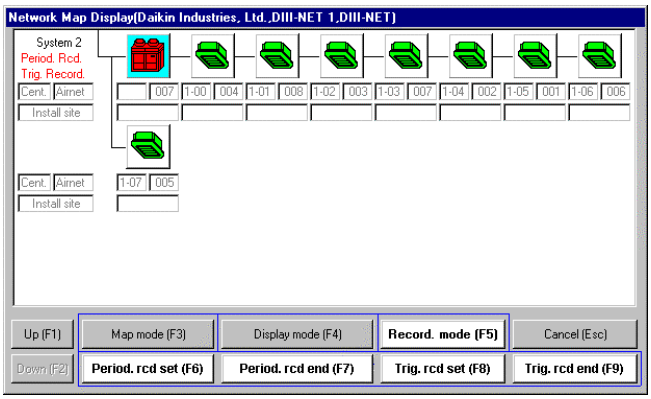


[Periodical record setting(F6)] : By proceeding to the window of [Periodical recording setting], Set the periodical recording. Proceed to the sections of “4.2.1” and “4.2.2” for periodical record setting.

[Periodical record start(F7)] : By pressing this button, periodical record is started to indicate [Periodical recording] in red at the upper left in the window. The indication of the button is changed to [Periodical record end(F7)]. Pressing the button again, the periodical record is ended.

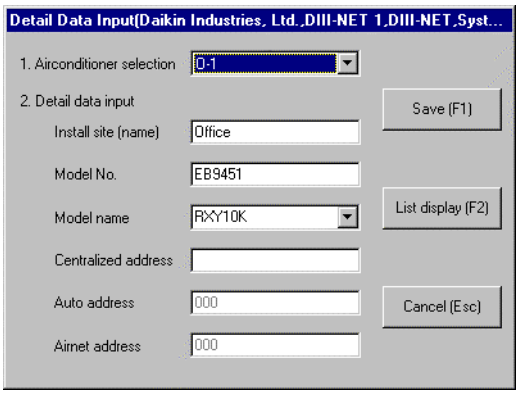
[Trigger record setting(F8)] : By proceeding to the window of [Trigger record setting], set trigger record. Proceed to the “4.2.3 Setting of trigger record”.

[Trigger inspection start(F9)] : By pressing this button, trigger inspection is started to indicate [Trigger inspecting] in red at the upper left in the window. When meeting trigger conditions to start trigger recording, the indication of [trigger recording] is displayed. The indication of the button is changed to [Trigger inspection end(F7)]. Pressing the button again, the trigger record is ended.



4.1.3 Inputting of detailed data

The window of the [Detail data input] is displayed below.



When pressing the button of the [Detail data input(F6)] after selecting the [Map mode(F3)] in the window of the [Network Map Display], the window of the [Detail data input] is displayed to enable to input the detail data of a system pointed with cursor (every outdoor unit).

(Note)
Use detail data as memos. In case of recording only operation data, the detail data input is unnecessary.

Procedures

(1) In the [1.Airconditioner selection], select an air conditioner for inputting detail data. The order of the [in1, in2,---] is for the order of auto address.

(2) Input each item of the [2.Detail data input]. The items are as follows.

Item	Description
Installation site(name)	Input for a memo.
Model No.	Input for a memo.
Model name	Since the automatic type identification in the DIII-NET connection and the model name of the PCB connection input by following the window of the [(5)Access Method Selection] in the [4.1.1 Selecting of customer data and others] are roughly designated model name, select here the model name in detail. After selected, model name can be edited. In case of an indoor unit, input model name since there are no selection items.
Centralized address	Input for a memo.
Auto address	In case of the DIII-NET connection, address is automatically taken in. In the window of the [Network Map Display], the icons are displayed in order of auto addresses. * Not to possible to change.
AIRNET address	In case of the DIII-NET connection, AIRNET address is automatically taken in. This address is set to an indoor unit by remote controller. * Not possible to change.

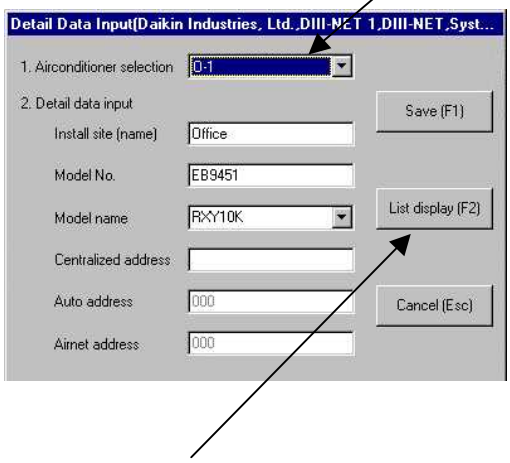
(3) After one set of data for an air conditioner are completed to input, press the [Save(F1)].

(4) By selecting another air conditioner with the [1.Airconditioner selection] to input necessary data, press the [Save(F1)].

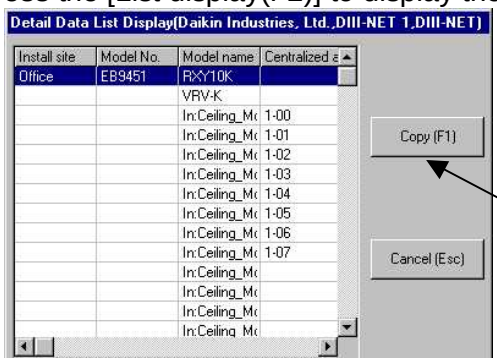
(Notes)

* In case of replacing PCB of an air conditioner, auto addresses in the network are changed.
* If in the DIII-NET connection, a PCB of an air conditioner is replaced after making a network map once, the detail data for air conditioners will be deviated by reason of managing the detail data for each air conditioner in order of auto address. To correct the deviation, move the detail data in accordance with the following procedures. (Auto address and Airnet address are not related to since they are automatically identified.)
* To correct the deviation, move the detail data in accordance with the following procedures.(an example of transfer the detail data of [In3] to [In7])

[1] Select the [In7] by the[1.Airconditioner selection] in the window of the [Detail data input].



[2] Press the [List display(F2)] to display the window of [Detail Data List Display].



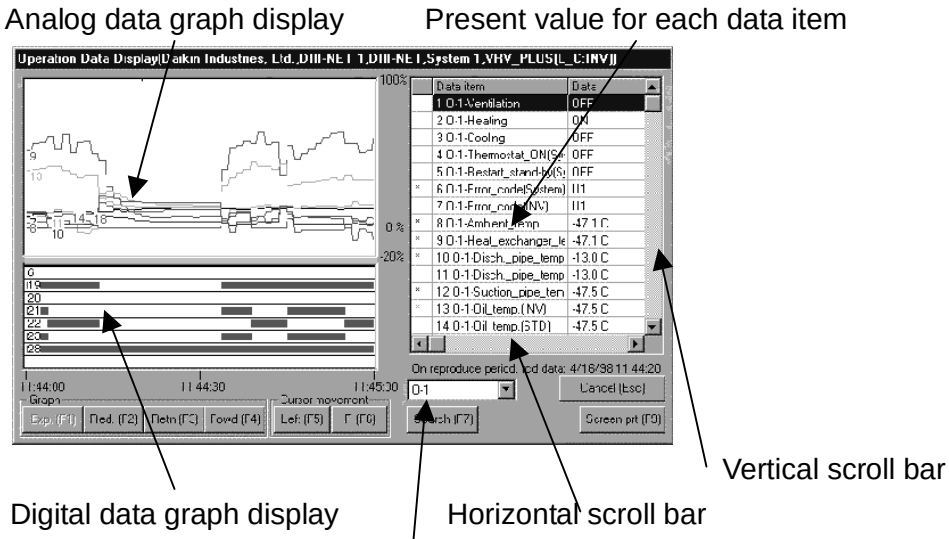
[3] By placing the cursor at the transferring [In3] and pressing the [Copy(F1)] button, the detail data of the [In3] are transferred to the [In7].

[4] Press the [Cancel(ESC)] to return to the window of the [Detail data input].

(5) After completing to input, press the [Cancel(ESC)] to return to the window of the [Network map display].

4.1.4 Displaying of operation data

The window of the [Operation Data Display] is displayed below.
The operation data for a system are displayed by pressing the button of the [Operation Data Display(F6)] after selecting the [Display mode(F4)] in the window of the [Network Map Display]. One window is displayed per one system.



(1) Analog data graph display(upper left in the window)
* Time and percentage ratio(-20% to +100%) to full-scale are indicated in the horizontal axis and in the vertical axis respectively. Since full-scale is located at the end of the right side of data- item list in the window, see by moving the horizontal scroll bar to the right. When at 100%, full scale value is indicated.
* The number and color of a graph coincide with those of ＊ at the left end in the data item in the window.
* Eight items per an air conditioner can be displayed.

(2) Digital data(ON/OFF) graph display(left bottom in the window)
* In case of ON, blue bar is displayed.
* The number of a graph coincides with that of the left end in the data item in the window.
* Eight items per an air conditioner can be displayed.

(3) Present value display of each item (list at the right side in the window).

Item of list	Description
(left end)	Data in a graph corresponds to colored ＊.
Data item	From left, [Successive number], [Distinction and number of indoor and outdoor unit], and [item name] are displayed.
Data	Operation data are displayed. In case of DIII-NET connection, updating of operation data of an indoor unit is at intervals of several minutes.
Update time	The time of data updated is displayed. In case of DIII-NET connection, there are items updating at intervals of several minutes.
Full-scale	When graphing analog data, full-scale corresponds to a 100% value.

* Eight items per an air conditioner for analog data and digital data are displayed respectively. By placing the cursor in a data item to be displayed and pressing the [F12] key, the data item is marked at the left end by * and its graph is displayed in the left side of the window at the same time.
* In case of ending a graph displayed by a data item, place the cursor in the data item on the list at the right in the window and press the [F12] key.

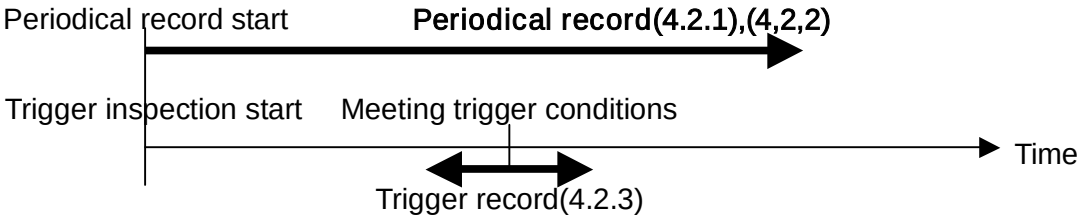
(Notes)

1. In the PCB connection, the data item with [***Retry] does not show [Retrying], but shows to have retried before.
2. On the data item of an indoor unit connected to the PCB, [Internal and external transmission error] shows the state that due to an indoor unit's error, signal transmission between an indoor unit and an outdoor unit cannot be performed. [Indoor unit error] shows the error state that it is impossible for an indoor unit to switch thermostat ON. [System error] shows that the overall system between an indoor unit and an outdoor unit is error. [Error between remote controllers] shows the error state between an indoor unit and a remote controller.
3. Because of not covering all of model classification in the TYPE 3 software, small horse-power models may display the items of not existing sensors and actuators.
   Neglect this and refer to the Service Manual in detail.

(4) Press the [Cancel(ESC)] to return to the window of the [Network Map Display].

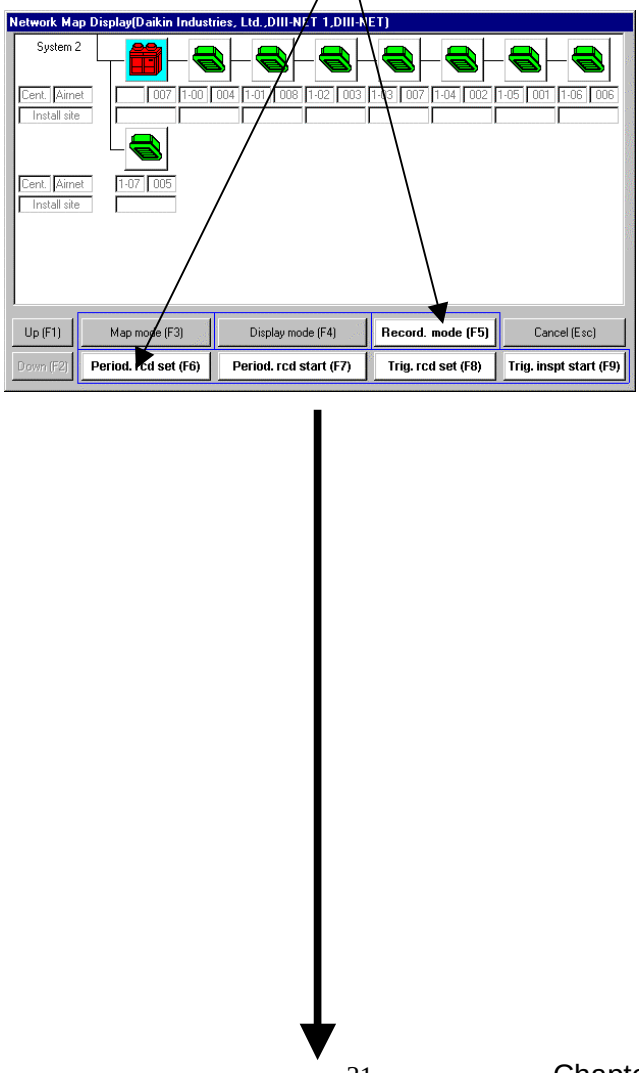
4.2 Setting of recording

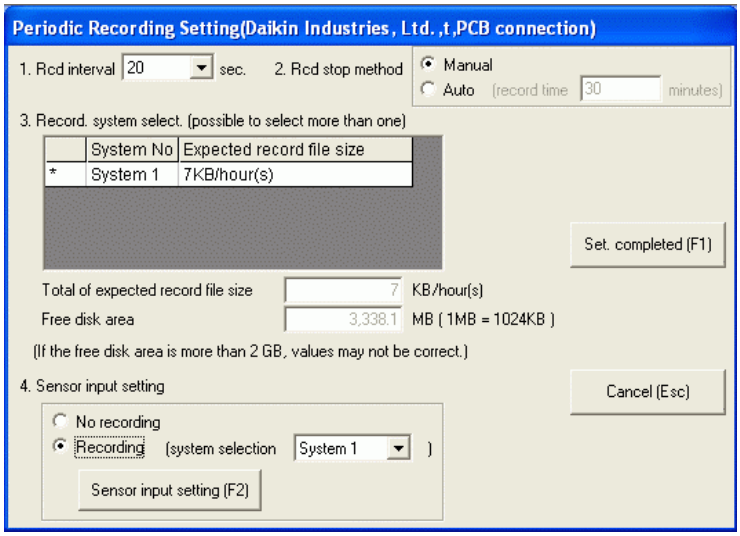
The method of recording operation data consists of two: one is the [Periodical recording] which records successively for a constant time, and another is the [Trigger recording] which records before and after meeting trigger conditions(conditions of digital data ON/OFF). The TYPE 3 software can set the method separately. Sensor input can be set only in the periodical recording.



4.2.1 Setting of periodical recording (in case of DIII-NET connection)

The window of the [Periodical record setting] is displayed by pressing the button of the [Periodical record setting(F6)] after selecting the [Recording mode(F5)] in the the window of the [Network Map Display].





The window of [Periodical record setting]

Procedures

1) Set the [1.Recording interval], the [2. Recording end method], and the [3. Recording system selection].

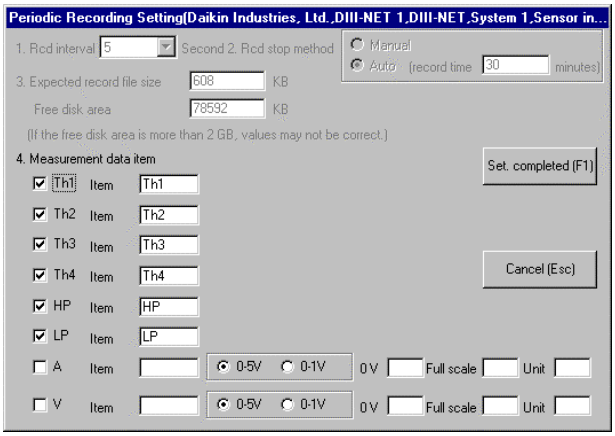
Setting item	Description
1. Recording interval	1) Select the time intervals recording in the hard disk of the personal computer.(5, 10, 20, 30, 60, 120, 180, 300, 600 seconds) 2) Since less time intervals need more recording data area for the hard disk, the initially set value of 20 seconds is recommended. 3) When recording for a long time (more than 2-3 days), it is recommended that the recording interval should be 120 to 300 seconds. * The recording interval is an interval recorded in the hard disk of the personal computer. The operation data taken in from each air conditioner may be recorded at intervals of several minutes in case of indoor units.
2. Recording end method	Set a recording stop method as follows. **Manual** : In the window of the [Network Map Display], continue to record until pressing the [Periodical record stop(F7)] button. **Automatic** : Recording of operation data ends automatically after arriving at a pre-set recording time. Input a recording time with a minute unit.
3. Recording system selection	1) In the DIII-NET connection, it is possible to set [Recording] or[No recording] for every system(each outdoor unit). Multiple selection is possible. 2) By placing the cursor in the [System No.] to press the [F12] key, [Recording] or [No recording] is shifted. The left side of system recording is marked ○.

(Notes)
Since the [Total of expected record file size(KB/hour(s))] and the [Free hard disk area (MB)] are displayed, confirm if the free area is enough in recording the data. Be careful to note that if the free hard disk area of the personal computer is more than 2 GB, values may not be displayed correctly.

2) Set the [4. Setting of sensor input].

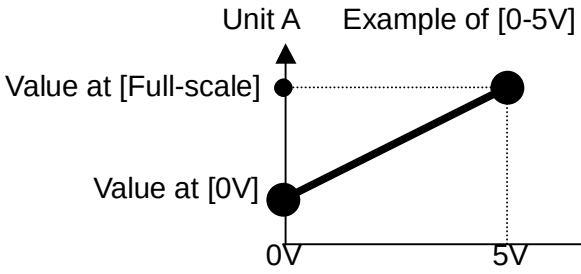
Select the [Recording] or [No recording], and also the [System] when recording.

When recording, further press the [Sensor input setting(F2)]. Set the [Measurement data item] by following the window below.



(Note)
In case of shifting [Th5] to [A] or [Th6] to [V] by using the switch of the Checker TYPE 3, shift at a window before the window of [Display of network map], otherwise, operation data will not be recorded correctly.

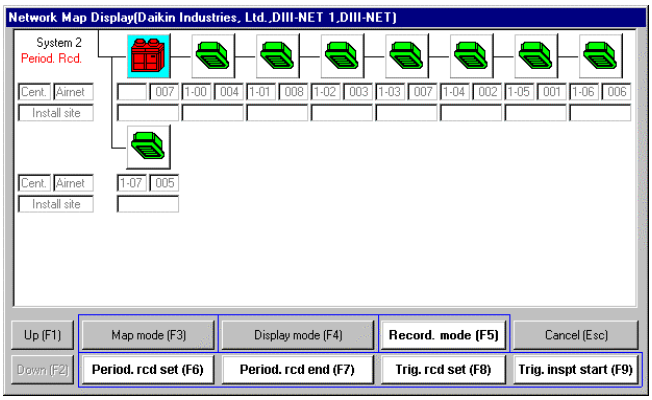
Set the following items.

Item	Description for setting
Th1 Th2 Th3 Th4 HP LP	(1) Click with the mouse the [Check box]at the left of sensor connectors to be used. (2) Input the [Item name] for recording data.
Th5 Th6	(1) Click with the mouse the [Check box]at the left of sensor connectors to be used. (2) Input the [Item name] for recording data. (3) If the switch of the Checker TYPE 3 is positioned at [A] or [V], set further the items located at the right side in the window. a. Select the range of voltage signals with 0-5VDC or 0-1VDC. b. Input a value at 0 V in the item of [0 V]. c. Input a value at full-scale (5V or 1V) in the item of [Full-scale]. d. Input unit in the item of [Unit].  (Horizontal axis : voltage signals from measuring instrument, vertical axis : recording values corresponding to voltage signals)

When completing to set the above, press the [Setting complete(F1)] to return to the window of the [Periodical record setting].

3) Press the [Setting complete(F1)] in the window of the [Periodical recording Setting] to return to the [Network Map Display].

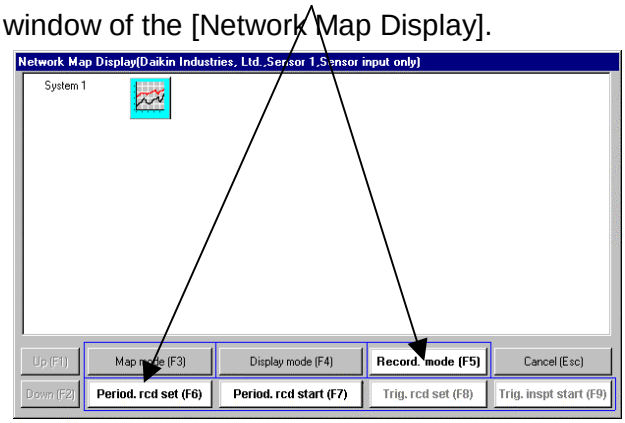
4) When starting the [Periodical record], press the [Periodical record start(F7)] in the window of the [Network Map Display] to display the [Periodical recording] in red at the upper left in the window. Also the indication of the button is changed to the [Periodical record end(F7)]



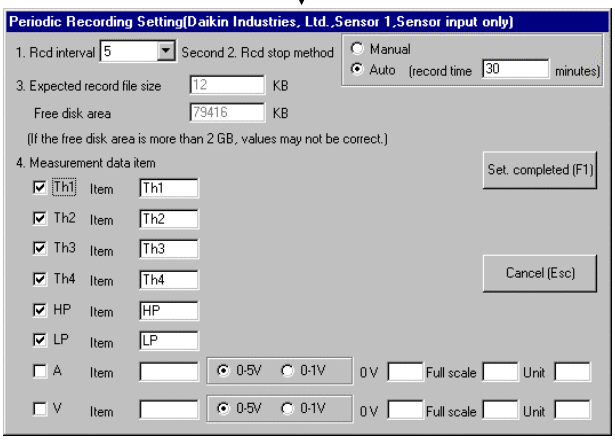
5) When ending the [Periodical record] manually, press the [Periodical record end(F7)]. If in the [Recording end method] of ①, the [Automatic] is set, recording data is automatically ended after pre-set [recording time].

4.2.2 Setting of periodical recording (in case of sensor input only)

The window of the [Periodical record setting] is displayed by pressing the button of the [Periodical record setting(F6)] after selecting the [Recording mode(F5)] in the window of the [Network Map Display].



The window of the [Periodical record setting]



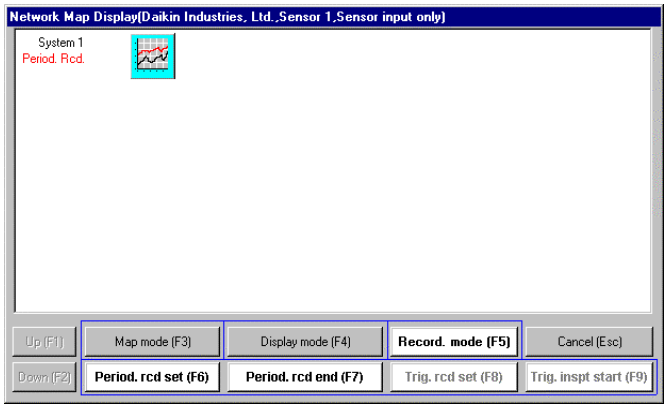
Procedures

(1) Set the [1. Recording interval] and the [2. Recording end method].
Refer to (1) of the “4.2.1 Setting of periodical recording(in case of DIII-NET connection and PCB connection). (There is no setting of the [3. Recording system selection]

(2) Set the [4. Setting of sensor input]
Refer to (2) of the “4.2.1 Setting of periodical recording (in case of DIII-NET connection and PCB connection).

(3) When completing to set the above, press the [Setting complete(F1)] to return to the window of the [Network Map Display].

(4) When starting the periodical recording, press the [Periodical record start(F7)] in the window of the [Network Map Display] to display the [Periodical recording] in red at the upper left in the window. Also the indication of the button is changed to the [Periodical record end(F7)].



(5) When ending the periodical recording manually, press the [Periodical record end(F7)]

If in the [Recording end method] of (1), the [Automatic] is set, recording data is ended automatically after pre-set [recording time] .

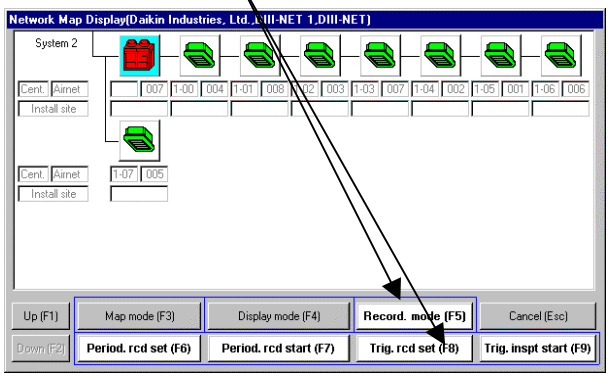
4.2.3 Setting of trigger recording

* System 1 only is possible to set trigger recording in the TYPE 3 software.
* The [Trigger recording] is a method which records before and after meeting trigger conditions (a combination of digital values (ON/OFF) of operation data).

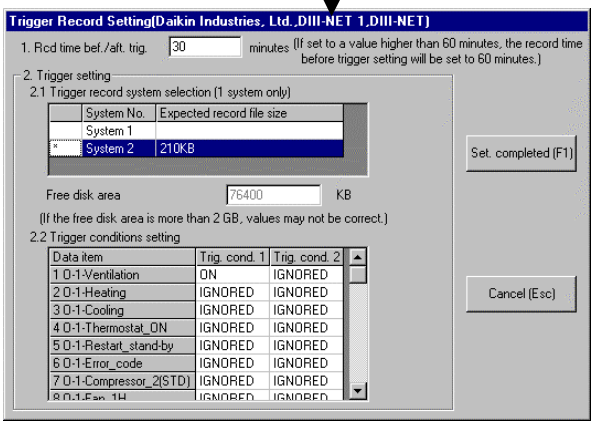
(Notes)

1. Since air conditioners conforming to the DIII-NET in the internal and external transmission method will take maximum several minutes for data-transfer intervals, triggering may be delayed several minutes even if actual changes are taken place in an air conditioner.
2. Depending on a combination of trigger conditions, triggering may not occur because of time deviation between the changes of an air conditioner and its data transfer.

The window of the [Trigger record setting] is displayed by pressing the button of the [Trigger record setting(F8)] after selecting the [Recording mode(F5)] in the window of the [Network Map Display].



The window of [Trigger record setting]



Procedures

(1) Set the [1. Record time before and after trigger] and the [2. Trigger setting].

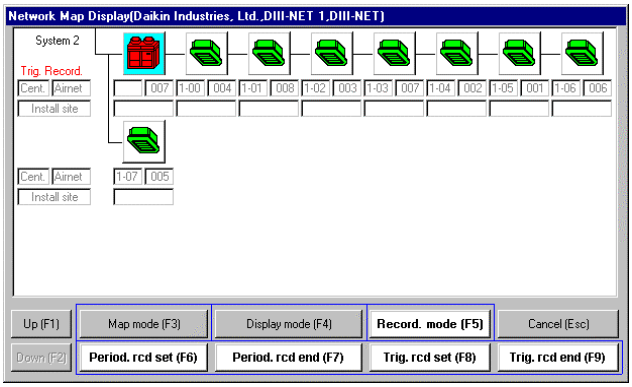
Setting item	Description
1. Record time before and after trigger	When the trigger conditions are met in the window of the [2.2 Trigger conditions setting], set a time by minute unit to determine the recording time before and after trigger. If setting [30 minutes] for the record time, the operation data for 30 minutes before and after trigger are recorded. If set to a value higher than 60 minutes, the record time before trigger setting will be set to 60 minutes and that after trigger will be set to the value. The interval of recording to the hard disk of the personal computer is fixed 10 seconds.
2.1 Trigger record	System 1 only is possible to set trigger recording in the TYPE 3 software. Select a System(each outdoor unit) recording trigger.

system selection	By placing the cursor in the [System No.] to press the [F12] key, [Recording] or [No recording] is shifted. The left side of system recording trigger is marked *.
2.2 Trigger conditions setting	The [Trigger conditions] can set two groups: the [Trigger condition 1] and the[Trigger condition 2]. If either group is met to trigger conditions, trigger will start recording. • Within a group, when all the conditions are met to trigger conditions, trigger will start recording. In the window example of the previous page , by the [Trigger conditions 1], the [Thermo ON] is ON and trigger is started, if [Error code] shows error state, but no other items are related to. When clicking with the mouse a column of the [Trigger conditions 1] or the [Trigger conditions 2] in the right side of the [Data item], since the selection items (OFF/ON/Neglect) are displayed, select applicable ones.

(Note)
Since the [Total of expected record file size(KB)] at the right side of [2.1Trigger record system selection] window and the [Free hard disk area(KB)] at the bottom of the window are displayed, confirm if the free area is enough in recording the data. However, be careful to note that if the free hard disk area of the personal computer is more than 2 GB, values may not be displayed correctly.

(2) Press the [Setting complete(F1)] to return to the [Network Map Display].

(3) When starting the trigger record inspection, press the [Trigger inspection start(F9)] in the window of the [Network Map Display] to display the [Trigger inspecting] in red at the upper left in the window. Also the indication of the button is changed to the [Trigger inspection end(F9)]. When trigger conditions are met to start trigger recording, the red characters at the upper left in the window are changed to the [Trigger recording], and also the indication of the button is changed to the [Trigger record end(F9)].



(4) When ending the [Trigger inspecting] or the [Trigger recording] manually, press the [Trigger inspection end (F9)] button or the [Trigger record end(F9)] button. After starting trigger recording, and recording the operation data of a selected system for the [Record time before and after trigger] set by (1), the trigger recording is automatically ended.

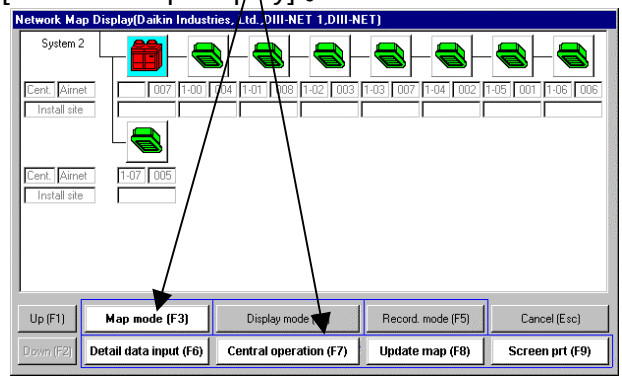
4.3 Centralized operation

In the DIII-NET connection, the centralized operation of indoor units can be made from the Service Checker TYPE **III**.

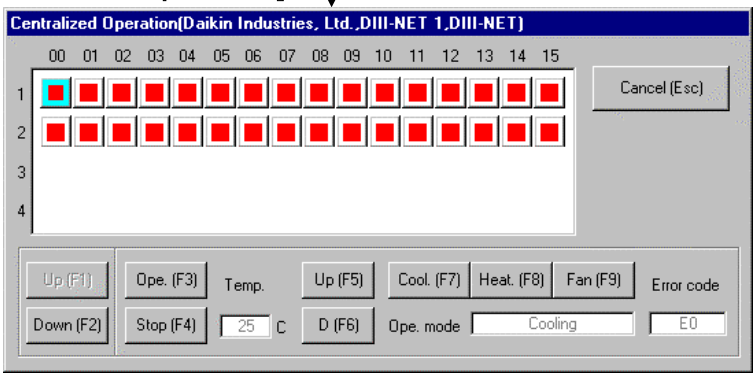
(Notes)

If no centralized control equipment on the DIII-NET is provided, set centralized address. After connecting the Checker TYPE 3 to the DIII-NET, and setting customer data by the TYPE 3 software, display the window of the [Network Map Display].
To set in this window centralized address to each indoor unit by using a remote controller, centralized operation will become possible.
From the next time, the centralized operation can be performed without setting the centralized address by using both customer data obtained this time and the network map without setting of centralized adress.

The window of the [Centralized operation] is displayed by pressing the button of the [Centralized operation(F7)] after selecting the [Map mode(F3)] in the window of the [Network Map Display].。



The window of the [Centralized operation]



In this window, air conditioners possible to make centralized operation displayed in order of centralized address by icons.
The icons are displayed with colors changed according to the state of an air conditioner.

Color	Description
Red	Error state
Purple	Transmission error
Green	Operating state
Grey	Stopped state

Procedures

(1)Make centralized operation by placing the cursor at the icon of target air conditioner, and pressing the buttons at the bottom in the window and inputting figures.

Button, Column	Description
Up(F1)	Move upward in the window.
Down(F2)	Move downward in the window.
Operation(F3)	Command air conditioner to operate
Stop(F4)	Command air conditioner to stop
Up(F5)	Set temperature with a range of 0-35℃. * Even if an air conditioner with the maximum temperature rating of 25℃ is set to 35℃ with[△(F5)], the display is returned to 25℃ in 2-3 seconds.
D(F6)	
Cooling(F7)	Issue cool mode command to air conditioner.
Heating(F8)	Issue heat mode command to air conditioner.
Fan(F9)	Issue fan mode command to air conditioner.
Error code	If error occurs, display error code.
Right side in the window	Same statement as remote controller is displayed with red characters in the right side in the window. [Under Center Control] : Not possible to operate from Checker [Under Forced Stop] : Not possible to operate from Checker other than stop. [Under Centralized Control] : If other centralized instrument has prohibited the operations of indoor units from a remote controller at hand, this sign is displayed on each indoor unit. The indoor units are not possible to operate other than stop. [Under Operation Shift Control] : In case of wiring multiple indoor units to one handy remote controller or connecting an Cool/Heat selector to outdoor units, this sign is displayed when selecting an indoor unit impossible to shift operation mode.

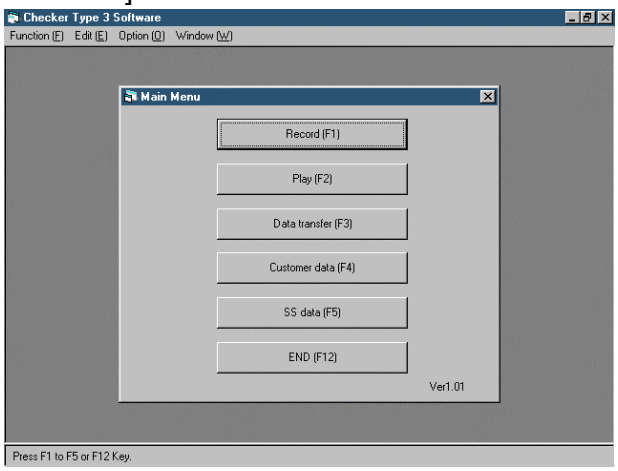
(2) When ending this window, press the [Cancel(ESC)] button.

Chapter 5 Playing back of operation data

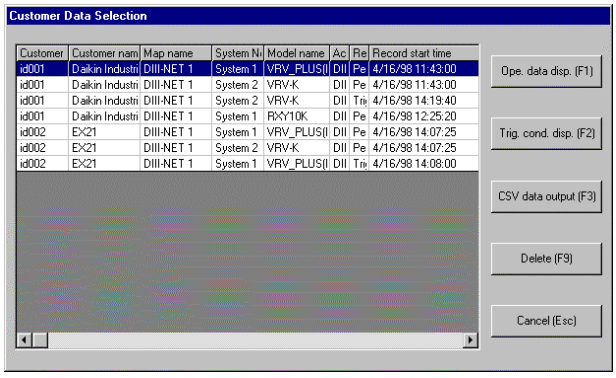
5. 1 Playing of operation data

Procedures

(1) Press the [Play F2] in the [Main Menu] to display the window of the [Customer Data Selection].



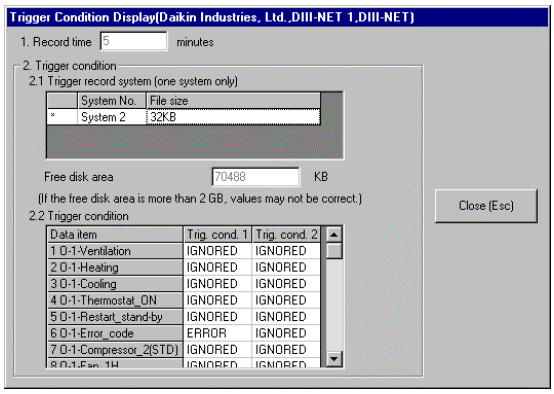
(2) The window of the [Customer Data Selection] is displayed below.



Place the cursor in the target operation data.

[Operation data display(F1)]: The operation data are displayed. Proceed to (3).

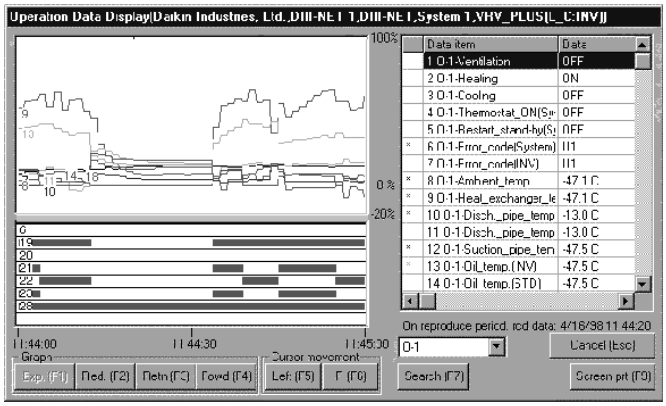
[Trigger condition display(F2)]: In case of operation data recorded by the [Trigger recording], the setting of the trigger recording at that time is displayed.



[CSV data output(F3)]: The data of CSV format possible to be read by commercial integrated software are output. Proceed the [5.3 CSV output].

[Delete(F9)]: The operation data are deleted.
[Cancel(ESC)]: The return to the [Main Menu] is made.

(3) The window of the [Operation data display] is shown below.

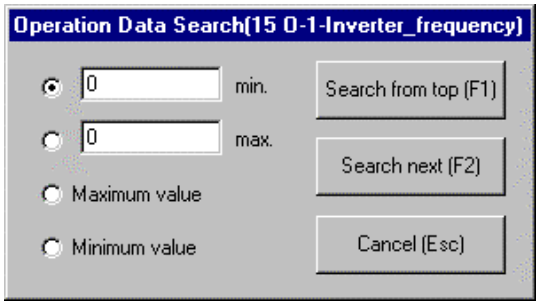


* Refer to the “4.1.4 Displaying of operation data” regarding detailed display.
When clicking the mouse on a graph, that data at the time are displayed in the right list . The following buttons function to a graph.

Button	Description
Expansion(F1)	A graph is displayed by shortening the display time of the graph.
Reduction(F2)	A graph is displayed by lengthening the display time of the graph.
Return(F3)	A graph is moved to the left in the window.
Forward(F4)	A graph is moved to the right in the window.
Left(F5)	The cursor on a graph is moved to the left in the window.
Right(F6)	The cursor on a graph is moved to the right in the window.
Print screen (F9)	Screen is printed.

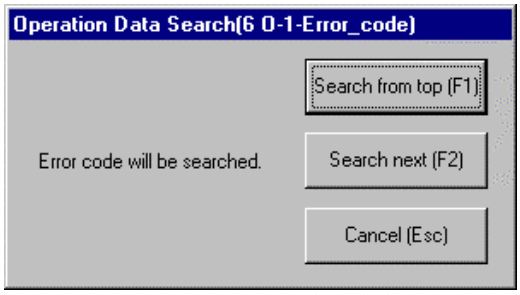
(4) The maximum and minimum analog data, and error code can be searched.

* Digital data cannot be searched.
Press the [Search(F7)] button by placing the cursor in data item to be searched in the list at the right in the window.
[1] In case of analog data



Input the conditions at the left in the window.
[Search from the top(F1)]: Searching is made from the top of operation data.
[Search next(F2)]: Searching is made in the direction from a cursor position on a graph to time lapse.
[Cancel(ESC)]: Returning to the window of the [Operation Data Display].

[2] In case of error code



Data with error code is searched.

[Search from the top(F1)]: Searching is made from the top of operation data.

[Search next(F2)]: Searching is made in the direction from a cursor position on a graph to time lapse.

[Cancel(ESC)]: Returning to the window of the [Operation Data Display].

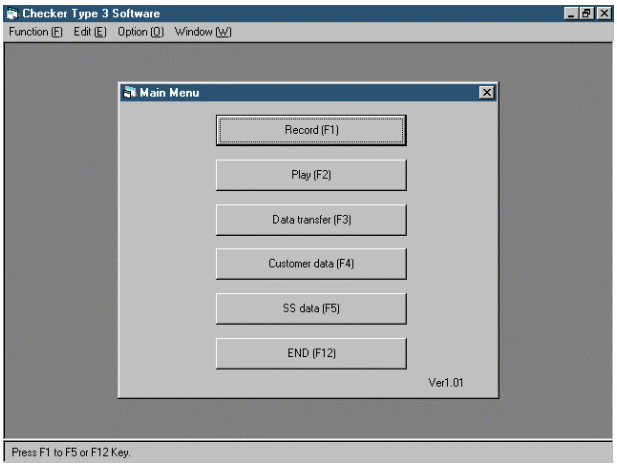
(5) Press the [Cancel(ESC)] button to return to the window of the [Customer Data Selection].

5.2 Playing back network map

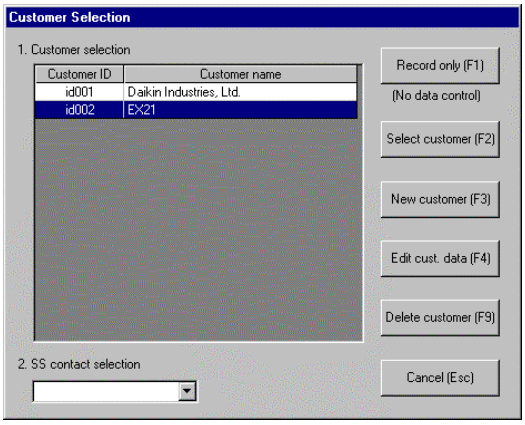
The network map is played back from customer data.

Procedures

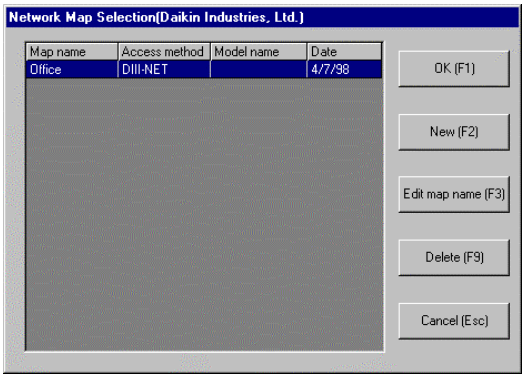
(1) Press the [Customer data(F4)] in the [Main Menu] to display the window of the [Customer Selection].



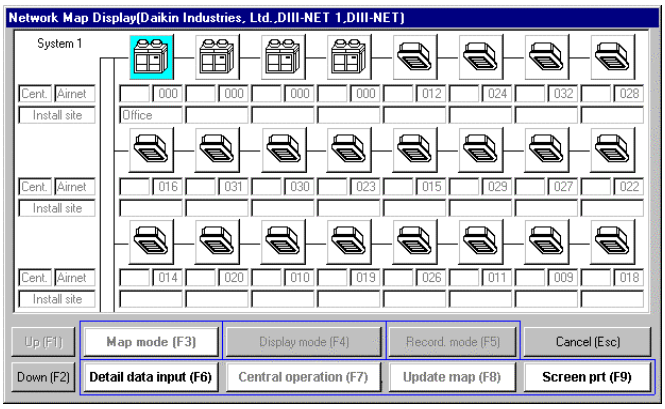
(2) The window of the [Customer Selection] is displayed below.
Press the [Select customer(F2)] to display the window of the [Network Map Selection].



(3) The window of the [Network Map Selection] is displayed below.
By placing the cursor in the target name of the network map, press the [OK(F1)] button to proceed the window of the [Network Map Display].



(4) The window of the [Network Map Display] is displayed below.



[UP(F1)], [Down(F2)]: The window is scrolled upward and downward respectively.

[Detail data input(F6)]: The detail data of an air conditioner designated by cursor are displayed.

[Print screen(F9)]: Screen is printed.

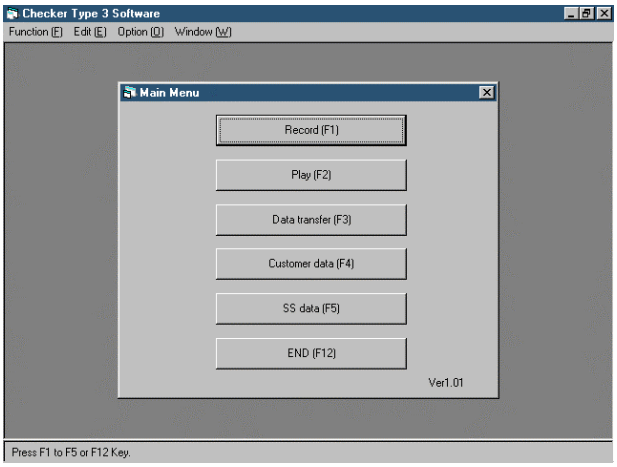
[Cancel(ESC)]: Return to the window of the [Network Map Selection].

5.3 CSV output

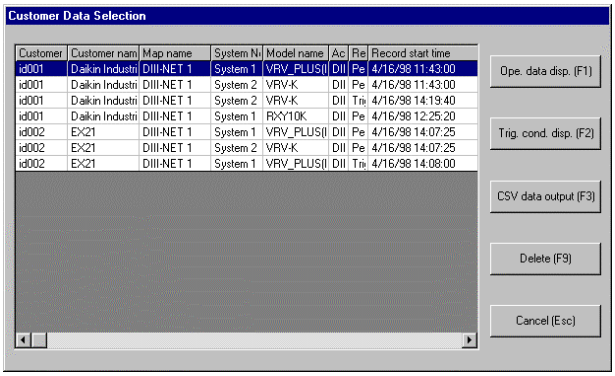
The data of CSV format possible to be read into by a commercial integrated software are output.

Procedures

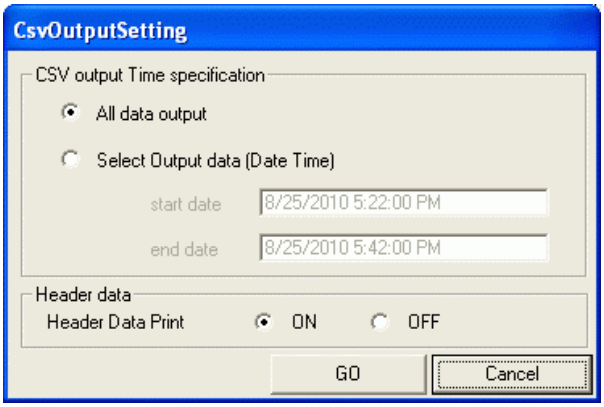
1) Press the [Play(F2)] in the [Main Menu] to display the window of the [Customer Data Selection].



2) The window of the [Customer Data Selection] is displayed below.
Press the [CSV data output(F3)] to display the window of the [Save with file name].

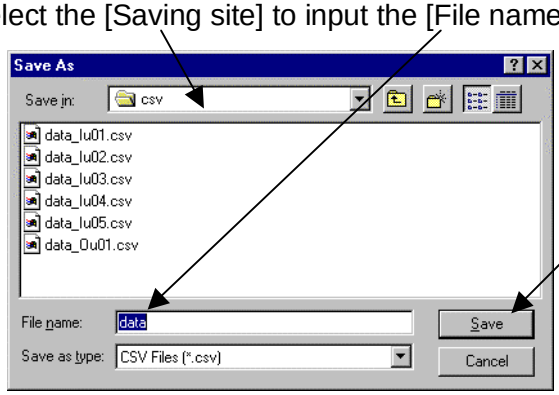


3) CSV file output setting

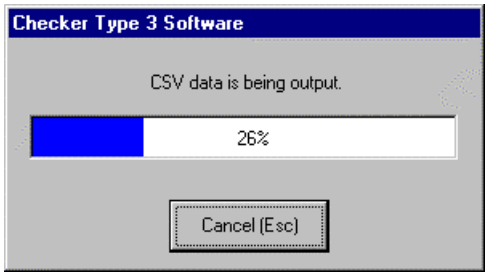


set output date and header data

4) The window of the [Save with file name] is displayed below.
Select the [Saving site] to input the [File name] and press the [Save] button.



5) While outputting CSV, the following window is displayed



(Notes)
1. In the CSV file, one file per an air conditioner is output. In case of one outdoor unit and eight indoor units, one CSV file for the outdoor unit and eight CSV files for the eight indoor units are output respectively.
2. If the size of CSV file has become bigger because of being recorded for a long time and resultantly, the integrated application software can not read in by one file, the file may be divided into multiple files automatically.

* Estimated time in CSV data processing

In the DIII-NET connection, if one outdoor unit and eight indoor units are periodically recorded at intervals of 5 seconds for 3.8 days, the file size of the operation data will be approximately 32MB. The CSV file size for the outdoor unit and the indoor units becomes approximately 29MB and 5MB.

(Since the size of CSV file depending on the model of an air conditioner and its capability respectively, note that the above time is only an estimation.)

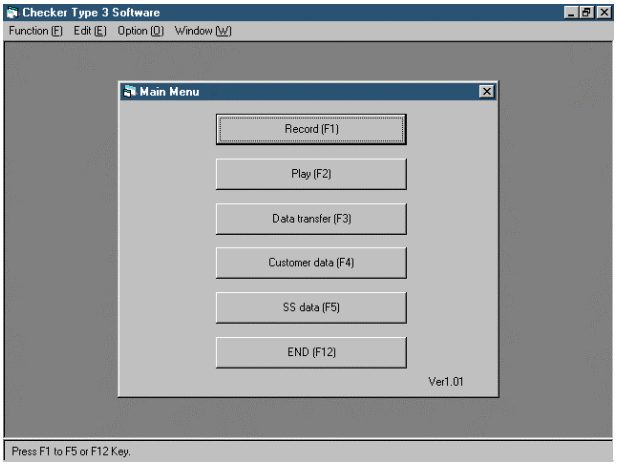
5.4 Data transfer

To exchange customer data and operation data, data transfer to a floppy disk and other devices is possible.

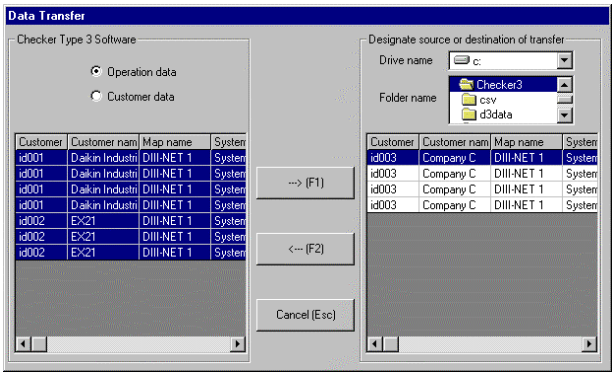
(Note)
In case of exchanging data between personal computers, copy the data to a folder (directory) installed the TYPE 3 software in the section of the “1.1 Installing TYPE 3 software”.

Procedures

(1) Press the [Data transfer(F3)] in the [Main Menu] to display the window of the [Data Transfer].



(2) The window of the [Data Transfer] is displayed below.



The left in the window is a site on the hard disk of a personal computer installed the TYPE 3 software(fixed).

The right in the window is a destination of transfer. The [Drive name] and the [Folder name] (directory name) can be changed.

The unit of data transfer consists of two: [(1)Operation data and Customer data] and [(2)only Customer data].

* The data of network map are included in the customer data

[1] Transferring operation data and customer data

A. In case of transferring data from the hard disk of a personal computer to a floppy disk or other devices

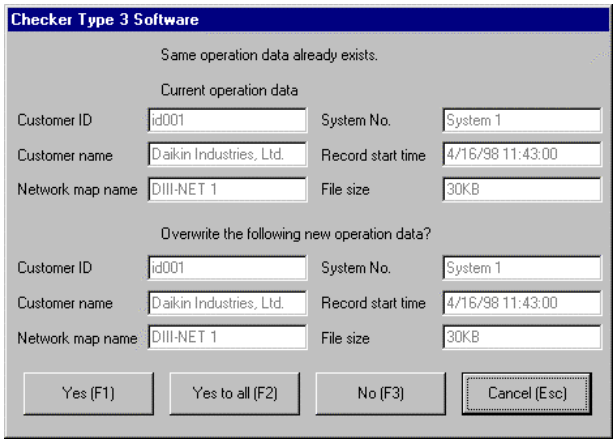
1. Select the [Operation data] at the left side in the window before selecting the transferring operation data in the list below.
2. Select the destination of transfer by using the [Drive name] and the [Folder name] (directory name) at the right side in the window.
3. Pressing the [→(F1)] to transfer the operation data and customer data.

B. In case of transferring data from a floppy disk or other devices of a personal computer to the hard disk

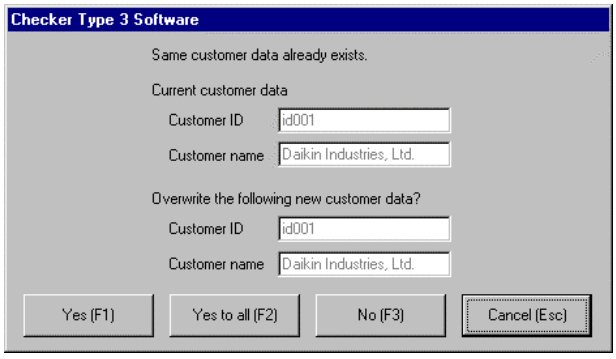
1. Select the [Operation data] at the upper left in the window.
2. After setting the floppy disk or other devices to the personal computer, select the source of transfer by using the [Drive name] and the [Folder name](directory name) at the right side in the window.
3. By using the list below the [Folder name], select the operation data.
4. Pressing the[←(F2)] to transfer the operation data and customer data.

C. If the operation data with the same title already exists, the following window is displayed.

[Yes(F1)]: Only this operation data is overwitten.
[Overwrite all(F2)]: All the operation data after this are overwitten.
[No(F3)]: While not overwriting this operation data, the next operation data are successively being transferred.
[Cancel(ESC): Data transfer is stopped.



D. If the customer data with the same title already exists, the following window is displayed. The functions of the buttons are same as the above [C].



[2] Transfer only customer data

Same as the [[1]Transferring operation data and customer data] other than selecting the [Customer data] at the upper left in the window.

(3) After ending the data input, press the [Cancel(ESC)].

Specifications

Specifications of Service Checker TYPE 3.1

Item	Specifications
External dimensions	180(width) x 150(depth) x 45(height)mm (excluding projecting sections)
Weight	Approx. 700g
Power supply	5VDC, 300mA(USB B-type) [use PC, USB-adapter, USB-battery].
Power consumption	Approx. 1.2W
Temperature and humidity conditions	-10 to 55℃ (-10 to 35℃ for AC adapter), 95% RH or less (no condensation)
RS-232C interface	Asynchronous (19200bps), D-sub 9-pin male (straight connection to a personal computer)
Sensor input section	Temperature at 6 points (one point for discharge pipe), pressure at 2 points (high pressure and low pressure). Two out of the 6 points can be switched to receive voltage signals (0 to 5VDC or 0 to 1VDC).

Standard configuration

Product name	Part number	Description
Checker TYPE 3.1	-	(1) Service Checker TYPE3.1 (2) RS-232C cable for personal computers (D-sub 9-pin female/ D-sub 9-pin female straight, 2m, shield cable) (3) USB cable (A-type / B-type, 2m, shield cable)
TYPE3 Software2	999151T	Software for English version Windows and this manual

Option parts

Product name	Part number	Description
Sensor Kit	999107T	(1) Outside temp. thermistor (2m) (2) Heat exchanger temp. thermistor (2m) (3) Dischage pipe temp. thermistor (2m) (4) Sucion pipe temp. thermistor (2m) (5) Indoor air temp. thermistor (2m)[3 sets] (6) High pressure sensor (2m) (7) Low pressure sensor (2m) (8) Optional cable (2m)[2 sets] (9) Union pipe joint/flare nut [2 sets] * All cable is none shield cable.

List of Applicable Models

Support model and information see Internet Web page.

http://airnnet.jpn.org/chk/

Please follow Daikin's purchasing procedure to purchase the checker and parts.
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The above specifications are valid as of Nov, 2012 and they may be modified for improvement without any advance notice.

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