OPERATING MANUAL

PC CONTROLLER for VRF System

UTR-YOTB

Ver. 2.0

- Before using this controller, please read this [OPERATING MANUAL] to ensure correct operation.
- Please keep this manual for future reference.
- Please read the LICENCE AGREEMENT in the manual at first.

FUJITSU GENERAL LIMITED

LICENSE AGREEMENT FOR "PC CONTROLLER FOR VRF SYSTEM"
(VERSION 2.0)

IMPORTANT-READ CAREFULLY

This "PC CONTROLLER for VRF SYSTEM" License Agreement (LICENSE AGREEMENT) is a legal agreement between you and Fujitsu General Limited (FGL) for the use of VRF PC CONTROLLER products designated below, which includes computer software and printed materials, and may include online or electronic documentation (SOFTWARE PRODUCT or SOFTWARE). By installing, copying, or otherwise using the SOFTWARE PRODUCT, you accept to be bound by all of the terms and conditions of this LICENSE AGREEMENT. If you do not agree to all of the terms and conditions of this LICENSE AGREEMENT, you may not use the SOFTWARE PRODUCT and shall promptly return the SOFTWARE PRODUCT to the place from which you have obtained it.

1. SOFTWARE PRODUCT LICENSE.

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as by other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed to you, not sold. FGL owns the title, copyright, and other intellectual property rights in the SOFTWARE PRODUCT.

2. GRANT OF LICENSE.

FGL hereby grants you the limited, non-exclusive and non-transferable rights only for the purpose of controlling the VRF air-conditioning system products (VRF) provided you comply with all terms and conditions of this LICENSE AGREEMENT.

3. COPYRIGHT.

All right, title, and copyright in and to the SOFTWARE PRODUCT, and any copies of the SOFTWARE PRODUCT are owned by FGL. The SOFTWARE PRODUCT is protected by copyright laws and international treaty provisions. Therefore, you may copy the SOFTWARE PRODUCT solely for backup or archival purposes.

4. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS.

(1) LIMITATIONS ON REVERSE ENGINEERING, DECOMPILATION, AND DISASSEMBLY.
You may not reverse engineer, decompile, or disassemble the SOFTWARE PRODUCT, except and only to the extent that applicable law expressly permits such activity notwithstanding this limitation.

(2) RENTAL.
You may not rent or lease the SOFTWARE PRODUCT.

(3) SOFTWARE TRANSFER.
You may not transfer the SOFTWARE PRODUCT to any person and/or entity (-ies) either payable or free of charge.

(4) TERMINATION.
Without prejudice to any other rights, FGL may terminate this LICENSE AGREEMENT if you fail to comply with the terms and conditions of this LICENSE AGREEMENT. In such an event, you shall promptly return all originals and copies of the SOFTWARE PRODUCT to FGL.

5. USE OF SOFTWARE PRODUCT.

You may install and use the enclosed SOFTWARE PRODUCT on a single terminal connected to a single computer. You may not network the SOFTWARE or otherwise use it on more than one computer terminal at the same time. The infrastructure necessary to use this software (PC, accessories, etc.), shall be prepared separately by you.

6. NO WARRANTY.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, FGL EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE SOFTWARE PRODUCT. THE SOFTWARE PRODUCT AND ANY RELATED DOCUMENTATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OR MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK ARISING OUT OF USE OR PERFORMANCE OF THE SOFTWARE PRODUCT REMAINS WITH YOU.

7. LIMITATION OF LIABILITY AND CUSTOMER REMEDIES.

FGL'S ENTIRE LIABILITY AND YOUR EXCLUSIVE REMEDY UNDER THIS LICENSE AGREEMENT SHALL BE, AT FGL'S OPTION, REPLACEMENT OF THE SOFTWARE WHICH IS RETURNED TO FGL. THIS LICENSE AGREEMENT SHALL ALSO APPLY TO THE REPLACEMENT SOFTWARE SUPPLIED UNDER THIS SECTION 7.

8. NO LIABILITY FOR CONSEQUENTIAL DAMAGES.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL FGL BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFIT, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) DIRECT OR INDIRECT, TO YOU OR TO ANY THIRD PARTY, ARISING OUT OF THE USE OR INABILITY TO USE THIS PRODUCT, EVEN IF FGL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

9. ENTIRE AGREEMENT.

This LICENSE AGREEMENT (including any addendum or amendment to this LICENSE AGREEMENT included with the SOFTWARE PRODUCT) is the entire agreement between you and FGL relating to the SOFTWARE PRODUCT and supersedes all prior contemporaneous oral or written communications, proposals and representations with respect to the SOFTWARE PRODUCT or any other subject covered by this LICENSE AGREEMENT.

10. INDEMNITY.

You agree to indemnify and hold FGL, and its subsidiaries, affiliates, officers, agents, co-branders or other partners, and employees, harmless from any damage, claim or demand, including without limitation reasonable attorneys' fees, made by any third party due to or arising out of your violation of the terms and conditions of this LICENSE AGREEMENT, or your violation of any rights of another person or entity.

11. GOVERNING LAW AND JURISDICTION.

To the maximum extent permitted by applicable law, this LICENSE AGREEMENT is governed by the laws of JAPAN. To the maximum extent permitted by applicable law, you and FGL hereby irrevocably submit to the exclusive jurisdiction of the Tokyo District Court and other higher courts having jurisdiction in Japan for the settlement of disputes arising under or in connection with this LICENSE AGREEMENT.

CONTENTS

1. SAFETY PRECAUTION 3

2. PRECAUTIONS WHEN USING THE PC CONTROLLER 4

3. OUTLINE 5
3-1. FEATURES 5
3-2. FUNCTION TABLE 6
3-3. EXPLANATION OF TERMS 7
3-4. NAMES AND FUNCTIONS OF PARTS 10

4. BASIC OPERATION 12
4-1. MONITORING AND CONTROL 12
4-2. BASIC OPERATION FLOW 13
4-3. OPERATION MONITORING SCREEN 14
4-3-1. Main frame 14
4-3-2. Building display 15
4-3-3. Floor layout display 16
4-3-4. List display 19

5. OPERATION CONTROL 21
5-1. OPERATING MONITORING SCREEN DISPLAY 22
5-2. OPERATION CONTROL METHOD
(Operating status/Operation Mode/Set temperature/Fan Speed/
Anti-freeze operation/Up-down swing setting/
Left-right swing setting) 23
5-3. R.C. PROHIBITION METHOD/FILTER RESET
(Standard remote controller operation prohibit setting) 30
5-4. OPERATION PATTERN SETTING 33
5-4-1. Setting method 33
5-4-2. Operation method 34

6. SCHEDULE CONTROL 35
6-1. NAMES AND FUNCTIONS OF EACH SECTION 36
6-2. FLOW OF SCHEDULE CREATION 38
6-3. REGISTERING SCHEDULE NAME 40
6-3-1. Register new schedule name 40
6-3-2. Changing the schedule name 41
6-3-3. Deleting schedule name 42
6-3-4. Schedule copy 43
6-4. SETTING R.C. GROUPS 45
6-4-1. Assigning R.C. Groups 45
6-4-2. Cancel R.C. Group 46
6-5. SETTING OPERATING TIME 47
6-5-1. Creates operating pattern 47
6-5-2. Changing operating patterns and deleting 49
6-5-3. Copying a pattern 50

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-6. CALENDAR SETTINGS 52
6-6-1. Assigning days of week 52
6-6-2. Date assignments 53
6-7. SETTING OFF DAYS 54
6-7-1. Setting the off day 54
6-7-2. Changing the off day 55
6-7-3. Deleting the off day 56

7. RECORDS 57
7-1. OPERATION RECORDS 58
7-1-1. Name and function of each section 58
7-1-2. Displaying operation records 60
7-1-3. Printing the operation record 61
7-2. OPERATING ACCUMULATION TIME 62
7-2-1. Names and functions of each section 62
7-2-2. Displaying operating accumulation time 64
7-2-3. Printing operating accumulation time 65

8. CALCULATION OF ELECTRICITY CHARGE 67
8-1. ENTERING ELECTRICITY CHARGE AND APPORTIONMENT PROCESSING 68
8-2. PAST BILL AMOUNT REFERENCE 70
8-3. DETAILED RESULT OF APPORTIONMENT 72
8-4. BILL PRINT SETTINGS 73
8-5. PRINTING THE BILL 75

9. ERROR DISPLAY 77
9-1. ERROR WARNING 78
9-2. ERROR INFORMATION 80
9-2-1. Printing error information 82
9-3. ERROR HISTORY 83
9-3-1. Printing error history 85

10. TROUBLESHOOTING 87
10-1. TROUBLESHOOTING 88

11. OTHERS 91
11-1. MAIL TRANSMIT 92
11-2. MAKING DOCUMENT 93
11-3. MEMORY FUNCTION 94
11-3-1. Memory save method 94
11-3-2. Memory operation method 95

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

1. SAFETY PRECAUTION

- Before using PC Controller, read this “SAFETY PRECAUTION” thoroughly to ensure the correct operation.
- This section describes the important safety information to operate PC Controller.
- The meanings of “WARNING” and “CAUTION” are explained as follows.

⚠ WARNING	**This mark indicates the procedures, which might result in the death or serious injury to the user or service personnel if improperly performed.**
⚠ CAUTION	**This mark indicates the procedures, which might result in personal harm to the user or damage to property if improperly performed.**

- Let the customers to keep this manual in a proper place to read instantly.
- This manual should be given to authorized service personnel, who operates PC controller.

⚠ WARNING

The following notices are mainly described for the dealing of transmission adaptor, which is used for transmitting data between PC controller and Indoor or Outdoor unit.

1. **The transmission adaptor includes the high voltage circuit. The installation must be dealt by authorized service personnel only.**
2. **This adaptor contains no user-serviceable parts. Always consult the authorized service personnel for repairs.**
3. **When moving this adaptor, consult the authorized service personnel for disconnection and installation.**
4. **If the problem (burning, smell, etc) occurs, turn off the electrical breaker immediately to stop operation and then consult the authorized service personnel.**
5. **If the power supply cord is damaged, do not attempt to repair it. Contact your service representative for instruction.**
6. **If any work for the transmission adaptor is required during operation, leave it more than 10 seconds after turning off the power supply. Failure to work might lead to be an electric shock.**

⚠ CAUTION

For personal computer used as PC Controller, refer to the instruction manual.
The following notices are mainly described for the dealing of transmission adaptor.

1. **Ensure that all electronic equipment is at least one meter away from the adaptor. Otherwise, unexpected noise might lead to malfunction to the equipment.**
2. **Avoid installing the adaptor near the fireplace or other heating apparatus.**
3. **When installing the adaptor, take precautions to prevent access from infants.**
4. **Do not use inflammable gases near the adaptor. Otherwise, it might lead to be a fire.**
5. **The rated voltage of the adaptor is 220-240V A.C. 50-60Hz. Confirm that the power supply is within this range. If the voltage is out of range, contact to your electricity company.**
6. **Do not change DIP-SW setting in the adaptor. Otherwise, PC Controller might malfunction.**
7. **Do not install the adaptor in highly dust location. Otherwise, it might cause to be a fire or electrical shock.**
8. **The operation temperature range of the adaptor is 0-46 °C. Do not use it except this range. Otherwise, it might malfunction.**
9. **Install the adaptor where the ambient relative humidity is less than 90% RH. Placing in highly humid or damp location might leads to be a fire or electrical shock.**
10. **If water, metal or foreign material enters in the adaptor, stop operation and disconnect the power supply cord transmission cord immediately.**
    Failure to disconnect might lead to be a fire or electric shock.
11. **Do not splash water in the adaptor or touch with wet hand. It doesn’t have the water-proof. If water enters, wipe it off with a dry cloth.**
    Failure to perform might lead to be a fire or electric shock.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

2. PRECAUTIONS WHEN USING THE PC CONTROLLER

1. Please read and fully understand the Operating Manual. Fujitsu General Limited is not responsible for improper use.

2. Fujitsu General Limited is not responsible if the settings in this software or data used for the controlling are deleted. We request that the customer take responsibility for the administration of the settings and control data.

3. PC Controller can control the air conditioner system on personal computer. Be careful not to turn off the power supply for Personal computer or transmission adaptor, or not to finish the application compulsorily during operation. Otherwise, PC Controller might malfunction.

4. If the personal computer operating this software stops, immediately restart the computer and restart this software. Also, if the unit equipment stops due to a power supply interruption, restart this software immediately as there is the potential for malfunctioning.

5. The master CD for this software and the hasp (hardware key) will not be reissued. Store the master CD in a safe place after installing.

6. For information about operating your personal computer, refer to the operating manual for the PC and the store that sold it.

7. Never start this software simultaneously with other software as this may cause malfunctioning.

8. This software performs schedules, operation record and apportionment data control based on date and time set in the personal computer. After starting operation, periodically adjust the time. Note that if the date is changed after starting operation, the recording data will not appear properly.

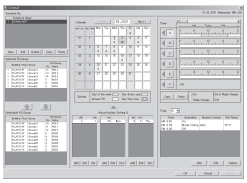
Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

3. OUTLINE

3-1. FEATURES

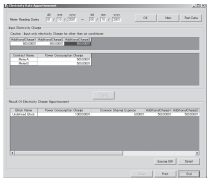
Monitoring of indoor unit operation can be performed using any one of three patterns: 3D display, floor layout display, list display, set temperature and turning the indoor units on and off.

4. BASIC OPERATION



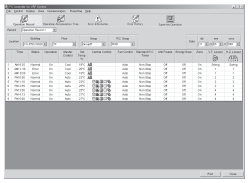
The indoor unit settings for turning the indoor unit on and off by day of the week or date can be made. The operating status and set temperatures can be made and settings for public holidays and detailed year-long scheduling can also be performed.

6. SCHEDULE CONTROL



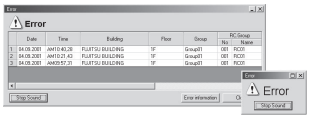
Calculations for the total electrical costs for each indoor unit can be made so that each tenant can be accurately billed.

8. CALCULATION OF ELECTRICITY CHARGE



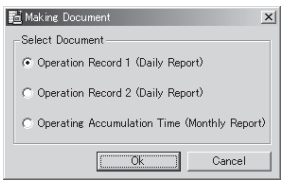
Record display of transitions in operating status of the indoor units (Operation record 1). Records the display of the operating status of the indoor units every hour. (Operation record 2). Performs calculation of operating accumulation time of the outdoor unit. (Accumulated operation time calculation)

7. RECORDS



A warning for an error that has occurred in the outdoor unit, indoor units or PC controller is displayed in a pop-up screen and list screen. Errors that have been resolved can also be referenced on the error list.

9. ERROR DISPLAY



Documents of Operation record 1/2 and Cumulative operating time can be output.

11-2. MAKING DOCUMENT

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

3-2. FUNCTION TABLE

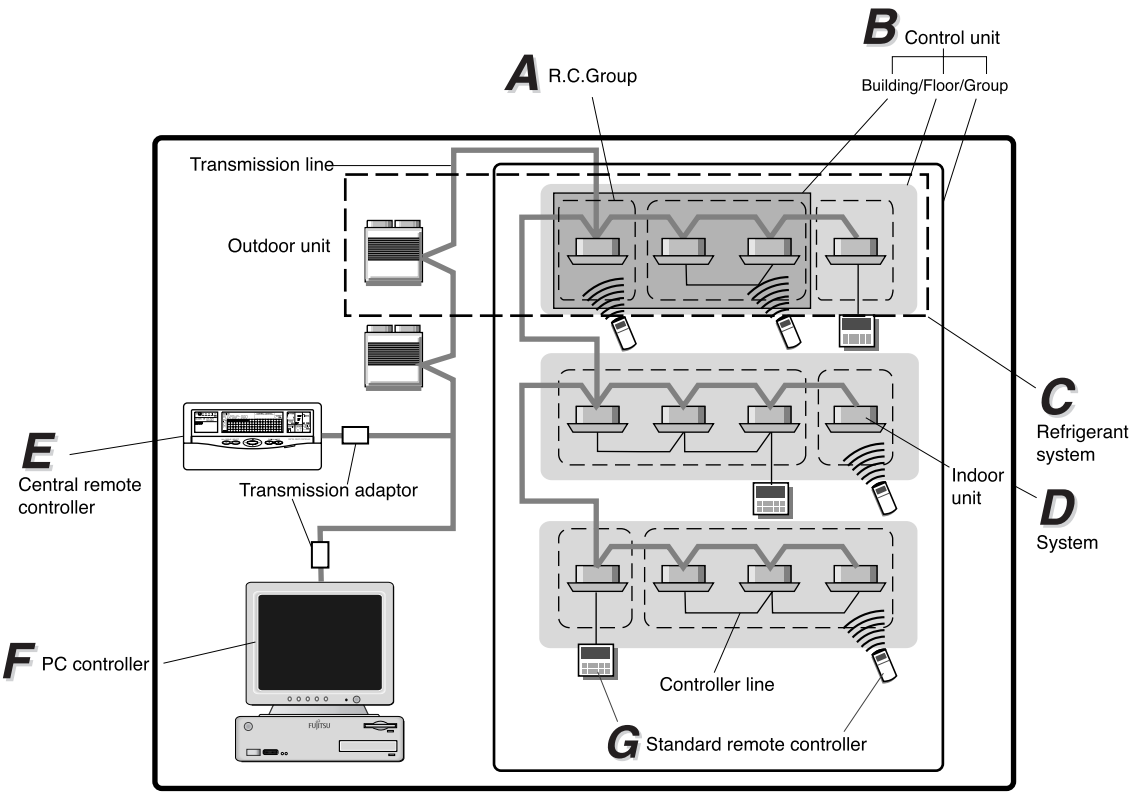
The PC controller has the following functions. Those functions marked with a ✔ can be set using the methods from "4-2. BASIC OPERATION FLOW" Refer to the specific item for those functions not marked with a ✔.

	Function	Description of the function	Reference page
MONITORING – CONTROL	✔ Operating/Stopping	Performs starting and stopping the indoor unit.	23
	✔ Operating mode setting	Performs operating mode settings for the indoor unit.	23
	✔ Temperature setting	Performs the set temperatures for the indoor unit.	23
	✔ Fan speed setting	Performs fan speed settings for the indoor unit.	24
	✔ Anti Freeze operation	Automatically starts a heating operation to prevent the room temperature from becoming too low and stops when the temperature rises above a preset level.	24
	✔ Air flow direction setting (Up/Down)	Sets the up/down air flow direction of the indoor unit.	24
	✔ Air flow direction (Left/Right)	Sets the left/right air flow direction of the indoor unit.	24
	✔ Swing setting	Perform auto-swing operation in vertical or in horizontal direction.	24
	✔ Operation prohibit item setting for standard remote controller	Sets the items for which operation is to be prohibited on the standard remote controller.	30
	✔ Filter cleaning warning reset	Resets the warning that indicates the filter on the indoor unit needs cleaning.	30
	Schedule control	Settings of the operation status of the indoor unit for each day of the week and date can be performed. Detailed year-long schedule control can be performed.	38
	Memory	The operating status of the buildings currently displayed at one point in time can be saved. This allows operating settings that have been saved to be restored with a simple operation.	94
RECORDING	Error warning	This error alarm is displayed if an error occurs in the indoor unit, outdoor unit, central remote controller or transmission adapter.	78
	Error information	Provides a reference table of information of the currently occurring errors.	80
	Error history	Provides a reference table of the only the errors that have been resolved.	83
	Operation records 1, 2	Displays a recording of the operating status of the indoor unit.	58
	Operating accumulation time	Provides the operating accumulation time of the indoor unit.	62
	Electricity charge apportionment	Apportionment calculation of the electricity charge is performed for each set charge calculation unit (block).	68
OTHERS	Mail transmit	For sending mail with error information and error history attachments.	92
	Help	For displaying the online operating manual in help.	

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

3-3. EXPLANATION OF TERMS

● Controller related items



A

R.C. Group:

This is the control unit of indoor units that have been connected with one controller line single indoor unit.
These two kinds of control units are the smallest unit controlled by PC controller, and are called a R.C. Group.

B

Control unit:

This is a control unit composed single or multiple R.C. Groups.
Building/Floor/Group
(For more information about groups, floors and buildings, refer to “4-4-4. Group settings” in the Setting Manual.)

C

Refrigerant system:

This is a system that is composed of indoor units, outdoor unit as well as those of relevant control equipment. All of the units and the equipment are connected with pipes with the same refrigerant.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

D

System:

This is all of the indoor units, outdoor unit as well as those of relevant control equipment (PC controller, central remote controllers, standard remote controllers) that are connected with the same transmission line.

E

Central remote controller:

The central remote controller is a remote controller that allows centralized control of multiple indoor units in the same manner as the PC controller. A central remote controller can control the operation of the indoor units and timers in three units: All, Group and Individual. Moreover, one central remote controller can control up to 400 indoor units and 64 groups.

F

PC controller:

The PC controller is a remote controller that allows multiple indoor units on the same network to be centrally controlled by computer. Refer to "2-1. SYSTEM OUTLINE" in the Setting Manual for details.

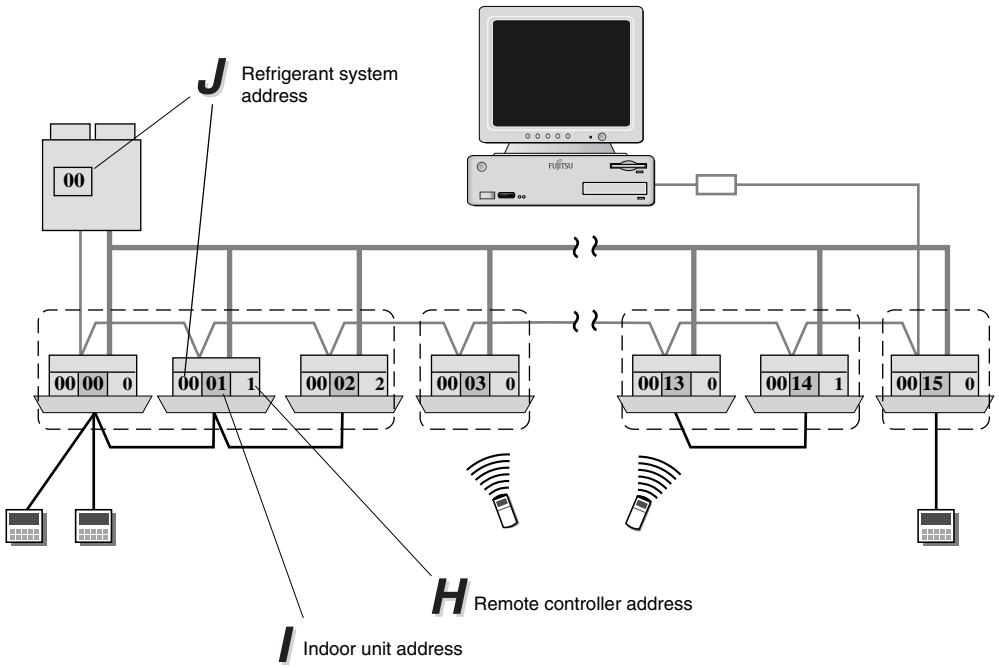
G

Standard remote controller:

The standard remote controller is a remote controller that controls indoor units that have been formed into R.C. Groups. There are two kinds of standard remote controllers: wired remote controller and wireless remote controller.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

● Address related items



H

Remote controller address (0~15):

This is the ID individually assigned to the indoor units forming each R.C. Group and is used for control.

I

Indoor unit address (0~47):

This is the ID individually assigned to each indoor unit and is used for control.

J

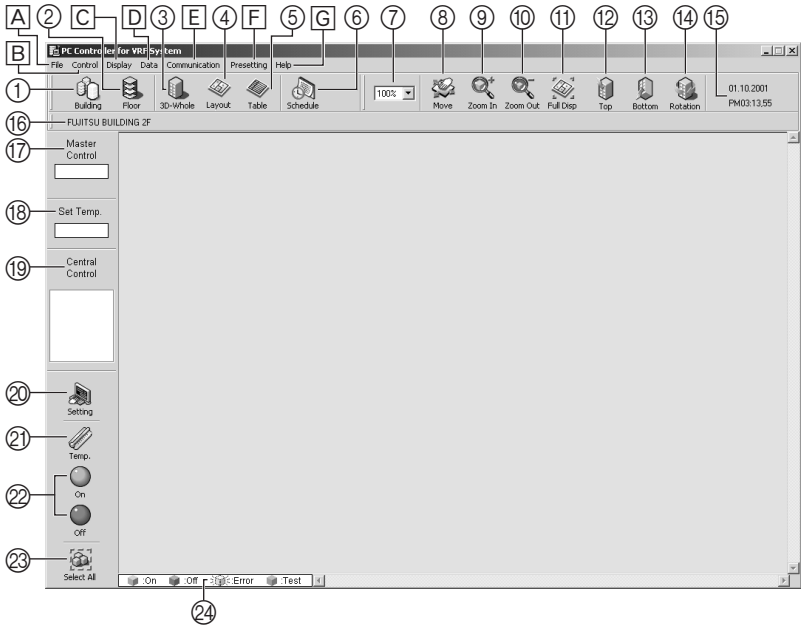
Refrigerant system address (0~99):

This is the ID individually assigned to each refrigerant system and is used for control.

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

3-4. NAMES AND FUNCTIONS OF PARTS

● Main frame

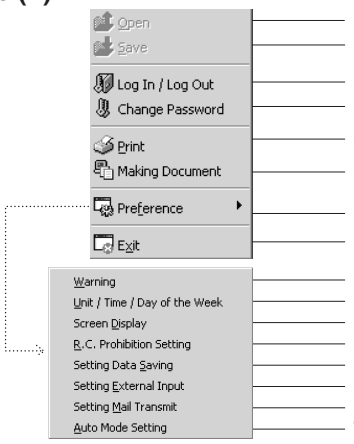


① **Building**	Displays the name of the registered building in the pull-down menu. This is displayed only when multiple buildings are registered.
② **Floor**	The registered floor name is displayed in the pull-down menu.
③ **3D-Whole**	Displays the screen of the building being monitored.
④ **Layout**	Displays floor layout screen.
⑤ **Table**	Displays list screen.
⑥ **Schedule**	Displays schedule screen.
⑦ **Zoom**	Sets zoom ratio when switching between the building monitoring screen and floor layout screen.
⑧ **Move**	Moves the screen when building monitoring screen and floor layout screen are displayed.
⑨ **Zoom In**	Enlarges the display of the building monitoring screen and floor layout screen.
⑩ **Zoom Out**	Reduces the display of the building monitoring screen and floor layout screen.
⑪ **Full Disp**	Full screen display of the building monitoring screen and floor layout screen.
⑫ **Top**	Moves the point of view position to the top in the building monitoring screen.
⑬ **Bottom**	Moves the point of view position to the bottom in the building monitoring screen.
⑭ **Rotation**	Switches between rotate and stop of the building on the building monitoring screen.
⑮ **Current Time**	Displays the current time.
⑯ **Selected Location Display**	Displays the building name, floor name and group name of the location currently selected.
⑰ **Operation Mode**	Displays the operation mode of the R.C. Group or group.
⑱ **Set Temp.**	Displays the R.C. Group or set temperature of the group of the R.C. Group that is currently selected.
⑲ **R.C. Prohibition**	Displays prohibited items of the standard remote controller.
⑳ **Setting**	Displays the operating control screen for changing the settings of the selected floor/ group/R.C. Group.
㉑ **Temp.**	Changes the set temperature of the R.C. Group or group/floor.
㉒ **On/Off**	Changes the on/off setting of the operating status of the R.C. Group or group/ floor.
㉓ **Select All**	(When building screen is displayed) Shows selected status of all floors. (When floor layout screen is displayed) Shows selected status of all groups. (When list screen is displayed) Shows the selected status of the entire list.
㉔ **Guidance Area**	Displays the icon color of the On, Off, Error, Test in the operating status.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

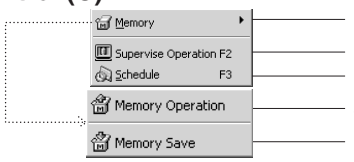
● Pull down menu

A File (F)



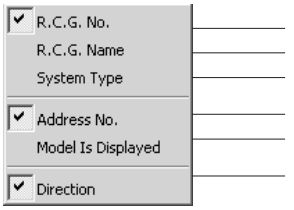
- Open — Cannot use
- Save — Cannot use
- Log In / Log Out — For logging in and logging off.
- Change Password — For changing password.
- Print — Creates daily or monthly reports of operating records and operating accumulation time.
- Making Document — For outputting various documents, on-line manual, error information and history, and results of electricity bill calculations.
- Preference — Displays environment setting screen.
- Exit — Ends PC controller.
- Warning — For settings related to error warnings or filter warnings.
- Unit / Time / Day of the Week — For setting the units for time, temperature, days and creating documents.
- Screen Display — For setting the building rotation speed , zoom ratio and screen background.
- R.C. Prohibition Setting — For setting operating masks.
- Setting Data Saving — For setting the number of error incidents to be saved on the error history screen.
- Setting External Input — For setting for external input enable/disable and method.
- Setting Mail Transmit — For setting the mail address.For setting the mail address.
- Auto Mode Setting — To set automatic switching between cooling and heating.

B Control (C)



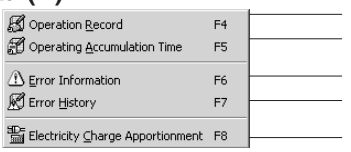
- Memory — Displays the start of memory operation and save screen.
- Supervise Operation F2 — Displays operation monitoring screen.
- Schedule F3 — Displays the schedule screen.
- Memory Operation — Starts the operation of each remote control group in the operating setting mode save in [Memory Save].
- Memory Save — Saves the operating status for each building currently displayed.

C Display (D)



- R.C.G. No. — Displays the remote control group No.
- R.C.G. Name — Displays the remote control group name.
- System Type — Displays the system type.
- Address No. — Displays the equipment addresses.
- Model Is Displayed — Displays the model name.
- Direction — Displays the direction window.

D Data (D)

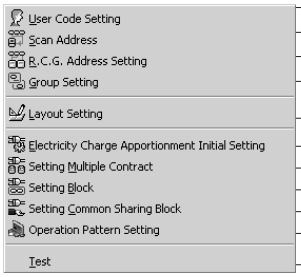


- Operation Record F4 — Displays the operating record screen.
- Operating Accumulation Time F5 — Displays the operating accumlation time screen.
- Error Information F6 — Displays the error information screen.
- Error History F7 — Displays the error history screen.
- Electricity Charge Apportionment F8 — Displays the electric charges apportionment screen.

E Communication (M)

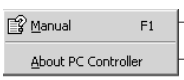
- Send Mail Ctrl+M — Starts the mail software

F Presetting (P)



- User Code Setting — Displays the user code/password setting screen.
- Scan Address — Displays the scan address screen.
- R.C.G. Address Setting — Displays the remote control group address setting screen.
- Group Setting — Displays the group setting screen.
- Layout Setting — Displays the layout setting screen.
- Electricity Charge Apportionment Initial Setting — Displays the electric charges apportionment initial settings screen.
- Setting Multiple Contract — Displays multiple contract setting screen.
- Setting Block — Displays the bill block setting screen.
- Setting Common Sharing Block — Displays the common sharing block setting screen.
- Operation Pattern Setting — Displays the operation pattern setting screen.
- Test — Displays the test operation start screen.

G Help (H)



- Manual F1 — Displays the on-line operating manual.
- About PC Controller — Displays the version information.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

4. BASIC OPERATION

4-1. MONITORING AND CONTROL

Monitoring and control can be performed from the PC controller.

● Operation monitoring

Operation monitoring is the function that displays the operating status of indoor units and outdoor units that are connected to the same network.
The operating status data is periodically updated and displayed on the screen.
The status monitoring screen will be displayed after the power is turned on without performing any operations.

NOTE Note that only the operation monitoring screen can be viewed during log out.

● Operation control

Operation control is the function used for changing the operation settings of the indoor unit.

Select either the R.C. Group or building/floor group from the operation monitoring screen and press the

button. The operating control screen will appear.

In addition, the operating status data is displayed immediately after the operating control screen is started.

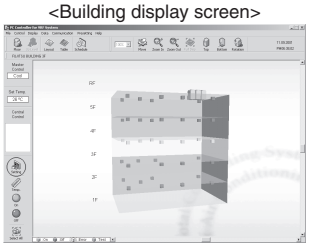
NOTE
*1 : The most recent accessed settings for the indoor units that are related among each controller will have priority.
*2 : Refer to “5. OPERATION CONTROL” for more information about setting operation settings.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

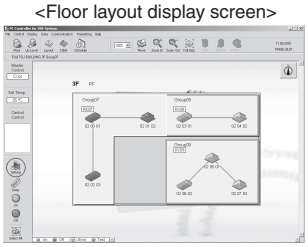
4-2. BASIC OPERATION FLOW

1 Operation monitoring

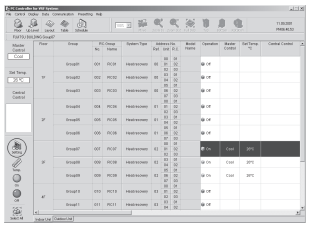
<Building display screen>



<Floor layout display screen>



<List screen>



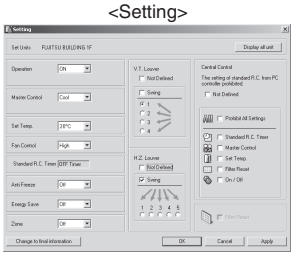
Monitors the operating status.

Click

to perform operation control.

2 Operation control

<Setting>

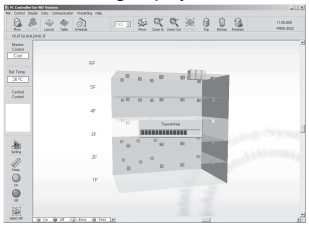


Sets the operating contents.

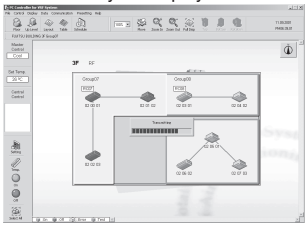
Click OK after settings have been completed.

3 Settings completed

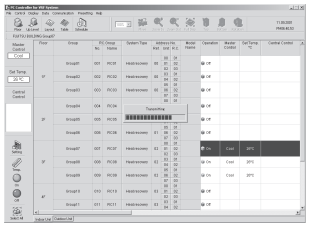
<Building display screen>



<Floor layout display screen>



<List screen>



The signal is sent and operation begins using the contents of the settings.

NOTE

*1 : For a simple method of starting and stopping operation, refer to “5-2. OPERATION CONTROL METHOD”.

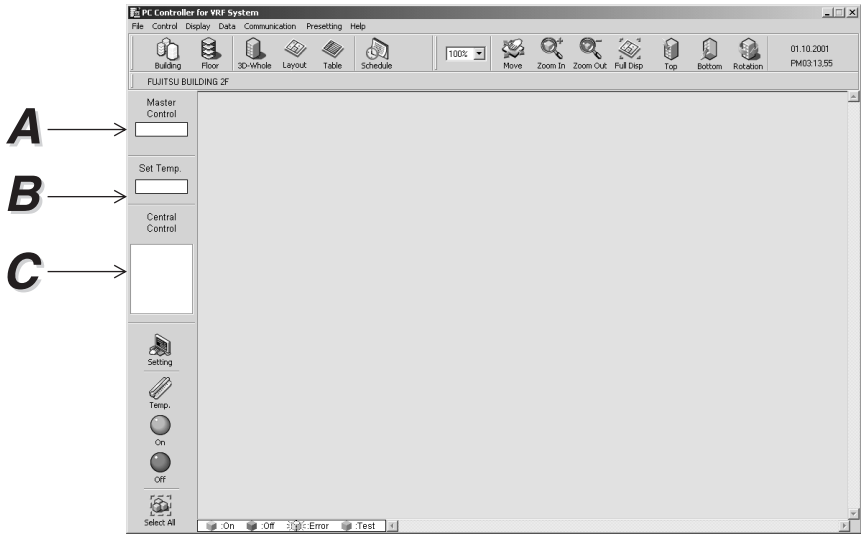
*2 : When restarting the PC, enter the user code and password when logging onto the PC controller.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

4-3. OPERATION MONITORING SCREEN

4-3-1. Main frame

Select the R.C. Group and group on the computer screen and the operating status, set temperature and operation-prohibited settings will be displayed in boxes A through C shown below.



A Operation Mode

●**The operation mode of the R.C. Group or group is displayed.**

1. On Heat Pump types, "**FIXED**" will be displayed below the operating status when 1 R.C. Group is selected. (Example: **COOL FIXED**)
   (Note:) When **FIXED** is displayed, always stop operation before switching between cool/dry and heat.
   (If the operating status is switched without stopping, the unit will return to the original operating status after a brief period of time.)
2. When 1 R.C. Group is selected, "**DEFROST**" will be displayed below the set temp during defrost operation.
3. If there are R.C. Groups with many different operating status in the selected group, "**VARIED**" will be displayed in the field shown as ***A***.

B Set Temp.

●**The set temperature in the R.C. Group or group is displayed.**

1. When 1 R.C. Group is selected and the operating status is "**FAN**", a " **–** " will be displayed.
2. If there are R.C. Groups with many different set temperatures in the selected group, "**VARIED**" will be displayed in the field shown as ***B***.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

C **R.C. Prohibition**

- **The items that have operation-prohibited on the standard remote controller that are within the R.C. Group or group are displayed.**

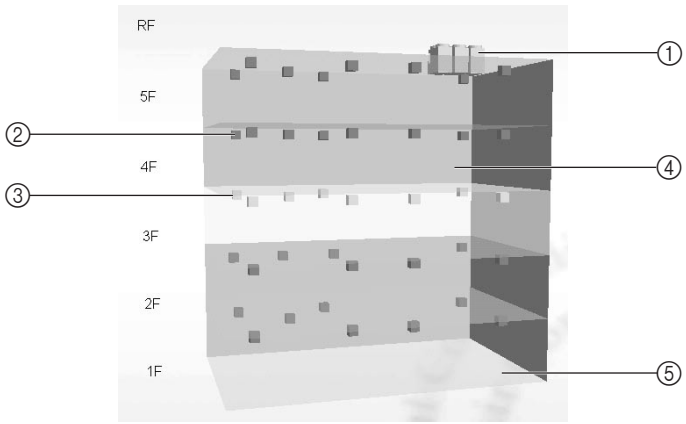
1. Six items are displayed in the **C** field. They are
   (Please refer to page 30. REFERENCE)
2. If there are R.C. Groups with many different operating status in the selected group, "**VARIED**" will be displayed in the field shown as **C**.
3. Note that this will not be displayed if operation-prohibit settings for the standard remote controller were not made in "4-7. PREFERENCES" in the Setting Manual.

The status monitoring screen is composed of the building display screen, floor layout display screen and list display screen.

4-3-2. Building display

The operating status of all indoor units and outdoor units that have been set for the selected building can be displayed on a rotating 3-D screen.
Selection can also be made from the building display screen in floor units.
Normally, the building screen is displayed when the PC controller is started. However, it is also possible to display it by clicking

on the main frame while displaying the floor screen.



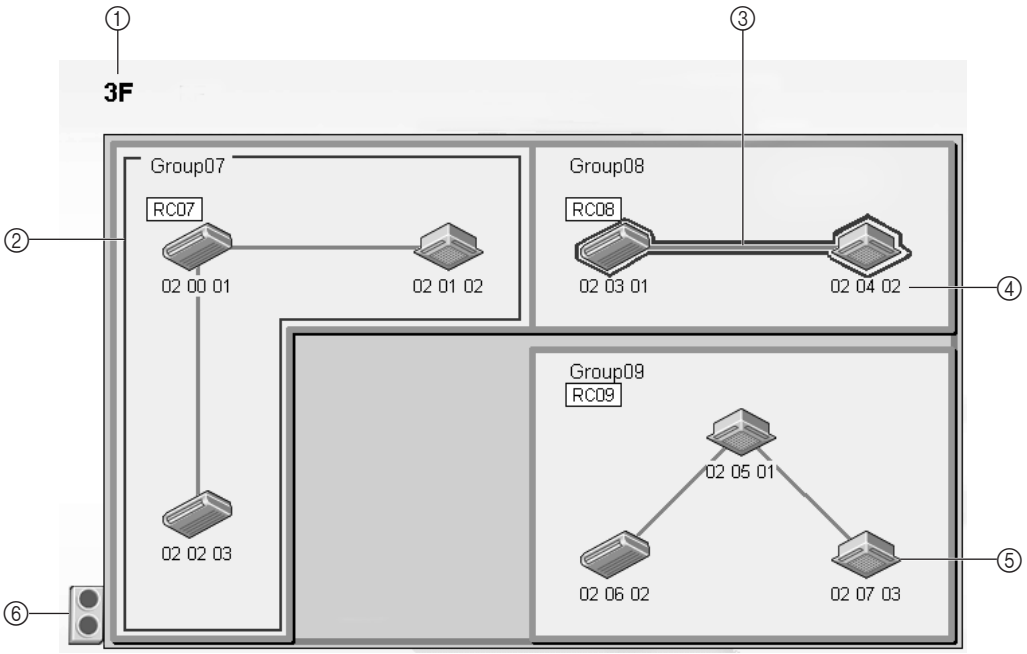
①**Outdoor Unit Icon**	The location set during initial settings is displayed. The color of the icon will change according to operating status. (Normal operation: Gray, Error: Flashing)
②**Indoor Unit Icon**	The same number of icons as that of indoor units is displayed at the location set in the initial settings. The color of the icon will change according to operating status. (On: Green, Off: Red, Test: Orange, Error: Flashing)
③**Floor Surface**	The color of the floor surface will change by clicking and the become the floor under control. Double click to change to the floor layout screen.
④**Floor Name**	The floor name set during initial settings is displayed.
⑤**Floor Surface**	Floors above ground and floors below ground will appear in different colors.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

4-3-3. Floor layout display

The layout display of the operating status of all indoor units and outdoor units that have been set for the selected floor can be made. Moreover, this layout display screen can be used for selecting floor units, group units and R.C. Group units. **Either double-click the relevant floor from the building display screen or click**

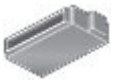
from the main frame.



① **Floor Name**	Displays the name of the floor that was set during the initial settings.
② **Group Name**	Displays the name of the group that was set during the initial settings. Click and the color of the frame for the group will change and become the group under control.
③ **R.C. Group**	The menu display settings can be used for displaying R.C. Group No., R.C. Group name or system type.
④ **Address**	The address or model name is displayed according to the settings. The addresses are shown from the left in the following sequence: refrigerant system address, indoor unit address and remote controller address.
⑤ **Indoor Unit Icon**	Only the number of indoor units is displayed in the locations that were set during initial settings. The color of the icon will change according to the operating status. (Refer to the example for the indoor unit shown below.)
⑥ **Outdoor Unit Icon**	Displayed in the locations that were set during initial settings. These icons will change according to the operating conditions.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

● Icon table

Icon	Type	Model Name
	AS	Wall Mounted Type
	AB	Universal/ Big Ceiling Type
	AR	Compact Duct Type Duct
	AU	Compact Cassette Type Cassette
	AW	Ceiling Wall

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

● Display status of each icon

- Outdoor unit icons

	Display	Operating condition
	Gray _ On steady	Normal
	Gray _ Flashing	Error

- Indoor unit icons

Display	Operating condition
Green on	ON
Red on	OFF
Orange on	TEST
Each color flashing	ERROR

① **Timer sign**: Displayed if timer has been set by standard remote controller.
② **Filter sign**: Displayed when filter cleaning interval has come.
This will only be displayed if the warning for the filter cleaning interval was set to operate in “4-7. PREFERENCES” in the Setting Manual.

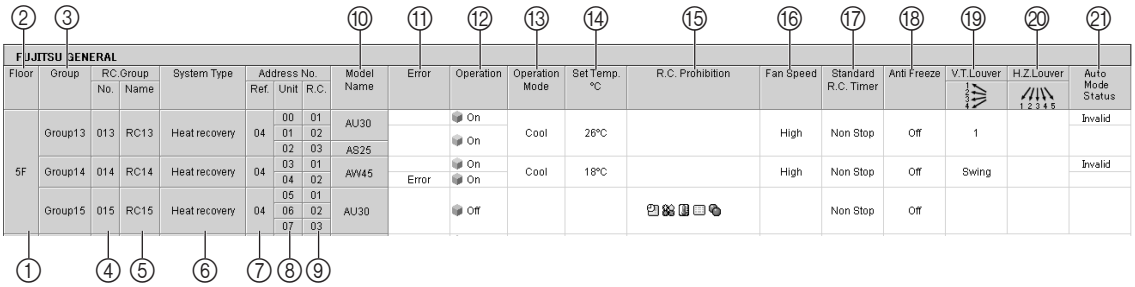
Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

4-3-4. List display

Lists the operating status of all indoor units and outdoor units that have been set in the system. The indoor units are listed in R.C. Group units (except for *1) and outdoor units are listed in units.
In addition, the following can be selected for the indoor units: building unit, floor unit, group unit, R.C. Group unit. Units can be selected for the outdoor units.

This can be displayed by clicking **on the main frame.**

● Indoor unit

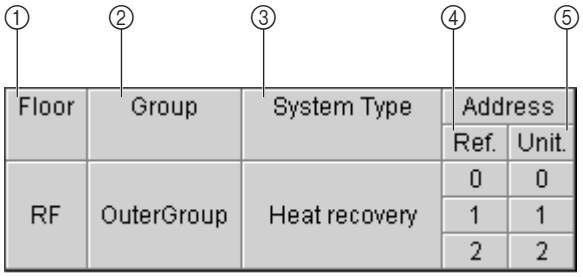


①**Building**	Displays the name of the building.
②**Floor**	Displays the name of the floor.
③**Group**	Displays the name of the group.
④**No.**	Displays the control number of the R.C. Group.
⑤**Name**	Displays the name of R.C. Group.
⑥**System Type**	Displays the name of the outdoor unit system type. *2
⑦**Ref.**	Displays the address of the refrigerant system. *2
⑧**Unit**	Displays the address of the indoor unit. *2
⑨**R.C.**	Displays the address of the R.C. Group. *2
⑩**Model Name**	Displays the model name. *2
⑪**Error**	Displays “Error” if an error has occurred. (This column is not displayed if there are no errors.)
⑫**Operation**	Displays the icon showing the operating condition and the name of the operating condition. (ON: Green; OFF: Red; TEST: Orange; ERROR: Each color flashing.)
⑬**Operation Mode**	Displays operating mode.
⑭**Set Temp.**	Displays set temperature.
⑮**R.C. Prohibition**	Displays the icons for the prohibited setting status of the remote controller. * For more information about prohibit setting icons, refer to “5. OPERATION CONTROL”.
⑯**Fan Speed**	Displays the fan speed.
⑰**Standard R.C. Timer**	Displays the timer status that has been set with the standard remote controller.
⑱**Anti Freeze**	Displays the setting status of the anti freeze function.
⑲**V.T. Louver**	Displays the up/down and swing setting status.
⑳**H.Z. Louver**	Displays the right/left and swing setting status.
㉑**Auto Mode Status**	Displays whether [Auto Mode Operation] is active or inactive.

NOTE
*1 : If the zone setting is on when the error occurs, the indoor unit is displayed.
*2 : If No. 6, 7, 8, 9 and 10 are omitted, display can be for each R.C. Group.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

● Outdoor unit



① **Floor**	Displays the name of the floor.
② **Group**	Displays the name of the group.
③ **System Type**	Displays the name of the outdoor unit system type.
④ **Ref.**	Displays the address of the refrigerant system.
⑤ **Unit.**	Displays the address of the indoor unit.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

5. OPERATION CONTROL

This section presents operating status for all buildings or specific buildings as well as the method for setting operation-prohibit items using the standard remote controller.

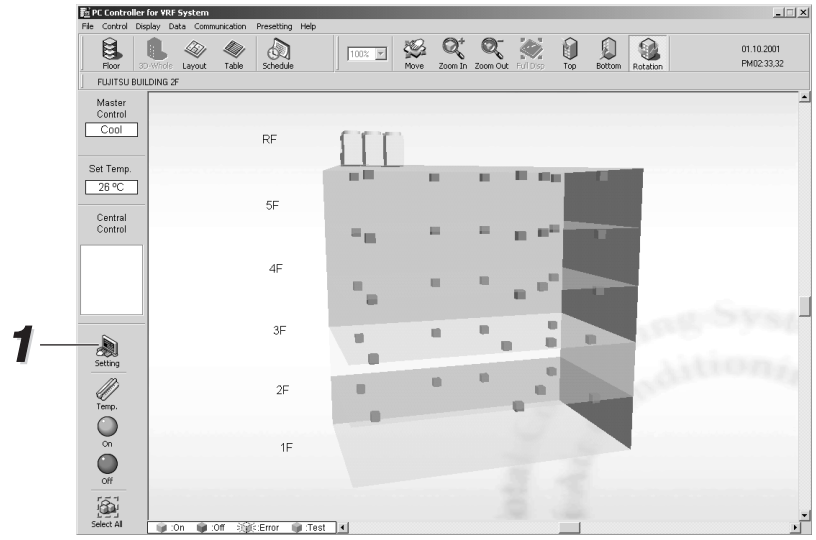
5-1. OPERATING MONITORING SCREEN DISPLAY 22
5-2. OPERATION CONTROL METHOD (Operating status/Operation Mode/ Set temperature/Fan Speed/ Anti-freeze operation/ Up-down swing setting/ Left-right swing setting) 23
5-3. R.C. PROHIBITION METHOD/ FILTER RESET (Standard remote controller operation prohibit setting) 30
5-4. OPERATION PATTERN SETTING 33

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

5. OPERATION CONTROL

Detailed settings for such areas as operating status and operation-prohibit items can be made for the groups and R.C. Groups selected on the building display screens, floor layout screen and list screen.

5-1. OPERATING MONITORING SCREEN DISPLAY



1 **Click**

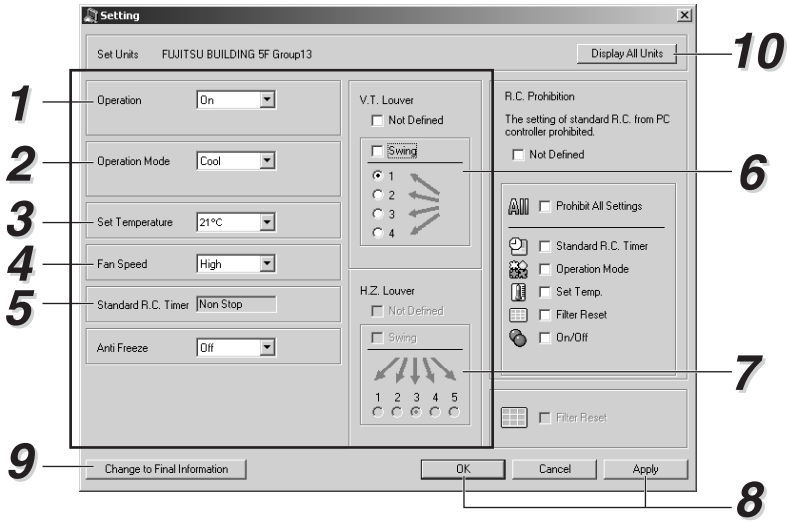
on the main frame after selecting the appropriate building, floor, group and R.C. Group on the building display screen, floor layout screen and list screen and the setting screen will be displayed.
(Refer to “4-2. BASIC OPERATION FLOW”.)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

5-2. OPERATION CONTROL METHOD

(Operating status/Operation Mode/Set temperature/Fan Speed/Anti-freeze operation/Up-down swing setting/Left-right swing setting)

The operating status data is displayed immediately after the operating control screen is started.



1 **Designate the operating status.**
Select ON/OFF/NOT DEFINED. (*1)

- If the selected R.C. Group and group are operating a test, "**TESTING**" will be displayed outside the field.
- If there are R.C. Groups with many different operating status in the selected group, "**VARIED**" will be displayed. (*2)

---

2 **Designate the operation mode.**
Select from AUTO (*3)/COOL/DRY/FAN (*3)/HEAT (*4)/NOT DEFINED (*1).
>> If the operating status changed, the settable range of the temperature and fan speed will change.

- If the 1 R.C. Group heat pump type is selected, "**FIXED**" will be displayed outside the field (*5).
- If the selected R.C. Group is defrosting, "**DEFROST**" will be displayed.
- If there are R.C. Groups with many different master control in the selected group, "**VARIED**" will be displayed. (*2)

---

3 **Designate the temperature.**
Select in the following range.
Settable temperature range
AUTO/COOL/DRY .. 18 to 30 °C/NOT DEFINED (*1)
HEAT ..... 16 to 30 °C/NOT DEFINED (*1)
The set temperature cannot be used when in the **FAN** operating status.

- If there are R.C. Groups with many different temperatures in the selected group, "**VARIED**" will be displayed. (*2)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

4 **Designate the fan speed.**
Select from AUTO/HIGH/MED/LOW/NOT DEFINED (*1).
Only AUTO can selected for fan operation when in DRY operating status.

- If there are R.C. Groups with many different fan settings in the selected group, "**VARIED**" will be displayed. (*2)

5 **Designate Anti Freeze operation.**
Select ON/OFF/NOT DEFINED. (*1)

- If there are R.C. Groups with different anti freeze operation in the selected group, "**VARIED**" will be displayed. (*2)

6 **Designate Up/Down swing.**
Select from 1/2/3/4/SWING/NOT DEFINED. (*1)

- If there are R.C. Groups with many different up/down swing in the selected group, "**VARIED**" will be displayed. (*2)

7 **Designate Left/Right swing.**
Select from 1/2/3/4/5/SWING/NOT DEFINED. (*1)

- If there are R.C. Groups with many different left/right swing in the selected group, "**VARIED**" will be displayed. (*2)

8 **To apply the values, click** OK **or** Apply **.**
The settings will be applied to the selected indoor unit.

9 **By pressing this button, the displayed data is updated to newest one.**

10 **By pressing this button, the detail information of selected R.C. Group can be shown.**

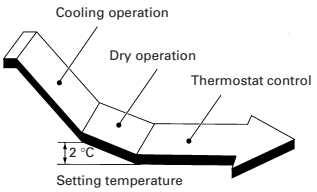
REFERENCE

*1 : NOT DEFINED will maintain the current settings.
*2 : VARIED will maintain the current settings.
*3 : Cannot be set in Heat Pump type refrigerant system.
*4 : Cannot be set in Cooling Only type refrigerant system.
*5 : Note: When FIXED is displayed, always stop operation before switching between COOL/DRY and HEAT.)
(If the operating status is switched without stopping, the unit will return to the original operating status after a brief period of time.)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

●About operation mode

AUTO ..COOLING MODEL



- When the room temperature is 2 °C higher than the set temperature, the operating status will switch between Cooling and Drying.
- During the Drying mode operation, the FAN setting should be switched to LOW for a gently cooling effect during which the fan may temporarily stop rotating.
- If the mode automatically selected by the unit is not satisfactory, see above and change the mode setting (COOL, FAN).

AUTO (AUTO CHANGE OVER) ..HEAT&COOL MODEL (Reverse cycle)

- When AUTO CHANGE OVER is selected, the air conditioner selects the appropriate operating status (Cooling or Heating) according to the real room temperature.
- When AUTO CHANGE OVER is first selected, the fan will operate at very low speed for about one minutes while the unit determines the current conditions of the room and accordingly selects the proper operation mode.
- When the air conditioner has adjusted the room temperature to near the thermostat setting, it will being monitor operation. In the monitor operation mode, he fan will operate at low speed. If the room temperature subsequently changes, the air conditioner will select the appropriate operation (Heating, Cooling) once again to adjust the temperature to the value set with the thermostat. (The monitor operation range is ±2 °C relative to the thermostat setting.)
- If the mode automatically selected by the unit is not satisfactory, see above and change the mode setting (HEAT, COOL, FAN).
- Do not select AUTO CHANGE OVER if the difference in the environmental temperature of the master and slave units is over 2 °C. (Otherwise, the indoor fan may not be controlled correctly.)

Heating

- Use to warm your room.
- When Heating mode is selected, the air conditioner will operate at very low fan speed for about 3 to 5 minutes, after which it will switch to the selected fan speed setting. This period of time is provided to allow the indoor units to warm up before a full operation.
- When the room temperature is very low, frost may form on the outdoor unit, therefore, the performance of the outdoor unit will decrease. In order to remove such frost, the unit will automatically enter the defrost cycle from time to time. During defrosting, the heating mode will be temporarily interrupted **DEFROST** will be shown on the remote controller display.

Cooling

- Use to cool your room.

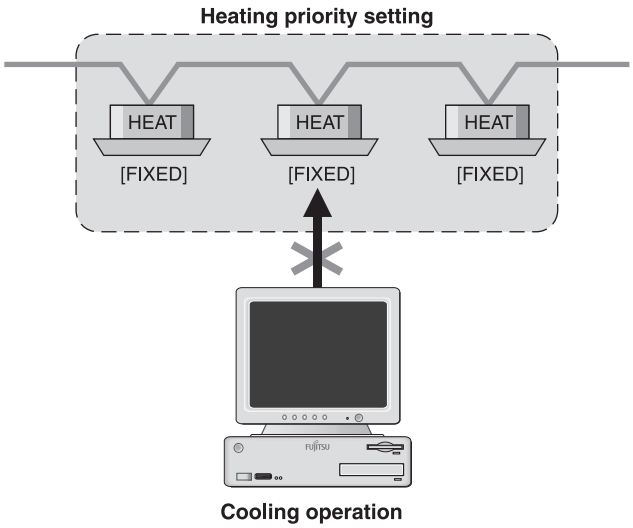
Fan

- Use to circulate the air throughout your room.

REFERENCE

During Heating
The set thermostat temperature should be higher than the actual room temperature, otherwise the heating mode does not work.
During Cooling
The set thermostat temperature should be lower than the actual room temperature, otherwise the cooling mode does not work, however the fan will rotate in cooling mode.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.



Cooling/Heating priority:

When a HEAT PUMP TYPE operating system is used, the system can only be performed in one of two operation modes (cooling/heating) for single refrigerant system. When an indoor unit in the system first starts an heating operation, the system is then in “Heating priority”. This means the system will refuse a command for changing the operation mode. On the other hand, when an indoor unit in the system first starts a cooling operation, the system is then in “Cooling priority”. The system will refuse to change to any other operation mode, except for the drying operation.

REFERENCE

When a group is composed of indoor units which are in different types of refrigerant systems **(HEAT RECOVERY TYPE/HEAT PUMP TYPE/COOLING ONLY TYPE)**, it is still possible to do an operating status setting for the group. However, the newly set operating status will be conducted only by those R.C. Groups in the group, when the newly set operating status can be conducted by them.
When a heating operation mode is attempted on a cooling only type refrigerant system, the set operating status will not be conducted. This occurs when a group composed of indoor units with different types of refrigerant systems **(heat recovery type/cooling & heat pump type/cooling only type)**. Actually, the operating command is sent to the relevant indoor units, but the command will not be conducted by those indoor units when the set operating status is not permitted by the type of refrigerant system where they exist.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

●About the AUTO setting of fan speed

Heating: Fan operates so as to optimally circulate warmed air. However, the fan will operate at very low speed when the temperature of the air issued from the indoor unit is low.

Cooling: As the room temperature approaches that of thermostat setting, the fan speed becomes slower.

Fan: The fan alternately turns on and off; when the fan turns on, it rotates at a low fan speed.

- The fan will operate at a very low speed during the monitor operation by which the room temperature is deleted.

REFERENCE

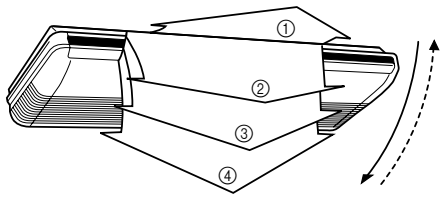
If fan speed setting is attempted on a cooling & heat pump type refrigerant system, the central control number will flash and fan operation will not be affected by the settings.
This occurs when a group is composed of indoor units which are in different types of refrigerant systems. **(HEAT RECOVERY TYPE/HEAT PUMP TYPE/COOLING ONLY TYPE)** (Actually, the command for the fan speed setting is sent to the relevant indoor units, it will not be conducted by those indoor units where the fan speed setting is not permitted by the type of refrigerant system where they exist.)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

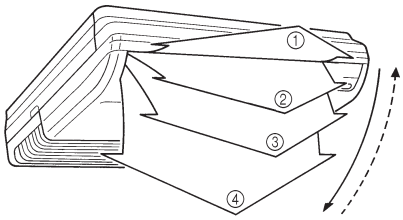
●About vertical airflow swing operation

- The swing range can be adjusted with the remote controller's **VERTICAL SET** button.
- The SWING operation may stop temporarily when the air conditioner's fan is not operating, or is operating at very low speeds.
- During use of the Cooling mode, do not set the air UP/DOWN direction flap, in the ④ position for a long period of time, since water vapor may condense near the outlet port and drops of water may drip from the air conditioner.

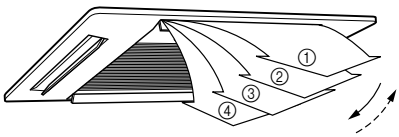
• CEILING SUSPENSION TYPE

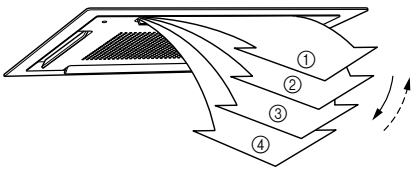


• FLOOR CONSOLE/UNDER CEILING DUAL TYPE

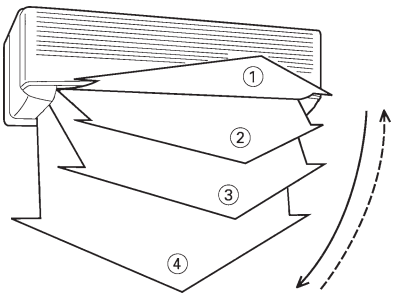


• CASSETTE TYPE





• WALL MOUNTED TYPE



REFERENCE

- At the beginning the vertical airflow direction is set automatically as shown, in accordance with the type of operation selected.
  During cooling mode: Horizontal flow ①
  During heating mode: Downward flow ④
- The air direction can be adjusted within the range shown below.
- During AUTO mode operation, for the first minute after beginning operation, airflow will be horizontal flow ①; the air direction cannot be adjusted during this period.
- If the direction setting is set at the same time as operation mode setting, the indoor unit will follow the flow direction setting that has been set.

REFERENCE

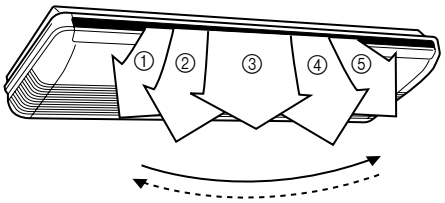
- Always use the remote controller's AIR FLOW DIRECTION button to adjust the UP/DOWN air direction louvers. Attempting to move them manually could result in improper operation; in this case, stop operation and restart. The flaps should begin to operate properly again.
- When used in a room with infants, children, elderly or sick persons, the air direction and room temperature should be considered carefully when making setting.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

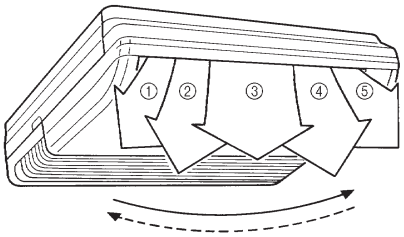
●About horizontal airflow swing operation

- The swing range can be adjusted with the remote controller's **HORIZONTAL AIR FLOW DIRECTION SET** button.
- The **SWING** operation may stop temporarily when the air conditioner's fan is not operating, or is operating at very low speeds.

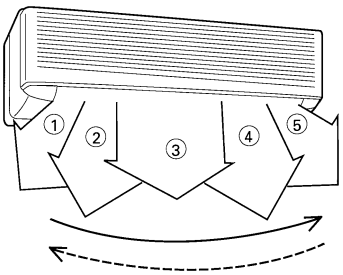
• CEILING SUSPENSION TYPE



• FLOOR CONSOLE/ UNDER CEILING DUAL TYPE



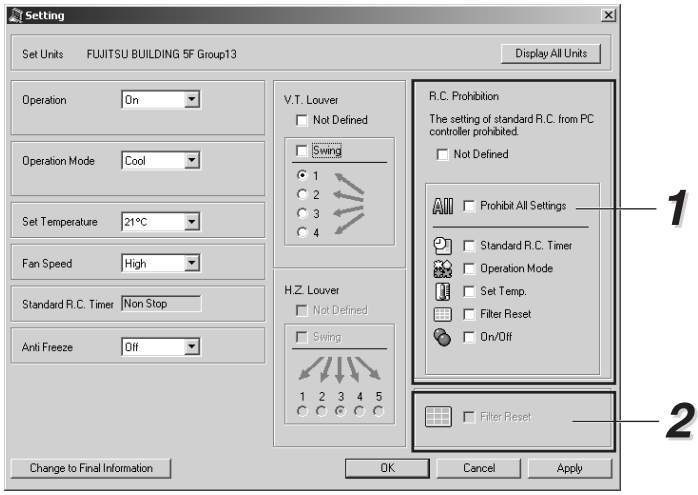
• WALL MOUNTED TYPE



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

5-3. R.C. PROHIBITION METHOD/FILTER RESET

(Standard remote controller operation prohibit setting)



1 **To change the standard remote controller operation prohibit items.**
Select from All Mode/Timer/Master Control/Set Temp./Filter Reset/On-Off/Not Defined. (*1) (Multiple selections are possible.)

- Not Defined will maintain the current settings.
- Settings cannot be made if the settings for the operation prohibit settings for the standard remote controller have be disabled.
- If there are R.C. Groups with many different central control in the selected group, "**VARIED**" will be displayed.

REFERENCE **Standard remote controller operation settings**

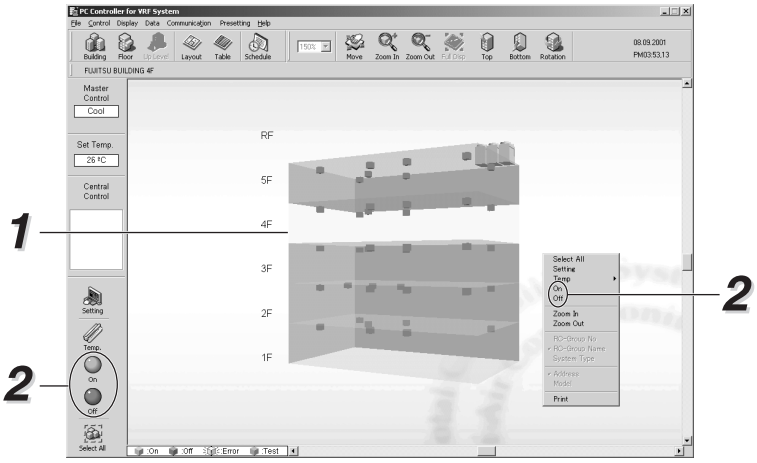
- ..... Prohibits all standard remote controller operations.
- ..... Prohibits timer operations from the standard remote controller.
- ..... Prohibits operating status operations from the standard remote controller.
- ..... Prohibits set temperature operations of ± 2 °C or more from the standard remote controller.
- ..... Prohibits filter reset operations from the standard remote controller.
- ..... Prohibits on/off operation of the indoor unit from the standard remote controller.

2 **Filter reset**
Sets the filter warning to off.
Place a check here to reset the current filter warning.
If the environment settings have been used to disable the filter warning settings, it will not be possible to make these settings.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

Turning the operating status on and off and set temperatures can be performed by clicking the icon on the toolbar at the top of the monitoring screen or by using a right click to display the pop-up menu.

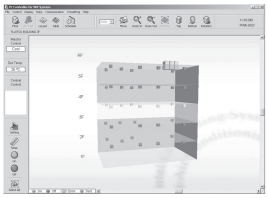
<1> Start/stop settings



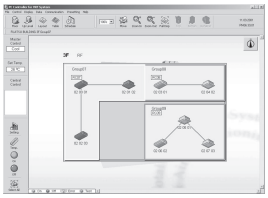
1 **Click on the group to be controlled from each monitoring screen.**

The following are the units that can be controlled by each monitoring screen.

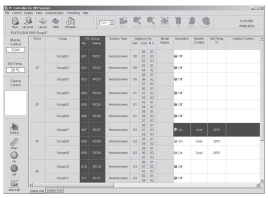
a. Building display screen: Floor unit.



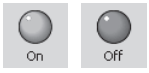
b. Floor layout screen: Group unit.



c. List display screen: R.C. Group unit.

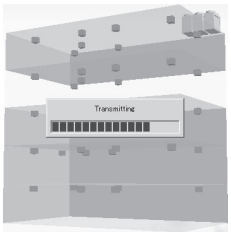


---

2 **Click on the** 

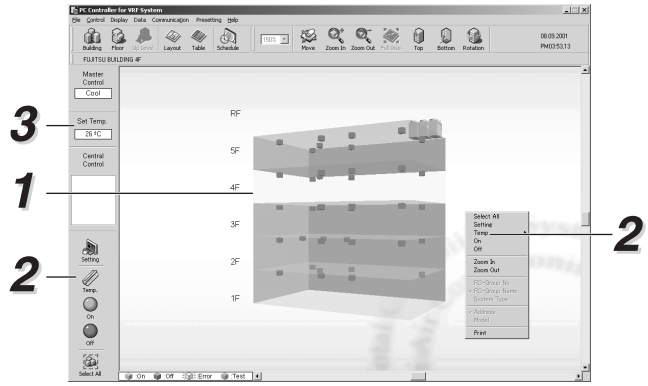
icon on the toolbar or use a right click and select on/off on the pop-up menu.

>> The signal will be sent and the selected group will go into the on/off mode.



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

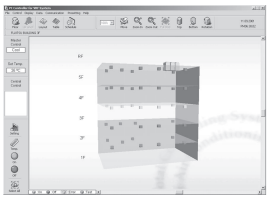
<2> Set temperature



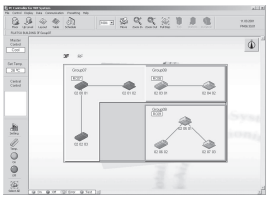
1 **Click on the group to be controlled from each monitoring screen.**

The following are the units that can be controlled by each monitoring screen.

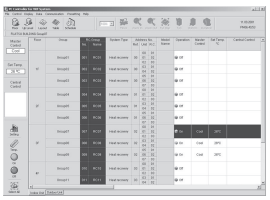
a. Building display screen: Floor unit.



b. Floor layout screen: Group unit.



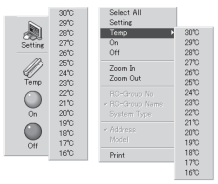
c. List display screen: R.C. Group unit.



---

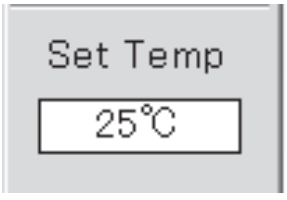
2 **Click on the icon on the toolbar or use a right click and select "Temp" on the pop-up menu.**

>> The signal will be sent and the temperature will be changed for the selected group.



---

3 **After the signal has been sent, the changed temperature will be displayed.**

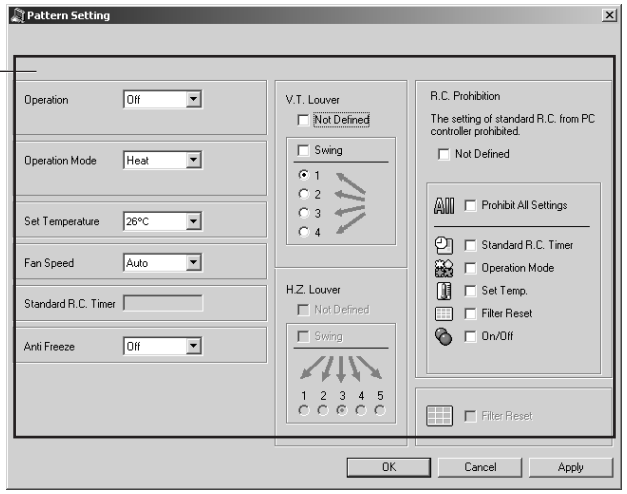


Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

5-4. OPERATION PATTERN SETTING

By registering an indoor unit operation pattern, all of the indoor units can be operated with the same settings.

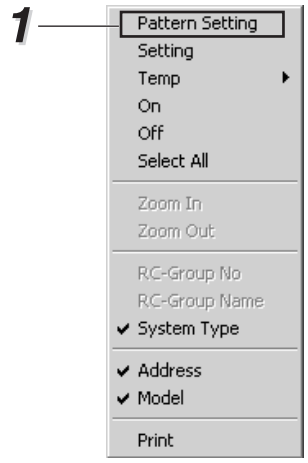
5-4-1. Setting method



1 **Settings are designated in the same way as described in sections 5-2 and 5-3.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

5-4-2. Operation method



1 **After right clicking the indoor unit whose operations you want to control, click [Pattern Setting].**
This will execute the operation controls set in the Pattern Setting dialog box on the designated indoor unit.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6. SCHEDULE CONTROL

This section presents how to set the operating schedule and operation-off days for each R.C. Group.

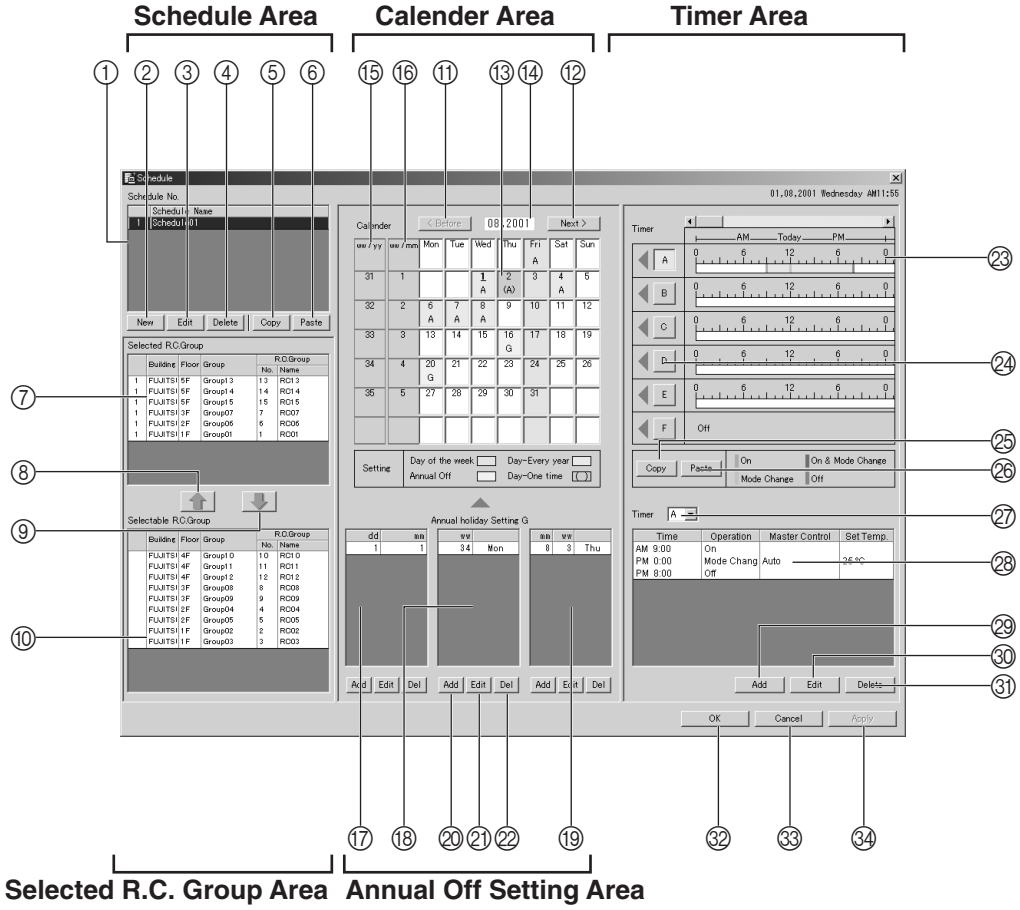
6-1. NAMES AND FUNCTIONS OF EACH SECTION 36
6-2. FLOW OF SCHEDULE CREATION 38
6-3. REGISTERING SCHEDULE NAME 40
6-4. SETTING R.C. GROUPS 45
6-5. SETTING OPERATING TIME 47
6-6. CALENDAR SETTINGS 52
6-7. SETTING OFF DAYS 54

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

6. SCHEDULE CONTROL

This allows operating status for each R.C. Group or public holidays to be set in detail throughout the year. **Either click on the main frame or select [Schedule] from the control menu to start.**

6-1. NAMES AND FUNCTIONS OF EACH SECTION



Schedule Area

① **Schedule List**	The names of the schedules registered are displayed.
② **New**	Used for creating a new schedule list.
③ **Edit**	Used for changing the schedule name.
④ **Delete**	Used for deleting the schedule name.
⑤ **Copy**	Used for copying the schedule.
⑥ **Paste**	Used for pasting the schedule.

Selected R.C. Group Area

⑦ **Selected R.C. Group List**	The R.C. Groups that the operation schedule has assigned are displayed.
⑧	Assigns the R.C. Groups to the schedule.
⑨	Deletes the R.C. Groups from the schedule.
⑩ **Selectable R.C. Group List**	All the R.C. Groups that are not on the operation schedule are displayed.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

Calendar Area

⑪ **Before**	Returns to the calendar for the previous month.
⑫ **Next**	Advances to the calendar for next month. (The range of display is 11 months after the current month.)
⑬ **Calendar**	The set schedule pattern code is displayed. Assigning or deleting of the schedule pattern and other operations can be done by mouse click.
⑭ **Current Year/Month**	Displays the current year and month.
⑮ **Week/Year**	Displays the week number of the year.
⑯ **Week/Month**	Displays the week number of the month.

Annual Off Setting Area

⑰ **dd/mm List**	Displays the specified off days by month and date.
⑱ **ww List**	Displays the specified off days by week of the year and day of the week.
⑲ **mm/ww List**	Displays the specified off days by month, week of the month and day of the week.
⑳ **Add**	Sets a new off day.
㉑ **Edit**	Changes an existing off day.
㉒ **Del**	Deletes a set off day.

Timer Area

㉓ **Timer Graph**	Displays the operating pattern. Portion for two days is displayed and the details can be seen by scrolling.
㉔ **Pattern Button**	The items selected from among A through F are assigned to the calendar and become the object of registering/changing the operating pattern.
㉕ **Copy**	Used for copying a schedule pattern.
㉖ **Paste**	Used for pasting the schedule pattern.
㉗ **Timer Box**	Displays the code for the currently selected pattern. Can also change the selection pattern.
㉘ **Timer List**	Displays the operating status that is set.
㉙ **Add**	Adds a new operating status to the selected pattern.
㉚ **Edit**	Changes the operating status of the selected pattern.
㉛ **Delete**	Deletes the operating status of the selected pattern.

Other Area

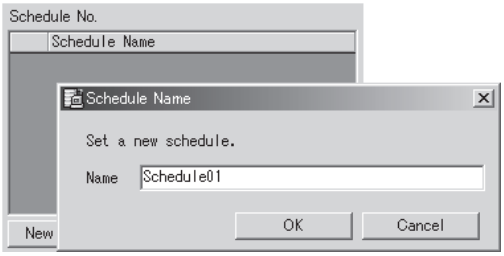
㉜ **OK**	Changes the data and closes the screen.
㉝ **Cancel**	Does not update data and closes the screen.
㉞ **Apply**	If there have been changes, these are displayed. (If there have not been changes, it cannot be used.) The data is updated and the screen is not closed.

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

6-2. FLOW OF SCHEDULE CREATION

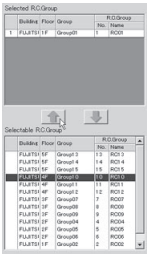
The following shows the flow of operations related to setting the schedule.

1 Register the schedule name



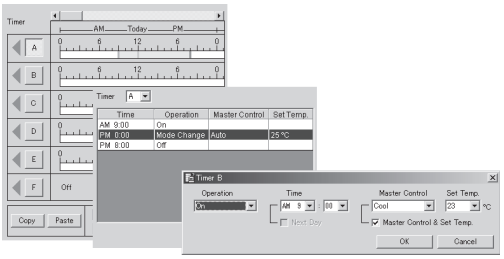
Register the schedule name.
Refer to “6-3. REGISTERING SCHEDULE NAME” for details.

2 R.C. Group assignment



Assign the R.C. Groups for the schedule operations desired.
Refer to “6-4. SETTING R.C. GROUPS” for detail.

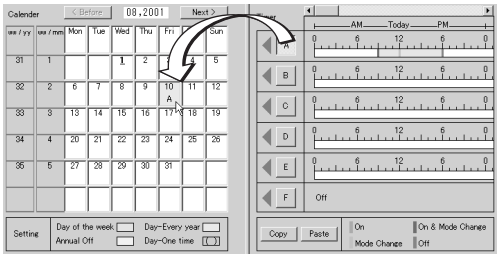
3 Create the operating pattern



The operating status are arranged by time to create the operating pattern.
Refer to “6-5. SETTING OPERATING TIME” for details.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

4 Assign operating pattern



Assign the operating patterns that have been created to the calendar.
Refer to “6-6. CALENDAR SETTINGS” for details.

5 Set off day

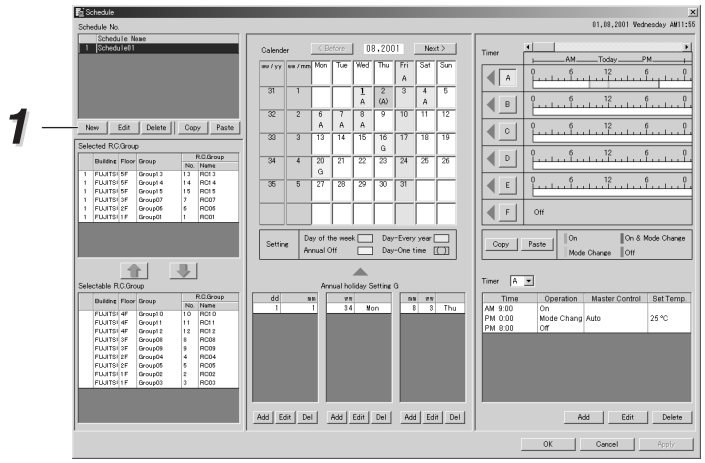
The off days throughout the year are set.
Refer to “6-7. SETTING OFF DAYS” for details.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-3. REGISTERING SCHEDULE NAME

6-3-1. Register new schedule name

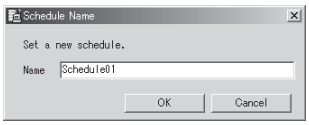
The schedule name must be registered before setting of the schedule data can be performed.
The setting of duplicate schedule names cannot be done.



1 **Click the New button.**
>> The schedule name window is displayed.

---

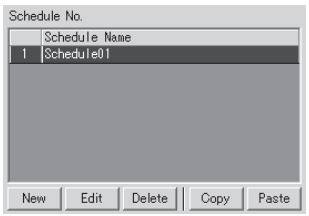
2 **Input the schedule name**
This can be up to 20 characters long.



---

3 **Click on the OK button to register.**
>> This will be reflected in the schedule list.

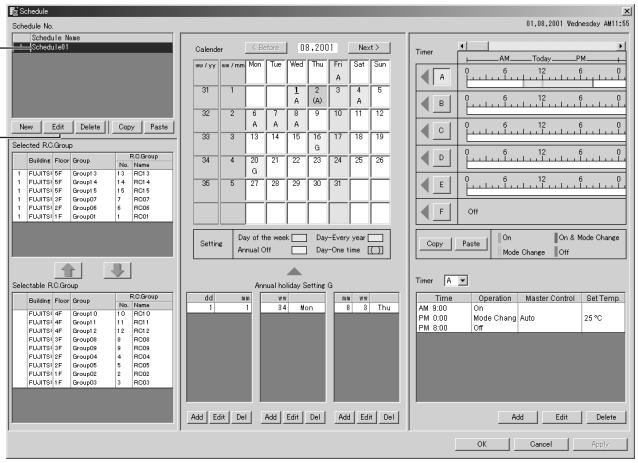
- A schedule number will be automatically assigned.
- Now schedule data settings can be done for the registered schedule name.
  If the Cancel button is clicked, the schedule name is not registered.



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-3-2. Changing the schedule name

The schedule name can be changed to another name.



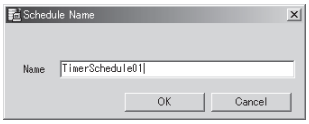
1 **Select the schedule name to be changed and click Edit.**

>> The schedule name window will be displayed and the schedule name selected will be shown.

---

2 **Change the schedule name.**

This can be up to 20 characters long.

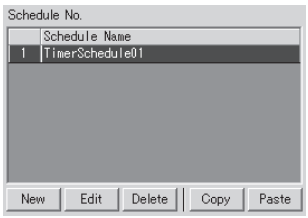


---

3 **Click** OK **to apply the changes.**

>> The changes are reflected in the schedule list. Only the schedule name is changed. The schedule data remains unchanged.

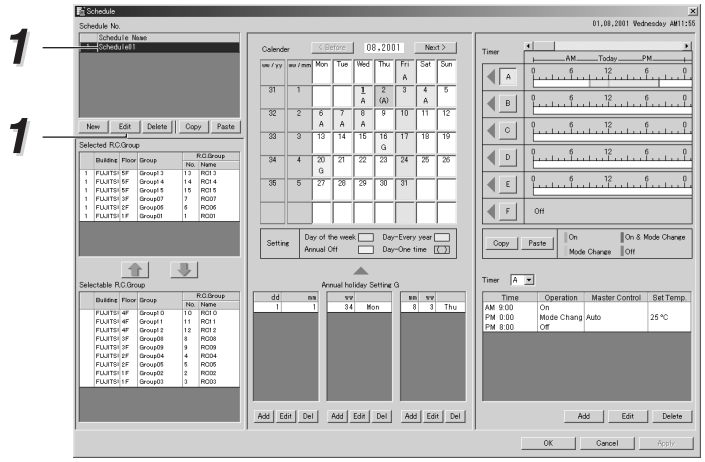
If the Cancel **button is clicked, the schedule name is not changed.**



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

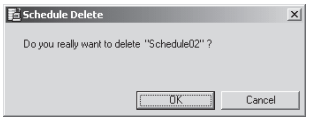
6-3-3. Deleting schedule name

The schedule name can be deleted.
This also deletes the schedule data that has been set.



1 **Select the schedule name to be deleted and click Delete.**

>> The schedule delete window will be displayed.

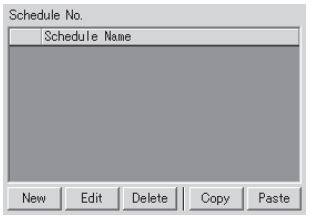


---

2 **Click [OK] to delete the schedule.**

>> The changes are reflected in the schedule list.

- Schedule renumbering is performed.
- All the schedule data for the relevant schedule is deleted. (*)
- If there are R.C. Groups that have been assigned, they will be removed from the registration.



REFERENCE

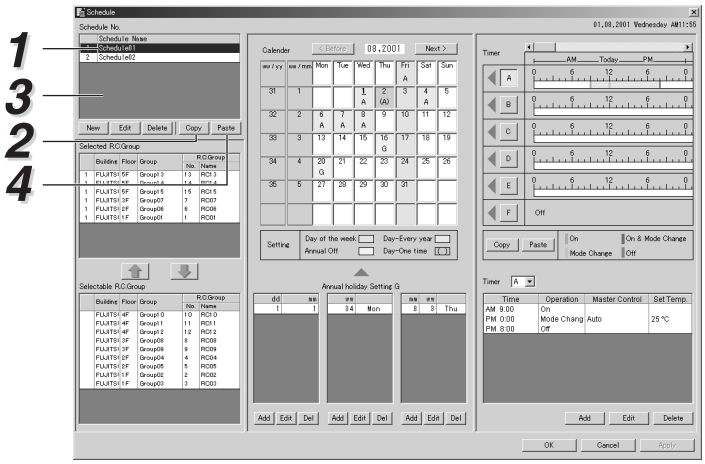
* If a schedule is accidentally deleted, right click and click on “Return to basis” on the menu. The previous condition will be restored.

(Refer to “ Right click functions” in the next section.)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-3-4. Schedule copy

Copies the schedule data.



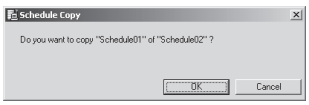
1 **Select the source schedule.**

2 **Click** Copy **.**

3 **Select the destination schedule.**

4 **Click** Paste **.**
>> The schedule copy window is displayed.

5 **Click** OK **to execute the copy.**
>> All of the data from the source schedule is copied to the destination schedule.

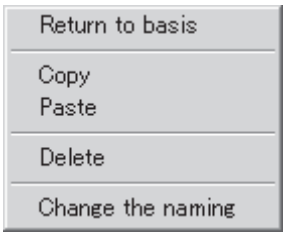


Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

Right click functions

Right click on the **schedule name list** and the pop-up menu is displayed.

- Return to basis ..... Returns to previous status. This is enabled after New, Edit, Delete or Paste operations have been selected.
- Copy ..... Same operation as the Copy button.
- Paste ..... Same operation as the Paste button.
- Delete ..... Same operation as the Delete button.

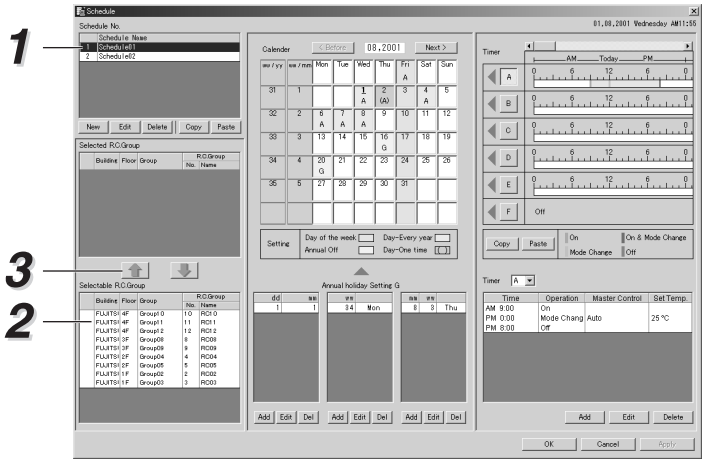


Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-4. SETTING R.C. GROUPS

6-4-1. Assigning R.C. Groups

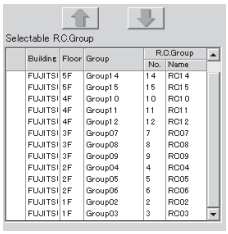
Assign a R.C. Group to the schedule and that R.C. Group will perform schedule operations.



1 **Select the schedule for assigning the R.C. Group from the schedule list.**

2 **Select the R.C. Group to be assigned to the schedule from the selectable R.C. Group List.**

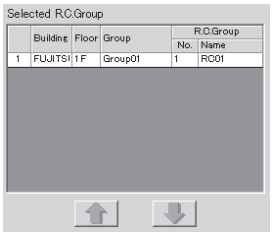
- Multiple selections can be made by holding down the Shift key while clicking on selections.
- If the control key is held down while clicking, only the R.C. Group will be registered.



3 **Click** **.**

>> The Selected R.C. Group is transferred to the Selected R.C. Group list and registered in the schedule.

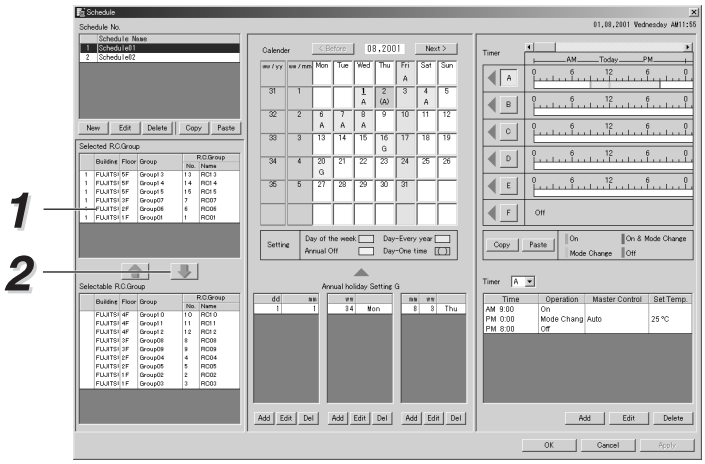
The selected schedule No. can be assigned.



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

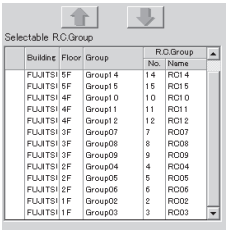
6-4-2. Cancel R.C. Group

Cancels schedule operation.



1 Select the R.C. Group for which the schedule is to be cancelled from the Selected R.C. Group List.

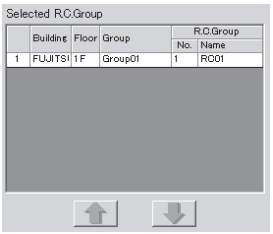
- Multiple selections can be made by holding down the Shift key while clicking on selections.
- If the Control key is held down while clicking, only the R.C. Group will be registered.



2 Click .

>> The selected R.C. Group is transferred to the selected R.C. Group list and cancelled from the schedule.

When canceling all R.C. Groups from the Selected R.C. Group list, you will be prompted for confirmation of deleting the schedule name. (Refer to “6-3-3. Deleting schedule name”.)

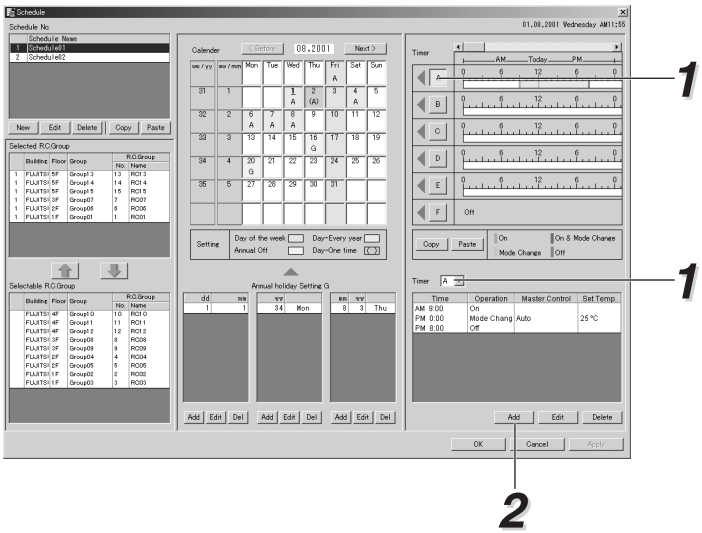


Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-5. SETTING OPERATING TIME

6-5-1. Creates operating pattern

Operating patterns can be set by time for patterns A through E.
Up to 72 ON/OFF settings can be set for each day of the week.

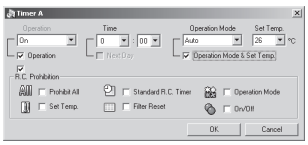


1 **Click the pattern button** A **for setting the operating pattern or select from the the timer box** A **.**

2 **Click** Add **.**
>> The timer window is displayed.

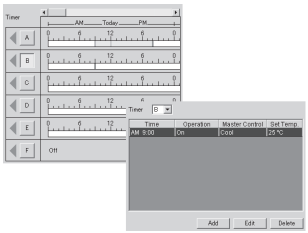
3 **First select operation ON/OFF and then select Time, Operation Mode, Set Temp., R.C. Prohibition. (*)**

- Can be set in units of 10 minutes.
- Checking "Next Day" will also set the operating pattern for the following day.



Refer to the follow section for information about "Operation" settings.

4 **Once the settings of the operating pattern have been completed, click** OK **.**
>> This data is reflected in the Timer list and Timer graph.



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

5 **Repeat operations *2* through *4* to make the operating schedule.**

REFERENCE * The selectable time range will change with the operation. Determine the operation first.

●Setting Conditions

On (Graph color: Green)

- Settings between AM 0:00 and PM 11:50 can be made.
- Once ON has been set, another ON cannot be set if no OFF setting has been made.

On & Mode Change (Graph color: Purple)

- If a check is placed in “Master Control & Set Temp.” during ON settings, it will be in ON & MODE CHANGE and Master Control and Set Temp. settings can be made.
- Settings between AM 0:00 and PM 11:50 can be made.
- Operation Mode, Set Temp. settings can be performed.

Off (Graph color: Red)

- Operation Mode, Set Temp. settings cannot be performed.
- To prevent the unit from remaining on intentionally, multiple off settings can be set after the initial off setting.

Mode Change (Graph color: Orange)

- Independent settings cannot be made. “On” must be set before Mode Change setting.
- Settings between AM 0:00 and PM 11:50 can be made.
- Settings to next day can be made.
- Can be set to the same time as the previously set On. In this case, the On of the Master Control. Set Temp is overwritten. On & Mode Change will have the same treatment.

R.C. Prohibition (Graph color ▽: On-Green/Off-Red)

- Settings are the same as those on the setting screen.
- Settings to next day can be made. (However, settings cannot be made when Operation is set to On.)

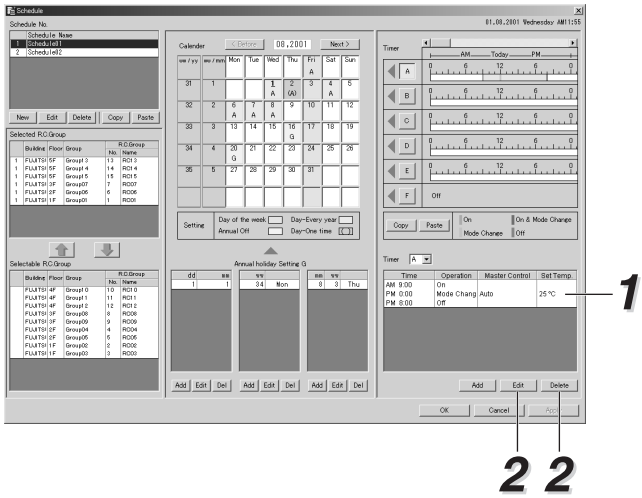
Examples of possible combinations of settings (Also including On in On & Mode Change.)

ON/OFF		Mode Change	
a. On only:	○	f. On-Mode Change-Off:	○
b. Off only:	○	g. On-Off-Mode Change:	×
c. Off-Off:	○	h. Mode Change-On:	×
d. On-Off:	○	i. Mode Change only:	×
e. On-On:	×		

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-5-2. Changing operating patterns and deleting

Changes and deletions can be made to such items as the time of the operating pattern or operating status that has been set.



1 **Select the operating pattern to be changed/deleted from the Timer list.**

2

<Change time>

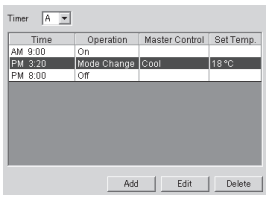
Click Edit **.**

>> The Timer window is displayed.

<Delete time>

Click Delete **. ***

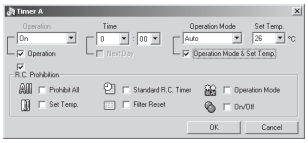
>> This is reflected in the Timer list and Timer graph.



3

<Change time>

Set the desired item. Operation cannot be changed. Refer to the next section for other change items.



4

<Change time>

Once the changes the operating pattern have been completed, click OK **.**

>> The changes will be reflected in Timer list and Timer graph.

NOTE * If On is deleted, its corresponding OFF and any Mode Change in between will also be deleted. If Off is deleted, the corresponding On and other items will also be deleted. If an on or off with no corresponding components is deleted, only one side will be deleted.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

●Change conditions:

On

- Next-Day, Master Control. Set Temp cannot be changed.
- If set within the On-Off range, the time can be changed to 10 minutes before Off.
- If an ON/OFF pattern on the calendar extends over two days, it is possible to set an ON after the time setting for the OFF on the second day.
- If On is changed to the same time as Mode Change, it will become On & Mode Change.

On & Mode Change

- If set within the On-Off range, the time can be changed to 10 minutes before Off.
- Changes to the Mode Change that is set can be changed to the same time.

Off

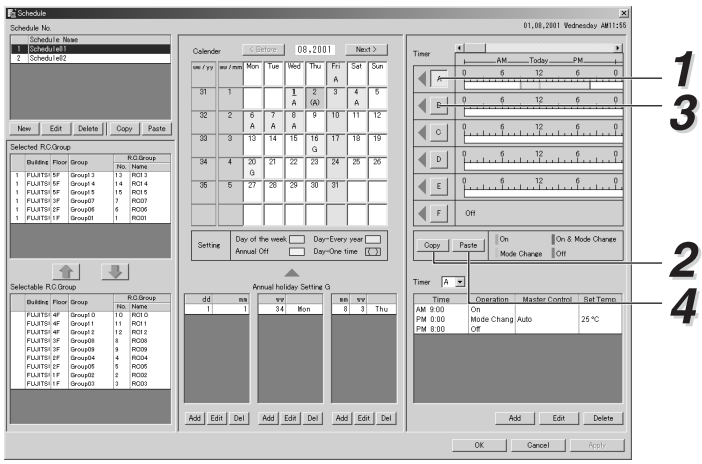
- If set within the On-Off range, the time can be changed to 10 minutes before On or Mode Change.
- Setting to the next day is possible.
- The changed pattern is assigned to the calendar and if the on setting pattern has been assigned to the next day, it is possible to set before the On time.

Mode Change

- If set within the On-Off range, the time can be changed to 10 minutes before Off.
- If changed to the same time as on, it will become Mode Change.

6-5-3. Copying a pattern

Copies operating patterns. In total, up to five pattern settings can be made.



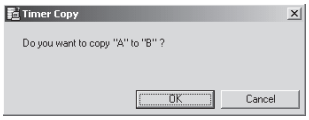
1 **Select the source pattern button.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

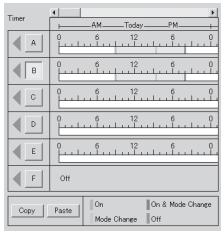
2 **Click** Copy **.**

3 **Select the destination pattern button.**

4 **Click** Paste **.**
>> The timer copy window is displayed.



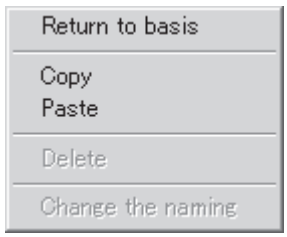
5 **Click** OK **to execute the copy.**
>> All of the data from the source pattern is copied to the destination pattern.
Click Cancel **and the operating pattern is not copied.**



Right click functions

Right click on the **Timer graph pattern** and a pop-up menu with the following items is displayed.

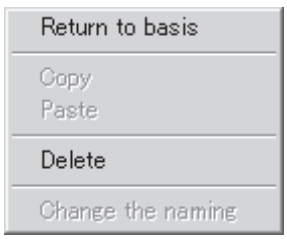
- Return to basis ..... Returns to previous status. This is enabled after “Paste” operation has been selected.
- Copy ..... Same operation as the “Copy” button.
- Paste ..... Same operation as the “Paste” button.
- Delete ..... Cannot use.
- Change the naming ..... Cannot use.



Right click functions

Right click on the **Timer list** and a pop-up menu with the following items is displayed.

- Return to basis ..... Returns to previous status. This is enabled after Add, Edit, or “Delete” operations have been selected.
- Copy ..... Cannot use.
- Paste ..... Cannot use.
- Delete ..... Same operation as “Delete” button.
- Change the naming ..... Cannot use.



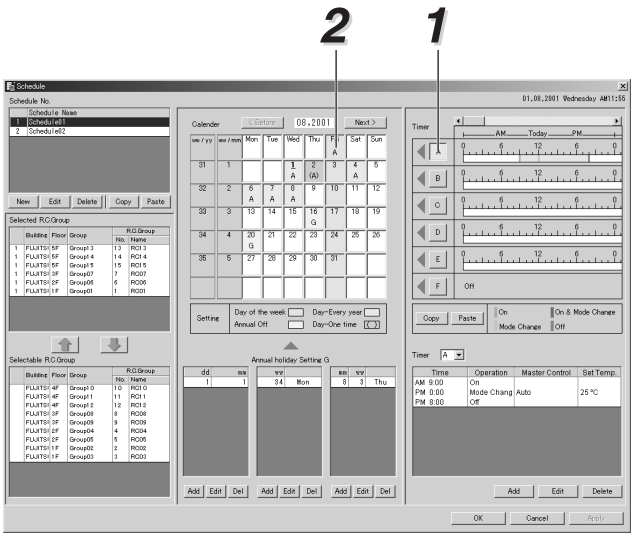
Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-6. CALENDAR SETTINGS

Assigns operating patterns to the calendar.

6-6-1. Assigning days of week

Day of week assignment is used when the operating pattern is to be executed on the same day of the week.

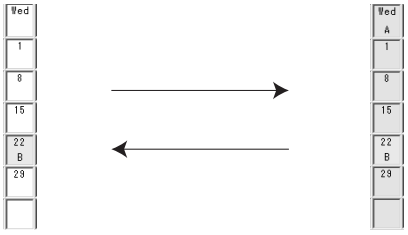


1 **Click the pattern button** A **for the desired pattern.**

2 **Click the cell for day on the calendar.**

>> The pattern code will appear below the day.
Each click changes the color as shown below.

On days that have date assignments, the date assignment will have priority.
On days that have annual stop days assigned to them, the annual stop day will have priority.



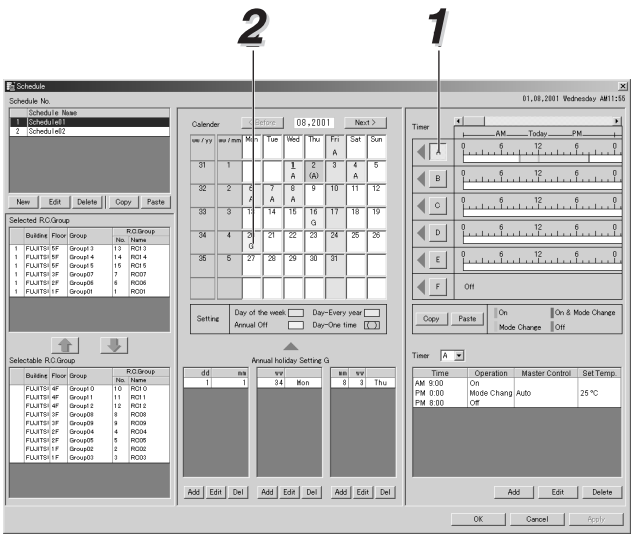
No assignment or day assignment Day of the week (Blue)

Day of the week: The operating pattern is also executed on the same day from the following month on.

REFERENCE The first day of the week on the calendar can be set to either Monday or Sunday.
Refer to “4-7. PREFERENCES <2> Unit/Time/Day of week” in the Setting Manual.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-6-2. Date assignments



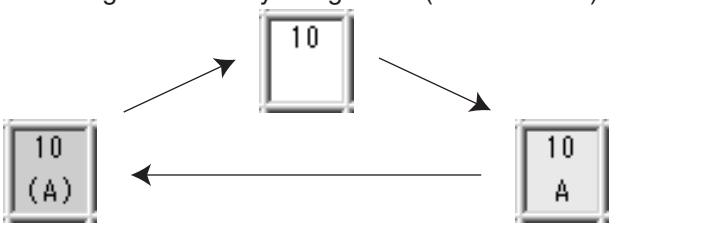
1 **Click on the pattern button** [A] **for the desired pattern.**

2 **Click on the cell with the desired date.**

>> The pattern code will appear below the date.
Each click changes the color as shown below.

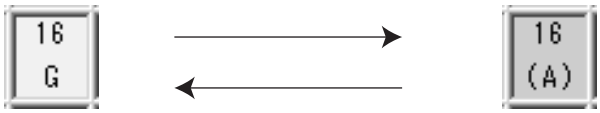
① **On date cells with no assignment or day of the week assignments.**

No assignment or day assignment (White or blue)



Day One Time (Pink) Day Every Year (Orange)

② **On date cells that have annual stop days assigned.**



Annual Off (Green) Day One Time (Pink)

*** Day Every Year: The operating pattern is also executed on the same date from the following year on.**

*** Day One Time: The operating pattern is deleted once the relevant date has passed.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-7. SETTING OFF DAYS

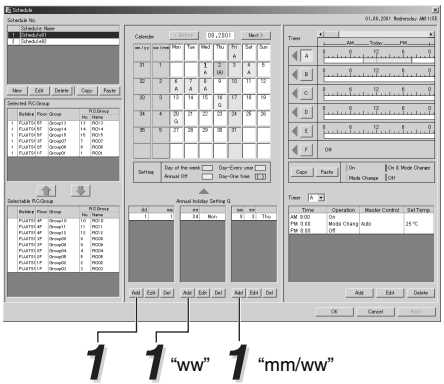
Three off day patterns dates throughout the year can be set.
These off days are only displayed on the calendar and are not sent to the indoor units.

dd/mm : Sets the off day by month and day.
ww : Sets the off day from the week of the year and day.
mm/ww : Sets the off day from the week of the month and day.

6-7-1. Setting the off day

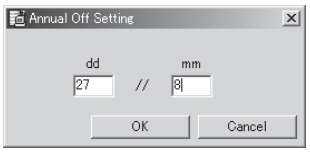
This explains the operating method when dd/mm.

- Adding “dd/mm”
- Adding “ww”
- Adding “mm/ww”



1 **Click** Add **.**
>> The Annual Off Setting window is displayed.

2 **Enter the date and month.**



3 **Click** OK **to register.**
>> These are reflected in the “dd/mm” list and calendar.
Click Cancel **and the day off is not registered.**
A “G” will appear on calendar at the specified day of the week. The off date that has been set will also be enabled for next year.

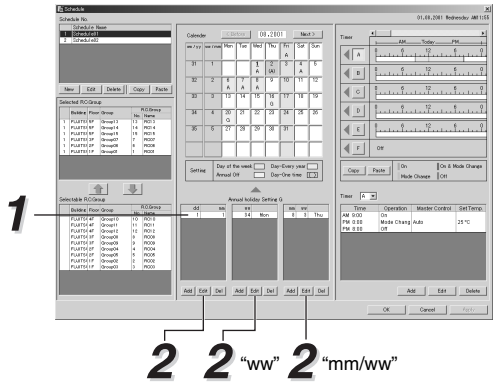
REFERENCE Deleting “ww” and adding “mm/ww” is the performed in the same manner as shown above.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-7-2. Changing the off day

This explains the operating method when dd/mm.

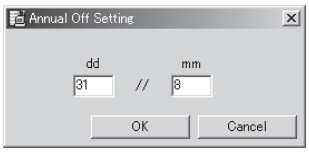
- Changing “dd/mm”
- Changing “ww”
- Changing “mm/ww”



1 Select the off day to be changed from the list.

2 Click Edit.

>> The Annual Off Setting window is displayed.

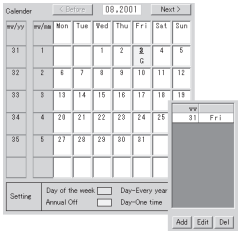


3 Change to the desired values for day and month.

4 Click OK to register.

>> These are reflected in the “dd/mm” list and calendar.

Click Cancel and the day off is not registered.



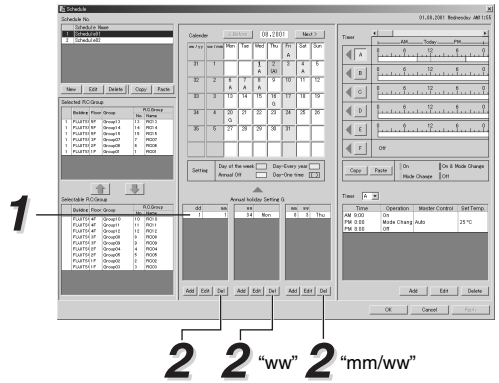
REFERENCE Deleting “ww” and adding “mm/ww” is the performed in the same manner as shown above.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6-7-3. Deleting the off day

This explains the operating method when dd/mm.

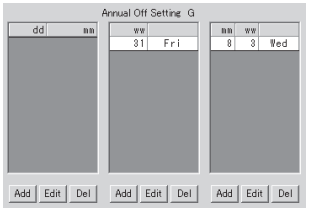
- Deleting “dd/mm”
- Deleting “ww”
- Deleting “mm/ww”



1 **Select the off day to be deleted from the list.**

2 **Click** Del **.**

>> The relevant data will be deleted from the “dd/mm” list and calendar.

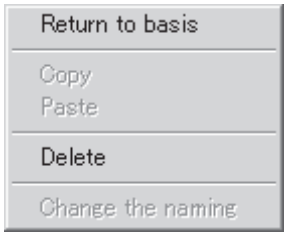


REFERENCE Deleting “ww” and adding “mm/ww” is the performed in the same manner as shown above.

Right click functions

Right click on each list for dd/mm, ww, mm/ww and the pop-up menu is displayed.

- Return to basis..... Returns to previous status. This is enabled after “Add”, “Edit” and “Del” operation has been selected.
- Copy..... Cannot use.
- Paste..... Cannot use.
- Delete ..... Same operation as Delete button.
- Change the naming ... Cannot use.



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

7. RECORDS

This section presents how to record and display data about the operating status of the indoor units and the operating accumulation time of the outdoor units.

7-1. OPERATION RECORDS 58
7-2. OPERATING ACCUMULATION TIME 62

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

7. RECORDS

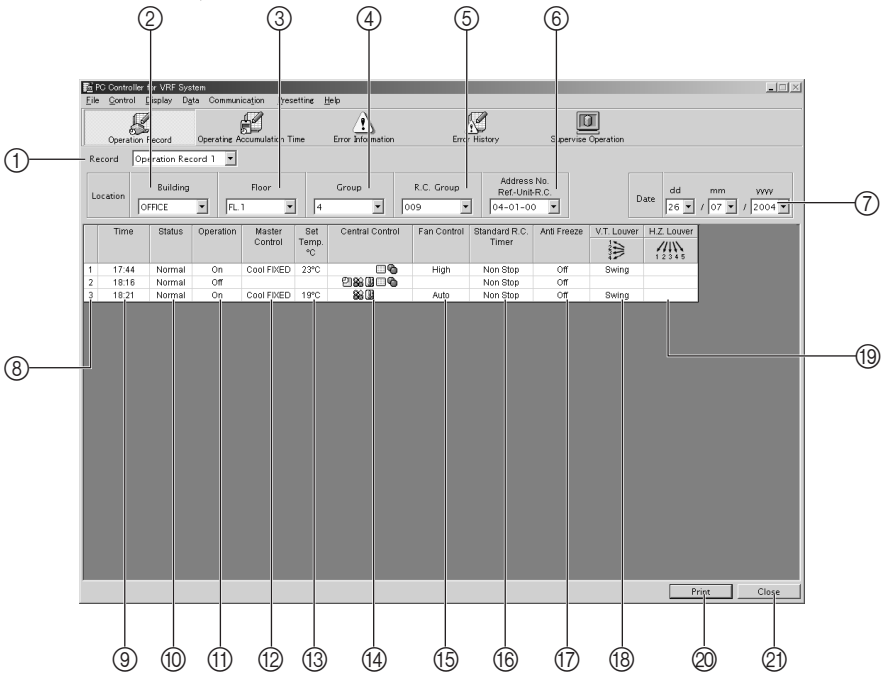
7-1. OPERATION RECORDS

[Operation Record] is used to confirm the settings of the specified R.C. Group. Moreover, by selecting operation record 1 and 2, it is possible to display changes in the settings over time while being able to print out documents of those lists.
Select [Operation Record] from the Data menu to start.

NOTE Be careful. If the PC controller is stopped while the VRF system is operating, data will not be collected for use in operation records, operating accumulation time and for calculating the electricity bill.

7-1-1. Name and function of each section

● Operation Record 1, 2 common



① **Record**	Switches between operation record 1 and operation record 2.
② **Building**	Displays all building names. The relevant operation record can be displayed by selecting the building name.
③ **Floor**	Displays the floor names included in the specified building. The pertinent operation record is displayed by selecting the floor name.
④ **Group**	Displays the group names included in the specified floor. The pertinent operation record is displayed by selecting the group name.
⑤ **R.C. Group**	Displays the R.C. Group names included in the specified group. The pertinent operation record is displayed by selecting the R.C. Group name.
⑥ **Address No.**	Displays the Refrigerant address No. -Unit address No.- R.C. Group address No. included in the specified R. C. Group.
⑦ **Date**	Specifies the date of the operation record to be displayed. (*1)
⑧ **No.**	Displays the sequential number. (*2)
⑨ **Time**	Operation record 1: Displays the time of the incident in the operating status of the indoor unit. Operation record 2: Displays the time in one-hour intervals. (*2)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

⑩ **Status**	Displays “Normal” if all the indoor units in a R.C. Group are operating normally. If one or more units has an error, “Error” is displayed. (*2)
⑪ **Operation**	Displays “Off” if all the indoor units in a R.C. Group are operating normally. If one or more units is on, “On” is displayed. (*2)
⑫ **Operation Mode**	Displays the operating status of the indoor unit. (Does not display is operation is off as shown in ⑩ above.)
⑬ **Set Temp.**	Displays the setting temperature of the indoor unit. (Does not display is operation is off as shown in ⑩ above.)
⑭ **R.C. Prohibition**	Displays the prohibited setting status of the indoor unit. Refer to “5. OPERATION CONTROL” for description of icons.
⑮ **Fan Speed**	Displays the fan status of the indoor unit. (Does not display is operation is off as shown in ⑩ above.)
⑯ **Standard R.C. Timer**	Displays the status of the timer for the indoor unit that has been set by the standard remote controller.
⑰ **Anti Freeze**	Displays the on/off status of the anti-freeze setting of the indoor unit.
⑱ **V.T. Louver**	Displays up/down louver position and swing setting status of the indoor unit. (Does not display is operation is off as shown in ⑩ above or if the unit has ducts.)
⑲ **H.Z. Louver**	Displays right/left louver position and swing setting status of the indoor unit. (Does not display is operation is off as shown in ⑩ above or if the unit has ducts and/or is ceiling cassette type.)
⑳ **Print**	Prints the contents of the currently displayed list.
㉑ **Close**	Closes the screen.

REFERENCE

*1 : **Display date when starting the screen.**
[⑦ Date]: The default date for the screen display will change by the method of starting.
- When starting by the Date menu or tool bar, the same day of the week will be displayed.
- When starting document the document creation screen, the date from the previous day of the week will be displayed.

*2 : The order of the displayed data can be sorted by clicking on the title.

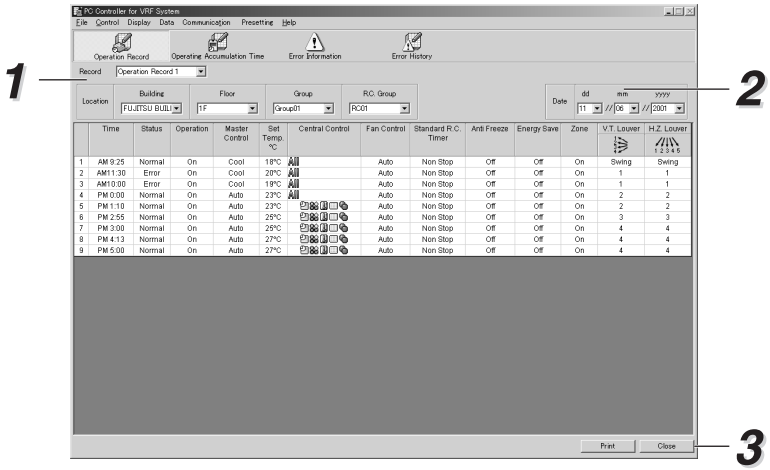
Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

7-1-2. Displaying operation records

The operating data for the indoor unit for the specified Location, Date is displayed.

- Operation record 1 (*) ..... Displays the operating data for changes in the operating status of the indoor unit between 0:00 and 23:59 for the specified location and date.
- Operation record 2 (*) ..... Displays the operating data for the indoor unit for each hour between 0:00 and 23:00 for the specified location and date.

● Operation record 1, 2 common



1 **Designate the building, floor, group, R.C. Group of the operation record to be displayed.**
>> The operation record for the specified location is displayed.

2 **Designate the date of the operation record to be displayed.**
>> The operation record for the specified date will be displayed.

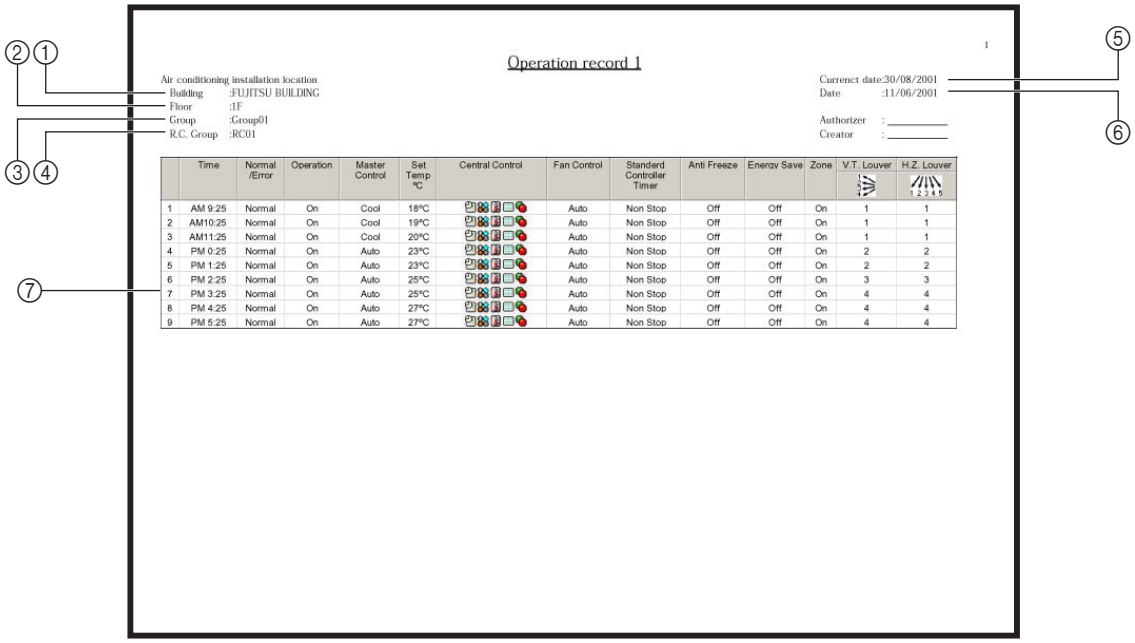
3 **Click** Close **to close the screen.**

NOTE * : During off, only the item operation, standard R.C. Timer and Anti Freeze are displayed. This is because the operation records are updated even during off and the status items other than those shown above are undergoing change.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

7-1-3. Printing the operation record

Click Print **on the operation record screen and the operation records currently displayed will be printed.**
Follow the instructions in the dialog box that will appear.
Or, select [Making Document] from the file menu and operation report documents can be output without displaying the operation reports screen.



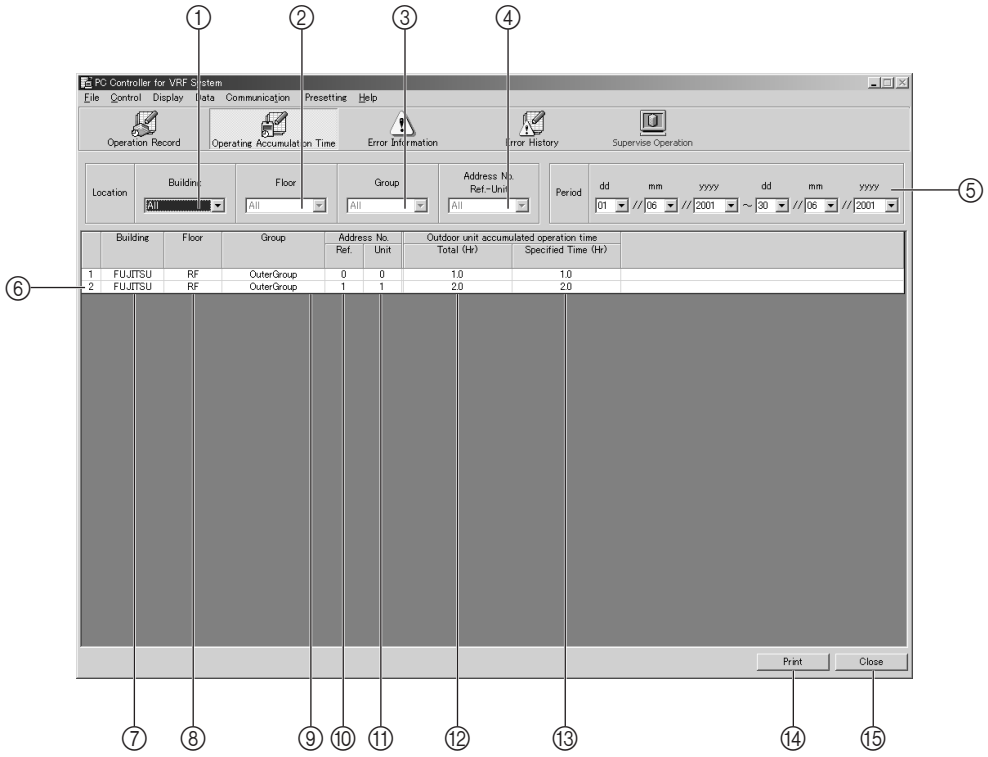
①**Building**	Prints the building name specified on the screen.
②**Floor**	Prints the floor name specified on the screen.
③**Group**	Prints the group name specified on the screen.
④**R.C. Group**	Prints the R.C. Group specified on the screen.
⑤**Current Date**	Prints the current date.
⑥**Date**	Prints the date name specified on the screen.
⑦**Record List**	Prints the operation record data specified on the screen.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

7-2. OPERATING ACCUMULATION TIME

[Operating accumulation time] This is used when checking the operating accumulation time of the outdoor unit being used by the specified group. The operating time of the specified year, month and day period is displayed and the results are printed.
Select [Operating Accumulation Time] from the Data (D) menu to start.

7-2-1. Names and functions of each section



① **Building**	Displays all building names. Select the building names and the pertinent operating accumulation time data will be displayed.
② **Floor**	Displays the floor names included in the specified building. Select the floor names and the pertinent operating accumulation time data will be displayed.
③ **Group**	Displays the group names included in the specified floor. Select the group names and the pertinent operating accumulation time data will be displayed.
④ **Address No.**	Displays the address numbers included in the refrigerant system and outdoor unit group. Select the floor names and the pertinent operating accumulation time data will be displayed.
⑤ **Period**	Specifies the date period for the operating accumulation time data to be displayed. (*1)
⑥ **No.**	Displays the sequential numbers. (*2)
⑦ **Building**	Displays the building name. (*2)
⑧ **Floor**	Displays the floor name. (*2)
⑨ **Group**	Displays the group name. (*2)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

⑩ **Ref.**	Displays the address of the refrigerant system. (*2)
⑪ **Unit**	Displays the addresses of each outdoor unit.
⑫ **Total**	Displays the total operating time for the past 1 month. (*3)
⑬ **Specified Time**	Displays the total operating time for date-specified period. (*3)
⑭ **Print**	Prints the contents of the list currently displayed.
⑮ **Close**	Closes the screen.

REFERENCE

*1 : **Display date when starting the screen.**

[⑤ Period]: The default date for the screen display will change by the method of starting.

- When starting by the Data menu or tool bar, both the starting date and ending date will display today's date.
- When starting from the document creation screen, the creation start date that was set in "Document Settings" in "4-7. PREFERENCES <2> Unit/ Time/Day of week" in the Setting Manual.
  The starting date is displayed. The ending date displays the date one month from the starting date.
  Example: Creation start date: 15 Current date: 2001/07/27
  Document creation start date: 2001/06/15 → End date 2001/07/14
  Example: Document creation start date: 28 Current date: 2001/07/27
  Document creation start date: 2001/05/28 → End date 2001/06/27

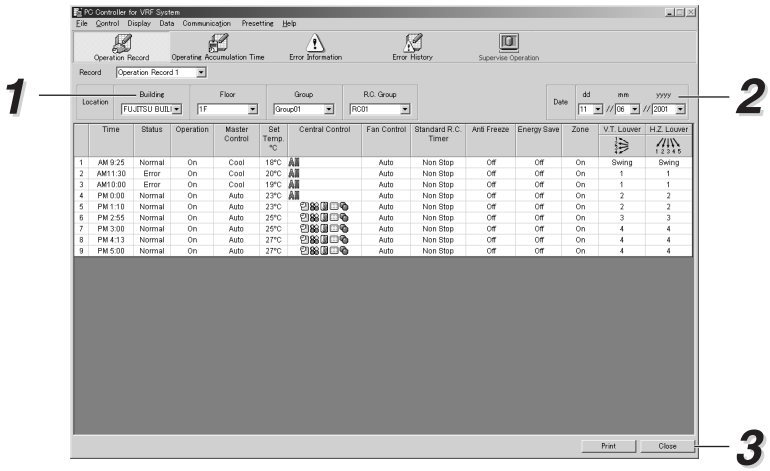
*2 : The order of the displayed data can be sorted by clicking on the title.

*3: For the S-UP series, the operating accumulation time displayed is the total of all of the outdoor units in a single refrigerant system.

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

7-2-2. Displaying operating accumulation time

Displays the operating accumulation time date for the outdoor unit for the specified location and period.



1 **Designate the building, floor, group and address number for operating accumulation time to be displayed.**
>> The operating accumulation time data for the specified location is displayed.

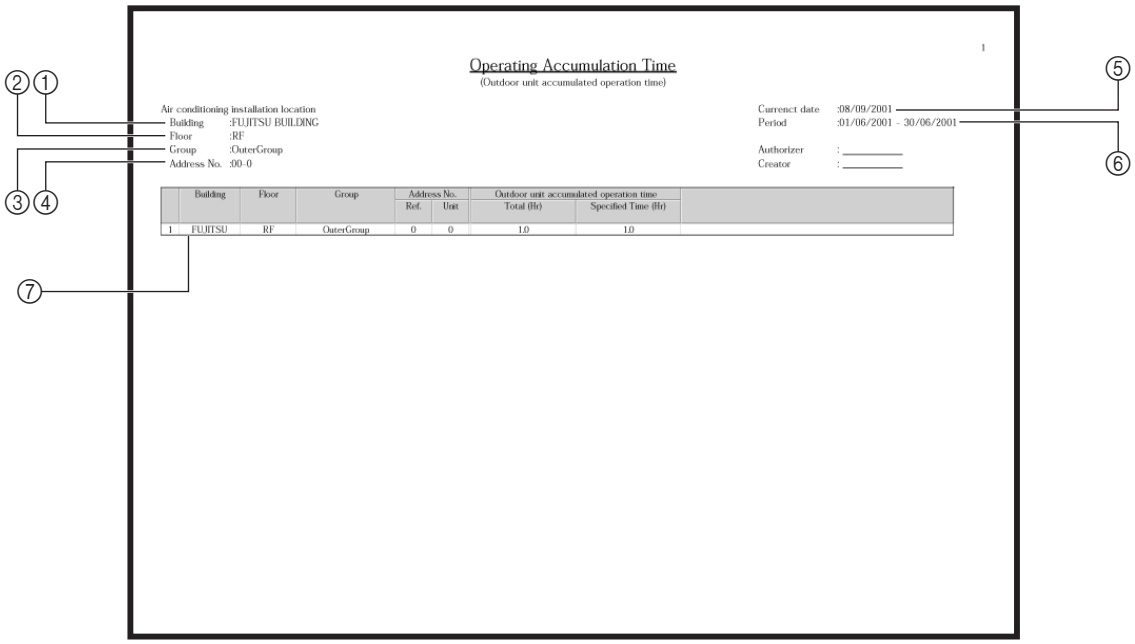
2 **Designate the period for the operating accumulation time data to be displayed.**
>> The operating accumulation time data for the specified period is displayed.

3 **Click** Close **to close the screen.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

7-2-3. Printing operating accumulation time

Click Print on the accumulation time screen and the accumulation time currently displayed will be printed.
Follow the instructions in the dialog box that will appear.
Or, select [Making Document] from the file menu and operation report documents can be output without displaying the operation reports screen.



①**Building**	Prints the building name specified on the screen.
②**Floor**	Prints the floor name specified on the screen. Will not print if All is specified.
③**Group**	Prints the group name specified on the screen. Will not print if All is specified.
④**Address No.**	Prints the address number specified on the screen. Will not print if All is specified.
⑤**Current Date**	Prints the current date.
⑥**Period**	Prints the period specified on the screen.
⑦**Operation Time List**	Prints the operating accumulation time data specified on the screen.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

8. CALCULATION OF ELECTRICITY CHARGE

This section presents how to apportion the bill for the electricity charge to each block and how to create documents and bills.

8-1. ENTERING ELECTRICITY CHARGE AND APPORTIONMENT PROCESSING 68
8-2. PAST BILL AMOUNT REFERENCE 70
8-3. DETAILED RESULT OF APPORTIONMENT 72
8-4. BILL PRINT SETTINGS 73
8-5. PRINTING THE BILL 75

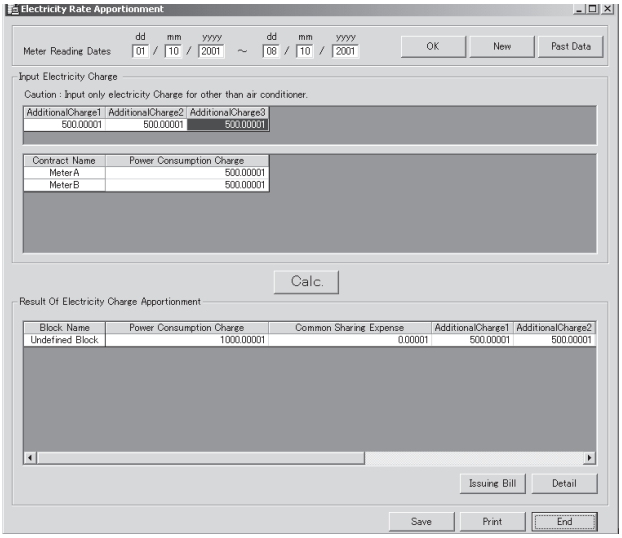
Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

8. CALCULATION OF ELECTRICITY CHARGE

Enter the bill amount for the electricity bill. It will apportioned to each block based on the setting data and the various charges will be displayed. Moreover, the results of the calculation can be output as documents for issuing bills or as reference for past billed amounts.
Select [Electricity Charge Apportionment] from the Data menu to start.

For more information about the initial settings for electricity rate apportionment calculation, block settings and other related items, refer to “4-5. ELECTRICITY CHARGE INITIAL SETTING” and “4-6. ELECTRICITY CHARGE CALCULATION INITIAL SETTINGS” in the Setting Manual.

8-1. ENTERING ELECTRICITY CHARGE AND APPORTIONMENT PROCESSING



1 **Enter the meter reading date for the electricity charge.**

---

2 **If it is a package contract, enter the standing charge, power consumption charge and additional charges (meter reading charge, CCL). (*1)**

---

3 **If it is a package contract, enter the standing charge, power consumption charge and additional charges (meter reading charge, CCL). (*1)**

---

4 **Click** Calc. **to start apportionment processing.**
>> The results of the electricity charge apportionment processing will be displayed.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

5 **Click** Save **.**

>> The data entered and the apportioned data will be saved in the data base. (*2)
At the same time, the data will be saved in CSV format in the “Install Destination Folder/Common”.

---

6 **Click** Issuing Bill **.**

>> The screen for issuing bills will be displayed. Refer to “8-4. BILL PRINT SETTINGS”. (*2)

---

7 **Click** Detail **.**

>> The screen with the details of the apportionment processing results will be displayed. Refer to “8-3. DETAILED RESULT OF APPORTIONMENT”. (*2)

---

8 **Click** Print **.**

>> The data entered and the apportionment processing results will be printed as documents. (*2)

---

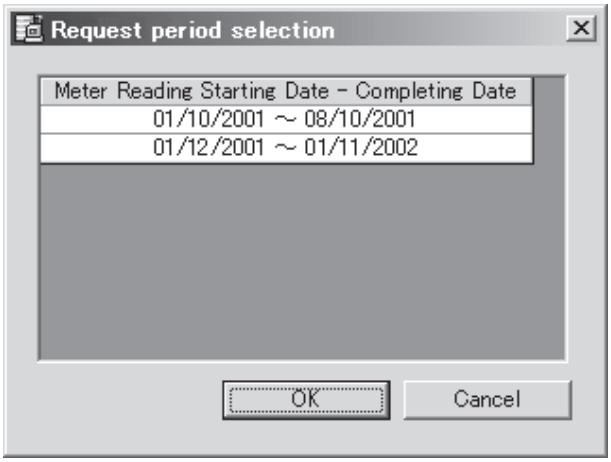
9 **Click** End **to close the screen.**

REFERENCE

*1 : Some of the input fields may or may not appear due to the settings in the initial settings for electricity rate apportionment calculation.
*2 : Only enabled after apportionment calculation has been completed.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

8-2. PAST BILL AMOUNT REFERENCE



1 **Click** Past Data **on the screen shown in 68 page.**
The meter reading periods for the past year are displayed.

2 **Select the meter reading period to display and click** OK **.**
>> The relevant bill amount data will be displayed. *

NOTE * The data displayed cannot be changed.

3 **Click** Cancel **.**
The past bill amount data will be cleared.
New data can now be entered.

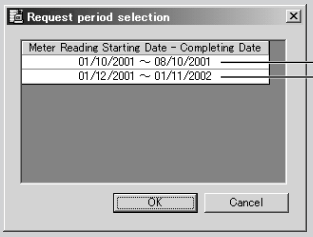
Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

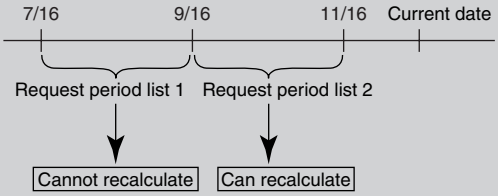
REFERENCE

Recalculating apportionment

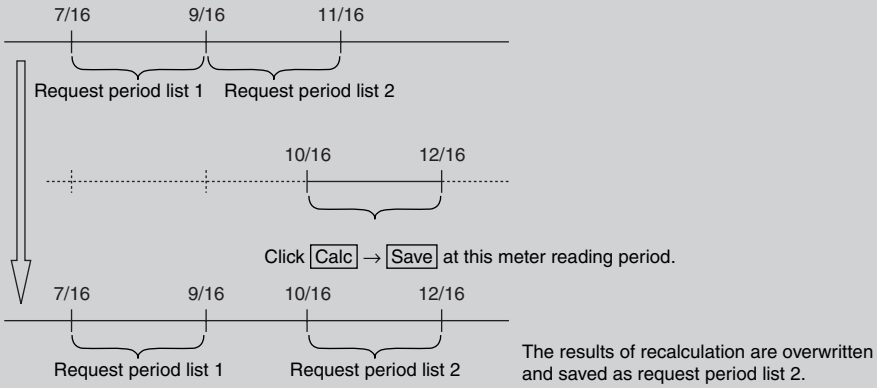
Click Calc. to recalculate the apportionment.

Note that meter reading period that can be recalculated will be up to the meter reading period for the new data that is in the list of the bill period selection screen.





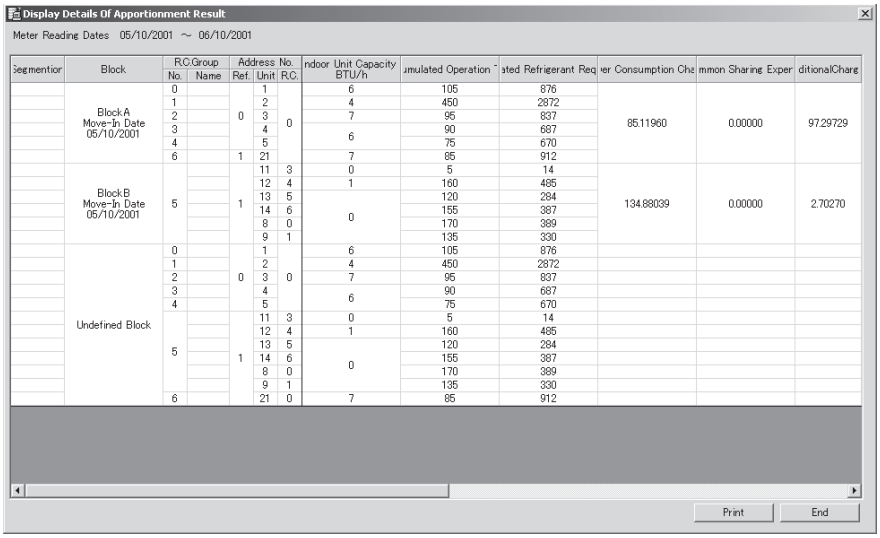
Specify the meter reading period that overlaps with the new data in the list of the bill period selection screen and click Calc. → Save. The new data will be recalculated and determined so it will be written over the results of the calculation in the latest data and saved.



Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

8-3. DETAILED RESULT OF APPORTIONMENT

Click Detail **on the electricity rate apportionment screen and details about the apportionment results will be displayed.** This provides a reference for such items as R.C. Group or address assigned to each block, the operating time for each indoor unit and the accumulated refrigerant demand.



Segmention	Block	R.C.Group No.	R.C.Group Name	Address No. Ref.	Address No. Unit	Address No. R.C.	Indoor Unit Capacity BTU/h	Accumulated Operation	Calculated Refrigerant Req	Power Consumption Cha	Common Sharing Exper	AdditionalCharg
	Block A Move-In Date 05/10/2001	0		0	1	0	6	105	876	85.11960	0.00000	97.29729
		1			2		4	450	2872			
		2			3		7	95	837			
		3			4		6	90	687			
		4			5			75	670			
		6		1	21		7	85	912			
	Block B Move-In Date 05/10/2001	5		1	11	3	0	5	14	134.88039	0.00000	2.70270
					12	4	1	160	485			
					13	5	0	120	284			
					14	6		155	387			
					8	0		170	389			
					9	1		135	330			
	Undefined Block	0		0	1	0	6	105	876			
		1			2		4	450	2872			
		2			3		7	95	837			
		3			4		6	90	687			
		4			5			75	670			
		5		1	11	3	0	5	14			
					12	4	1	160	485			
					13	5	0	120	284			
					14	6		155	387			
					8	0		170	389			
					9	1		135	330			
		6			21	0	7	85	912			

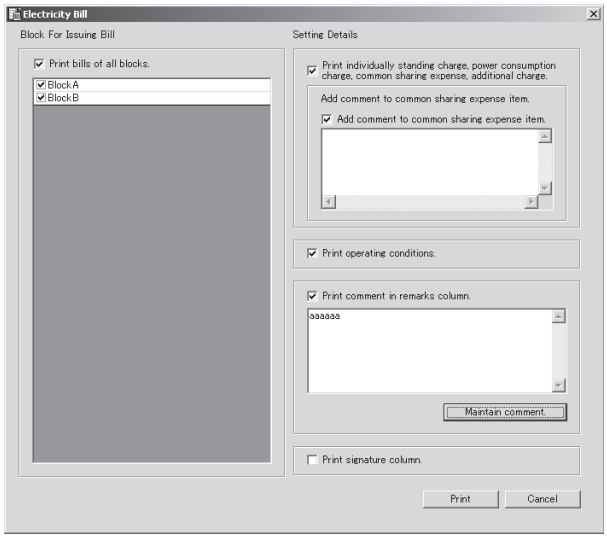
1 **Click** Print **to print the data displayed.**

2 **Click** End **to close the screen.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

8-4. BILL PRINT SETTINGS

Click Issuing Bill **on the electricity rate apportionment screen and the screen for issuing bills will be displayed.** This is used for setting the items to be printed in the bill.



1 **Place a check in "Print bills of all blocks".**
>> The bills for all registered blocks will be printed.

2 **If a check has not been placed in *1*, select the blocks for which bills are to be printed.**

3 **Place a check in "Print individually standing charge, power consumption charge, common sharing expense, additional charge" and each of these four items will be printed individually. It is also possible to add comments to the common sharing charges item.**

4 **Place a check in "Print operating conditions".**
>> The operating conditions will be printed.

5 **Place a check in "Print comments in remarks column" and comments that have been entered into the comment remarks column will be printed.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6 **Click** Maintain comment**.**

>> The comments entered in ***5*** will be maintained so that the same comments can be used for the next printing.

---

7 **Place a check in "Print signature column".**

>> Signature column will be printed.

---

8 **Click** Print**.**

>> The bill will be printed based on these settings.

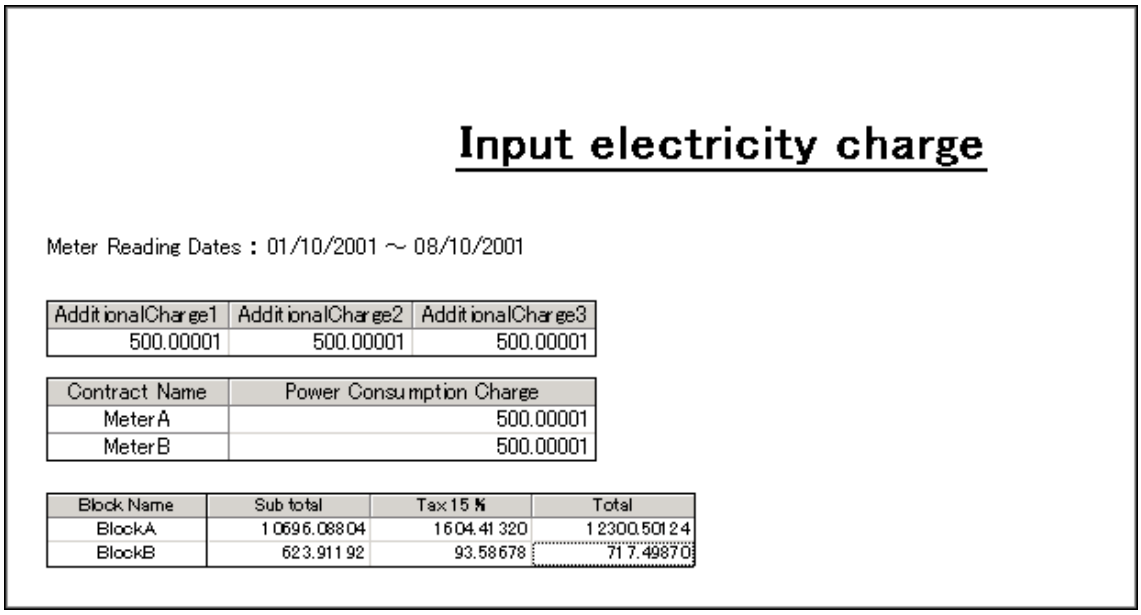
---

9 **Click** Cancel **to close the screen and return to the electricity rate apportionment screen.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

8-5. PRINTING THE BILL

Click Print **on the bill screen and an bill will be printed based on the data that appears in the electricity rate apportionment screen.**
Follow the information in the dialog boxes for confirming printing.



Input electricity charge

Meter Reading Dates : 01/10/2001 ~ 08/10/2001

AdditionalCharge1	AdditionalCharge2	AdditionalCharge3
500.00001	500.00001	500.00001

Contract Name	Power Consumption Charge
Meter A	500.00001
Meter B	500.00001

Block Name	Sub total	Tax 15 %	Total
BlockA	10696.08804	1604.41320	12300.50124
BlockB	623.91192	93.58678	717.49870

①**Bill No.**	Blank
②**Bill Date**	Prints current date.
③**Meter Reading Period**	Prints the meter reading period entered in the electricity rate apportionment screen.
④**Charges**	Prints the standing charge, power consumption charge, common sharing charges and additional charges entered in the electricity rate apportionment screen. *
⑤**Operating Condition**	Prints the operating time. *
⑥**Comments**	Prints the comments entered in the setting screen. *
⑦**Signature Column**	Prints the signature column. *
⑧**Sub total**	Prints the sub-total for the apportioned amount seen in the electricity rate apportionment screen.
⑨**Tax**	Prints the tax for the apportioned amount seen in the electricity rate apportionment screen.
⑩**Total**	Prints the total for the apportioned amount seen in the electricity rate apportionment screen.

NOTE * : Does not print if not set in electricity charge bill screen.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

8. CALCULATION OF ELECTRICITY CHARGE

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

9. ERROR DISPLAY

This section presents how to use the error warning, error data and error history screens to check on errors that have occurred in equipment connected to the system.

9-1. ERROR WARNING 78
9-2. ERROR INFORMATION 80
9-3. ERROR HISTORY 83

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

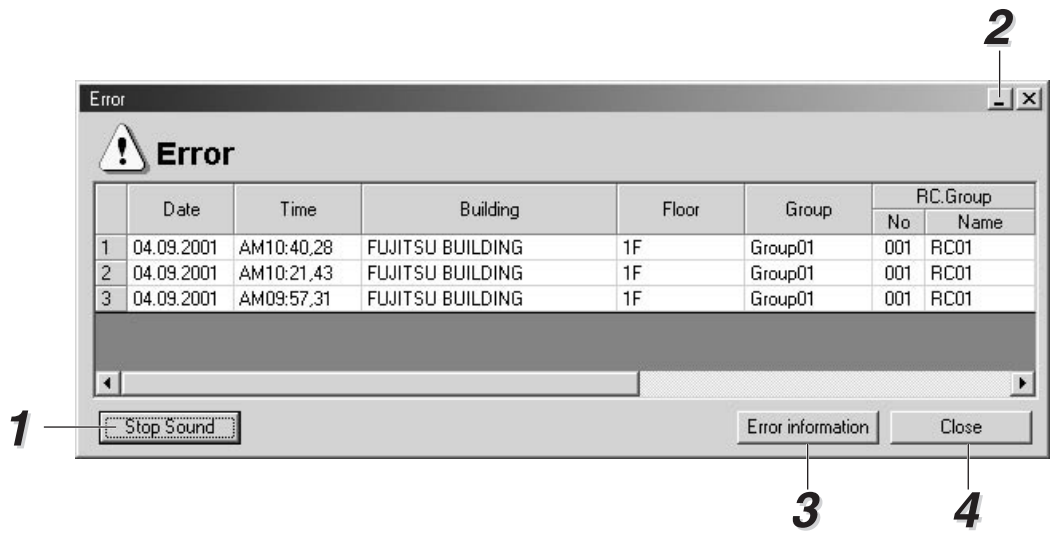
9. ERROR DISPLAY

Information about errors related to the indoor units, outdoor units, central remote controller, PC controller (including transmission adapter) is displayed in 3 screens.

- Error warning screen: Displayed when error occurs.
- Error data screen: Displays information about the errors currently occurring and this can be printed.
- Error history screen: Displays data about recovered errors and this can be printed.

9-1. ERROR WARNING

If an error occurs in equipment connected to the network, the error warning screen will be displayed. It is also possible to make environment settings that will prevent the error screen from being displayed.
Refer to “4-7. PREFERENCES” in the Setting Manual for details.



1 **Click Stop Sound to stop the alarm sound made when an error occurs.**

- The alarm sound can also be stopped automatically by making Preference.
- If the Preference are made, this button will not be displayed.

2 **Click Minimize to reduce the size of the error warning screen.**

>> When this is selected, the window will appear as shown.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

3 **Click Error information to check all the error information currently occurring. Confirm using the error information screen.**

4 **Click Close to close the screen.**

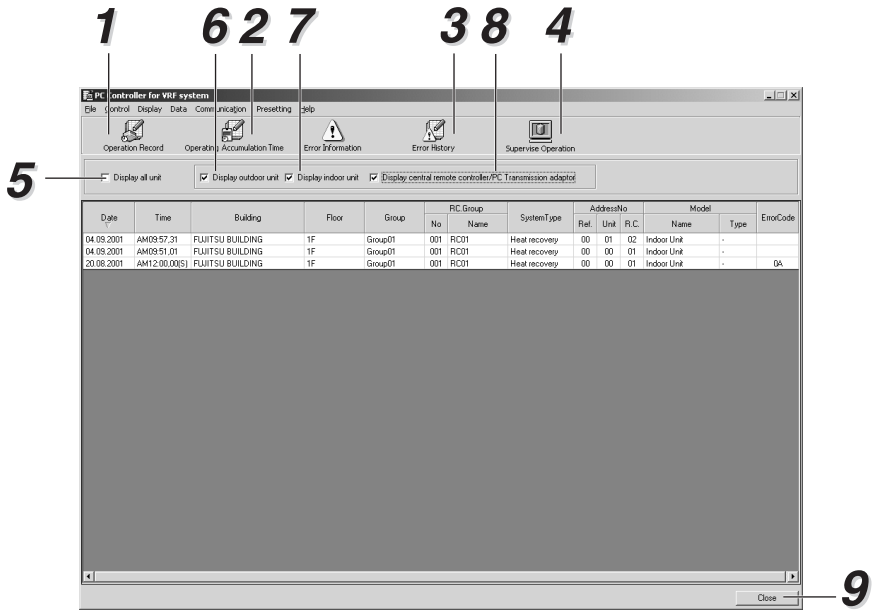
REFERENCE The data can be sorted by clicking on the title.

NOTE When an error has occurred in the equipment while the application has ended, the error code may display "-" when the application is started. If this happens, it may take several minutes until the error code is displayed.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

9-2. ERROR INFORMATION

Displays error information about the equipment that is currently experiencing an error. (The most recent error is displayed at the top.)
Errors that have been recovered will be deleted and will appear on the error history screen.
Start by selecting [Error Information] from the Data menu.



1 **Click to check data about the operating status of indoor units on operation record screen.**

---

2 **Click to check data about the operating accumulation time on the operating accumulation time screen.**

---

3 **Click to check data about recovered errors on the error history screen.**

---

4 **Click to return to the operation monitoring screen.**

---

5 **Place a check for [Display all unit].**
>> The data for all equipment will be displayed.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

6 **Place a check for** Outdoor Unit **.**
>> The data for the outdoor unit will be displayed.
If there is a check for (5), a check cannot be placed for this item.

---

7 **Place a check for** Indoor Unit **.**
>> The data for the indoor unit will be displayed.
If there is a check for (5), a check cannot be placed for this item.

---

8 **Place a check for** Central R. / PC Controller **.**
>> Data about the central remote controller/PC controller (including transmission adapter) will be displayed.
If there is a check for (5), a check cannot be placed for this item.

---

9 **Click** Close **to close the screen.**

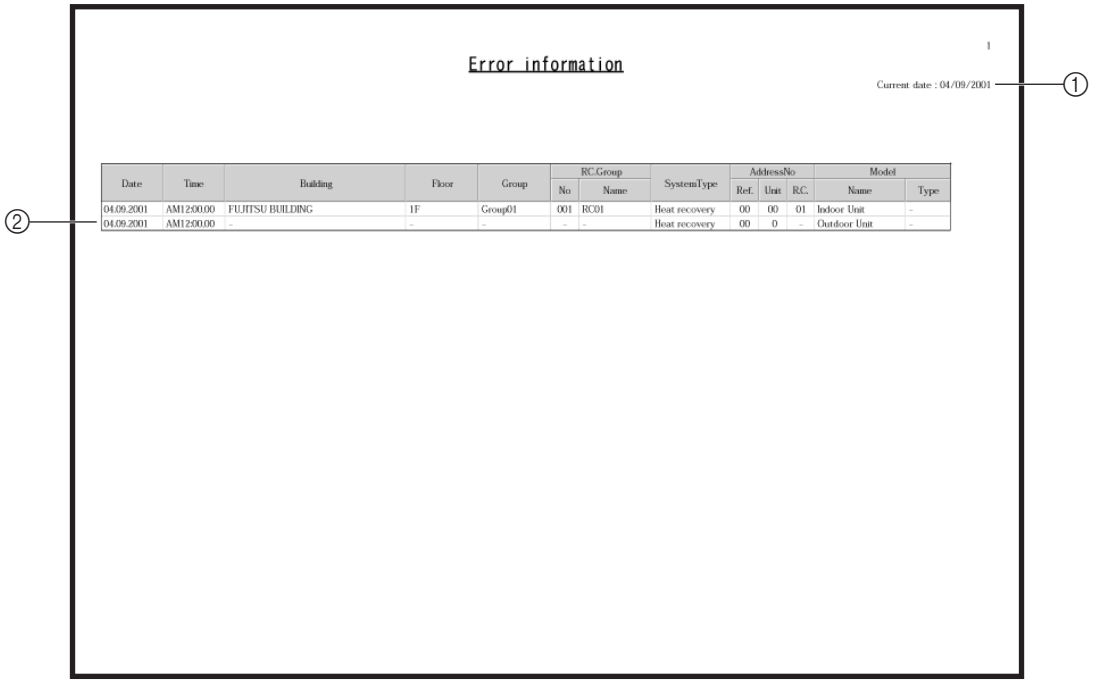
REFERENCE The data displayed can be sorted by clicking on the title.

NOTE When an error has occurred in the equipment while the application has ended, the error code may display "-" when the application is started. If this happens, it may take several minutes until the error code is displayed.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

9-2-1. Printing error information

To print the error data being displayed on the screen, click [File Menu] and then Print. The data currently being displayed will be printed.



①**Current Data**	Prints the current date.
②**List**	Prints error information currently displayed.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

9-3. ERROR HISTORY

Display the error data about errors that were restored for each equipment. Up to 100 cases can be displayed. Use the environment settings to set the number of items displayed.

Start by selecting from the [Data] menu.

• Indoor unit

Select the tab for [Indoor Unit] in the lower left of the screen shown below to display the error history for the indoor units.

• Outdoor unit

Select the tab for [Outdoor Unit] in the lower left of the screen shown below to display the error history for the outdoor units.

• Central remote controller/PC controller

Select the tab for [Central Controller/PC Controller] at the bottom left of the screen and the error history for the central remote controller/PC controller (including transmission adapter) appears.

1 **Click to check data about the operating status of indoor units on operation record screen.**

---

2 **Click to check data about the operating accumulation time on the operating accumulation time screen.**

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

3 **Click to check data about all error information currently occurring on the error information screen.**

---

4 **Click to return to the operation monitoring screen.**

---

5 **Select** Indoor Unit **.**

>> The error history for the indoor unit will be displayed.

Select Outdoor Unit **.**

>> The error history for the outdoor unit will be displayed.

Select Central R. / PC Controller **.**

>> The error history for the central remote controller/PC controller (including transmission adapter) appears.

---

6 **Click** Close **to close the screen.**

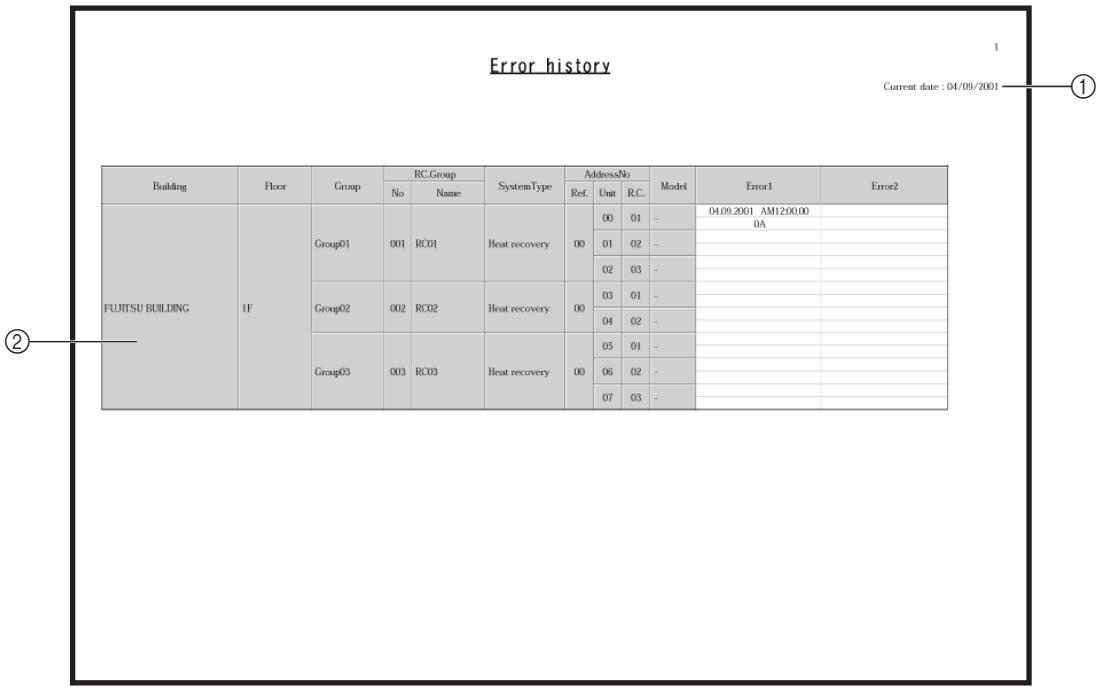
REFERENCE

The data can be sorted by clicking on the title.
(The data displayed can be sorted by clicking on the title.)

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

9-3-1. Printing error history

To print the error history being displayed on the screen, click [File Menu] and then Print. The history currently being displayed will be printed.



①**Current Data**	Prints the current date.
②**List**	Prints error history currently displayed.

REFERENCE

Model name shows the model type and indoor unit capacity.
The indoor unit capacity is shown in BTU with the last 3 digits deleted.

- The codes for the types of indoor units are as follows.
  Wall mounted: AS **Universal/Big ceiling: AB** **Compact cassette/Cassette: AU**
  Compact Duct/Duct: AR
- The outdoor unit is shown AO90.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

10. TROUBLESHOOTING

This section presents countermeasures to be taken when trouble occurs.

10-1. TROUBLESHOOTING 88

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

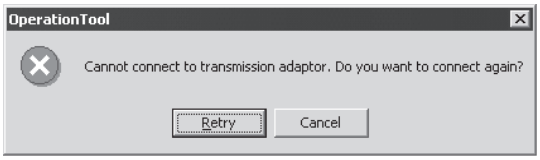
10. TROUBLESHOOTING

10-1.TROUBLESHOOTING

The following shows problems that may occur and then suggests possible causes and solutions.

Trouble

The following error message appears or the error code "1F" is displayed in the error warning screen.



Cause

a. The power supply for the transmission adapter is not on.
b. The RS-232C cable to the PC transmission adapter is not properly connected.
c. The power supply to the indoor units, outdoor units or central remote controller is not on.

Solution

1. Make sure that the power supply for the transmission adapter is on.
2. Make sure that the RS-232C cable to the PC transmission adapter is properly connected.
3. Make sure that the power supply to the indoor units, outdoor units or central remote controller is on and properly connected.
   Refer to "3-5. INSTALLATION" in the "Setting Manual"

Trouble

Does not print documents.

Cause

a. The power supply for the printer is not on.
b. The printer cable is not properly connected.
c. The print driver is not properly installed.

Solution

1. Make sure that the power supply for the printer is on.
2. Make sure that the printer cable is properly connected.
3. The printing of documents is done by Microsoft Windows® settings.
   Refer to the troubleshooting guide for printing with Windows and make sure that all Windows settings are correct.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

Trouble

Cannot send mail

Cause

a. Settings for mail software not properly set.
b. Temporary service outage due to static in the transmission line or provider server maintenance.

Solution

1 Use the help provided by the mail program being used to check the settings.

2 The provider server may be out of service. Wait a while and try again. If possible, contact the system manager.

Trouble

Won't read the setting data or an error occurs when updating the data.

Cause

The database may have been damaged by a power outage during operation.

Solution

Backup database needs to be restored.
Exit the PC Controller and open [My Computer] or [Windows Explorer].

1 Double click "Restore VRFDB.bat" file on the following folder "Operation".
Then the [Command prompt] screen is opened.

Path: [Program files] → [VRF System] (The installation folder of PC Controller)
→ [Operation] → "Restore VRFDB.bat"

2 Push an [Enter] key, when restoration is completed.
Then the [Command prompt] screen is closed.

3 Restart the PC Controller.

NOTE When database is restored, the data after the backup will be lost.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

Question

If the power is interrupted during operation, what will happen to the data?

Answer

If the power is interrupted before updating, such as while creating a layout on the layout creation window, the data being used during the creation of the layout will be damaged.
Once power has been restored, start the Operation Tool and perform a check using the pertinent screens.

Problem

How do I reinstall the software?

Answer

1. Use the following sequence to delete the Operation Tool: Start → Settings → Control Panel → Add or Delete Application → Delete Operation Tool.
2. Restart Windows.
3. Refer to the Installation and Setting Manual and follow the usual procedure for installing the software.

NOTE If a virus-check software is being used, stop momentarily before installing.

REFERENCE Note that on the PC controller, the troubleshooting manual and operation manual are available online.
Select Help → Manual.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

11. OTHERS

This section presents the memory functions that can save an operating status at a given point in time for environment settings, mail sending and making document and then use them later for starting those operations.

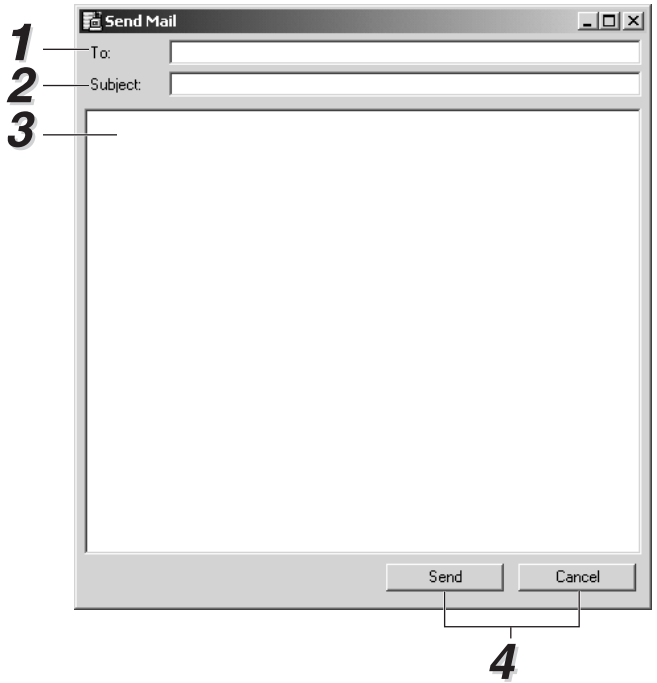
11-1. MAIL TRANSMIT 92
11-2. MAKING DOCUMENT 93
11-3. MEMORY FUNCTION 94

Copyright © 2001, 2004 Fujitsu General Limited. All rights reserved.

11. OTHERS

11-1. MAIL TRANSMIT

Click [Mail] in the [Communication] menu to display the send mail screen.
The mail will automatically attach the error information and error history file (CSV format) to the mail message. Use this to contact us about trouble.



1 **The default address set in the environment settings will be set as destination. Change this address if sending to a different address.**

2 **Enter the subject.**

3 **Enter your comments.**

4 **Click [Send] to send the mail, and click [Cancel] to close the screen without sending the mail.**

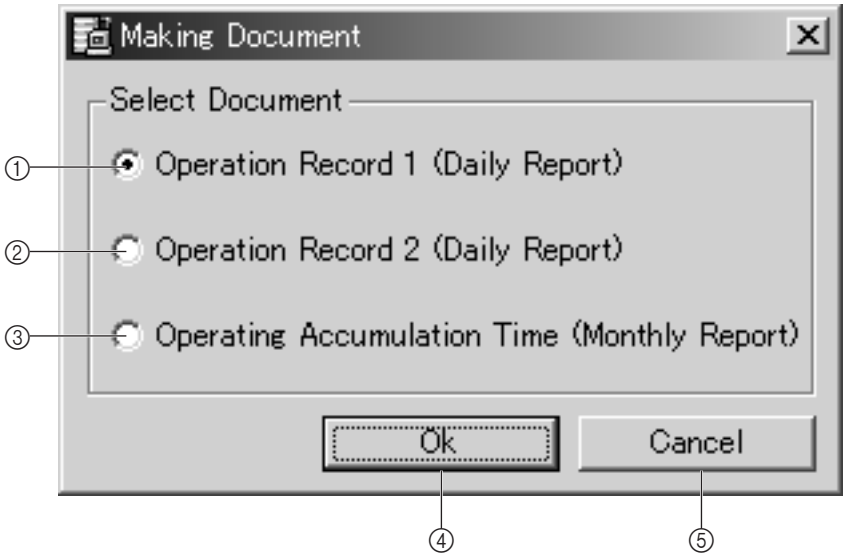
NOTE

* Settings are required for sending the mail using the screen shown here. Refer to the manual for the mail software for information about setting and using it.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

11-2.MAKING DOCUMENT

Start by using [Making document] from [File] menu on Main Frame screen. The following documents can be output: Operation records 1/2, (daily reports) and operating accumulation time (monthly reports).
For the operation of operation records 1/2 screen and operating accumulation time screen, refer to "7. RECORDS".



① **Operation record 1 (Daily report)**	Select operation record screen 1.
② **Operation record 2 (Daily report)**	Select operation record screen 2.
③ **Operating accumulation time (Monthly report)**	Select operating accumulation time screen.
④ **OK**	Displays selected screen.
⑤ **Cancel**	Closes the window.

< 1 > Operation record 1

Select operation record 1 (Daily Report) and click [OK]. Operation record screen 1 will be displayed.
The data shown will be the data from the previous day.

< 2 > Operation record 2

Select operation record 2 (Daily Report) and click [OK]. Operation record screen 2 will be displayed.
The data shown will be the data from the previous day.

< 3 > Operation Accumulation time (Monthly report)

Select Operating accumulation time screen and click [OK]. The operating accumulation time screen will be shown. The data displayed will be based on the documents settings that has been set in the environment settings.

Example: If the date set for the start of operation is the 15th.

- If the date for the document to be created ranges from July 15 to August 14, the range displayed will be June 15 to July 14.
- If the date for the document to be created ranges from June 15 to July 14, the range displayed will be May 15 to June 14.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

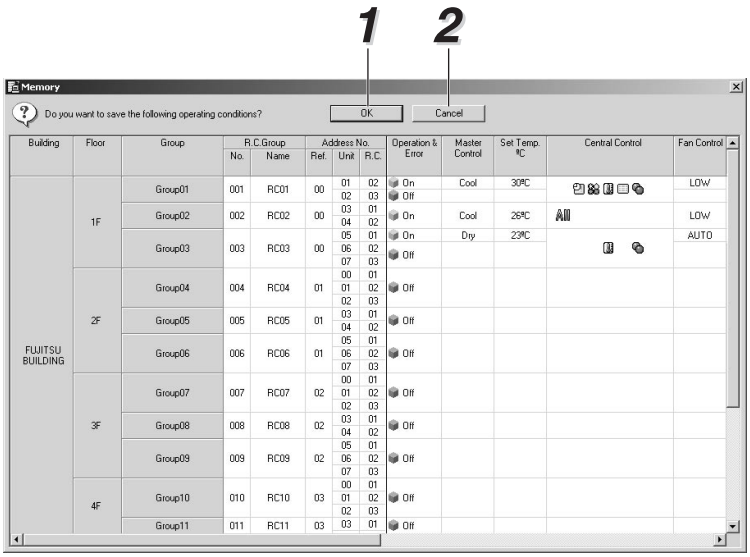
11-3. MEMORY FUNCTION

Memory save and memory operation can be performed.

- Memory save: Saves the operating status for each building currently displayed.
- Memory operation: Operates each R.C. Group using the operation settings save in memory save.

11-3-1. Memory save method

Displays the current operating status of the indoor unit and then saves that operating status. **Start by selecting [Memory] → [Memory Save] from the Control menu**.



1 **Click [OK] to save the operating status.**
The current operating status will be saved and the screen closed.

2 **Click the [Cancel] button to close the screen without saving the current operating status.**

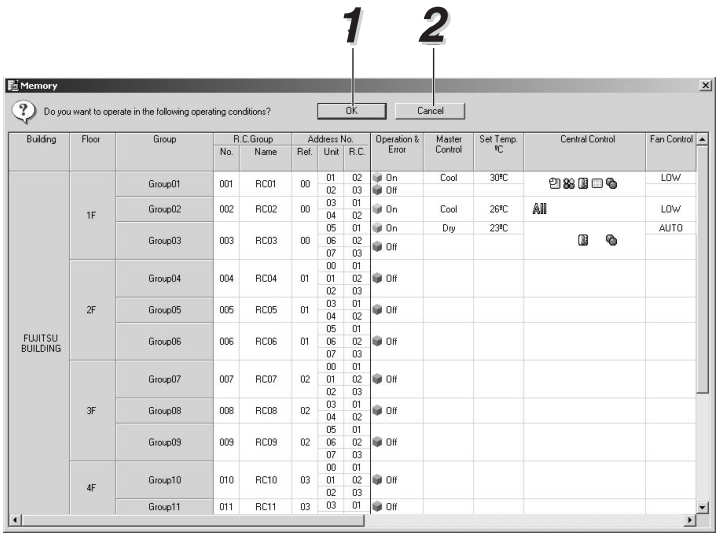
NOTE

*1: If save is performed, the previous saved contents are deleted.
*2: The up/down, right/left swing display field is not displayed if the indoor unit model is a duct type or ceiling cassette type.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

11-3-2. Memory operation method

Displays the current operating status and operates the indoor unit using that status.
Start by selecting [Memory] → [Memory Operation] from the Control menu.



1 **Click [OK] to operate using the saved status.**
The saved operation will start to operate and the screen will close.

---

2 **Click the [Cancel] button to close the screen without operating the using the saved status.**

NOTE * : The up/down, right/left swing display field is not displayed if the indoor unit model is a duct type or ceiling cassette type.

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

FUJITSU GENERAL LIMITED

1116, Suenaga, Takatsu-ku, Kawasaki 213-8502, Japan

• *Microsoft, Windows, and DirectX are registered trademarks of Microsoft Corporation in the United States and/or other countries.*
• *Adobe and Acrobat Reader are registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.*
• *Intel and Pentium are registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.*
• *All other brand and product names are trademarks or registered trademarks of their respective holders.*

Copyright© 2001, 2004 Fujitsu General Limited. All rights reserved.

9368886028