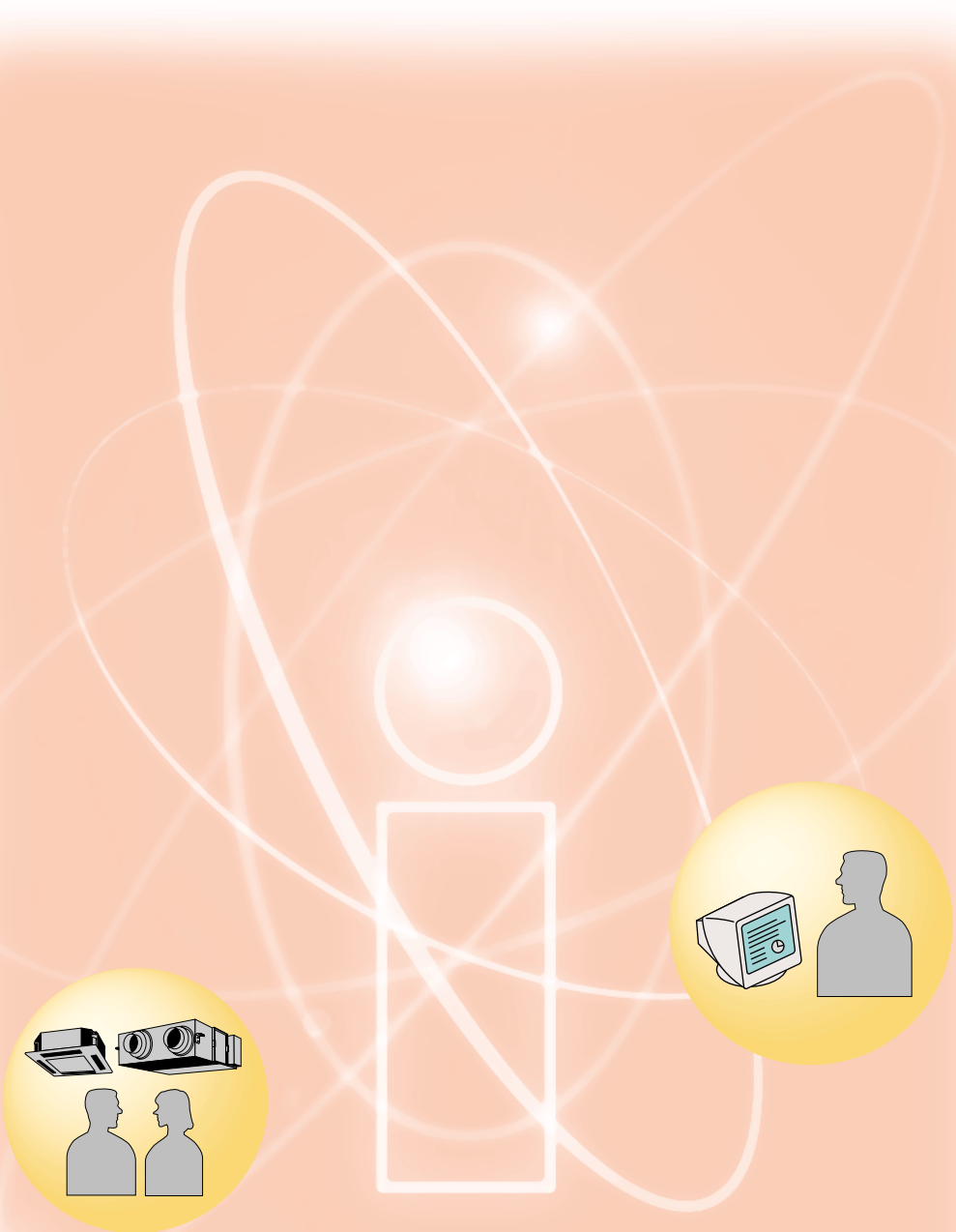
DAIKIN

ED72 - 423

DESIGN GUIDE

intelligent touch Controller



DAIKIN INDUSTRIES,LTD.

intelligent touch Controller

intelligent Touch Controller	**DCS601C51**
DIII NET-plus adaptor	**DCS601A52**
Power Proportional Distribution Card	**DCS002C51**
intelligent Touch Controller Web Software	**DCS004A51**

This controller is a central remote controller offering higher functions than those of the previous controller DCS302B61, and easier operation.
Up to 64 groups of indoor units may be connected to 1 unit of this controller.

This controller aims to be a product positioned between the current central controlling device (central controller DCS302B61) and the controller i-manager for large scale buildings (in both the viewpoints of application area and functional grade), and is a central controller most suitable for middle and small size buildings.

< Products Features >

1. High Level Functions
   - Annual schedule control
   - Electricity proportional distribution function (option)
   - Air net function (DCS601C51 only)
2. Easy Operation
   - Color liquid crystal
   - Icon display
   - Touch panel application
   - Air conditioner name and zone name input available
3. D-III NET x 1 line (64 groups)
   ∗ 128 groups with use of D-III NET plus adaptor
4. Saving expenses
   - Controlling personnel not required (saving control expenses)
   - Energy saving schedule
   - Functions equal to those of a compact monitor panel

Part 1 intelligent Touch Controller System 1

Part 1 intelligent Touch Controller System

1. System Overview

1.1 Overview

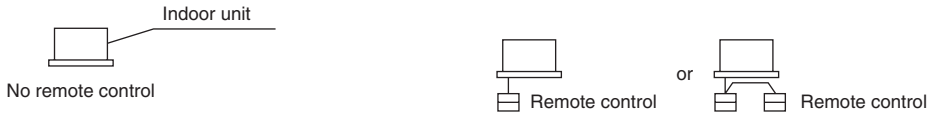
This intelligent Touch Controller is capable of controlling/monitoring up to 64 groups of indoor units (hereafter “groups”).

The main functions of the intelligent Touch Controller include :

1. Collective starting/stopping of operation of the indoor units connected to the intelligent Touch Controller.
2. Starting/stopping of operation, temperature setting, switching between temperature control modes and enabling/disabling of operation with the hand-held remote control by zone or group.
3. Scheduling by zone or group.
4. Monitoring of the operation status by zone or group.
5. Display of the air conditioner operation history.
6. Compulsory contact stop input from the central monitoring panel (non-voltage, normally-open contact).
7. Power distribution of the air conditioners. (With the optional DCS002C51)

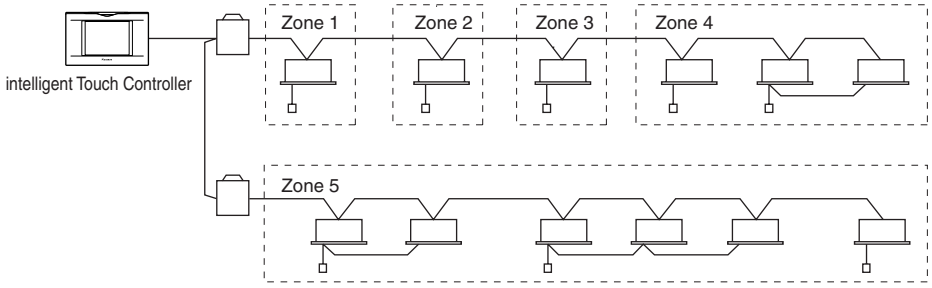
* A group of indoor units include:

① One indoor unit without a remote control. ② One indoor unit controlled with one or two remote controls.



③ Up to 16 indoor units controlled with one or two remote controls.

* Zone control with the intelligent Touch Controller
* Zone control, which allows collective settings for more than one group, is available with the intelligent Touch Controller, which facilitates the setting operations.



- One setting makes the same setting for all of the units in one zone.
- Up to 128 zones can be set with one intelligent Touch Controller. (The maximum number of groups in one zone is 64.)
- Groups can be zoned at will with the intelligent Touch Controller.
- Units in one group can be divided into more than one zone.

1.2 Features

■ **Operation Menu**

intelligent Touch Controller is capable of starting/stopping of the operation by the group or zone. Collective starting/stopping is also available.

■ **Air Conditioner Detail Setup**

Temperature setting, switching between temperature control modes, switching of speed and direction of wind and remote control mode setting are available by the group, by the zone or collectively.

■ **Monitoring of Various Information on Indoor Units**

Information on operation such as the operation mode and temperature setting of the indoor units, maintenance information including the filter or element cleaning sign, troubleshooting information such as error codes can be displayed by the group or the zone.

■ **Diversified Operation Modes**

Operation can be controlled both with the main unit and the remote control to provide diversified operation management. Setting with the main unit allows the following remote control settings by the group, by the zone or collectively:

1. Start/Stop	2. Operation Mode	3.Temperature Setting
: (Remote control) Inhibited	: (Remote control) Inhibited	: (Remote control) Inhibited
: (Remote control) Permitted	: (Remote control) Permitted	: (Remote control) Permitted
: Priority		

■ **Zone Control Simplifying Complicated Setting Operations**

Up to 64 groups can be controlled with the intelligent Touch Controller.
More than one group can be consolidated into a zone, which can be registered, to allow the following settings by the zone. This eliminates the need for repeating the same setting operation for each group. Function to allow collective setting for all groups is also available.

· Start/stop
· Temperature setting
· Switching between operation modes
· Setting of direction and fan speed
· Disabling/enabling the remote control

■ **Detailed Scheduled Operation Control**

The intelligent Touch Controller allows detailed scheduled operation by the group, by the zone or collectively. Up to 8 options for annual schedule can be set. Each schedule can include four types of plans : for Monday, Tuesday... Sunday, Special day 1~10, Special days 1 and Special days 2. Each of the plans allows setting of up to 16 operations.

■ **Handy Automated Control**

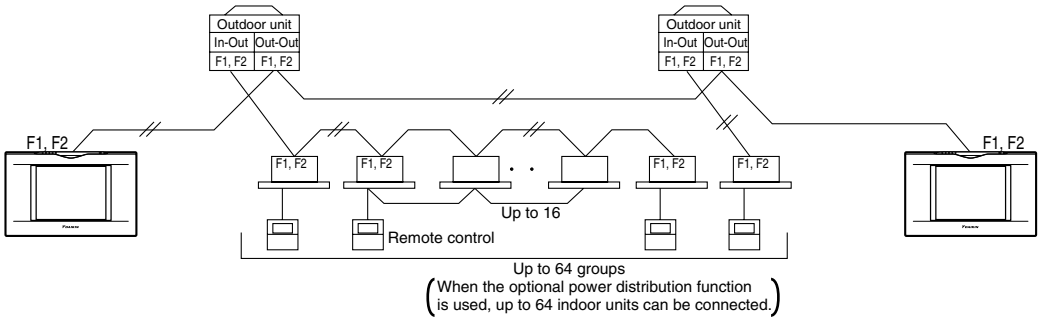
The intelligent Touch Controller can do the following.

· Change Over Settings : automatically switches between cooling and heating according to the room temperature.
· Temperature Limit Setting : prevents the temperature from rising too high or too low in unmanned rooms.
· Heating Optimization Settings : stops uncomfortable hot air from blowing when the heating the thermo is off.

2. System Image

2.1 Double intelligent Touch Controllers

Using two intelligent Touch Controllers allows central control of indoor units from different places.

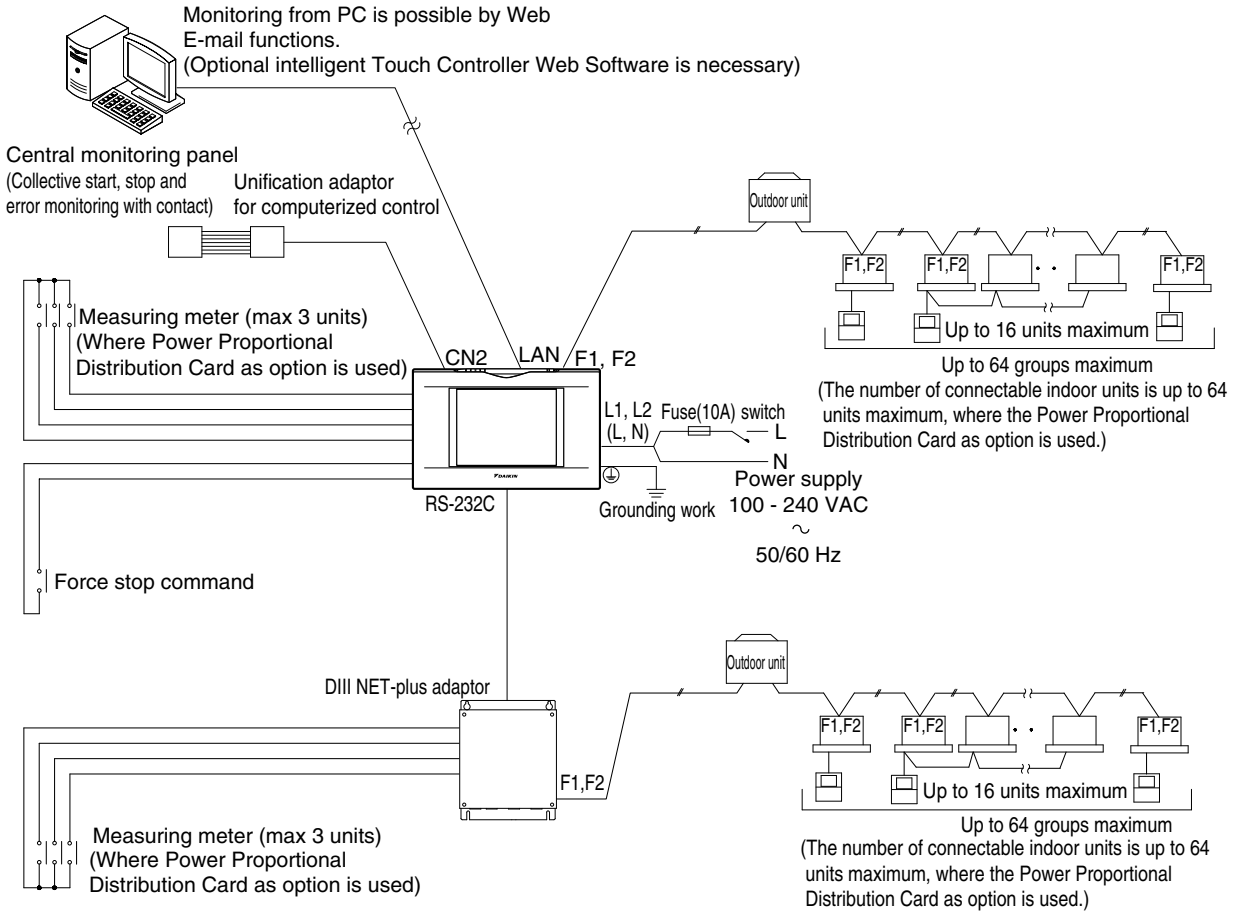


NOTE

- For combination and settings for double intelligent Touch controllers, be sure to consult the vendor.

2.2 Options

Connecting Unification adaptor allows using the contact for normal and abnormal operation signal and collective start/stop with a contact. For details, contact the vendor you purchased the product from.
Also, by connecting DIII NET-plus adaptor, it is possible to operate and monitor the indoor units of 64 groups (intelligent Touch Controller plus DIII NET – plus adaptor–128 groups in total) additionally.



3. Part Names and Functions

3.1 Part Names and Functions

PCMCIA Card Slot

Used when using the optional Power Proportional Distribution (DCS002C51) or updating the intelligent Touch Controller software to a newer version.

Color LCD with Touch Panel

Provides a display for monitoring and operation.
Be sure to use the touch pen provided for operation.

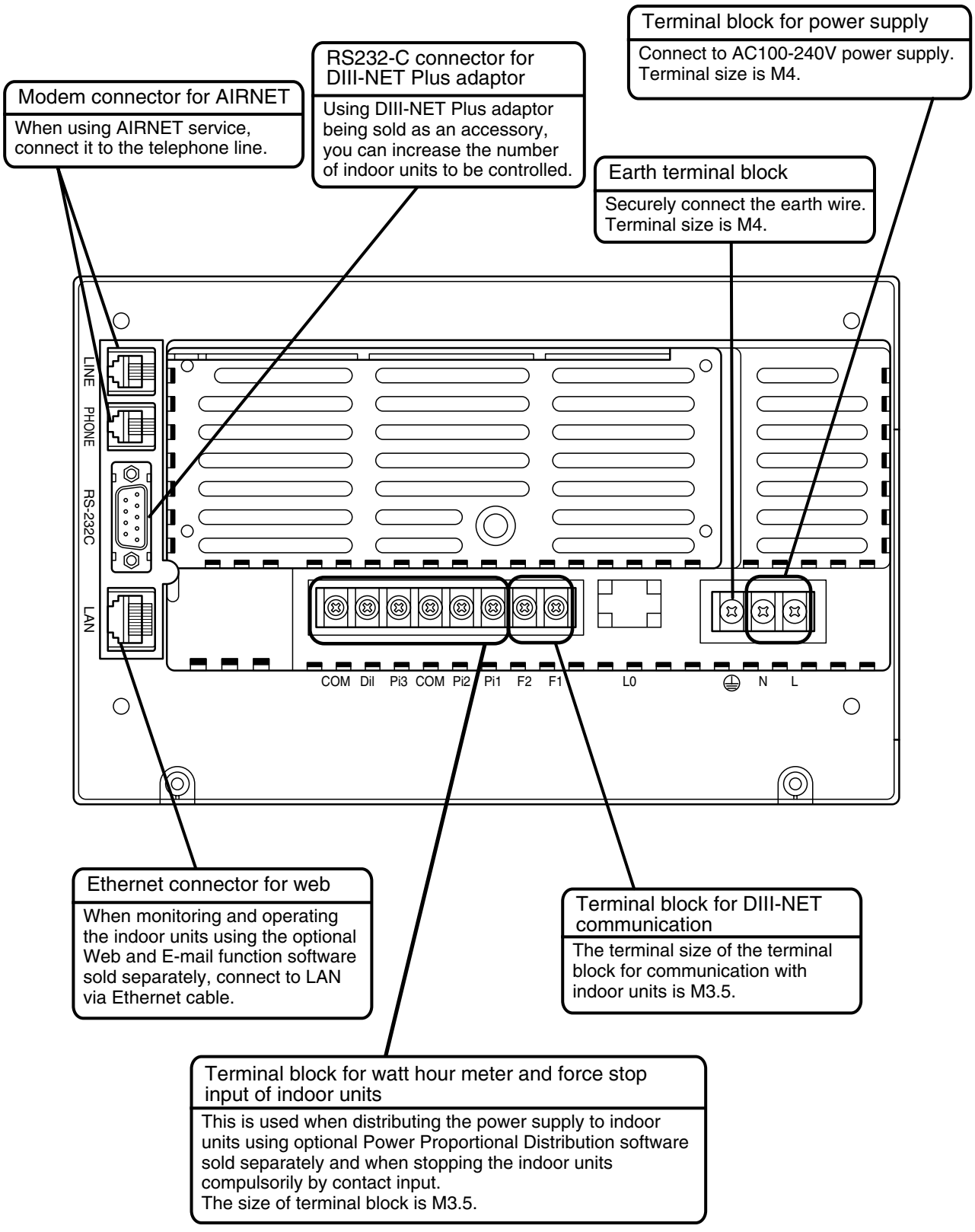
Touch Pen

Use the touch pen for operation.
Be sure to use the touch pen for operation.
Use caution not to lose the touch pen.
(When the pen is lost, contact the dealer you purchased the product from.)

NOTE

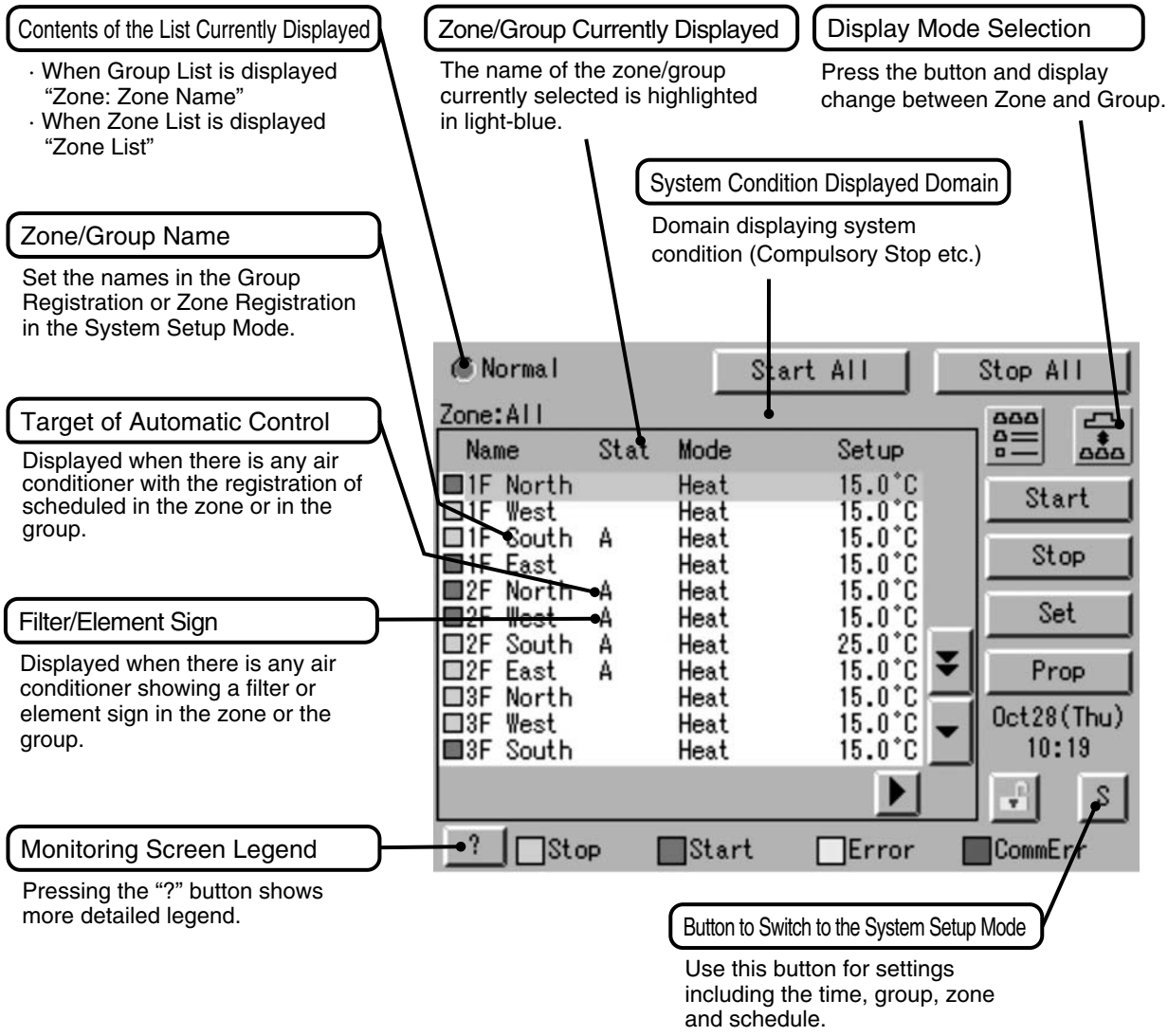
- Be sure to use the touch pen for operation of the touch panel of the intelligent Touch Controller. Operating with an object other than the touch pen provided may cause damage and failure.

3.2 Terminals on the Back of intelligent Touch Controller



4. Part Names on the Monitoring Screen and the Functions

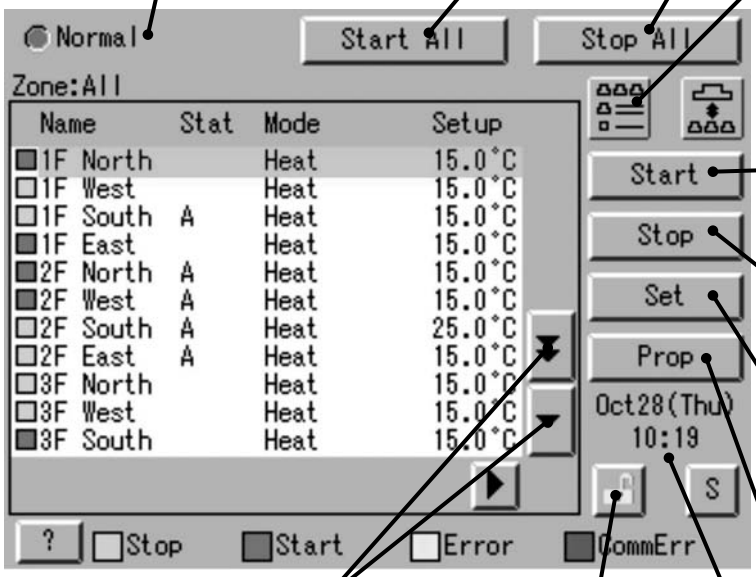
4.1 List



1

Display for Collective Monitoring of Air Conditioners Connected to intelligent Touch Controller

When operation is normal and any air conditioner is in operation:
Red/Normal
When operation is normal and all air conditioners are in stoppage:
Green/Normal
When there is any air conditioner generating an error:
Yellow/Abnormal
When there is any air conditioner with communication error:
Blue/Abnormal
(Change in color of Start/Stop is possible by Iconcolor Settings in System Settings.)



Start All Button

Button to collectively start all the air conditioners connected to intelligent Touch Controller.

Stop All Button

Button to collectively stop all the air conditioners connected to intelligent Touch Controller.

Display Mode Selection

Select the mode among icon/list/detailed icon.
(Displayed in List in the right figure.
Icon display is P10, 11.)

Group/Zone Start Button

Button to start operation of the group/zone selected.

Group/Zone Stop Button

Button to stop operation of the group/zone selected.

Group/Zone Set Button

Makes settings (temperature setting, temperature control mode, etc.) and display of the group/zone selected.

Group/Zone Prop Button

Detailed display of the group/zone selected

Current Time Display

Shows the current date and time.

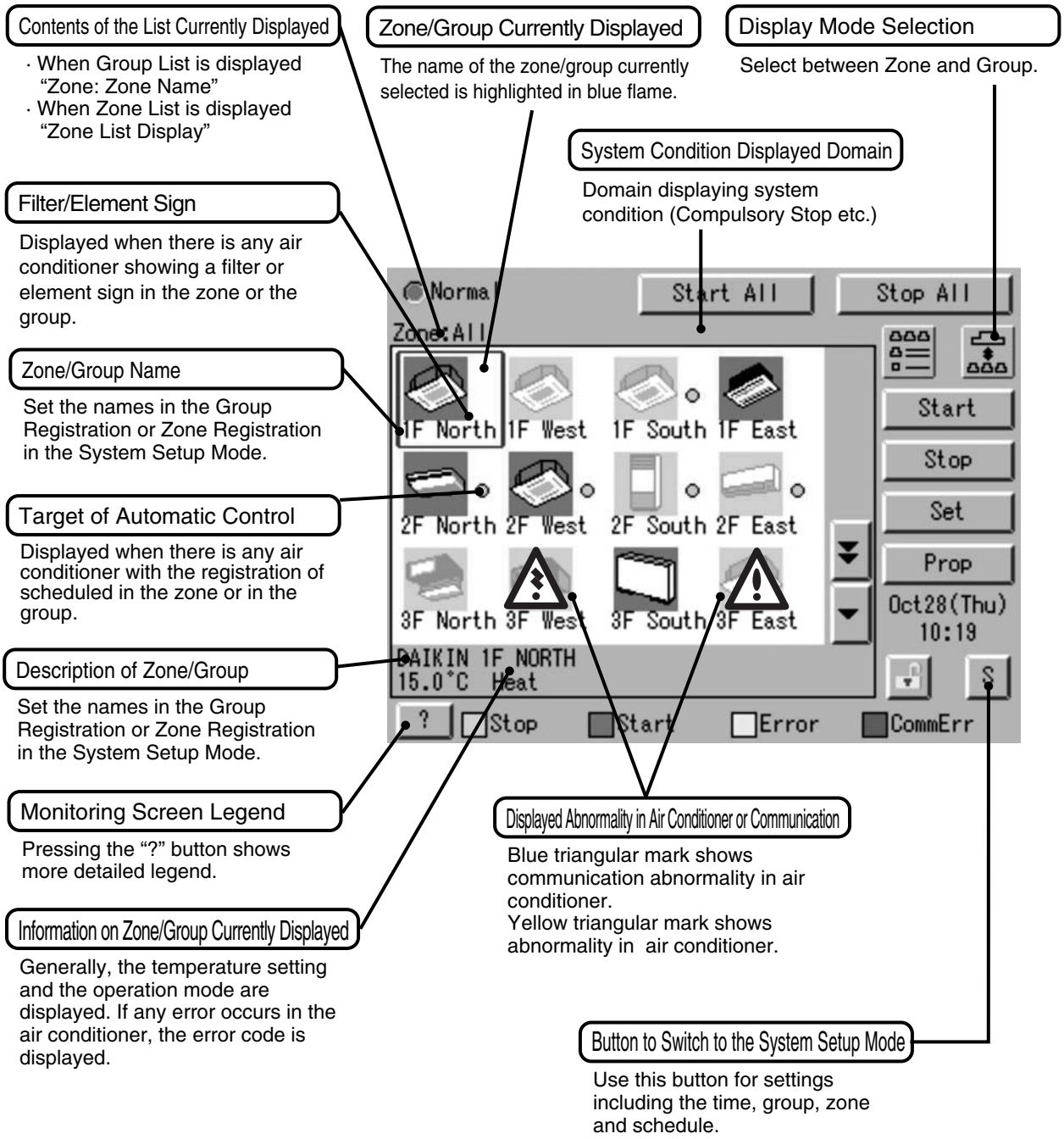
Scroll Buttons

Up/Down scroll button used when monitoring zone/group which are not currently displayed.
Left/Right scroll button used when monitoring temperature and errors etc.
Which are not currently displayed.

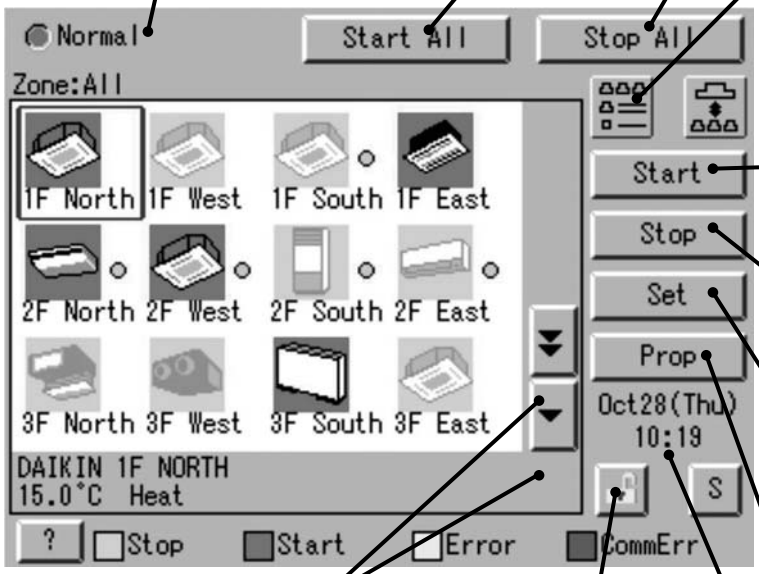
Lock Setting/Cancel Button

Displays possibititiy of monitor operation.
Expresses detailed information in P31.

4.2 Icon


Contents of the List Currently Displayed
· When Group List is displayed
"Zone: Zone Name"
· When Zone List is displayed
"Zone List Display"
Zone/Group Currently Displayed
The name of the zone/group currently selected is highlighted in blue flame.
Display Mode Selection
Select between Zone and Group.
System Condition Displayed Domain
Domain displaying system condition (Compulsory Stop etc.)
Filter/Element Sign
Displayed when there is any air conditioner showing a filter or element sign in the zone or the group.
Zone/Group Name
Set the names in the Group Registration or Zone Registration in the System Setup Mode.
Target of Automatic Control
Displayed when there is any air conditioner with the registration of scheduled in the zone or in the group.
Description of Zone/Group
Set the names in the Group Registration or Zone Registration in the System Setup Mode.
Monitoring Screen Legend
Pressing the "?" button shows more detailed legend.
Information on Zone/Group Currently Displayed
Generally, the temperature setting and the operation mode are displayed. If any error occurs in the air conditioner, the error code is displayed.
Norma
Start All
Stop All
Zone:All
1F North
1F West
1F South
1F East
2F North
2F West
2F South
2F East
3F North
3F West
3F South
3F East
Start
Stop
Set
Prop
Oct28(Thu)
10:19
DAIKIN 1F NORTH
15.0°C Heat
?
Stop
Start
Error
CommErr
Displayed Abnormality in Air Conditioner or Communication
Blue triangular mark shows communication abnormality in air conditioner.
Yellow triangular mark shows abnormality in air conditioner.
Button to Switch to the System Setup Mode
Use this button for settings including the time, group, zone and schedule.

1



Display for Collective Monitoring of Air Conditioners Connected to intelligent Touch Controller

When operation is normal and any air conditioner is in operation:
Red/Normal
When operation is normal and all air conditioners are in stoppage:
Green/Normal
When there is any air conditioner generating an error:
Yellow/Abnormal
When there is any air conditioner with communication error:
Blue/Abnormal
(Change in color of Start/Stop is possible by Iconcolor Settings in System Settings.

Start All Button

Button to collectively start all the air conditioners connected to intelligent Touch Controller.

Stop All Button

Button to collectively stop all the air conditioners connected to intelligent Touch Controller.

Display Mode Selection

Select the mode among icon/list/detailed icon.
(Displayed is List in the right figure.
List display in P8, 9.

Group/Zone Start Button

Button to start operation of the group/zone selected.

Group/Zone Stop Button

Button to stop operation of the group/zone selected.

Group/Zone Set Button

Makes settings (temperature setting, temperature control mode, etc.) and display of the group/zone selected.

Group/Zone Prop Button

Detailed display of the group/zone selected

Current Time Display

Shows the current date and time.

Scroll Buttons

Up/Down scroll button used when monitoring zone/group which are not currently displayed.
Left/Right scroll button used when monitoring temperature and errors etc.
Which are not currently displayed.

Lock Setting/Cancel Button

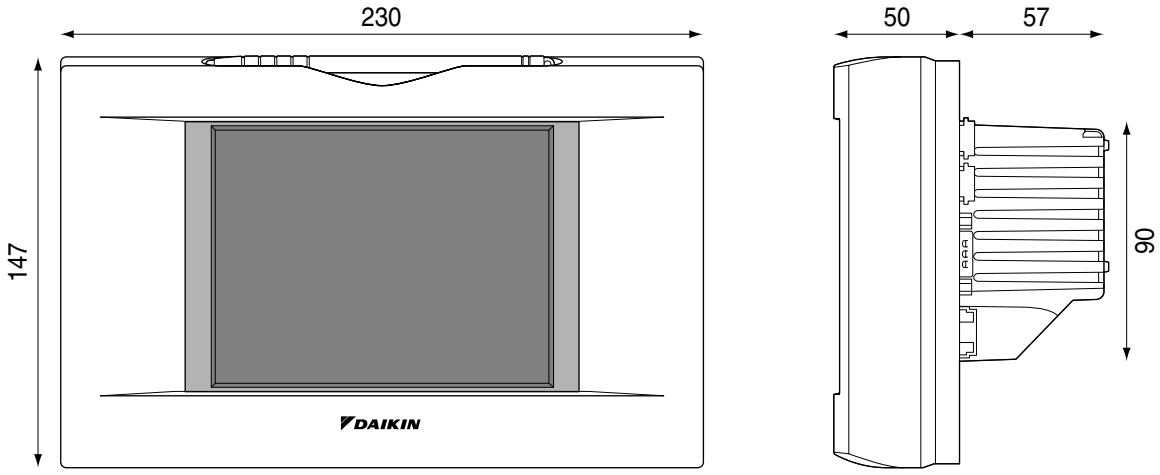
Displays possibititiy of monitor operation.
Expresses detailed information in P31.

5. Specification

5.1 Specification

Power	AC100 - 240V 50/60Hz
Power consumption	10 W maximum
Force stop input	Normally-open contact Contact current approximately 10 mA
Size	230×147×107 (W×H×D)
Mass	1.2kg

5.2 Dimension



The specification and appearance of the product may be modified for improvement without prior notice.

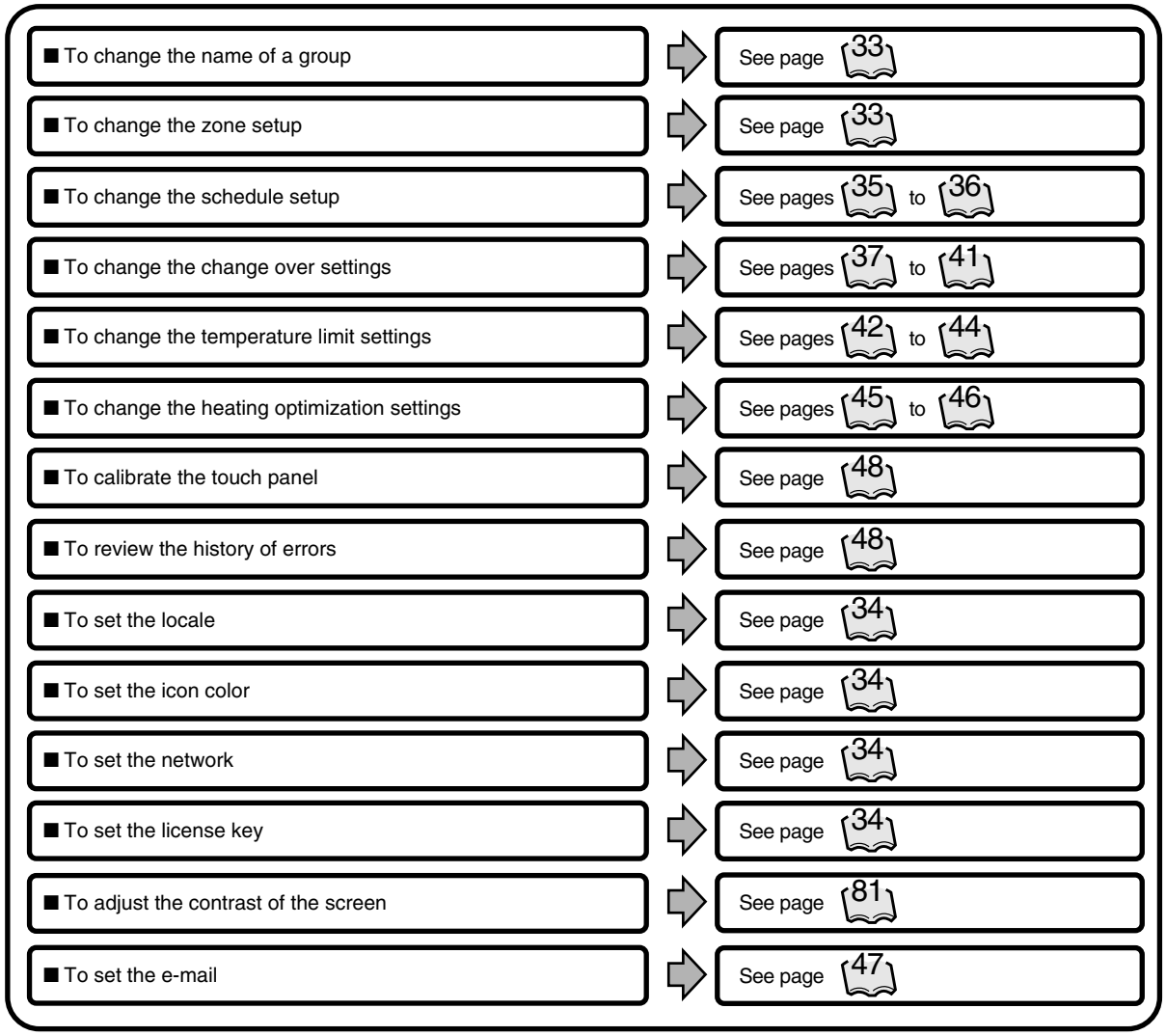
6. Operation Manual

6.1 Quick Reference

Air Conditioner Operation

Air Conditioner Operation Monitoring

System Setup Menu



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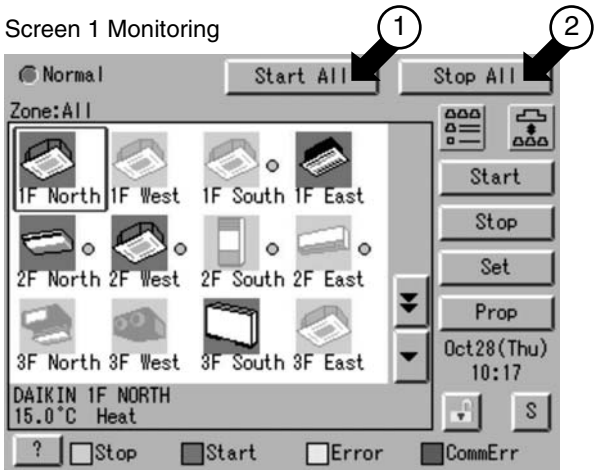
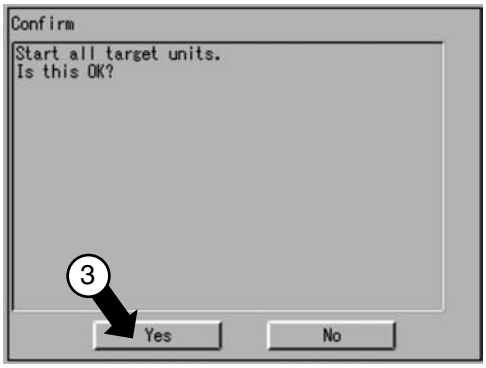
6.2 Air Conditioner Operation

6.2.1 Starting/Stopping Operation Collectively

Screen 1 Monitoring



Screen 2 Confirm



To start/stop the operation of all devices connected

Start or stop collectively the operation of devices connected.

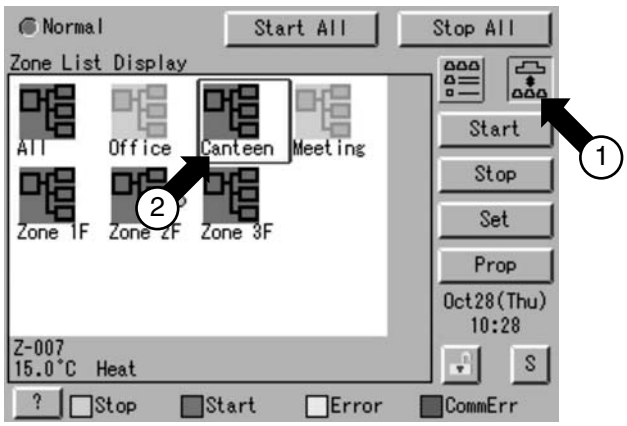
On the Monitoring screen, operation is allowed with either Zone or Group as the display mode and with either Icon or List as the display type. In the example on the left, the display mode is Group in the collective mode and the display type is Icon.

[Procedure]

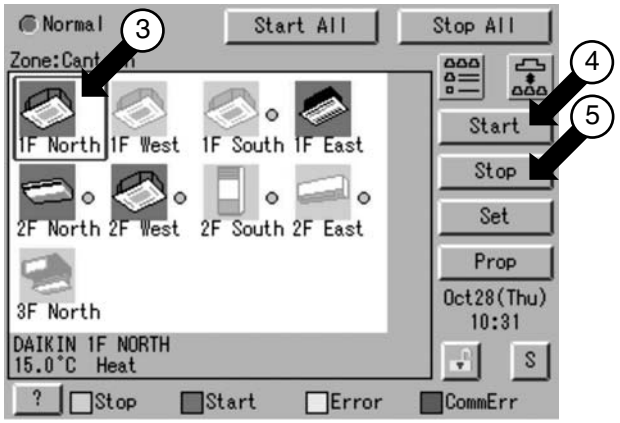
1. On Screen 1 Monitoring, press the [Start All] button ① or [Stop All] button ②.
2. Screen 2 Confirm appears. Press the [OK] button ③.
   (To exit without activating collective start or stop, press the [Cancel] button.)

6.2.2 Starting/Stopping Operation by the Group

Screen 1 Monitoring



Screen 2 Monitoring (Group)

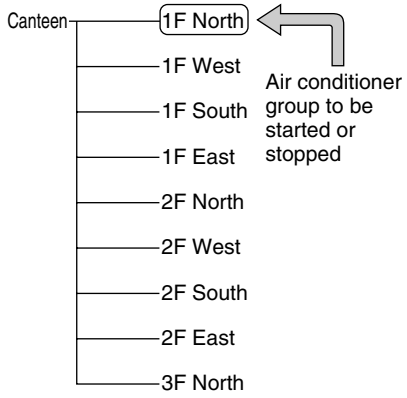


To start/stop the operation of devices by group

Start or stop the operation of air conditioners by group.

The example on the left shows the screen for starting/stopping the operation of Group Name : 1F North registered for Zone Name : Canteen.

Zone Name



[Procedure]

1. On Screen 1 Monitoring, select a zone from the button ①.
2. Select a zone that includes the group of which the operation is to be started or stopped ②.
3. Select a group from the button ①. Screen 2 Monitoring (Group) appears.
4. Select a group to be started or stopped as in ③ and press the [Start] button ④ or [Stop] button ⑤.

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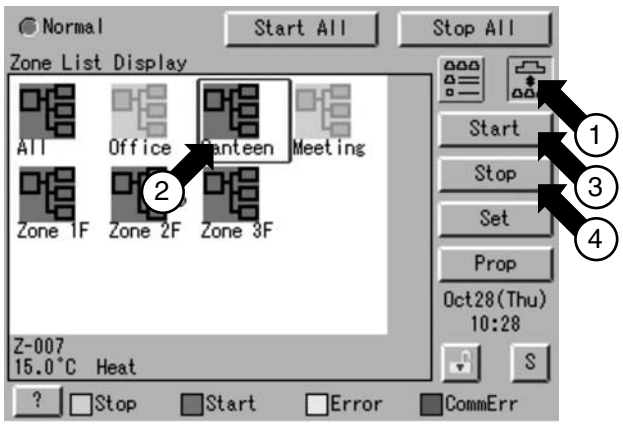
6.2.3 Starting/Stopping Operation by the Zone

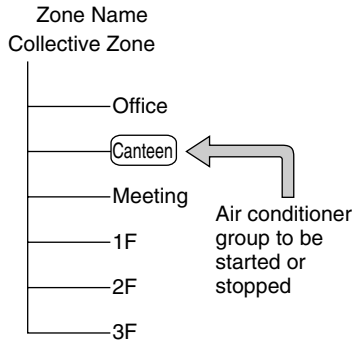
Screen 1 Monitoring



To start/stop the operation of devices by group

Start or stop by zone the operation of groups of air conditioners set in zones.

The example on the left shows a screen for starting or stopping the operation of air conditioners in the canteen.

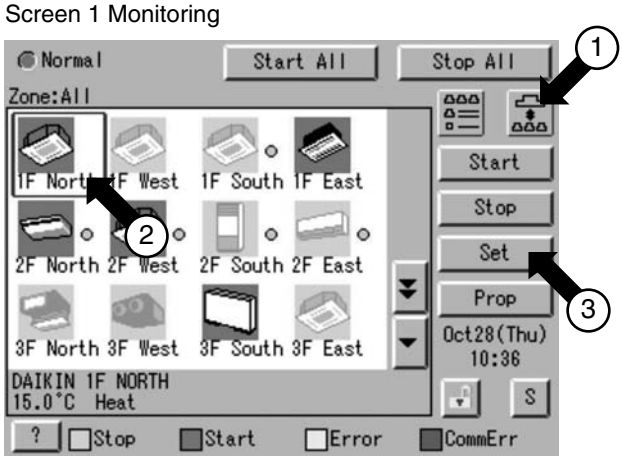


[Procedure]

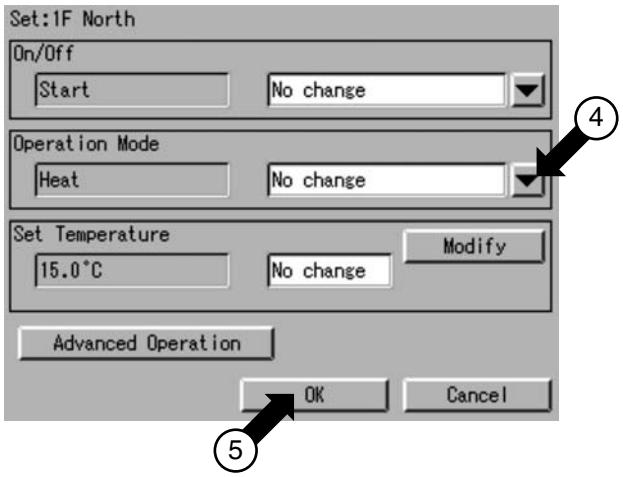
1. On Screen 1 Monitoring, select a zone from the button ①.
2. Select the zone of which the operation is to be started/stopped as shown in ②.
3. Press the [Start] button ③ or [Stop] button ④.

6.2.4 Switching the Operation Mode

Screen 1 Monitoring



Screen 2 Operation



Switch the operation mode of the air conditioner.

On the Monitoring screen, operation is allowed with either Icon or List as the display type.

The operation mode can be switched by zone or by group.

Selecting a zone and switching the operation mode switches the mode of all air conditioners in the zone.
Selecting a group and switching the operation mode switches the mode of air conditioners in the group selected.

[Procedure]

1. On Screen 1 Monitoring, select a zone or a group from the button ①.
2. Select with ② a zone or a group of which the operation mode is to be switched.
3. Press the [Set] button ③.
   Screen 2 Operation appears.
4. Select the operation mode to be set from the pull down menu ④.
   (On the menu, operation modes available for air conditioners in the zone are displayed if the switching is to be made by zone. See the example below.)
5. Press the [OK] button ⑤.
   (To cancel the setting, press the Cancel button.)

Ex.: For the following zone setting, the operation modes available are Fan, Cool, Heat and Auto.
If Cool/Heat option is not available for any air conditioner in the zone, Fan and Set Point are the available operation modes.

Zone name	Group name	Operation modes available	
Canteen	1F North	"Cool"	"Air"
	1F West	"Cool"	"Heat"
		"Auto"	"Air"

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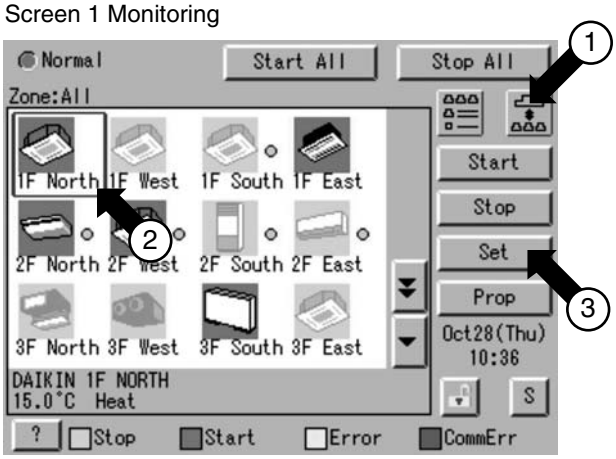
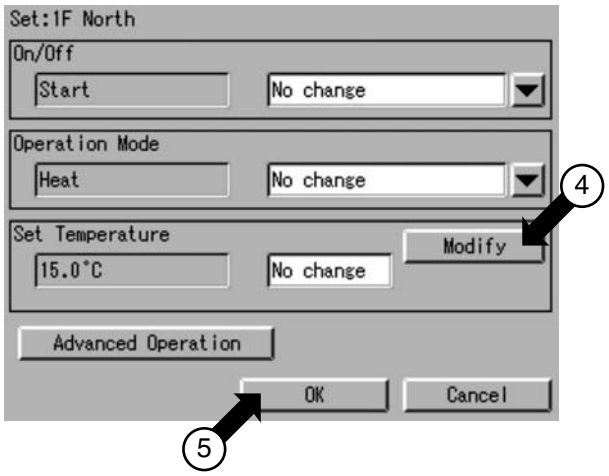
6.2.5 Changing the Temperature Setting

Screen 1 Monitoring



Screen 2 Operation



Change the temperature setting of air conditioners.

On the Monitoring screen, operation is allowed with either Icon or List as the display type.

The temperature setting can be switched by zone or by group.

Selecting a zone and changing the temperature setting changes the setting of the air conditioner groups in Cool, Heat, Auto or Temp operation in the zone.

Selecting a group and changing the temperature setting changes the temperature setting of air conditioners in the group selected.
(If all of the air conditioners in the group selected are in Fan operation, temperature setting cannot be changed.)

[Procedure]

1. On Screen 1 Monitoring, select a zone or a group from the button ①.
2. Select a zone or a group of which the temperature setting is to be changed ②.
3. Press the [Set] button ③.
   Screen 2 Operation appears.
4. For temperature setting, press the [Modify] button ④.
   Set Temperature dialog is displayed and input temperature for setting.
   (On the menu, temperature settings available for air conditioners in the zone are displayed if the setting is to be made by the zone. See the example below.)
5. Press the [OK] button ⑤.
   (To cancel the setting, press the [Cancel] button.)

Ex.: For the following zone setting, the temperature settings available are between 20˚C and 30˚C inclusive.

Zone name	Group name	Range of temperature settings available (see Note)
Canteen	1F North	25 to 30˚C
	1F West	20 to 25˚C

When the temperature setting is 30˚C, the actual temperature settings for air conditioners are as shown below :

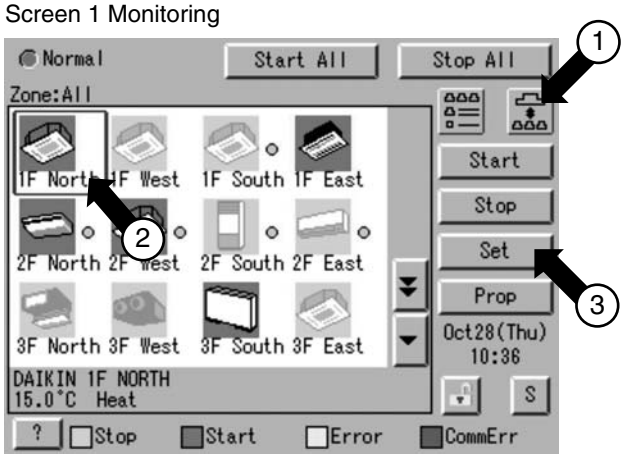
Group name	Temperature setting
1F North	30˚C
1F West	25˚C

Note: Range of temperature settings available is the range specified in accordance with the following.
- Range of temperature setting inherent to the air conditioner main unit.
- Range of temperature as a result of the restriction by the temperature setting limit.

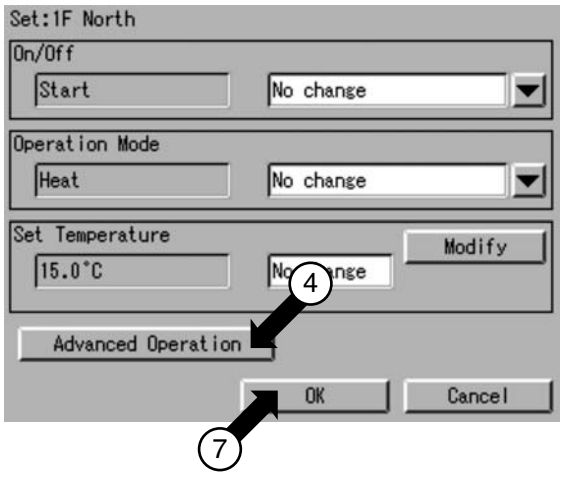
(See page 53)

6.2.6 Resetting the Filter/Element Sign

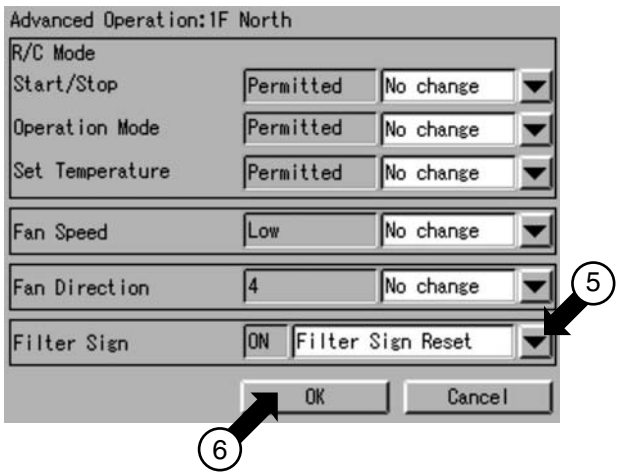
Screen 1 Monitoring



Screen 2 Operation



Screen 3 Advanced Operation



Reset the filter or element sign after cleaning any air conditioner showing the filter or element sign.

On the Monitoring screen, operation is allowed with either Icon or List as the display type.

The filter or element sign can be reset by zone or by group.

[Procedure]

1. On Screen 1 Monitoring, select a zone or a group from the button ①.
2. Select a zone or a group of which the filter or element sign is to be reset ②.
3. Press the [Set] button ③.
   Screen 2 Operation appears.
4. Press the [Advanced Operation] button ④.
   Screen 3 Advance Operation appears.
5. To reset the filter/element sign, select "Filter Sign Reset" in pull-down menu ⑤.
   Then press the [OK] button ⑥.
   (To cancel the setting, press the [Cancel] button.)
   Screen 2 Operation reappears.
6. Then press the [OK] button ⑦ on Screen 2 Operation.
   (To cancel the setting, press the [Cancel] button.)

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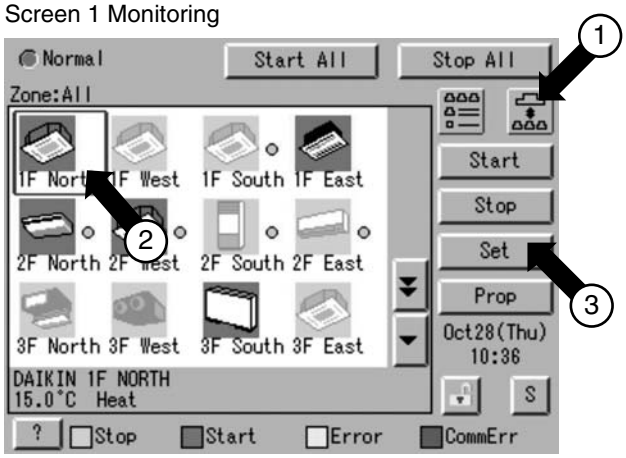
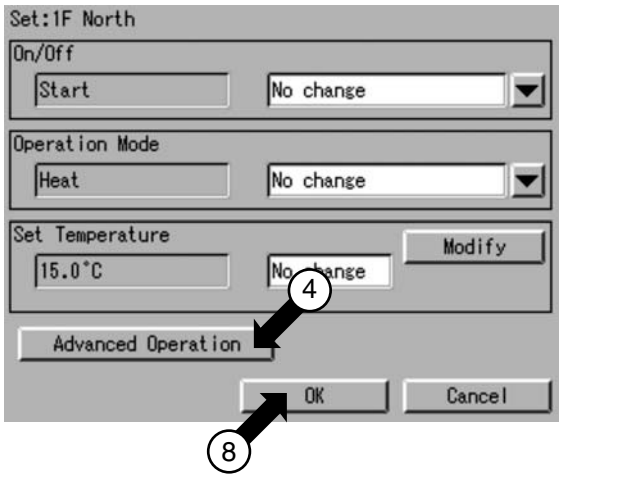
6.2.7 Changing the Direction/Fan Speed

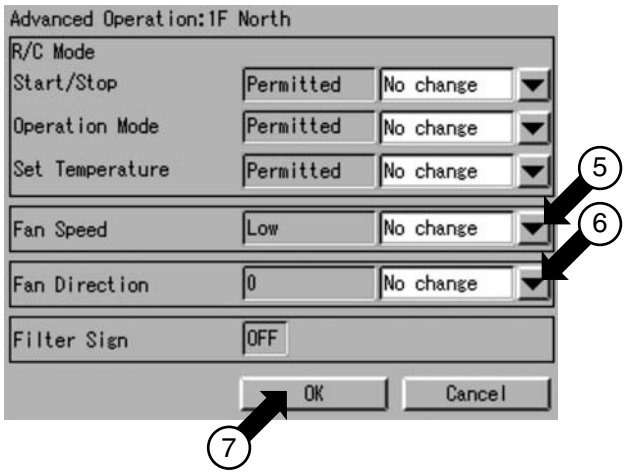
Screen 1 Monitoring



Screen 2 Operation



Screen 3 Advanced Operation



Change the fan direction or volume of air conditioners.

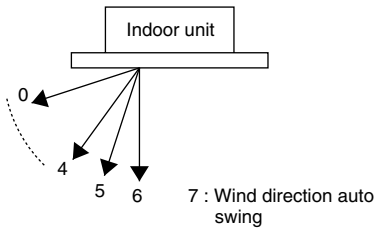
On the Monitoring screen, operation is allowed with either Icon or List as the display type.

The fan direction or volume can be changed by zone or by group.

[Procedure]

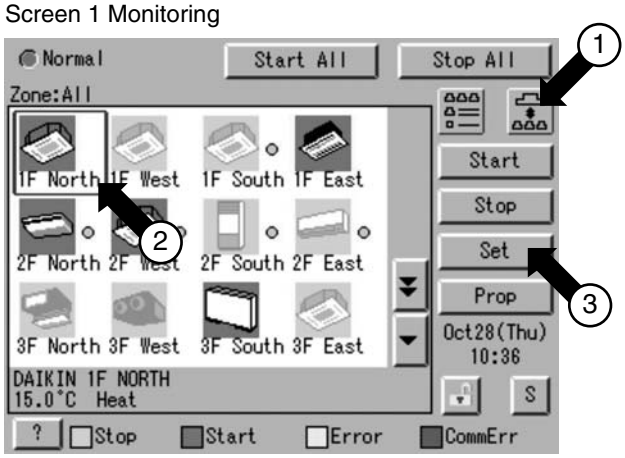
1. On Screen 1 Monitoring, select a zone or a group from the button ①.
2. Select a zone or a group of which the fan direction or volume is to be reset ②.
3. Press the [Set] button ③.
   Screen 2 Operation appears.
4. Press the [Advanced Operation] button ④.
   Screen 3 Advance Operation appears.
5. Set the direction with the pull-down menu ⑥.
   (The larger the value for wind direction setting (0 - 6), the closer to vertical the direction becomes. The value 7 indicates automatic swing.
   (Note: See the figure below.)
   The description given above may not exactly apply depending on the model. Check the wind direction sign on the remote control after operation.)
   Select between High and Low with the pull-down menu ⑤.
   Then press the [OK] button ⑦.
   (To cancel the setting, press the [Cancel] button.)
   Screen 2 Operation reappears.
6. Then press the [OK] button ⑧ on Screen 2 Operation.
   (To cancel the setting, press the [Cancel] button.)

Note: Guidelines for wind direction value and actual direction

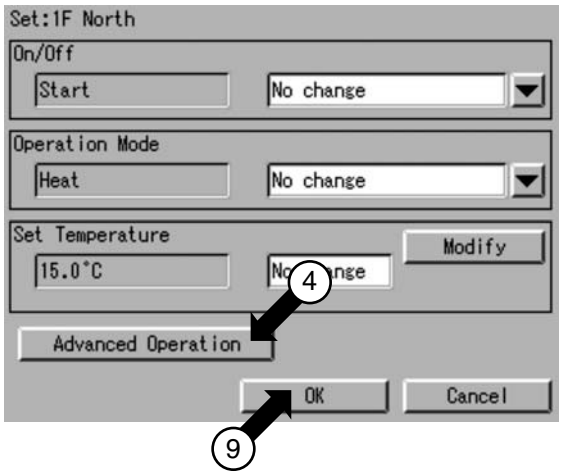


6.2.8 Changing the Range of Operation Allowed with Remote Control

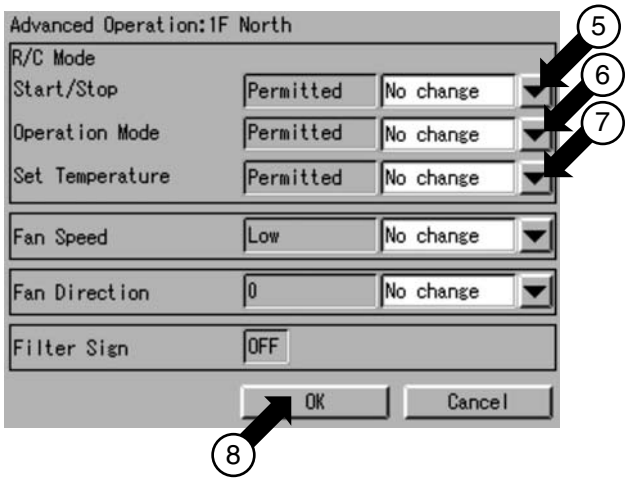
Screen 1 Monitoring



Screen 2 Operation



Screen 3 Advanced Operation



Change the setting of operation with the remote control of air conditioners between Permitted and Prohibited.

On the Monitoring screen, operation is allowed with either Icon or List as the display type.

The setting between Permitted and Prohibited can be changed by zone or by group.

[Procedure]

1. On Screen 1 Monitoring, select a zone or a group from button ①.
2. Select with ② a zone or a group for which the setting of the range of operation allowed with remote control is to be reset.
3. Press the [Set] button ③.
   Screen 2 Operation appears.
4. Press the [Advanced Operation] button ④.
   Screen 3 Advance Operation appears.
5. Then make setting with the pull-down menus ⑤ - ⑦.
   There are three settings as shown below:
   - ⑤Start/Stop
     "Prohibited"
     "Stop Only"
     "Permitted"
     "No change"
   - ⑥Operation Mode
     "Permitted or Prohibited"
     "No change"
   - ⑦Set Point
     Permitted or Prohibited
     "No change"

   Press the [OK] button ⑧ after setting ⑤ - ⑦.
   (To cancel the setting, press the [Cancel] button.)
   Screen 2 Operation reappears.
6. Then press the [OK] button ⑨ on Screen 2 Operation.
   (To cancel the setting, press the [Cancel] button.)

[Details of Setting]

Item	Setting	Meaning
Start/Stop	Prohibited	The remote control cannot start or stop operation.
	Stop Only	The remote control can stop the operation of air conditioners in operation but cannot start air conditioners not in operation.
	Permitted	The remote control can start or stop operation.
Operation Mode	Permitted	The remote control can change the operation mode.
	Prohibited	The remote control cannot change the operation mode.
Set Point	Permitted	The remote control can change the temperature setting.
	Prohibited	The remote control cannot change the temperature setting.

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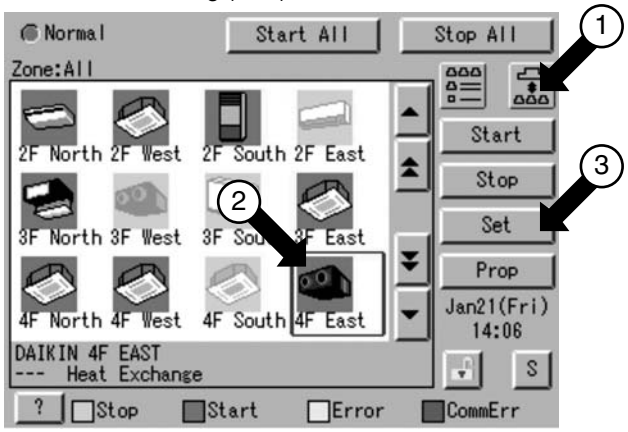
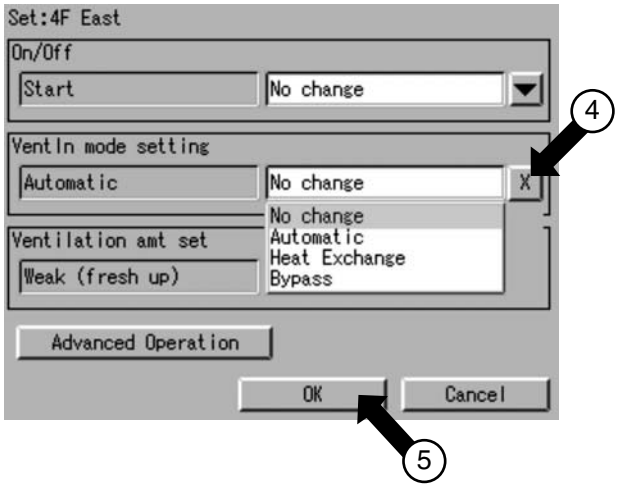
6.2.9 Set Ventilation Mode

Screen 1 Monitoring (Icon)



Screen 2 Set



Perform the following procedure to switch the ventilation mode.

For this operation, you can select any of three display types, icon, detailed icon and list on the monitoring screen

When changing the ventilation modes of all the ventilation groups of a zone, select the zone and switch the ventilation mode.

When changing the ventilation mode of a group, select the group and switch the ventilation mode.

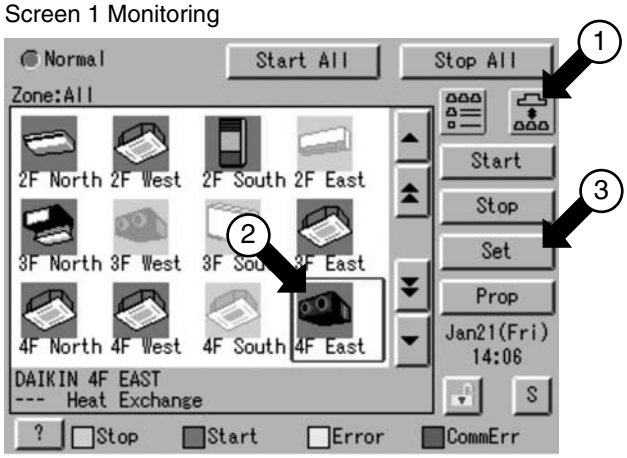
[Procedure]

1. On Monitoring Screen Screen 1, select a zone or group by pushing the button ①.
2. To select a zone or group subject to ventilation mode switching, push the icon ②.
3. Push [Set] button ③ to display Set Screen Screen 2.
4. Select a desired ventilation mode on the pull-down menu ④.
5. Last, press [OK] button ⑤.
   (To cancel above settings, press [Cancel] button.)

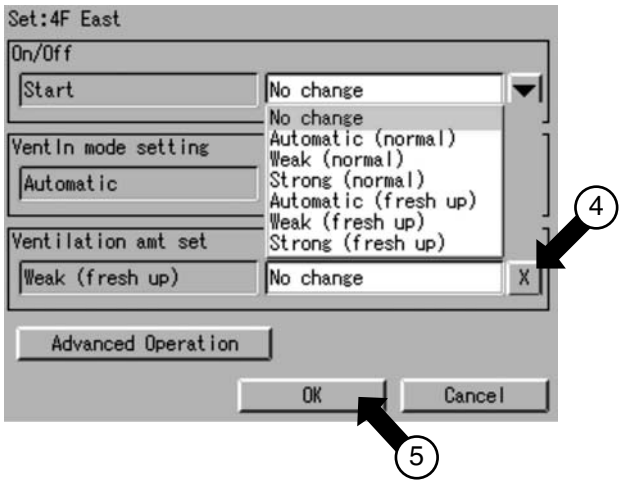
∗ Note that some models of ventilation systems permit you to make the above settings but the others don't.

6.2.10 Set Ventilation Volume

Screen 1 Monitoring



Screen 2 Set



Perform the following procedure to change the ventilation volume.

For this operation, you can select any of three display types, icon, detailed icon and list on the monitoring screen.

When changing the ventilation volumes of all the ventilation groups of a zone, select the zone and switch the ventilation volume.

When changing the ventilation volume of a group, select the group and switch the ventilation volume.

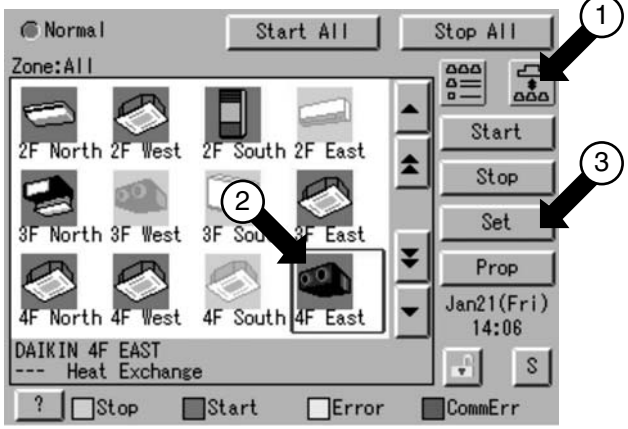
[Procedure]

1. On the Monitoring Screen Screen 1, select a zone or group by pushing the button ①.
2. To select a zone or group subject to ventilation volume switching, push the icon ②.
3. Push [Set] button ③ to display the Set Screen Screen 2.
4. Select a desired ventilation volume on the pull-down menu ④.
5. Lastly, push [OK] button ⑤.
   (To cancel above settings, press [Cancel] button.)

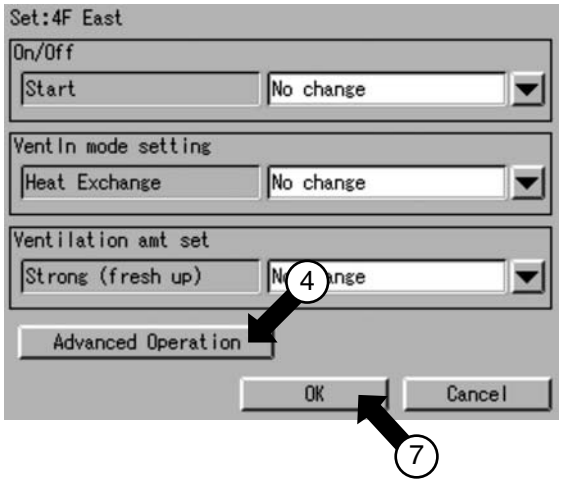
* Note that some models of ventilation systems permit you to make the above settings but the others don't.

6.2.11 Permit/Inhibit setting of Ventilation Remote Control Operations

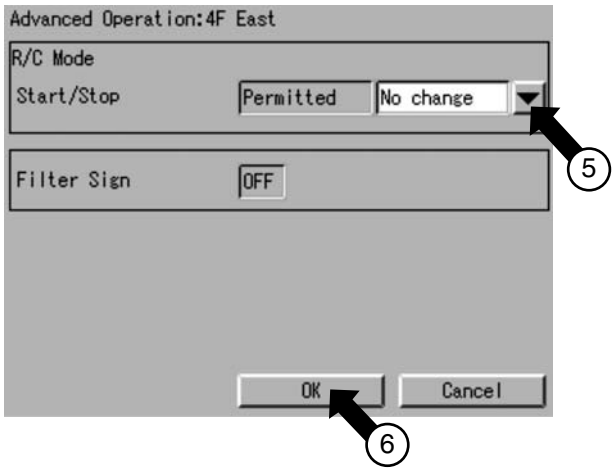
Screen 1 Monitoring



Screen 2 Set



Screen 3 Advanced Operatioon



Perform the following procedure to enable or disable the ventilation remote control operations.

For this operation, you can select any of three display types, icon, detailed icon and list on the Monitoring Screen.

You may enable or disable the remote control operations in units of zones or groups.

[Procedure]

1. On the Monitoring Screen Screen 1, select a zone or group by pushing the button ①.
2. To select a zone or group subject to ventilation volume switching, push the icon ②.
3. Push [Set] button ③ to display the Set Screen Screen 2.
4. Push [Advanced Operation] button ④ to display the Advanced Operation Screen Screen 3.
5. Make a desired setting on the pull-down menu ⑤.
   You can enable or disable the following setup items for remote control :
   - Disabling remote control operations
   - Enabling only stop operation
   - Assigning priority to button pushed later

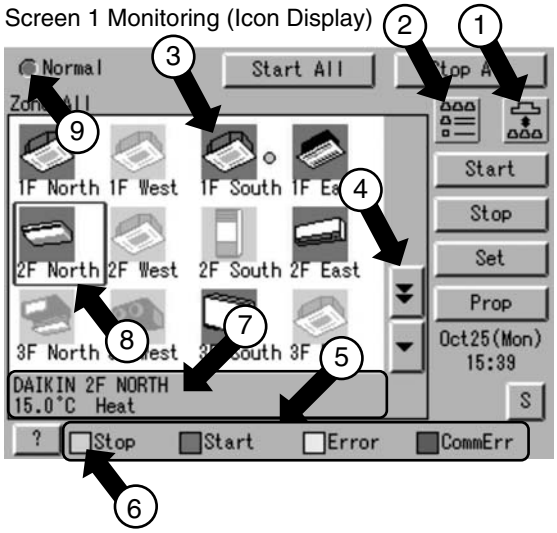
   After making the setting, push [OK] button ⑥ to display the Set Screen Screen 2 again.
   (To cancel above settings, push [Cancel] button.)
6. Lastly, push [OK] button ⑦ on the Set Screen.
   (To cancel above settings, push [Cancel] button.)

* Note that some models of ventilation systems permit you to make the above settings but some models don't.

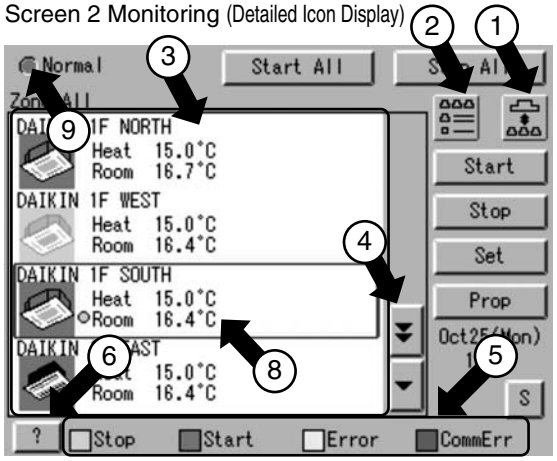
6.3 Monitoring Operation of Air Conditioner

6.3.1 Monitor Zone or Group Operation Status

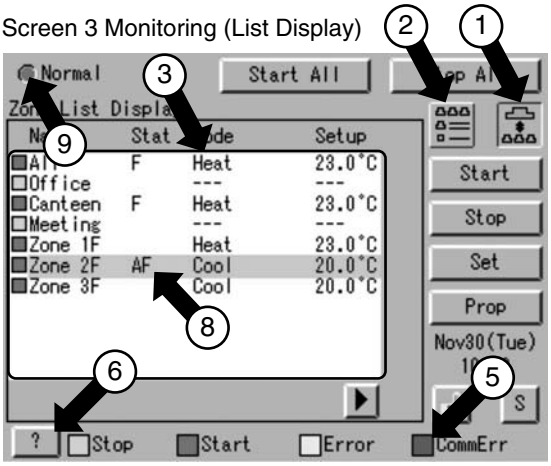
Screen 1 Monitoring (Icon Display)



Screen 2 Monitoring (Detailed Icon Display)



Screen 3 Monitoring (List Display)



Monitor Zone or Group Operation Status

To monitor the operation status, the monitoring screen permits you to choose any of three display types, icon, detailed icon or list.
Push the button ② to select a display type.
(Display type selection takes place repeatedly in the order of icon, detailed icon and list.

You may monitor the operation status in units of zones or groups.
Examples of display types are shown in left figures.

Screen 1	Display type	: Icon
	Unit of monitoring	: Group
Screen 2	Display type	: Detailed icon
	Unit of monitoring	: Group
Screen 3	Display type	: List
	Unit of monitoring	: Zone

[Descriptions of Display Items on the Screen]

At ③ displays information concerning a zone or group, including the operation active or inactive status and the presence/absence of faults, automatic control settings, filters and element signs, etc.

Push the button ④ to change a display scope.
(When the number of registered zones or groups is small and all the zones or groups can be displayed within one screen, this button does not appear. See Screen 3.

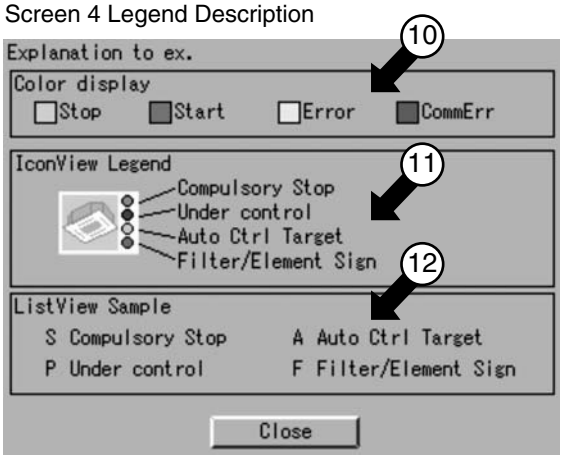
Display of ⑤ indicates a legend.
When requiring a more detailed legend, display the Legend Description Screen Screen 4 on the next page by pushing the [?] button ⑥.
To return to the previous screen, push Close button.

⑧ displays the current zone or group.
You may select another zone or group by pushing the screen.

On Screen 1, ⑦ displays the settings of the zone or group selected at ⑧. (Icon display only)
Display takes place in the following order:
- Upper : Detailed name for a zone or group
- Lower left : Setting temperature
(For a zone, this also indicates the temperature set for the representative machine (Note).
- Lower right : Operation mode
(For a zone, this also indicates the operation mode for the representative machine. (Note).

(When an error occurs, the corresponding error code is indicated in the lower area.

Screen 4 Legend Description



At ⑨, you can monitor at a glance the operation status of all air-conditioners connected to the Intelligent Touch Controller.

When no problem is found and one or more air-conditioners are operating : Display in red
When no problem is found and air-conditioners are not operating : Display in green
When one or more wrong air-conditioners are found : Display in yellow
When one or more air-conditions with communication errors are found : Display in blue

(You may change the colors indicating the operation active or inactive status through the use of Icon Color Setting on the System Setting menu.
(See page 34 for Icon color setting.))

(Note) Representative zone
When monitoring takes place in units of groups on the Monitoring Screen, the following groups indicate the zone representative machines.

- When the display type is icon : Leftmost group on the top line
- When the display type is detailed icon or list: Groups on the top line.

⑩displays the operation status of an air-conditioner.
For zone list display, display takes place as shown below.

- When no problem is found and one or more air-conditioners are operating : Display in red
- When no problem is found and no air-conditioner is operating : Display in green
- When one or more wrong air-conditioners are found : Display in yellow
- When one or more air-conditions with communication errors are found : Display in blue

(You may change the colors indicating the operation active or inactive status through the use of Icon Color Setting on the System Setting menu.
(See P34 for Icon color setting.))

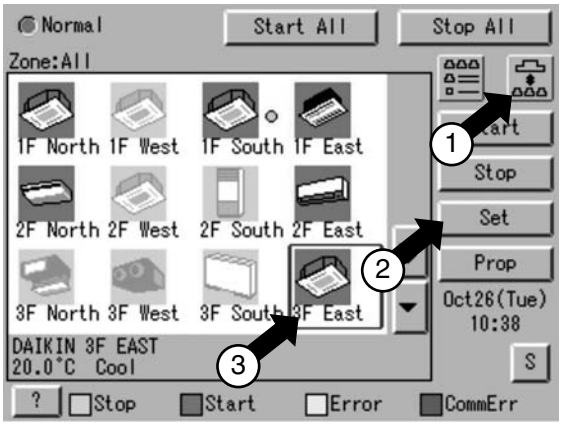
⑪provides for icon or detailed icon display.

⑫provides for list display.

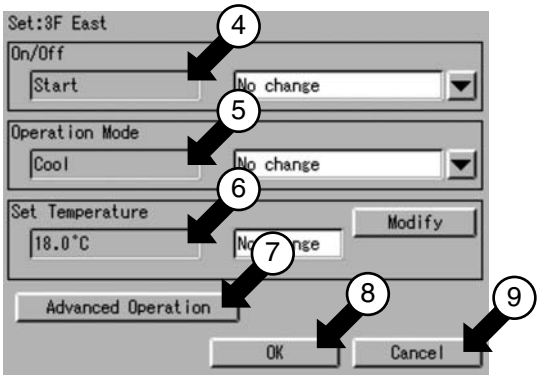
(Machines subject to automatic control are displayed only when schedule settings are made.
They cannot be displayed when Heating Mode Optimization or Temperature Limit has been set.)

6.3.2 Monitoring Detailed information

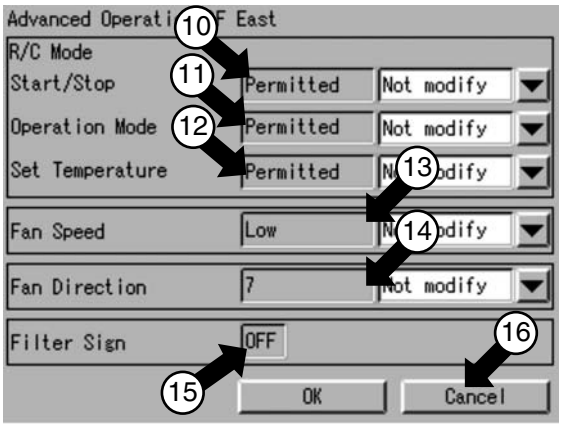
Screen 1 Monitoring (Icon Display)



Screen 2 Operation Screen



Screen 3 Advanced Operation Screen



Monitor Operation Status of a Zone or Group in Detail

(When monitoring the operation status in detail, you may choose any of three display types, icon, detailed icon and list.)

You may monitor the details of the operation status in units of zones or groups.

1. Select either Zone or Group by pushing the button ①.
   (Note that screens in the left-hand column are examples for group selection.)
2. Push [Set] button ② to display the Operation Screen Screen 2.
   When a zone is selected in the above operation, both ④ to ⑥ on Screen 2 and ⑩ to ⑭ on Screen 3 show the operation status of the representative machine in that zone. ⑮ displays ON so long as at least one of the filter signs or element signs is on in the zone or group.
   The following describes in order the contents of display data on Screen 2.
   The grayed characters in ④ to ⑥ indicate the current status of the selected zone or group.
   The meanings of screen data in the left-hand column are shown below.
   Operation/stop status : Start
   Operation mode setting status : Cool
   Temperature setting status : 20.0°C
3. Push [Advanced Operation] button ⑦ to display the Advanced Operation Screen Screen 3.
   To return to the Monitoring Screen Screen 1, push [Cancel] button ⑨.

The following describes in order the contents of display data on the Advanced Operation Screen Screen 3.

⑩ displays the settings made for start and stop remote control operations.
Prohibited, Stop Only or Permitted is displayed.
⑪ displays the settings made for remote control operations to change the operation mode.
Either Permitted or Prohibited is displayed.
⑫ displays the settings for remote control operations to change the setting temperature.
Either Permitted or Prohibited is displayed.
⑬ displays the settings for remote control operations to change the setting temperature.
Either Permitted or Prohibited is displayed.
⑭ displays the direction of wind.
A value from 1 to 7 is displayed.
Wind flows more vertically as the setting value becomes larger in a range from 0 to 6. When the setting value 7 is displayed, the direction of wind is swung automatically.
Note that these descriptions may vary from model to model.
Check for a wind direction displayed on the remote control.
⑮ displays a filter sign.
Either ON and OFF is displayed.

* Display data on Screens 2 and 3 is updated each time the respective screens are displayed.
Once these screens are displayed, no data is updated unless they are closed and opened again.

4. Check the settings and push [Cancel] button ⑯.

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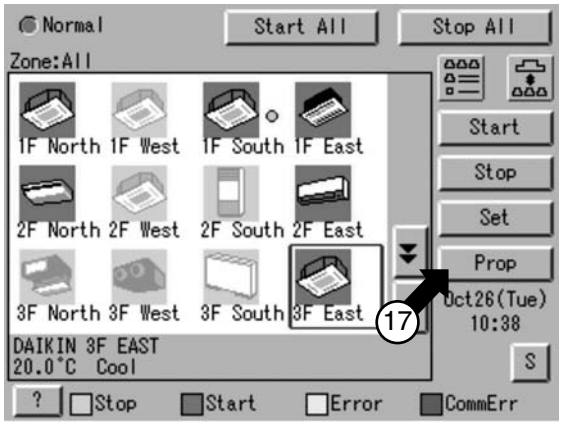
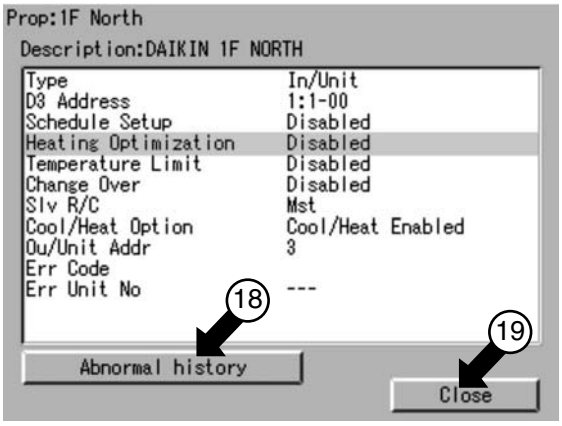
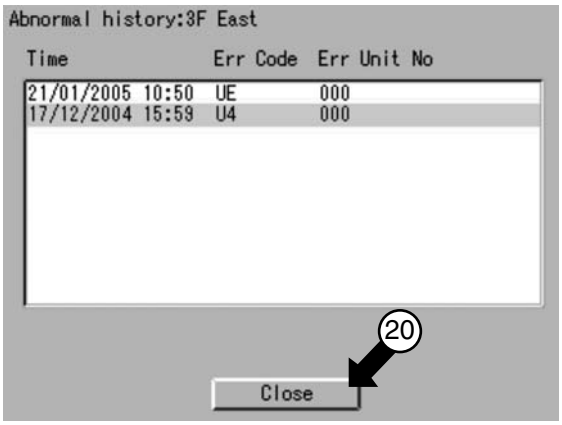
Screen 4 Monitoring Screen (Icon Display)



Screen 5 Detailed Information Screen



Screen 6 Fault History



5. Push [Prop] button ⑰.
The following maintenance data is displayed on the Detailed Information Screen Screen 5.
(Note that screens in the left-hand column are examples for group selection.)

[For group selection]

Name : Group name
Detailed name : Detailed group name
Type : Air-conditioner/ventilation/D3Dio/D3Di
D3 Address : 1:1-00 to 1:4-15
(When DIII-NET Plus adapter is enabled: 1:1-00 to 2:4-15)
Schedule Setup : Enabled or disabled
Heating Optimization : Enabled or disabled
Temperature Limit : Enabled or disabled
Change Over Settings : Enabled or disabled
Slv R/C : Parent or child
Cool/Heat Option
: Presence/Absence/Under Selection
Ou/Unit Addr : Outside unit address
Err Code : 2-digit error code in case of error occurence
Err Unit No
: [–] for no error or unit number for error

[For zone selection]

Name : Zone name
Detailed name : Detailed zone name
Start1By1 : Enabled or disabled
Nb of Regist Grp : Number of groups registered in a zone
Schedule Setup : Enabled or disabled

6. Push [Abnormal history] button ⑱ to display the Abnormal History Screen (Screen 6).

The following data is displayed on the Abnormal History.

[For group selection]

Name : group name
Detailed name : Detailed group name
Error log :
- Time : Error occurrence time
- Err Code : 2-digit error code
- Err Code No : Unit number

[For zone selection]

Name : group name
Error log :
- Time : Error occurrence time
- Name : Error occurrence group name
- Err Code : 2-digit error code
- Err Code No : Unit number

Top 10 error logs are displayed, assigning the highest priority to the time of the latest error.
∗ When the same error recurs, the error time is renewed.

Check for display data and push [Close] button ⑳ to return to the detailed information screen Screen 5. To return to the Monitoring Screen Screen 4, push [Close] button ⑲ on that screen.

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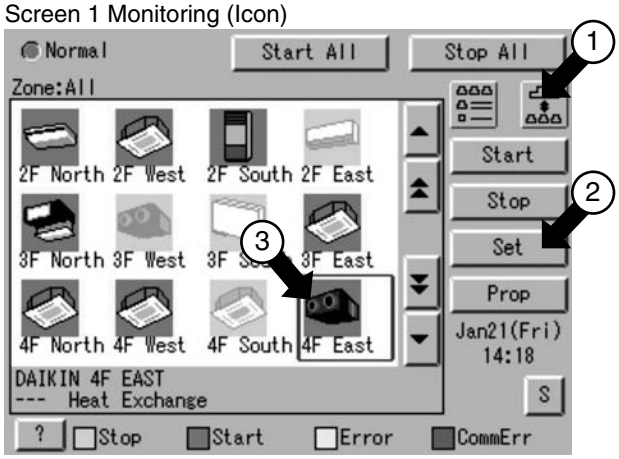
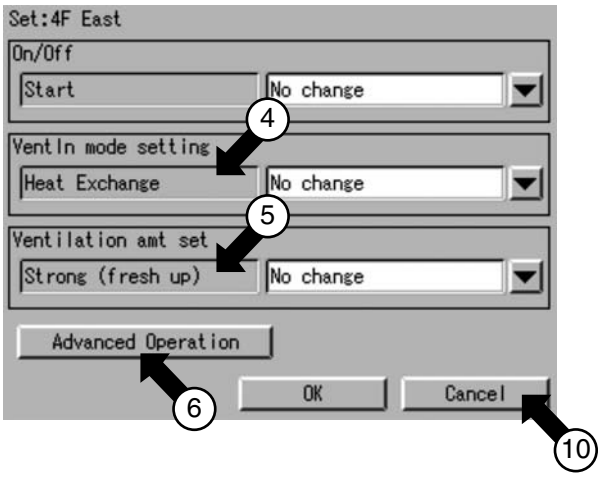
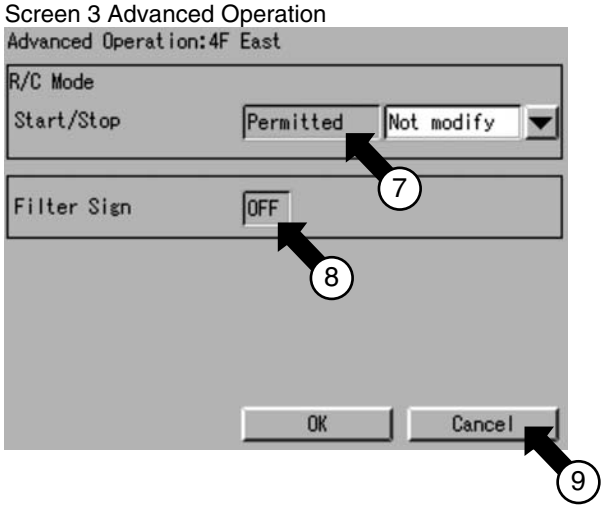
Screen 1 Monitoring (Icon)



Screen 2 Set



Screen 3 Advanced Operation



Monitor Ventilation Status of a zone or group in Detail

(When monitoring the operation status in detail, you may choose any of three display types, icon, detailed icon and list.)

You may monitor the details of the operation status in units of zones or groups.

1. Select either Zone or Group by pushing the button ①.
   (Note that screens in the left-hand column are examples for group lection.)
2. Push [Set] button ② to display the Operation Screen Screen 2.
   The following describes in order the contents of display data on Screen 2.
   The grayed characters ④ and ⑤ indicate the current status of the selected zone or group.
   The following data is displayed on the screen of the left-hand column.
   Ventilation mode : Heat Exchange
   Ventilation volume : Strong (fresh up)
3. Push the [Advanced Operation] button ⑥ to display the Advanced Operation screen Screen 3.
   To return to the Monitoring Screen Screen 1, push [Cancel] button ⑩.
   The following describes in order the contents of display data on the Advanced Operation screen Screen 3.
   ⑦displays the settings made for start- or stop-related remote control operations.
   Prohibited, Stop Only or Permitted is displayed.
   ⑧ displays a filter sign.
   ON or OFF is displayed.

∗ Display data on Screens 2 and 3 is updated each time the respective screens are displayed. Once these screens are displayed, data is not updated unless they are closed and opened again.

4. Check for display data and push [Cancel] button ⑨.

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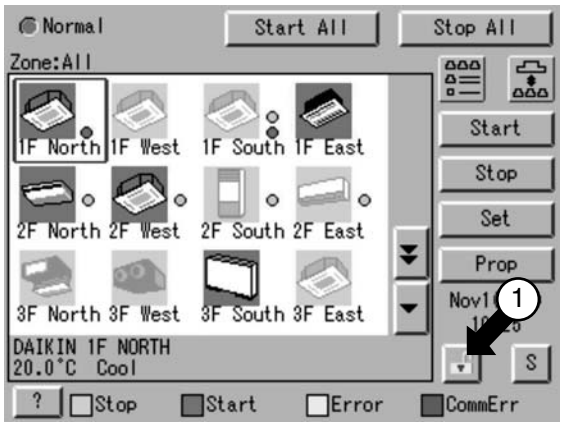
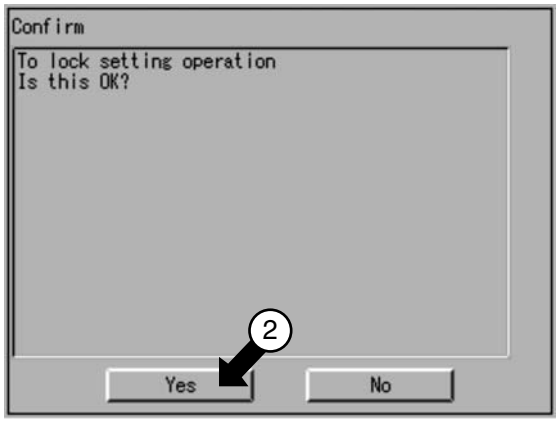
6.3.3 To set/release the lock of screen operation

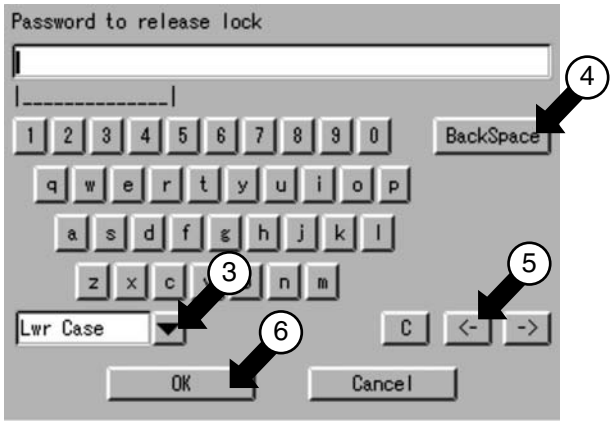
Screen 1 Monitoring (Icon)



Screen 2 Confirm



Screen 3 Password to release lock



Lock and Unlock Operations on the Screen

You may use a password to lock and unlock operations on the screen.
To make this lock/unlock setting, you have to assign an unlock password on P50 beforehand. The key mark in the following figure does not appear unless this setting is made.

Unlock icon
This icon indicates that operations on the screen have been unlocked.

Lock icon
This icon indicates that operations on the screen have been locked. In this state, you cannot manipulate the air-conditioner or the system.

[Lock method]

1. While the unlock button is displayed, push the button ① to display the Confirmation Screen Screen 2.
2. Push Yes button ② to return to the Monitoring Screen Screen 1 with the operations locked.
   Push No button not to lock the operations.

[Unlock method]

3. While the lock icon is displayed, push the button ①, Air-conditioner Operation button or System Operation button to display the Password to release lock Screen Screen 3.
4. Enter the password assigned for unlock password protection on P50.

   [Lock method]

   ③ : Toggle button for switching uppercase letters to lowercase letters
   ④ : Correction button for characters entered by hitting the incorrect keys. When deleting one or more incorrect characters just immediate before the cursor, you must push this button as many times as necessary.
   ⑤ : Button for moving the cursor.
   After entering the password, push OK button ⑥.

   To cancel the entered password, push Cancel button and return to the Monitoring Screen Screen 1.

6.4 System Setup Menu

6.4.1 System Setup Menu

The System Setup menu includes the following items:

- Password Setup
- Time Setup
- Backlight Setup
- Group Setup
- Zone Setup
- Schedule Setup
- Change Over Settings
- Temperature Limit Settings
- Heating Optimization Settings
- History Display
- Touch Panel Calibration
- Version Information

The following table describes the items mentioned above.

System Setup Menu Item	Description	Operation (Reference)
Setting a Password	You can set passwords to restrict persons responsible for control operations. 1. Assigning administrator passwords You may assign administrator passwords to restrict system menu operations. 2. Assigning unlock passwords You may assign unlock passwords to restrict air-conditioner and system menu operations. (When both passwords have been assigned, you have to reset them twice to resume the system menu operations.) Notes : When you forget the assigned passwords, you cannot perform any system operations. Don't forget the passwords. When you don't remember them, contact a dealer in your area.	See page 50
Time Setup	Adjust the system clock (year, month, day, hour, minute and second). The clock is used for scheduled operation, saving history, power distribution (optional) and demand operation (optional). Note : Adjusting the clock may affect scheduled operation, power distribution or demand operation. (For the details of the influence, see the following. For power distribution and demand operation, see the respective instruction manual as well.) [Influence of changing the clock setting on scheduled operation] · The operation scheduled to run at a time passed by advancing the clock is not performed. (Ex.: When an air conditioner is scheduled to start at 10:00 (①) : If the time is adjusted to 10:05 at 9:55, the scheduled operation (①) is not performed.) · The operation scheduled to run at a time reached again by turning back the clock is performed again. (Ex.: When an air conditioner is scheduled to start at 10:00 (①) : If the time is adjusted to 9:55 at 10:05, the scheduled operation (①) is performed again at 10:00.)	See page 51

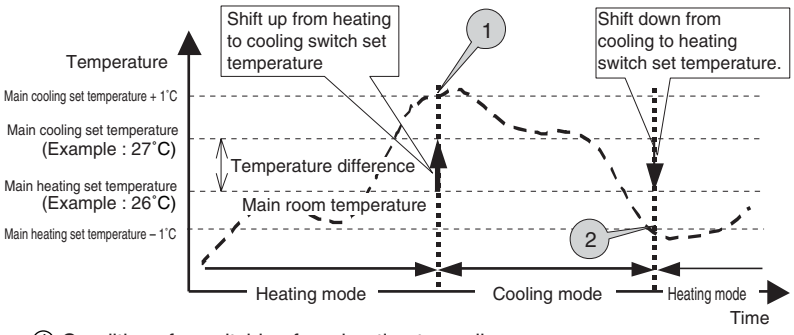
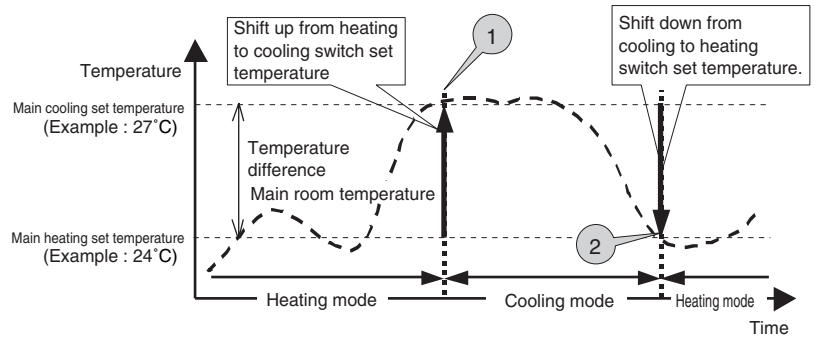
System Setup Menu Item	Description	Operation (Reference)
Backlight Setup	A backlight is used for the LCD of the intelligent Touch Controller. The backlight has its service life and the luminance of the backlight is reduced in proportion to the period of time it is illuminated. This setting is for preventing the luminance from being reduced in a short time by automatically turning the backlight OFF when the touch panel has been left untouched for a set period of time. (If the backlight has been turned off automatically, touching the panel illuminates the backlight again.) Backlight setting includes the following two steps : 1.Set the time before the backlight is automatically turned OFF. Range : 1 - 60 minutes in increments of one minute. 2.Set whether the backlight should be automatically illuminated when any error is generated in the air conditioner while the backlight is turned OFF. Enable/Disable Note: If this setting is not made, the backlight generally requires replacement every 3 - 4 years. The life of the backlight becomes even shorter if it is illuminated in a low temperature (10˚C or lower) environment for a long time. When using the intelligent Touch Controller in a low temperature environment, it is recommended that a shorter time is set for 1. above and Disabled for 2.	See page 52
Group Setup	Set the name, description, icons to be displayed and temperature setting limit (see Note) for the group. If this registration is not made, addresses for central management of the group is used for the Name and Description. Operation is not affected if these settings are not made. (Addresses for central management include up to 64 addresses 1-00, 1-01, ... 1-15, 2-00, ... 4-15.) During use of DIII plus adaptor, addresses are 128, 1:1-00 to 2:4-15. (Note): The temperature setting limit is a function to allow operation only within the preset temperature limit to prevent too much cooling or heating. (The limit function above does not work when the operation mode of the air conditioners is Auto.) Ex.: Temperature setting limit : 25 - 35˚C cooling If the temperature is set to 20˚C with the remote control, the intelligent Touch Controller automatically changes the temperature setting to 25˚C.	See page 53
Zone Setup	Set the name, description, icons to be displayed and sequential starting of the groups registered for a zone (see Note), and groups to be registered for the zone. (The zone includes “Collective,” for which all groups are registered in advance. This zone is made available for making the settings for all of the air conditioners connected to the intelligent Touch Controller. The name, description or registered groups cannot be changed for this Collective zone.) (Note) : Setting sequential starting of groups registered for the zone When multiple groups are registered for a zone and operation is performed by the zone, air conditioner outdoor units start operation at one time. If many outdoor units start at the same time, a large amount of current is used momentarily, which may trip the breaker when the power capacity of the receiving device is not enough. This setting is a function to prevent such phenomenon by starting air conditioners one by one. (Memo 1) : When power distribution (optional) is performed, the zone registered here becomes the unit for distribution (tenant). Register the zone setting by the tenant. (Memo 2) : One group can be registered for more than one zone.	See pages 54 to 55

System Setup Menu Item	Description	Operation (Reference)
Locale Setting	This menu permits you to select a language from the list displayed on the Intelligent Touch Controller. By setting locale, you can display data in the selected language on the Intelligent Touch Controller.	See page 55
Network Setting	This menu permits you to set an IP address for the Intelligent Touch Controller. (Remarks) : When using a Web function (option), you have to set the IP address, subnet mask, etc. according to the environmental requirements of your system.	See page 56
Icon Color Setting	This menu permits you to change the icon colors on the Intelligent Touch Controller. Icons on the monitoring screen are displayed in the colors set on this menu.	See page 57
Input License Key	You have to input the license key to use various options of the Intelligent Touch Controller. If necessary, you can check the current license or add the new license. This setting is usually done by sales engineer of our company.	See page 58

<table>
<tr><th>System Setup Menu Item</th><th>Description</th><th>Operation (Reference)</th></tr>
<tr><td>Setting Schedule Outline</td><td>This menu permits you to make settings for the scheduled operations in units of zones or groups. The scheduled operations are used to automatically start or stop an air-conditioner at the date and time (year, month, day, day of the week, hour and minute) previously set in the Intelligent Touch Controller according to the operating conditions of the air-conditioner.
The following operations can be scheduled and controlled.
• Start/stop • Remote control enabled/disabled • Operation mode
• Temperature setting • Ventilation mode (*) • Ventilation volume (*)
* Note that these settings cannot be made depending on the model in use.
The following describes a procedure for setting the schedule.
• 17 kinds of dates can be registered including the weekly settings (Sunday to Saturday) and special settings (Ex1 to Ex10).
These 17 kinds of dates are registered via following Setting Calendar menu. When registering them in setting calendar, you can register 11 kinds of dates including one weekly setting (because settings from Sunday to Saturday are used as a single setting) and 10 special settings (Ex1 to Ex10).
• Calendar settings, weekly settings and special settings can be made.
(Example : The weekly settings are made for regular use and special settings are made for summer holiday.)➔These settings can be made for the coming 13 months.
• Lastly, concrete events can be registered on the respective 17 kinds of dates for which 7 weekly settings (Sunday to Saturday) and 10 special settings (Ex1 to Ex10) have been made.
(Example : Setting for starting zone 1 at 9:00 and stopping it at 17:00)➔
A maximum of 16 operations can be registered for each date.
• A maximum of 8 schedules can be registered when the above settings are handled as a single schedule.</td><td></td></tr>
<tr><td colspan="2">The following describes how to make the settings, showing a few examples.</td><td></td></tr>
<tr><td>Setting Zone</td><td>1. [Utilization of floors]
1F : Reception Register “1F” as a zone name.
2F : Office Register “2F” as a zone name.
3F : Canteen Register “3F” as a zone name.</td><td>See page 54</td></tr>
<tr><td>Schedule Setting Calendar</td><td>2. [Make the weekly and special settings on the setting calendar menu for the above zones]
<table>
<tr><th colspan="2">Zone name / Day of the week</th><th>Zone 1F</th><th>Zone 2F</th><th>Zone 3F</th></tr>
<tr><td colspan="2">Sunday</td><td>Holiday</td><td>Holiday</td><td>Holiday</td></tr>
<tr><td colspan="2">Monday</td><td>9:30 to 18:00 : Working hours</td><td>8:30 to 17:00 : Working hours
12:00 to 13:00 : Lunch hour
17:00 to 22:00 : Overtime
22:00 : Locking</td><td>9:30 to 14:30 : Working hours</td></tr>
<tr><td colspan="2">Tuesday</td><td>Same as above</td><td>Same as above</td><td>Same as above</td></tr>
<tr><td colspan="2">Wednesday</td><td>9:30 to 17:00: Working hours</td><td>Same as above</td><td>Same as above</td></tr>
<tr><td colspan="2">Thursday</td><td>Same setting as for Monday</td><td>Same as above</td><td>Same as above</td></tr>
<tr><td colspan="2">Friday</td><td>Same setting as for Monday</td><td>Same as above</td><td>Same as above</td></tr>
<tr><td colspan="2">Saturday</td><td>holiday</td><td>holiday</td><td>holiday</td></tr>
<tr><td>EX1</td><td>Third Saturday in every month</td><td>Handled as a weekday for attendance</td><td>Handled as a weekday for attendance</td><td>Handled as a weekday for attendance</td></tr>
<tr><td rowspan="2">EX2</td><td>August 1 to August 20</td><td rowspan="2">holiday</td><td rowspan="2">holiday</td><td rowspan="2">holiday</td></tr>
<tr><td>December 29 to January 4</td></tr>
<tr><td>EX3</td><td>December 28</td><td>9:00 to 12:00 : Working hours</td><td>9:00 to 12:00: Working hours</td><td>holiday</td></tr>
<tr><td>EX4</td><td>January 5</td><td>10:00 to 15:00 : Working hours</td><td>9:00 to 12:00 : Working hours
12:00 to 13:00 : Lunch hour</td><td>9:30 to 14:30 : Working hours</td></tr>
</table>
</td><td>See page 59</td></tr>
</table>

<table>
<tr><th>System Setup Menu Item</th><th>Description</th><th>Operation (Reference)</th></tr>
<tr><td>Setting Scheduled Event</td><td>
3. [Set events for zone 2F.]
(Note) The following lists the events for reference.
Change the settings according to the actual use conditions.
Setting events for Monday to Friday
<table>
<tr><th>Time</th><th>Target zone</th><th>Start/stop</th><th>Operation mode</th><th>Setting temperature</th><th>Remote control code</th></tr>
<tr><td>8:30</td><td>Zone 2F</td><td>Start</td><td>Disabled</td><td>Disabled</td><td>Assign priority to key pushed later</td></tr>
<tr><td>12:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Disabled</td></tr>
<tr><td>13:00</td><td>Zone 2F</td><td>Start</td><td>Disabled</td><td>Disabled</td><td>Assign priority to key pushed later</td></tr>
<tr><td>17:00</td><td>Zone 2F</td><td>Disabled</td><td>Disabled</td><td>Disabled</td><td>Only stop operation permitted</td></tr>
<tr><td>22:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Remote control operation prohibited</td></tr>
</table>
Setting events for Saturday and Sunday
<table>
<tr><th>Time</th><th>Target zone</th><th>Start/stop</th><th>Operation mode</th><th>Setting temperature</th><th>Remote control code</th></tr>
<tr><td>8:30</td><td>Zone 2F</td><td>Start</td><td>Disabled</td><td>Disabled</td><td>Assign priority to key pushed later</td></tr>
<tr><td>12:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Remote control operation prohibited</td></tr>
</table>
Setting events for Ex1 (Third Saturday in every month)
<table>
<tr><th>Time</th><th>Target zone</th><th>Start/stop</th><th>Operation mode</th><th>Setting temperature</th><th>Remote control code</th></tr>
<tr><td>8:30</td><td>Zone 2F</td><td>Start</td><td>Disabled</td><td>Disabled</td><td>Assign priority to key pushed later</td></tr>
<tr><td>12:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Disabled</td></tr>
<tr><td>13:00</td><td>Zone 2F</td><td>Start</td><td>Disabled</td><td>Disabled</td><td>Assign priority to key pushed later</td></tr>
<tr><td>17:00</td><td>Zone 2F</td><td>Disabled</td><td>Disabled</td><td>Disabled</td><td>Only stop operation permitted</td></tr>
<tr><td>22:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Remote control operation prohibited</td></tr>
</table>
Setting events for Ex2 (Summer holiday, etc.)
<table>
<tr><th>Time</th><th>Target zone</th><th>Start/stop</th><th>Operation mode</th><th>Setting temperature</th><th>Remote control code</th></tr>
<tr><td>9:00</td><td>Zone 2F</td><td>Disabled</td><td>Disabled</td><td>Disabled</td><td>Assign priority to key pushed later</td></tr>
<tr><td>17:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Remote control operation prohibited</td></tr>
</table>
Setting events for Ex3 (December 28)
<table>
<tr><th>Time</th><th>Target zone</th><th>Start/stop</th><th>Operation mode</th><th>Setting temperature</th><th>Remote control code</th></tr>
<tr><td>12:00</td><td>Zone 2F</td><td>Start</td><td>Heating</td><td>25°C</td><td>Assign priority to key pushed later
Temperature setting prohibited
Operation mode prohibited</td></tr>
<tr><td>17:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Only stop operation permitted</td></tr>
</table>
Setting events for Ex3 (December 28)
<table>
<tr><th>Time</th><th>Target zone</th><th>Start/stop</th><th>Operation mode</th><th>Setting temperature</th><th>Remote control code</th></tr>
<tr><td>10:00</td><td>Zone 2F</td><td>Start</td><td>Heating</td><td>25°C</td><td>Assign priority to key pushed later
Temperature setting prohibited
Operation mode prohibited</td></tr>
<tr><td>12:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Only stop operation permitted</td></tr>
<tr><td>13:00</td><td>Zone 2F</td><td>Start</td><td>Disabled</td><td>25°C</td><td>Assign priority to key pushed later
Temperature setting prohibited
Operation mode prohibited</td></tr>
<tr><td>15:00</td><td>Zone 2F</td><td>stop</td><td>Disabled</td><td>Disabled</td><td>Only stop operation permitted</td></tr>
</table>
∗ The term “Disabled” means that the setting is not changed
</td><td>See pages 60 to 62</td></tr>
<tr><td>Change Schedule Name</td><td>4. [Change a schedule name.]
This function enables you to change the existing schedule name to an easy-to-understand schedule name.</td><td>See page 63</td></tr>
<tr><td>Change Special Date Name</td><td>5. [Change a special day name.]
This function enables you to change the existing special holiday name to an easy-to-understand holiday name.</td><td>See page 63</td></tr>
<tr><td>Enable or disable a schedule.</td><td>6. [Enable or disable a schedule.]
This function finally enables you to decide whether to enable or disable the setting made.</td><td>See page 63</td></tr>
<tr><td>Other Schedule Functions</td><td>7. [Convenient functions for setting a schedule]</td><td>See pages 64 to 65</td></tr>
</table>

System Setup Menu Item	Description	Operation (Reference)
Change Over Settings	This function allows the optimal room temperature to be maintained without the users having to change the operation mode by automatically switching the air conditioner's operation mode (cooling or heating) according to the room temperature for locations where the temperature difference during the day and at night is very large. < Overview of Function > This function automatically switches the air conditioner's operation mode and set temperature in units of one **(4) automatic cooling/heating switch group** according to the following 3 parameters : **(1) main set temperature, (2) main room temperature,** and the difference between the set temperatures when in cooling and in heating operation (listed hereafter as **(3) temperature difference**). [1] Control Method (How to determine the (1) Main Set Temperature and (2) Main Room Temperature) The 3 following methods exist for determining the above temperatures. **1.Fixed Air Conditioner Method** The first indoor unit (the one highest on the screen) among those registered in the automatic cooling/heating switch group is designated the main indoor unit and the set temperature and room temperature of that indoor unit are designated the main set temperature and main room temperature. Note, however that if the main indoor unit is in fan operation mode, its automatic cooling/heating switch group cannot be controlled. **2.Operating Air Conditioner Selection Method** Starting with the first indoor unit (the one highest on the screen) of those registered in the automatic cooling/heating switch group and working down, a search is performed to find an indoor unit which is both operating and in either cooling, heating, or automatic operation mode. The first one which satisfies both of these conditions is designated the main indoor unit and the set temperature and room temperature of that indoor unit are designated the main set temperature and main room temperature. If none is found which satisfies these conditions, the main set temperature and main room temperature are determined using the Fixed Air Conditioner Method shown above. **3.Average Method** All the indoor units which are registered in the automatic cooling/heating switch group, are operating, and are either in cooling, heating, or automatic mode are found, and the averages for their set temperatures and room temperatures are calculated and used as the main set temperature and main room temperature. (Decimals are rounded up.) Note, however, that if there no air conditioners among the registered air conditioners for the averages to be calculated, the main set temperature and main room temperature are determined using the Fixed Air Conditioner Method shown above. [2] (3) Temperature Difference The temperature difference is the difference between the set temperatures when automatically switching between cooling and heating when using this control. The temperature difference is set to between 1˚C and 7˚C in 1˚C units. (When shipped from the factory, the setting is 2˚C.) [3] (4) Automatic Cooling/Heating Switch Group • This control is performed using one automatic cooling/heating switch group as a unit. • Up to 128 indoor unit groups can be registered in one automatic cooling/heating switch group. • It is not possible to register the same indoor unit to multiple automatic cooling/heating switch groups. • Up to 128 automatic cooling/heating switch groups can be registered in this unit. • These controls can be enabled and disenabled for each individual automatic cooling/heating switch group. (These controls only work for groups set as enabled.) • A mark indicating that the indoor unit is under automatic control will appear on the monitor screen.	See page 66

System Setup Menu Item	Description	Operation (Reference)
Change Over Settings	< Control Implementation Conditions > The relationship between the main room temperature, the main set temperature, and the operation mode is described below, with examples. (Two examples are given, as the operation differs for temperature differences 2˚C and below and 3˚C and above.) The controls are implemented when the control conditions are satisfied, every 5 minutes from the time the power is turned on. < Implementation conditions when the temperature difference is 2˚C or lower.> (The figure below is for a temperature difference of 1˚C)  ① Conditions for switching from heating to cooling : Main room temperature > main set temperature + temperature difference + 1˚C (Example : 28.1˚C > 26˚C + 1˚C + 1˚C) ② Conditions for switching from cooling to heating : Main room temperature < main set temperature – temperature difference – 1˚C (Example : 24.9˚C < 27˚C – 1˚C – 1˚C) <Implementation conditions when the temperature difference is 3˚C or higher.> (The figure below is for a temperature difference of 3˚C)  ① Conditions for switching from heating to cooling : Main room temperature > main set temperature + temperature difference (Example : 27.1˚C > 24˚C + 3˚C) ② Conditions for switching from cooling to heating : Main room temperature < main set temperature - temperature difference (Example : 23.9˚C < 27˚C – 3˚C) * See the next page for a detailed description of the instructions to the air conditioner.	See page 66

System Setup Menu Item	Description	Operation (Reference)
Change Over Settings	The control instruction is sent to the indoor units registered in the automatic cooling/heating switch group when the control implementation conditions shown on the previous page are satisfied. The actual control instructions sent differ according to the control method setting (fixed air conditioner/operating air conditioner selection/average) and the satisfied conditions (switch from cooling to heating, etc.). The control instructions for each situation are shown below.	See page 66

<Instructions sent to indoor units when control is implemented>

1.Fixed air conditioner/operating air conditioner selection methods

The control instructions are determined by the operation mode of the main indoor unit and the main set temperature. Instructions regarding the operation mode and the set temperature, shown below, are sent to all the indoor units registered in the group once all the control implementation conditions on the previous page are satisfied.

When conditions are met for switching from heating to cooling			
		Instructions to indoor units registered in the automatic cooling/heating switch group	
		Operation mode	Set temperature
Operation mode of the main indoor unit	Heating/Automatic heating	cooling	main unit setting temperature+temperature difference
	Cooling/Automatic cooling	cooling	main unit setting temperature
When conditions are met for switching from cooling to heating			
		Instructions to indoor units registered in the automatic cooling/heating switch group	
		Operation mode	Set temperature
Operation mode of the main indoor unit	Cooling/Automatic cooling	heating	main unit setting temperature–temperature difference
	Heating/Automatic heating	heating	main unit setting temperature

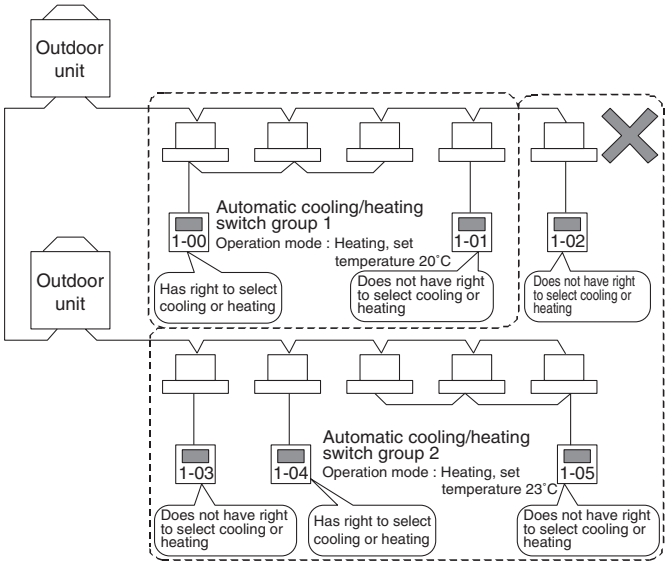
For this control, when the operation mode of the main indoor unit is automatic, whether it is automatic cooling mode or automatic heating mode is checked when judging the control conditions. Once the instructions have been determined, either a cooling or a heating instruction is sent to indoor units in automatic operation mode. (They switch from automatic to cooling or heating.)

2. Average Method

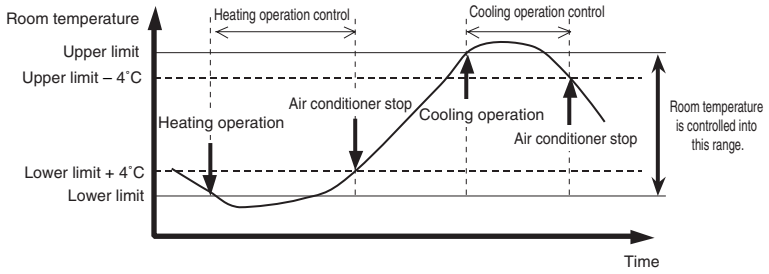
Unlike the fixed air conditioner and operating air conditioner selection methods, the set temperature is decided based on considerations of the current set temperature for each individual unit, without sending the same instruction based on the main indoor unit to all the air conditioners. When implementing the control, the following operation modes and set temperature instructions are executed.

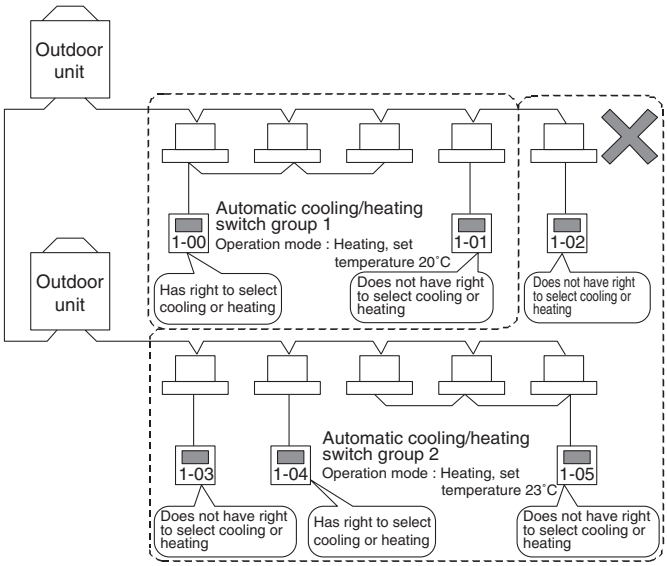
When conditions are met for switching from heating to cooling			
		Instructions to indoor units registered in the automatic cooling/heating switch group	
		Operation mode	Set temperature
Current indoor unit operation mode	Heating/Automatic heating	cooling	Current set temperature+temperature difference
	Cooling/Automatic cooling	No instruction	No instruction
	Other than the above	cooling	main unit setting temperature+temperature difference
When conditions are met for switching from cooling to heating			
		Instructions to indoor units registered in the automatic cooling/heating switch group	
		Operation mode	Set temperature
Current indoor unit operation mode	Cooling/Automatic cooling	heating	Current set temperature-temperature difference
	Heating/Automatic heating	No instruction	No instruction
	Other than the above	cooling	main unit setting temperature–temperature difference

System Setup Menu Item	Description	Operation (Reference)
Change Over Settings	<Precautions when using this control> 1.Do not use the set temperature restriction function in indoor units which are subject to control. If it is used, operation modes will be switched and the set temperature will be changed repeatedly, **possibly causing the air conditioners to break down.** Caution (See P44 for how to set the set temperature restriction function.) 2.The following will happen if a communication error (the icon on the screen is blue) occurs in the air conditioner being controlled. 2-1.Fixed air conditioner If the main unit experiences a communication error, the automatic cooling/heating switch group control will not happen. 2-2.Operating Air Conditioner Selection Method Remove the air conditioner experiencing the communication error from selection as the main unit, and select an air conditioner with normal communication. 2-3.Average Method Remove the air conditioner experiencing the communication error from the calculation for the average, and only use air conditioners with normal communication for calculating the average. 3.Control which matches the main unit's operation mode (Control for when the operation mode of the main unit does not represent the automatic cooling/heating switch group.) It is possible that only the operation mode for the main unit is changed when control using this function is done based on the main group unit (when the control method is fixed air conditioner or operating air conditioner). The following control is performed because it is possible that the operation mode of air conditioners other than the main unit in the group might be in violation of the purpose of control and not automatically switch if the conditions for implementing control using this function are not satisfied. [Example] Heating Mode-Matched Control When the main unit is already operating in heating mode, whether or not the conditions for implementing a switch from cooling to heating (main room temperature < main set temperature – temperature difference) depends on the state (environment) of the main unit. (If only the main unit is in heating operation, it is possible that the room temperature might not rise because of the indoor units other than the main unit which are in cooling operation, and the above control conditions might not be satisfied.) Therefore, only when control is performed based on the main group unit is the control below performed depending on the operation mode of the main group unit. Cooling Mode-Matched Control <table><tr><td colspan="2" rowspan="2"></td><td colspan="2">Instructions to indoor units registered in the automatic cooling/heating switch group</td></tr><tr><td>Operation mode</td><td>Set temperature</td></tr><tr><td colspan="2">State of main unit (control conditions)</td><td rowspan="3">Cooling</td><td rowspan="3">main set temperature</td></tr><tr><td>Operation mode</td><td>Cooling/Automatic cooling</td></tr><tr><td>Temperature</td><td>Main room temperature>main set temperature</td></tr></table> Heating Mode-Matched Control <table><tr><td colspan="2" rowspan="2"></td><td colspan="2">Instructions to indoor units registered in the automatic cooling/heating switch group</td></tr><tr><td>Operation mode</td><td>Set temperature</td></tr><tr><td colspan="2">State of main unit (control conditions)</td><td rowspan="3">Heating</td><td rowspan="3">main set temperature</td></tr><tr><td>Operation mode</td><td>Heating/Automatic heating</td></tr><tr><td>Temperature</td><td>Main room temperature<main set temperature</td></tr></table>	See page 66

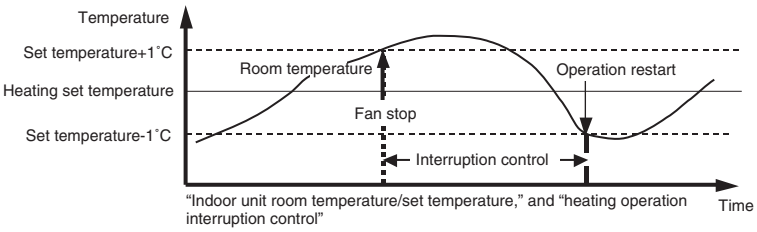
System Setup Menu Item	Description	Operation (Reference)
Change Over Settings	4.Because this control automatically switches the operation mode, if the air conditioner is not a cooling/heating free unit, always register indoor units which have the right to select cooling or heating for the same cooling system to the same automatic cooling/heating switch group, when controlling indoor units which do not have such rights. Unexpected things may happen if control is done using the following incorrect automatic cooling/heating switch group settings.  If indoor units (address 1-02) which do not have the right to select cooling or heating for the same cooling system are not registered to the same automatic cooling/heating switch group, address 1-02 will behave in the following way. [Actions related to operation mode] If the room temperature of Group 1 rises, group 1 will switch to cooling as per this control and the set temperature will become 25˚C (if the temperature difference is 5˚C). When this happens, the set temperature of the indoor unit at 1-02 will continue at 23˚C although only the operation mode will change to cooling, i.e. in a different operation mode from the other indoor units in Group 2. →The operation mode will be determined by Group 1. [Actions regarding set temperature] If the room temperature of Group 2 rises, group 2 will switch to cooling as per this control and the set temperature will become 28˚C (if the temperature difference is 5˚C). When this happens, the operation mode of the indoor unit at 1-02 will continue in heating and only the set temperature will change to 28˚C, i.e. in a different operation mode from the other indoor units in Group 2. →The set temperature will be determined by Group 2.	See page 66

System Setup Menu Item	Description	Operation (Reference)
Temperature Limit Settings	This function automatically starts and stops air conditioners in order to prevent the room temperature of unmanned rooms from getting too high or too low. For example, This has the following advantages. • It prevents overheating of or condensation from forming on equipment which needs to be temperature controlled in unmanned rooms. • It can also help buildings and not just individual rooms to preserve heat by preventing unmanned rooms from reaching extremes of temperature at night. <Overview of Function> This function performs automatic control by monitoring the relationship between the set upper and lower limits and the room temperature (the air conditioner intake temperature) to prevent the set room temperature from exceeding those limits. This function starts and stops the air conditioners and changes the operation mode. • **Cooling operation control (and stop control)** Cooling operation is automatically started when the room temperature rises above the set upper temperature limit. The air conditioner is stopped once the room temperature falls sufficiently far below the upper temperature limit (upper temperature limit – 4˚C or more) during cooling due to this control. • **Heating operation control (and stop control)** Heating operation is automatically started when the room temperature falls below the set lower temperature limit. The air conditioner is stopped once the room temperature rises sufficiently far above the lower temperature limit (lower temperature limit + 4˚C or more) during heating due to this control. ① : Controlled air conditioners • This controls auto-start and auto-stop for each air conditioner based on the temperature set for each room temperature limit control group. • This control is not applicable to air conditioners which are already operating, even if they are registered to the room temperature limit control group. (It is only applicable to stopped air conditioners.) • Up to 128 indoor groups can be registered in one room temperature limit control group. • It is not possible to register the same indoor unit to multiple room temperature limit control groups. • Up to 8 room temperature limit control groups can be registered in this unit. • These controls can be enabled and disenabled for each individual room temperature limit control group. (These controls only work for groups set as enabled.) • A mark indicating that the indoor unit is under automatic control will appear on the monitor screen. ② : Upper room temperature limit • **Upper and lower room temperature limit** The upper and lower room temperature limits desired for automatic control. The settable range of upper and lower limits is as follows. **Upper limit** : 34˚C to 50˚C in 1˚C units. (The default is 36˚C.) **Lower limit** : 2˚C to 14˚C in 1˚C units. (The default is 14˚C.) The temperature different between the upper or lower limit and the room temperature when the air conditioner under cooling (heating) operation control using this function (to prevent hunting) is 4˚C.	See page 67

System Setup Menu Item	Description	Operation (Reference)
Temperature Limit Settings	③ : Control Implementation Conditions The relationship between room temperature, upper/lower limit, and operation mode is shown below. The controls are implemented when the control conditions are satisfied, every 5 minutes from the time the power is turned on.  This function performs stop control for cooling/heating operation and other operation controls to prevent excessive increase or decrease of the room temperature. The set values of room temperature upper/lower limit control group are used for the upper/lower limit values and other factors of this control. This control is not performed for the group of air conditioners to which this control is set invalid. The set temperatures of the air conditioners are not changed by this control. ① **Start condition of cooling operation :** Cooling operation is controlled when the room temperature is higher than the upper limit of room temperature and the unit is stopped. ② **Start condition of heating operation :** Heating operation is controlled when the room temperature is lower than the lower limit of room temperature and the unit is stopped. ③ **Stop condition :** The air conditioners under cooling/heating control by this function stop when any of the following conditions are met. • **During cooling operation** “Room temperature is lower than the upper limit of room temperature – 4˚C” or “Room temperature is lower than the cooling set temperature” • **During heating operation** “Room temperature is higher than the lower limit of room temperature + 4˚C” or “Room temperature is higher than the heating set temperature”	See page 67

System Setup Menu Item	Description	Operation (Reference)
Temperature Limit Settings	④ : Precautions for the use of this control The operation modes are switched over automatically with this control. Therefore, if the air conditioners are not cooling/heating-free machines, and when an indoor unit without cooling/heating selection right is to be controlled, be sure to register an indoor unit with cooling/heating selection right in the same cooling system into the same room temperature upper/lower limit group. If the control is performed with a wrong setting of room temperature upper/lower limit control group as shown in the figure below, the following unexpected control will be performed.  As shown in the figure above, if an indoor unit (address 1-02) not having the cooling/heating selection right is not registered into the same room temperature upper/lower limit control group with an indoor unit having cooling/heating selection right in the same cooling system, the operation of the address 1-02 will be as follows. [Actions related to operation mode] When the room temperature of the group 1 rises, the operation mode of the group 1 is switched to cooling operation by this control, and the automatic operation continues. At this time, only the operation mode of the indoor unit 1-02 changes into cooling mode, and operates in the mode different from other indoor units. →The operation mode will be determined by Group 1.	See page 67

System Setup Menu Item	Description	Operation (Reference)
Heating Optimization Setting	With the air conditioners made by Daikin (Buil-Mul or Building multi indoor unit), when the thermo-switch is turned off (the compressor is off) during heating operation, the fan does not stop. (It continues to run at the minimum speed, or at the speed set in the heating mode.) Also, because a slight amount of coolant continues to circulate at this time, the room temperature may rise slightly by the fan operation described above. Therefore, this function starts/stops the air conditioner based on the room temperature (intake air temperature) and the set temperature during heating operation to prevent the temperature rise. <Overview of Function> • **Operation interruption control** When the room temperature for the air conditioner in heating operation becomes higher than the set temperature + 1˚C, the air conditioner is stopped. However, because the stop control (operation interruption) by this function is the optimum control for turning off of the thermo-switch during heating operation, the system regards this status as in operation, and the screen display on the unit remains “In-operation.” ∗After the unit is interrupted by this function, it restarts when the specified conditions are met. Therefore the user’s explicit stop command is effective. • **Operation restart control** When the room temperature for the air conditioner under the stop control by this function (during heating operation interruption) becomes lower than the set temperature – 1˚C, the air conditioner is restarted. ① : Controlled air conditioners • This control is performed for each individual air conditioner. This function can be set to enabled/disabled for each air conditioner. • Only the air conditioners with this function set to enabled becomes the subject for the control. • For the indoor units under this control, a mark showing the automatic control is displayed on the monitoring screen.	See page 68

System Setup Menu Item	Description	Operation (Reference)
Heating Optimization Setting	② : Control execution condition The relationship between room temperature, set temperature, and operation/stop status is shown in the figure below. The operation period of the control is every 5 minutes after the system power is turned on, and the operation is executed when the control conditions are met at each timing.  "Indoor unit room temperature/set temperature," and "heating operation interruption control" This function performs start/stop control based on the relationship between the set temperature and the room temperature (intake air temperature) of the air conditioner in heating operation. The control conditions are described below. **Operation interruption control in heating mode (Stop control)** When the room temperature for the air conditioner in heating operation becomes higher than the set temperature + 1˚C, the air conditioner is stopped. The stoppage (operation interruption) by this control is processed as "in-operation of the air conditioner" on the monitoring screen of the unit. **Operation restart control in heating mode (start control)** When the room temperature for the air conditioner in interruption becomes lower than the set temperature – 1˚C by this function, the air conditioner is restarted. **Enabled-to-disabled change over control (start control)** When the setting of this function for the air conditioner is changed from enabled to disabled during operation interruption, the operation is restarted. **Operation mode change over control (Start control)** When the operation mode of the air conditioner in interruption is changed by this function, the air conditioner is restarted. ③ : Precautions for the use of this control 1.The stoppage (operation interruption) by this control is processed as "in-operation of the air conditioner" on the monitoring screen of the unit. As a result, this status is indicated as "Stop" on the remote controller of the air conditioner, and as "In-operation" on the monitoring screen of the unit. 2.As explained above (item 1), because the display on the remote controller during operation interruption by this control is "Stop," the user may not perform the stop operation even at the scheduled time of system stoppage, resulting in forget-to-stop error. Therefore, it is recommended that a measure against forget-to-stop error be executed by the scheduled control of the unit or other appropriate methods.	See page 68

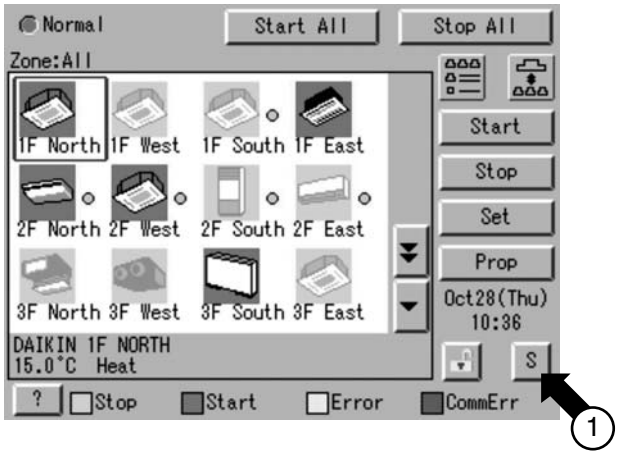
1

<table>
<tr><th>System Setup Menu Item</th><th>Description</th><th>Operation (Reference)</th></tr>
<tr><td>E-Mail Setting</td><td>
∗ The e-mail function (option) comes standard with the Web function.
When an air-conditioner fault has been detected in the Intelligent Touch Controller, this option can send e-mail to up to three destinations of the registered administrator to inform the status of the fault (date and time of error occurrence and error code).
• The following equipment is required to use the e-mail function.
SMTP (Simple Mail Transfer Protocol) server
This server is capable of sending e-mail conforming to RFC821.
Electronic mail receiving terminal
This server is capable of transferring e-mail conforming to RFC822.
This setting is made for items listed in the following table.
<table>
<tr><th colspan="3">Setting item</th><th>Description</th></tr>
<tr><td colspan="3">Enabling/disabling the electronic mail function</td><td>When this mail function has been disabled, no e-mail transmission takes place.</td></tr>
<tr><td rowspan="6">SMTP server</td><td colspan="2">SMTP server address</td><td>Specifies a URL (IP address) for the SMTP server.</td></tr>
<tr><td colspan="2">SMTP server port number</td><td>Specifies a port number for the SMTP server.</td></tr>
<tr><td colspan="2">Enabling/disabling the POP before SMTP function</td><td>Specifies whether to access the specified POP server before mail transmission.</td></tr>
<tr><td rowspan="4">Setup items for enabling/disabling the POP before SMTP function</td><td>POP server address</td><td>Specifies a URL (IP address) for the POP server.</td></tr>
<tr><td>POP server port number</td><td>Specifies a port number for the POP server.</td></tr>
<tr><td>POP user ID</td><td>User ID for POP authentication</td></tr>
<tr><td>POP password</td><td>Password for POP authentication</td></tr>
<tr><td rowspan="3">Transmission condition</td><td colspan="2">Transmission group</td><td>Specifies a group to which e-mail transmission takes place at error occurrence.</td></tr>
<tr><td colspan="2">Transmission interval</td><td>Retransmits e-mail at the specified time when the error remains. (Retransmission can take place in units of hours within a setting range from 1 to 72).</td></tr>
<tr><td colspan="2">ITO identification name</td><td>Specifies a character string to be displayed as the subject at mail reception.</td></tr>
<tr><td>Electronic mail</td><td colspan="2">Mail addresses 1, 2 and 3</td><td>Specifies up to three mail addresses. This address specification may be omitted.</td></tr>
</table>
• E-mail transmission timing
When an error has been found, e-mail is transmitted to a registered group 3 minutes later.
• Operation at e-mail transmission error
When an e-mail transmission error has been found, e-mail is transmitted three times at intervals of 2 minutes. However, no e-mail transmission takes place in the following cases :
– The POP server returns an error at the time of user authentication.
– The SMTP server makes a permanent error response.
– Test e-mail transmission takes place.
• E-mail transmission log
A maximum of 300 e-mail logs can be saved for successful or unsuccessful transmission.
∗ For details on e-mail logs, refer to “Log Display” on P69.
</td><td>See pages 70 to 71</td></tr>
</table>

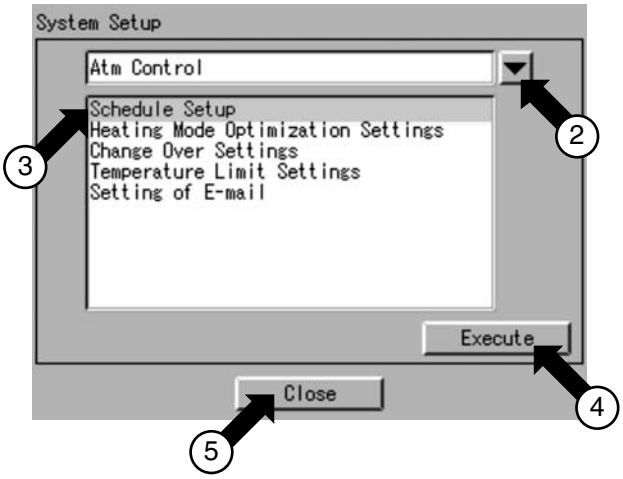
System Setup Menu Item	Description	Operation (Reference)
History Display	This menu shows the time when record is made in addition to the following. Use this to see if the scheduled operation set is properly performed or if errors are generated often in any specific air conditioner. 1. Generation and resetting of an error in air conditioners 2. Generation and resetting of an error in the system. 3. History concerning scheduled operation 4. History concerning zone registration 5. History concerning change of clock setting 6. History concerning the time at which the intelligent Touch Controller is turned ON. 7. History concerning power distribution (optional) Up to 300 records can be made altogether.	See page 69
Touch Panel Calibration	Menu for adjusting the positions of buttons on the touch panel used as the screen of the intelligent Touch Controller. If a phenomenon such as “the intelligent Touch Controller does not recognize the pressing on the button shown on the screen” repeatedly occurs, use this menu to calibrate the touch panel.	See page 70
Version information	This provides maintenance information. The menu shows the version number of the software for the intelligent Touch Controller currently used.	See page 72

6.4.2 System Setup Menu Operation

Screen 1 Monitoring Screen



Screen 2 System Setup Menu

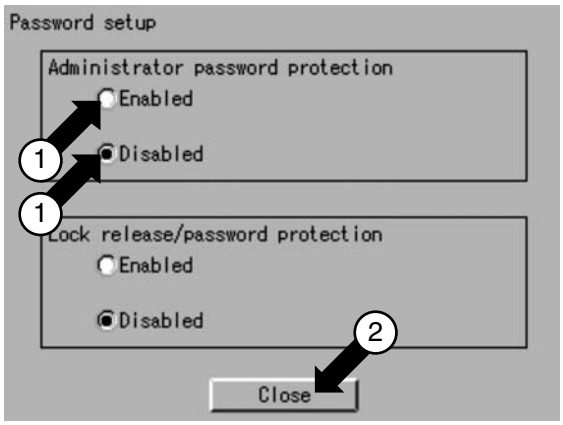


Viewing the System Setup Menu Screen

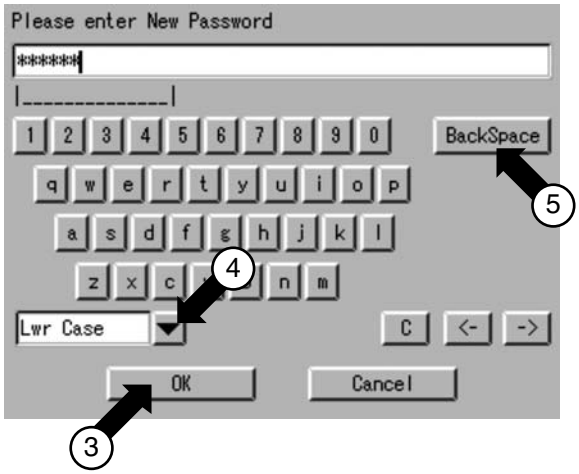
1. Press the [**S**] button ① on Screen 1 Monitoring.
2. Screen 2 System Setup Menu (see lower left) appears.
   (If a password is set, the screen does not appear unless the password is entered.)
3. Select an item from the System Setup Menu.
   - 3-1. Select an item from pull-down menu ②.
   - 3-2. Click the item to be set ③. and press the [Execute] button ④.
     (The example on the left shows the appearance of the screen for password setup.)
   - 3-3. The setting screen selected appears.
   - 3-4. When the setting has been made on the setting screen, press Exit (OK) or cancel.
     (Detailed operation is described in the following items.)
   - 3-5. Screen 2 reappears. The setting selected is complete.
   - 3-6. If another item is to be set, repeat the operation in 3-1 - 3-5.
     If there is no more item to be set, press the [Close] button ⑤.
     Screen 1 Monitoring screen reappears.

The following pages describe the System Setup operation in order.

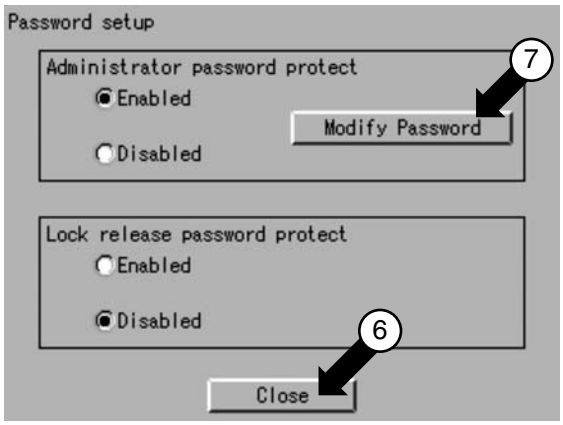
Screen 1 Password Setup



Screen 2 Enter Password



Screen 3



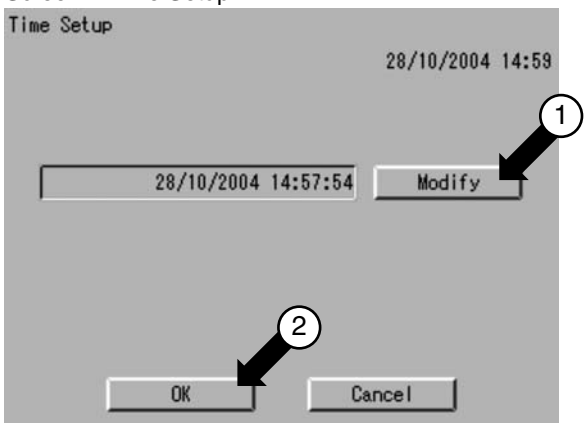
Password setup

1. Select Password Setup as described on page 49.
2. Screen 1 Password Setup, which is shown on the left, appears.
3. Select Enable or Disable for password Protection ①.
   If Disable is selected, press the [Close] button ②. The setting is completed.
   If Enable is selected, Screen 2 Enter Password appears.
   Perform following operation in 4 to 7.
4. Use the keyboard on the panel to enter the password.
   Note : Password is case-sensitive (see ④). Use caution and enter the exact password.
   A password can be as long as 32 characters.
   When a wrong character is entered by mistake, press the [Back Space] button ⑤.
5. When the setting has been made, press the [OK] button ③.
   (Pressing the [Cancel] button is equal to setting Disable for Password Protection.)
6. For confirmation, Please reenter Password screen appears. Enter the password as described in 4. Screen 3 appears.
7. Pressing the [Close] button ⑥ completes the setting.

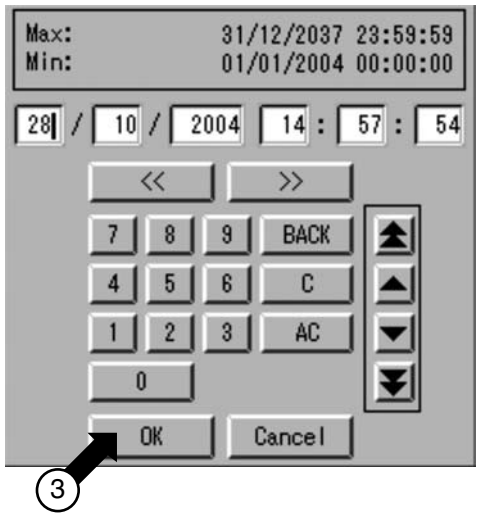
(Memo): To change the password, press the [Modify Password] button ⑦ and repeat the operation in 4 - 7 above.

* Password setting is possible in the same way both in Administrator password protect and Lock release password protect.

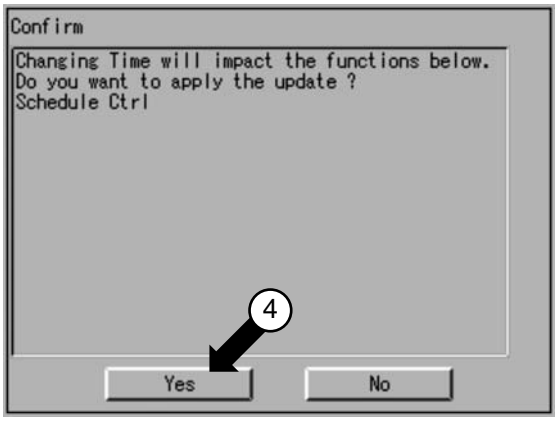
Screen 1 Time Setup



Screen 2



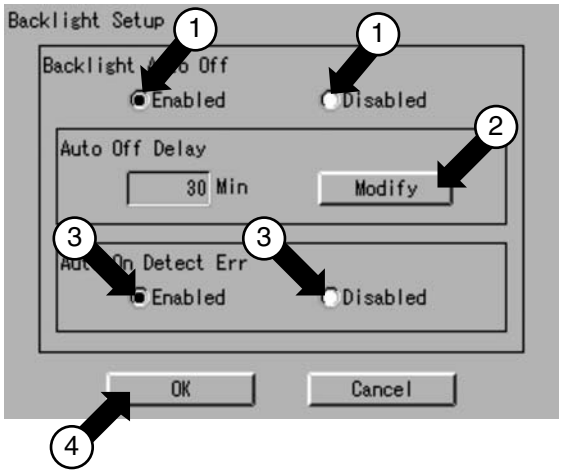
Screen 3 Confirmation



Time setup

1. Select Time Setup as described on page 49.
2. Screen 1 Time Setup, which is shown on the left, appears.
   Press the [Modify] button ①.
   Time setting dialog in Screen2 is displayed.
3. Press the number key button to set the year, month, day, hour, minute and second.
4. When the setting has been made, press the [OK] button ③.
   Screen 3 Confirmation appears.
5. See the Note on page 25. If changing the time setting causes no problem, press the [OK] button ④. Time setup is complete.
   To cancel setting, press the [Cancel] button.

Screen 1 Backlight Setup



Backlight setup

1. Select Backlight Setup as described on page 49.
2. Screen 1 Backlight Setup, which is shown on the left, appears.
3. Press Enable or Disable for Backlight Auto Off ①.
   If you select Disabled, go to step 6.

⚠Caution

For longer service life of the backlight, select Enable whenever the backlight does not need to be illuminated all the time. The backlight once turned OFF is illuminated again when the panel is touched or automatically activated by any error generated in the air conditioner if Enable is selected for 5. Auto On Detect Err.

4. Press the [Modify] button ②.
   Input dialog is displayed.
   Set the time for automatic OFF.
5. Set whether the backlight should be automatically turned ON when any error is generated in air conditioners by selecting Enable or Disable ③.
6. Press the [OK] button ④.
   (To cancel the setting, press the [Cancel] button.)

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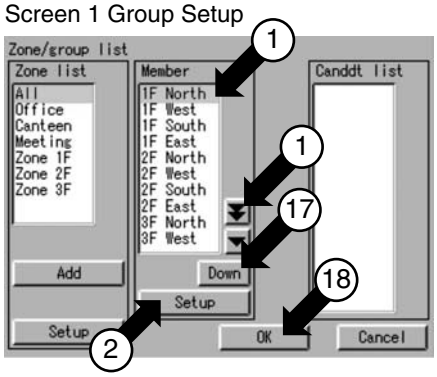
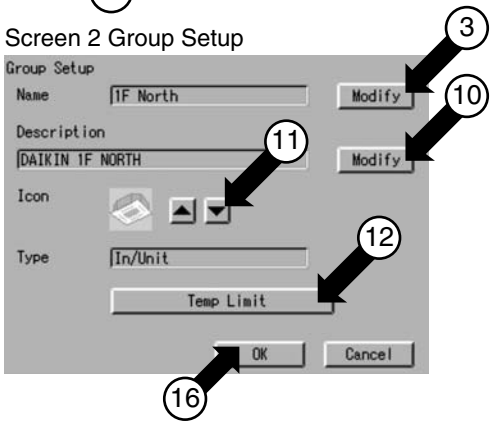
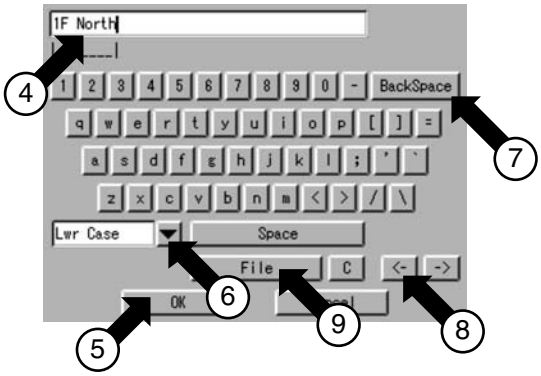
Screen 1 Group Setup



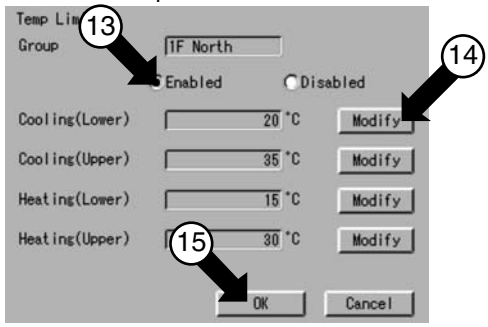
Screen 2 Group Setup



Screen 3 Enter Group Name



Screen 4 Temp Limit



Group setup

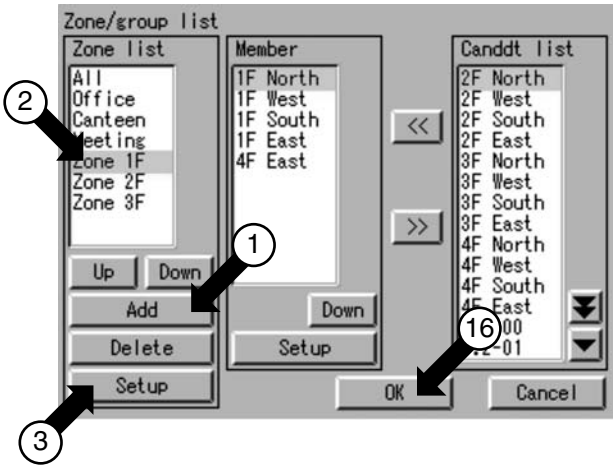
1. Select Group Setup as described on page 49.
2. Screen 1 Group [Setup], which is shown on the left, appears.
3. Select the group to be set with ①.
   Press the [Setup] button ②.
   Group setup in Screen 2 is displayed.
4. Press the [Modify] button ③.
   Screen 2 Enter Group Name appears.
   Use the keyboard on the panel to enter the name in such a way that it is contained in the area ④.
   (If it is not contained in the area, reduce the number of characters and reenter.)

   [How to use the keyboard]

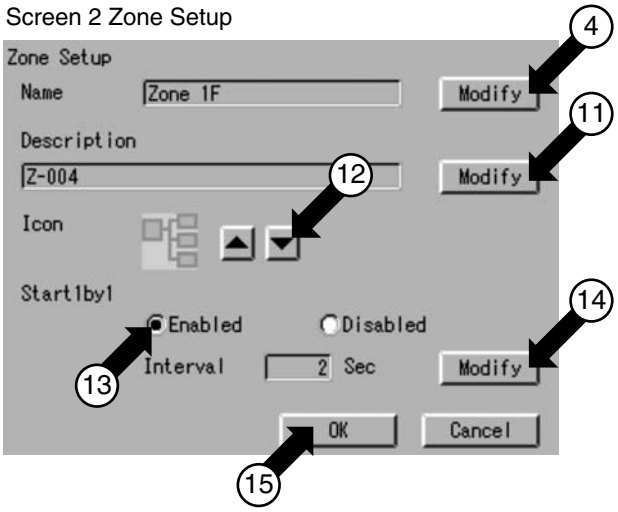
   ⑥ : Button to select between uppercase and lowercase.
   ⑦ : Button to correct wrong entries made.
   Pressing one time deletes one character leftward starting at the cursor.
   ⑧ : Button to move the cursor.
   ⑨ : Candidates for input are displayed. Words presumed to be input for Name has already been involed.

   When all entries have been made, press the [OK] button ⑤.
   To cancel, press the [Cancel] button.
   Screen 2 Group Setup reappears.
5. Press the [Modify] button ⑩ and enter the name as shown in step 4 above.
6. Press the [▲] or [▼] button ⑪ to select an icon.
   (The selection of icon does not affect the operation of the group.)
7. Press the [Temp Limit] button ⑫.
   Screen 4 Temp Limit appears. Select Enbled or DIsabled ⑬ for Limits Setup for the group currently selected.
   If you select Yes, set the limits by press the [OK] button ⑮. Press the [Modify] button ⑭ and set the restriction range.
   Screen 2 Group Setup reappears.
8. Select the position with the [Down] or [Up] button ⑰ for showing the group currently selected within the zone.
9. Press the [OK] button ⑱.
   (To cancel the setting, press the [Cancel] button.)

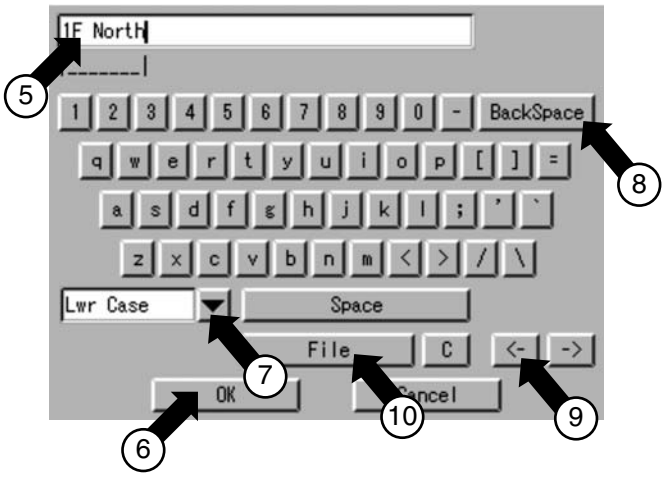
Screen 1 Zone Setup



Screen 2 Zone Setup



Screen 3 Enter Group Name



Zone setup

1. Select Zone Setup as described on page 49.
2. Screen 1 Zone Setup, which is shown on the left, appears.
3. To add a zone, press the [Add] button ①. A zone is added with the name Z-000. To modify the zone, select with ② the zone to be modified. Press the Setup button. Zone setup in screen2 is displayed.
4. Press the [Modify] button ④. Screen 3 Enter Group Name appears. Use the keyboard on the panel to enter the name in such a way that it is contained in the area ⑤.
   (If it is not contained in the area, reduce the number of characters and reenter.)

   [How to use the keyboard]
   ⑦ : Button to select between uppercase and lowercase.
   ⑧ : Button to correct wrong entries made. Pressing one time deletes one character leftward starting at the cursor.
   ⑨ : Button to move the cursor.
   ⑩ : Candidates for input are displayed. Words presumed to be input for Name has already been involed.

   When all entries have been made, press the [OK] button ⑥.
   To cancel, press the Cancel button. Screen 2 Group Setup reappears.
5. Press the [Modify] button ⑪ and enter the name as shown in step 4 above.
6. Press the [▲] or [▼] button ⑫ to select an icon.
   (The selection of icon does not affect the operation of the group.)
7. For operation by the zone, to start the groups in the zone one by one rather than at one time, press the Enable button for Interval Start ⑬. To start the groups at one time, press Disable. If you select Enable, press the [Modify] button ⑭ and set the interval time for group sequential start.

   (Note) For the zone Collective, the factory setting is Enable for Interval Start and 2 (seconds) for Interval.

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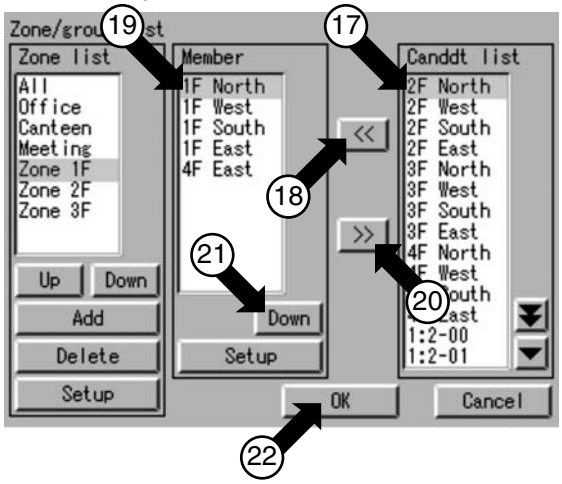
Screen 3 Registered Groups Edit



Zone setup 2

8. Set the groups to be registered for the zone currently selected.

To add a group to the zone, select the group to be added with ⑰ and press the [<<] button ⑱.

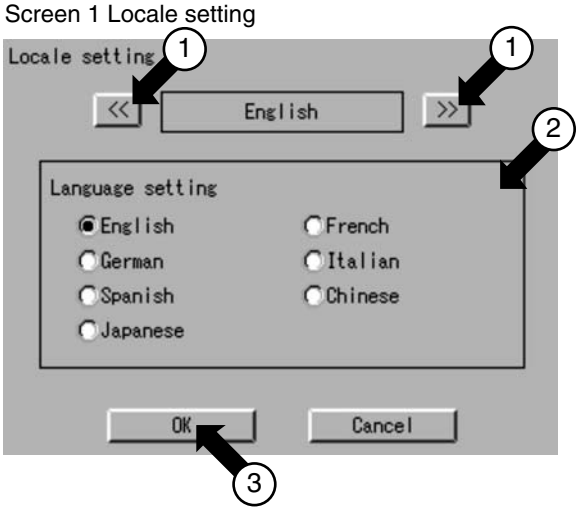
To delete a group registered for a zone, select the group to be deleted with ⑲ and press the [>>] button ⑳.

The [Up] or [Down] button ㉑ allows changing the order in display of groups in the zone currently selected on the Monitoring screen.

The group shown on the top is the representative unit for the zone.
(In the example of Screen 3 shown on the left, 1F Lobby is the representative unit for the zone 1F.)

When all editing has been completed, press the [OK] button ㉒.
To cancel the setting, press the [Cancel] button.

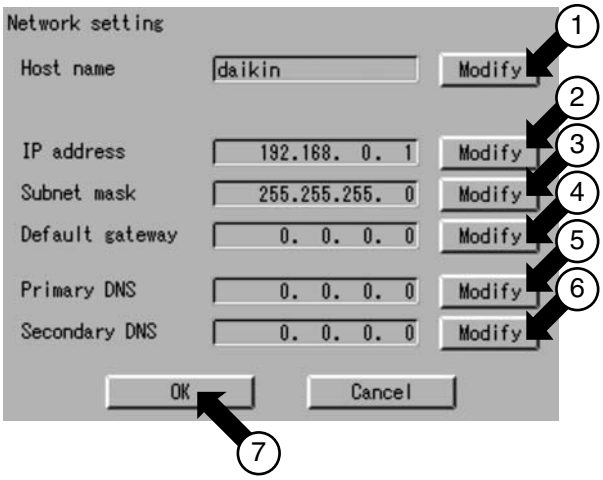
Screen 1 Locale setting



Locale Setting

1. Select “Locale Setting” according to the operating procedure shown in page 49.
2. Confirm that the Locale setting screen Screen 1 will be displayed in the left-hand column.
3. Select a language by pushing [<<], [>>] button ① on the Locale setting screen. (The details of settings remain unchanged.)
4. Select a language via the Language setting radio button ②.
5. Last, push [OK] button ③.
(To cancel the settings made, push [Cancel] button.)

Screen 1 Network Setting



Network Setting

1. Select “Network Setting” according to the operating procedure shown in page 49.
2. Confirm that the Network setting screen Screen 1 will be displayed as shown in the left-hand column.
3. Push the [Modify] button ① and enter a Host name on the resulting input screen.
4. Push the [Modify] button ② and enter an IP address on the resulting input screen.
5. Push the [Modify] button ③ and enter a Subnet mask on the resulting input screen.
6. Push the [Modify] button ④ and enter a Default gateway on the resulting input screen.
7. Push the [Modify] button ⑤ and enter a Primary DNS on the resulting input screen.
8. Push the [Modify] button ⑥ and enter a Secondary DNS on the resulting input screen.
9. After making the settings, push the [OK] button ⑦.
   To cancel the settings made, push the [Cancel] button.

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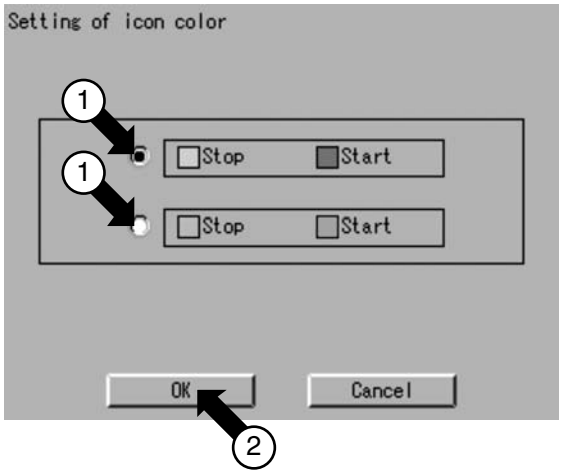
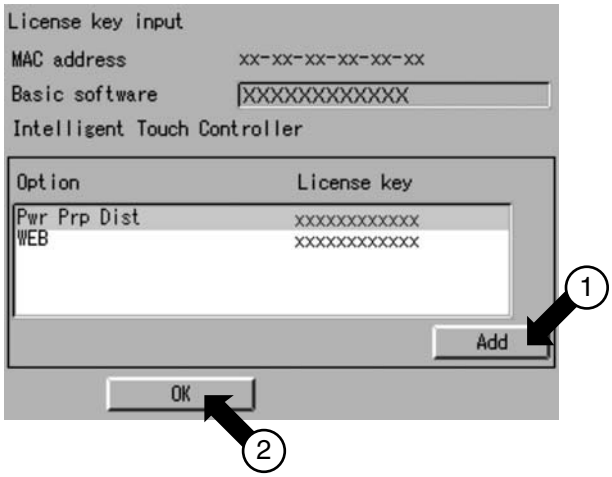
Screen 1 Setting of icon color



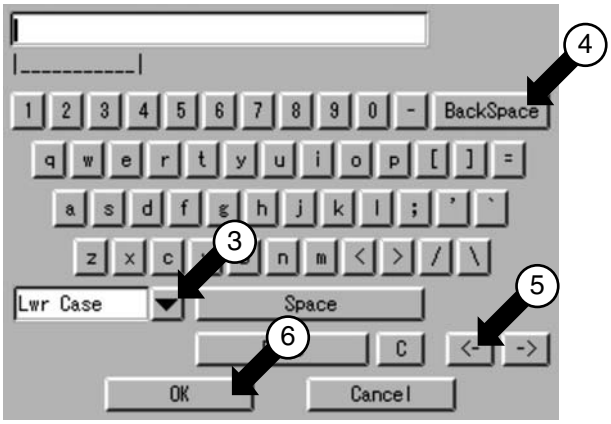
Icon Color Setting

1. Select “Setting of icon color” according to the operating procedure shown in page 49.
2. Confirm that the Setting of icon color screen Screen 1 will be displayed as shown in the left-hand column.
3. Select a desired color via the radio button ① to change the start/stop icon color on the Monitoring screen. Note that the stop icon color is light green and the start icon color red at factory setting. and the start icon color red at factory setting.
4. Push the [OK] button ②.
   To cancel the settings made, push the Cancel button.

Screen 1 License key input



Screen 2 Input Screen



License Key Input

1. Select “License key input” according to the operating procedure shown in page 49.
2. Confirm that the License key input screen Screen 1 will be displayed as shown in the left-hand column.
3. Push the [Add] button ① and input an option software license key on the resulting keyboard dialog.
   (In this case, care should be taken for key input because the license key cannot be registered so long as it contains incorrect uppercase or lowercase letters.)

[How to use the keyboard]

③ : Button for switch uppercase to lowercase and vice versa

④ : Button for deleting a character input by pressing the incorrect character key You can delete any number of characters from the cursor position to the left by pushing this button as many times as necessary.

⑤ : Button for moving the cursor
After making the necessary settings, push the [OK] button ⑥.
To cancel the settings made, push the [Cancel] button and return to the License key input screen Screen 1.

4. After adding the option, push the [OK] button ② to determine the input license key. Then, push the [OK] button on the restart confirmation screen to restart the Intelligent Touch Controller.

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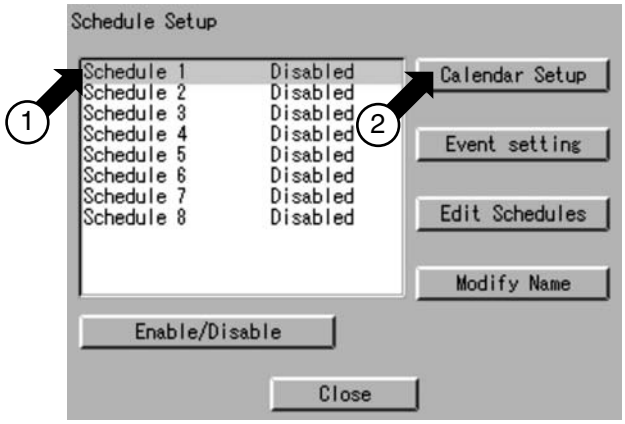
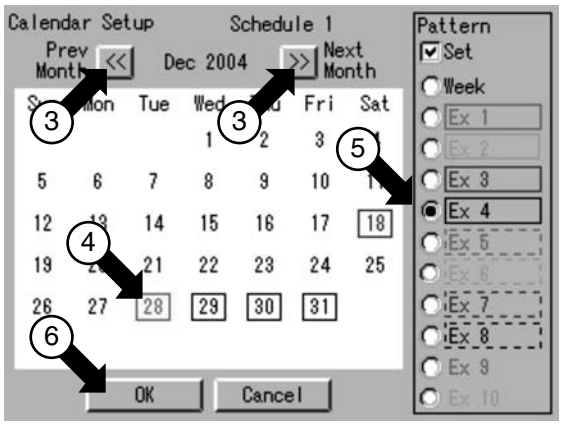
Screen 1 Schedule Setup



Screen 2 Calendar Setup



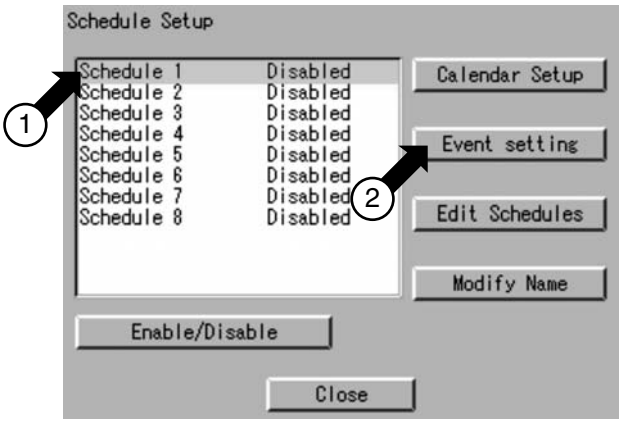
Set Schedule and Calendar

Before setting a calendar, refer to page 35 to consider what kind of schedule is to be set and perform the following operations.
(The following shows an example of setting made referring to zone 2 in page35.)

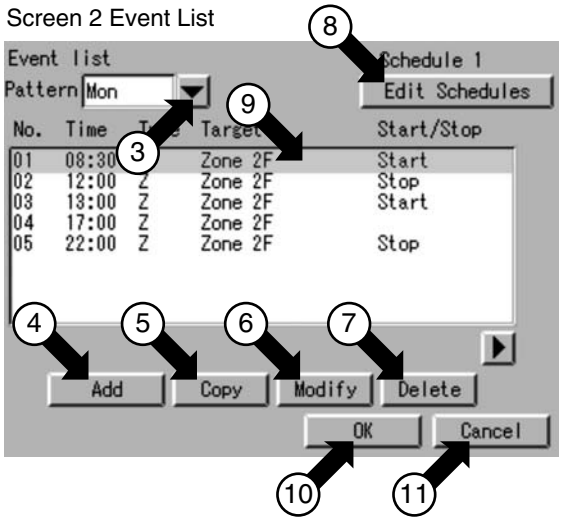
This example shows the setting that determines which days in the year schedule to use for special days (such as the summer holidays) requiring air-conditioner control different from that in the regular weekly schedule.

1. Select “Schedule setting” according to the operating procedure shown in page 49.
2. Confirm that the Schedule setting screen Screen 1 will be displayed as shown in the left-hand column.
3. Select a schedule from ① to set or change the calendar.
4. Push the [Calendar Setup] button ② to display the calendar setup screen Screen 2. Initially, the weekly settings are made. Select a month for change at ③ and a day for change at ④. Then, select a pattern for the selected day from ⑤.
   * Check a Set checkbox to display a radio button for each pattern.
   (This setting can be made for the coming 13 months.)
5. After making the necessary settings, push the [OK] button ⑥ and return to the Schedule setup screen Screen 1.

Screen 1 Schedule Setup



Screen 2 Event List



Set Schedule and Event

Before setting an event, refer to page 36 to determine what kind of event is to be set and perform the following operations.
(The following shows an example of setting made referring to page 36.

1. Select “Schedule Setup” according to the operating procedure shown in page 49.
2. Confirm that the Schedule setup screen Screen 1 will be displayed as shown in the left-hand column.
3. Select a schedule from ① to set or change the event (s).
4. Push the [Event setting] button ② to display an event list (Screen 2). Here, actual schedule operations are set for each of 17 kinds of days (Sunday to Saturday, Ex1 to Ex10). First, use the pull-down menu ③ to determine a day of the 17 kinds of days for which events are to be set. Screen 2 indicates that Mon has been selected.
5. The following describes in order the functions of buttons ④ to ⑧.

④ Add :
Use this button to add the new event. Pushing this button causes the Event setup screen Screen 3 on the next page to be displayed.
(For details on event setup operation, refer to the descriptions given on the next page.

⑤ Copy :
Use this button to make the same setting as for the previously set event. Select the previously set event from ⑨. Push the copy button ⑤ to copy the event.
(Push the [Modify] button ⑥ (described below) to modify the copy event.

⑥ Modify :
Use this button to change the previously registered event. Select the event to be changed from ⑨ and push the [Modify] button ⑥.

⑦ Delete :
Use this button to delete the previously registered event. Select the event to be deleted from ⑨ and push the [Delete] button ⑦.

⑧ Edit Schedules :
This button provides the functions similar to those of the above copy button. This button can be used to copy the events set for a set of days (Sunday to Saturday and Ex1 to Ex10) to another set of days (Sunday to Saturday and Ex1 to Ex10). (For details on Edit Schedules, refer to page 64 “Convenient Functions.”)

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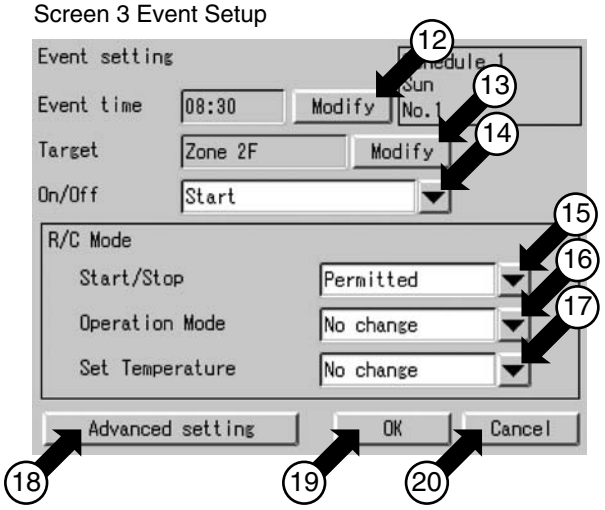
Screen 3 Event Setup



A full description of each button has been given above.

The following discusses how to make the actual settings.

To define the new operation, push the [Add] button ④. To change the previously set operation, push the [Modify] button ⑥.

6. Push the Add button or Modify button on the previous page, and the Event setup screen
Screen 3 will be displayed. The current settings of events are shown at the left side of the buttons ⑫ to ⑰.
The following describes in order the settings of events that can be made.

- Event time :
  Refers to the event setting time. Display a keyboard for registering the time by pushing the [Modify] button ⑫ and enter the time.
- Target :
  Refers to the zone or group of the air-conditioner to be controlled. Push the [Modify] button ⑬ to select a zone or group for which schedule operations should be performed.
- On/Off :
  Sets Start, Stop or No change. Use the pull-down menu ⑭ for this selection.

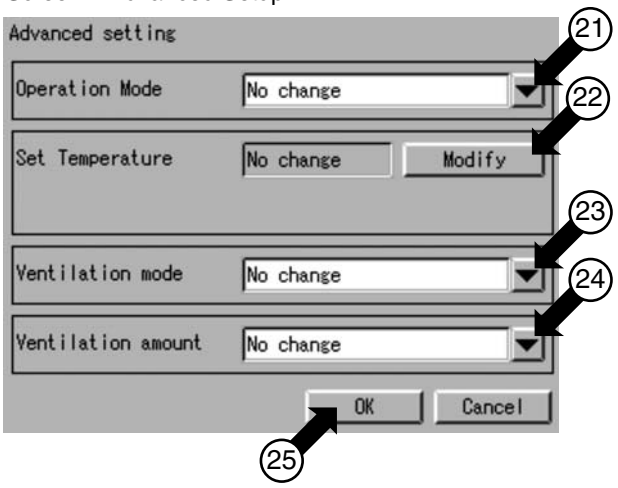
[How to make the setting for the remote control at hand]

(Start/Stop :
Select Permitted, Stop Only, Prohibited or No change from the pull-down menu ⑮
Operation Mode :
Select Permitted, Prohibited or No change from the pull-down menu ⑯.
Set Temperature :
Select Permitted, Prohibited or No change from the pull-down menu ⑰.)

- Advanced setting :
  Push the button ⑱ to display an advanced setting screen Screen 4.
  (The descriptions of the advanced setting are shown on the next page.)

After setting the operation and making the advanced setting on the next page, push the [OK] button ⑲. To cancel the settings made, push the [Cancel] button ⑳ to return to Screen 2 on the previous page. When making additional settings, repeat the operations shown in steps 5 and 6. After making the necessary settings, push the [OK] button on Screen 2 of the previous page.

Screen 4 Advanced Setup



7. Push the [Advanced setting] button ⑱ on the Event setup screen Screen 3 to display an advanced setup screen Screen 4. The current settings of events are shown at the left side of the buttons ㉑ to ㉔.

- Operation Mode :
  Refers to the operation mode for a zone or group. Select Cool, Heat, Auto, Fan, Set Point or No change. Note that only three modes (Set Point, Fan and No change) are available when a target zone or group (being subject to mode selection) does not provide you with an option for selecting “heating” or “cooling.” In this case, you may select one of the modes from the pull-down menu ㉑.

  (Temperature adjustment :
  Refers to cooling or heating. When “cooling” or “heating” has been set in an air-conditioner (providing you with an option for selecting “heating” or “cooling”), the air-conditioner works according the selected cooling or heating operation mode.)

- Set Temperature :
  Set thetemperature of a zone or group. Push the [Modify] or [Disabled] button ㉒ according to purpose. When displaying a keyboard to register a temperature and entering a desired temperature on that keyboard, push the [Modify] button. The Disabled button is displayed only when the [Modify] button is pushed once and the desired temperature is set. Push the [Disabled] button to cancel the temperature set through the [Modify] button.

When ventilation is to be scheduled, the following settings can be made.
Though this setting menu is displayed regardless of ventilation, no ventilation control takes place even if the setting is made.

- Ventilation mode :
  Set the ventilation mode.You can select Auto, Normal, All heat exchange or No change from the pull-down menu ㉓.
- Ventilation amount :
  Set the volume of ventilation.You can select Auto (Normal), Weak (Normal), Strong (Normal), Auto (Freshen up), Weak (Freshen up), Strong (Freshen up) or No change from the pull-down menu ㉔.

After making the advanced settings, push the [OK] button ㉕ to return to Screen 3 on the previous page.

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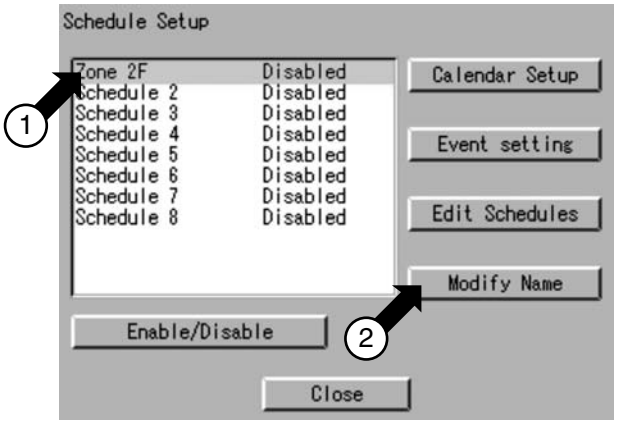
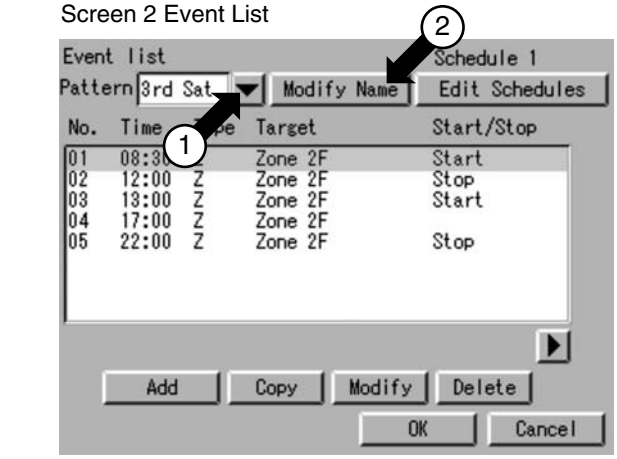
Screen 1 Schedule Setup



Change Schedule Name

1. Select “Schedule Setup” according to the operating procedure shown in page 49.
2. Confirm that the Schedule setup screen Screen 1 will be displayed as shown in the left-hand column.
3. Select a schedule from the list ① to change the name.
4. Display a keyboard screen by pushing the [Modify Name] button ② and enter a desired schedule name on that keyboard. (A schedule name can be entered in up to 16 characters.)

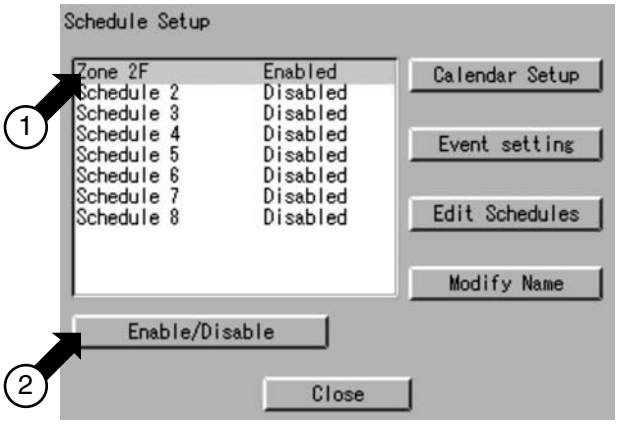
Screen 2 Event List



Change Special Day Name

1. Select a specify day from the pull-down menu ① on the event list screen to change the name.
2. Confirm that the [Modify Name] button ② will be displayed for the selected special day.
3. Display a keyboard screen by pushing the [Modify Name] button ② and enter a desired special day name. (A special day name can be entered in up to 8 characters.)

Screen 3 Schedule Setup



Enable or Disable Schedule

1. Last, enable or disable a schedule. Perform the following operations on the schedule setup screen Screen 3. Select a schedule from the list ① and enable or disable the schedule at ②. On the confirmation screen, push the [Yes] button to enable the schedule and the [No] button to disable it. Then, check to see the display “Enabled” or “Disabled” in right side of ① to confirm that the schedule has been enabled or disabled successfully.

Even if the calendar or event is set, no schedule function works unless the schedule is enabled.

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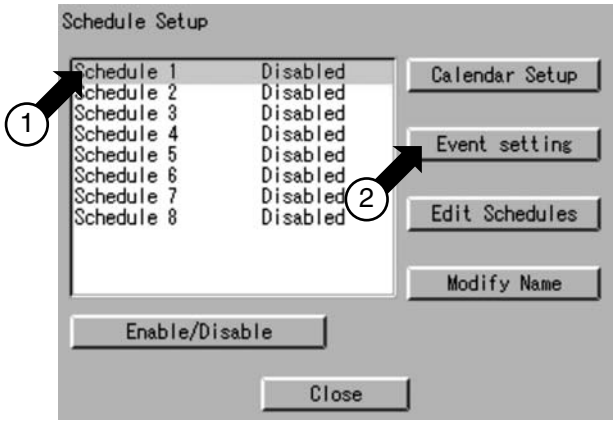
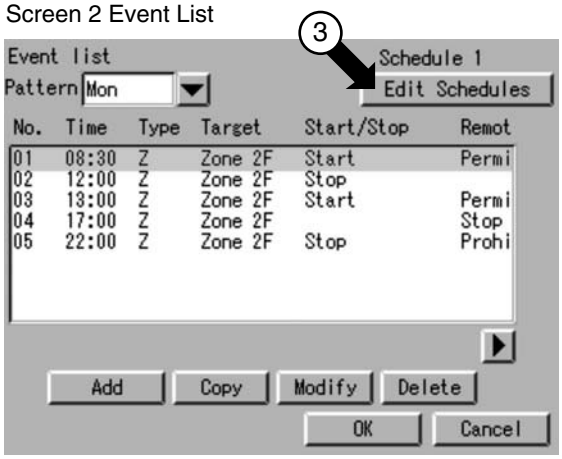
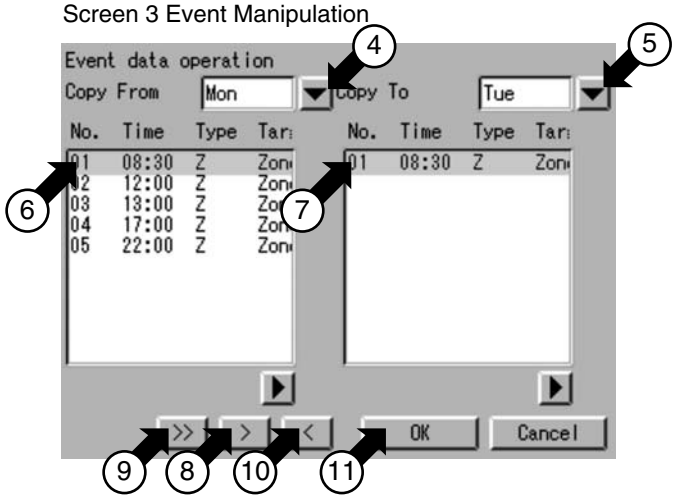
Screen 1 Schedule Setup



Screen 2 Event List



Screen 3 Event Manipulation



Convenient Function 1
Copy in Units of Events

* When it is necessary to reuse an event set for a day of the week, this function greatly helps you copy the event to the other day of the week.
  (Example : When using the same schedule for Monday to Friday, set an event for Monday, then copy it for Tuesday to Friday to eliminate the efforts required for making the setting for each day of the week.)

1. Select “Schedule Setup” according to the operating procedure shown in page 49.
2. Confirm that the schedule setup screen Screen 1 will be displayed as shown in the left-hand column.
3. Select a schedule from ① to copy the event.
4. Push the [Event setting] button ② to display the event setup screen Screen 2.
5. Push the [Event Schedules] button ③ to display the event manipulation screen Screen 3.

   The following describes in order the functions of buttons ④ to ⑩.

   Select a day of the week for a copy source at ④ and that for a copy destination at ⑤. In an example of the left-hand column, “Mon” is selected as a day of the week for the copy source and “Tues” as that for the day of the copy destination.
   Then, select the event to be copied at ⑥ and push the [>] button ⑧ to copy the event No. 01 from Monday to Thursday.
   Push the [>>] button ⑨ to copy all the events from Monday to Thursday,
   Push the [<] button ⑩ once to delete the event copied incorrectly from ⑦.
   You must push the [<] button ⑩ as many times as necessary to delete multiple incorrect events. After making the necessary settings, push the [OK] button ⑪ to return to the event list screen Screen 2.

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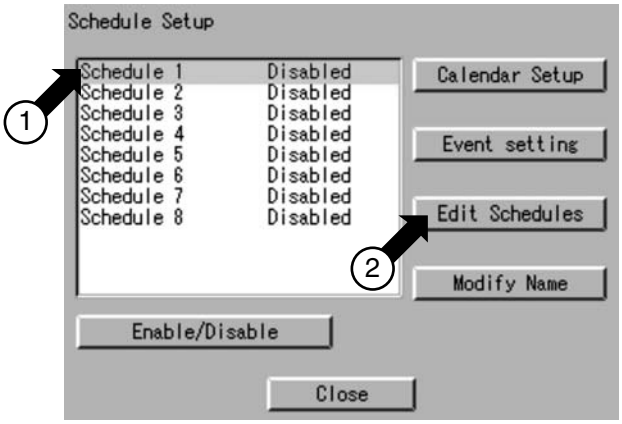
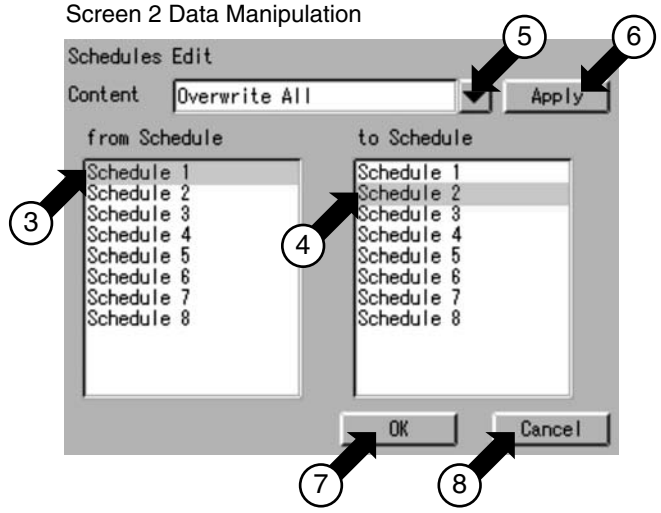
Screen 1 Schedule Setup



Screen 2 Data Manipulation



Convenient Function 2
Copy or Delete in Units of Schedules

* When it is necessary to resume a calendar setting made for schedule 1, this function greatly helps you copy the calendar setting to the other schedule(s).

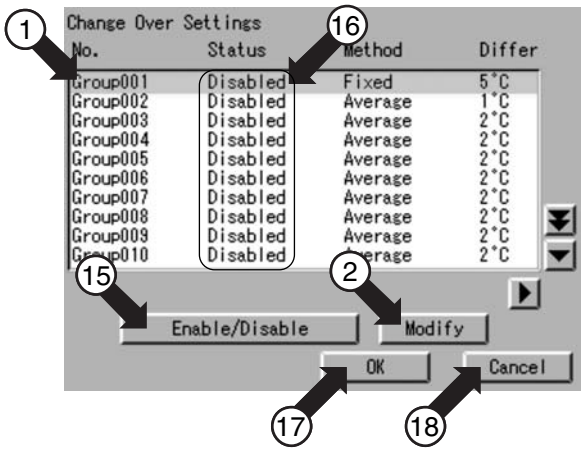
(Example:
When reusing the same calendar setting (such as the summer holiday) for the other schedule, make the calendar setting for schedule 1, then copy it for the other schedule to eliminate the efforts required for making the same setting for each of the other schedules.)

1. Select “Schedule Setup” according to the operating procedure shown in page 49.
2. Confirm that the schedule setup screen Screen 1 will be displayed as shown in the left-hand column.
3. Push the [Edit Schedules] button ② to display the data manipulation screen Screen 2.

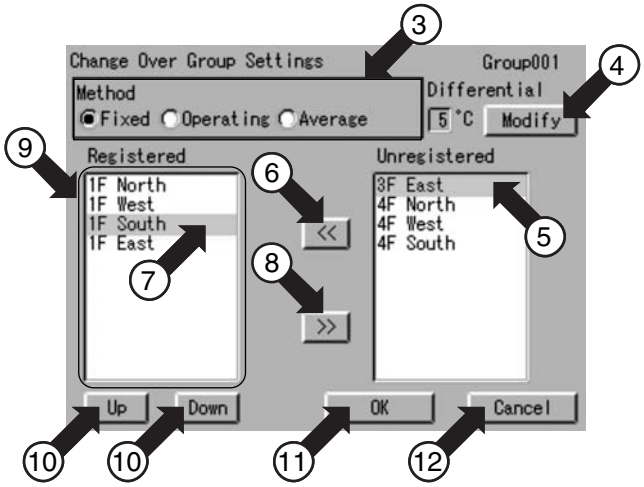
   (For setup item copy)
   Select a schedule for a copy source at ③ and that for a copy destination at ④. In an example of the left-hand column, the schedule of the copy source is schedule 1 and that of the copy destination schedule 2. Next, select the setup item (to be copied) of schedule 1 from the pull-down menu ⑤. The following setup items can be selected.
   • Overwriting all setup items
   • Overwriting only the calendar setup item
   After selecting either of the above items, push the [Apply] button ⑥. Last, push the [OK] button ⑦ to terminate the copy procedure. To cancel the settings made, push the [Cancel] button ⑧ and return to the schedule setup screen Screen 1.

   (For setup item deletion)
   Select the schedule to be deleted at ④. Next, select the setup item to be deleted from the pull-down menu ⑤. The following setup items can be selected.
   • Delete all the setup items
   • Delete only the calendar setup item
   After selecting either of the above setup items, push the [Apply] button ⑥. Last, push the [OK] button ⑦. To cancel the settings made, push the [Cancel] button ⑧ and return to the schedule setup screen Screen 1.

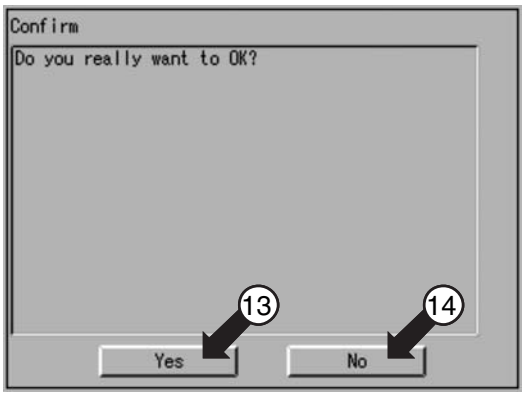
Screen 1 Change Over Settings



Screen 2 Cooling/Heating Automatic Change Over Group Settings



Screen 3 Confirmation



Operation of Change Over Settings

Before performing Change Over Settings, read thoroughly the section Change Over Settings on page 37, and perform the following procedure.

1. See page 49 and select Change Over Settings.
2. Screen 1 Change Over Settings, which is shown on the left, appears.
   (This screen shows current status (enabled/disabled) of each cooling/heating automatic change over group, control method, set value of temperature difference, and the number of the registered indoor unit groups.)
3. Touch a cooling/heating automatic change over group to be set or changed as shown by ① , and press the [Modify] button ②.
4. Screen 2 Cooling/Heating Automatic Change Over Group Settings, which is shown on the left, appears. First, select a control method at ③. The following three control methods are available.
   • Fixed • Operating • Average
   For details of each control method, see page 37.
5. Set a temperature difference value for cooling/heating automatic change over with the [modify] button ④.
   (Setting range: 1˚C - 7˚C)
6. At ⑤, select an indoor unit to be added to the cooling/heating automatic change over group which is currently selected, and press the button ⑥ to add.
   To delete an indoor unit from the cooling/heating automatic change over group, select it at ⑦, and press the button ⑧.
7. To change the order of the registered indoor group ⑨, select an indoor unit to be changed at ⑦, and move it with the Up button or the Down button ⑩.
   Memo: When the control method “Fixed” is selected, the indoor unit displayed on the top in the box ⑨ becomes the representative one. When the operation method “Operating” is selected, a search for representative unit is performed starting from the top.
8. When all settings for this cooling/heating automatic change over group (control method, temperature difference, indoor unit registration) are completed, press the [OK] button ⑪ (To cancel, press the [Cancel] button ⑫.)
   Screen 3 Confirmation Display appears.When there is no problem in setting change, press the [Yes] button ⑬.
   Screen 1, which is shown on the top on this page, appears. (To add or change the settings in the cooling/heating automatic change over group mentioned above, press the [No] button ⑭. Screen 2 appears.)
9. On the screen 1, select the cooling/heating automatic change over group to be enabled at ①, and press the button ⑮ to enable. (Confirm the group status (enabled/disabled) displayed on ⑯.)
   Only the cooling/heating automatic change over group set to enabled is controlled automatically.
10. Lastly, when all the setting changes are correct, press the [OK] button ⑰. (To cancel, press the Cancel button ⑱.)When the [OK] button ⑰ is pressed, the screen 3 Confirmation Display appears.When there is no problem in setting change, press the [Yes] button ⑬.This menu is ended, and System Setup Menu appears.
    (When the [No] button ⑭ is pressed, the screen 1 appears.)

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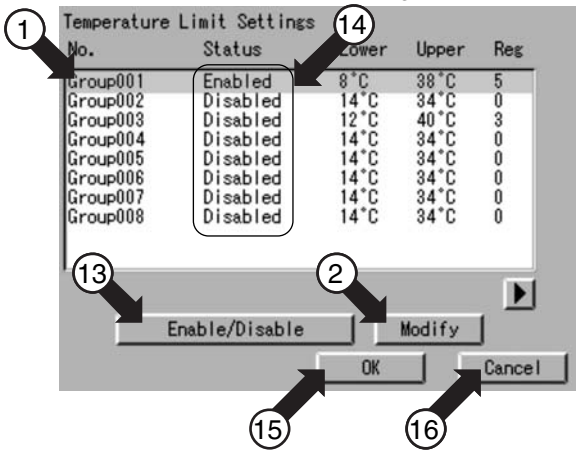
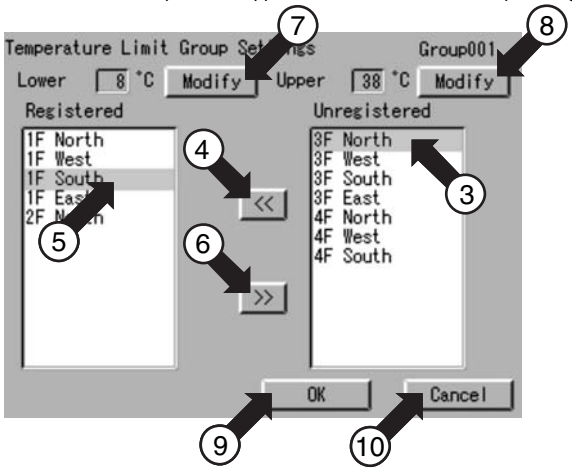
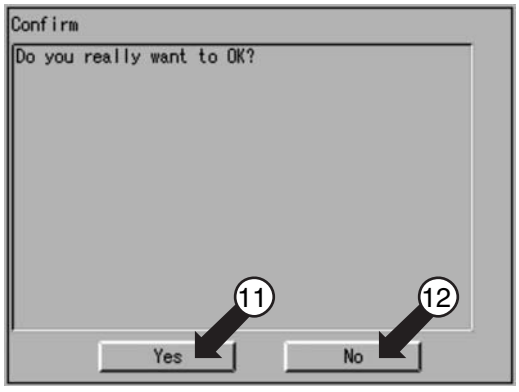
Screen 1 Temperature Limit Settings



Screen 2 Room Temperature Upper/Lower Limit Control Group Settings



Screen 3 Confirmation

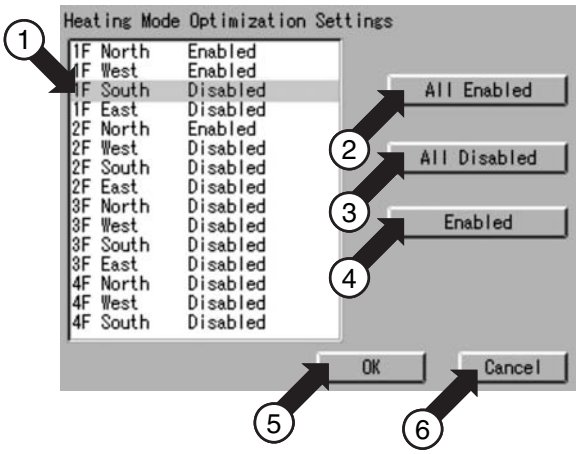


Operation of Temperature Limit Settings

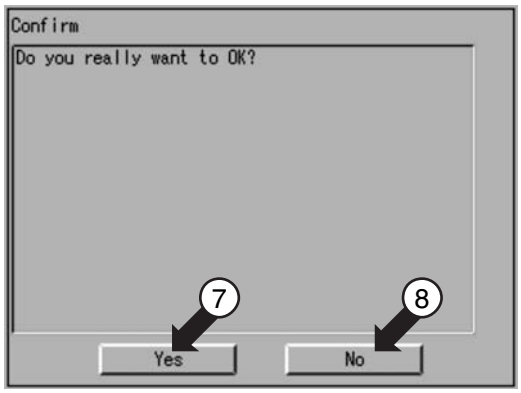
Before performing Temperature Limit Settings, read thoroughly the section Temperature Limit Settings on page 42, and perform the following procedure.

1. See page 49 and select Temperature Limit Settings
2. Screen 1 Temperature Limit Settings, which is shown on the left, appears.
   (This screen shows current status (enabled/disabled) of room temperature upper/lower limit control group, and setting status of lower temperature limit, upper temperature limit, and the number of registered indoor unit groups.)
3. Touch a room temperature upper/lower limit control group to be set or changed as shown by ①, and press the [Modify] button ②.
4. Screen 2 Room Temperature Upper/Lower Limit Control Group Settings, which is shown on the left, appears. First, at ③, select the indoor unit to be added to the room temperature upper/lower limit control group which is currently selected, and press the button ④ to add. To delete an indoor unit from the group, select it at ⑤, and press the button ⑥.
5. Set a lower limit of room temperature with the [Modify] button ⑦, and an upper limit of room temperature with the [Modify] button ⑧.
   (Setting range : 2˚C - 14˚C for lower limit, 34˚C - 50˚C for upper limit)
6. When all settings for this room temperature upper/lower limit control group (indoor unit registration, settings of upper limit and lower limit) are completed, press the [OK] button ⑨. (To cancel, press the [Cancel] button ⑩.)
   Screen 3 Confirmation Display appears.
   When there is no problem in setting change, press the [Yes] button ⑪.
   Screen 1, which is shown on the top on this page, appears.
   (To add or change the settings in the room temperature upper/lower limit control group mentioned above, press the [No] button ⑫. Screen 2 appears.)
7. On the screen 1, select a room temperature upper/lower limit control group to be enabled at ①, and press the button ⑬ to enable.
   (Confirm the group status (enabled/disabled) displayed on ⑭.)
   Only the room temperature upper/lower limit control group set to enabled is controlled automatically.
8. Lastly, when all the setting changes are correct, press the [OK] button ⑮. (To cancel, press the [Cancel] button ⑯.)
   When the [OK] button ⑮ is pressed, the screen 3 Confirmation Display appears.When there is no problem in setting change, press the [Yes] button ⑪.This menu is ended, and System Setup Menu appears.(When the [No] button ⑫ is pressed, the screen 1 appears.)

Screen 1 Heating Optimization Settings



Screen 2 Confirmation



Operation of Heating Optimization Settings

Before performing Heating Optimization Settings, read thoroughly the section Heating Optimization Settings on page 45, and perform the following procedure.

1. See page 49 and select Heating Optimization Settings.
2. Screen 1 Heating Optimization Settings, which is shown on the left, appears.
   (This screen shows current registration status of Heating Optimization Settings.)
3. Touch an indoor unit to be added as shown by ①, and press the button ② to add.
   To deactivate this control, select an indoor unit at ③, and press the button ④.
4. Lastly, when all indoor units are registered, press the [OK] button ⑤.
   (To cancel, press the [Cancel] button ⑥.)
   Screen 2 Confirmation Display appears.
   When there is no problem in setting change, press the [Yes] button ⑦.This menu is ended, and System Setup Menu appears.
   (To continue the change, press the [No] button ⑧. The screen 1 appears.)

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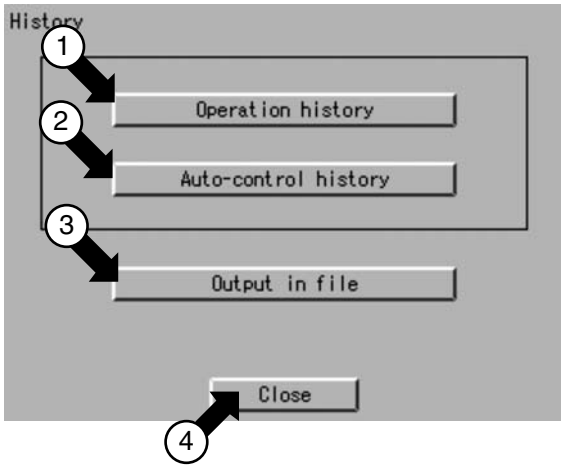
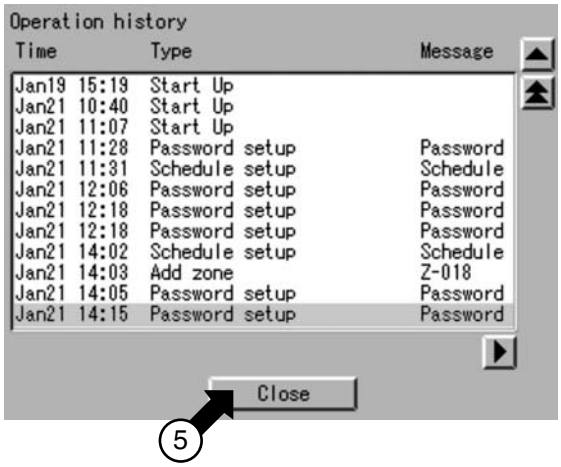
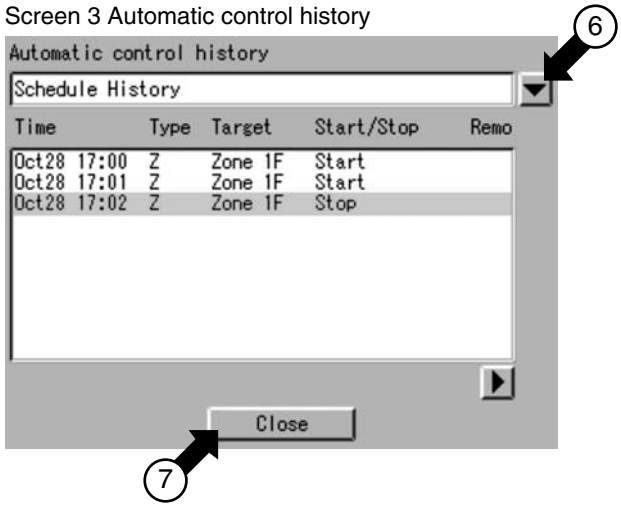
Screen 1 History



Screen 2 Operation History



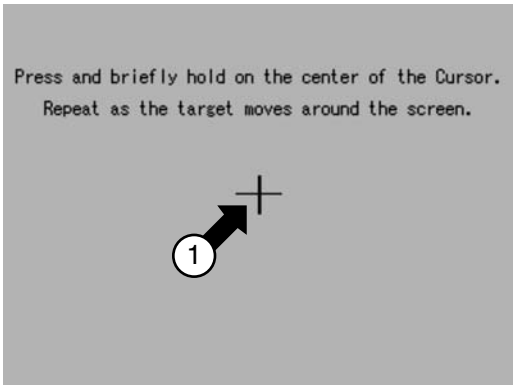
Screen 3 Automatic control history



Check for History

1. Select “History” by using the operation method described on page 49.
2. The History screen Screen 1 appears as shown in the left-hand column.
3. When checking for the history of system setup operations, touch the [Operation History] button ① to confirm that the Operation history screen Screen 2 is displayed. The system setup operations recorded in the controller are displayed in the order where they have been performed.
4. To return to the History screen, touch the [Close] button ⑤.
5. When checking for the history of automatic control operations, touch the [Auto-control history] button ② to confirm that the Automatic control history screen Screen 3 is displayed.
6. Use the pulldown menu ⑥ to display the following items on the related screens :
   • Schedule History
   Use this item to display log records on schedule execution.
   • Heating opt. Cntl. History
   Use this item to display log records on optimal stop control during heating.
   • Temp. limit func. History
   Use this item to display log records on upper-/lower-limit control for the room temperature.
   ∗ When purchasing option soft, items shown below are displayed in the pulldown menu ⑥ in addition to those shown above.
   • Power prop. division History
   • E-mail History
   ∗ 4 items shown above except the item "Power prop. division History" disappear when turning off the power of the contoroller.
7. To return to the History screen Screen 1, touch the [Close] button ⑦.
8. When saving the stored log records in a memory card, insert a commercially available PCMCIA flash memory card into a slot provided at the left side of the controller and touch the [Output in file] button ③.
   ∗ Care should be taken for memory card insertion. Be sure to insert a memory card in such a way that the rear side of the card (not provided with a label for the manufacturer name and model name) should face upwards.
   When the memory card has been forcibly inserted in wrong direction, the controller may be damaged.
   Then, touch the [OK] button to save the log records in the memory card.
9. After checking the log record, touch the [Close] button ④.

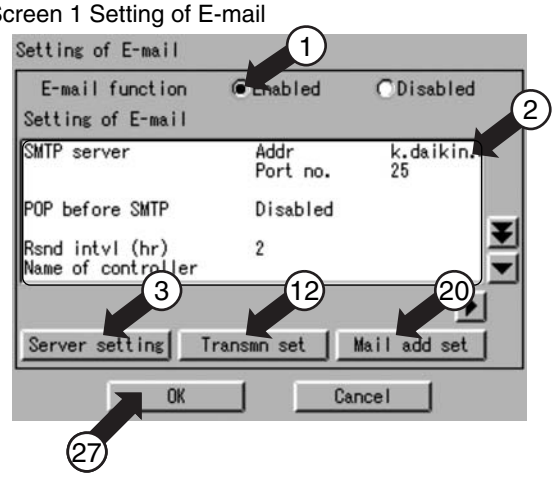
Screen 1 Touch Panel Calibration



Touch Panel Calibration

1. See page 49 and select Touch Panel Calibration.
2. Screen 1 Touch Panel Calibration, which is shown on the left, appears.
3. Follow the instruction shown on the screen and press the intersection of the crosshairs ① and keep it pressed for about 1 second.
4. The crosshairs are moved. Repeat the operation described in step 3 on a total of five points.
   When calibration is finished, the System Setup automatically appears within 30 seconds.

Screen 1 Setting of E-mail

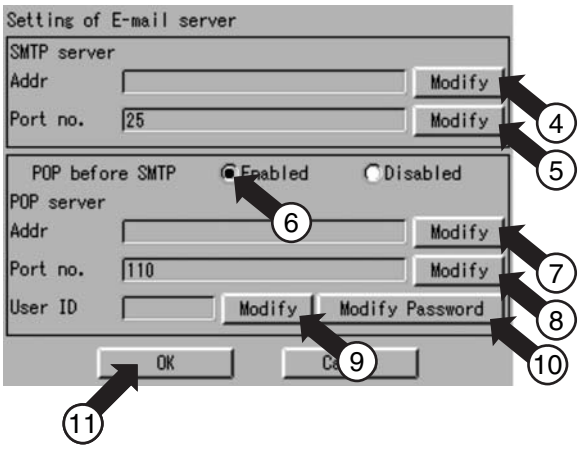


Setting of E-mail

∗ The e-mail function (option) comes standard with the Web function.

1. Select “Setting of E-mail” according to the operating procedure shown in page 49.
2. Confirm that the Setting of Email screen Screen 1 will be displayed as shown in the left-hand column.
3. Select “Enable” or “Disabled” for the e-mail function ①. When “Disabled” has been selected, there is no additional setup operation for the e-mail function. To continue the setup operation, be sure to select the [OK] button ㉗.
4. You can monitor the current setting in the display area ②.
5. Push the [Server Setting] button ③ to display the Setting of E-mail server screen Screen 2 will be displayed as shown in the left-hand column.
6. Push the [Modify] button ④ and enter an SMTP server address on the input screen.
7. Push the [Modify] button ⑤ and enter an SMTP server port number on the input screen.
8. Select “Enabled” or “Disabled” for the POP server ⑥.
9. Push the [Modify] button ⑦ and enter a POP server address on the input screen.
10. Push the [Modify] button ⑧ and enter a POP server port number on the input screen.
11. Push the [Modify] button ⑨ and enter a POP server user ID on the input screen.
12. Push the [Modify Password] button ⑩ and enter a POP server password on the input screen.
13. Last, push the [OK] button ⑪ to return to the Setting of E-mail screen Screen 1.
    (To cancel the settings made, push the [Cancel] button.)
14. Push the [Transmn Set] button ⑫ to display the Setting of E-mail transmission screen on the next page Screen 3.

Screen 2 Setting of E-mail server



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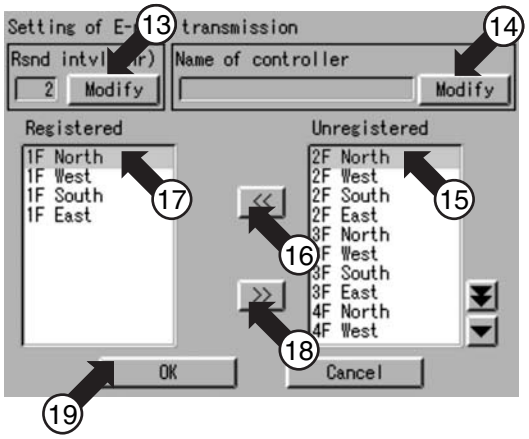
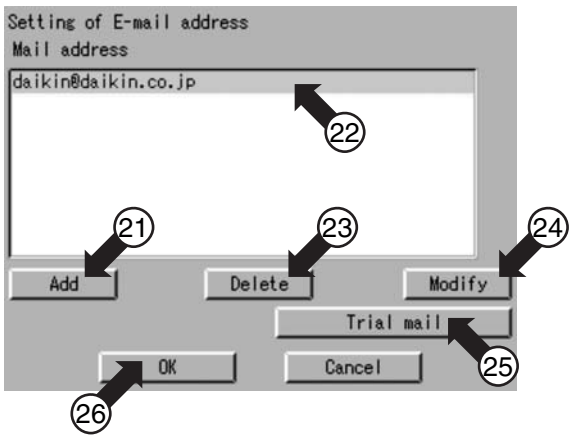
Screen 3 Setting of E-mail transmission



Screen 4 Setting of E-mail address



15. Push the [Modify] button ⑬ and enter a retransmission interval on the input screen.
(The retransmission interval is an e-mail retransmission interval when faults occur consecutively with the equipment. This interval time (hour) must be a value from 1 to 72. Initially, it is set to 2 hours.)

16. Push the [Modify] button ⑭ and enter an ITC identifier on the input screen. The name specified here is displayed in the Subject field during e-mail transmission.

17. When adding an air-conditioner for fault confirmation by e-mail, select the air-conditioner at ⑮ and push the [<<] button ⑯.
When deleting an air-conditioner for fault confirmation by e-mail, select the air-conditioner at ⑰ and push the [<<] button ⑱.
After finishing the necessary edit operations, push the [OK] button ⑲ to return to the Setting of E-mail screen on the previous page Screen 1.
(To cancel the settings made, push the [Cancel] button.)

18. Push the [Mail add. Set] button ⑳ on the previous page to display the Setting of E-mail address screen Screen 4.

19. When adding an e-mail address for fault notification by e-mail, push the [Add] button ㉑ and enter the e-mail address on the input screen.
(Note that a maximum of 3 e-mail addresses can be registered.)
When deleting an e-mail address, select the address at ㉒ and push the [Delete] button ㉓. In addition, when changing the registered e-mail address, select the address at ㉒ and push the [Modify] button ㉔.

20. When sending test e-mail, select a destination e-mail address at ㉒ and push the [Trial mail] button ㉕.

21. After making the necessary settings, push the [OK] button ㉖ to return to the Setting of E-mail screen on the previous page Screen 1.
(To cancel the settings made, push the [Cancel] button.)

22. After finishing the necessary setting for e-mail, push the [OK] button ㉗.
(To cancel the settings made, push the [Cancel] button.)

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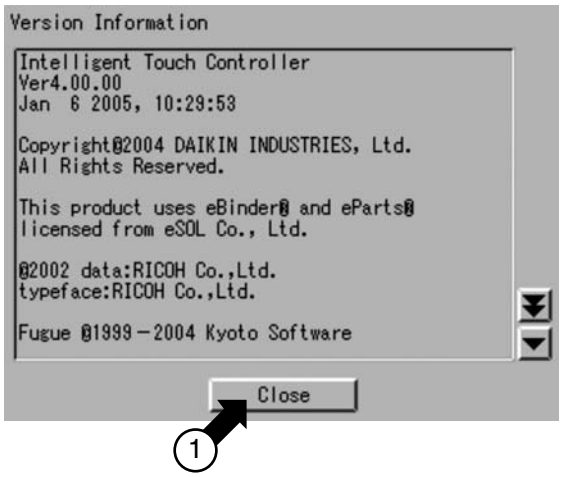
Screen 1 Version Information



Version Information

This is a menu for checking the version number of the software for the intelligent Touch Controller currently used. Generally it is not necessary to check.

1. See page 49 and select Version Information.
2. Screen 1 Version Information, which is shown on the left, appears.
   (The figure on the left shows an example. It may be different from the actual version.)
3. When the version number has been checked, press the [Close] button ①.

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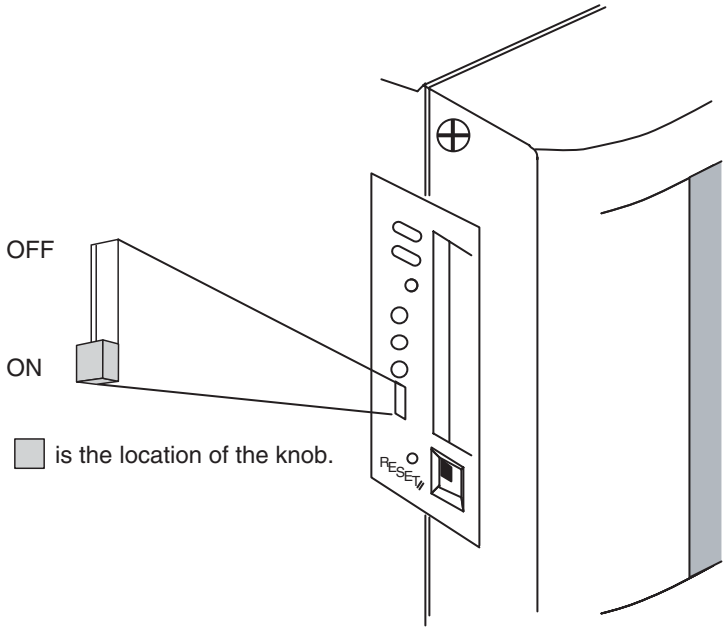
6.4.3 Internal Battery Enable(ON)/Disable(OFF)Switch

The intelligent Touch Controller is equipped with internal batteries in order to run the clock during blackouts as well as to save data during blackouts when using the optional Power Proportional Distribution. The batteries can be enabled and disabled using the switches shown in the figure below.
The clock and Power Proportional Distribution will not function properly when a blackout occurs if this switch is turned to [OFF].
The switches are turned to [ON] when the unit is installed. Do not touch them unless the power has been turned off for a long time. (See the next page for details on what to do if the power has been off for long periods of time.)

<Location and Setting of Switches>
As shown in the figure, set the battery switch on the left side of this controller to “OFF” (switch knob upper side) or “ON” (switch knob lower side), using a precision minus(-) screwdriver.
(Turning this switch OFF does not erase the settings for groups, zones or schedule.)



Note
- Do not touch other switches.
- Avoid turning the switch ON and OFF with excessive force; otherwise such operation may lead to parts damage and failure.

6.5 Maintenance

6.5.1 Maintenance

LCD Maintenance

- When the surface of the LCD or the main unit of the intelligent Touch Controller is soiled, wipe the soil off with a piece of cloth soaked in a diluted neutral detergent and wrung sufficiently.

Note

- Do not use thinner, organic solvent, strongly acid solution, etc. The print may fade or wear out and discolor.
- Forced rubbing with hard cloth may cause damage to the liquid crystal display unit. Remove stains, always using a soft waste cloth.
- If the unit is stored with water droplets and stains sticking to the liquid crystal display unit, a blot may be made and the coating may come off.

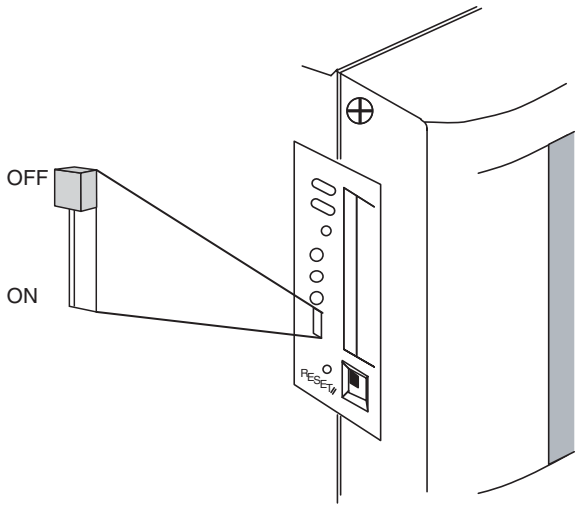
6.5.2 When Leaving the Product Turned OFF for Long Time

When you leave the intelligent Touch Controller turned OFF for a long time (6 months or longer), turn the switch OFF to maintain the battery.

- The intelligent Touch Controller has a built-in battery for operating the clock in power failure. The battery mentioned above is for power failure only and it may be completely discharged if no power is provided for a long time. (The capacity is worth about 2 years of in total if no power is supplied.)
- To use the intelligent Touch Controller again, turn the switch ON.

[Setting the switch]

As shown in the figure, set the battery switch on the left side of this controller to “OFF” (switch knob upper side) or “ON” (switch knob lower side), using a precision minus(-) screwdriver.
(Turning this switch OFF does not erase the settings for groups, zones or schedule.)



is the location of the knob.

Note

- Do not touch other switches.
- Avoid turning the switch ON and OFF with excessive force; otherwise such operation may lead to parts damage and failure.

⚠Caution

If electric components in the intelligent Touch Controller are charged with static electricity, it may cause failure.
Be sure to discharge the static electricity accumulated in your body before attempting any operation.
To discharge yourself, touch a grounded metal object (control panel, etc.).

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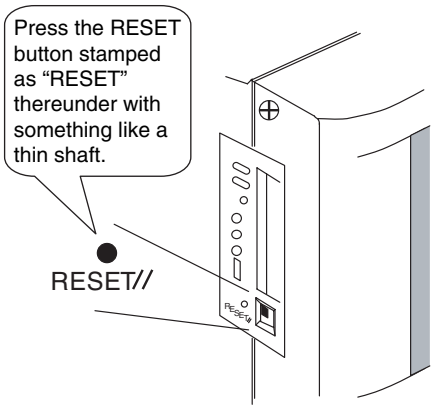
6.6 Troubleshooting

6.6.1 Before Having the Product Serviced

Item	Description and Corrective Action
The display of the intelligent Touch Controller has gone out.	When Backlight Auto OFF is set for Backlight Setup of the intelligent Touch Controller, the light goes out if the screen is left untouched for a certain time. Touch the screen with the pen provided. The display comes back on.
The backlight does not go out when Backlight auto OFF is set.	Backlight Auto OFF is a function to automatically turn the backlight OFF if it is left untouched for a certain time. If the display is Set/Prop, System Setup, etc., the light does not go out automatically.
The intelligent Touch Controller cannot be operated or monitoring is not available.	Press and hold down the reset button on the left screen of the intelligent Touch controller for 5 seconds. Pressing this switch initialize the intelligent Touch Controller. (Pressing this switch does not erase the settings for groups, zones or schedule.)  intelligent Touch Controller **Note** • Do not touch other switches. • Avoid turning the switch ON and OFF with excessive force ; otherwise such operation may lead to parts damage and failure. **⚠ Caution** If electric components in the intelligent Touch Controller are charged with static electricity, it may cause failure. Be sure to discharge the static electricity accumulated in your body before attempting any operation. To discharge yourself, touch a grounded metal object (control panel, etc.).

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Item	Description and Corrective Action
On the Monitoring screen, buzzer sounds when an area not allocated for a button for operation is pressed.	The intelligent Touch Controller is designed in such a way that the buzzer sounds when any part of the screen is pressed. It is normal.
The screen flickers at a regular interval.	While the Monitoring screen is shown, the screen is updated every 3 seconds to show the latest status of air conditioners. The screen may look flickering when the update is made. It is normal.
Touching the screen of the intelligent Touch Controller does not change the display soon.	Updating of the display may take some time depending on the communication status with the air conditioners connected. Update is completed in a few seconds.
LCD	There may be found some dots that are never illuminated or always illuminated on a certain part of the LCD of the intelligent Touch Controller. It is normal. The LCD may inherently generate unevenness due to change of temperature, which is normal.
On the Zone Monitoring screen of the intelligent Touch Controller, a filter or element sign was shown for a certain zone. Cleaning the filter or element of air conditioners and resetting the cleaning sigh with a remote control does not turn out the filter or element sign.	On the Zone Monitoring screen, the filter or element sign shown is not turned out unless the filter or element signs for all of the air conditioners in the zone are reset. Check for any air conditioner showing cleaning sign apart from the air conditioners cleaned in the zone.
Pressing an operation button on the screen of the intelligent Touch Controller sounds the buzzer but operation is not accepted.	The positions of buttons on the touch panel may be shifted over time. See page 69 and perform touch panel calibration.
The intelligent Touch Controller does not allow setting of Permitted/Inhibited of the remote control.	When iPU, BAC net Gateway is connected, Permitted/Inhibited setting of the remote control cannot be made with the intelligent Touch Controller. When double intelligent Touch Controller control is performed, one of the two intelligent Touch Controllers cannot make Permitted/Inhibited setting.
An air conditioner to be connected to the intelligent Touch Controller has been added but the added air conditioner cannot be monitored on the Monitoring screen of the intelligent Touch Controller.	When adding an air conditioner to be connected to the intelligent Touch Controller, trial running of the intelligent Touch Controller, as well as of the air conditioner, is required. (When trial running of the intelligent Touch Controller has not been performed, contact our representative.)

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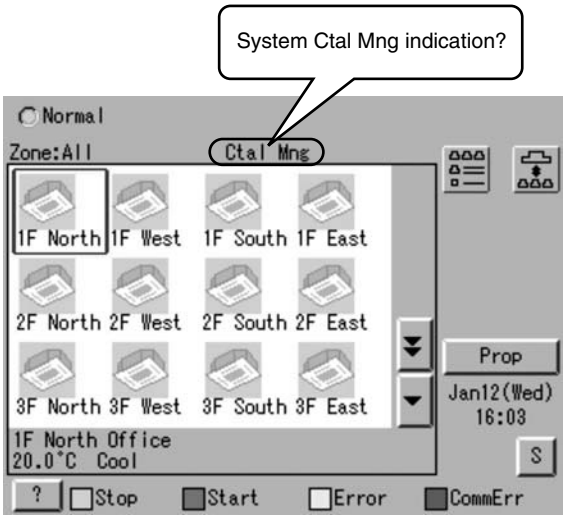
Item	Description and Corrective Action
Collective Operation, Start and Stop buttons are not shown on the Monitoring screen of the intelligent Touch Controller and operation of air conditioners is made impossible.	Is the indication System Ctal Mng on the Monitoring screen, as shown below? This indication is shown in the following cases. When iPU, BAC net Gateway is connected to the intelligent Touch Controller, the low order control inhibit setting is available for iPU, BAC net Gateway. The lower order control inhibit is a setting that inhibits operation of air conditioners from the intelligent Touch Controller central management controller and ON/OFF controller and enables commands from iPU, BAC net Gateway only. When this setting is made, System Ctal Mng indication is shown on the intelligent Touch Controller. When the setting is released, the System Ctal Mng indication disappears and operation with the intelligent Touch Controller becomes available. 

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Item	Description and Corrective Action
The air conditioner is supposed to operate, but it is stopped.	The followings are possible causes. Check the followings. 1. Is the stop operation performed with the remote control of the air conditioner? 2. When a central unit is connected in addition to this unit, is the stop operation performed with the central unit? 3. Was the power supply for air conditioner interrupted? 4. Is the schedule of stopping the air conditioner registered with the schedule function of the unit? 5. Is Heating Optimization function of this unit activated? (The above function stops the air conditioner during the heating operation to prevent warm air when the thermo-switch is turned off.) (For details, see P45,46.)
The air conditioner is supposed to be stopped, but it is operating.	The followings are possible causes. Check the followings. 1. Is the start operation performed with the remote control of the air conditioner? 2. When a central unit is connected in addition to this unit, is the start operation performed with the central unit? 3. Is the schedule of starting the air conditioner registered with the schedule function of the unit? 4. Is Temperature Limit function of this unit activated? (The above function operates the air conditioner automatically to avoid excessive increase or decrease of room temperature.) (For details, see P42-44.)
The set temperature or the operation mode of the air conditioner has been changed.	The followings are possible causes. Check the followings. 1. Is the set temperature or the operation mode changed with the remote control of the air conditioner? 2. When a central unit is connected in addition to this unit, is the set temperature or the operation mode changed with the central unit? 3. Is the schedule of changing the set temperature or the operation mode registered with the schedule function of the unit? 4. Is Change Over function of this unit activated? (The above function changes the operation mode and set temperature of the air conditioner automatically to maintain an optimum room temperature. (For details, see P37-41.)

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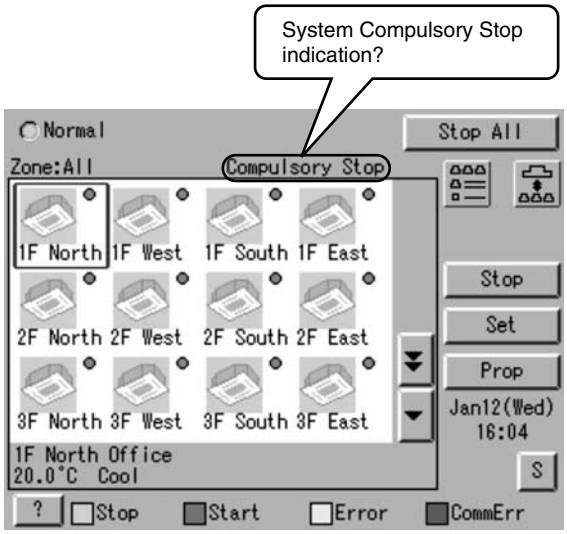
Item	Description and Corrective Action
Collective Operation, Start and Stop buttons are not shown on the Monitoring screen of the intelligent Touch Controller and operation of air conditioners is made impossible.	Is the indication System Compulsory Stop on the Monitoring screen, as shown below? This indication is shown in the following cases. When compulsory stop command is input to central management devices (central remote controller, ON/OFF controller, etc.) including the intelligent Touch Controller, the indication appears. Inputting compulsory command stops all air conditioners connected to the central management device. While the command is input, neither the central management devices nor remote control can operate air conditioners. When the compulsory stop input command is canceled, the System Compulsory Stop disappears, which allows control with the intelligent Touch Controller. 

6.6.2 Emergency Procedure for intelligent Touch Controller Failure

Item	Description and Corrective Action
Failure occurs in the intelligent Touch Controller while the remote control is disabled with the intelligent Touch Controller and start/stop setting, etc. of air conditioners cannot be made.	As a temporary measure before our service personnel investigates into the problem, turn OFF the power supply breaker of the intelligent Touch Controller. This allows all kinds of operation with the remote control of air conditioners in about 5 minutes. (When there is any other central management device, turn the power OFF for all of the devices.)

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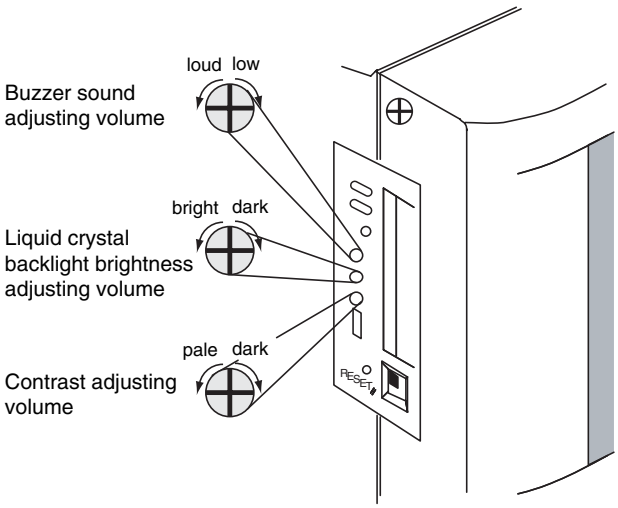
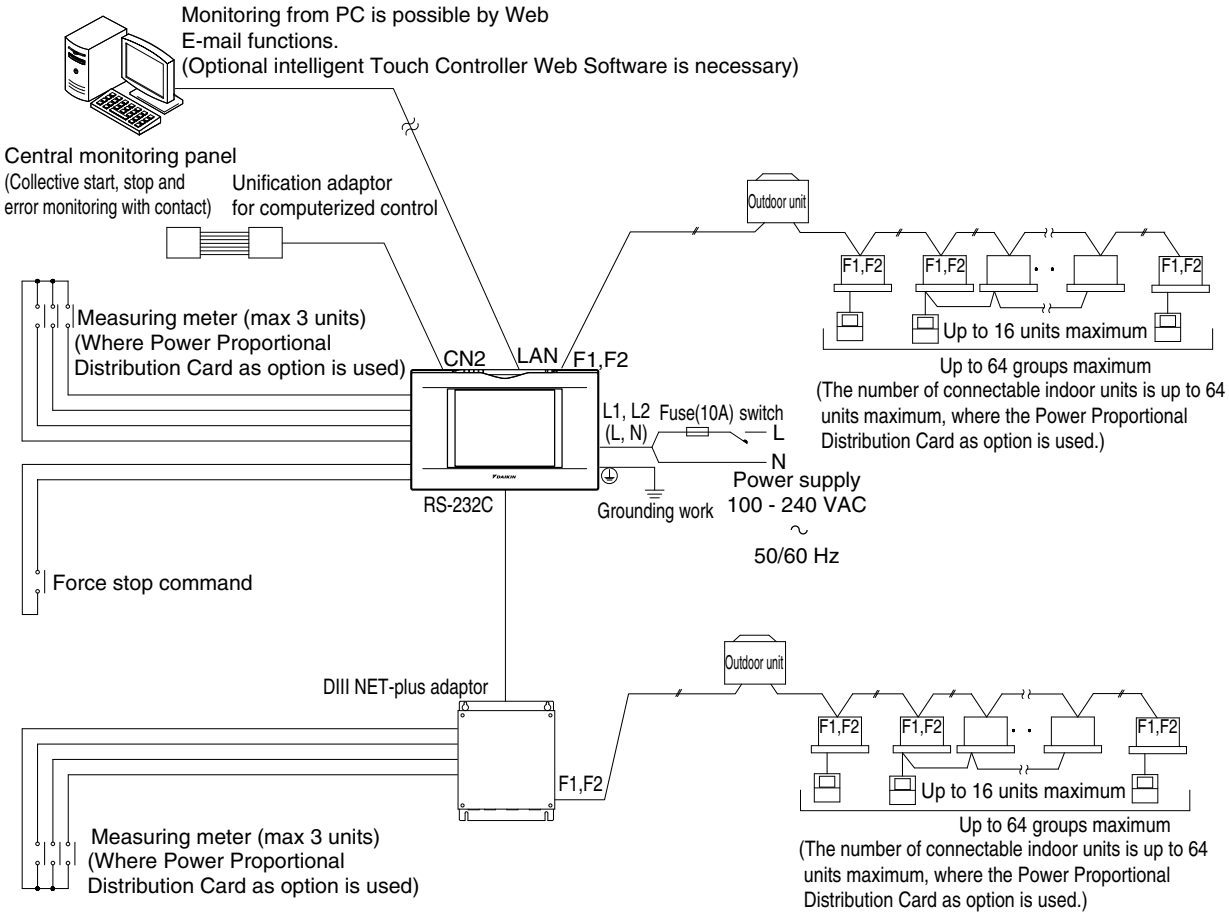
6.6.3 When it is desired to adjust screen brightness, contrast and buzzer sound level

Item	Description and Corrective Action
Screen brightness, contrast and buzzer sound adjustment is desired.	The screen brightness, contrast and buzzer sound level are factory adjusted properly before shipment, but in case where the screen is hard to see and the buzzer is hard to hear, for example, according to the actual installation condition and usage, the screen brightness, contrast and buzzer sound level can be adjusted by the following method. [Adjustment Method] Adjust the volume (variable resistor) on the left side of the intelligent Touch controller with a Phillips head screwdriver while checking each level. The buzzer sound, screen brightness and screen contrast volume switches are located in sequence from the top as shown below.  **Note** • Since each volume is a precision component part, do not turn the volume switch with excessive force. It should be noted that a fault is caused to the switch. • Do not touch other switches. (The buzzer sound volume and liquid crystal backlight brightness can be adjusted with the volume switch described above; normally, however, no such adjustment is required.) **⚠Caution** If electric components in the intelligent Touch Controller are charged with static electricity, it may cause failure. Be sure to discharge the static electricity accumulated in your body before attempting any operation. To discharge yourself, touch a grounded metal object (control panel, etc.).

6.7 Options

Connecting Unification adaptor allows using the contact for normal and abnormal operation signal and collective start/stop with a contact. For details, contact the vendor you purchased the product from.
Also, by connecting DIII NET-plus adaptor, it is possible to operate and monitor the indoor units of 64 groups (intelligent Touch Controller plus DIII NET – plus adaptor–128 groups in total) additionally.



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7. Installation

7.1 intelligent Touch Controller

Please read these "SAFETY CONSIDERATIONS" carefully before installing this unit and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference. This unit comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.
⚠ WARNING Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alect against unsafe practices.
⚠ NOTE Indication situation that may result in equipment or property-damage-only accidents.

⚠WARNING

Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.
Improper installation may result in electric shocks or fire.

Perform installation work in accordance with this installation manual.
Improper installation may result in electric shocks or fire.

Be sure to use only the specified accessories and parts for installation work.
Failure to use the specified parts may result in electric shocks, fire or the unit falling.

Carry out the specified installation work after taking into account earthquakes.
Improper installation work may result in the equipment falling and causing accidents.

Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.
Improper connections or installation may result in fire.

When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

Before touching electrical parts, turn off the unit.

Ground this unit. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.
Incomplete grounding may result in electric shocks.

Do not reconstruct or change the settings of the protection devices.
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

Do not touch the switch with wet fingers.
Touching a switch with wet fingers can cause electric shock.

Install an leak circuit breaker, as required.
If an leak circuit breaker is not installed, electric shock may result.

DO not install this unit in the following locations.
(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen.
plastic parts may deteriorate and fall off or result in water leakage.
(b) where corrosive gas, such as sulfurous acid gas, is produced.
Corroding copper pipes or soldered parts may result in refrigerant leakage.
(C) near machinery emitting electromagnetic waves.
Electromagnetic waves may disturb the operation of the control system and result in malfunction of the equipment.
(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or whre volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

⚠CAUTION

Be very careful about product transportation.

Safely dispose of the packing materials.
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them.
If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

⚠NOTE

Install this unit, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

This unit is a class A product.

In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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❶ System components

The components of the kit are as follows.
Before installing, be sure to check whether they are supplied.

intelligent Touch Controller proper	1 set	Installation manual	1 copy
Touch pen	1 piece	Hardware manual	1 copy
Mounting screw (M4×50)	4 piece	Software ID	1 copy
Flat washer	4 piece		

Where embedded in wall, a steel electrical box

❷ Installing

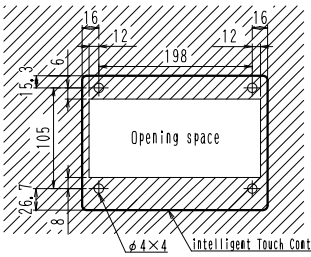
Don't fail to turn OFF the indoor unit power switch before installing intelligent Touch Controller.
Failure to observe this instruction could result in electric shock.

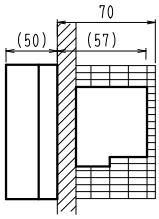
Location

Either Installation on control panel front door or Embedding in wall is selectively available for installation of the intelligent Touch Controller.
Install the intelligent Touch Controller at an indoor location where it is free from affect by electromagnetic wave and adhesion of water content, dust, etc., whether installed on the front door or embedded in wall.

Required installation space

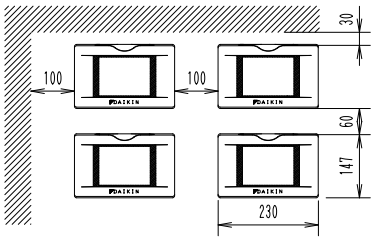
Open space necessary for the front door of control panel and for the walls:





Do not install anything in the ▦ zone (illustrated left).

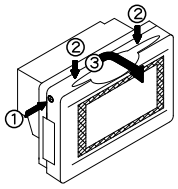
Device to device pitch and minimum spacing from wall surface, where installed in series



≪CAUTION≫
Reserve a space of 100 mm or more at the left side for inserting PCMCIA card.

How to install

1. Open the upper case.
Separate portion-① using a screwdriver (+). (Be careful not to lose the separated portion.)
Open portion-② in direction ③ while pressing it lightly.

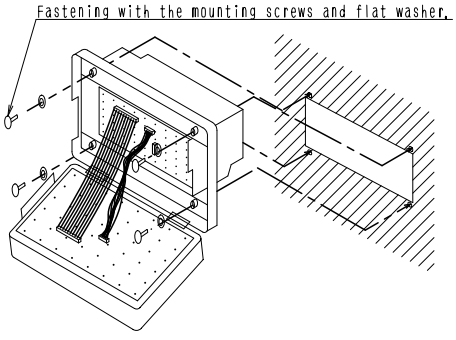


≪CAUTION≫
- Control PC board is contained in both of the upper case and lower case. When opening, be careful not to damage them by a screwdriver.
- PC board is not so resistible to static electricity. Therefore, remove completely static electricity which is accumulating by the human body, before beginning opening the case. (The static can be removed by bringing the body in touch with control panel, etc, which is already grounded.)

2. Mount the intelligent Touch Controller, using the screws

2−1. Where installed on the control panel front door

Fastening with the mounting screws and flat washer.



For detail of the opening of the control panel front door, refer to Required installation space prescribed in the foregoing paragraph.

≪CAUTION≫
- Tightening the mounting screws too tightly could cause damage of the intelligent Touch Controller case.
- A spacing of 70mm or more must be available at the back of i-Touch Controller because terminal block, etc, are provided on the back panel.

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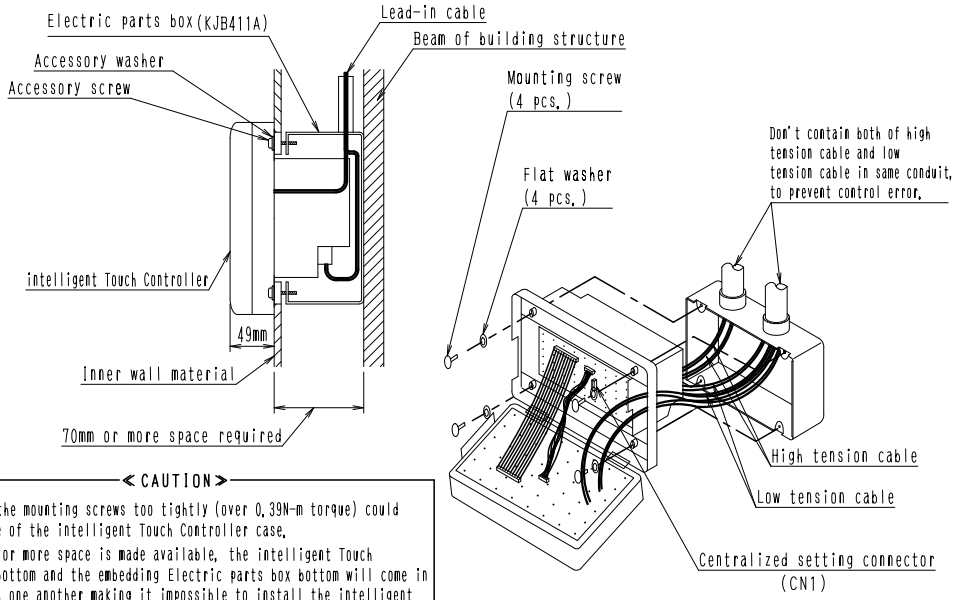
2-2. Where embedded in a wall

Mount the intelligent Touch Controller in the embedded Electric parts box as illustrated right below, using the accessory mounting screws (M4 × 50).



≪CAUTION≫

- Tightening the mounting screws too tightly (over 0.39N-m torque) could cause damage of the intelligent Touch Controller case.
- Unless 70mm or more space is made available, the intelligent Touch Controller bottom and the embedding Electric parts box bottom will come in contact with one another making it impossible to install the intelligent Touch Controller.
- In this case, the 4-piece embedding electric box cover is not used. Dismount the box cover before using the intelligent Touch Controller.

Initial setting

Centralized setting connector (CN1) (The controller is complete with this connector when shipped from the shop.)
.... See the above sketch for the position detail.
- Where one intelligent Touch Controller only is used independently, don't dismount the centralized setting connector. (Use it as shipped from the shop.)
- Where two intelligent Touch Controllers are used in series and used in combination with other centralized devices, make initial setting per the Table below.

≪CAUTION≫

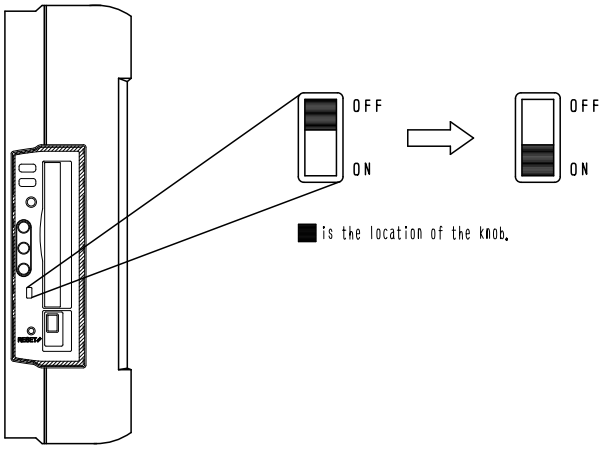
- Disconnect this connector, however, where used in combination with iPU, BACnet Gateway, DMS-IF, Parallel Interface, etc.
- This is unavailable for combined use with the schedule timer.

Pattern	Connection pattern of centralized devices			Setting the centralized setting connector (CN1)		
	intelligent Touch Controller	Central remote controller	ON/OFF controller	intelligent Touch Controller	Central remote controller	ON/OFF controller
①	1 to 2 sets			※1		
②	1 set	1 set		WITH	WITHOUT	
③			1 to 8 sets			Set "WITHOUT" for all
④	1 to 2 sets			※1		

※1:Set "WITH" (with centralized setting connector) for either one controller and set "WITHOUT" for all others.

After complete setting up of all the above setting items, shut the intelligent Touch Controller panel door in the reverse sequence of the above.

- Setting "BACK-UP BATTERY VALIDATE" switch (shifted to OFF when being shipped from the shop, -- Back-up battery set to INVALIDATE)
  For the switch to back up the clock, etc. in case of any power failure, actuate it from OFF side (knob is located above) to ON side (knob is located below) as shown in the sketch below.



TO BACK

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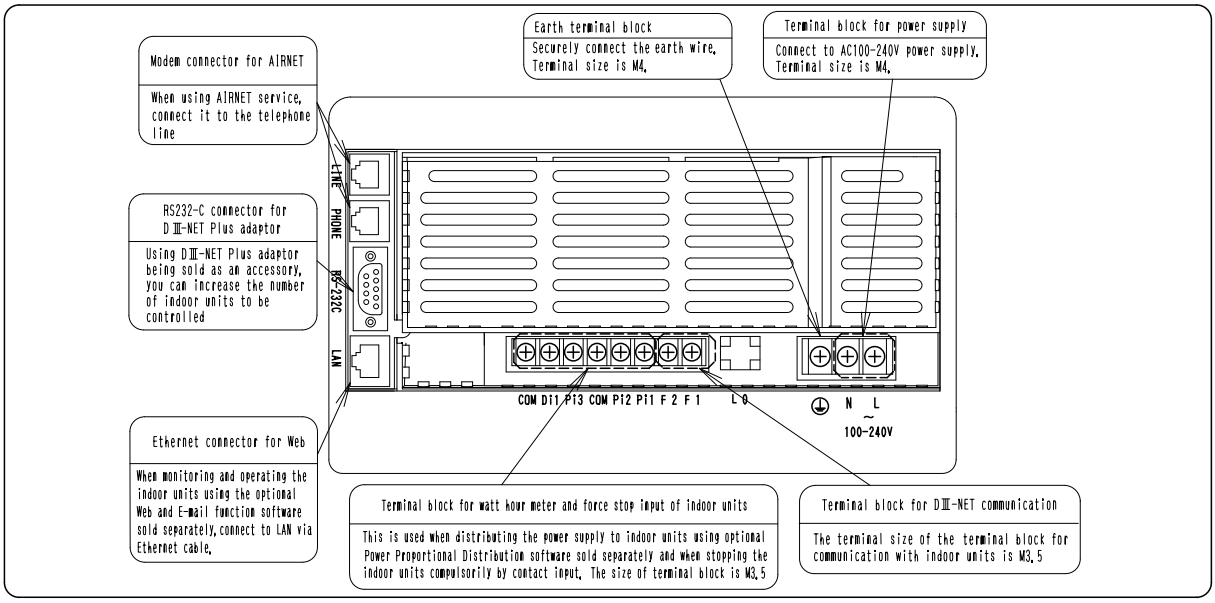
❸ Names of the rear terminals and their function (Before start electrical wiring, check the terminal block and connector at the back of controller.)

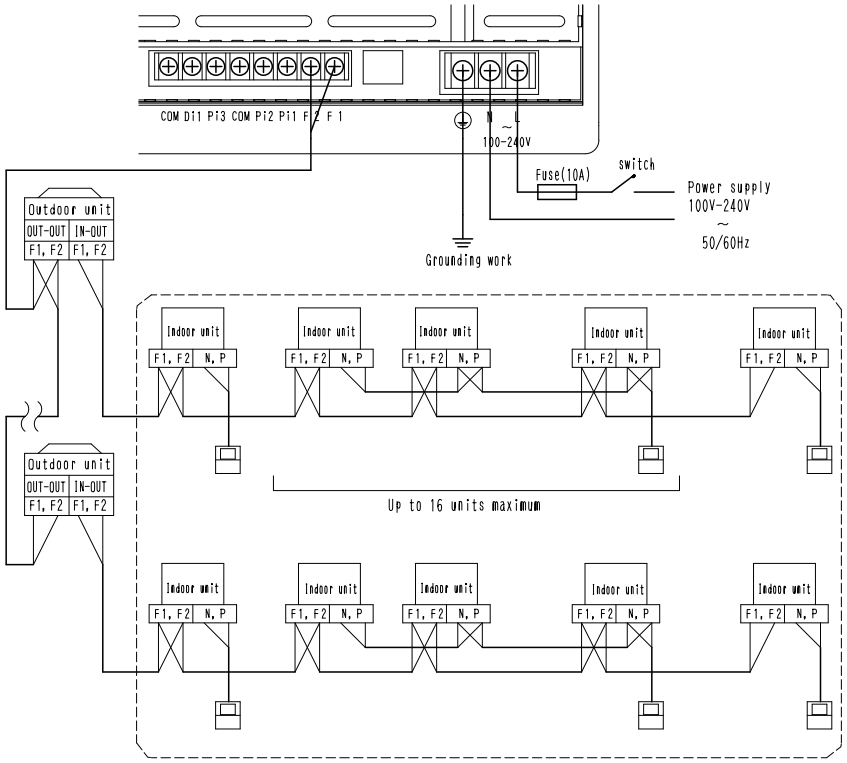


❹ Electric Wiring Connection (Do not fail to use a round crimp terminal with reinforcing sleeve for safety wiring connection to the intelligent Touch Controller.)

When wiring, cut off the power supply (using a local switch) and do not apply power until all work has been finished.

Wiring for power supply and Connecting wiring for DⅢ-NET communication of indoor units

In order to perform centralized control of indoor units using this controller, connect the power wiring to terminals L1 and L2, earth wire to earth terminal ⏚ and connecting wiring for DⅢ-NET communication of air-conditioner (indoor unit and outdoor unit) to terminals F1 and F2 respectively as shown in the sketch below.



Power cable wiring	1.25mm²
Fuse	10A
Connecting wiring for DⅢ- NET communication of indoor and outdoor units	0.75 - 1.25 mm² vinyl cord or cable with sheath (2 wire) ---Up to 1000 m maximum (wiring length -- up to 2000 m maximum) (When shield cable is used, the wiring length is available up to 1500m.) For the type of electric wire, refer to the design guide.

< CAUTION >

- Don't fail to perform installation of Grounding work. Don't connect the grounding wire to any of gas pipe, city water pipe, lightning rod, and telephone grounding wire.
- Don't turn ON the power supply (front switch) until all the works are complete.
- The connecting wiring for communication of indoor and outdoor units is a connecting wiring for the control.
  Don't clamp these cables together with high voltage cables.
  Failure to observe this instruction would cause control error.
- Don't connect the power cable to F1, F2 terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units.
  This is very hazardous. Check each wired cable once more before turning ON the power switch.

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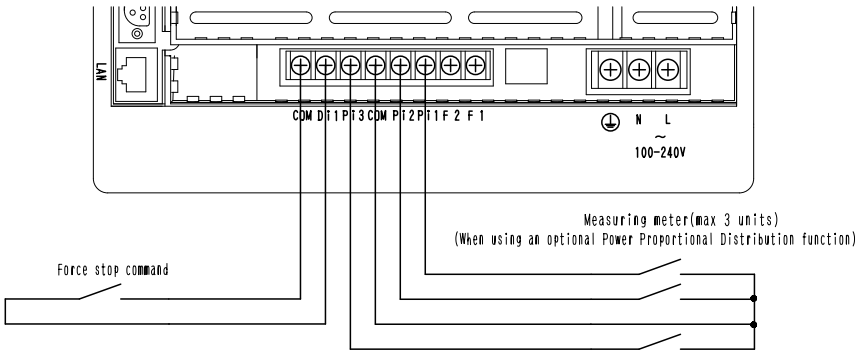
Wiring for force stop input and for electric power distribution

In order to stop the air-conditioner through force stop input, connect the wiring for force stop input to the terminals Di1 and COM as shown in the sketch below. In addition, in order to calculate the electric energy using optional Power Proportional Distribution software, connect the wiring for electric energy to the terminals Pi and COM as shown in the sketch below.



Wiring for force stop input	• 0.75 – 1.25 mm² vinyl cord or cable with sheath (2 wire) -- up to 150m maximum • When FORCE-STOP INPUT is kept ON, the indoor units connected thereto are unable to be operated because they are force-stopped. • Use a contact which can guarantee minimum application load DC16V and 10mA. • Use an instantaneous contact of 200msec or more in current feed time, where required.
Meter wiring for power distribution(option)	• 0.75 – 1.25 mm² vinyl cord or cable with sheath (2 wire) -- up to 150m maximum • The number of connectable indoor units is up to 64 units maximum, where the Power Proportional Distribution Card as option is used. • The measuring meters to be connected must meet the requirements specified below. • To be a measuring meter with pulse oscillator. (pulse/kwh) • Pulse band of 100msec or mores • Measuring meter which uses semiconductor relay for pulse output and outputs pulses from non-voltage contact

< CAUTION >

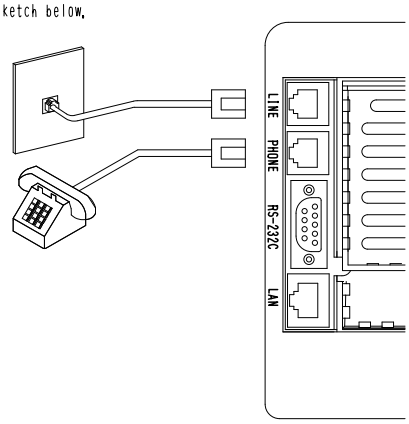
- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- Terminals COM are inter-connected. Connecting to either one is allowed, but the number of cables connectable to one terminal is limited to 2 pieces.
- Don't connect the power cable to Pi, Di, COM terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units. This is very hazardous. Check each wired cable once more before turning ON the power switch.

Connection to public telephone line

Connect to the telephone line in order to monitor the air-conditioner via AIRNET service.
Connect to modular cable from the public telephone line to the upper connector with a stamping of LINE, and connect the modular cable of the telephone to the lower connector with a stamping of PHONE, as shown in the sketch below.

< CAUTION >

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- When using AIRNET service, it is necessary to use a separate modem specified by us and enter into Maintenance Agreement with charge.

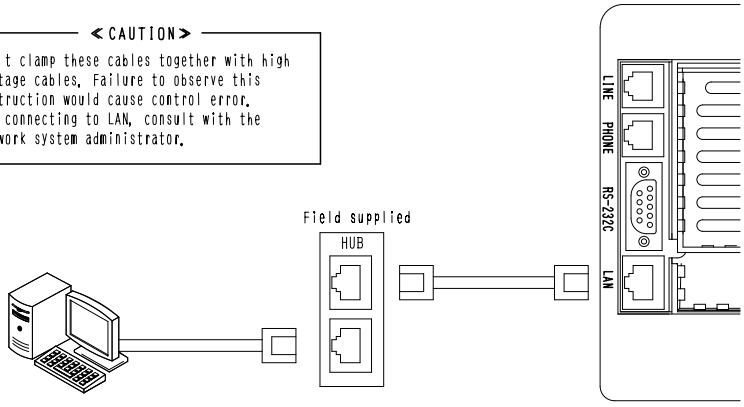


Connection to LAN

In order to monitor/control the air-conditioner using optional Web and E-mail function software sold separately, use a UTP cable to connect to LAN.
Connect the UTP cable to the Ethernet connector with a stamping of LAN.

< CAUTION >

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- For connecting to LAN, consult with the network system administrator.



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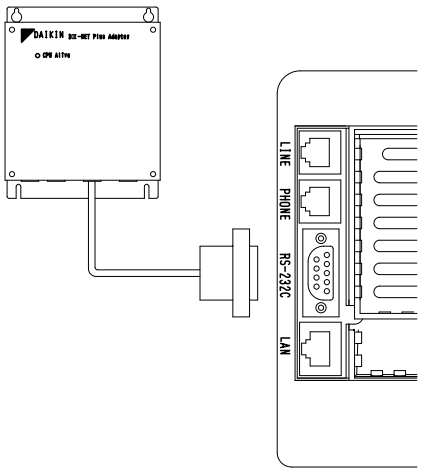
DⅢ-NET Plus adaptor connection

In order to increase the number of indoor units to be controlled, connect DⅢ- NET Plus adaptor using RS232-C cable attached to the adaptor.
For details, refer to the installation manual of DⅢ- NET Plus adaptor.

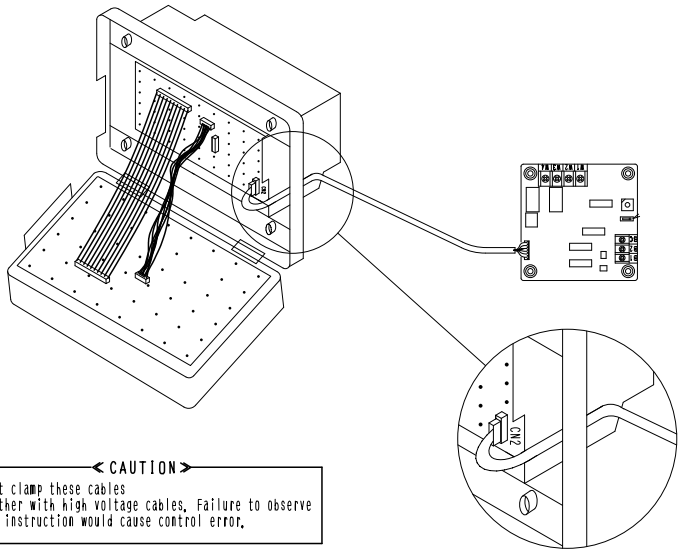


<CAUTION>

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.

Connection for Unification Adaptor

In order to perform total start and stop/situation monitoring from central supervisory board, etc., connect a Unification Adaptor sold separately.
As shown in the sketch below, open the controller and connect the cable from the Unification Adaptor to CN2 connector located on the printed board on the lower case.
If you route the cable in the cable guide groove on the lower case, you can make a smart connection without any slack of the cable.

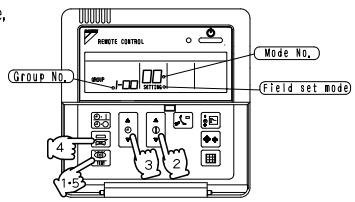


<CAUTION>

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.

⑤ Setting group No. for centralized control

Turn ON the power to the intelligent Touch Controller Following the below procedure, set the group numbers for the indoor units connected to the DⅢ-NET.
This group number is set for each indoor unit system.
(When not using the remote controller, the remote controller is to be connected just for making settings but must be disconnected when finished.)



Pre-paration	● Check no troubles exist with installation and wiring before turning ON the power. ● Turn ON the power to the indoor unit and intelligent Touch Controller Setting is not possible with the power OFF.

● Nothing is wrong with the eguipment if "88" is displayed when power is turned ON. This may happen and the unit may not respond to operation, but the situation should last only a moment.

1	Hold down TEST for 4 seconds or more to enter the field set mode.
2	Press ▲▼ and set the mode NO. to "00"
3	Press ▲▼ and set the group No. Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00,... 4-15 Set the group No. when "GROUP" on the liquid crystal display is flashing. Press the SET button to initiate flashing of "GROUP" on the liquid crystal display.
4	Press SET to set the group No.
5	Press TEST . This will return the system to the normal mode.

- For details on making settings from the simplified remote controller, refer to the instruction manual of the unit.
- For details on making settings of the group No. of the Ventiaire or adapters (wiring adapter for other air conditioners, etc.), refer to the instruction manual of the said unit.

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7.2 DIII NET-plus adaptor

This manual must be read prior to installation.
Make sure the power supply is off when carring out the installation.

WARNING
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

⚠WARNING

Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.
Improper installation may result in electric shocks or fire.

Perform installation work in accordance with this installation manual.
Improper installation may result in electric shocks or fire.

Be sure to use only the specified accessories and parts for installation work.
Failure to use the specified parts may result in electric shocks, fire or the unit falling.

Carry out the specified installation work after taking into account earthquakes.
Improper installation work may result in the equipment falling and causing accidents.

Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.
Improper connections or installation may result in fire.

When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

Before touching electrical parts, turn off the unit.

Ground this unit. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.
Incomplete grounding may result in electric shocks.

Do not reconstruct or change the settings of the protection devices.
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

Do not touch the switch with wet fingers.
Touching a switch with wet fingers can cause electric shock.

Install an leak circuit breaker, as required.
If an leak circuit breaker is not installed, electric shock may result.

DO not install this unit in the following locations.

(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen.
Plastic parts may deteriorate and fall off or result in water leakage.

(b) where corrosive gas, such as sulfurous acid gas, is produced.
Corroding copper pipes or soldered parts may result in refrigerant leakage.

(C) near machinery emitting electromagnetic waves.
Electromagnetic waves may disturb the operation of the control system and result in malfunction of the equipment.

(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or whre volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

⚠CAUTION

Be very careful about product transportation.

Safely dispose of the packing materials.
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them.
If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

⚠NOTE

Install this unit, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

This unit is a class A product.

In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

Before commissioning by a NI (Network Integrator), make sure to turn ON the battery backup switch. If the battery backup switch is in OFF position, even if commissioning is carried out, all data set at commissioning will be cleared when the power supply to DMS504B71 is turned OFF. In such a case, commissioning will be needed again by NI and additional cost will be charged.

The neuron ID is indicated on the control PC Board by seal. See the paragraph 6. Names and function of P.C.B. ASSY.

For safety, lock the door with the key except for maintenance.

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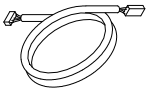
❶ Components

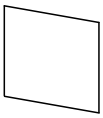
The following parts are attached to this unit.
Make sure to check them before installation.

DCS601A52

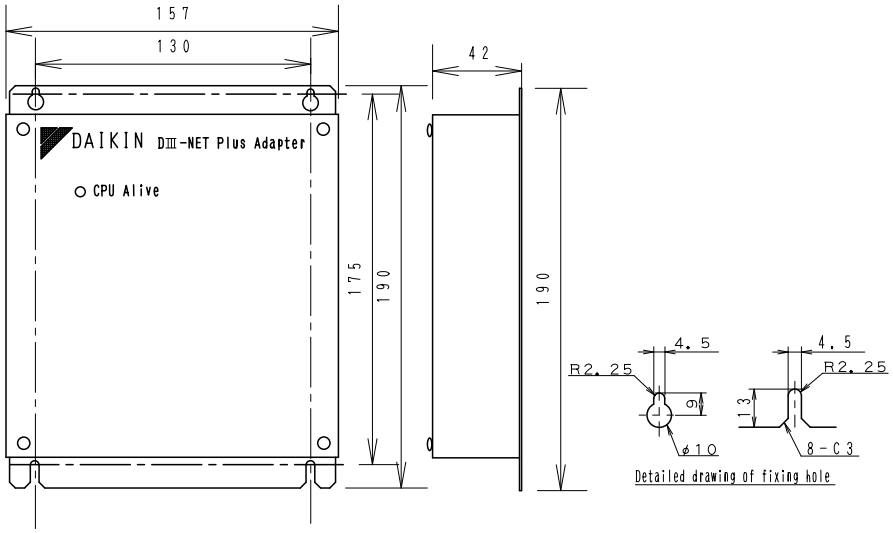
RS232-C Cable (10m)



INSTALLATION MANUAL



❷ Installation



● Make sure to install the unit on the inside of the inaccessible and lockable (or needed to use exclusive tools to open) electrical component box installed indoors where the effect of electromagnetic wave or dust can be avoided.

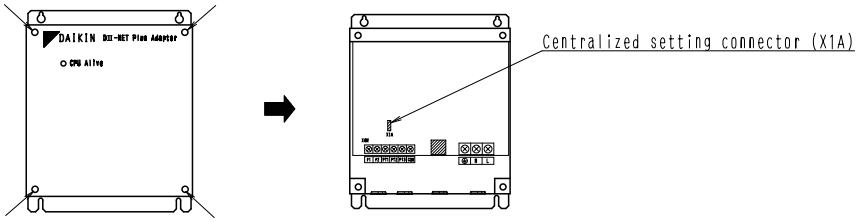
● For installation direction follow the drawing shown below.

Make sure to install the unit vertically. Do not install the unit horizontally, because it may cause malfunction.

1)Electrical rating	(1)Rated voltage and frequency : Single phase 100—240V ~ 50/60Hz	
	(2)Rated power consumption : maximum 5W	
2)Conditions	(1)Power supply fluctuation : ±10%	
	(2)Ambient temperatyre : -10~+40℃	
	(3)Ambient humidity : 10~95% (Sweating is not acceptablle)	
	(4)Preservation : -15~+50℃	
3) Performance : Insulation resistance : 50MΩ or more by DC500 megohmmeter		
4)Mass : 1.2Kg		
5)Colour of the unit : stainless steel sus304-NO.4		

● Please remove a centralized setting connector (X1A), when you use together with BACnet Gateway , IPU , DMS-IF or Parallel interface .

• Remove the 4 screws as shown in the drawing below



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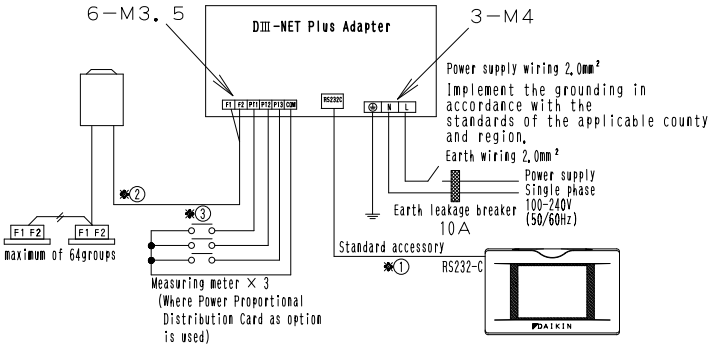
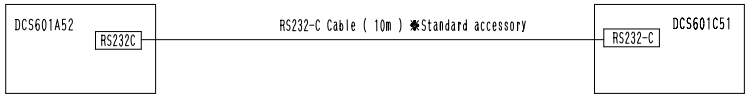
1

❸ Electric Wiring Connection

●Use a round crimp terminal with reinforcing sleeve for safety wiring connection to this unit.

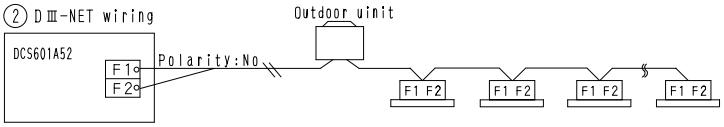


✽① RS232C wiring



Wirings must be isolated from the power lines.

✽② DIII-NET wiring

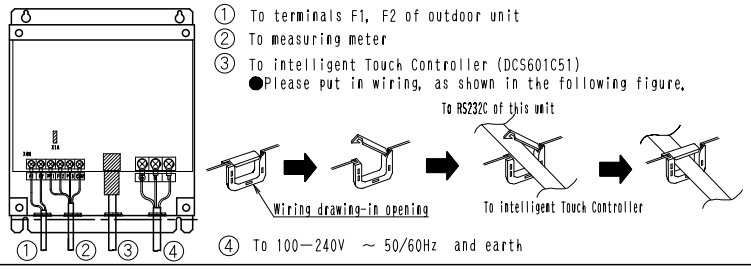


1. Do not use multicore cables with three or more cores.
2. Use wires of sizes between 0.75mm² and 1.25mm²
3. Wire length:Max 1000m
4. Do not bind the wire for DIII-NET
5. Wirings for DIII-NET must be isolated from the power lines.
6. Terminal contact size:M3.5

✽③ Measuring meter 0.75~1.25mm² vinyl cord or cable with up to 150m maximum.

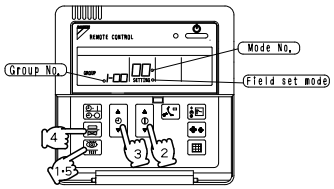
The measuring meters to be connected must meet the requirements specified below.
1. To be a measuring meter with pulse oscillator. (pulse/kwh)
2. Pulse band of 100msec or mores
3. Measuring meter which uses semiconductor relay for pulse output and outputs pulses from non-voltage contact1. Use a no voltage contact.
4. Use a contact which can guarantee minimum application load DC16V and 10mA.
5. Wirings must be isolated from the power lines.
6. Terminal contact size:M3.5.

●How to draw local wiring should follow the following figure.



❹ Setting group No. for centralized control

Turn ON the power to this unit Following the below procedure, set the group numbers for the indoor units connected to the DIII-NET.
This group number is set for each indoor unit system.
(When not using the remote controller, the remote controller is to be connected just for making settings but must be disconnected when finished.)



Pre-paration	● Check no troubles exist with installation and wiring before turning ON the power. ● Turn ON the power to the indoor unit and this unit Setting is not possible with the power OFF.

● Nothing is wrong with the eguipment if "88" is displayed when power is turned ON. This may happen and the unit may not respond to operation, but the situation should last only a moment.

1	Hold down TEST for 4 seconds or more to enter the field set mode.
2	Press ▲▼ and set the mode NO. to "00"
3	Press ▲ and set the group No. Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 4-15 Set the group No. when "GROUP" on the liquid crystal display is flashing. Press the SET button to initiate flashing of "GROUP" on the liquid crystal display.
4	Press SET to set the group No.
5	Press TEST. This will return the system to the normal mode.

• For details on making settings from the simplified remote controller, refer to the instruction manual of the unit.

• For details on making settings of the group No. of the Ventiaire or adapters (wiring adapter for other air conditioners, etc.), refer to the instruction manual of the said unit.

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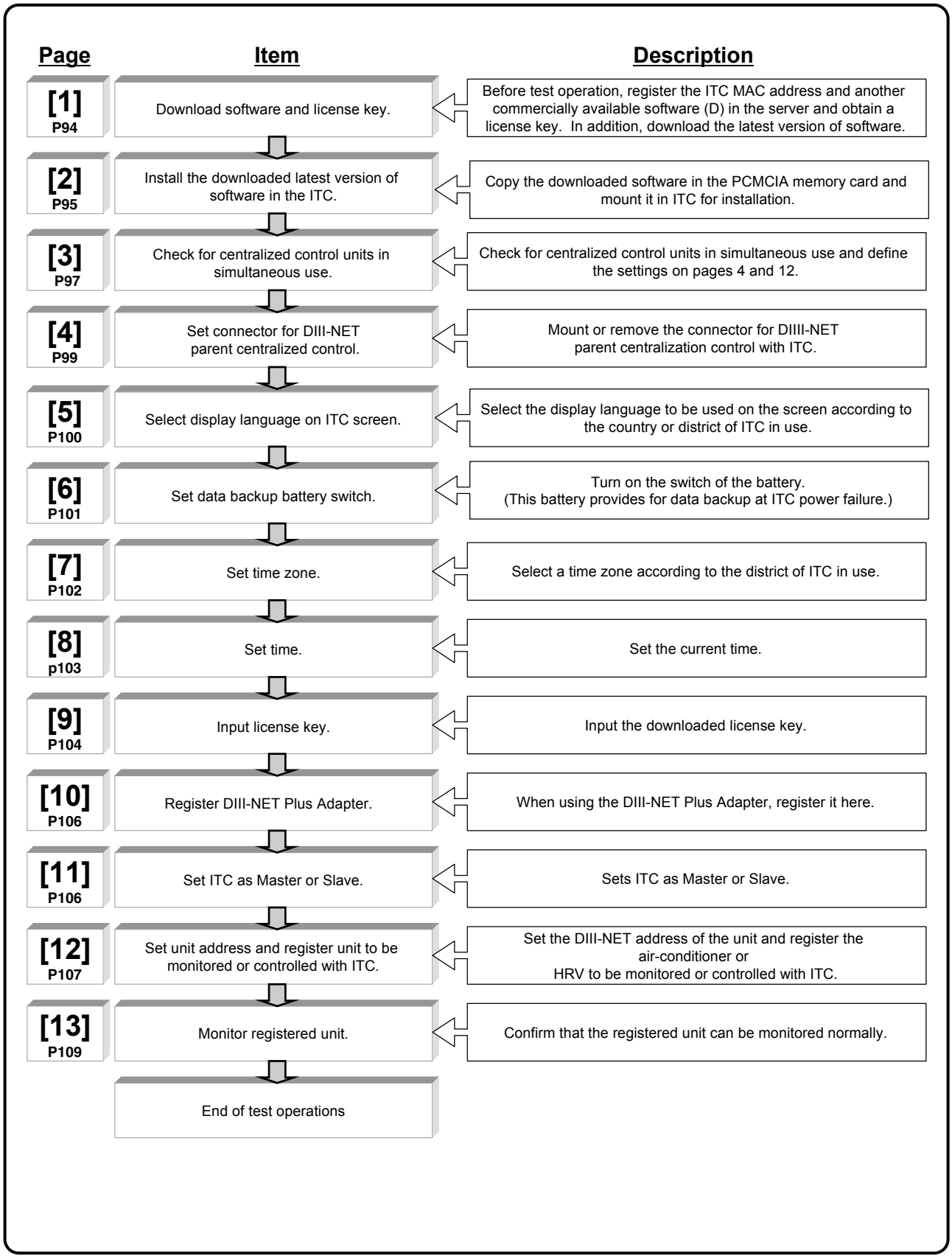
8. Test Run Manual

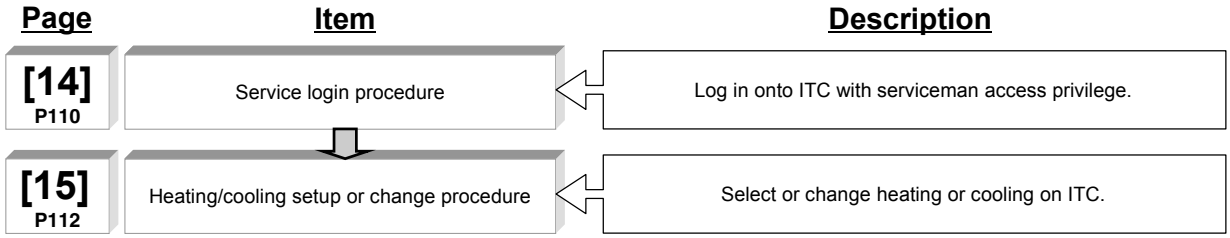
[Intelligent Touch Controller Test Operations Flow] (For New Installation)



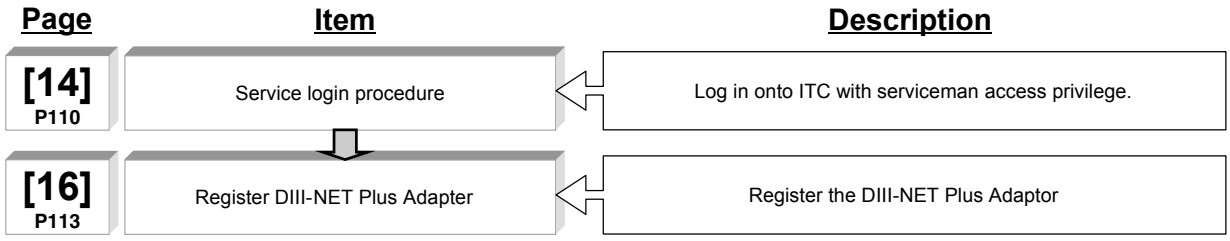
1

[Operations Flow for Changing Settings after Intelligent Touch Controller Test Operations]

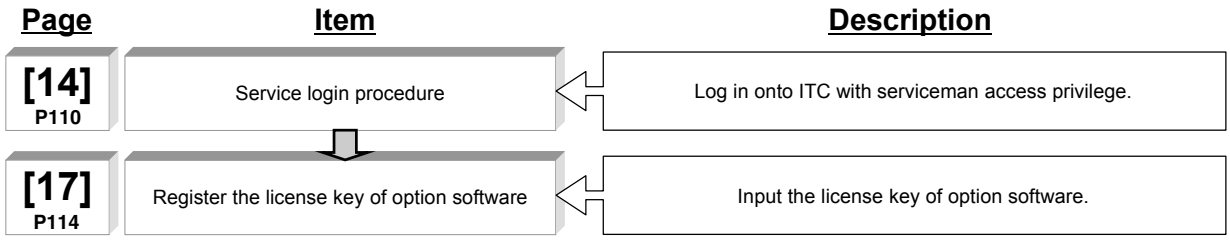
●Select air-conditioner setting (heating or cooling) on ITC



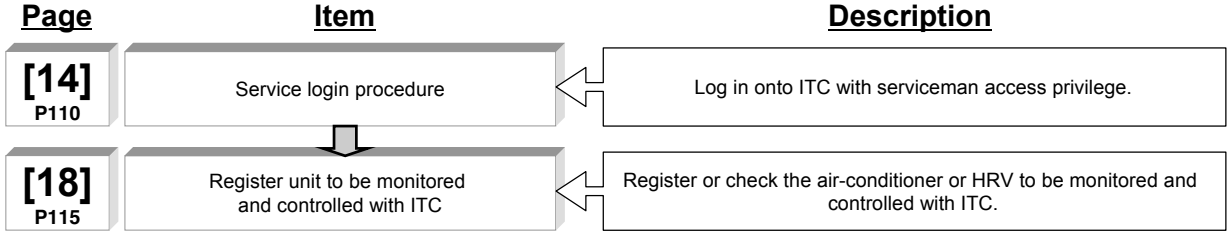
Add DIII-NET Plus Adapter after completion of test operations



●Add option software after test operations



●Add units to be controlled with ITC after test operations



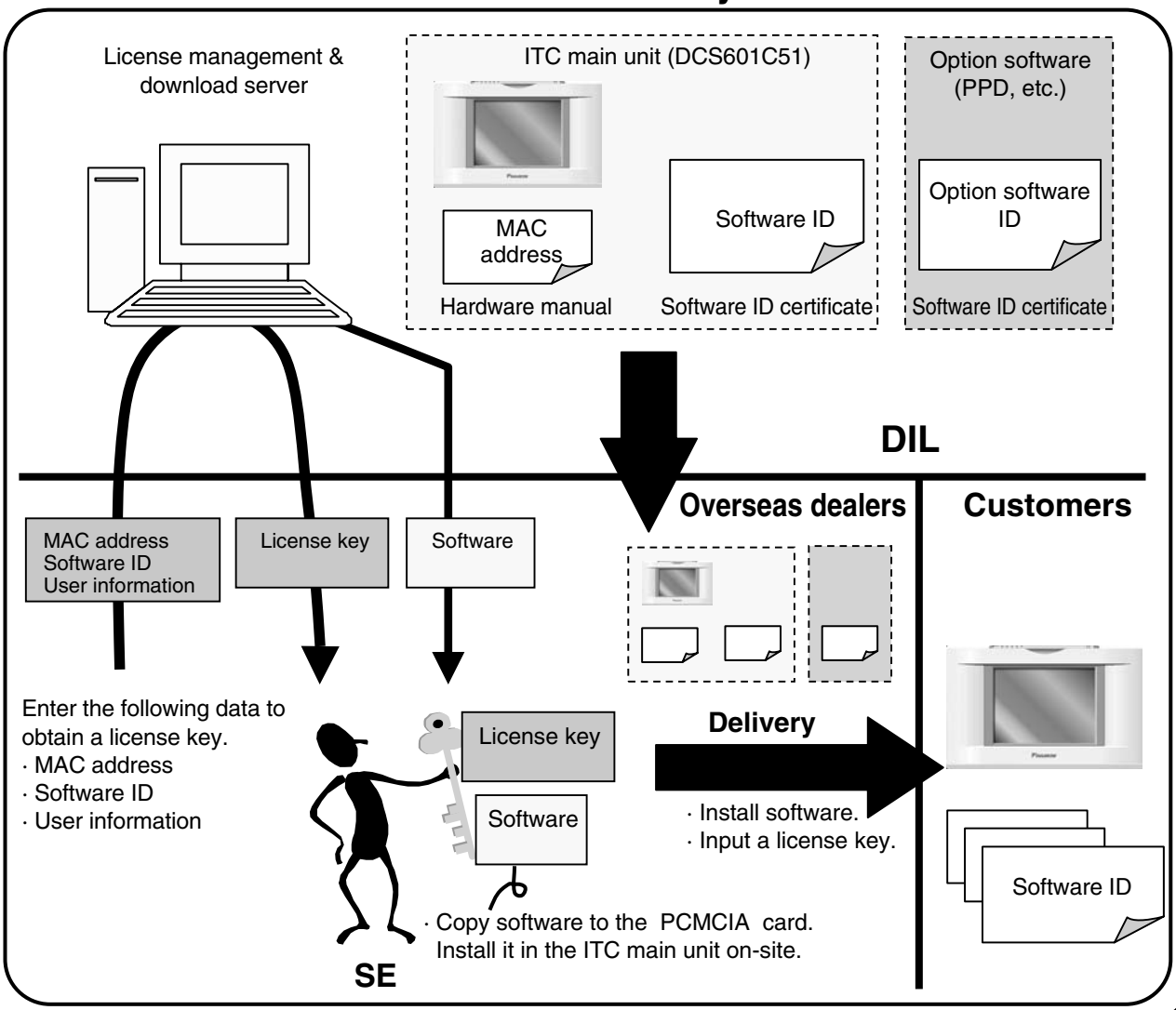
8.1 Download Software and License Key

Before on-site test operations, download ITC installation software and its license key from the license management server.

Operation Outline : (For details, refer to the download manual.)

1. Download the **latest version of software** from the server and copy it to the **PCMCIA card**.
2. Register the MAC address and software ID (this ID comes with the ITC main unit package) in the license **management server to obtain a license key**.

Overview of Software and License Key Server



8.2 Upgrade Software

Figure 1 PCMCIA Card Slot

Figure 2 Reset Switch Position

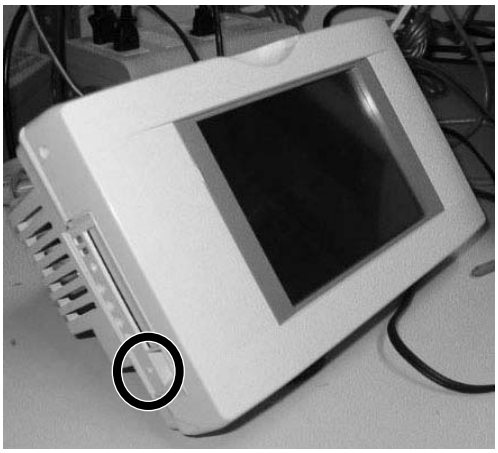
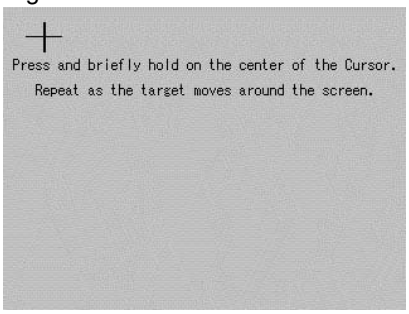


Figure 3 Initial Screen for Software Upgrade

Figure 4 Touch Panel Calibration Screen



The following describes how to upgrade the existing ITC software to the latest version downloaded from the server.

Note: Be sure to download and use the latest version of ITC software.

1. Insert an ITC software PCMCIA card into the PCMCIA card slot at the left side of the ITC main unit.
The location of this slot is indicated by a red circle in Figure 1.

Caution on PCMCIA Card Insertion

Be sure to insert the PCMCIA card into the slot with the card upturned, i.e., with the rear side (with no design nameplate) topside from the viewpoint of the front of the ITC main unit. Incorrect card insertion may damage the card lot.

2. After inserting the card, switch ITC ON. When ITC is already ON, switch it OFF once according to the following procedure.

[ITC Reset Procedure]
The reset switch lies at the left side of the ITC main unit. See the location indicated by a red circle in Figure 2. To reset and restart ITC, push this switch with a tip of the precision screwdriver for about 3 seconds.

3. Switch on or restart ITC to display the initial screen for software upgrade (see Figure 3) on the ITC screen, then touch a desired item on the ITC screen menu.

Figure 4 shows the touch panel calibration screen.

4. Touch the plus (+) marks sequentially with a touch pen according to the directions given on the screen. Upon completion of calibration, the screen (see Figure 5) on the next page is displayed.

Figure 5 Start of Software Upgrade

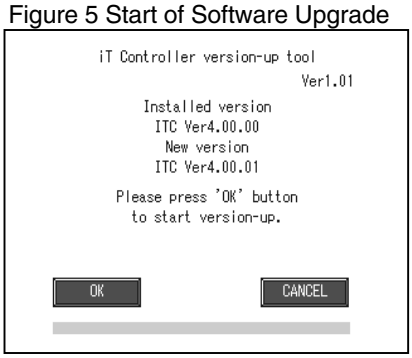


Figure 6 Screen during Software Upgrade

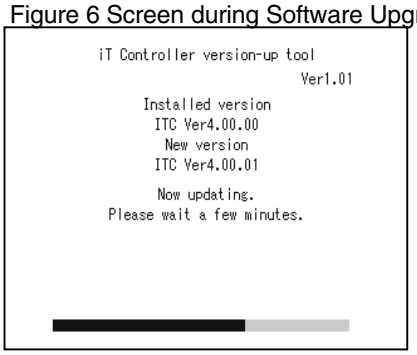


Figure 7 Screen during Software Upgrade

5. Touch the [OK] button to start the software upgrade process on the screen shown in Figure 5.

   This software upgrade takes about 2 minutes.

6. On successful completion of software upgrade, the screen shown in Figure 7 appears. Remove the PCMCIA card from the slot and touch the [Restart] button on that screen to restart the system. Software upgrade is complete through the above steps.
   Now, begin to learn the operations described on the next page.

<Caution>

When restarting the system without removing the PCMCIA card, the software upgrade confirmation screen is displayed again.
In this case, remove the PCMCIA card from the slot while the screen shown in Figure 3 is displayed, then reset the ITC according to the procedure shown on the previous page.

8.3 Check for Centralized Control Devices in Simultaneous Use

ITC requires the following two settings. Note that these settings may vary depending on the types of centralized control units in simultaneous use. Check for centralized control units in each customer and list the necessary ITC settings in the form of the next page, referring to a summary given in the following table before starting to make the settings.

1. Making the setting for the master or slave
   When two ITC's are connected or one central controller and one ITC are used, one unit must be set up as the master and another as the slave.
   (Only the ITC set up as the master permits you to make the settings for remote control permission/inhibition and setup temperature limitation.)
   *Note that the ITC must be set up as the master when only one ITC is available.

2. Setting the connector for DIII-NET parent centralized control
   Attach the connector only to one of the centralized control units connecting to the DIII-NET communication line and remove all the other centralized control units.
   Only the unit provided with the connector supplies power to the DIII-NET communication line.

   Read the following descriptions for master/slave settings and relationship among settings required for DIII-NET parent centralized control.

	Unit name	Connector setup for DIII-NET parent centralized control	Master/slave setup
Upper	I-Manager	Be sure to always mount the connector for parent centralized control.	No master/slave setting required. (Remote control inhibition can be allowed at any time.)
Upper	BACnet Gateway		
Upper	DMS-IF		
Upper	Parallel interface		
Middle	ITC	**For presence of upper unit** ⇒ Remove the connector for parent centralized control. **For absence of upper unit** ⇒ Attach the connector for parent centralized control to one of the middle-grade units for use.	Set one of the **middle** units as the master and another as the slave. Master = Settings for remote control inhibition can be made (when the **upper** unit is not used). Slave = Settings for remote control inhibition **cannot be made**. When the upper unit is used together : ⇒ Settings for remote control inhibition **cannot be made**. ***DIII-The NET PLUS adaptor has no master/slave relationship.**
Middle	Central controller		
Middle	DIII-NET PLUS adaptor		
Lower	ON/OFF controller	**For presence of upper or middle unit** ⇒ Remove the connector for parent centralized control. **For absence of upper and middle units** ⇒ Attach the connector for parent centralized control to one of the **lower** units for use.	For details of master/slave settings on the ON/OFF controller, refer to the D-BACS Design Guide.)

Qty.	Unit name	Connector setup for parent centralized control	Master/slave
1	I-Manager	To be mounted	
	BACnet Gateway		
	DMS interface		
	Parallel interface		
1	ITC	To be removed	Remote control inhibition setting disabled for master
	Central controller		
1	DIII-NET PLUS adaptor	To be removed	
4	ON/OFF controller	1. To be removed 2. To be removed 3. To be removed 4. To be removed	1. Master 2. Slave 3. Master 4. Slave

***Example of entry**

Master/slav : Memo field to be used in setting a connector For DIII-NET parent centralized control. Make an entry, Referring to an example of entry.

- Quantity : Enter the quantity of units connected.
- Connector setup for DIII-NET centralized control Specify whether the unit is a parent or a child
- Master/Slave : Specify whether the unit is a master or a slave.

	Unit name	Connector setup for DIII-NET parent centralized control	Master/slave setting
	I-Manager		
	BACnet Gateway		
	DMS interface		
	Parallel interface		
	ITC		
	Central controller		
	DIII-NET PLUS adaptor		
	ON/OFF controller		

8.4 Set Connector for DIII-NET Parent Centralized Control

Figure 1 Screw Location

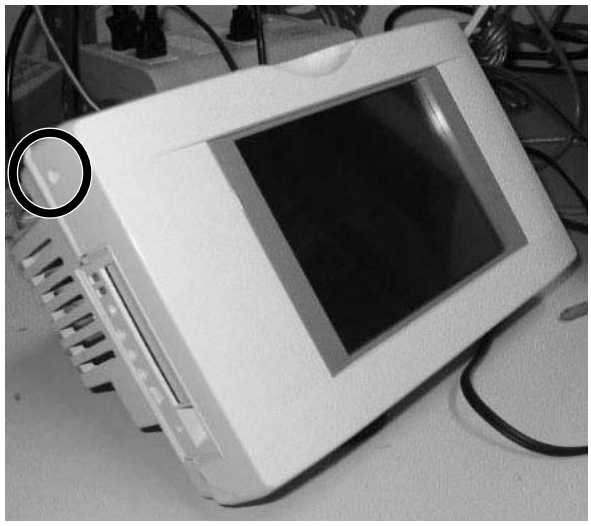


Figure 2 Hook Location

Figure 4

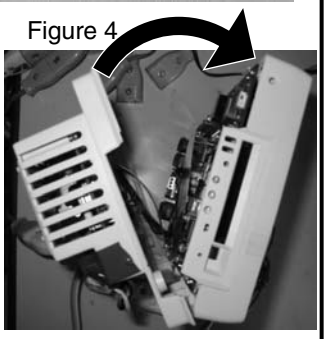
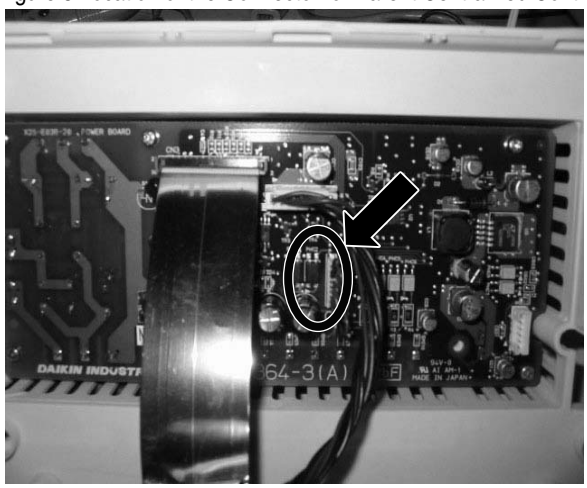


Figure 3 Removing the Panel

Figure 5 Location of the Connector for Parent Centralized Control



<Caution>

To avoid electric shock, confirm that ITC is OFF before starting this operation.
In addition, operators should touch the grounded control panel to remove electricity before starting the operation because the built-in P plate is quite fragile to static electricity.

1. Remove the connector for DIII-NET parent centralized control according to the procedure described on the previous page.

   (This connector is provided at shipping from the factory. When it is not necessary to remove this connector, proceed to the next page because settings on this page are not required.)

   Open the front panel to remove the connector for parent centralized control.
   The front panel has been fixed with a screw at the location indicated by a **red circle** in Figure 1. Remove the screw and view the front panel from the top.

2. The top of the front panel is shown in Figure 2. Push down hooks at the locations indicated by three **red circles** in Figure 2 for easy panel removal. Open the top of the ITC and pull the screen assembly as shown in Figure 4 to detach the front panel.

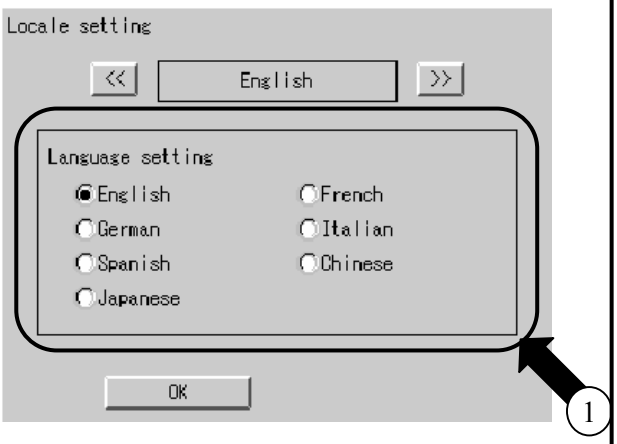
3. The connector (CN1) for parent centralized control lies at the location indicated by a red circle in Figure 3.

   After removing the connector, close the front panel. At this time, don't forget to fix the panel with the screw removed in step 1.

   After closing the front panel, switch on again and confirm that the following screen on the next page is displayed.

8.5 Select Display Language on ITC Screen

Figure 1 Local Setting Screen



Select a display language on the ITC screen according to the requirements of a customer.

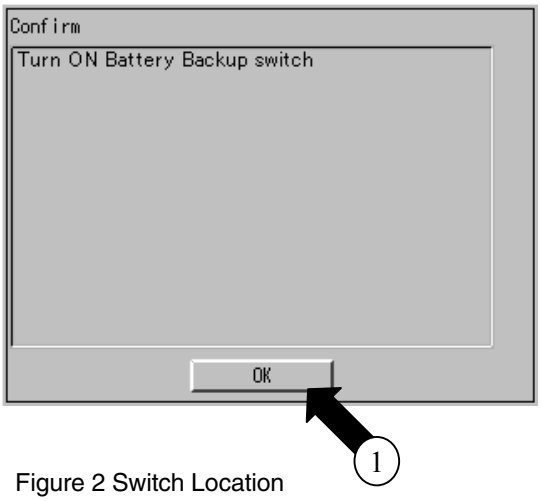
Use the buttons (<< and >>) to touch a radio button for any of the languages on the Locale setting screen.
(This selection does not affect the contents of the setting.)

1. Click a language setting radio button to select a display language to be used on all ITC screens from the pane indicated by (1). After selecting the radio button, touch the [OK] button to set up the selected display language as the new language.

   Next, the subsequent page of screen is displayed.

8.6 Set Data Backup Battery Switch

Figure 1 Battery Backup Switch Confirmation Screen



Set a switch to enable the use of a data backup battery. When this switch is already set, the screen shown in Figure 1 does not appear. In this case, proceed to the setup operations on the next page.

1. When the battery backup switch is OFF, the confirmation screen is displayed as shown in the left-hand figure. In this case, turn on this switch according to the following procedure.

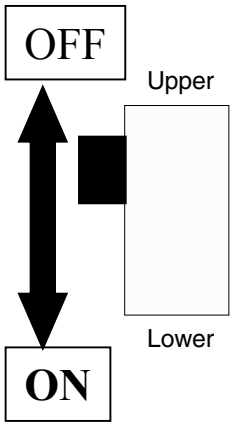
Figure 2 Switch Location

2. The following describes how to turn on the battery backup switch.

   The battery backup switch lies at the left side of ITC (location indicated by a **red circle** in Figure 2). The enlarged view is shown in Figure 3.

Figure 3 Switch Location

Figure 4 Switch Drawing



3. The location of the battery backup switch is indicated by a **red circle** in Figure 3. Manipulate this switch with a tip of the precision screwdriver.

   The interior of the switch is shown in Figure 4. Slide the knob to the upper side for OFF and **slide it to the lower side for ON**.

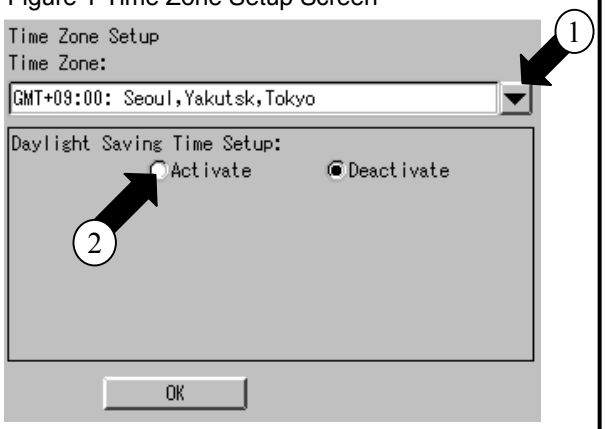
4. Slide the knob to the lower side for ON, then touch the [OK] button indicated by (1) in Figure 1 to display the next page of screen.
   (When the knob has been placed in position for ON, the screen shown in Figure 1 is displayed again. Push the OK button (1) again.)

<Caution>

Be sure to turn on the battery backup switch. When this switch is OFF, time data etc. may be lost at power failure.

8.7 Set Time Zone and Summer Time

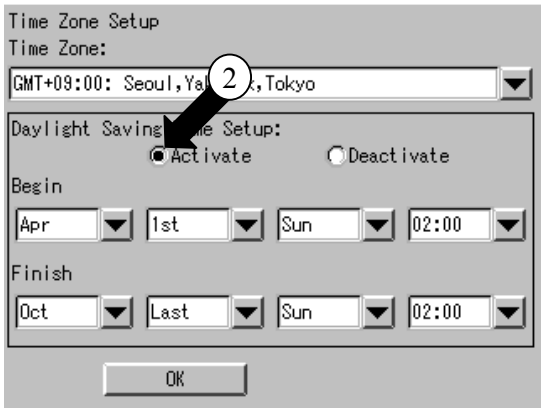
Figure 1 Time Zone Setup Screen



Set a time zone according to your district where the intelligent touch controller (ITC) is used.

1. Figure 1 shows a time zone setup screen.
   Click the button indicated by (1) to display a pulldown menu.
   Then, select a desired time zone from the world time zones in this pulldown menu.

Figure 2 Summer Time Setup Screen



When automatically using the ITC time based on the summer time, make the following settings in the corresponding fields :

1. To set the summer time, select a radio button indicated by (2) and make “activate” the summer time setting effective. On the screen shown in Figure 2 perform the following two settings :

   - Starting date and time for Summer time
   - Ending date and time for Summer time

   Click the button ( ) to the right of each field to display the pulldown menu.
   Then, set a desired date and time on the displayed pulldown menus.

   After making the necessary settings, touch the [OK] button. The time zone and summer time are set up and the next page of screen is displayed.

8.8 Set ITC Date and Time

Figure 1 Time Setup Screen

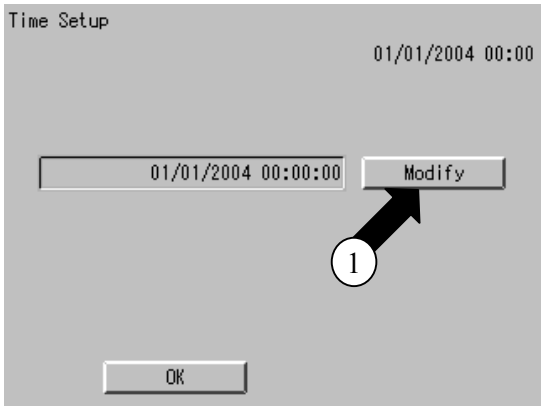
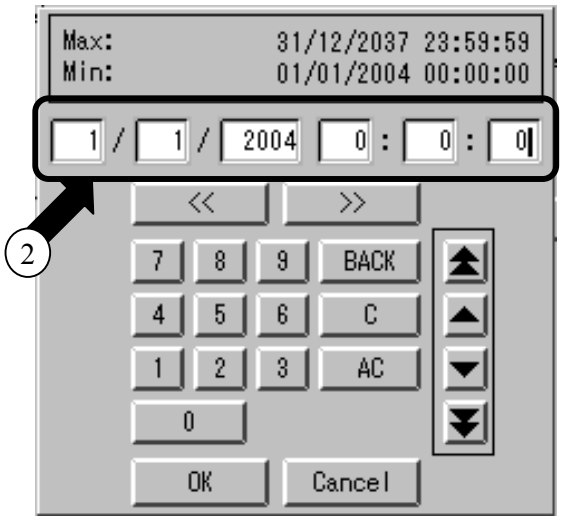


Figure 2 Time Setup Dialog



The following describes how to set the current date and time.

1. Push the Modify button (1) to display the Time Setup screen shown in Figure 2.

2. Use the following buttons to set the date and time. After setting them, touch the [OK] button to determine the current date and time.
   Next, the subsequent page of screen is displayed.

   *** Descriptions of buttons**

Selects a text box item to the left of the current item as a new change item.

Selects a text box item to the right of the current item as a new change item.

Increments a change value in units of 10.

Decrements a change value in units of 10.

Increments a change value in units of 1.

Decrements a change value in units of 1.

The date and time can be set within a range from 1/1/2004 00:00:00 to 31/12/2037 23:59:59.

<Caution>

The fields of the time setup text box (2) may be displayed in different order, depending on the order of language selection made in 6. Select a Display Language on the ITC Screen.
Example) English – Day/Month/Year Hr : Min : Sec
Japanese – Year/Month/Day Hr : Min : Sec

8.9 Input License Key

8.9.1 For Basic Software

Figure 1 License Key Input Screen

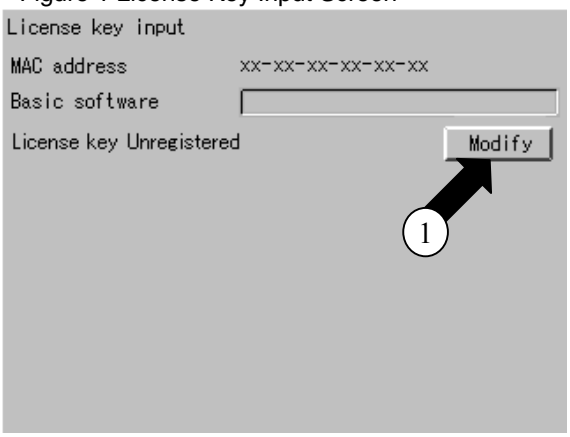


Figure 2 Keyboard Dialog

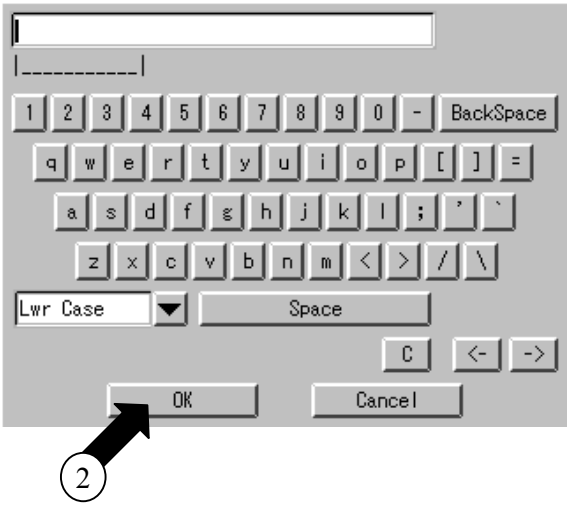
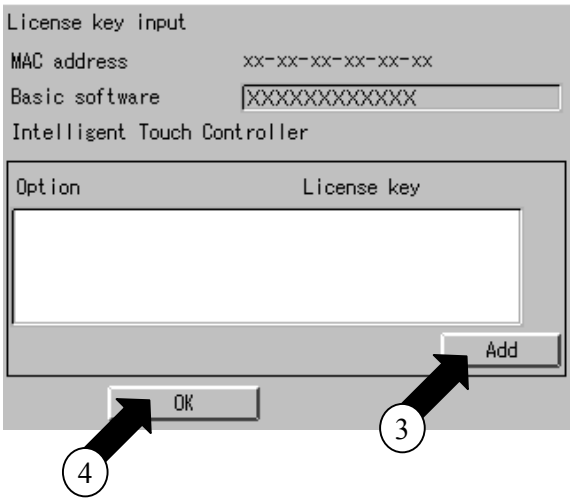


Figure 3 Screen after License Key Input



ITC does not run unless software is installed as shown in Section 8.2 and its license key is input according to the following procedure in this section. This section describes how to input a license key for basic software.
(*For license key acquisition, refer to Section 8.1.)

1. Push the [Modify] button (1) to display the keyboard dialog shown in Figure 2.
   Input your license key on this keyboard.
   (The license key is case-sensitive. Care should be taken to input the uppercase and lowercase letters of the key to ensure that license key registration can take place successfully.)

The following gives a brief description of operations on the keyboard dialog.

*** Descriptions of Buttons**

▼	Changes the keyboard (switching of uppercase and lowercase letters, Spec-U and Spec-L)
<-	Moves the cursor left by one character.
->	Moves the cursor to right by one character.
C	Clears all the input characters.
BackSpace	Deletes the character just before the cursor.

After completion of license key input , touch the [OK] button (2) to determine the input key.

The screen shown in Figure 3 appears when a license key for basic software is input.

When it is necessary to input a license key for option software immediately after that for basic software, touch the [Add] button (3) in Figure 3.

Confirm that the screen shown in Figure 1 on the next page is displayed. Input a license key for option software according to the procedure described on the next page.

When it is not necessary to input a license key for option software, touch the [OK] button (4) and confirm that the restart confirmation screen is displayed, then restart ITC.

Upon successful ITC restart, the screen in Section 8.11 is displayed.

8.9.2 For Option Software

Figure 1 License Key Input Screen

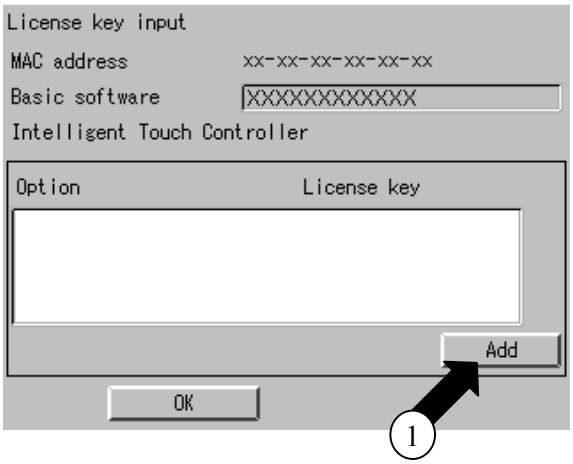


Figure 2 Keyboard Dialog

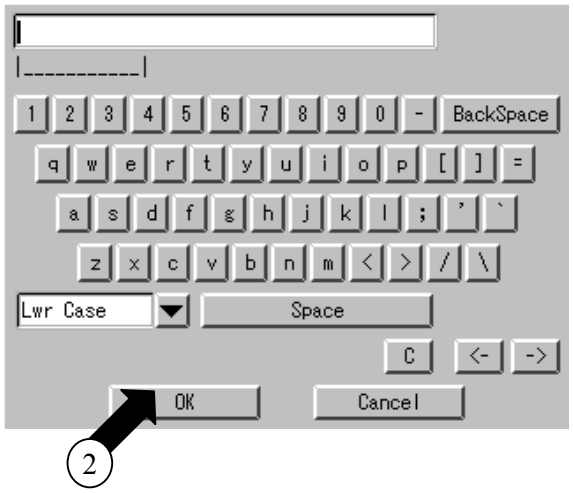
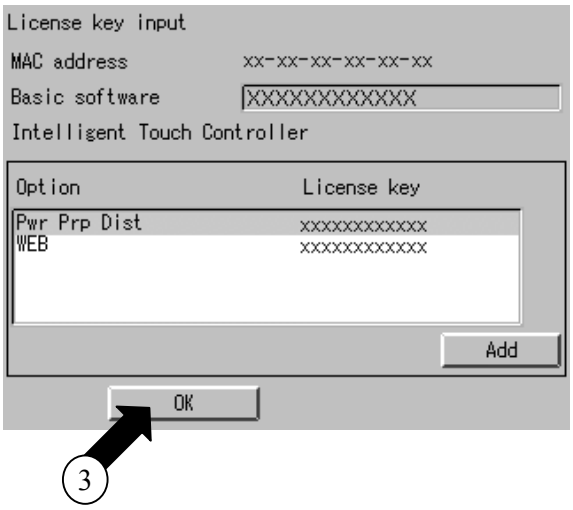


Figure 3 Screen after License Key Input



This section describes how to input a license key for option software.
(*For license key acquisition, refer to Section 8.1.)

1. Push the [Add] button (1) to display the keyboard dialog. Input your license key for option software on this keyboard.
   (The license key is case-sensitive. Care should be taken to input the uppercase and lowercase letters of the key to ensure that license key registration can take place successfully.)

The following gives a brief description of operations on the keyboard dialog.

*** Descriptions of Buttons**

▼	Selects a text box item to the left of the current item as a new change item.
<-	Moves the cursor left by one character.
->	Moves the cursor left by one character.
C	Clears all the input characters.
BackSpace	Deletes the character just before the cursor.

After completion of license key input , touch the [OK] button to determine the input key.

The option content appears when a license key for option software is input.

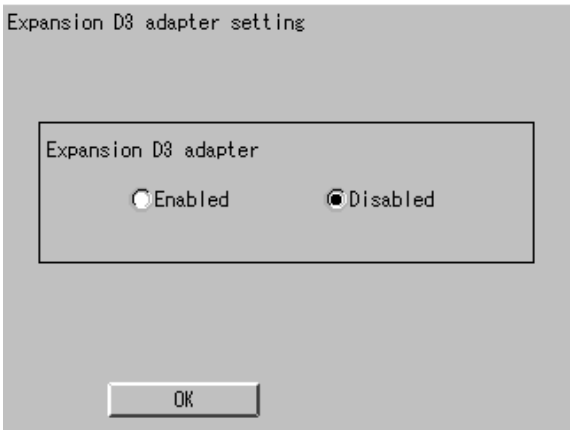
After adding all the option software license keys, touch the [OK] button (3) to determine the input license keys.

Then, confirm that the restart confirmation screen is displayed and touch the [OK] button to restart ITC.

Upon successful ITC restart, the next page of screen is displayed.

8.10 Register DIII-NET Plus Adaptor

Figure 1 DIII-NET Plus Adapter Setup Screen



When connecting a DIII-NET Plus adaptor (option) to ITC, be sure to register it according to the setup procedure described in this section.
When the DIII-NET Plus adaptor is not connected, you need not make this setup operation.

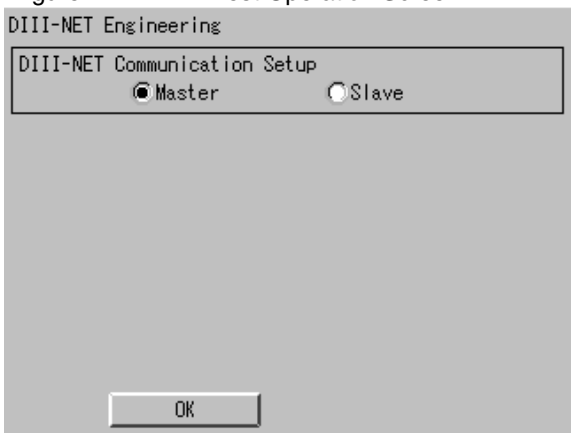
1. Make the setting for enabling or disabling the DIII-NET Plus adaptor. When the DIII-NET Plus adaptor has been connected, select an [Enable] radio button on the setup screen (Figure 1). Otherwise, select a [Disable] radio button on that screen.

2. After making the setting, touch the [OK] button to complete the setting for the DIII-NET Plus adaptor.

Then, confirm that the next page of screen is displayed.

8.11 Set ITC as Master or Slave

Figure 1 DIII-NET Test Operation Screen



Set ITC as master or slave based on the information items arranged in Section 8.3.

1. Select “Master” or “Slave” for ITC.
   * When only one ITC is available, be sure to select a radio button for Master.

2. After making this selection, touch the [OK] button and confirm that the next page of screen is displayed.

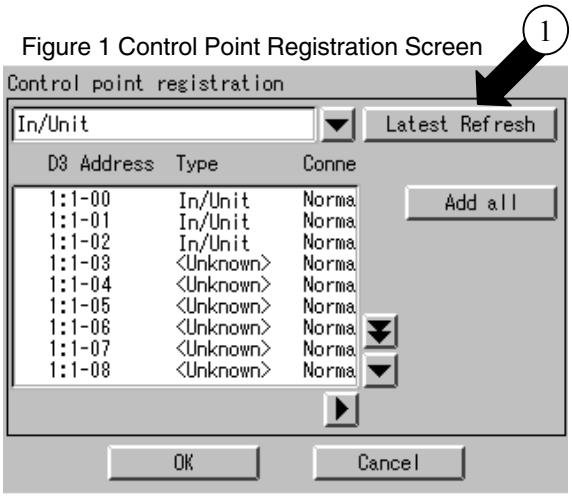
   (Note the following points when other centralized control units are also available :)
   · Remote control permission/inhibition and setup temperature limitation are available only with ITC set as master.
   When upper units such as I-Manager, etc. are used together, remote control permission/inhibition is not available regardless of whether ITC is set as the master or slave.

8.12 Set Unit's DIII-NET Address and Register Unit to be Monitored and Controlled with ITC

8.12.1 For Air-Conditioner

This section describes how to set the DIII-NET addresses of all units to be monitored and controlled with ITC (setting can be made with the remote control at hand) and register the above units.

Figure 1 Control Point Registration Screen



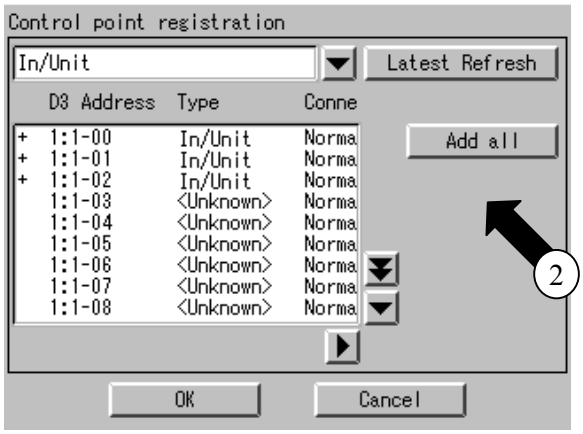
1. On the ITC screen (Figure 1), enter in order the addresses of units to be monitored and controlled. After entering the addresses of all units, touch the [Latest Refresh] button (1) to confirm that the latest connections are listed.
   * Connecting field
     Confirm that "Normal" is displayed in the Connecting field for units whose addresses have been set.
   * Type field
     When the connected unit is an in-house unit, "In/Unit" is displayed in the Type field if the [Latest Refresh] button (1) is touched.

When the Type and Connecting fields are not refreshed even if the above [Latest Refresh] button (1) is touched, wait a while and touch it again.

(Note: It takes time to recognize the units.)

When the connected unit is a Di unit, Dio unit or HRV, the Type field is not refreshed, i.e., it remains "Unknown" even if the [Latest Refresh] button is touched. The setting methods are described on the next page by unit type.

Figure 2 Screen after In/Unit Addition



2. Add the control units of air-conditioners as follows. First, confirm that "Normal" is displayed in the Connecting field for all air-conditioners whose addresses have been set, then touch the [Add all] button (2) and confirm that the "+" mark is displayed at the left end of the address of each air-conditioner for which "Type=In/Unit", "Connecting=Normal" are displayed.

   When the control points are all air-conditioners, proceed to setup operations in Section 8.12.3.

   When they are HRV, Di and Dio except air-conditioners, register them according to the procedure shown on the next page.

8.12.2 Except Air-Conditioner

Figure 1 Control Point Registration Screen

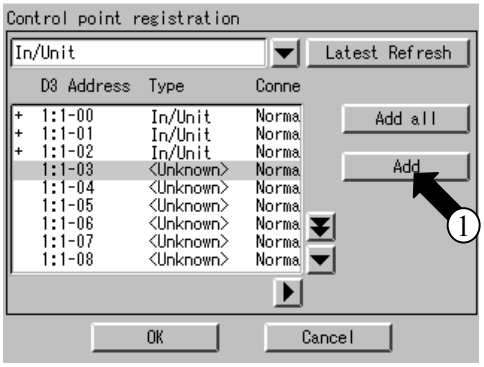


Figure 2 Add Type Selection Screen

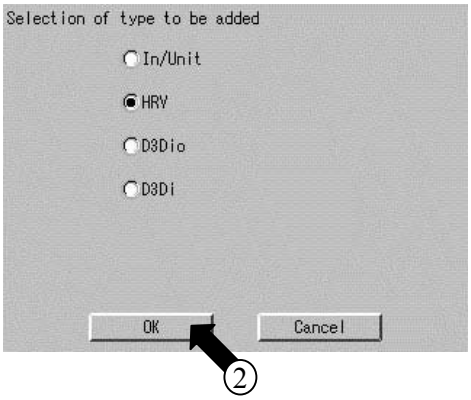


Figure 3 Control Point Registration

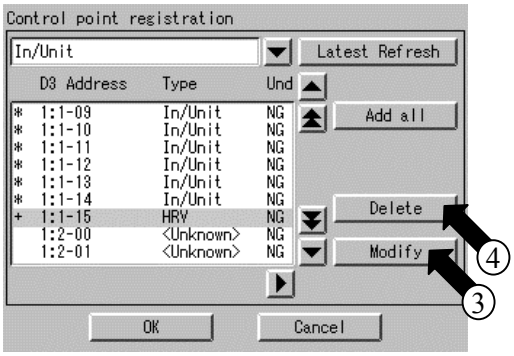
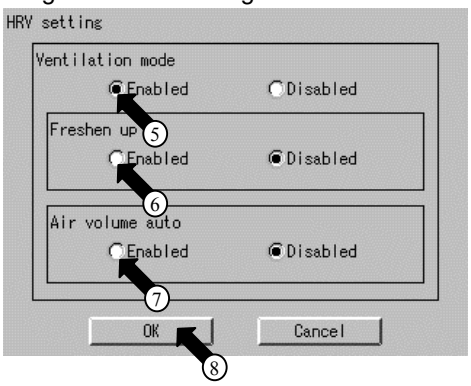


Figure 4 HRV Setting



1. Set the addresses of units according to step 1 on the previous page.

   After setting the addresses of HRV, Di unit and Dio unit, add the respective control points manually.

   Select the address to be added as a control point to display the [Add] button (1) and touch it. When the [Add] button is touched, the [Add Type Selection] screen (Figure 2) is displayed.

2. Select the unit type of the control point to be added. Select a radio button for the target unit type and touch the [OK] button (2).

Confirm that the Control Point Registration screen is displayed as shown in Figure 3.

3. Select the HRV address and touch the [Modify] button (3) only when “HRV” has been selected in the above step 2.
   Then, confirm that the HRV Setting screen is displayed as shown in Figure 4.

   When other than HRV has been selected in the above step 2, proceed to step 5.

4. When the tailing part of an HRV unit name indicates a GA or the subsequent (i.e., HRV marketed on and after 2005), select the [Enable] radio buttons at (5), (6) and (7) and touch the [OK] button (8).

   Confirm that the screen (3) is displayed again.

   For units marketed earlier than GA, select the related radio buttons for [Disable] in principle.

   Operations for Control Point Deletion
   Select the control point to be deleted on the screen shown in Figure 3, then touch the [Delete] button (4). The “-” mark is displayed at the left end of the address for each of the deleted control points.

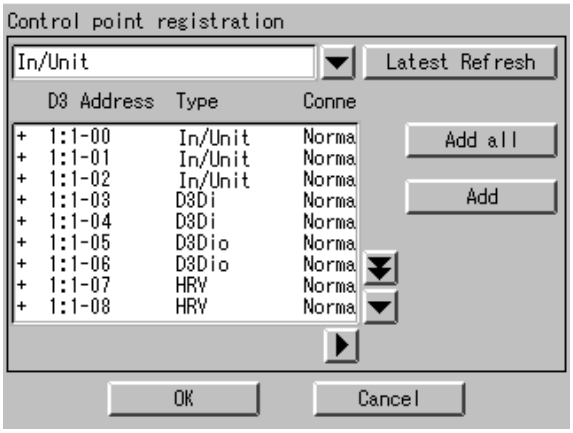
5. Confirm that the “+” mark is displayed at the left end of the address set.

   Repeat the steps 1 to 4 for each unit whose address must be set.

   Finally, make the settings on the next page.

8.12.3 Fixing Control Points

Figure 1 End of Control Point Addition



Fixing Control Points

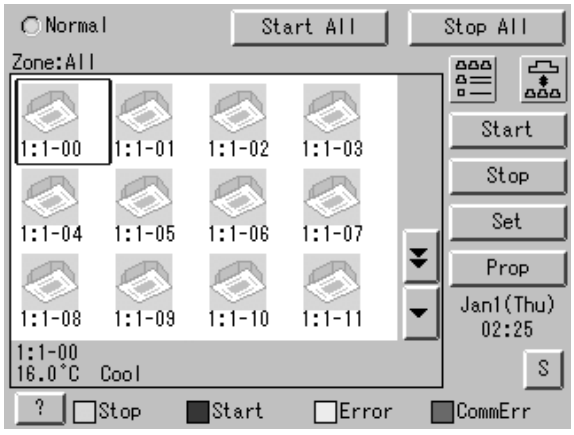
Confirm that the “+” mark is displayed for each of the units to be monitored and controlled with ITC and touch the [OK] button.

Touch the [OK] button, confirm that the restart confirmation screen is displayed and restart the ITC according to the directions displayed on the screen.

After restart, the main screen is displayed as shown on the next section.

8.13 Monitor Registered Units

Figure 1 Main Screen



Confirm on the main screen that the units registered on the previous section can be monitored.

Check whether or not the units registered in Section 8.12 are all displayed on the main screen.

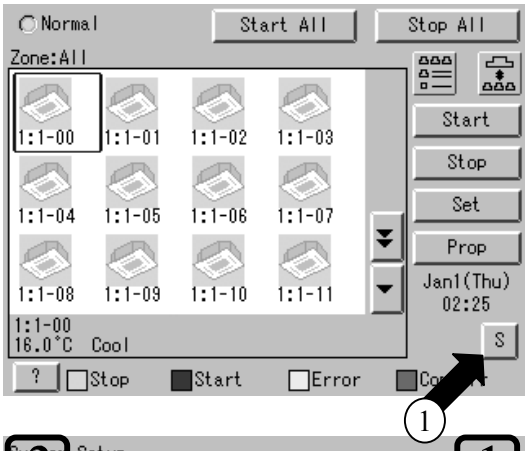
When there is a registered unit that does not appear on the main screen, display the service menu according to the procedure shown in Section 8.14 “Service Login,” select “Control Point Registration” and register that unit by performing the procedure shown in Section 8.18.

Upon completion of this confirmation, all test operations are complete.

8.14 Service Login

8.14.1 Service Login on System Menu

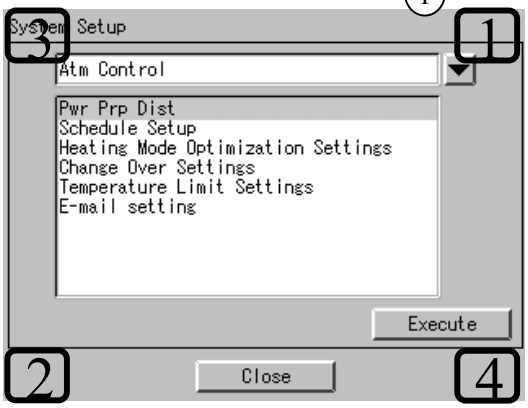
Fig. 1



Sections 8.14.1 and 8.14.2 describe how to display the dedicated menus (for exclusive use by servicemen) in changing the ITC settings again after completion of test operations.

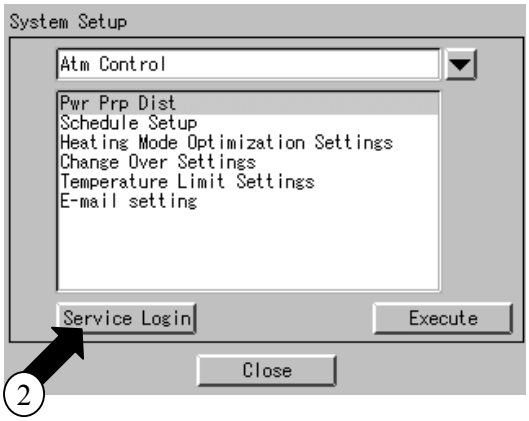
1. Click the [S] (System) button (1) on the main screen to display the System Setup screen (Figure 2).

Fig. 2



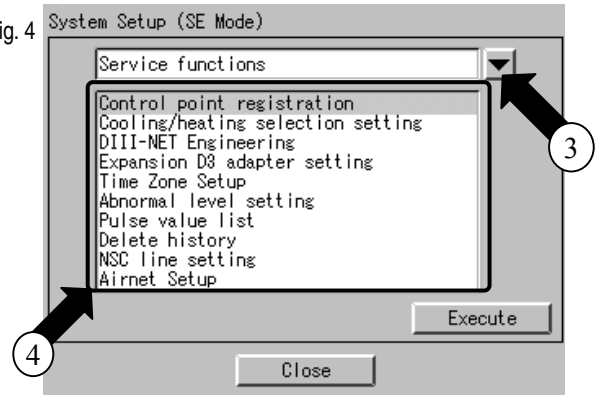
2. Click four locations on the screen: upper right, lower left, upper left and lower right.
   (Click them in order according to numbers (1-4) on the screen.)

Fig. 3



3. Confirm that the [Service Login] button (2) is displayed on the screen.
   Click this button to display the service/password input screen, then type “daikin” in lowercase letters on that screen.
   (Don’t type it in uppercase letters.)

Fig. 4



4. Click  (3) to display the pulldown menu, then select “Service functions” on that menu.
   In this way, the dedicated menu for servicemen can be displayed.

8.14.2 Service Login during Administrator Password Protection Setting

Figure 1 Main Screen

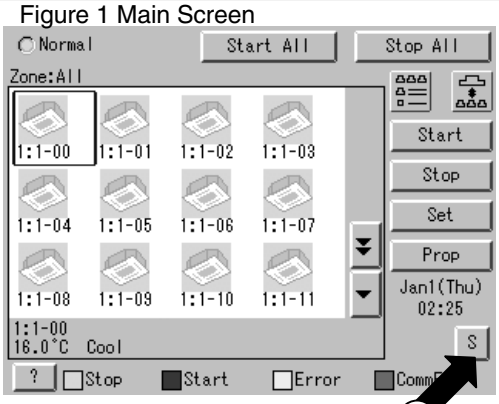


Figure 2 Admin. Password Input Screen

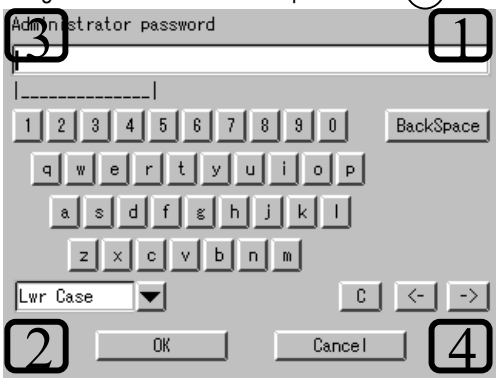


Figure 3 Service Password Input Screen

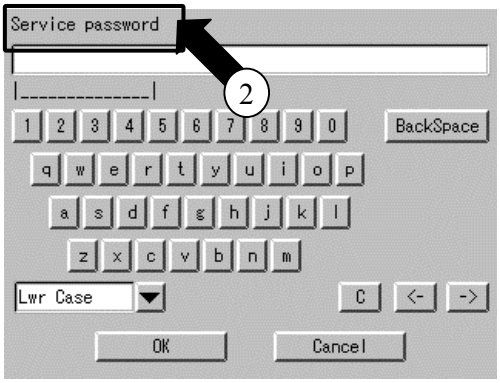
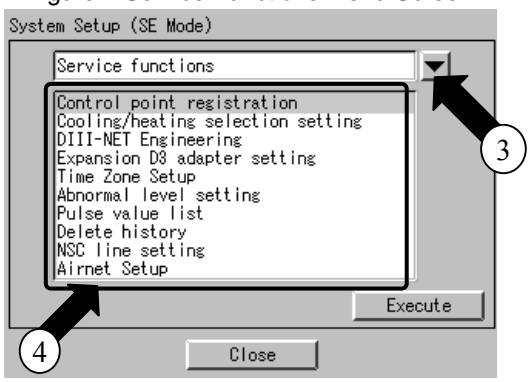


Figure 4 Service Functions Menu Scree



Sections 8.14.1 and 8.14.2 describe how to display the dedicated menu for servicemen in changing the settings after completion of test operations.

1. Click the [S] (System) button (1) on the main menu. When the [S] button has been locked with the administrator password (Figure 2), the administrator password input screen is displayed.

2. Click four locations on the administrator password input screen : upper right, lower left, upper left and lower right (concretely, touch them as numbered 1 to 4 in the left-hand figure).
   The administrator password input screen changes to the service password input screen shown in Figure 3 (character string at (2) changes to Service password).

3. Type “daikin” in lowercase letters on this screen. (Don’t type it in uppercase letters.)

   The System Setup screen (SE Mode) shown in Figure 4 is displayed.

4. Click  (3) to display the pulldown menu, then select “Service functions” on that menu.
   In this way, the dedicated menu for servicemen can be displayed.

8.15 Set Cooling/Heating Control in In-house Air-conditioner with ITC

Figure 1 Cool/Heat Selecting Screen

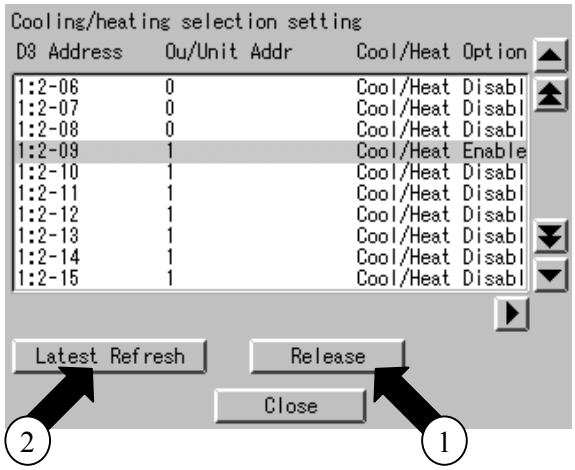


Figure 2 Now Selectings

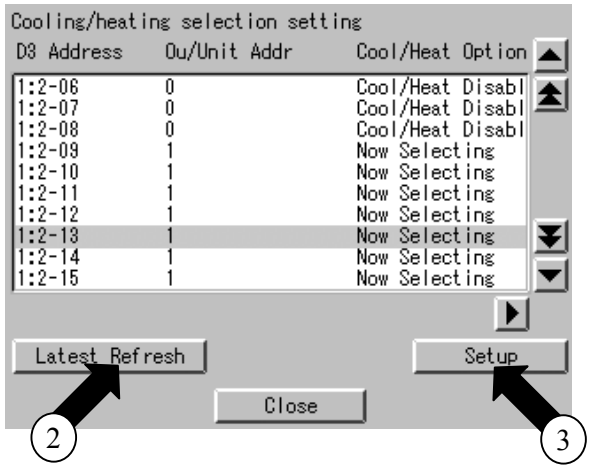
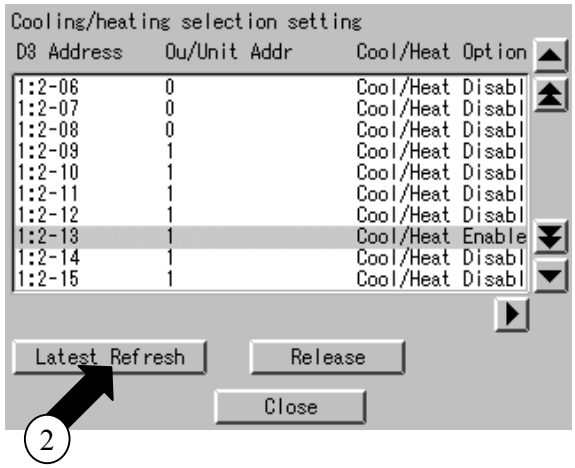


Figure 3 Screen after Cooling or Heating Option Selection



In the in-house air-conditioner, cooling/heating control is usually assigned with the hand-held control, but its settings (cooling or heating) can be changed with ITC. The procedure is described in this section.

1. Long in according to the procedure described in Section 8.14 “Service Login” and select “Service functions.” Select “Cool/Heat selection setting” on the menu and confirm that the screen (see Figure 1) appears.
   The screen shown in the left-hand column appears when the cooling or heating mode has been selected in advance. In this example, the cooling/heating mode has been set for 2-09.

2. The following gives an example of operation.
   <Example> Operations for transferring cooling/heating control to 2-13
   Click the [Release] button (1) to reset cooling/heating control set for 2-09, then touch the [Latest Refresh] button (2).

3. Confirm that “Now Selecting” is displayed for all Cool/Heat Options within the same refrigerant series address (“1” in this example).
   (When “Now Selecting” is not displayed, wait for a while and touch the [Latest Refresh] button (2) again.)

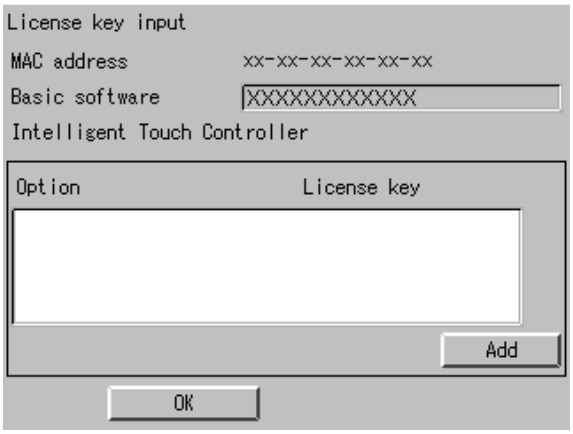
4. With 2-13 selected, touch the [Setup] button (3).

5. Confirm that “Cool/Heat Enable” is displayed for Cool/Heat Option in 2-13 and “Cool/Heat Disable” is displayed for all other Coo/Heat Options within the same series address (“1” in this example).
   (When “Cool/Heat Enable” or “Cool/Heat Disable” is not displayed, wait for a while and touch the [Latest Refresh] button (2) again.)

   After this confirmation, touch the [Close] button to terminate the setup operation for cooling/heating control assignment.
   All the settings have been changed through the above steps.

8.16 Add Option Software after Test Operations

Figure 1 License Key Input Screen



The following describes how to add option software after completion of test operations.

1. Perform service login according to the procedure shown in Section 8.14 “Service Login” and select “System.”
   Then, select “License key input” on that screen and touch the [Execute] button to confirm that the License Key Input screen (see Figure 1) is displayed.

2. Input the license key as described in Section 8.9 “Input License Key.” Be sure to check the license key input in Section 8.9 in advance for correct key input in this field.

After license key input, touch the [OK] button to determine the key input.

8.17 Add DIII-NET Plus Adaptor after Test Operations

Figure 1 Service Functions Menu Screen

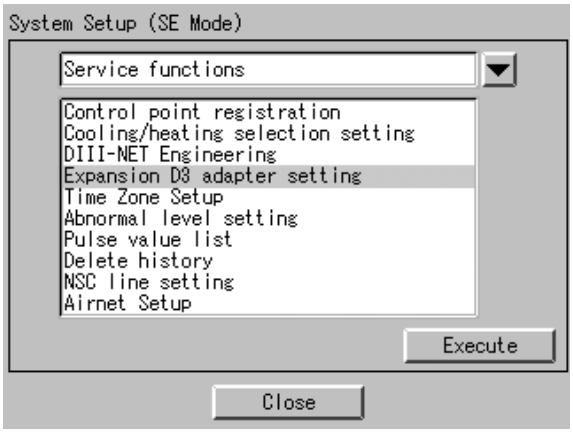
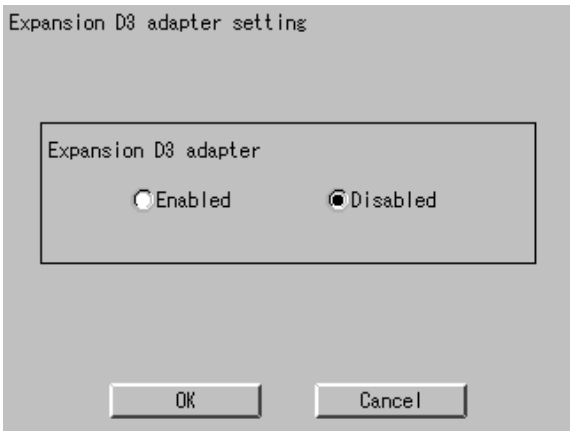


Figure 2 DIII-NET Plus Adaptor Setup Window



The following describes how to add the DIII-NET Plus adaptor.

1. Perform service login according to the procedure shown in Section 8.14 “Service Login” and select “Service functions.”
   Then, touch “Expansion D3 adapter setting” on that screen to confirm that the screen shown in Figure 2 is displayed.

2. When enabling the DIII-NET Plus adaptor, touch an [Enable] radio button. Otherwise, select a [Disable] radio button.
   Then, touch the [OK] button to determine the setting and confirm that the restart confirmation screen is displayed.

   Next, touch the [OK] button to restart ITC according to the direction given on that screen.

   * : When removing the attached DIII-NET Plus adaptor, be sure to delete all control points connected to this DIII-NET Plus adaptor according to the descriptions given in **“Operations for Control Point Deletion”** (Refer to Section 8.12.2) before directly changing the setting from Enable to Disable on this screen.

8.18 Connect Additional Units to ITC

8.18.1 For Air-Conditioner

Figure 1 Control Point Registration Screen

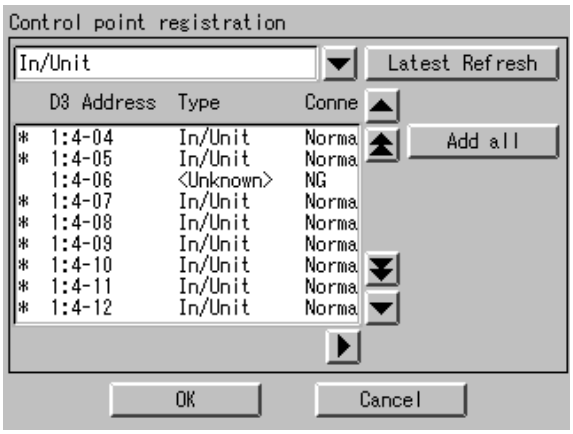


Figure 2 Addition of Control Points

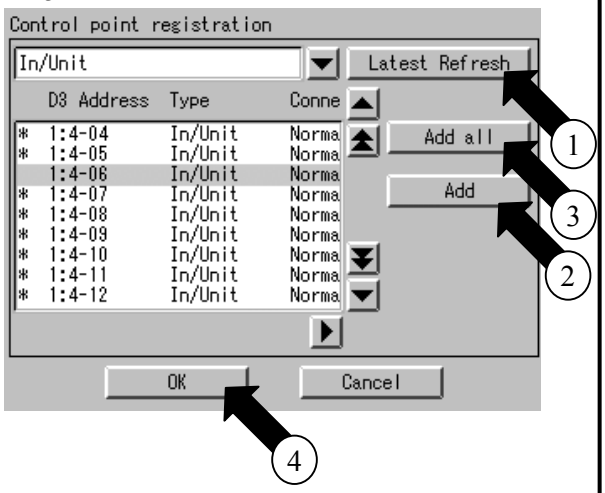
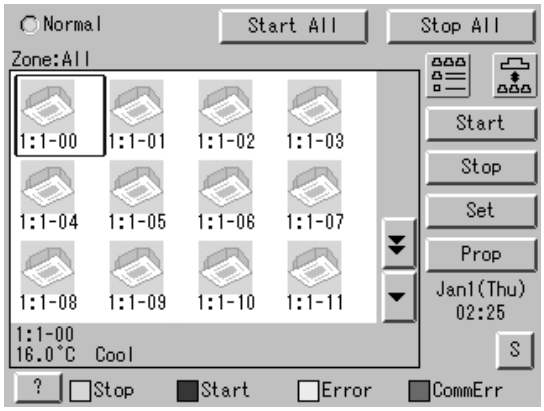


Figure 3 Main Screen



The following describes how to connect additional units to ITC after completion of test operations.

1. Set the DIII-NET address of an additional unit to be connected to ITC.

2. Perform service login according to the procedure shown in Section 8.14 “Service Login” and select “Service functions.”
   Then, select “Control point registration” on the menu and confirm that the screen shown in Figure 1 is displayed.

   When address setting is complete, “Type=<Unknown>”, “Connecting=NG” is initially displayed for the newly added unit.
   In this status, touch the [Latest Refresh] button (1).

3. Confirm that “Normal” is displayed in the Connecting field for an air-conditioner whose address has been set.
   (When “NG” remains, wait for a while and touch the [Latest Refresh] button (1) again.)
   (When “Normal” is not displayed regardless of retry, check whether address setting has been made correctly.)

   After confirm that “Normal” is displayed in the Connecting field, select the address of a unit to be added and touch the [Add] button (2).
   (When there are multiple units to be added, repeat the address setting steps and touch the [Add all] button (3).
   Then, confirm that the + mark is displayed at the left end of the address and touch the [OK] button (4).
   Finally, restart ITC according to the direction given on the screen.

4. When the added unit can be monitored on the screen displayed after ITC restart, it can conclude that it has been added (connected) to ITC successfully.

   * : When deleting control points, read the descriptions under the heading **“Operations for Control Point Deletion”** (Refer to 8.12.2).

8.18.2 For Other Equipment

Figure 1 Control Point Registration Screen

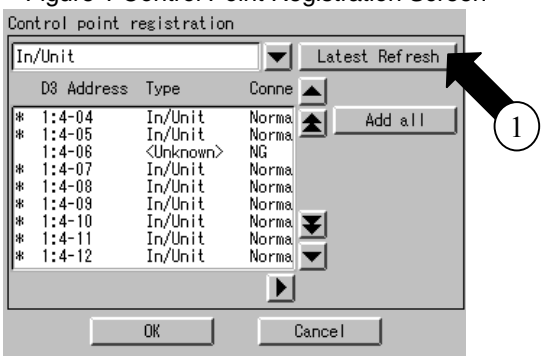


Figure 2 Addition of Control Points

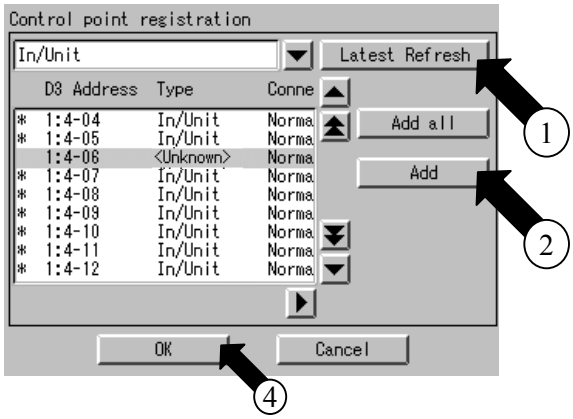


Figure 3 Add Type Selection Screen

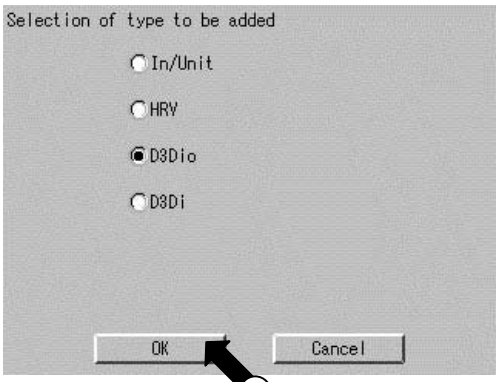
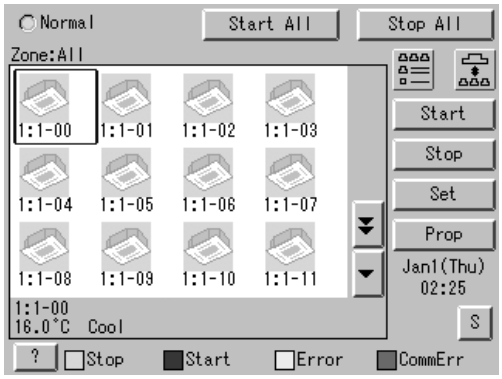


Figure 4 Main Screen



The following describes how to connect additional units to ITC after completion of test operations.

1. Set the DIII-NET address of an additional unit to be connected to ITC.

2. Perform service login according to the procedure shown in Section 8.14 “Service Login” and select “Service functions.”
   Then, select “Control point registration” on the displayed menu and confirm that the screen shown in Figure 1 is displayed.

   When address setting is complete, “Type=<Unknown>”, “Connecting=NG” is initially displayed for the newly added unit.
   In this status, touch the [Latest Refresh] button (1).

3. Confirm that “Normal” is displayed in the Connecting field for an air-conditioner whose address has been set.
   (When “NG” remains, wait for a while and touch the [Latest Refresh] button (1) again.)
   (When “Normal” is not displayed regardless of retry, check whether address setting has been made correctly.)

   After confirming that “Normal” is displayed in the Connecting field, select the address of a unit to be added and touch the [Add] button (2) to confirm that the Add Type Selection (see Figure 3) screen is displayed.

4. Select the unit type of a control point to be added. Then, select the unit type with a radio button and touch the [OK] button (3).
   Then, confirm that the screen shown in Figure 2 is displayed again and the selected unit type is displayed in the Type field.

   When the added unit type is HRV, make the settings shown in steps 3 and 4 in Section 8.12.2.

   Then, touch the [OK] button (4) and restart ITC according to the direction given on the screen.

5. When the added unit can be monitored on the main menu displayed after ITC restart, it can conclude that the unit has been added (connected) to ITC successfully.

* : When deleting control points, refer to the descriptions under the heading **“Operations for Control Point Deletion.”**

Part 2
Power Proportional Distribution Card Operation Manual

1. Function and Outline

Power Proportional Distribution Card, in combination with an existing intelligent Touch Controller, enables to proportionally calculate and display electricity amount used by air conditioner per indoor unit.

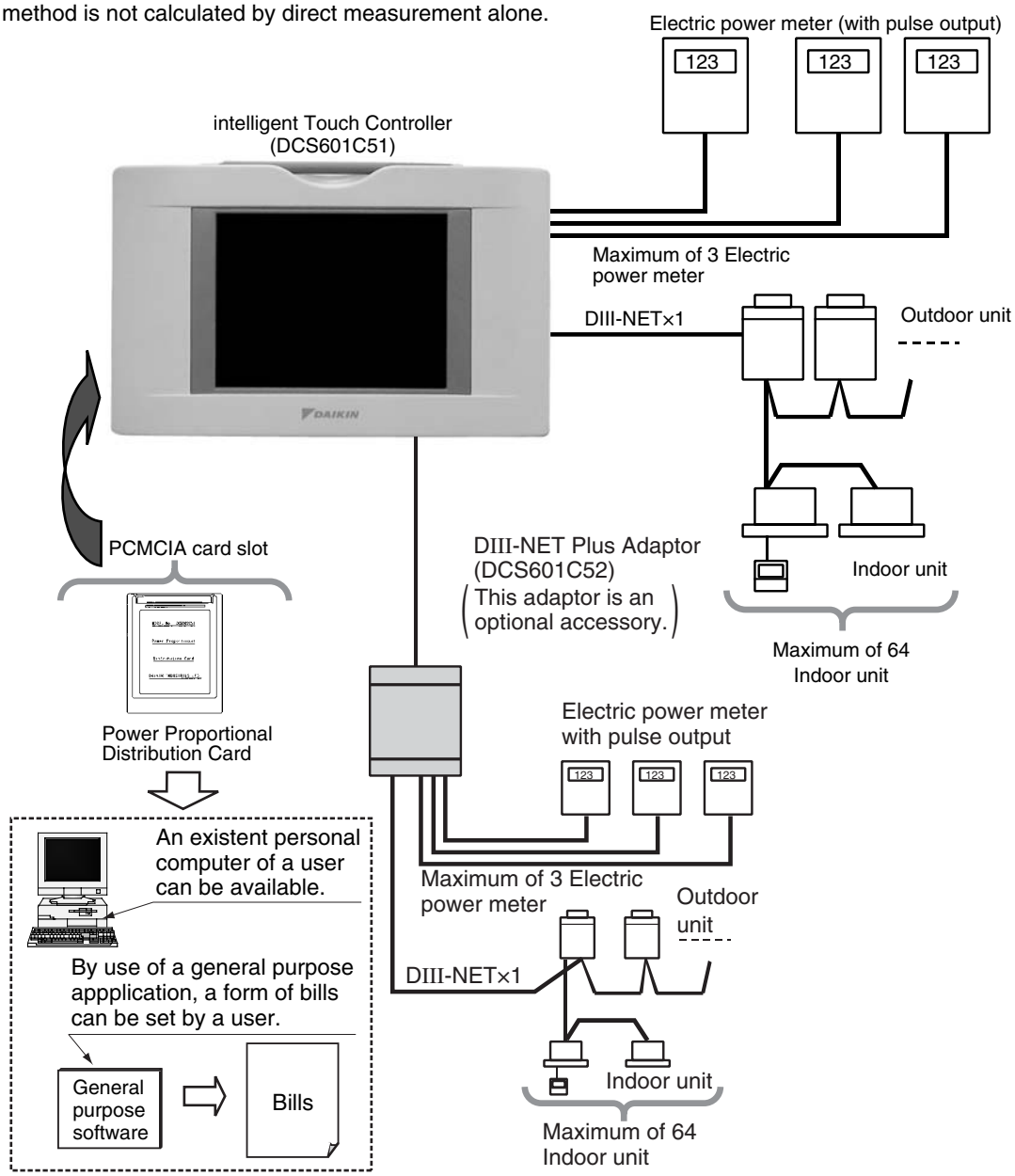
1.1 Main Functions

Power proportional distribution results data can be saved for 12 months. (max. 12 months and 30 days)

- Per intelligent Touch Controller, power proportional distribution can be calculated for 64 indoor units at maximum.
- When DIII-NET Plus Adaptor is connected, power proportional distribution can be calculated for more 64 indoor units at maximum (a total of 128).
- 3 Electric power meters at maximum can be connected to an intelligent Touch Controller.
- When DIII-NET Plus Adaptor is connected, more 3 Electric power meters at maximum (a total of 6) can be connected.
- Power proportion distribution results data can be saved into a PCMCIA card.
  Data is saved CSV format generally applied to personal computers, so bills can be issued by use of a general purpose table calculation software package in easy manners.
  (A personal computer and a general purpose table calculation software package can be available separately.)

1.2 Precautions

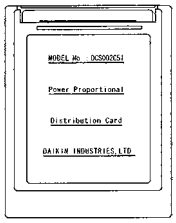
This system calculates electricity consumptions by size of indoor units, run time, expansion vales open gap, suction rate and the number of pulses from the power meters installed at the Outdoor Units.
This method is not calculated by direct measurement alone.

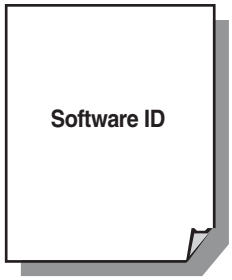


2. Preparation

2.1 Checking Attachments

Power proportional Distribution Card includes the following attachments.

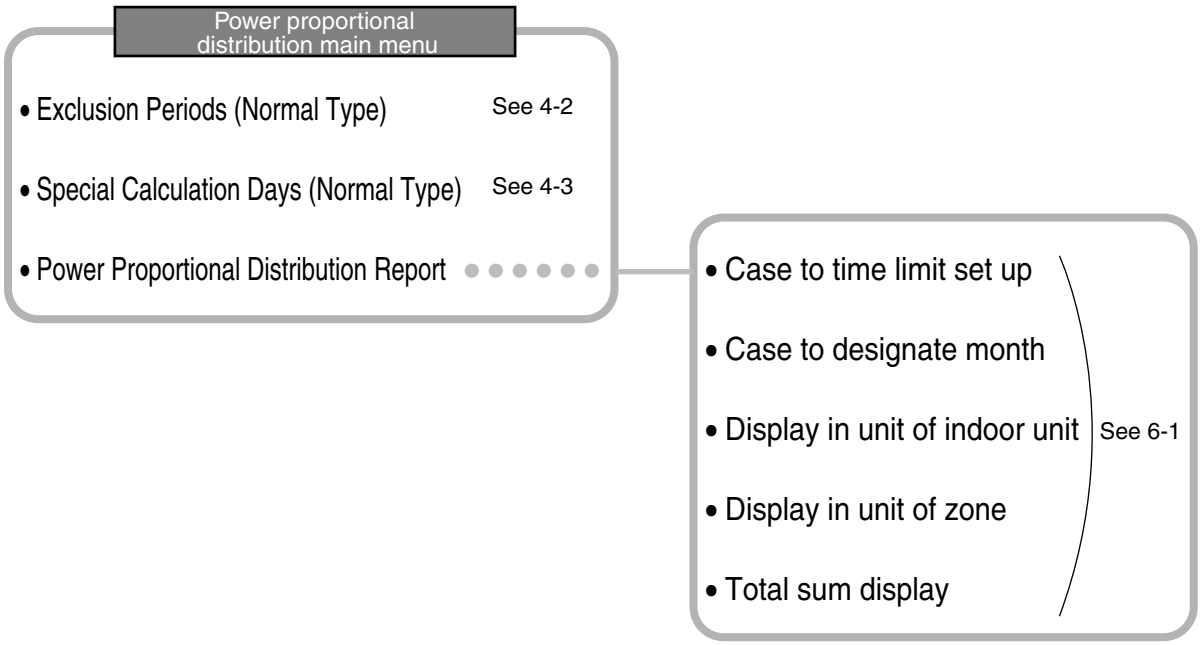




2.2 How to Connect

To activate the power proportional distribution function, it is necessary to set the program by use of the attached PCMCIA card and carry out a trial operation. Before use, consult your supplier.

3. Simplified Chart



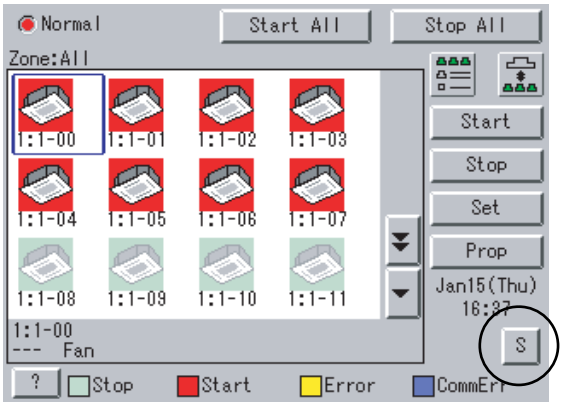
CAUTION

As for how to set current clock time, refer to the manual attached to intelligent Touch Controller.

4. Initial Setup

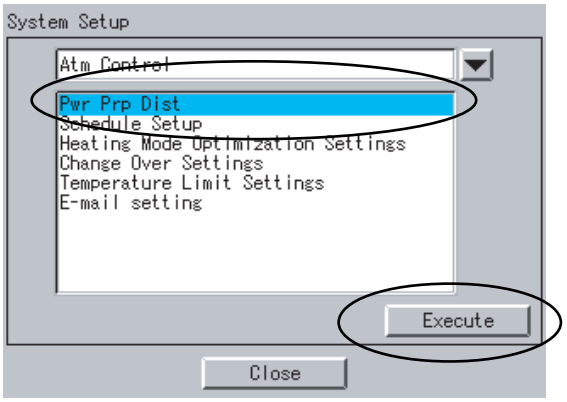
4.1 Power Proportional Distribution Main Menu

Settings of Power Proportional Distribution is made via the system setup menu.
To display the system setup menu, press the S button at the bottom on the screen.



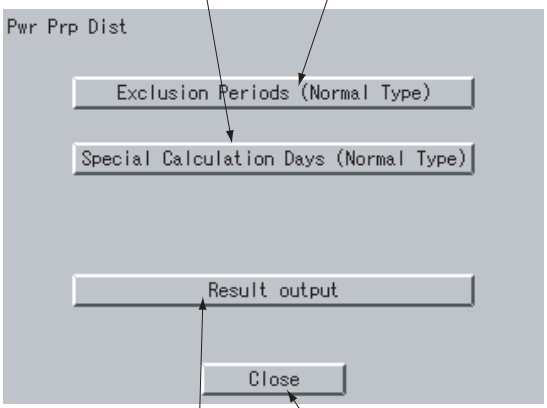
Press S button of the fundamental screen.

When the S button is pressed, the screen shown below will appear.
Press “Pwr Prp Dist” in the system setup menu to display it inverted, and then press Execute button.



To set Special Calculation Days (Normal Type), press this button on the screen.

To set Exclusion Periods (Normal Type), press this button on the screen.



To set Power Proportional Distribution Report, press this button on the screen.

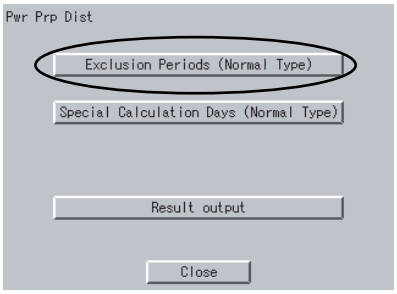
To get back to the previous screen, press this button on the screen.

NOTE

- Before initial setup, be sure to set the current clock time.

4.2 How to set Exclusion Periods (Normal Type)

This function is only for normal type, and exclusion periods where Power Proportional Distribution calculation is not carried out and week days may be set. For example, it can be used when to collect fixed charges during day time in week days and carry out Power Proportional Distribution calculation only for overtime work and holiday work. Time zone can be set per week day. By the way, this setup is of all system, and it is impossible to make different settings in unit of zone.

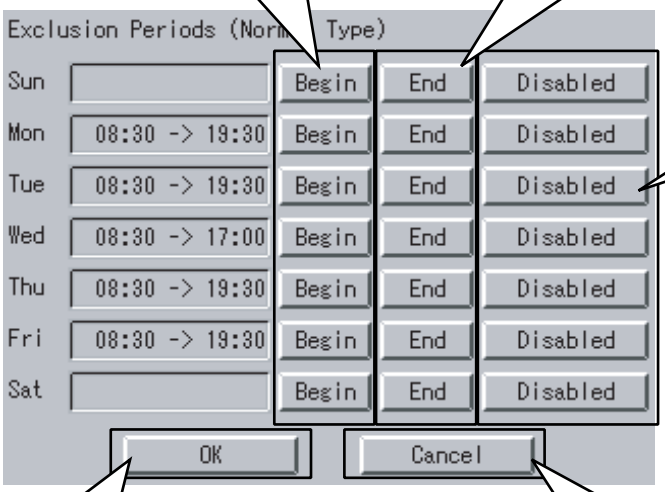


Press Exclusion Periods (Normal Type).

1 How to set Begin Time
Press Begin button of the week day you want to set, and set the begin time in exclusion periods where Power Proportional Distribution calculation is not carried out.
*The numeric keyboard appears. Set Begin Time.

2 How to set End Time
Press End button of the week day you want to set, and set the end time in exclusion periods where Power Proportional Distribution calculation is not carried out.
*The numeric keyboard appears. Set End Time.

3 How to cancel time setting
When to cancel Exclusion Periods where Power Proportional Distribution calculation is not carried out , press Disabled button.



4 When to end setup, press OK button.

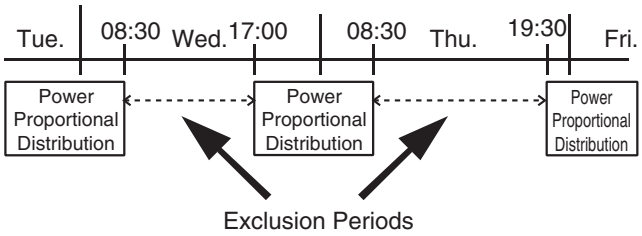
5 When to cancel setup, press Cancel button. (Settings remain same as previous.)

[The numeric keyboard]

[How to set End Time]

When end time is set at 24:00 (at midnight), enter 00:00.

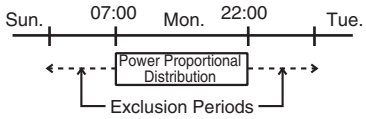
When Exclusion Periods is set in the above setup, the following setting contents appear.



CAUTION

When end time is set over 24:00, it is considered it is set from 0:00 of the day.

Ex.) Begin time Mon. 22:00 End time 7:00

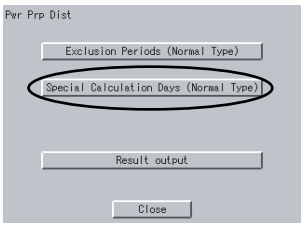


4.3 Special Calculation Days (Normal Type)

Even in the case where Exclusion Periods (Normal Type) is set, it is available to set a day when Power Proportional Distribution calculation is specially carried out all the day (0:00 - 24:00).

Setting is made for one year in unit of day.

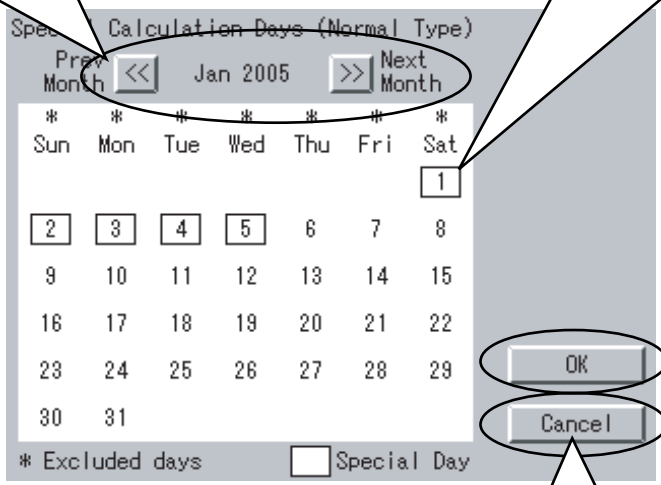
For example, it is used when to carry out Power Proportional Distribution for all the day in irregular holidays.



Press Special Calculation Days (Normal Type).

1 Select the month you want to set.
* When << is pressed, the previous month is displayed.
When >> is pressed, the next month is displayed.

2 Select the day you want to set.
* When the day portion is pressed, a □ is displayed.
* When the day portion with a □ is pressed, the □ disappears and setup is cleared.



3 When to end setup, press OK button.

4 When to cancel setup, press Cancel button.
(Settings remains same as previous.)

5. Power Proportional Distribution Report Output Procedures

Here are descriptions of procedures to output monthly Power Proportional Distribution Report.

CAUTION

Monthly Power Proportional Distribution data will not be collected unless initial setup has been carried out.

5.1 Screen Display Procedures

1. Insert Power Proportional Distribution Card into PCMCIA card slot of intelligent Touch Controller

2. Press S button in the default screen of intelligent Touch Controller.

3. Select the Pwr Prp Dist in the System Setup menu, and press Execute button.

4. Press Result output button in the Pwr Prp Dist menu.

5. Select either period designation or month designation.
   In the case of period designation, enter calculation start day and calculation end day.
   In the case of month designation, designate the calculation day since calculation is made in unit of month.

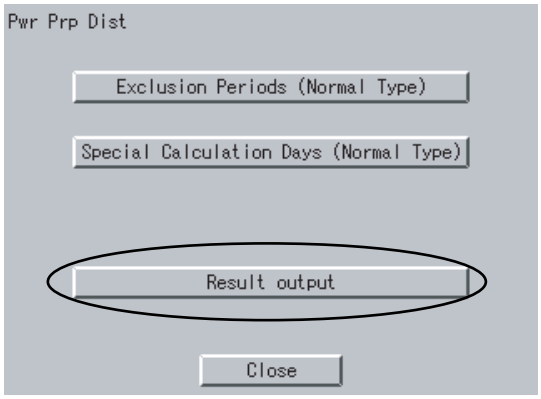
6. Press Execute button.

7. Power Proportional Distribution Report is displayed on the screen.

6. How to Output Power Proportional Distribution Report

6.1 Display of Power Proportional Distribution Report

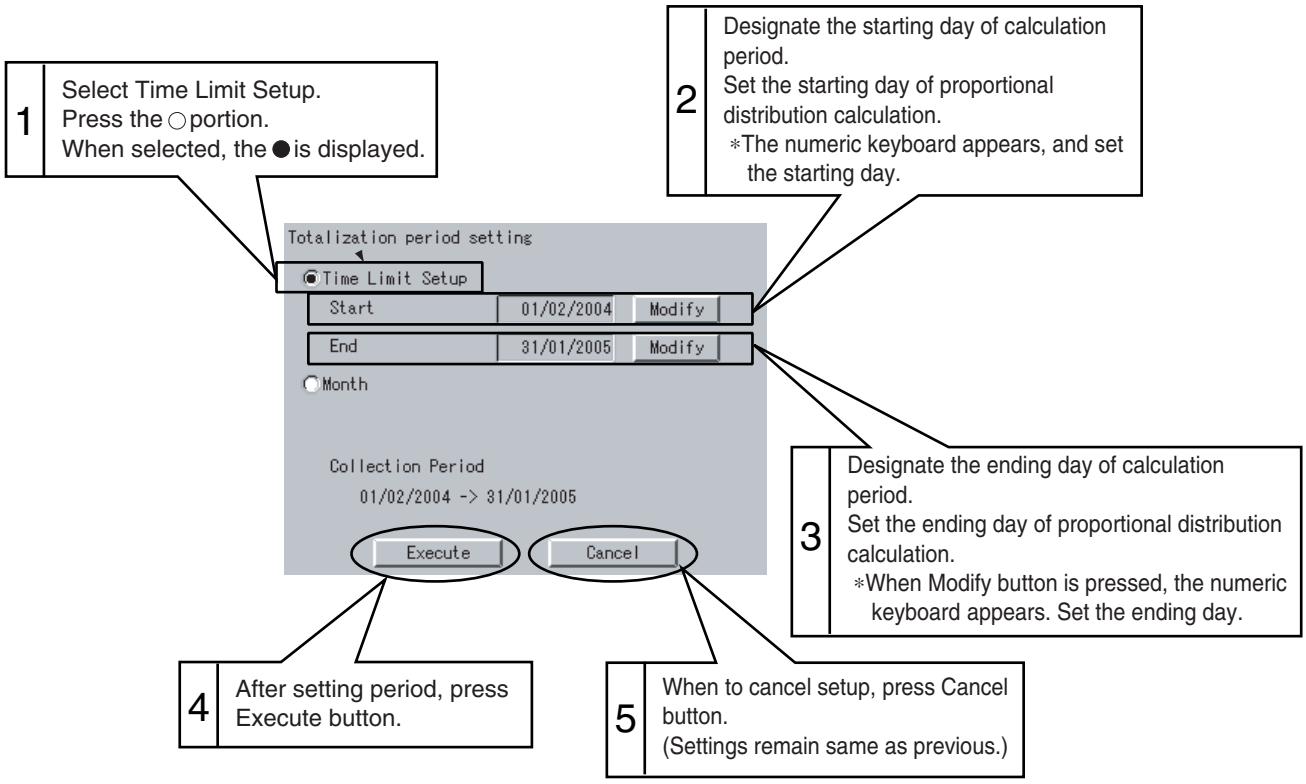
There are 2 methods to display Power Proportional Distribution Report, the method to designate a period and the one to designate a month.



Press the Result output portion.

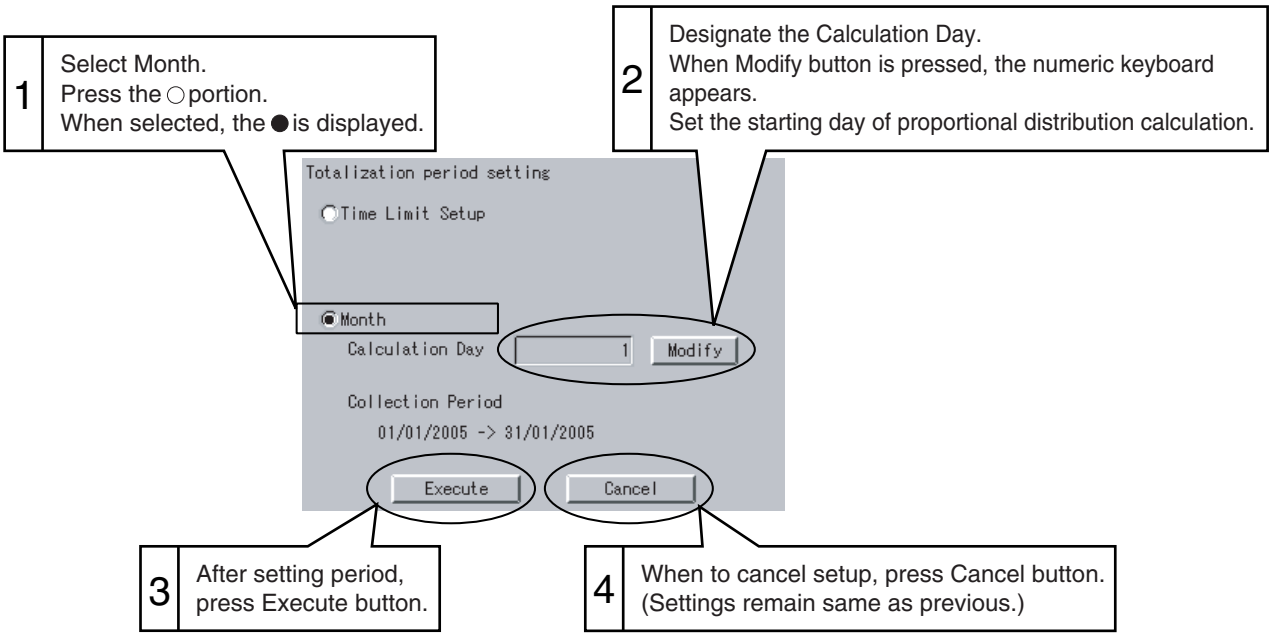
- **Case to Time Limit Setup**

In Time Limit Setup, the period for power proportional distribution calculation may be designated optionally. For example, it can be used when zone is changed in middle of a month and you want to see Power Proportional Distribution Report divided into the period before change and the period after change.

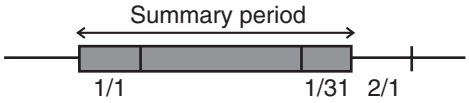


- **Case to designate month**

In month designation, Power Proportional Distribution Report can be read in unit of one month. And by designating the calculation days, Power Proportional Distribution Report for a month from the designated calculation day of previous month to that of next month can be displayed.

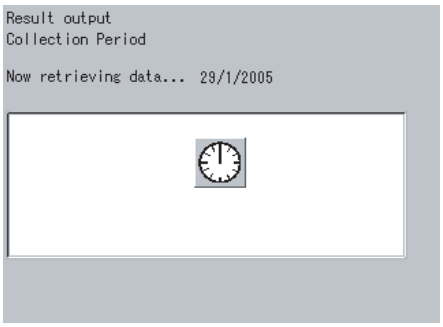


Summary period is from 0:00 of the calculation day of one month before to 0:00 of that of this month.
Ex.) When the calculation day is set to “1” and the day of operating displays is 1 February, the power proportional distribution result of 1 to 31 January is summed up.

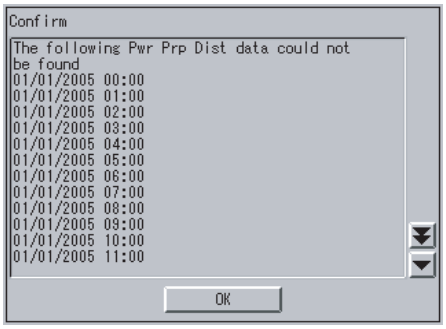


- **Display of Power Proportional Distribution Report**

After selecting either Time Limit Setup or Month, when Execute button is pressed, the following screen appears.

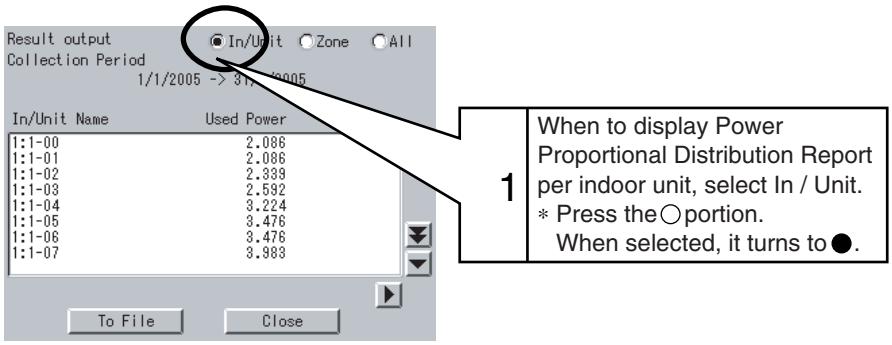


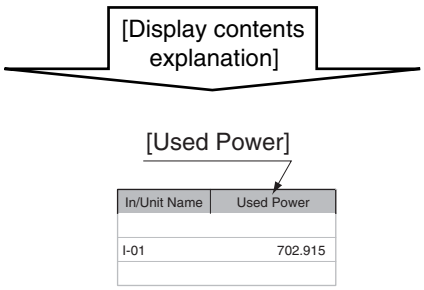
In case the Power Proportional Distribution Report is missing, the display indicates the list of missing data (day / month / year / time). The list indicates up to a maximum of 100 cases. If the missing data exceed 100 cases, the list indicates only the first 100 cases. If OK button is pressed, the display indicates the Power Proportional Distribution Report.



Display of Power Proportional Distribution Report

- **Display in unit of indoor unit**



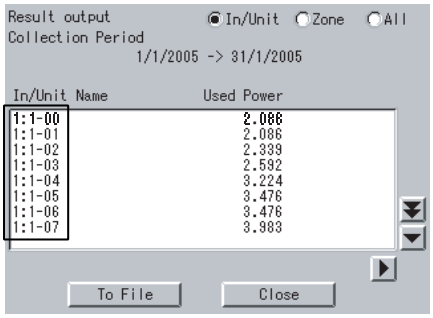


[Cautions]

Display of In/Unit Name

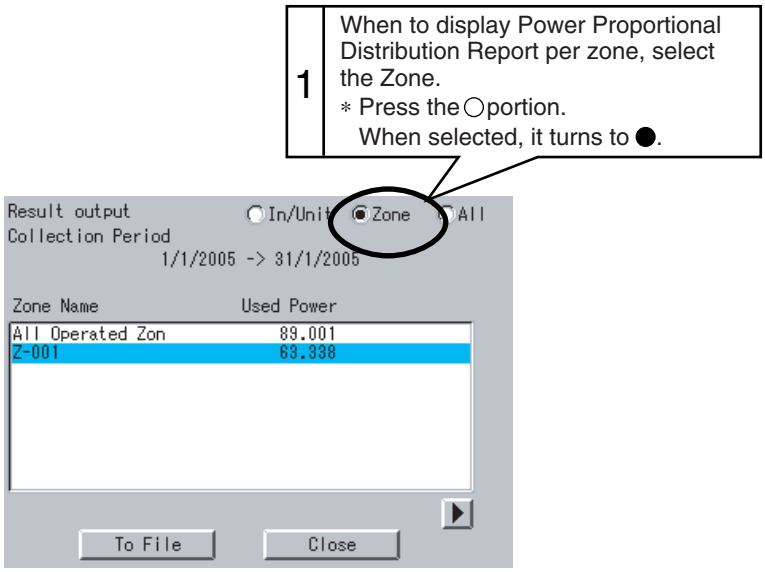
1:1-00 ~ 1:4-15 display indoor units connected to intelligent Touch Controller (DCS601C51).

2:1-00 ~ 2:4-15 display indoor units connected to DIII-NET Plus Adaptor (DCS601A52, Optional accessory).



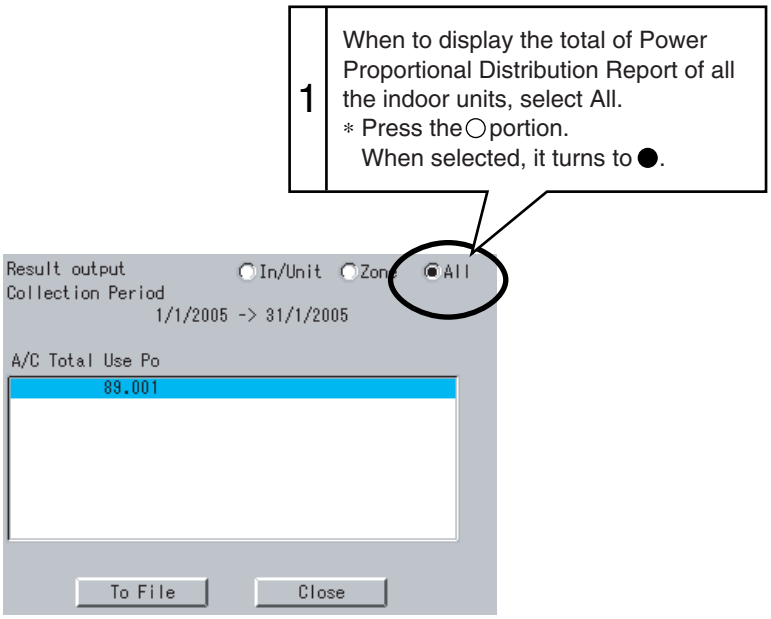
- **Display in unit of zone**

When Zone is selected, the total of Power Proportional Distribution Report of indoor units registered in zone is displayed.



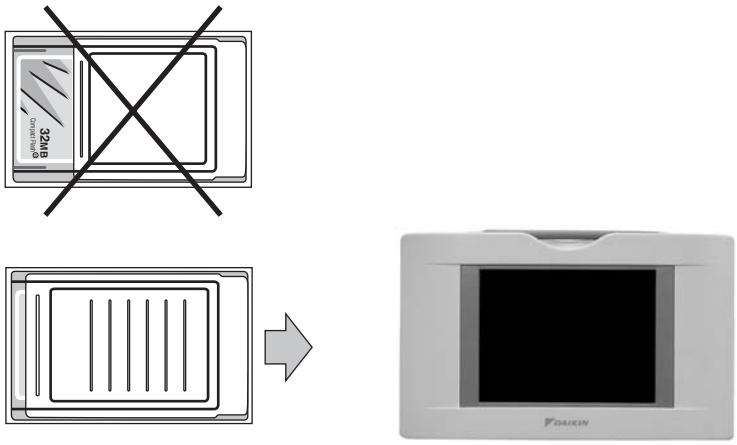
- **Total sum display**

When All is selected, the total of Power Proportional Distribution Report of all the indoor units is displayed.



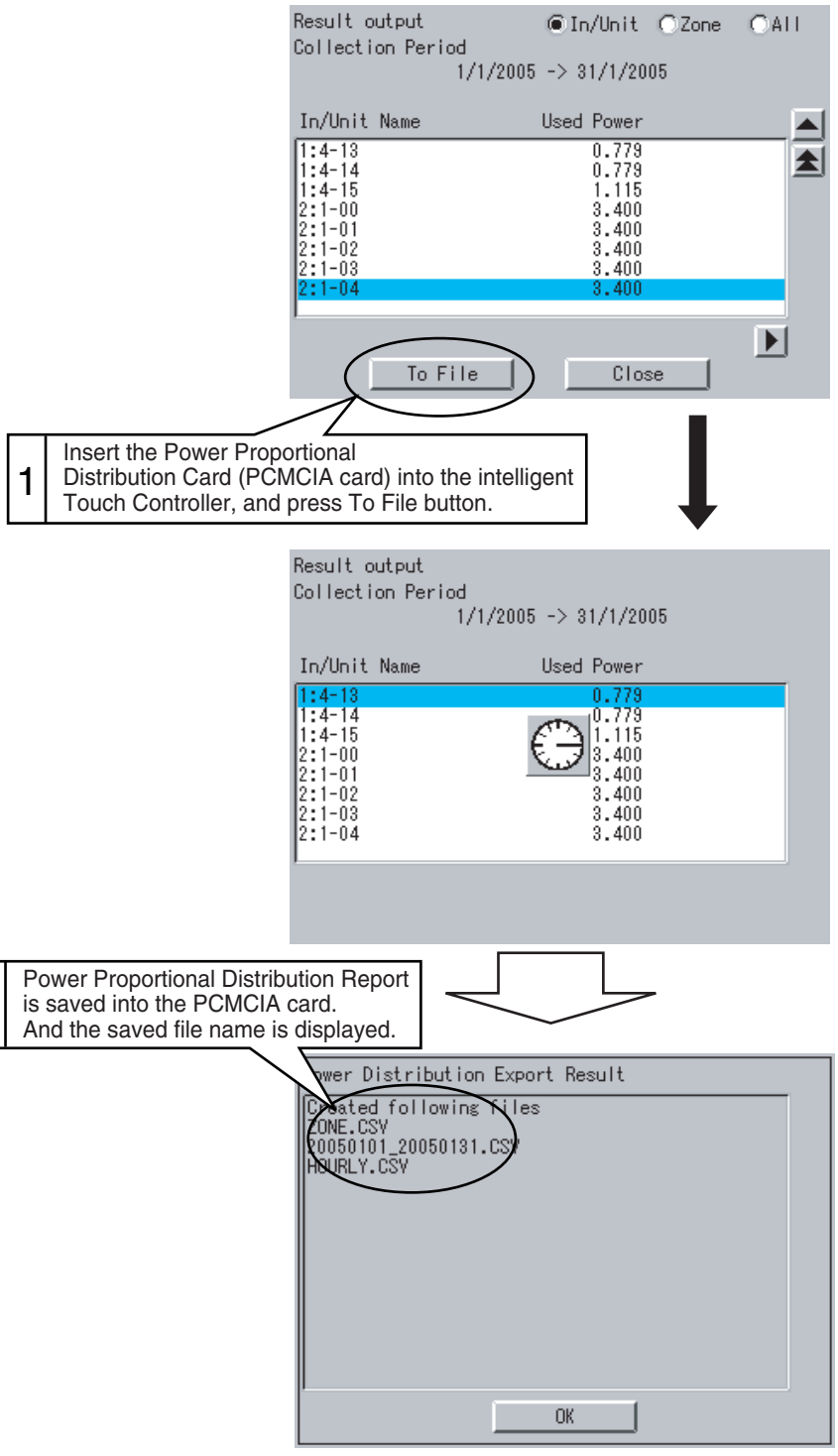
Insert the Power Proportional Distribution Card all the way into the insertion mouth on the left-hand side of the intelligent Touch Controller.

Check that the Power Proportional Distribution Card is seated in the right direction as shown below.



6.2 Saving Files

Power Proportional Distribution Report may be saved. When to print out Power Proportional Distribution Report, when to display electric power amount in unit of tenant, and when to convert electric power amount into charges, edit these files in your general purpose spread sheet software.



[Cautions]

Display of In/Unit Name

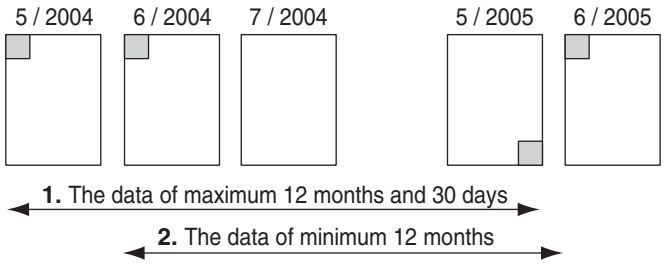
1:1-00 ~ 1:4-15 display indoor units connected to intelligent Touch Controller (DCS601C51).

2:1-00 ~ 2:4-15 display indoor units connected to DIII-NET Plus Adaptor (DCS601A52, Optional accessory).

CAUTION

The minimum of 12 months to the maximum of 12 months and 30 days of the Power Proportional Distribution results data can be retained.

When the month changes, the data of the previous month of the previous year will be zero cleared.



(Example)

1. When reading the Power Proportional Distribution results on 31 May 2005, the data from 1 May 2004 to 30 May 2005 can be read.
2. When reading the Power Proportional Distribution results on 1 June 2004 to 31 May 2005 can be read.

6.3 File Format

When Power Proportional Distribution Report is saved, a zone information file, an electric power information file and detailed information file are created.

1. Zone information file

This contains zone name and information of air conditioners in the zone.

1. File name : ZONE.CSV

2. File format :

(Example)

```
Zone ID, Zone Name   <-- Index
0, " ' All"          <-- Zone ID, zone name
1, " ' Z-000"
2, " ' Z-001"
3, " ' Z-002"

                     <-- One line space
zone ID, A/C Unit No <-- Zone ID, air conditioner
0, 0                     number
0, 1
1, 2
1, 3
```

[Cautions]

Zone ID is automatically assigned. Do not change it.

2. Electric power information file

This file contains Power Proportional Distribution Report and information of air conditioners.

1. File name : YYYYMMDD _ YYYYMMDD. CSV

Year, month and date of calculation completion

Year, month and date of calculation start

(Example)

When the data from 25 Oct. 2000 to 24 Nov. 2000 are totalled, the results are indicated as "20001025_20001124. CSV". If the file of the same name already exists, it overwrites.

2. File format :

(Example)

```
Start Date, Nb of Days, A/C Type, Undistributed Power Amount,Period Type 20050101,31,0,0,200501
A/C Unit No,In/Unit Name,HP Code,Daytime Used Pwr,Nighttime Used Pwr,Daytime Idle Pwr,Nighttime Idle Pwr,
0,"'1:1-00",38,2459,0,0,0
1,"'1:1-01",38,2718,0,0,0
2,"'1:1-02",38,3105,0,0,0
3,"'1:1-03",38,3494,0,0,0
4,"'1:1-04",38,4141,0,0,0
60,"'1:4-12",70,489,0,0,0
```

61,“'1:4-13”,8c,779,0,0,0
62,“'1:4-14”,2d,779,0,0,0
63,“'1:4-15”,47,1115,0,0,0
64,“'2:1-00”,38,3400,0,0,0
126,“'2:4-14”,38,3400,0,0,0
127,“'2:4-15”,38,3400,0,0,0

[Cautions]

Meaning of each data

Start Date : The starting day of sum
Nb of Days : Number of days of sum
A/C Type : 0 fixed
Undistributed Power Amount
: 0 fixed
Period Type : Period designation system (0 : Period designation system, Date : Month designation system)
A/C Unit No : Number of indoor unit (0 ~ 63, 0 ~ 127 in case DIII-NET Plus Adaptor is connected.)
In/Unit Name : Name of indoor unit
HP Code : Horsepower of indoor unit
Daytime Used Pwr : Power amount used
Nighttime Used Pwr : Not used
Daytime Idle Pwr : Electric power amount at stoppage (The amount is displayed, only when Power Proportional Distribution calculation is not carried out at stoppage.)
Nighttime Idle Pwr : Not used

3. Detailed information file

1. File name : HOURLY. CSV
If the detailed information already exists, it will overwrite.
Therefore, it is necessary to backup the data to a PC at every data output.

The data of the period designated by the Power Proportional Distribution Report (from 01:00 of the day the tabulation started to 0:00 of the next day the tabulation ended) are output. Regardless of whether the registration exists or not in the commissioning tool, the results of 64 (or 128) units of air conditioners are output.

2. File format :

(Example)
PPD Hourly Data (Wh)
Note:,Date and Time mean the calculation time of PPD.
,The value of 3:00 is a result between the calculation time just before 3:00 and 3:00.
Date,Time,’1:1-00,’1:1-01,’1:1-02,’1:1-03, --- ,’1:4-15, ’2:1-00,’2:1-01,’2:1-02, --- ,2:4-15
2005.1.1,1:00,21,20,15,21, --- ,15,21,20,15, --- ,15
2005.1.1,2:00,22,20,17,22, --- ,17,22,20,17, --- ,17
2005.1.1,3:00,20,24,19,20, --- ,19,20,24,19, --- ,19
2005.1.1,4:00,20,21,16,20, --- ,16,20,21,16, --- ,16
2005.1.1,5:00,21,24,18,21, --- ,18,21,24,18, --- ,18
2005.1.1,6:00,20,24,18,20, --- ,18,20,24,18, --- ,18
2005.1.1,7:00,20,24,20,20, --- ,20,20,24,20, --- ,20
2005.1.1,8:00,21,22,21,21, --- ,21,21,22,21, --- ,21
2005.1.1,9:00,35,30,23,35, --- ,23,35,30,23, --- ,23
2005.1.1,10:00,40,30,23,40, --- ,23,40,30,23, --- ,23
2005.1.1,11:00,40,37,28,40, --- ,28,40,37,28, --- ,28
2005.1.31,17:00,49,43,38,49, --- ,18,21,24,18, --- ,38
2005.1.31,18:00,50,39,37,50, --- ,18,20,24,18, --- ,37
2005.1.31,19:00,45,39,38,45, --- ,20,20,24,20, --- ,38
2005.1.31,20:00,30,28,27,30, --- ,21,21,22,21, --- ,27
2005.1.31,21:00,32,28,26,32, --- ,23,35,30,23, --- ,26
2005.1.31,22:00,20,19,16,20, --- ,23,40,30,23, ---,16
2005.1.31,23:00,20,19,16,20, --- ,28,40,37,28, --- ,16
2005.2.1,0:00,21,20,15,21, --- ,15,21,20,15, ---,15

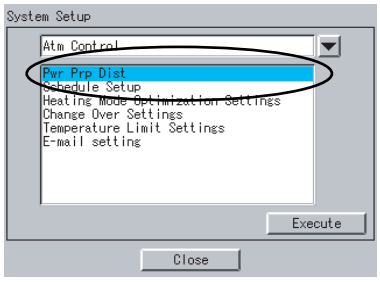
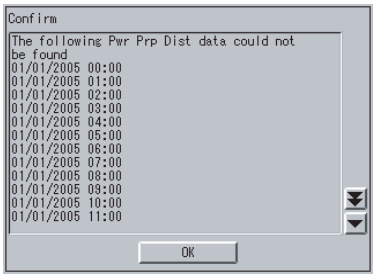
[Cautions]

View of data

It displays the Power Proportional Distribution Results of indoor unit No.1-00, from 0:00 to 1:00 on 1 January 2005.

PPD Hourly Data (Wh)									
Note:	Date and Time mean the calculation time of PPD.								
	The value of 3:00 is a result between the calculation time just before 3:00 and 3:00.								
Date	Time	'1:1-00	'1:1-01	'1:1-02	'1:1-03	'1:4-15	'2:1-00	'2:1-01	'2:1-02
2005.1.1	1:00	21	20	15	21	15	21	20	15
2005.1.1	2:00	22	20	17	22	17	22	20	17
2005.1.1	3:00	20	24	19	20	19	20	24	19
2005.1.1	4:00	20	21	16	20	16	20	21	16
2005.1.1	5:00	21	24	18	21	18	21	24	18
2005.1.1	6:00	20	24	18	20	18	20	24	18
2005.1.1	7:00	20	24	20	20	20	20	24	20
2005.1.1	8:00	21	22	21	21	21	21	22	21
2005.1.1	9:00	35	30	23	35	23	35	30	23
2005.1.1	10:00	40	30	23	40	23	40	30	23
2005.1.1	11:00	40	37	28	40	28	40	37	28
2005.1.31	17:00	49	43	38	49	18	21	24	18
2005.1.31	18:00	50	39	37	50	18	20	24	18
2005.1.31	19:00	45	39	38	45	20	20	24	20
2005.1.31	20:00	30	28	27	30	21	21	22	21
2005.1.31	21:00	32	28	26	32	23	35	30	23
2005.1.31	22:00	20	19	16	20	23	40	30	23
2005.1.31	23:00	20	19	16	20	28	40	37	28
2005.2.1	0:00	1006	1112	1270	1429	433	1400	1400	1400

7. Troubleshooting

Symptom	Cause and countermeasures
"Pwr Prp Dist" is not displayed. 	Power Proportional Distribution function is not set yet. Contact your supplier.
When Power Proportional Distribution calculation is carried out, the following message is displayed. 	There is a time when Power Proportional Distribution calculation is not made in the designated collection period. The cause for non availability of Power Proportional Distribution calculation can be power failure. Press OK button to continue collection. * Collection is made by other period excluding the day.
When Power Proportional Distribution Report is to be saved into a file, "No memory card" is displayed.	PCMCIA card is not inserted correctly into the intelligent Touch Controller. Check whether PCMCIA card is inserted, and whether it is inserted correctly or not.
I can't display electric power amount in unit of tenant	When electric power proportional distribution is carried out by the intelligent Touch Controller mainframe, electric power amount is displayed in unit of air conditioner or in unit of zone. To display electric power amount in unit of tenant, edit the data of CSV format saved in PCMCIA card by use of your general purpose table calculation software.
How do I convert electric power amount into charges?	It is not available to convert electric power amount into charges by the intelligent Touch Controller. To convert electric power amount into charges, edit the data of CSV format saved in PCMCIA card by use of your general purpose table calculation software.

Symptom	Cause and countermeasures
How to print out Power Proportional Distribution Report?	The intelligent Touch Controller does not have printing function. To print out Power Proportional Distribution Report, print out the data of CSV format saved in PCMCIA card by use of your personal computer and printer.
How to change zone registration?	To change zone registration for change of insertion and so forth in the middle of month, read out once Power Proportional Distribution Report for the days to the previous day of change. (By period designation, it is possible to designate and read an optional period.) For the month with change, read the reports for days before change and those for days after change.
Exclusion Periods (Normal Type) setup and Special Calculation Days (Normal Type) setup	Exclusion Periods (Normal Type) setup and Special Calculation Days (Normal Type) setup are not to be set when to carry out Power Proportional Distribution of ice storage type. And setting is for only one pattern, and it is not available to make different setting per zone.
“Time Zone Setup” is not displayed.	“Time Zone Setup” can be displayed in SE Mode. Contact your supplier.
When the S button is presed, “Password for administrator” is displayed. 	Confirm your administrator to enter the password.

8. Test Run Manual

Introduction

1. A test run is required before using the i-Controller's PPD function.
   The test run procedure can generally be divided into three parts.

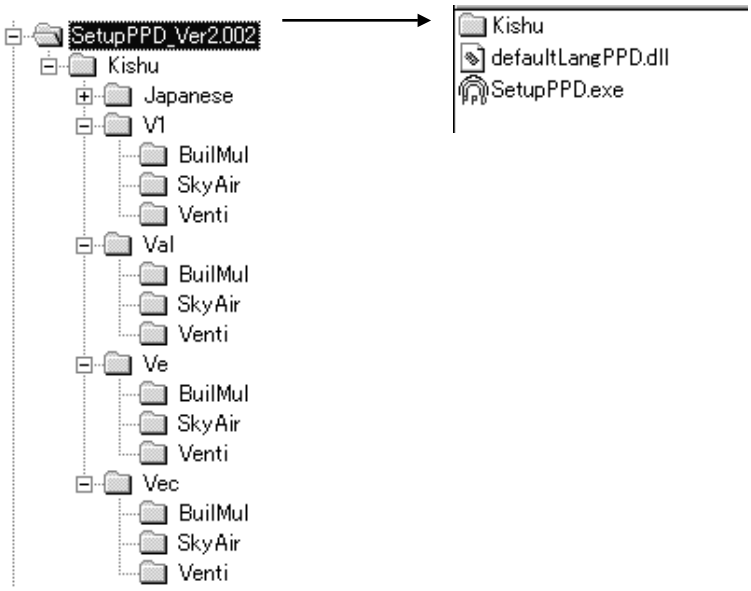
   (1) Activating the i-Controller's PPD function.
   (2) Conducting the test run of the i-Controller unit.
   (3) Conducting the test run of the Service PC.
   * A test run is conducted after connecting the i-Controller unit to the Service PC.

> How to Activate the PPD Function
>
> To validate the the function of power proportional distribution, it is necessary to obtain ACTIVATION KEY.
> As for the method to obtain the license key and validate the function, see the intelligent Touch Controller (DCS601C51) Test Run Manual.

2. Test Run Program

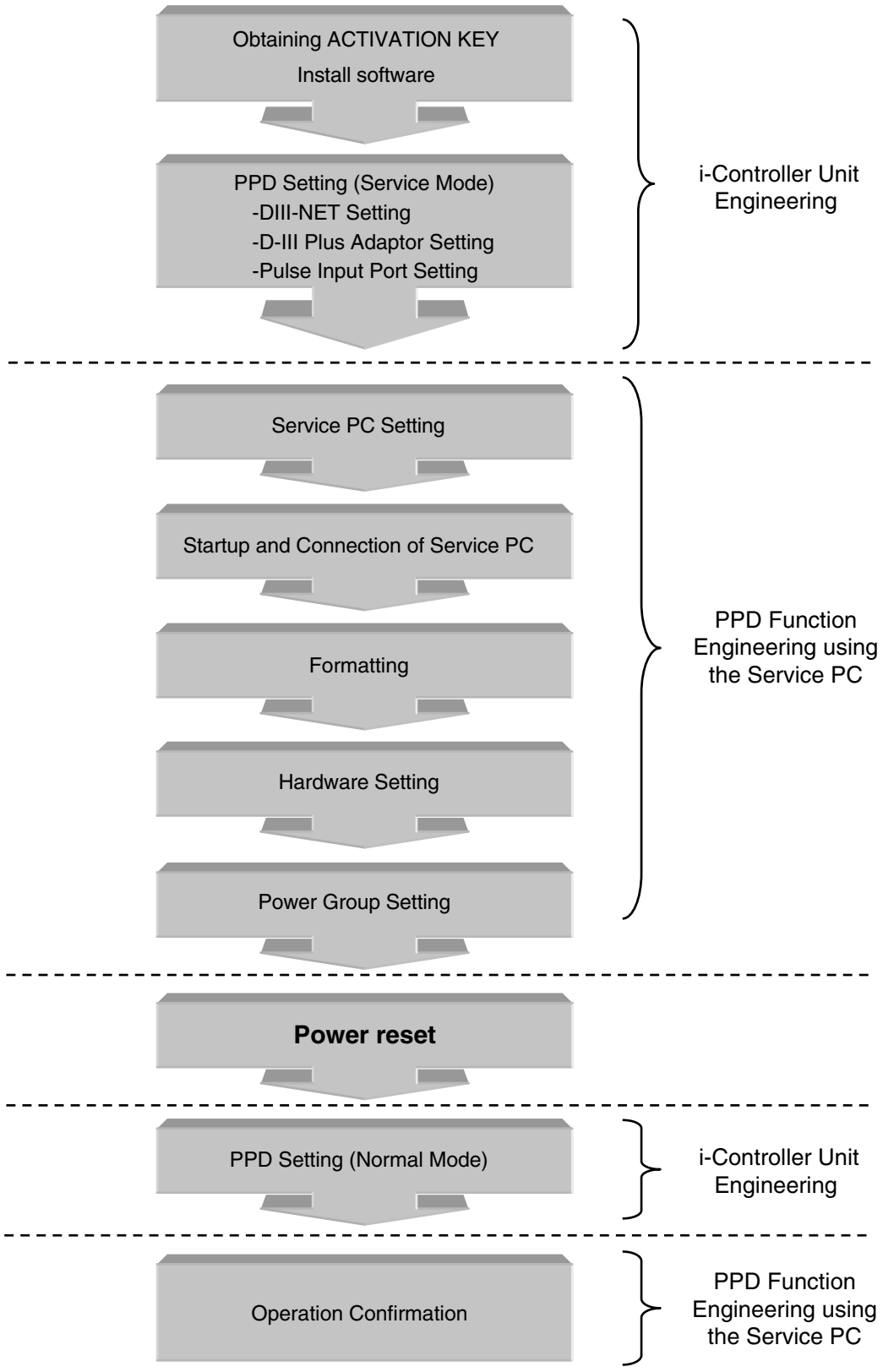
For the power proportional distribution test run, the dedicated test run program is required.

(1) Program Control No. : FD04A210
(2) Program File No. : SetupPPD.exe (Ver 2.003~)
(3) Program formation



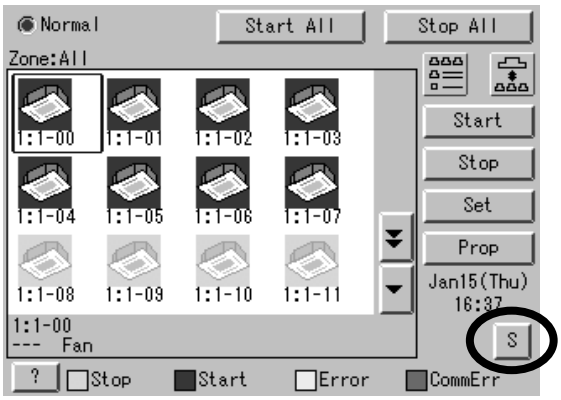
8.1 Test Run Procedure

The test run procedure is as follows :

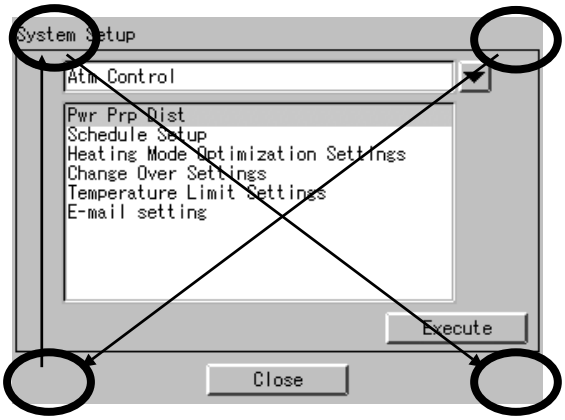


8.2 PPD Setting (Service Mode)

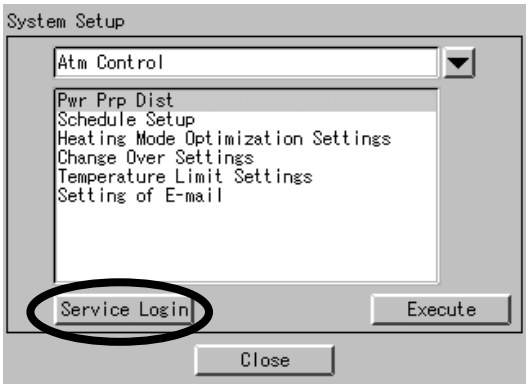
8.2.1 DIII-NET Plus Adaptor Setting



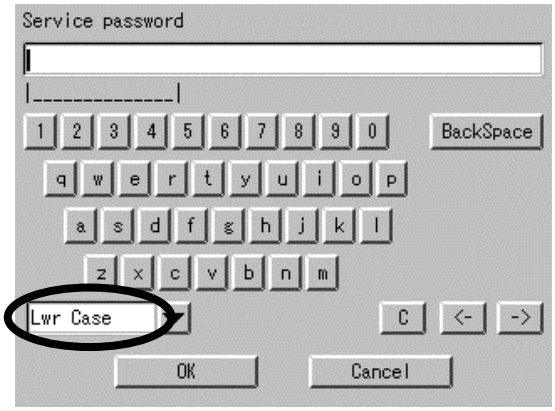
1. Click the “S” button on the monitor screen.



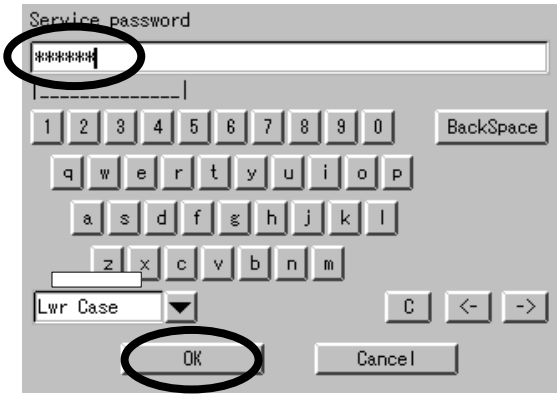
2. Click the upper right, lower left, upper left and lower right corners on the System Setting Menu screen, in that particular order.



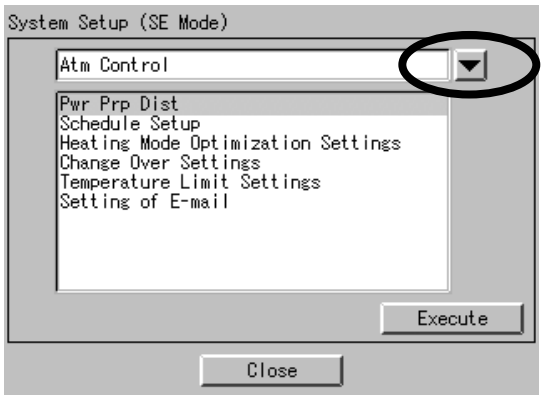
3. Click the “Service Login” button.



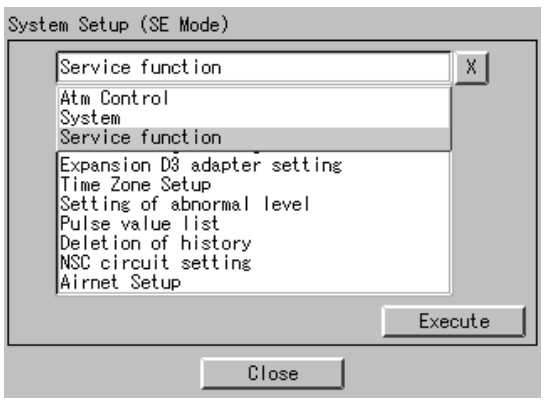
4. The Password Input screen will come up.
5. Select “Lwr Case” on the Lettering Switch menu.



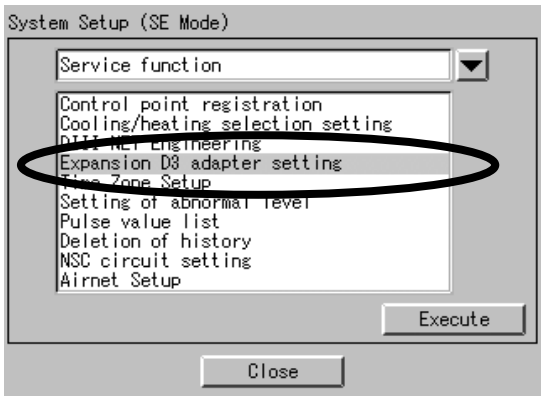
6. Input “daikin”.
7. Click the “OK” button.



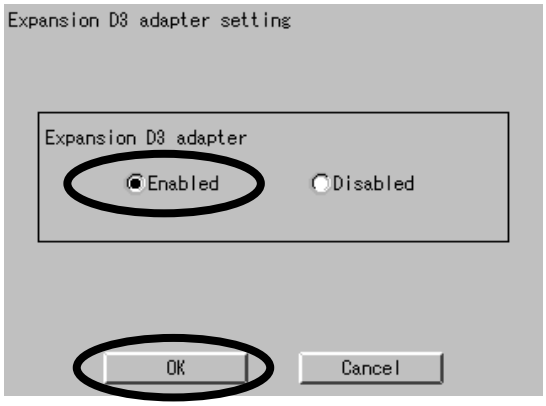
8. The System Setup screen in the Service Mode will come up.
9. Click the ▼ button.



10. Select “Service function” from the System Setup menu.

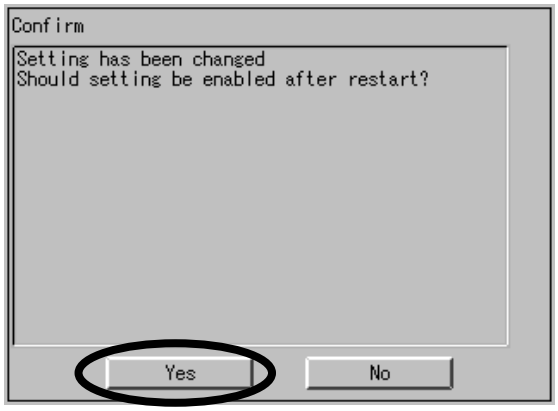


1. Select “Expansion D3 adapter setting” on the System Setting menu and click the “Execute” button.



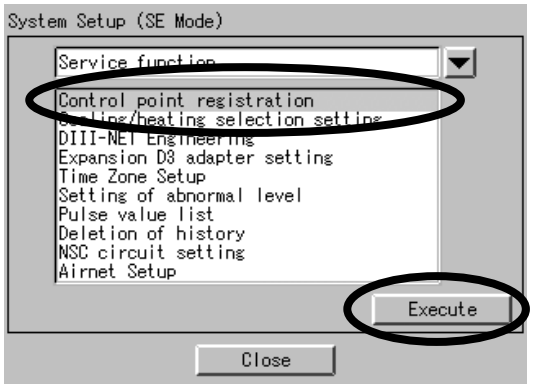
2. Select “Disabled” when DIII-NET Plus Adaptor is not used, and “Enabled” when it is used.

3. Click the “OK” button.

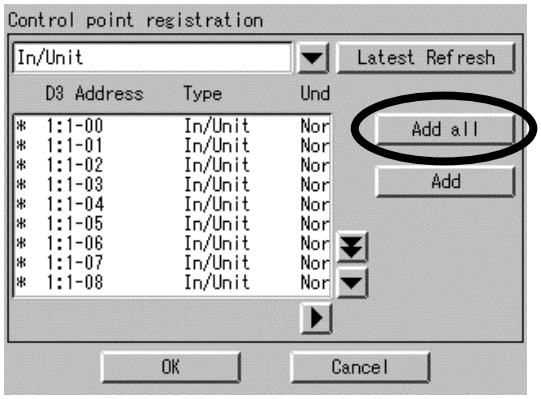


4. Click the “Yes” button.

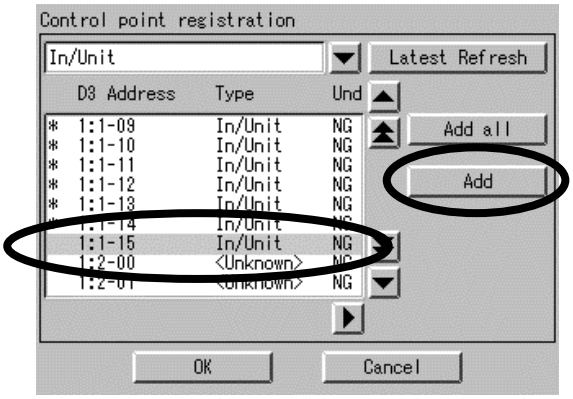
8.2.2 DIII Port Setting (Service Mode)



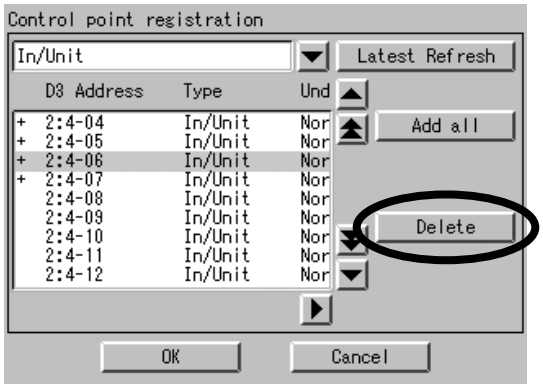
1. Select “Control point registration” from the System Setup menu and click the “Execute” button.



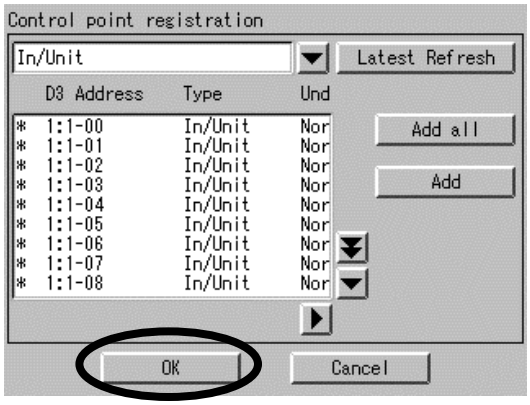
2. To make all the connected indoor units to be the models to be monitored, press “Add all”.



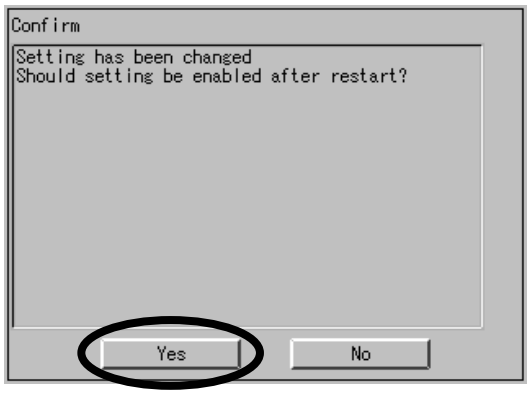
3. To make the designated indoor unit to be the model to be monitored by designating the indoor unit No., press the “Add” button.



4. When the indoor unit No. is designated and the button “Delete” is pressed, the designated model will become the model not to be monitored.

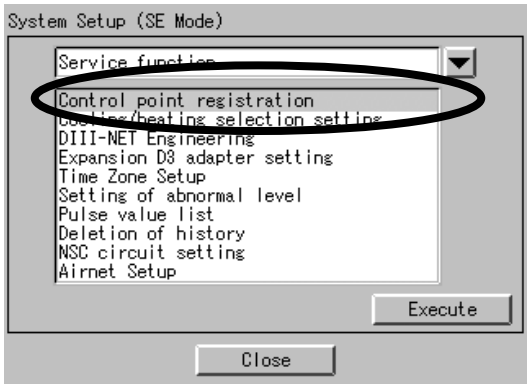


5. Click the “OK” button.

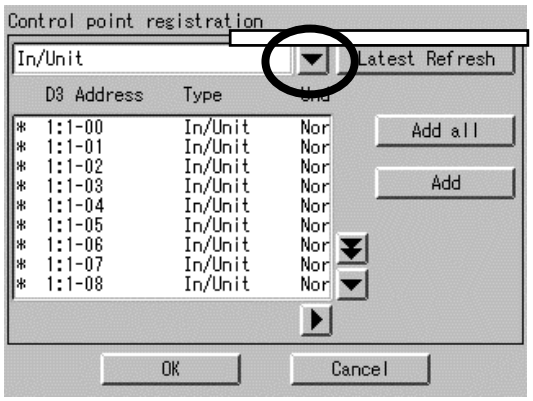


6. Click the “Yes” button.

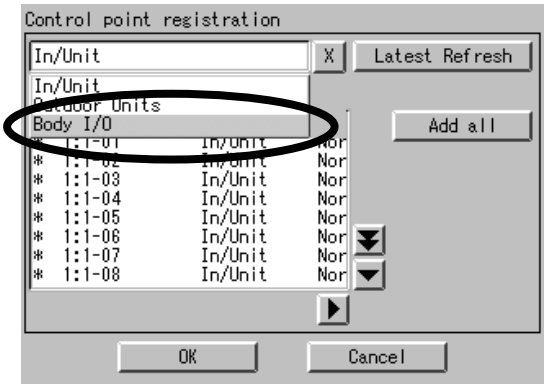
8.2.3 Pluse Input Port Setting (Service Mode)



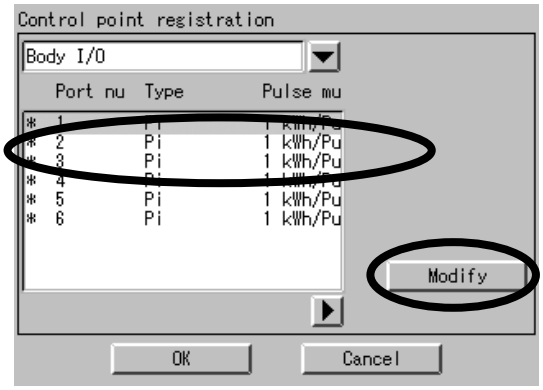
1. Select “Control point registration” on the System Setup menu and click the “Execute” button.



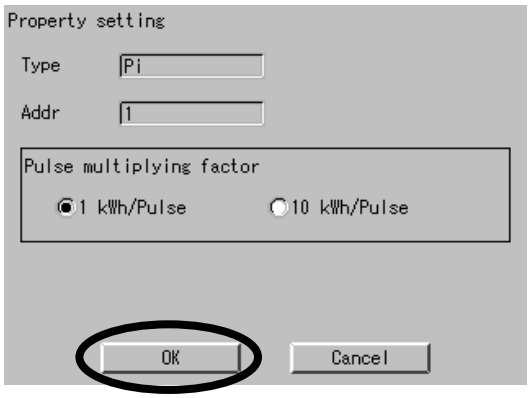
2. Click the button.



3. Select “Body I/O” from the System Setup menu.

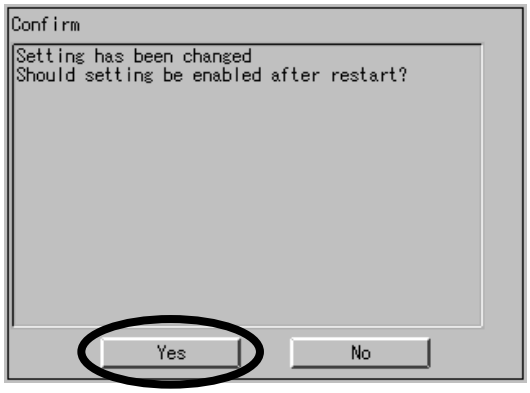


4. Select “pulse port” and click the “Modify” button.



5. Set the Pulse multiplying factor to 1 or 10 for the Input Ports to be used and click the “OK” button.

(Note)
The following selections are available as the output pulse units for the wattmeter.
(1) 1 kWh/pulse
(2) 10 kWh/pulse



6. Click the “Yes” button.

8.3 Service PC Setting

8.3.1 Required Performance of Service PC

The PPD Test Run Tools is a program that operates on Windows 98/Me/NT/2000/XP.
This program operates under the following environment.

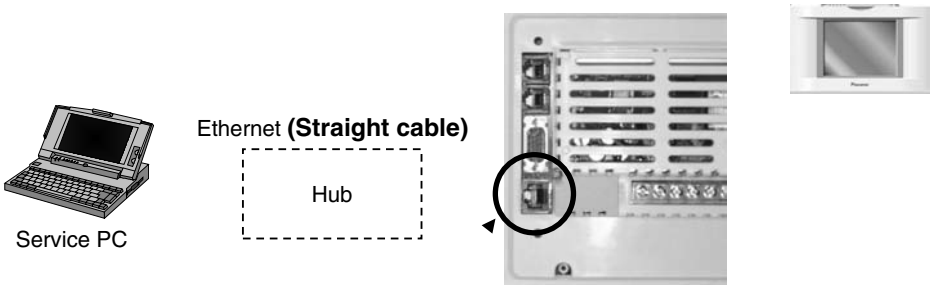
Hardware

- CPU At least Pentium 100 MHz
- Memory Minimum 32 MB
- HDD At least 2 MB of open space
- Other Video Card that can present images with 640 x 480 pixel resolution and in displays in 256 colors. ethernet (10 BASE-T),

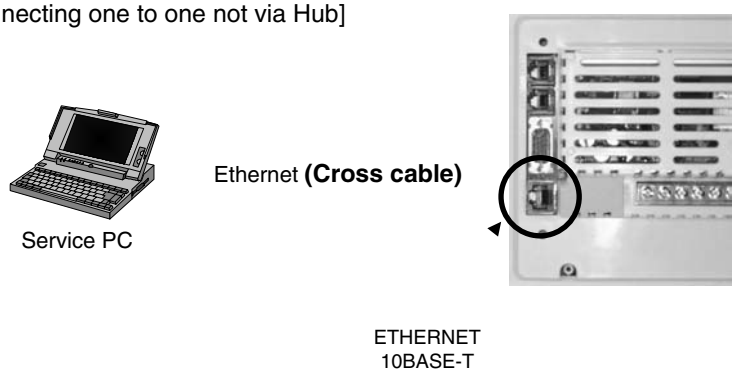
8.3.2 Method of Connection Between Service PC

Connect Service PC and intelligent Touch Controller with Ethernet.
There are 2 kinds of cables for the 10BASE-T cable of Ethernet, one is cross type and the other is straight type.
Make sure to select the correct cable according to the following cases.
If a wrong cable is selected, the equipment may be damaged at the worst.

[When connecting via Hub]



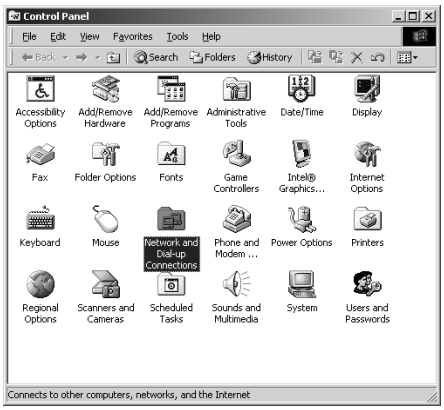
[When connecting one to one not via Hub]



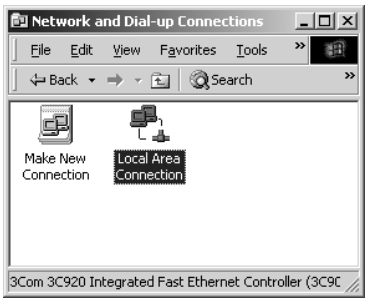
8.4 Startup and Connection of Service PC

8.4.1 Connection Between Service PC and intelligent Touch Controller

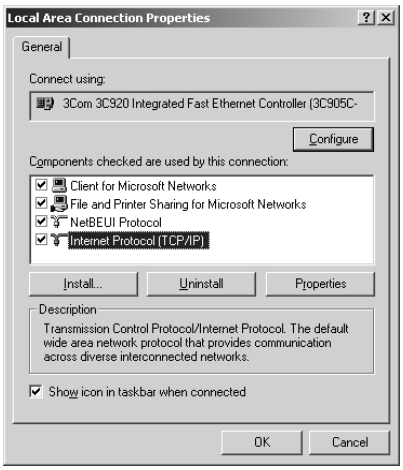
1. Setting up the IP address of the PC. First go into **Control Panel** then **Network and Dial-up Connection.**



2. Then click on **Local Area Connection** and select **Properties.**

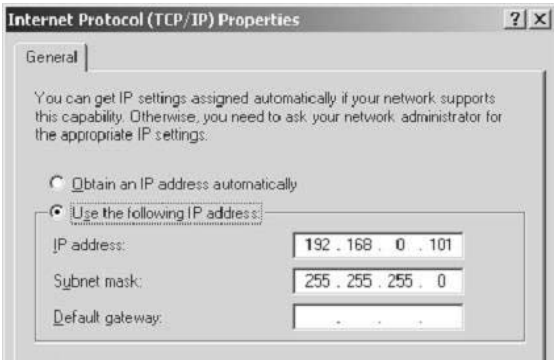


3. From here select **Internet Protocol (TCP/IP)** and select properties or just double click on it.

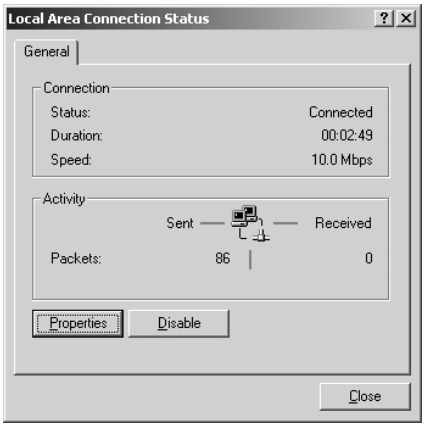


4. The default IP setting for the iController is 192.168.0.1 so you set your PC at any other.

   For engineering we recommend you **set your PC at 192.168.0.101.**

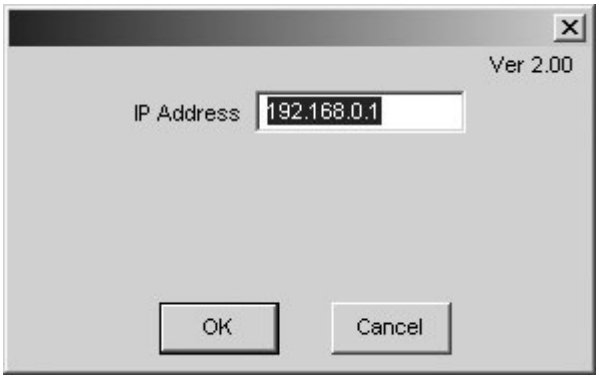


5. After the setting is made you should have a connection from the PC to the iController.



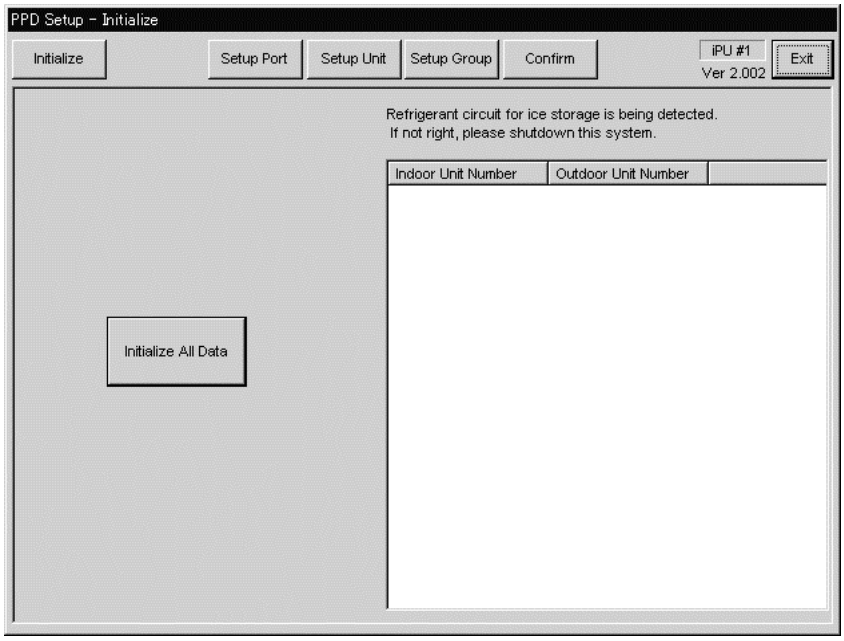
6. Now you can run the **SetupPPD**.exe file.

7. Set the Ethernet IP address of the iController (192.168.0.1).



8. If all worked well the Setup program should start without any problems.

Note: If software buttons are grayed out, this indicates that connect was not successfully made. Please check that the cables are properly connect and repeat the procedure from the beginning if necessary.



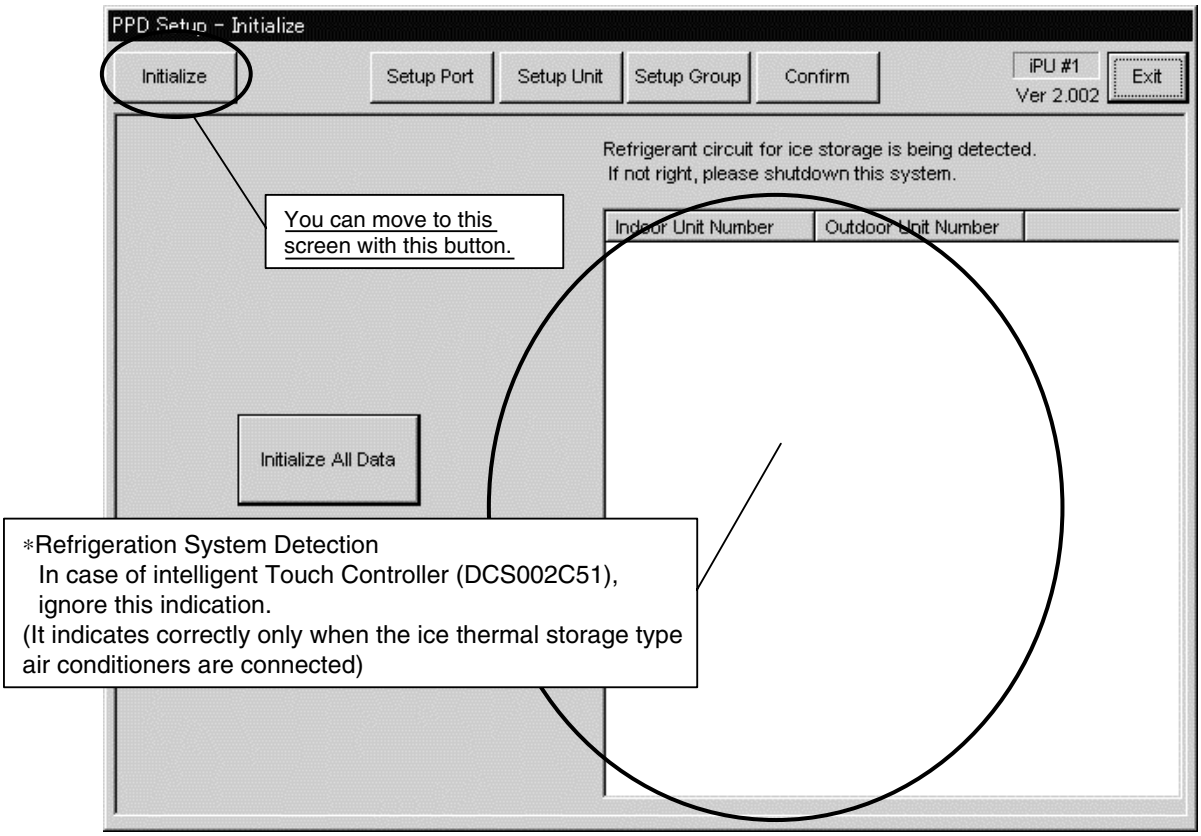
8.5 Formatting

1. The dialog box below will be displayed if the connection is successfully made. The dialog box can be brought up with the “Format” button on the top left of the screen.

2. **Test runs should never be continued if the set condition cannot be properly detected. (*3)**
   - When the air-conditioner cannot be detected...
     First quit Test Run Tools and restart it after waiting two to three minutes.
   - When the combination of air-conditioner and system number is not correct...
     Quit Test Run Tools and confirm the installation, air-conditioner address and outdoor unit system number.

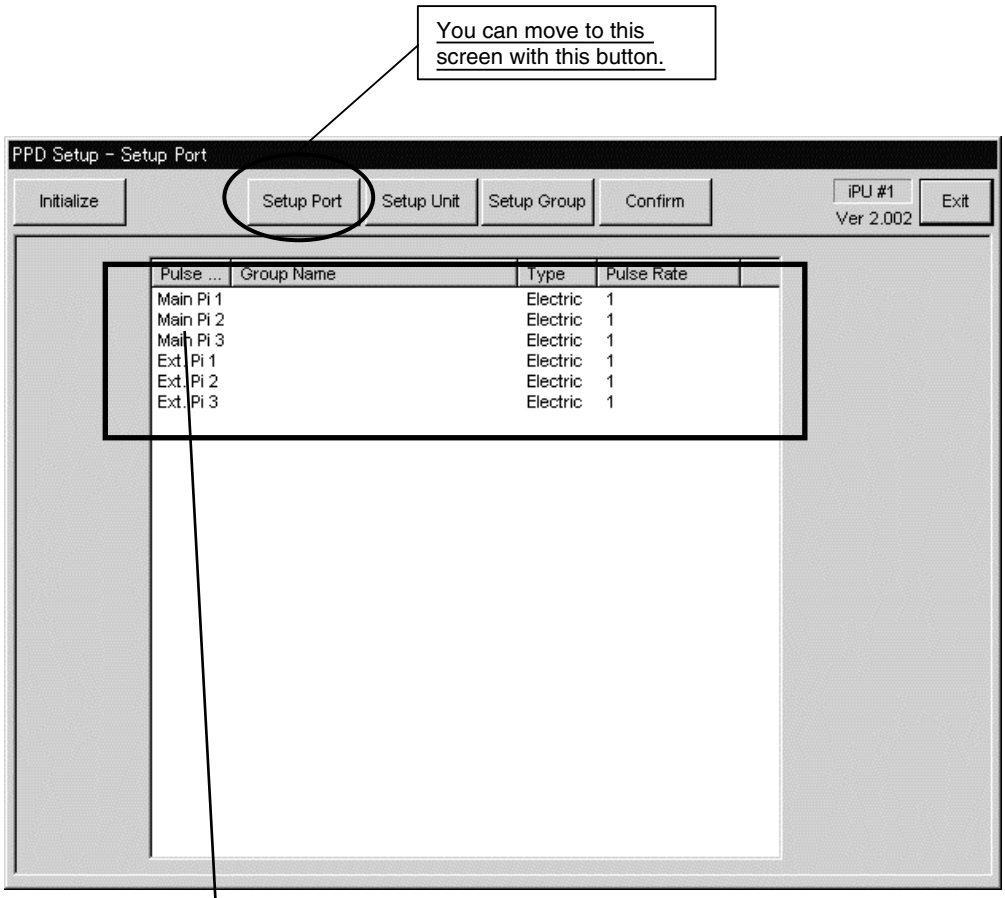
3. When setting for the first time, click the “Format All Data” button and **clear all set values and calculation data.** When the formatting is properly completed, a confirmation dialog box will be displayed. No other operations should be conducted until it is displayed.

(Note)
* 1 Indoor Unit Number
  The number will be shown in a 1-1-00 format. The first figure will represent the D3 Line Number (1) and the remaining two figures, the air-conditioner address.
* 2 System Number
  The number will be shown in a 1-01 format. The first figure will represent the D3 Line Number (1) and the second, the system address (1-10) assigned to the outdoor unit.



8.6 Setup Port

1. When the screen changeover button “Setup Port” is pressed, the display of set port is indicated on the main screen.
   The Pi control point (main frame Pi, Ext-Pi) usable as an input port (depends on the controller spec) is indicated.
   Here, the port which belongs to the power group during proportion calculation is indicated in red and that during suspended state in blue and that suring proportion calculation suspended state in black.



Caution
1. Main Pi1 ~ Pi3 show the Pulse Input Port of the intelligent Touch Controller main unit.
2. Ext. Pi1 ~ Pi3 show the Pulse Input Port of DIII-NET plus Adapter

∗When changing the pulse rate of the integrating watt-hour meter, see “8.2.3 Pulse Input Port Setting”.

8.7 Hardware Setting

1. Click the “Hardware Setting” button to bring up the dialog box below. The machines within the power groups for which proportional distribution is being calculated will be shown in red. The settings for the power groups cannot be changed when it is being calculated.

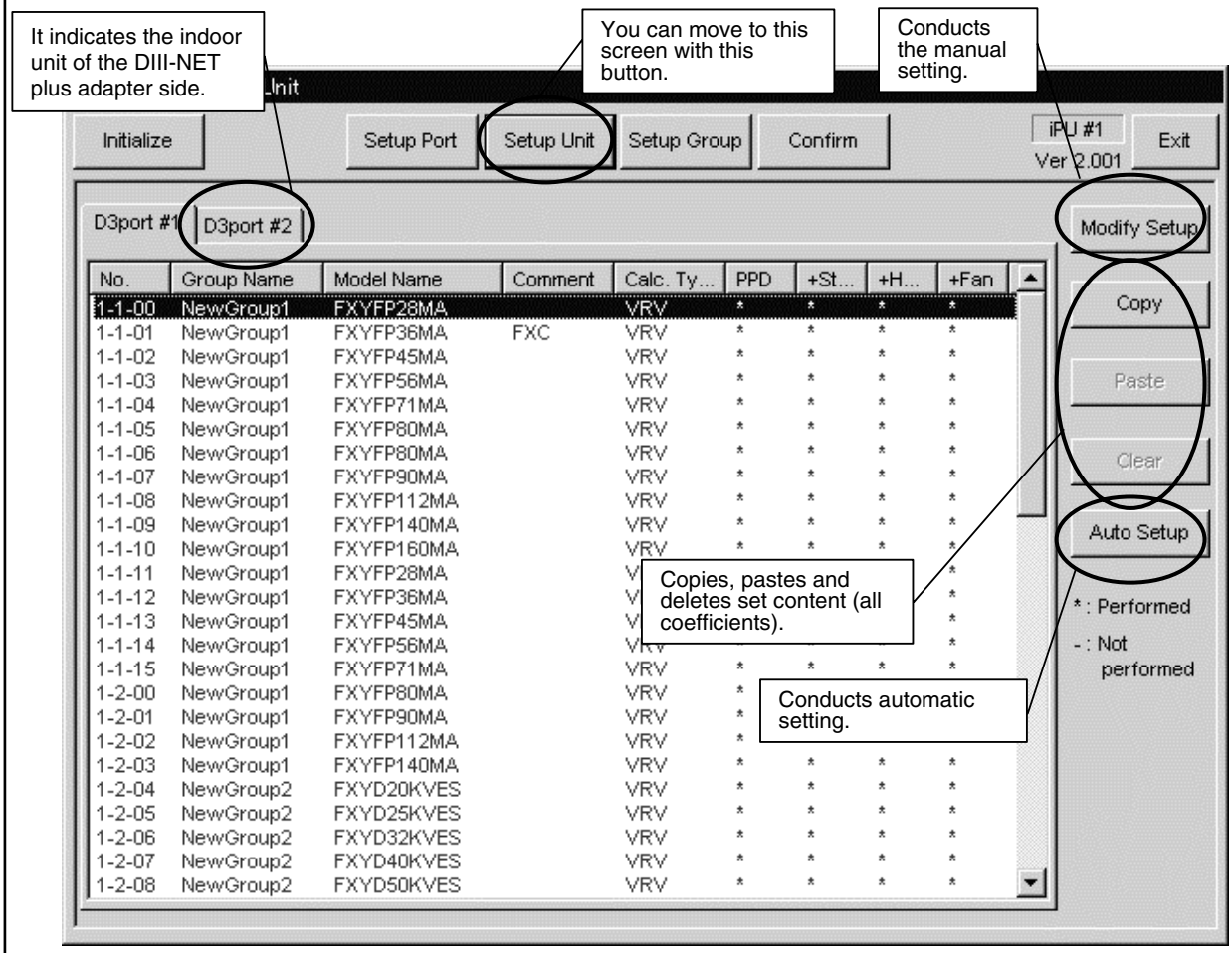
2. Click the “Automatic Setting” button to start the automatic setting (*1) for the hardware. The model name for the air-conditioner that is first detected will be shown. So click the "Setting Start” button if there are no problems.

3. When wanting to change the hardware calculation conditions (default settings are “Conduct Proportional Distribution”, “Conduct Proportional Distribution when OFF”, “Conduct Proportional Distribution for the Heater” and “Conduct Proportional Distribution for the Fan”), manually set by clicking the “Setting Change” button.

4. Click the “Setting Change” button to manually set hardware that cannot be set with the Automatic Setting function and HRV/Wiring ADP for Other Air-Conditioners.

(Note)
* 1 Automatic Setting
The installed air-conditioners are automatically recognized and the coefficients are set for the pertinent models.

* 2 Manual Setting
The coefficients and calculation conditions are set manually on an individual basis.



No.	Group Name	Model Name	Comment	Calc. Ty...	PPD	+St...	+H...	+Fan
1-1-00	NewGroup1	FXYFP28MA		VRV	*	*	*	*
1-1-01	NewGroup1	FXYFP36MA	FXC	VRV	*	*	*	*
1-1-02	NewGroup1	FXYFP45MA		VRV	*	*	*	*
1-1-03	NewGroup1	FXYFP56MA		VRV	*	*	*	*
1-1-04	NewGroup1	FXYFP71MA		VRV	*	*	*	*
1-1-05	NewGroup1	FXYFP80MA		VRV	*	*	*	*
1-1-06	NewGroup1	FXYFP80MA		VRV	*	*	*	*
1-1-07	NewGroup1	FXYFP90MA		VRV	*	*	*	*
1-1-08	NewGroup1	FXYFP112MA		VRV	*	*	*	*
1-1-09	NewGroup1	FXYFP140MA		VRV	*	*	*	*
1-1-10	NewGroup1	FXYFP160MA		VRV	*	*	*	*
1-1-11	NewGroup1	FXYFP28MA		V				*
1-1-12	NewGroup1	FXYFP36MA		V				*
1-1-13	NewGroup1	FXYFP45MA		V				*
1-1-14	NewGroup1	FXYFP56MA		VRV				*
1-1-15	NewGroup1	FXYFP71MA		VRV	*	*	*	*
1-2-00	NewGroup1	FXYFP80MA		VRV	*			
1-2-01	NewGroup1	FXYFP90MA		VRV	*			
1-2-02	NewGroup1	FXYFP112MA		VRV	*			
1-2-03	NewGroup1	FXYFP140MA		VRV	*	*	*	*
1-2-04	NewGroup2	FXYD20KVES		VRV	*	*	*	*
1-2-05	NewGroup2	FXYD25KVES		VRV	*	*	*	*
1-2-06	NewGroup2	FXYD32KVES		VRV	*	*	*	*
1-2-07	NewGroup2	FXYD40KVES		VRV	*	*	*	*
1-2-08	NewGroup2	FXYD50KVES		VRV	*	*	*	*

8.7.1 Automatic Setting

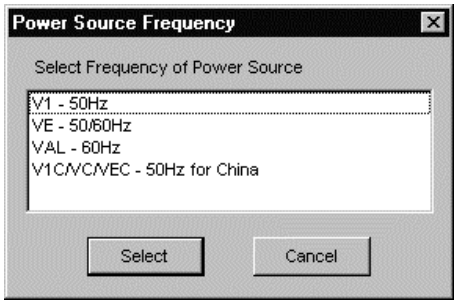
1. When the “Automatic Setting” button in the “Hardware Setting” dialog box is clicked, select the power supply specification.

2. When the “Select” button is clicked, the installed air-conditioners are automatically recognized (*) and a search for data on the pertinent models is conducted. If data exists on a model, then the model name will be shown in the dialog box below.

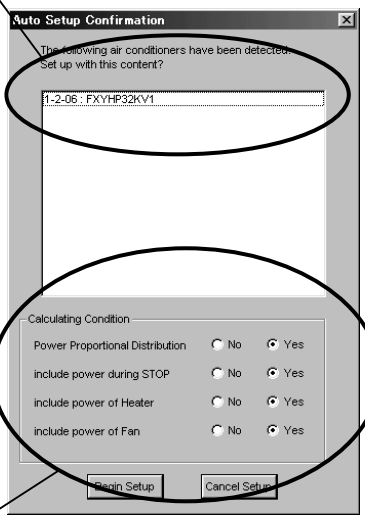
3. When setting, the conditions can all be set at once after clicking the “Conditions Setting” button.

4. Clicking the “Begin Setup” button sets the coefficient values (within the model data) and specified calculation conditions for all the detected air-conditioners.

(Note)
* Automatic Model Recognition
Already set air-conditioners are not targeted in the automatic setting, so it is necessary to either completely delete all prior settings by formatting or delete the data for only those models necessary with the “Clear” button.



Only existing data for pertinent models is shown.



Set all default settings to “Yes” when conducting all the condition settings at once.

8.7.2 Manual Setting

1. Clicking the “Setting Change” button in the “Hardware Setting” dialog box will bring up the dialog box below.

2. In order to manually input all data, input the appropriate values for the “Calculation Method (*1)”, “Comments”, “Conditions Setting” and “Coefficient Setting” (“Model Name” cannot be manually input).

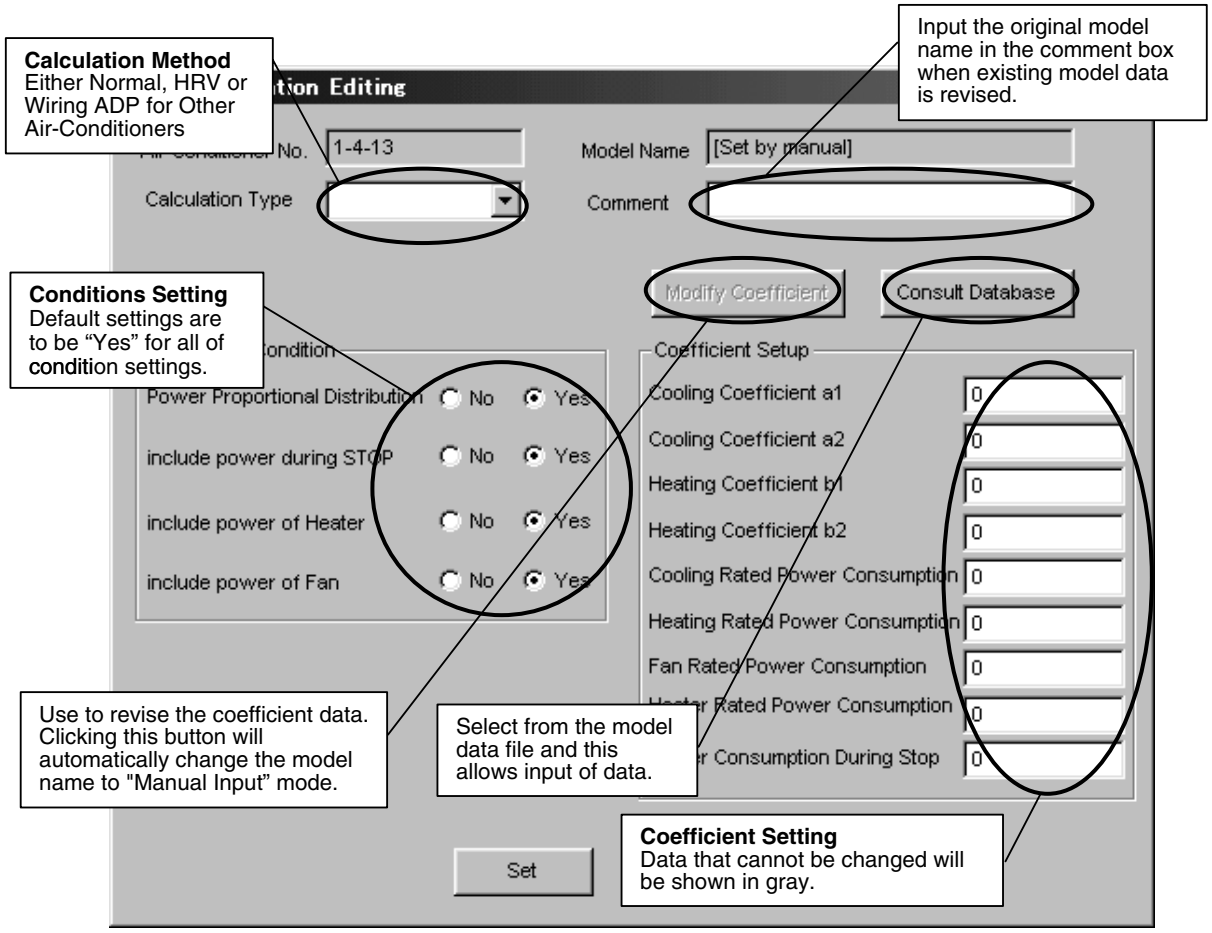
3. In order to use the coefficients in the model data file, click the “Database Reference” button and select the appropriate coefficient from the displayed list.

4. When wanting only to revise a portion of the existing model data at source, click the “Coefficient Change” button and this will allow changing of the values in the “Coefficient Setting (*2)”.

5. The “Condition Setting” can be changed at any time.

(Note)
* 1 Calculation Method
There are three methods used to calculate consumed power, that for “Normal (VRV)", “HRV" and“Wiring ADP for Other Air-Conditioners". “Normal" is used for hardware for which consumed power is calculated according to proportional distribution, while the other methods are used for hardware for which consumer power is calculated according to operation time.

* 2 Coefficient Setting
All coefficients can be set with “Normal”, ‘Rated Consumed Power for Fans’ with “HRV” and only ‘Consumed Power when OFF’ with “Wiring ADP for Other Air-Conditioners”.



8.8 Power Group Setting

1. Clicking the“Power Group” button will bring up the dialog box below. Groups being calculated will be shown in red and those that are Temporarily OFF, in blue.

2. Click the “New” button to create new power groups. You will have to select which type of power group to create; Normal Type or Heat Storage Type (*). The type of power group cannot be changed once it is set.

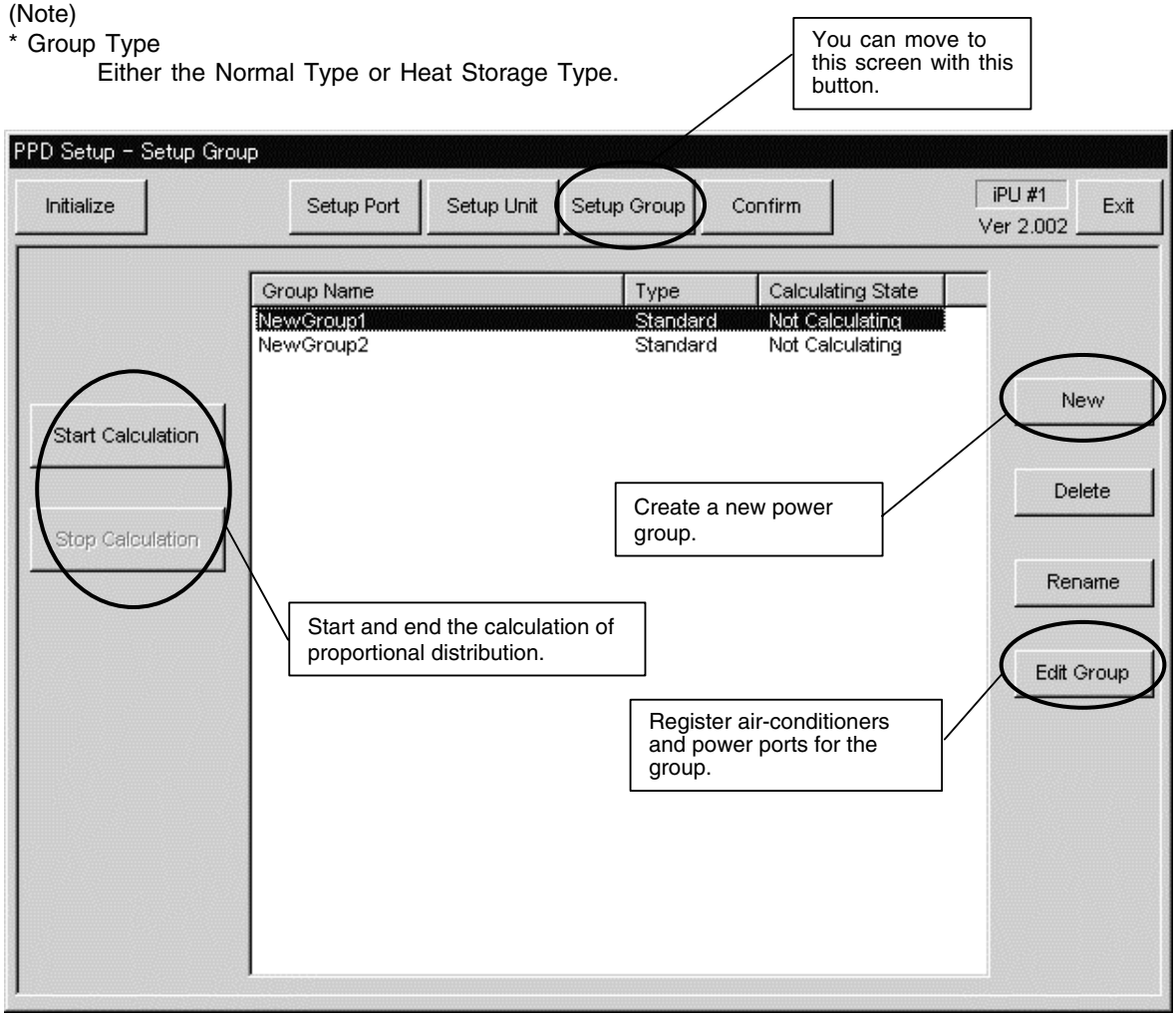
3. Click the “Group Editing” button to register the power ports and air-conditioner for the power group. (The method is explained on the following page.)

4. Click the “Calculation Start” to initiate calculation. The power groups for which PPD calculation is being conducted will be shown in red and those that are Temporarily OFF, in blue.

5. Click the “End Calculation” to end the calculation. However, note that after the calculation has been ended all accumulated data is cleared the next time calculation is initiated.

6. Clicking the “Temporary Stop” button for the groups for which power is being calculated temporarily stops the calculation process off. Clicking the button a second time revives the calculation process (button display will differ depending on the calculation state for the selected group). When the calculation has been restarted from a temporary stop state, the pulse meter values are once again aligned. Therefore, this step can (also) be used to align the meters.

(Note)
* Group Type
Either the Normal Type or Heat Storage Type.



8.8.1 Power Group Editing

1. Clicking the “Group Editing” button in the “Power Group” dialog box brings up the dialog box below (*1). The displayed ports and air-conditioners are only those registered in the same i-Controller.

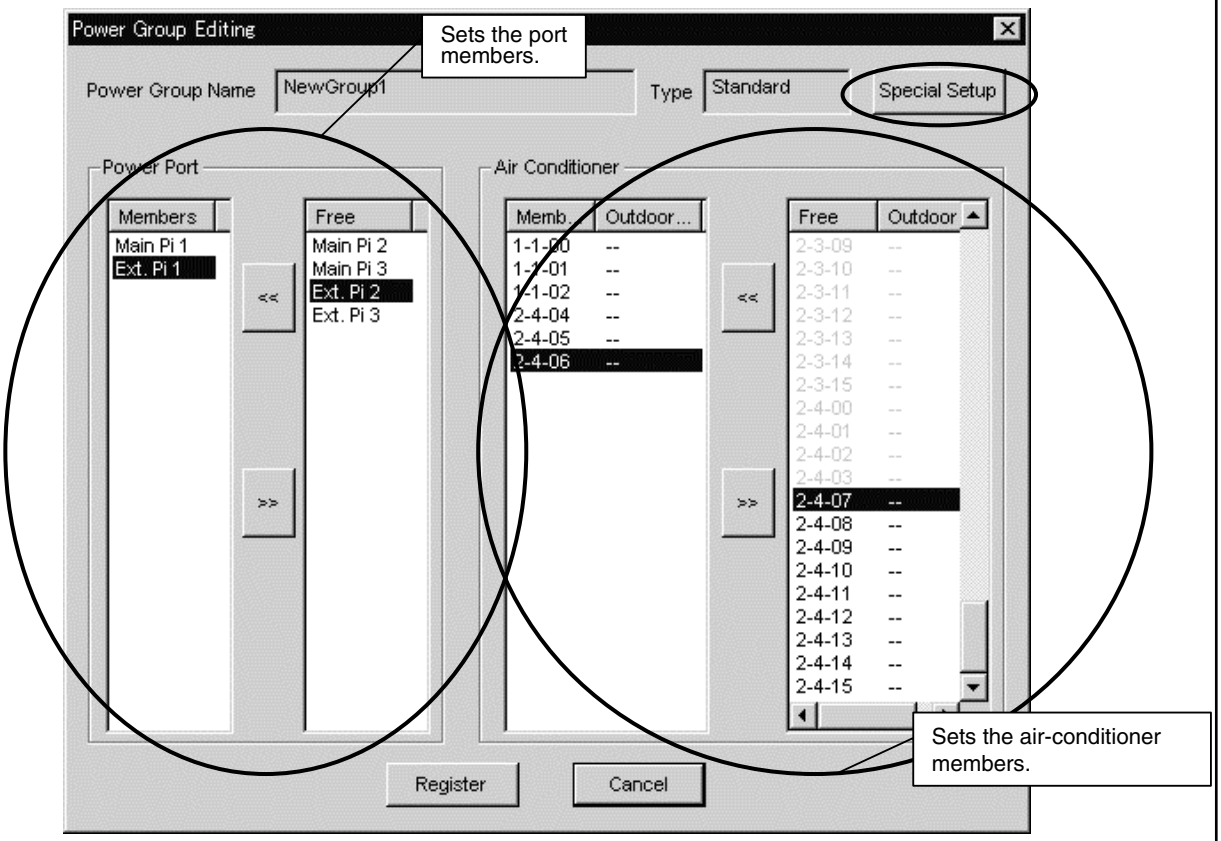
2. Under both the ports (*2) and air-conditioners (*3), the right side will show the registered control points for the selected group and the left, control points that are not registered for any of the groups.

3. Select those you will register in the group from the right list and add to the list on the left.

4. Clicking the **“Special Setup”** button will bring up a dialog box asking whether you will be conducting automatic proportional distribution for the rated power consumption-type hardware. When all the group hardware are rated power consumption-type hardware, the automatic proportional distribution for the rated power consumption type hardware refers not to actually consumed power equaling the tentative consumed power (time of operation x rating), but proportional distribution of the input pulse according to the tentative consumed power. The default setting is “Conduct Automatic Proportional Distribution”.

5. Once the setting has been completed, click the “Register” button to register.

(Note)
* 1 Colors used in the lists
  - Power Ports...Black
  - Air-conditioners...Air-conditioners with normal communication are black and those not, blue.
* 2 Ports
  Wattmeter ports can be registered in a group as determined appropriate.
  (Many body 1 and Main body 3 can be registered in the same group.)
* 3 Air-conditioners
  When adding and deleting Ice Heat Storage air-conditioners, all the air-conditioners in the same system are added or deleted.



8.9 PPD Setting (Normal Mode)

You can set the schedule for calculating proportional distribution using the i-Controller. The calculation schedule mentioned here refers to the two schedules shown below. There is only one calculation schedule per system (one per system), so the calculation of proportional distribution is conducted for all power groups according to the set same calculation schedule.

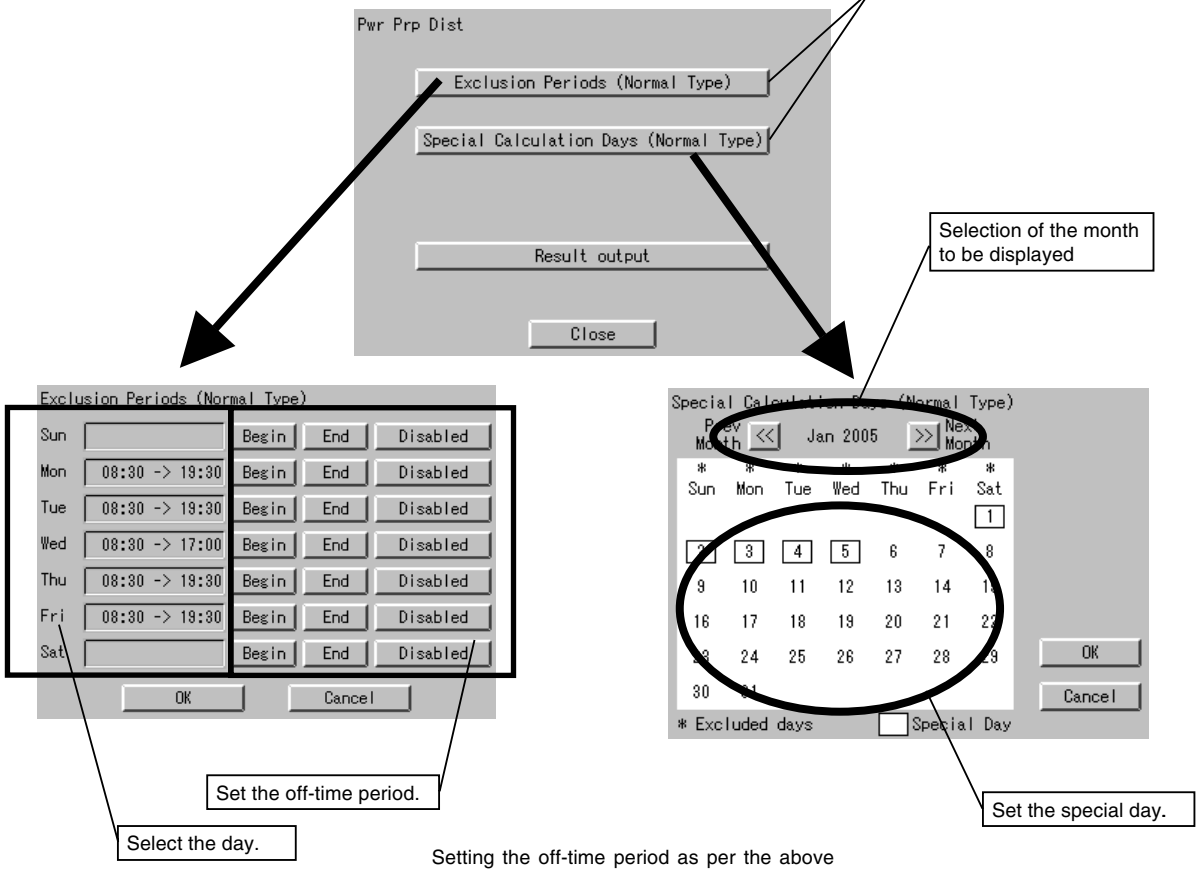
● **Off-time Period**
Off-time period (time periods in which the PPD is not calculated) setting can be conducted for normal type power groups. This can be used when the tenant knows that they are being charged the regular amount when using within the scheduled hours. The period is specified by selecting days and hours as determined appropriate for the off-time period.

● **Special Day Setting**
For normal type power groups, special days can also be set on the yearly calendar for which calculation of proportional distribution will be conducted all day long despite the day being an “off-day”. Off-time periods cannot be set for heat storage type power groups (not an option).

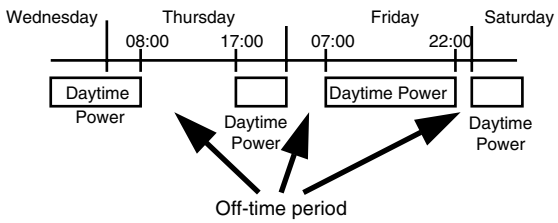
● **Nighttime Discount Period**
For heat storage type power groups, nighttime discount periods can be set. In this case, the results of the proportional distribution calculations are collected in two batches, daytime (outside of the night discount period) and nighttime (within the nighttime discount period). The data for the normal type power groups are collected as daytime power.

Execute the “PPD Setting” from the System Setting menu

Can be used for normal type power groups.

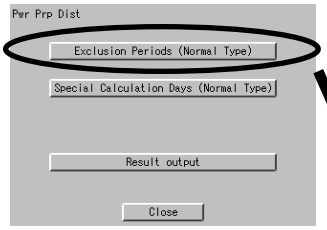


Setting the off-time period as per the above example will result in the following:



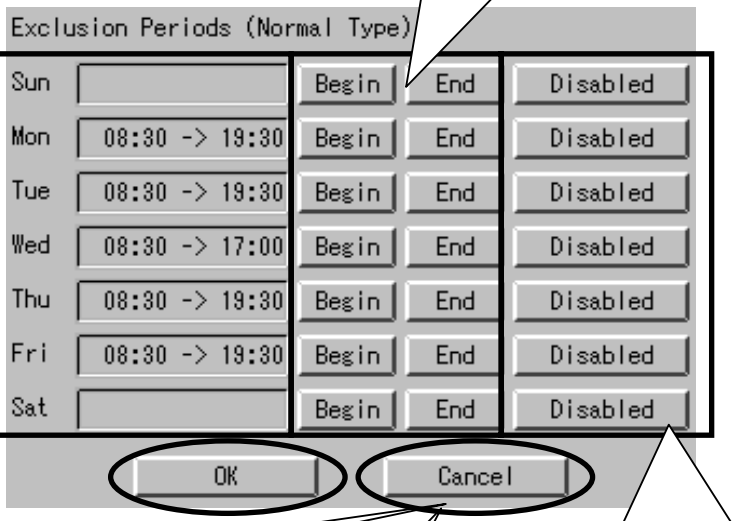
8.9.1 OFF-time Period (Normal) Setting

This function refers to setting only for the normal type and it allows the user to specify days and periods in which the PPD calculation will not be conducted.
For example, it can be used for cases where during day time of weekdays the regular charge will be collected, while PPD is only calculated for overtime hours and holidays.
The time period settings can be done for each day. The settings apply to the whole system and different settings on a zone basis cannot be conducted.



Click the “Off-time Period (Normal) Setting” button.

(1)Select the day you want to set.
(2) Set the Begin and End times.

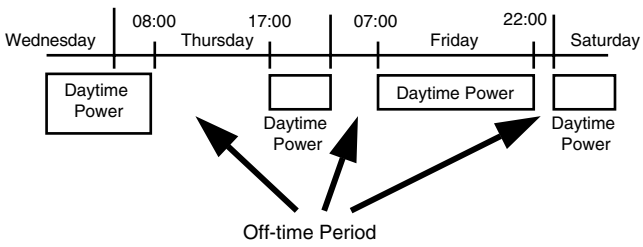


Activate the setting and return to the previous screen.
∗Setting becomes effective at the time OK is pressed

(3) Select the “Disabled" when canceling the setting.

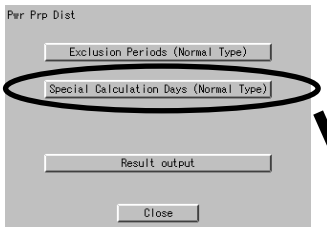
Returns to the previous screen without conducting any settings.
(Setting remains as previously conducted)

Setting the off-time period as per the above example will result in the following:



8.9.2 Special Day (Normal) Setting for Proportional Distribution

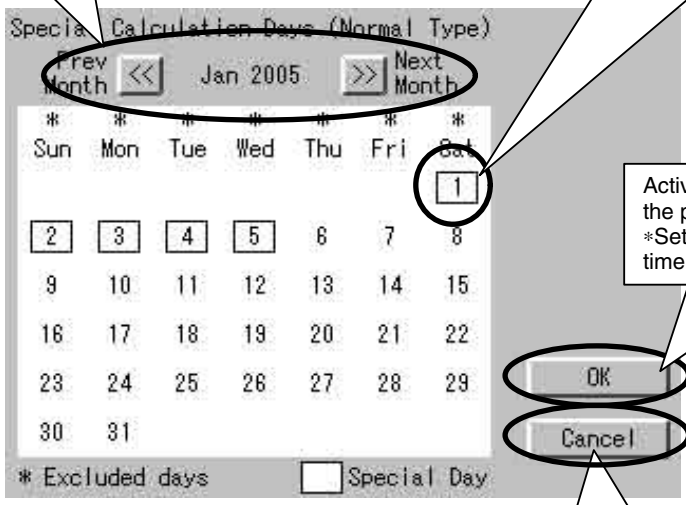
Even when setting for off-time periods (normal), you can conduct settings for special days on which you will be calculating PPD. The setting can be conducted for one year according to the specific month and day.
For example, it can be used to calculate PPD on irregular holidays such as national holidays.



Click the “Special Day (Normal) Setting” for Proportional Distribution

(1) Select the month for which you want to set.
* Clicking the << will show the previous month and >>, the next month.

(2) Select the day.
* Clicking a day puts a box over that specific day.
* Clicking the days with boxes will cancel the setting.

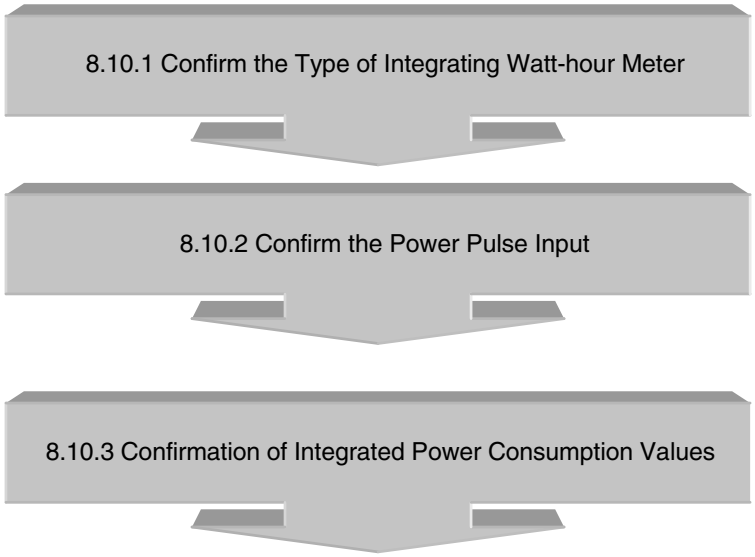


Activate the setting and return to the previous screen.
∗Setting becomes effective at the time OK is pressed.

Returns to the previous screen without conducting any settings.
(Setting remains as previously conducted)

8.10 Confirmation of Operation

Follow the procedure shown below and confirm whether the Power Proportional Distribution is properly carried out or not.



8.10.1 Confirmation of the Type of Integrating Watt-hour Meter

When carrying out the Power Proportional Distribution by i-Controller, one or more Integrating Watt-hour Meter is always required.

In fact, the Integrated Power Consumption which i-Controller recognizes is obtained by the Pulse Input from the Integrating Watt-hour Meter.

Therefore, an Integrating Watt-hour Meter is important for i-Controller and it is necessary to confirm that the specification (type) meets the i-Controller conditions.

[Checkpoint]

An Integrating Watt-hour Meter connectable to i-Controller must satisfy all the following conditions.

(1) An Integrating Watt-hour Meter must be that with pulse oscillator.

(2) The unit of output pulse must be 1 pulse to 1 kwh or 1 pulse to 10 kwh.

(3) The width of output pulse must be 100 msec or more.

(4) The pulse oscillator must be that with a semicondutor relay.

Problems when the conditions do not meet those mentioned above

- Unless the unit of output pulse from the Integrating Watt-hour Meter and the unit of input pulse set by the pulse input port are the same, the following problems will occur. (However, it does not mean that it will always be 10 times or 1/10 times.)
  - ∗If the unit of Integrating Watt-hour Meter output pulse = 1 kwh/1 pulse, setting by pulse input port = 10 kwh/1 pulse
    The calculated results of Integrated Power Consumption will be approximately 10 times of the actual Integrated Power Consumption.
  - ∗If the unit of output pulse of the Integrating Watt-hour Meter = 10 kwh/1 pulse, setting by pulse input port = 1 kwh/ pulse : The calculated results of Integrated Power Consumption will be approximately 1/10 of the actual Integrated Power Consumption.
- If the pulse width is 100 msec or less, it cannot be recognized as pulse.
- Unless a semiconductor relay is used, the contacts cause chattering and 1 pulse may be recognized as multiple pulses. (The contacts of a reed switch may cause chattering and the pulse may not be correctly read)

(Caution) Confirm the label of the Integrating Watt-hour Meter for the unit of output pulse.
It is marked on the label.

8.10.2 Confirmation of Power Pulse Input

Confirm whether the output pulse of an Integrating Watt-hour Meter is correctly input to i-Controller or not.

[Checkpoint]

1. If an air conditioner operates and the Integrating Watt-hour Meter rotates, the output pulse from the Integrating Watt-hour Meter must input to iTouch controller.
2. If multiple Integrating Watt-hour Meters are installed, the registered content edited by the power group must correspond to the actually connected Integrating Watt-hour Meter.
   ∗When an air conditioner of a certain system starts operation, the corresponding Integrating Watt-hour Meter must rotate and the output pulse from the Integrating Watt-hour Meter must input to the power port of the registered power group.

[Checking method]

1. Record the value (W1) of the Integrating Watt-hour Meter. At the same time record the number of pulses (P1) from the Integrating Watt-hour Meter which is input to i-Controller by the following “pulse data”.
2. When the Ingerating Watt-hour Meter changes, record the changed value (W2). At the same time, record the number of pulses (P2) from the Integrating Watt-hour Meter which is input to i-Controller by the following “pulse data”.
3. If it is (W2 – W1) ≒ (P2 – P1), it is acceptable.
4. In the same way, check all the connected Intergating Watt-hour Meters.

8.10.3 Confirmation of Integrated Power Consumption

Confirm that the total of the power energy proportionally distributed to each indoor unit agrees with the value of integrating watt-hour meter.

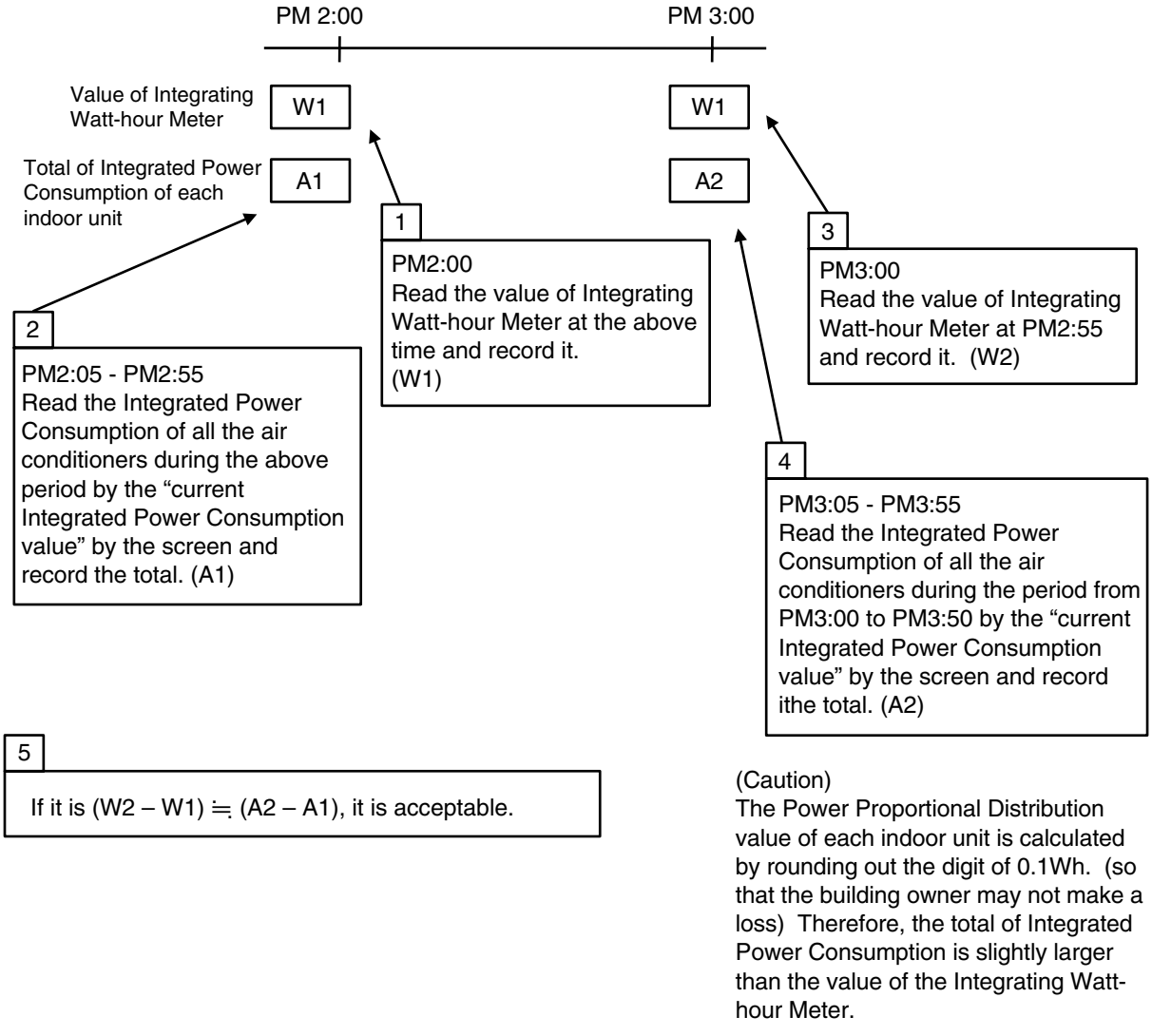
[Checkpoint]
1. Confirm by each power group

[Note]
Every hour on the hour, it carries out the Proportional Distribution calculation.

[How to check]

(1) Record the value of the Integrating Watt-hour Meter at one 5 minutes before the hour. (W1)
(2) Readout the Integrated Power Consumption value of all the registered indoor units in the same group by the screen of "current Integrated Power Consumption value" and record the total. (A1)
(3) Record the value of the Integrating Watt-hour Meter at the next 5 minutes before the hour. (W2)
(4) Readout the Integrated Power Consumption of all the indoor unit registered in the same group by the "current Integrated Power Consumption value" and record the total. (A2)
(5) If it is (W2 – W1) ≒ (A2 – A1), it is acceptable.
(6) Carry out the confirmation procedure from (1) to (5) with all the power group.

(Example) Follow the procedures below in the numerical order from 1 to 5.



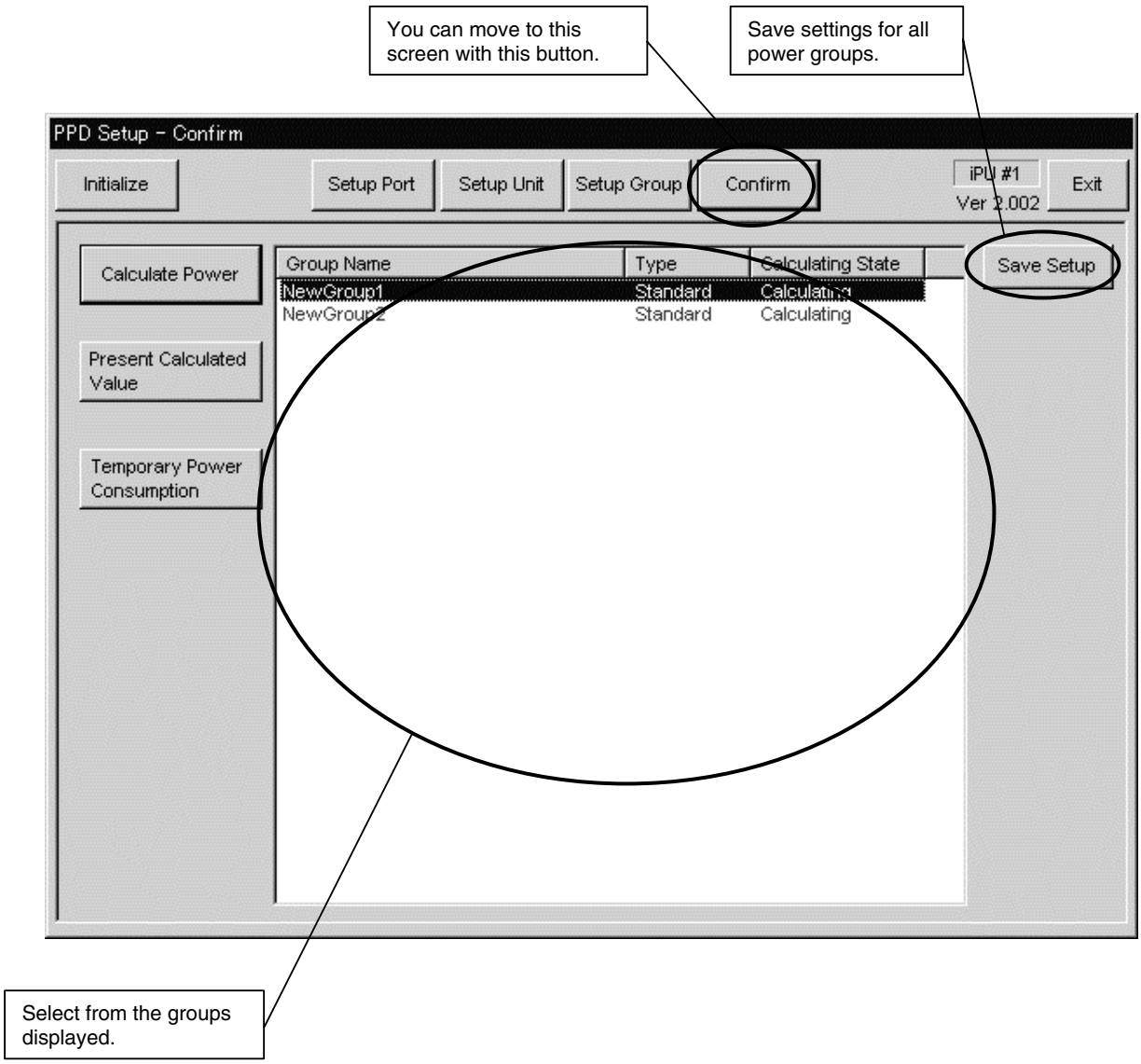
(Caution)
The Power Proportional Distribution value of each indoor unit is calculated by rounding out the digit of 0.1Wh. (so that the building owner may not make a loss) Therefore, the total of Integrated Power Consumption is slightly larger than the value of the Integrating Watt-hour Meter.

8.11 Operation Confirmation

1. Clicking the “Confirm” button brings up the dialog box below.

2. Selecting the group from the list allows you to click the buttons on the left side. Clicking each button allows you to confirm the current data for the indoor units and ports within the group. The buttons allow confirmation of the following content :
   * Integrated Power… Confirm the hysterical data of indoor unit, input port and group
   * Integrated Current Value…Confirm the actual Power Consumption of indoor unit, input port and group
   * Verification Data…Confirm the Temporary Power Consumption value of indoor unit, input port and group.

3. Clicking the “Save Setting” button allows you to save the current settings for all power groups in a text file on the PC.



8.11.1 Confirmation of Integrated Power

1. Clicking the “Integrated Power” button in the “Operation Confirmation” dialog box will bring up the corresponding dialog box below. This allows viewing the data of the specified period (The data over 48 hours is indicated.)

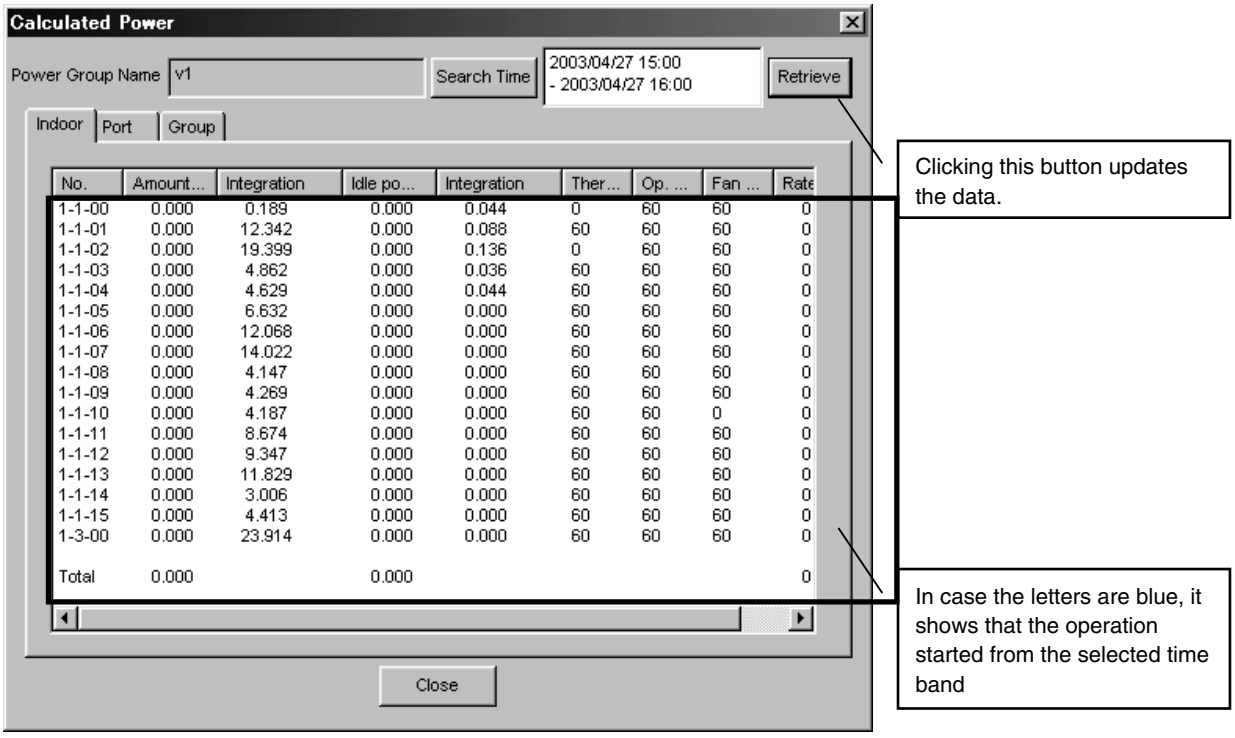
2. If the button “time retrieval” is pressed, the dialog “time selection” will be indicated. Then, select the time stamp of the desired data and press the button “select”, the period of the data will be indicated on the side of the button “time retrieval”.

3. If the button “read-out” is pressed during the period of the data is indicated, the data of the specified period will be calculated and indicated.

4. Pressing the “Tab” key allows changing of the displays of the data for indoor units, ports and groups. Data for indoor units, ports and groups can be displayed for the Normal Type.

(Note)
* 1 Overflow
An overflow error occurs if the integrated value exceeds 999.999 kWh/day or exceeds 99.999 kWh/day when the machine is off.
* 2 Input Pulse Error
An input pulse error occurs when the input pulse is 0 regardless of whether the tentative consumed power is 1000 kWh or above. (Note)

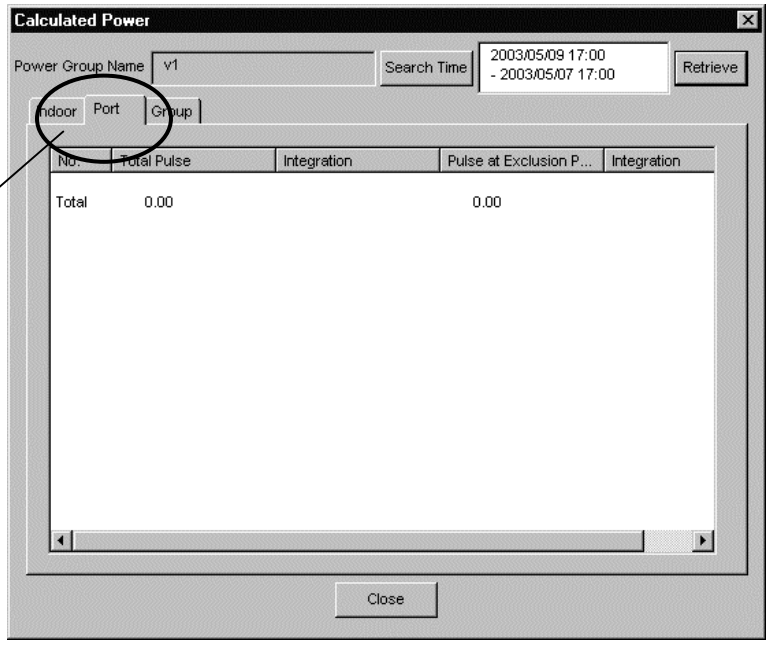
*3. The data indicated by “Indoor” is as follows :
Amount (kWh) : It indicates the Integrated Power Consumption over the period specified by “time selection”.
Integration : It indicates the Integrated Power Consumption from the operation startup to the present.
Idle power (kWh) : It indicates the Integrated Power Consumption over the period specified by “time selection” only when set to no Proportional Distribution at a standstill.
Integration : It indicates the Integrated Power Consumption from the operation startup to the present only when set to no Proportional Distribution at a standstill.
ThermoON Time (min) : It indicates the ThermoON time over the period specified by “time selection”
OP.Time (min) : It indicates the indoor unit operating time over the period specified by “time selection”
Fan OP. Time (min) : It indicates the fan operating time over the period specified by “time selection”.
Rate (%) : It indicates the Proportional Distribution rate over the period specified by “time selection”.



Note
1. Data can be shown for specified period(s) at least one day.
2. Data can be shown for up to 48 hours.

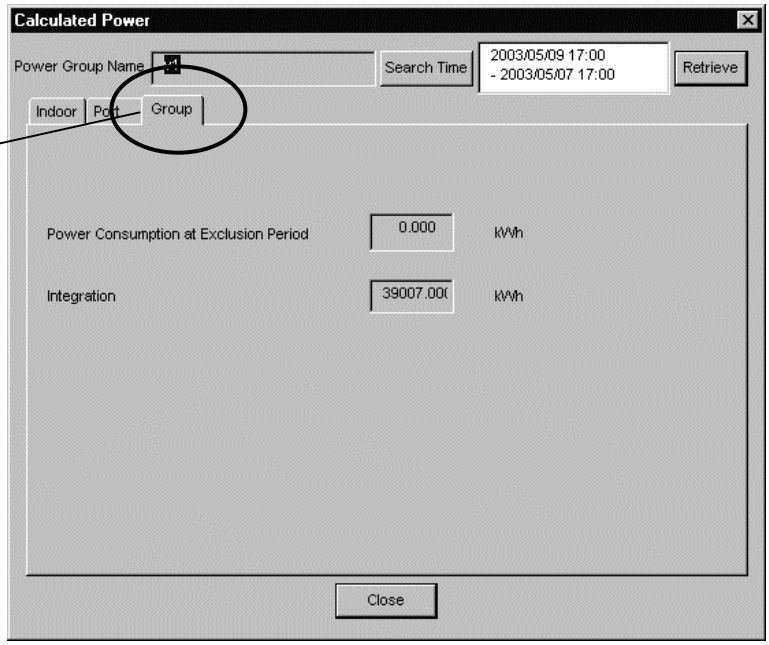
*4. The data indicated by [Port] are as folllows :
Total Pulse : It indicates the number of pulse input over the period specified by “time selection”.
Integration : It indicates the number of pulse input from the operation startup to the present.
Pulse at Exclusion Period : It indicates the number of pulse input in the time zone of Proportional Distribution excluded from the total pulse over the period specified by “time selection”.
Integration : It indicates the number of pulse input in the time zone of Proportional Distribution being excluded from the integrated pulse input the operation startup to the present.

You can move to this screen with this button.



*5 The data indicated by [Group] are as follows:
Power consumption at Exclusion Period : It indicates the Integrated Power Concumption in the time zone of Proportional Distribution excluded over the period specified by “time selection”.
Integration: It indicates the Integrated Power Consumption in the time zone of Proportional Distribution being excluded from the operation startup to the present.

You can move to this screen with this button.



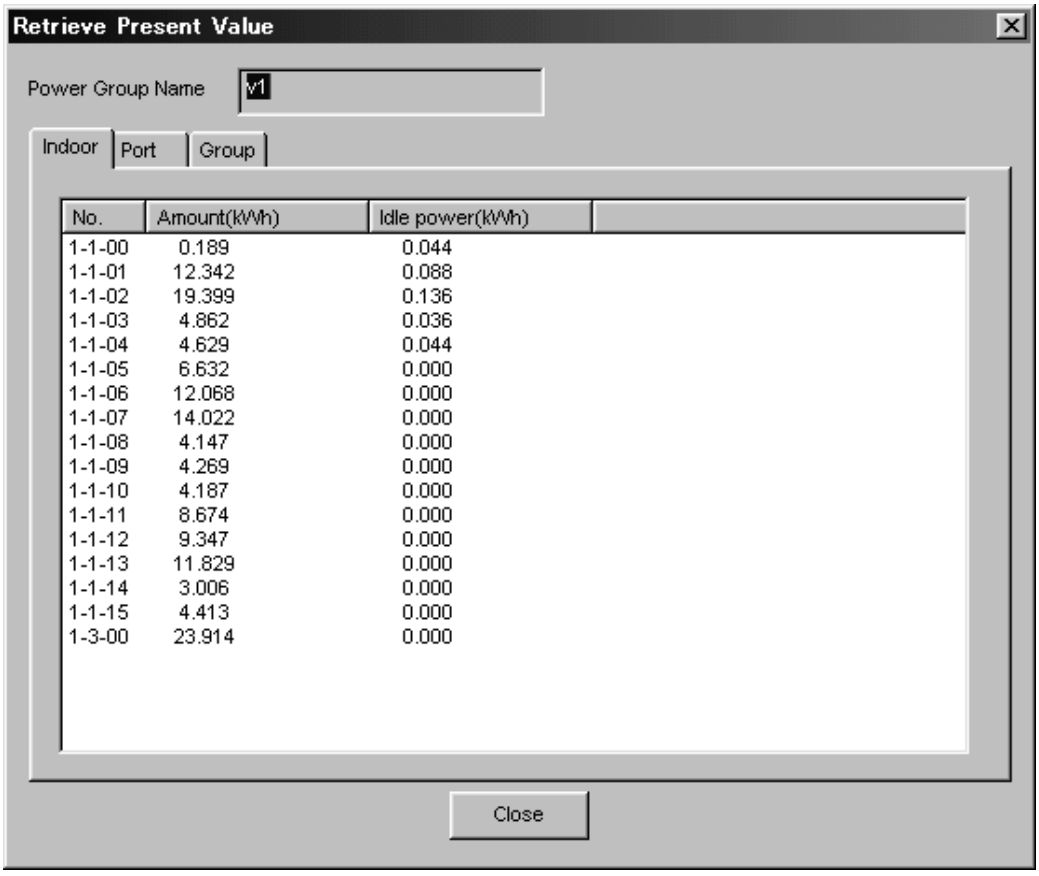
8.11.2 Confirmation of Current Integrated Values

1. Clicking the “Present Calculated Value” button in the “Operation Confirmation” dialog box brings up the corresponding dialog box below. This shows the integrated data for the time from 00:00 of the previous day to the time of final calculation (the 00 minutes before the current time).

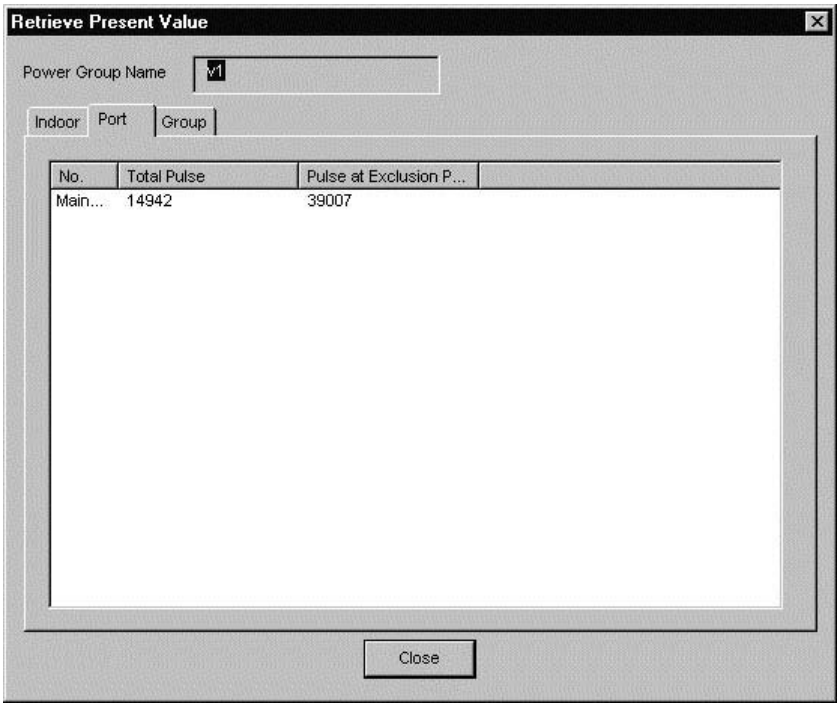
2. Data that is invalid due to overflow and input pulse errors will show pound signs before and after the numerical value. Moreover, the entries will be shown in red.

3. Pressing the “Tab” key allows changing of the displays of the data for indoor units, ports and groups. Data for indoor units, ports and groups can be displayed for the Normal Type.

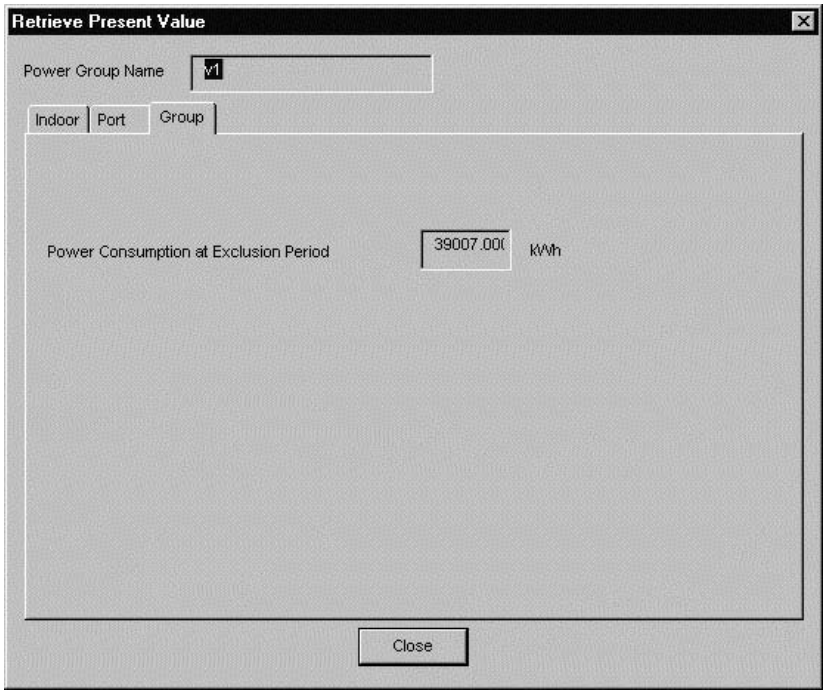
*1. The data indicated by [Indoor] are as follows :
Amount (kWh) : It indicates the Integrated Power Consumption from the operation startup to the present.
Idle power (kWh) : It indicates the power consumption at stop from the operation startup to the present only when set to no Proportional Distribution at a standstill.



*2 The data indicated by [Port] is as follows :
Total Pulse : It indictes the number of input pulse from the time of starting operation to the present.
Pulse at Exclusion Period : It indicates the number of pulse input in the time zone of proportional distribution excluded from the time of starting operation to the present.



*3 The data indicated by [Group] is as follows :
Power consumption at Exclusion Period : It indicates the Integrated Power Consumption in the time zone of Proportional Distribution being excluded from the operation startup to the present.

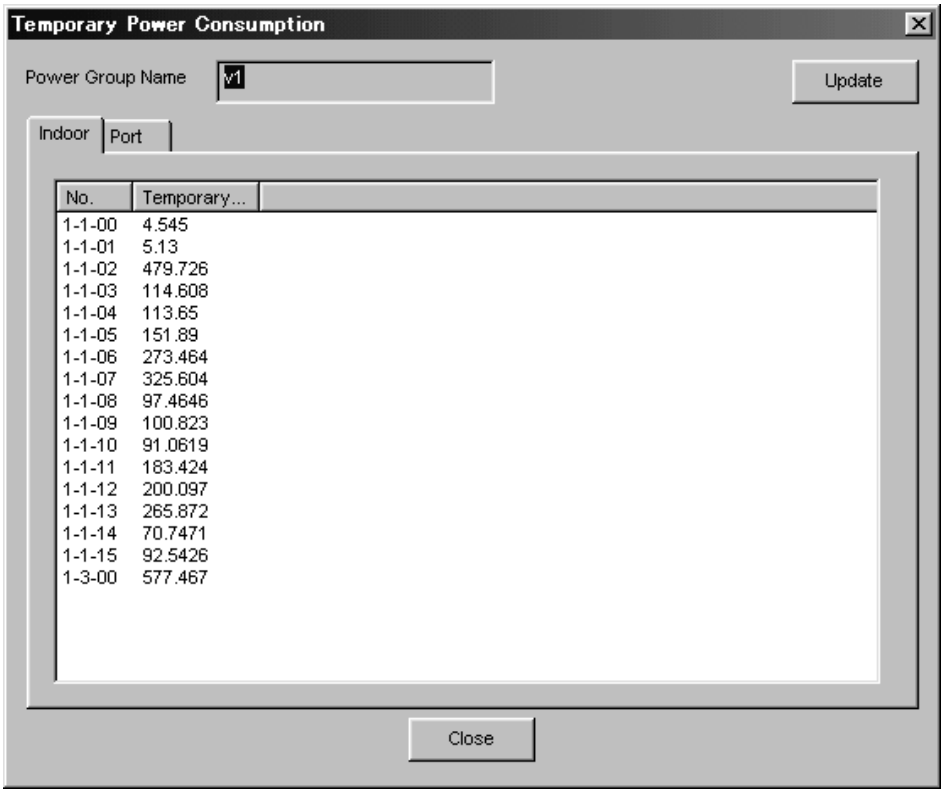


8.11.3 Confirmation of Tentative Consumed Power

1. Clicking the “Temporary Power Consumption” button in the “Operation Confirmation” dialog box will bring up the corresponding dialog box below. This allows viewing of the tentative consumed power from the time of final calculation to the present.

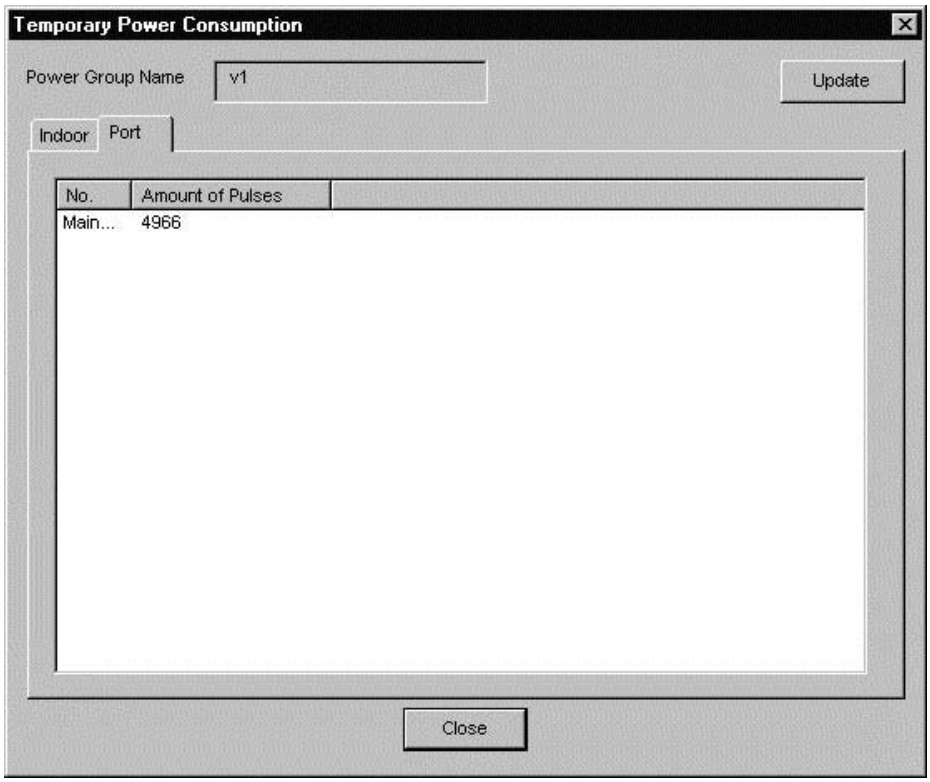
2. Pressing the “Tab” key allows changing of the displays of the data for indoor units, ports and groups. Data for indoor units, ports and groups can be displayed for the Normal Type.

*1 The data indicated by [Indoor] is as follows :
Temporary Power Consumption : It indicates the temporary Power Consumption from every hour on the hour up to the present.
The data is cleared every hour on the hour.



*2 The data indicated by [Port] is as follows :
Amount of Pulse : It indicates the number of pulse input from every hour on the hour up to the present. The data is cleared every hour on the hour.

* The pulse is counted even in the Proportional Distribution being excluded time zone.



8.12 Abnormality History

Abnormalities that occur when calculating the power proportional distribution are as follow :

(They are indicated in the abnormality history of system setting menu in iTouch controller)

Abnormality history	*Additional information on history*	*Abnormality occuring conditions*	*Measures taken when abnormalty occurred*
Daytime Pwr overflow	Air conditioner No.	Actual Power Consumption of indoor unit calculated on the hour exceeded 500.000KWh..	The data of the day the abnormality occurred can be readout normally. In addition, the day the abnormality occurred is indicated on the screen.
Daytime Idle Pwr overflow	Air conditioner No.	The Power Consumption of indoor unit at a standstill calculated on the hour exceeded 500.000KWh	The data of the day the abnormality occurred can be readout. In addition, the day the abnormality occurred can be readoput on the screen.
Pulse Input Err	Air conditioner No.	Though the total of tentative power consumption of indoor units which belong to the power group exceeds 1000kWh, the input pulse is 0.	The data of the day the abnormality occurred cannot be read-out. In addition, the day the abnormality occurred is indicated on the screen.
Backup Start	None	Since a power failure occurred in the process of retaining the data, it started from the backup data.	The calculation continues.
BCC Err	None	Information retained in SRAM is destructed.	The destructed information is zero cleared and the calculation starts.

8.13 In Such a Case

8.13.1 Memory Card

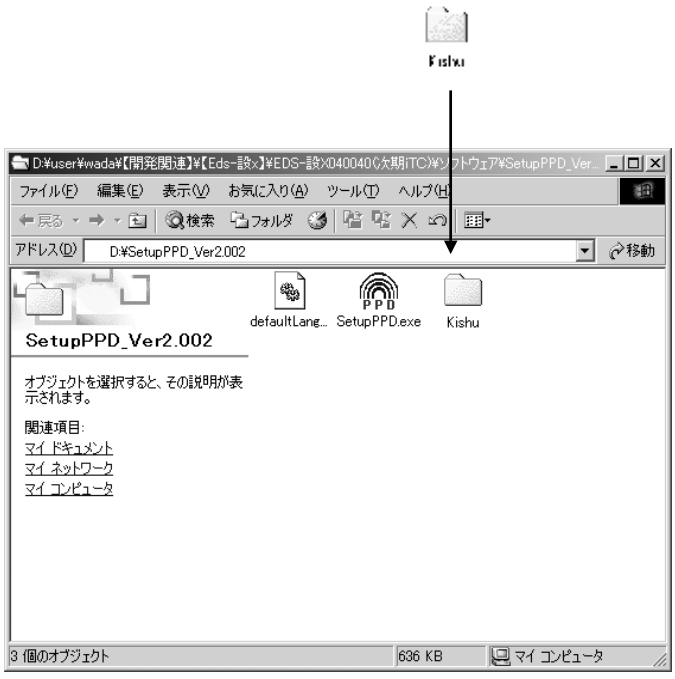
When the memory card is inserted into the Intelligent Touch Controller main unit and if a message “do you initialize?” is indicated, select either “YES or OK” and initialize. Then, the memory card can be used.

8.13.2 Watt-hour Meter

1. Minimum starting current of watt-hour meter
   Air conditioners consume electric power even when they are at standstill. In case an air conditioner is at standstill, if pulse input from the watt-hour meter is extremely small, check the minimum starting current of the watt-hour meter. Starting current means the minimum current value detectable by a watt-hour meter.

8.13.3 Model Data

1. When a model name is not indicated by the automatic equipment registration, obtain the latest model name from the Global Operation home page. Overwrite and copy the set of folder (¥kisyu).

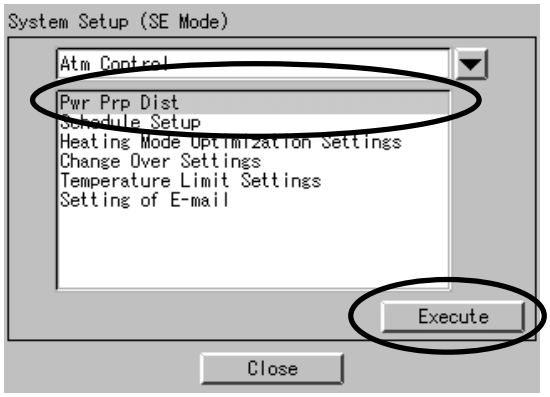


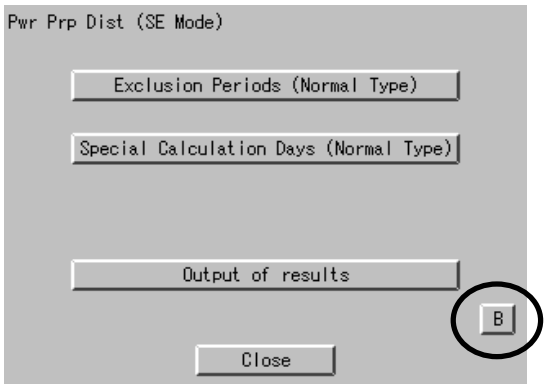
8.14 Appendix

8.14.1 Retention of Verified Data

If a doubt arises with regard to the results of proportional distribution, retain the verified data according to the following method and send it to the DIL Quality Control Dept.

1. Insert the memory card into the Intelligent Touch Controller main unit.
2. On the screen of “Pwr Prp Dist” of the service mode of the Intelligent Touch Controller main unit, press the button [B], and the data is retained in the memory card.
3. As the file below will be made in the memory card, send all the file to the DIL Quality Control Dept.
   (To thaw the file, the dedicated software is required.)
   *ppd_DB_01.dat.gz ~ ppd_DB_12.dat.gz, ppd_DB_CUR.dat.gz
   The power consumption per every hour, the thermo ON time and the number of power pulse of one month are retained in a file.
   (can be retained up to max. 13 months)
   *ppd_hst00.dat.gz ~ ppd_hst48.dat.gz
   This is the latest 48 minutes data
   *ppd_prop.dat.gz, ppd_sched.dat.gz
   The tools for trial run and the set contents on the screen are retained.

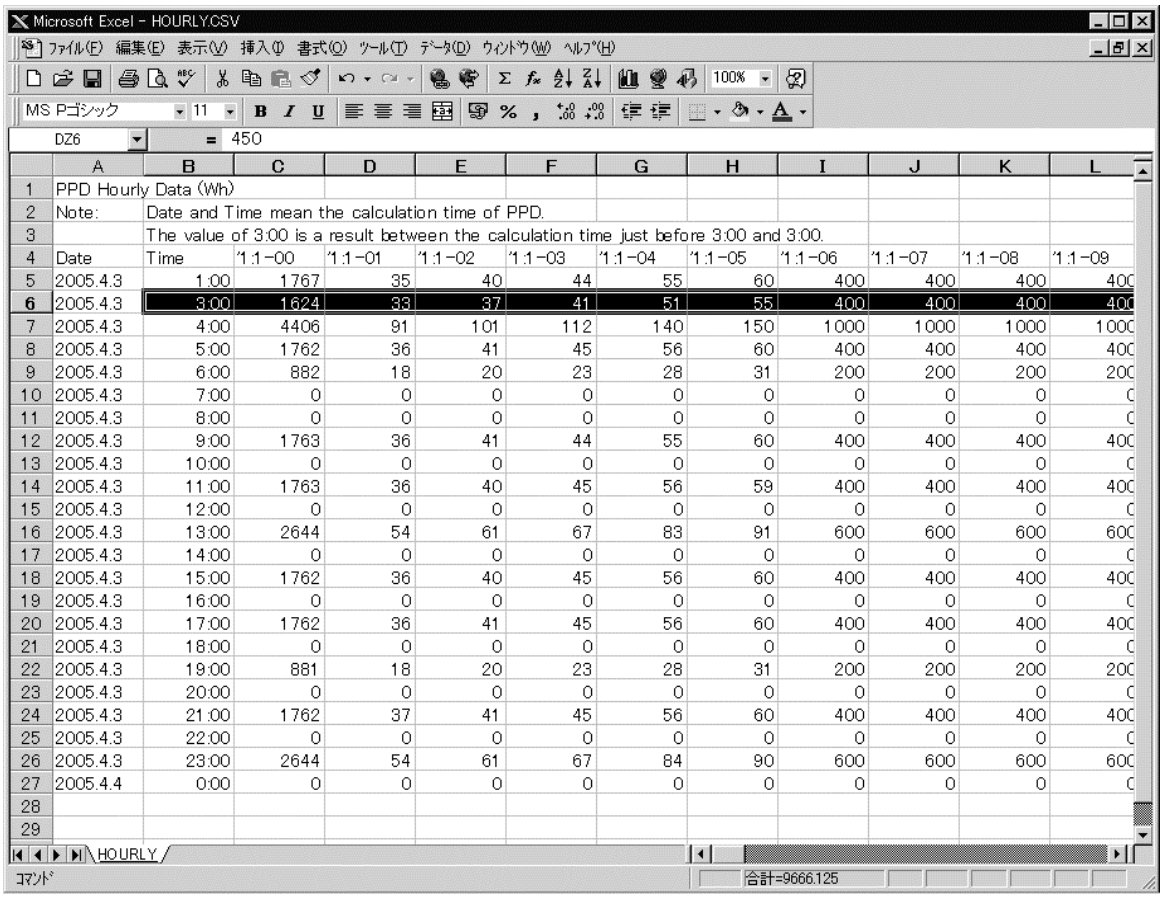




8.14.2 Proportional Distribution Results at the Start and End of Day Light Saving Time

1. Start of daylight saving time (client's data)

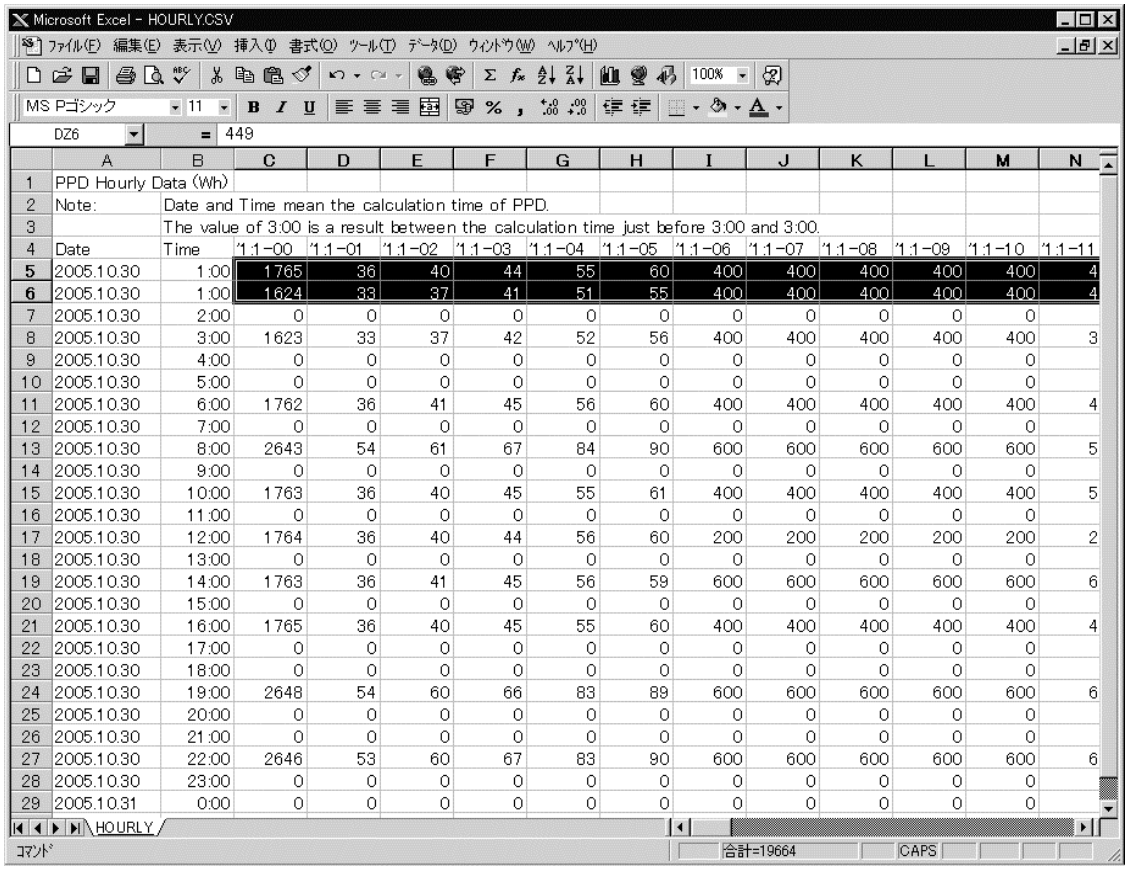
For example if the daylight saving time starts at 2:00, the clock of intelligent Touch Controller automatically changes from 2:00 to 3:00 at 2:00.
When the proportional distribution results of this day is retained, the data between 1:00 and 2:00 is added to the part of 3:00.



	A	B	C	D	E	F	G	H	I	J	K	L
1	PPD Hourly Data (Wh)											
2	Note:	Date and Time mean the calculation time of PPD.										
3		The value of 3:00 is a result between the calculation time just before 3:00 and 3:00.										
4	Date	Time	'1:1-00	'1:1-01	'1:1-02	'1:1-03	'1:1-04	'1:1-05	'1:1-06	'1:1-07	'1:1-08	'1:1-09
5	2005.4.3	1:00	1767	35	40	44	55	60	400	400	400	400
6	2005.4.3	3:00	1624	33	37	41	51	55	400	400	400	400
7	2005.4.3	4:00	4406	91	101	112	140	150	1000	1000	1000	1000
8	2005.4.3	5:00	1762	36	41	45	56	60	400	400	400	400
9	2005.4.3	6:00	882	18	20	23	28	31	200	200	200	200
10	2005.4.3	7:00	0	0	0	0	0	0	0	0	0	0
11	2005.4.3	8:00	0	0	0	0	0	0	0	0	0	0
12	2005.4.3	9:00	1763	36	41	44	55	60	400	400	400	400
13	2005.4.3	10:00	0	0	0	0	0	0	0	0	0	0
14	2005.4.3	11:00	1763	36	40	45	56	59	400	400	400	400
15	2005.4.3	12:00	0	0	0	0	0	0	0	0	0	0
16	2005.4.3	13:00	2644	54	61	67	83	91	600	600	600	600
17	2005.4.3	14:00	0	0	0	0	0	0	0	0	0	0
18	2005.4.3	15:00	1762	36	40	45	56	60	400	400	400	400
19	2005.4.3	16:00	0	0	0	0	0	0	0	0	0	0
20	2005.4.3	17:00	1762	36	41	45	56	60	400	400	400	400
21	2005.4.3	18:00	0	0	0	0	0	0	0	0	0	0
22	2005.4.3	19:00	881	18	20	23	28	31	200	200	200	200
23	2005.4.3	20:00	0	0	0	0	0	0	0	0	0	0
24	2005.4.3	21:00	1762	37	41	45	56	60	400	400	400	400
25	2005.4.3	22:00	0	0	0	0	0	0	0	0	0	0
26	2005.4.3	23:00	2644	54	61	67	84	90	600	600	600	600
27	2005.4.4	0:00	0	0	0	0	0	0	0	0	0	0
28												
29												

2. End of daylight saving time (client's data)

For example, if the daylight saving time ends at 2:00, the clock of intelligent Touch Controller automatically changes from 2:00 to 1:00 at 2:00.
When the proportional distribution results of this day is retained, there are two data of 1:00. The second data of 1:00 is the data of the time band the daylight saving time ended.



Microsoft Excel - HOURLY.CSV

DZ6 = 449

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	PPD Hourly Data (Wh)													
2	Note:	Date and Time mean the calculation time of PPD.												
3		The value of 3:00 is a result between the calculation time just before 3:00 and 3:00.												
4	Date	Time	'1.1-00	'1.1-01	'1.1-02	'1.1-03	'1.1-04	'1.1-05	'1.1-06	'1.1-07	'1.1-08	'1.1-09	'1.1-10	'1.1-11
5	2005.10.30	1:00	1765	36	40	44	55	60	400	400	400	400	400	4
6	2005.10.30	1:00	1624	33	37	41	51	55	400	400	400	400	400	4
7	2005.10.30	2:00	0	0	0	0	0	0	0	0	0	0	0	
8	2005.10.30	3:00	1623	33	37	42	52	56	400	400	400	400	400	3
9	2005.10.30	4:00	0	0	0	0	0	0	0	0	0	0	0	
10	2005.10.30	5:00	0	0	0	0	0	0	0	0	0	0	0	
11	2005.10.30	6:00	1762	36	41	45	56	60	400	400	400	400	400	4
12	2005.10.30	7:00	0	0	0	0	0	0	0	0	0	0	0	
13	2005.10.30	8:00	2643	54	61	67	84	90	600	600	600	600	600	5
14	2005.10.30	9:00	0	0	0	0	0	0	0	0	0	0	0	
15	2005.10.30	10:00	1763	36	40	45	55	61	400	400	400	400	400	5
16	2005.10.30	11:00	0	0	0	0	0	0	0	0	0	0	0	
17	2005.10.30	12:00	1764	36	40	44	56	60	200	200	200	200	200	2
18	2005.10.30	13:00	0	0	0	0	0	0	0	0	0	0	0	
19	2005.10.30	14:00	1763	36	41	45	56	59	600	600	600	600	600	6
20	2005.10.30	15:00	0	0	0	0	0	0	0	0	0	0	0	
21	2005.10.30	16:00	1765	36	40	45	55	60	400	400	400	400	400	4
22	2005.10.30	17:00	0	0	0	0	0	0	0	0	0	0	0	
23	2005.10.30	18:00	0	0	0	0	0	0	0	0	0	0	0	
24	2005.10.30	19:00	2648	54	60	66	83	89	600	600	600	600	600	6
25	2005.10.30	20:00	0	0	0	0	0	0	0	0	0	0	0	
26	2005.10.30	21:00	0	0	0	0	0	0	0	0	0	0	0	
27	2005.10.30	22:00	2646	53	60	67	83	90	600	600	600	600	600	6
28	2005.10.30	23:00	0	0	0	0	0	0	0	0	0	0	0	
29	2005.10.31	0:00	0	0	0	0	0	0	0	0	0	0	0	

HOURLY

合計=19664 CAPS

9. After-sales Service

After-sales Service

- **To have the product repaired, prepare the following information**
  - Model
  - Date of installation
  - Circumstances - as detailed as possible
  - Address, name, phone number
- **Transfer**
  Transfer requires professional technique. Be sure to contact the supplier you purchased the product from or service station.
  The customer will be charged for the expense required for transfer work.
- **Questions**
  For after-sales service, contact the supplier you purchased the product from or the nearest service center.