MITSUBISHI ELECTRIC

CE

Air-conditioner Network System

Centralized Controller

AG-150A
GB-50ADA-A
GB-50ADA-J

Instruction Book

(Web browser for System maintenance engineer)

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Before using the controller, please read this Instruction Book carefully to ensure correct operation. Retain this manual for future reference.

WT05490X06
Ver. 2.4

1 Introduction

Special features of Mitsubishi Electric Corporation's "Centralized Controller AG-150A," "Centralized Controller GB-50ADA-A," and "Centralized Controller GB-50ADA-J" are that a PC connected to a LAN can be used to monitor the operation condition of air conditioners and perform air conditioner operations.
In this manual, the procedures to monitor the status of and to operate the centralized controller on the Web browser are described.
Hereinafter, Centralized controller AG-150A, GB-50ADA-A, and GB-50ADA-J, unless otherwise specified, will be called "AG-150A".

Note: License of "Web Monitor" or "Basic License Pack" is necessary to use the web browser (to operate or monitor the air conditioners). Some licenses are necessary depending on the functions to be used. Register the license key on the LCD screen or on the registration screen.

Note: A one-day license key can be registered on the LCD screen that allows the user to use the "Web Monitor" only on the day of the registration (not applicable to GB-50ADA-A and GB-50ADA-J). Use this license key to use the initial setting browser, or in any other situations when a temporary license key "Web Monitor" is necessary.

Note: Use a security device such as a VPN router when connecting the AG-150A to the Internet to prevent unauthorized access.

Note: "Booster unit" and "Water HEX unit" are referred to as "Air to water".

Note: GB-50ADA-A and GB-50ADA-J cannot be connected to the Expansion Controller (PAC-YG50ECA). Settings or displays of the Expansion Controller cannot be made on the GB-50ADA-A and GB-50ADA-J.

1-1 Terms Used in This Manual

- "Click" refers to the action of positioning the mouse cursor on the object (such as button or folder), pressing down, and releasing the left mouse button once.
- Unless otherwise specified, the example screen images used in this manual are Windows® XP and Internet Explorer 6.0 screen images.

Note: Windows is a registered trademark or trademark of Microsoft Corporation USA in the United States and other countries.

1-2 Computer Requirements

To monitor and operate air conditioners by web browser, computer must include the following requirements.

Table 1-1 Computer Requirements

Item	Requirement
CPU	Pentium 300MHz or faster
Memory	64M Bytes or more (128M Bytes or more recommended)
Screen resolution	1024 x 768 or higher recommended
Compatible browser	Microsoft® Internet Explorer 6.0 or later Note: You must have a Java® execution environment. (Sun Microsystems® Java Plug-in Ver.1.6.0_02 or later). Note: You can check the Sun Microsystems Java Plug-in version in "Java" in a control panel. Note: When using Sun Microsystems® Java Plug-in Ver.1.6.0_10 or later, set the Java execution environment according to the instructions in section 2-3 "Setting the Java Execution Environment."
On-board LAN port or LAN card	One connector (100BASE-TX)
Other	Pointing device such as a mouse

Note: Microsoft is a registered trademark or trademark of Microsoft Corporation USA in the United States and other countries.
Sun Microsystems and Java are trademarks or registered trademarks of Sun Microsystems Inc. in the United States and/or other countries.

1-3 Notes on using AG-150A with the integrated centralized control software (TG-2000A)

If the system is connected to the integrated centralized control software (referred to as TG-2000A hereafter), make all settings and changes from the TG-2000A so that the data in TG-2000A and AG-150A will match.

2 Setting the Operating Environment

PC settings and web browser settings required for using a web browser to monitor air conditioner units and perform operations are explained in the following pages.

2-1 Setting the PC IP Address

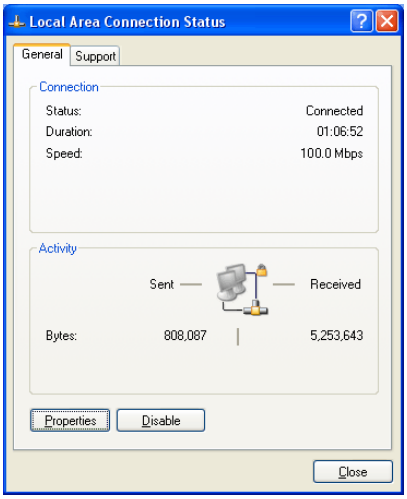
Set an IP address on the PC that enables AG-150A to connect via a web browser. For instance, if the AG-150A IP address is [192.168.1.1], the PC IP address will need to belong to the same system [192.168.1.101].

If the AG-150A is connected to an existing LAN, ask the LAN administrator to decide what PC IP address to use.

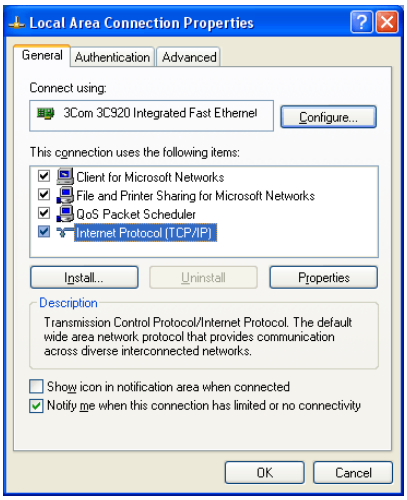
Note: When using a AG-150A dedicated LAN, it is recommended that the AG-150A main unit be given an IP address within the range [192.168.1.1] - [192.168.1.40] and the PCs that will be connected to the AG-150A be given an IP address within the range [192.168.1.101] - [192.168.1.150]

(1) Click on [Control Panel] under [Start] to open the Control Panel.

(2) In the Control Panel window, double click [Network and Dial-up Connections] and the Network and Dial-up Connections window will open. Double click on [Local Area Setting] and the [Local Area Connection Status] dialog will open. Click [Properties].

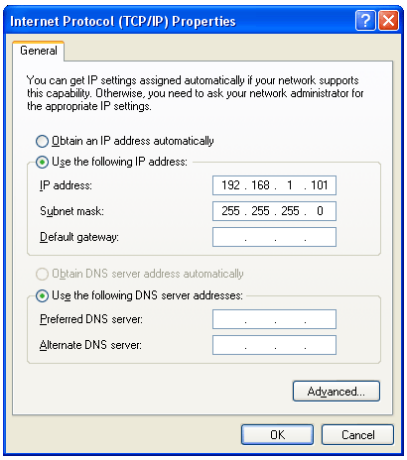


(3) In the [Local Area Connection Properties] dialog, click [Internet Protocol] to select it and click the [Properties] button.



(4) In the [Internet Protocol (TCP/IP) Properties] dialog, click [Use the following IP address] and enter the IP address (for example, “192.168.1.101”) that you want to set in the IP address field.
You normally set [255.255.255.0] as the subnet mask.

Note: Ask your LAN administrator to provide the IP addresses and subnet mask.



(5) Click the [OK] button to close this dialog, and then close the other open dialogs to complete the network setting.

2-2 Setting the Web Browser

Use a security device such as a VPN router when connecting the AG-150A to the Internet to prevent unauthorized access.
If no security devices are installed, the operation settings may be changed by an unauthorized person without the knowledge of the user.

Necessary web browser settings must be performed to enable the web browser to connect to the AG-150A.

Note: The settings and screen images used as examples in this manual are based on Internet Explorer 6.0.

2-2-1 No Internet Connection

Follow the instructions below to make the web browser environment settings when using the PC with no Internet connection for monitoring and operating the air conditioners.

(1) Click the web browser menu item [Tools] and then click [Internet Options…] to select.

(2) In the [Internet Options] tabbed dialog, click the [Connections] tab to display.

(3) Select [Never dial a connection] in the Dial-up settings section and click the [OK] button to close the dialog.

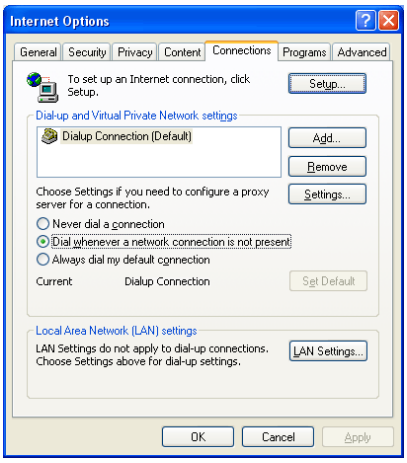
2-2-2 Internet Connection Using a Dial-Up

If the PC used for monitoring air conditioners and performing operations is going to connect to the Internet via a dial-up connection, use the procedure given below to set the web browser environment settings.
By performing these settings, a message will appear asking whether or not to use a dial-up connection when an Internet connection is necessary. When connecting to the Internet, follow the directions below.

(1) Click the web browser menu item [Tools] and then click [Internet Options…] to select.

(2) In the [Internet Options] tabbed dialog, click the [Connections] tab to display.

(3) Select [Dial whenever a network connection is not present] in the Dial-up settings section and click the [OK] button to close the dialog.



2-2-3 Connecting to the Internet using a proxy server (Using an existing LAN)

If the PC you use for monitoring air conditioners and performing operations is going to access the Internet via proxy server by connecting to an existing LAN such as a LAN within your company, use the procedure given below to set the web browser environment settings.
By performing these settings, your PC will connect to a proxy server only when connecting to the Internet.

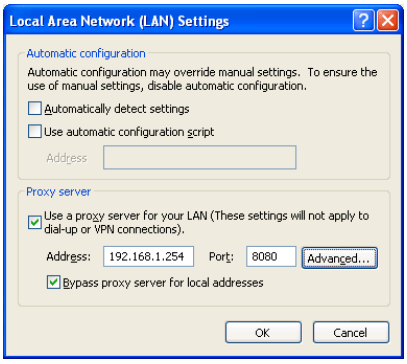
(1) Click the web browser menu item [Tools] and then click [Internet Options…] to select.

(2) In the [Internet Options] tabbed dialog, click the [Connections] tab to display.

(3) Select [Never dial a connection] in the Dial-up setting section.

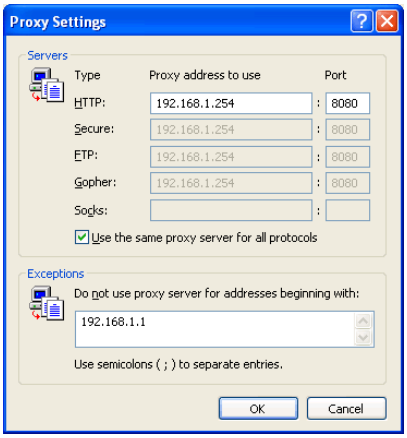
(4) Click the [LAN Setting ...] button in the Local Area Network (LAN) settings section to display the Local Area Network (LAN) Settings dialog.

(5) In the Local Area Network (LAN) Settings dialog, check [Bypass proxy server for local addresses] and click the [Advanced...] button.



(6) Enter the IP address for the AG-150A (e.g. 192.168.1.1) in the Exceptions field of the Proxy Setting dialog and click the [OK] button to close the dialog and then close the other open dialogs to complete the setting.

Note: If connecting to more than one AG-150A, you can specify multiple IP addresses like [192.168.1.1; 192.168.1.2], however, it is also possible to use the asterisk (*) and specify [192.168.1*].



2-3 Setting the Java Execution Environment

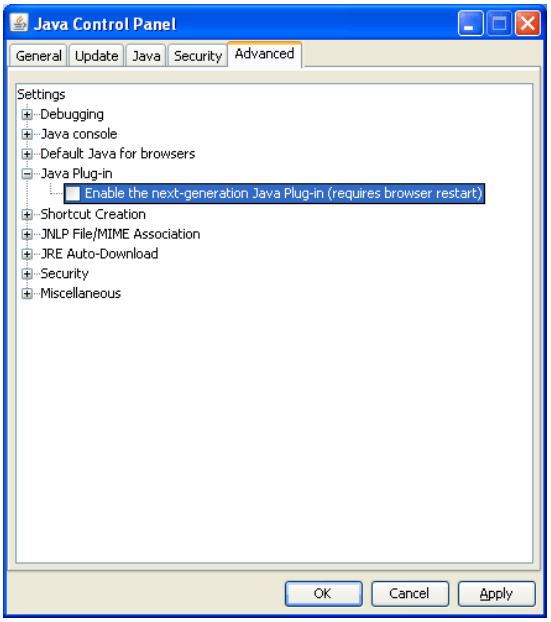
When using Java Plug-in version 1.6.0_10 or later, make the following environment settings (not required for version 1.6.0_09 or earlier).

Note: The setting samples and screenshots used in this manual are those of Java Plug-in version 1.6.0_11.

2-3-1 Disabling the next-generation Java Plug-in

(1) Open Java Control Panel by double-clicking Java in the Control Panel.

(2) In the [Advanced] tab under the [Java Control Panel] screen, click the plus next to [Java Plug-in] to expand the list, and uncheck the checkbox next to [Enable the next-generation Java Plug-in (requires browser restart.)].



3 Performing Operations

Text below explains how to connect to the AG-150A and how to monitor and adjust the operation condition of air conditioners. Follow the directions given here when performing operations.

Note: If the AG-150A is restarted due to a power interruption etc., wait until the screen on the AG-150A main unit displays the normal operation screen (it takes several minutes before the normal operation screen is displayed) before using a web browser to access the AG-150A. If access is attempted while the AG-150A is still starting up, the most recent data might not be displayed or communication errors could occur.

Note: Default IP address of AG-150A is "192.168.1.1". (Factory setting)

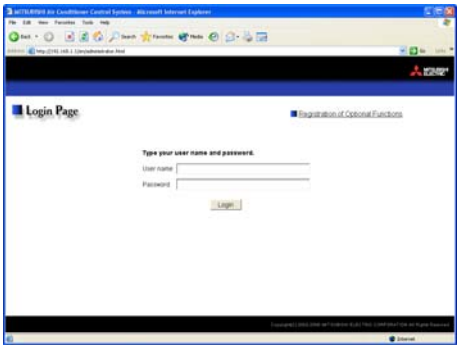
3-1 Logging in on the AG-150A

3-1-1 Logging in on the AG-150A

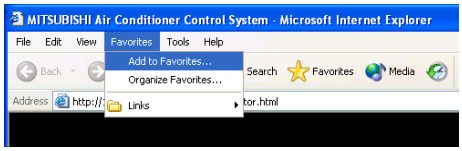
(1) Enter the web page address in the address field of the web browser as follows:

http://[IP address of the AG-150A]/administrator.html

Press the [Enter] key on the keyboard. A screen appears for login.
Note: For example, type “http://192.168.1.1/administrator.html” if the AG-150A IP address is [192.168.1.1].



(2) To make connection easier for the next time, click the web browser menu item [Favorites], click [Add to Favorites] then add the address to the Favorites folder. Once this address is added to the Favorites folder, it is not necessary to input the address of (1). Simply select it from your Favorites folder and the AG-150A page will appear.



(3) Enter the user name and the password in the login screen, and click the [Login] button. The screen for monitoring the operation condition will appear. An explanation on how to perform operations in the normal operation screen begins from the next page.
The table below shows the web page address for public users and managers, their respective default the user names and passwords, and accessible functions. If there are public users who will only operate the air conditioners, provide them with the appropriate web page address and password.

User	Web page address	Default user name	Default password	Available functions	
Building manager	http:// [IP address of AG-150A]/administrator.html	administrator	admin	Monitor / Operation	Condition List Measurement List Malfunction List Filter Sign List
				Schedule settings	Today's Schedule Weekly Schedule1 Weekly Schedule2 Annual Schedule
				Malfunction log	Unit Error Communication Error
				System Settings	Date/Time Settings User Registration
				Maintenance	Send Mail Log Gas Amount Check
Public user	http:// [IP address of AG-150A]/index.html	guest	guest	Monitor / Operation	Condition List

Note: You can register a maximum of 50 public users and it is possible to individually specify which air conditioners can be operated by each user. (The use of this function requires a license registration.)

Note: It is recommended to change the user name and password so users other than the manager are not permitted to change the settings.

Note: The Web page is displayed in the same language as the computer uses and it is also possible to display the Web page in other languages by entering the following Web page addresses.

English	: http://[IP address of the AG-150A]/en/administrator.html
German	: http://[IP address of the AG-150A]/de/administrator.html
French	: http://[IP address of the AG-150A]/fr/administrator.html
Spanish	: http://[IP address of the AG-150A]/es/administrator.html
Italian	: http://[IP address of the AG-150A]/it/administrator.html
Russian	: http://[IP address of the AG-150A]/ru/administrator.html
Chinese	: http://[IP address of the AG-150A]/zh/administrator.html
Portuguese	: http://[IP address of the AG-150A]/pt/administrator.html
Japanese	: http://[IP address of the AG-150A]/ja/administrator.html

The above addresses are for administrators. For user's use, change [administrator.html] to [index.html].

3-1-2 Encrypting the communication data and login on the AG-150A

AG-150A can encrypt communication data using HTTPS (SSL).

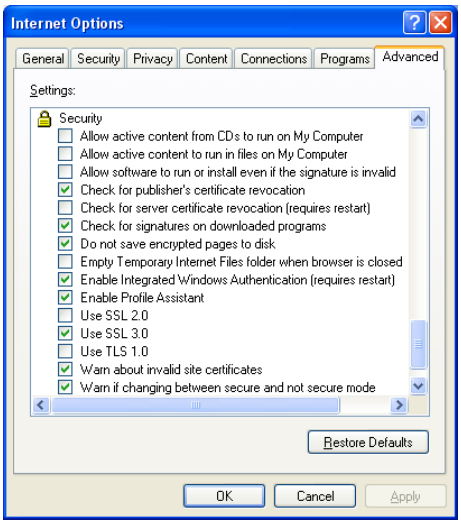
When connecting the AG-150A to the LAN that can be accessed by the general public, it is recommended that the following settings be made so that the units are monitored and controlled on the encrypted Web page.

Note: Depending on the operating system or the version of Java, HTTPS encrypted messages may not be handled correctly. If this happens, use a HTTP connection to monitor and control the units as noted in the section above.

(1) Go to [Tools]->[Internet Options]->[Advanced], and make the following settings.

Item	Checkbox setting
Use SSL 2.0	Uncheck the box.
Use SSL 3.0	Check the box.
Use TLS 1.0	Uncheck the box.
Do not save encrypted pages to disk	Check the box.

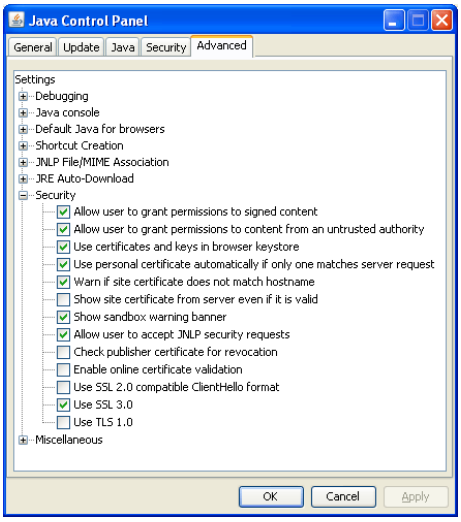
Note: Some of the settings may have different names depending on the Web browser version.



(2) Click on [Java] in the Control Panel, and make the settings for the items under [Security] in the [Advanced] tab.

Item	Checkbox setting
Use SSL 2.0 compatible Client Hello format	Uncheck the box.
Use SSL 3.0	Check the box.
Use TLS 1.0	Uncheck the box.

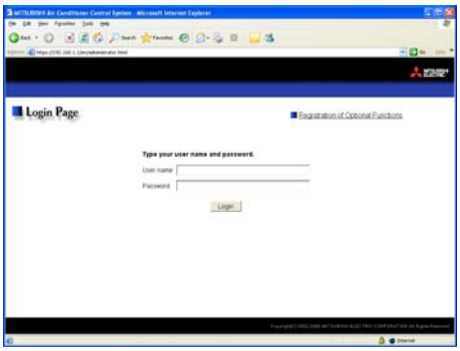
Note: Some of the settings may have different names depending on the Java version.



(3) Prefix the Web address with [https], enter the address, and hit the [Enter] (Return) key on the keyboard.

https://[IP Address of the AG-150A]/administrator.html

Note: For example, type “https://192.168.1.1/administrator.html” if the AG-150A IP address is [192.168.1.1].



If the security alert is disabled as described in the note in the following and the subsequent sections, encrypted date communication will begin, and the Login screen will appear. If the security alert has not been disabled, take the following procedures.

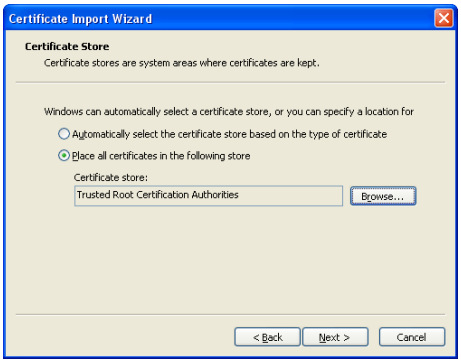
(4) If the security alert has not been disabled, after entering the web address and hitting the Enter (Return) key, a security alert message will alert asking if you want to proceed . This is because the AG-150A uses the self-authentication system. Click [Yes] and proceed.

Note: Disable the security alert that appears every time the browser is opened, take the following two steps:
1) Register the security certificate and
2) Change the Web browser's option settings

To register the security certificate, click the [View Certificate] button on the security alert window to display the certificate, click on the [Install Certificate] button, and add the certificate to the Trusted Root Certification Authorities store. Just follow the prompts of the Import Wizard.

Go to [Tools]->[Internet Options]->[Advanced], and make the following settings for the Web browser.

Item	Checkbox setting
Warn about invalid site certificates	Uncheck the box.

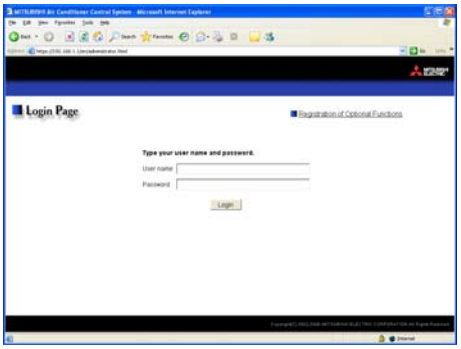


(5) A Java security alert message will appear after you click [Yes] in step (4) above, click [Yes] again to proceed.

Note: To disable the security alert message that appears every time the browser is opened, check the check box next to [Always trust content from this publisher], and click [Yes]. The browser may need to be restarted to reflect the change.

Note: If the window shown on the right does not appear and connection fails, the certificate needs to be added to the Java certificate list. Click the [View Certificate] button on the screen in step (4) to display the certificate, click on the [Copy to File] on the [Details] page, and save the certificate in any desired location in the DER format. Open [Java] in the Control Panel, click on the [Certificates] button on the [Security] page to bring up the certificate registration screen. On the screen, select [Secure Site], click on the [Import] button, change the File of type to [All Files], and select the saved certificate. Now the certificate has been added to the Java certificate list.

(6) If a connection is successfully made, the login window will appear. All communication with the AG-150A will be encrypted. The Web addresses for general users and in each language will have the web address in the previous section with "http" changed to "https".



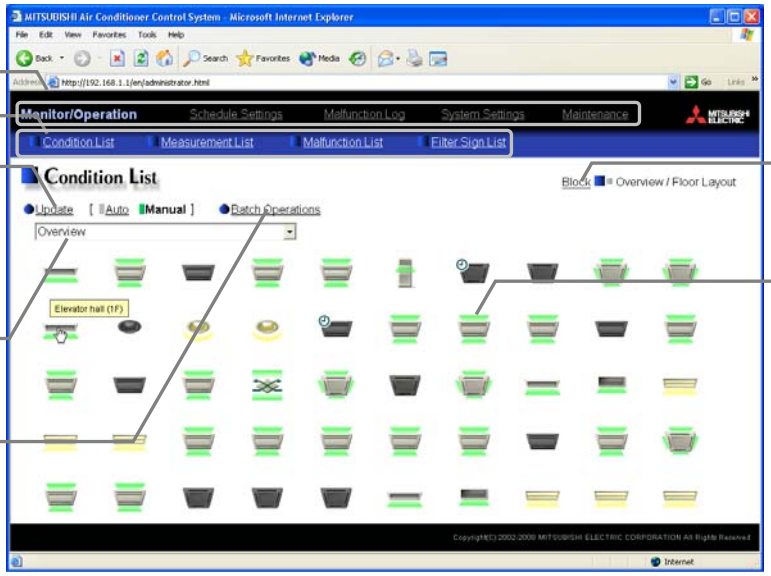
3-2 Checking the Operation Condition

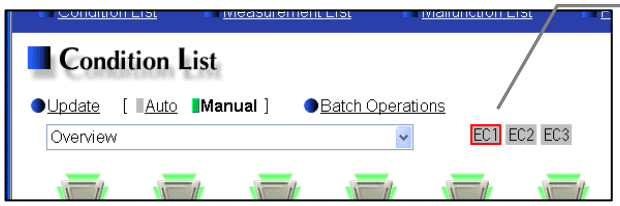
Text below explains how to monitor the operation condition of a list of all groups, or of groups in block units. When a correct user name and password is entered on the password entry screen, the screen used to monitor the operation condition of air conditioner and general equipment and hot water supply groups will appear.

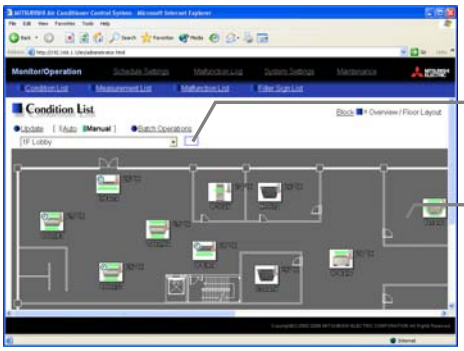
3-2-1 Checking the operation condition on Overview/Floor layout display

Click the menu item [Monitor/Operation], or click [Condition List] in the sub menu to display a list of the operation condition of all the air conditioner and the general equipment and hot water supply groups. Layout of the selected floor can be displayed when floor layout setting is performed on AG-150A.

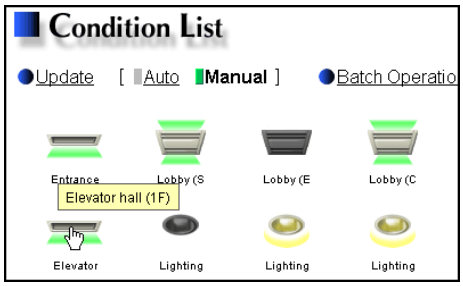
This screen allows the operator to view a list of all the groups to monitor for malfunctions and prevent units being left on by mistake.

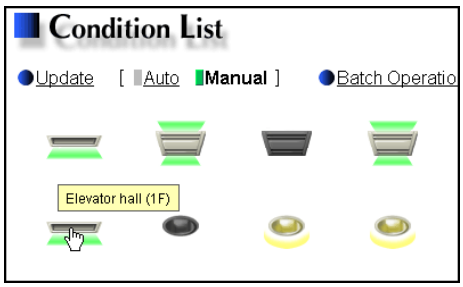


Item	Description
Block display	Switches to the screen where you can check the operation condition according to block units.
Update to most recent condition	Click [Update] to ensure the displayed items reflect the most recent operation condition. When [Auto] is selected, information is updated automatically every minute to reflect the latest information.
Batch operation	Click [Batch Operation] when you want to perform an operation on all groups at once. Note: If a PAC-YG50ECA Expansion Controller is connected, a batch operation will be performed on the groups in the system that is currently displayed. To perform an operation on all units, switch to other Expansion Controller and perform a batch operation on each system.
Expansion Controller system selection	If one or more PAC-YG50ECA Expansion Controllers are connected to control more than 50 air conditioning units, Expansion Controller system selection buttons will appear on the screen. Click the button that corresponds to the desired system to see the operation status of the units in the selected system. Note: [EC1] stands for the first Expansion Controller system, [EC2] stands for the second, and [EC3] stands for the third. Note: Expansion Controller system selection button will not appear if the flat view option is selected or if no Expansion Controllers are connected.  **Expansion Controller system selection button** Click to display the operation status of the Expansion Controller system.

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Floor selection</td><td>
When floor layout setting is performed on AG-150A (not applicable to GB-50ADA-A and GB-50ADA-J), preset floors are selectable besides [Overview] . When a floor is selected, a window that shows group icons will be displayed on the floor layout.
Note: Floor layout can be set only on the liquid crystal display on this unit. Refer to the AG-150A Instruction Book for the floor layout setting or to see how to read layouts. If floor layout is changed on this unit, restart the browser. New layout will be displayed after restarting.
Note: On high resolution display, the whole floor can be displayed by increasing the browser display size.
Note: After clicking a group icon, the operation area will be displayed at the left top of the layout display screen. Scroll up to the left top of the screen for the operation of air conditioning unit or general equipment.


Font color change
Changes the font color of group name to either black or white.
Floor layout display area
Click to display floor layout.
</td></tr>
<tr><td>Group icon</td><td>
The operation condition is indicated by the icon that is displayed. When you point to a group icon with the mouse cursor, the group name is displayed. To switch to the operation screen, click on the icon. The icons used to indicate the operation condition are shown below.
(1) Air conditioner group operation condition
<table>
<tr><td>ON</td><td>OFF</td><td>Error</td><td>Filter sign</td></tr>
<tr><td> </td><td> </td><td> </td><td> </td></tr>
<tr><td>Interlocked ventilator ON</td><td>Interlocked ventilator OFF</td><td>Schedule set</td><td>Energy saving</td></tr>
<tr><td> </td><td> </td><td> </td><td> </td></tr>
<tr><td colspan="2">Setback ON</td></tr>
<tr><td colspan="2"> </td></tr>
</table>
Note: Other than 4-aiflow icons, 2-airflow or ceiling-suspended icons are also available. Select the icon type on Initial Setting Web.
Note: Whether to display the filter sign can be set on Initial Setting Web.
Note: The energy saving icon is displayed while the energy-saving control is performed in a group of indoor units and in the outdoor unit belonged to that group.
Note: If a given LOSSNAY unit is interlocked with multiple indoor unit groups, the LOSSNAY unit may be in operation even when the display shows that the unit is stopped.
Note: When setting ventilation interlock with Mr.Slim units, the air conditioning and interlocked ventilation icon will display ON even when the interlocked LOSSNAY is operating by itself. (This will occur when used with the following M-NET adapter:PAC-SF48/50/60/70/80/81MA-E)
Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, “Schedule set,” “Energy saving,” and “Setback ON” will be displayed only on the AG-150A controller that is executing these functions.
</td></tr>
</table>

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Group icon</td><td>
(2) Ventilator (Lossnay) group operation condition
<table>
<tr><th>ON</th><th>OFF</th><th>Error</th><th>Filter sign</th></tr>
<tr><td> </td><td> </td><td> </td><td> </td></tr>
<tr><th>Schedule set</th><th>Energy saving</th></tr>
<tr><td> </td><td> </td></tr>
</table>
Note: Whether to display the filter sign can be set on Initial Setting Web.
Note: The energy saving icon is displayed while the energy-saving control is performed in a group of ventilator units.
Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, “Schedule set” and “Energy saving” will be displayed only on the AG-150A controller that is executing these functions.
(3) Hot water supply group operation condition
<table>
<tr><th>ON</th><th>OFF</th><th>Error</th><th>Check water</th></tr>
<tr><td> </td><td> </td><td> </td><td> </td></tr>
<tr><th>Schedule set</th><th>Energy saving</th></tr>
<tr><td> </td><td> </td></tr>
</table>
Note: The energy saving icon is displayed while the energy-saving control is performed in a group of hot water supply units.
(4) General equipment group operation condition
<table>
<tr><th>ON</th><th>OFF</th><th>Error</th><th>Schedule set</th></tr>
<tr><td> </td><td> </td><td> </td><td> </td></tr>
</table>
Note: Other than lighting icons, pump or card key icons are also available.
</td></tr>
<tr><td>Group name</td><td>
Up to 8 letters are displayed under the icon.
Note: Whether to display the group names can be set on Initial Setting Web.
Note: To display all letters, move the cursor to the icon.


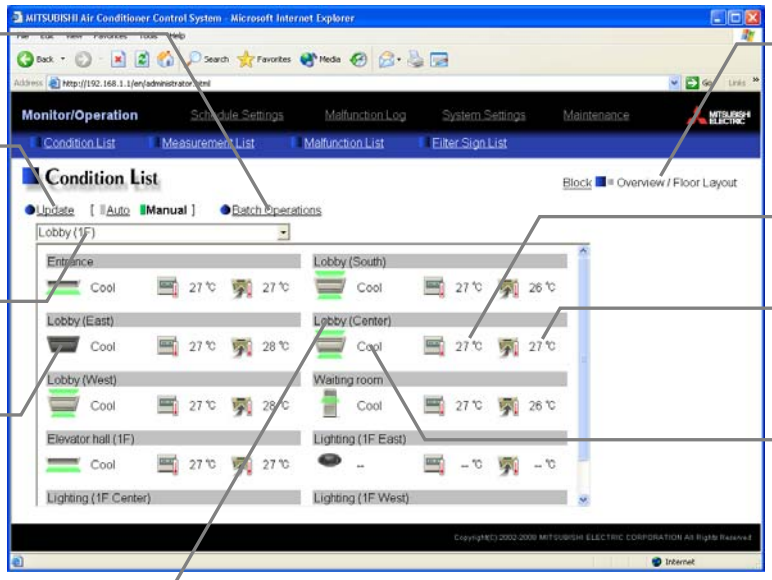
With the display of group names


Without the display of group names
</td></tr>
</table>

3-2-2 Checking the operation condition of groups in different blocks

Click [Block] in the Overview/Floor layout screen to display the operation condition of air conditioner and general equipment and hot water supply groups for each block.

Use this screen if you want to check data not included in the List screen such as operation mode and set temperature or if you want to check operation condition for each block.



Batch operation
Click when you want to perform an operation on all groups at once.

Update to most recent condition
Click to update the screen so that the most recent operation condition is shown.

Select block
Use this to select which block to display.

Group icons
These icons are used to indicate the operation condition of an air conditioner or a general equipment group.
Switch to the operation screen by clicking the icon.

Group name
Group names are displayed.

Overview/Floor Layout display
Click to display operation condition of groups in Overview or Floor layout display.

Set temperature display
The set temperature is displayed here.

Room temperature display
The temperature of the indoor unit's intake is displayed here.

Operation mode display
The operation mode is displayed here.

Item	Description
Overview / Floor Layout display	Switches to the screen where you can check the operation condition of all the groups or floor layout.
Update to most recent condition	Click [Update] to ensure the displayed items reflect the most recent operation condition. When [Auto] is selected, information is updated automatically every minute to reflect the latest information.
Batch operation	Click [Batch Operation] when you want to perform an operation on all groups in the block at once.
Select block	Use this to select which block to display and perform operations on.
Group icons	The operation condition is indicated by the icon that is displayed. To switch to the operation screen, click on the icon.
Group name	Group names are displayed.
Operation mode display	The operation mode is displayed.
Set temperature display	The set temperature is displayed. Note: The water temperature setting will be displayed for the hot water supply group.
Room temperature display	The temperature of the indoor unit's intake is displayed. Note: Because the temperature displayed here is of the indoor unit's intake, it could be different from the actual room temperature. Note: The current water temperature will be displayed for the hot water supply group. Note: The temperature display can be set to display in either Celsius (°C) or Fahrenheit (°F).

3-3 Performing the Operations

Text below explains how to perform air conditioner or hot water supply or general equipment operations that target one group, one block, or all groups.

3-3-1 Performing the operations that target one group

When you click on a group icon in the operation condition monitoring screen that shows the list of all groups, floor layout or the list of groups in the selected block, the operation screen for that group will appear. The items shown in this screen are the current operation conditions. Modify the items you want to change and click [OK] to confirm the operation details. Click [Cancel] to return to the previous screen without making any changes.

Note: Only the ON/OFF operation is possible on the general equipment. No operation is possible on the general equipment on which the group operation is prohibited.

Note: If the Web browser is configured to block Java Script, the operation window will appear at the left top of the floor layout screen. If the floor layout window is scrolled down to click the group icon, scroll up the screen to the left to perform an operation.

Group name
The name of the group is displayed here.

Block name
The name of the block is displayed here.

Interlocked ventilator ON/OFF
Click to switch interlocked ventilator ON or OFF.

ON/OFF
Click to switch to ON or OFF.

Fan speed of interlocked ventilator
Click to adjust the fan speed of the interlocked ventilator.

Operation mode
Click to switch the operation mode.

Set temperature
Click to adjust the set temperature.

Prohibit remote controller operation
Click to select the items you do not want the remote controller to control.

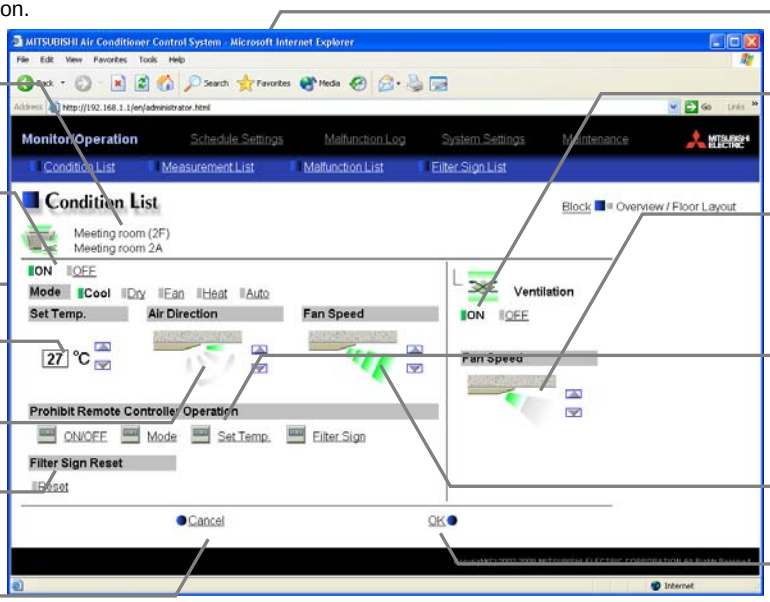
Air direction
Click to adjust the air direction.

Fan speed
Click to adjust the fan speed.

Filter sign
Click to reset the filter sign.

OK button
Click to confirm the operation details. You must press the OK button for the operation to take effect.

Cancel button
Click to cancel all operations.



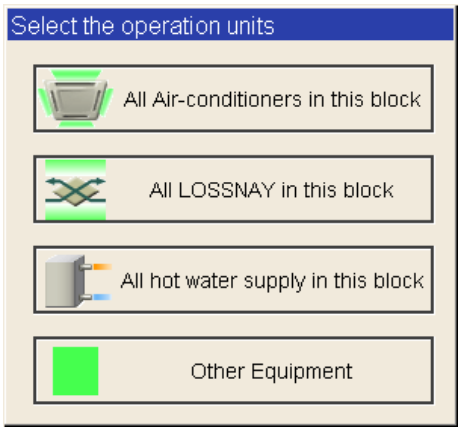
Item	Description
ON/OFF *1	Click [ON] or [OFF] to switch to ON or OFF. Note: Ventilation units that are interlocked with a given group of indoor units will turn on and off when this switch is turned on and off. To switch on/off the interlocked ventilation units only, use the "Ventilation ON/OFF" button.
Operation mode	Click [Cool], [Dry], [Fan], [Heat] or [Auto] to switch the operation mode. Note: This item will not appear if the operation mode switching function is not available. Note: Some unit models do not support certain operation modes. Unsupported operation modes are not displayed. Note: For K control models, all modes are displayed, however, choose only the modes that can be operated. Note: If it is a ventilator group, select [Bypass], [Heat Recovery] or [Auto]. Note: When making the settings for the hot water supply group, elect from [Heating], [Heating ECO], [Hot Water], [Anti-freeze], and [Cooling].
Set temperature	Click ▲ ▼ to adjust the set temperature. For [Cool] and [Dry], the setting range is 19 ~ 30°C/67 ~ 87°F, for [Heat] it is 17 ~ 28°C/63 ~ 83°F, and for [Auto] it is 19 ~ 28°C/67 ~ 83°F. Note: This item will not appear for the model that has no set temperature switch function. Note: The temperature setting range varies depending on the unit model. Note: The temperature setting range for the hot water supply group is as follows: [Heating] mode : 30°C ~ 45°C or 50°C / 87°F ~ 113°F or 122°F [Heating ECO] mode : 30°C ~ 45°C / 87°F ~ 113°F [Hot Water] mode : 30°C ~ 90°C or 70°C / 87°F ~ 194°F or 158°F [Anti-freeze] mode : 10°C ~ 45°C / 50°F ~ 113°F [Cooling] mode : 10°C ~ 30°C / 50°F ~ 87°F. Note: The temperature display can be set to display in either Celsius (°C) or Fahrenheit (°F).
Air direction	Click ▲ ▼ to adjust the air direction. (Mid3) (Mid 2) (Mid 1) (Mid 0) (Horizontal) (Swing) (Auto) Note: If it is a model that does not support air direction adjustment, this item is not displayed. Note: Available functions vary depending on the unit model.

Item	Description
Fan speed	Click ▲ ▼ to adjust the fan speed. (Low) (Mid 2) (Mid 1) (High) (Auto) Note: If it is a model that does not support fan speed adjustment, this item is not displayed. Note: Available functions vary depending on the unit model.
Prohibit remote controller operation	Select the items you do not want the remote controller to control. Click the word part of [ON/OFF], [Mode], [Set Temp] or [Filter Sign] and switch to prohibit or enable . Note: For K control models, it is only possible to prohibit all items or enable all items. Note: For K control models, there is no [Filter Sign] item. Note: For ventilator models, there are no [Mode] item or [Set Temp] item. Note: For the hot water supply groups, the "[Check Water] (circulating water replacement warning) sign reset" function can be enabled or disabled, instead of the [Filter Sign] reset function.
Filter sign	Click [Reset] to specify whether to reset the filter sign. It is set to reset when a green indicator is displayed on the left of Reset ([**Reset**]). Note: If filter signs are not triggered in the group, then this item is not displayed.
Interlocked ventilator ON/OFF *1	Click [ON] or [OFF] to switch interlocked ventilator ON or OFF. Note: For groups that are not connected to an interlocked ventilator, the items related to interlocked ventilators are not displayed.
Fan speed of interlocked ventilator	Click ▲ ▼ to adjust the fan speed of the interlocked ventilator. Note: For groups that are not connected to an interlocked ventilator, the items related to interlocked ventilators are not displayed.

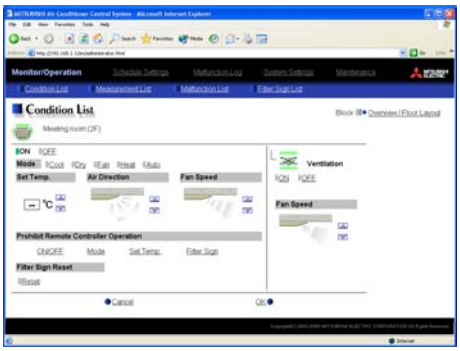
*1: The change on the interlock setting between the indoor and LOSSNAY units made on the indoor unit side will not be reflected on the LOSSNAY unit side on the screen until the OK is pressed and the change is saved. The actual interlock setting, however, is immediately effective, so as soon as the interlock setting on the indoor unit side is set to ON, the LOSSNAY unit will go into operation when one or more indoor units go into operation regardless of the display on the screen.

3-3-2 Performing the operations that target one block

(1) Select the block you want to operate as an entire block from the operation condition monitoring screen for block lists and click [Batch Operation]. When air conditioner groups, ventilator (LOSSNAY) groups, and general equipment groups exist together in the selected block, a new screen will appear to select the group. Click one of the [All air-conditioners in this block], [All LOSSNAY in this block], [All hot water supply in this block], or [Other Equipment] and the screen to set the batch operation will appear. If the block that was selected has only air conditioner groups or only LOSSNAY groups or only hot water supply groups or only general equipment groups, this selection screen will not appear.



(2) After you have made the settings on the screen for batch operation, click [OK] and the operation settings for only the adjusted items will be sent to all the air conditioner, ventilator (LOSSNAY) groups, hot water supply groups, or general equipment groups contained in the selected block.
To return to the previous screen without performing any operations, click [Cancel].



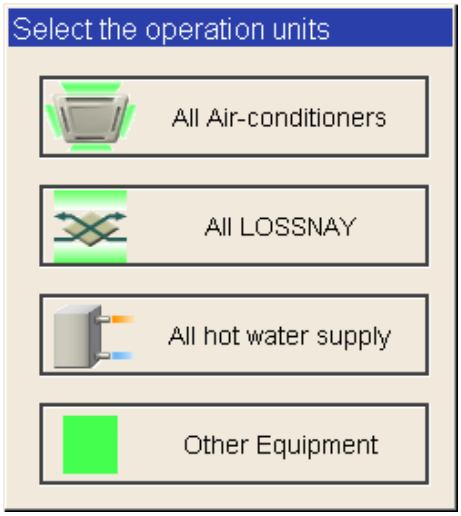
Note: When resetting the filter sign as part of a one-block batch operation, the accumulated ON time used to trigger the filter sign will be reset in all units belonging to the selected block, irrespective of whether or not the filter sign was triggered. Use the reset filter sign operation in a batch operation in a case such as when all the unit filters in the same batch are cleaned at once.

Note: When allowing remote controller operation under K control, all prohibit remote controller operation items must be set enable.

3-3-3 Performing the operations that target all groups

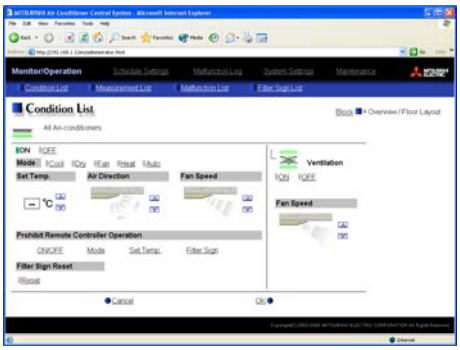
(1) Click [Batch Operation] from the operation condition monitoring screen that displays all groups in a list. When air conditioner groups, ventilator (LOSSNAY) groups, and general equipment groups exist together in the system, a new screen will appear to select the group. Click one of the [All air-conditioners], [All LOSSNAY], [All hot water supply], or [Other Equipment] and the screen to set the batch operation will appear.

If the system has only air conditioner groups or only LOSSNAY groups or only hot water supply groups or only general equipment groups, this selection screen will not appear.



(2) After you have made the settings on the screen for batch operation, click [OK] and the operation settings for only the adjusted items will be sent to all the air conditioner, ventilator (LOSSNAY) groups, hot water supply groups or general equipment groups.

To return to the previous screen without performing any operations, click [Cancel].



Note: When resetting the filter sign as part of an all-groups batch operation, the accumulated ON time used to trigger the filter sign will be reset in all units, irrespective of whether or not the filter sign was triggered. Use the reset filter sign operation in a batch operation in a case such as when all the unit filters are cleaned at once.

Note: When allowing remote controller operation under K control, all prohibit remote controller operation items must be set enable.

3-4 Checking the Measurement Condition

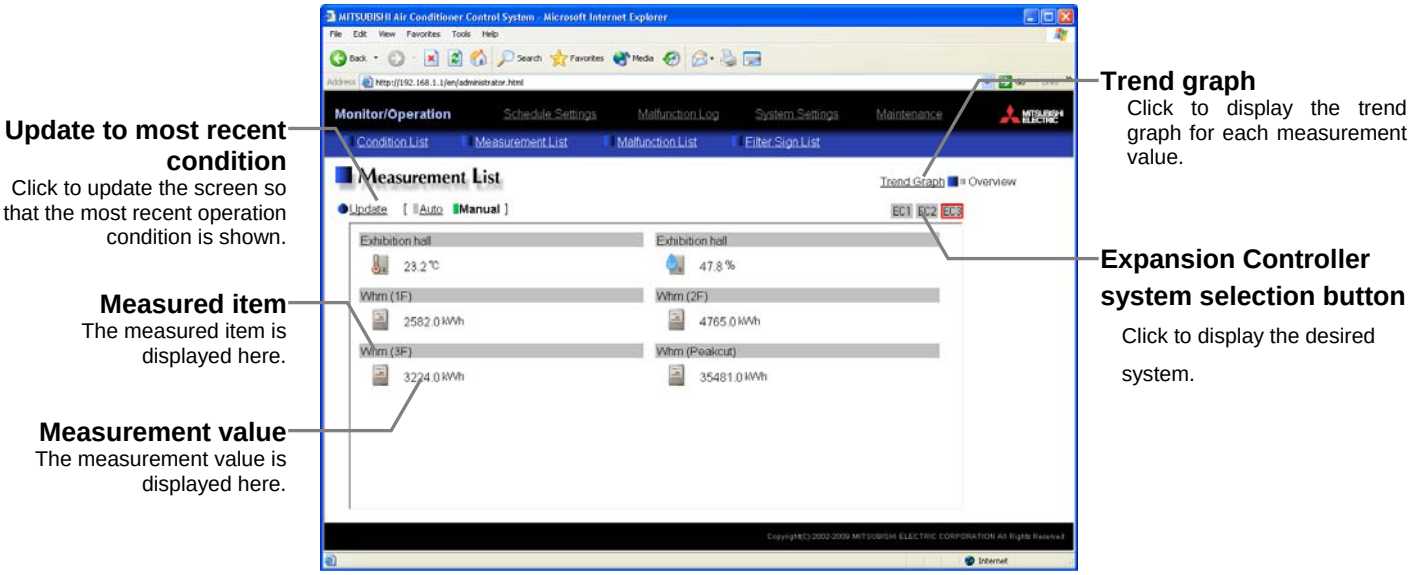
Text below explains how to check the measurement condition either by list or graph.

Note: An AI controller (PAC-YG63MCA) and a commercially available temperature sensor and humidity sensor are required to measure the temperature and humidity.

Note: A PI controller (PAC-YG60MCA) and a commercially available pulse output meter are required to measure the electric, water, heat, and gas consumptions.

3-4-1 Using a measurement list

Click [Monitor/Operation] in the menu, and click [Measurement List] in the sub menu to display a list of the measurement condition.



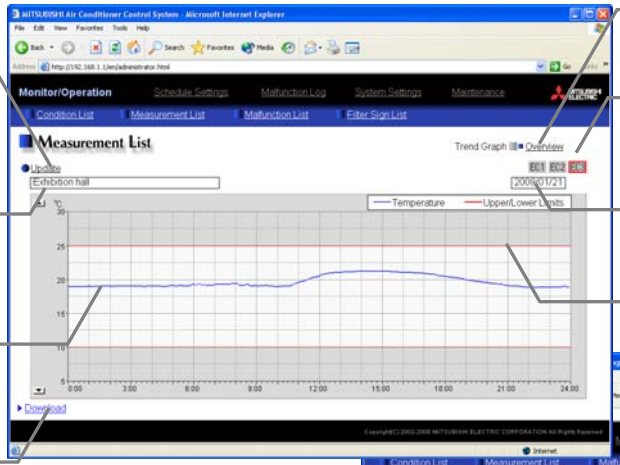
Item	Description
Trend graph	Switches to the screen where the measurement value can be checked by graph.
Update to most recent condition	Click [Update] to ensure the displayed items reflect the most recent operation condition. When [Auto] is selected, information is updated automatically every minute to reflect the latest information.
Expansion Controller system selection buttons	Click the button that corresponds to the desired Expansion Controller system to display the measuring units in the system. Note: Expansion Controller system selection buttons will not appear if no PAC-YG50ECA Expansion Controllers are connected.
Measurement value	The present value is displayed. Note: The following icons are used to indicate the measuring devices. The icon is displayed in vermilion when the measured value exceeds the upper limit alarm value or the lower limit alarm value that is set on Initial Setting Web.

	Normal	Upper/lower limit alarm
Temperature sensor		
Humidity sensor		
Drop meter		

3-4-2 Using a graph

Click [Trend Graph] on the measurement condition list screen, and select the measured item to be displayed. The measured value can be checked by graph. The graph can also be downloaded as a CSV file.

Note: [Temperature], [Humidity], and [Electric power for peak cut control] can be displayed in the trend graph.



Temperature / Humidity

Update to most recent condition
Click to update the screen so that the most recent operation condition is shown.

Selection of measured item
Select the measured item to be displayed.

Measurement value
The measured value is displayed as a graph.

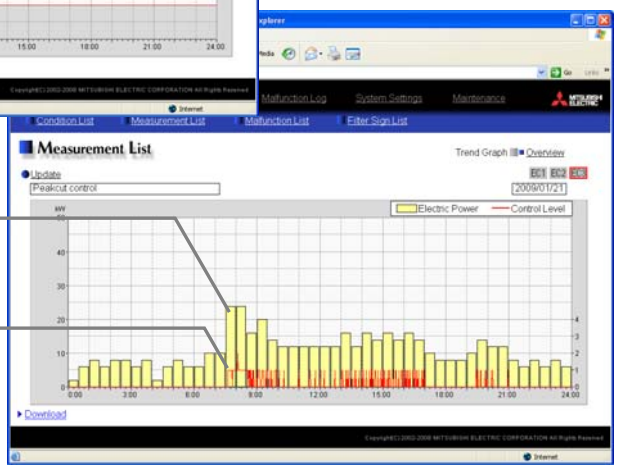
Download
Click to download the graph being displayed.

Overview display
Click to display the measurement value as a list.

Expansion Controller system selection buttons
Click to display the desired system.

Measurement date
Select the date when the value to be displayed is measured.

Upper/lower limit alarm value
The Upper/lower limit alarm value is displayed.



Peak cut control

Average electric power
The average electric power for 30 minutes is displayed.

Control level
The change in control level is displayed.

Item		Description
Overview		Switches to the screen where the measurement value can be checked as a list.
Update to most recent condition		Click [Update] to ensure the displayed items reflect the most recent operation condition.
Expansion Controller system selection buttons		Click the button that corresponds to the desired Expansion Controller system to display the measuring units in the system. Note: Expansion Controller system selection buttons will not appear if no PAC-YG50ECA Expansion Controllers are connected.
Selection of measured item		Click the [Selection of measured item], and select the measured item to be displayed from the list. Note: When the peak cut function is used, selecting [Peak cut control] is possible, and the electric power and the control level can be displayed as a graph.
Measurement date		Select the date when the value to be displayed is measured. Note: The period of time that the graph for temperature/humidity can be displayed varies depending on the data saving interval. When the interval is 5 minutes, the graph can be displayed for 10 days, when 1 minutes, for 2 days. Note: The graph for peak cut control can be displayed for 3 days, the previous, the current, and the following day.
Temperature, humidity	Measurement value	The measured item is displayed as a graph. Note: The temperature/humidity data saving interval can be set on Initial Setting Web. (Select between 1 min./2 min./5 min.)
	Upper/lower limit alarm value	Upper/lower limit alarm value that is set on Initial Setting Web is displayed. When the measurement value exceeds the upper/lower limit alarm value, the area that is above/below than the upper/lower limit alarm value is displayed in yellow.
Peak cut control	Average electric power	The average electric power (kW) is displayed every 30 minutes. Note: The electric power is saved every hour and the half. When blackout occurs, the data cannot be saved for 30 minutes at maximum. Note: The electric power is displayed in [kW]. When the graph is displayed in the unit of 0.5h, use the following formula to calculate the amount of electricity (kWh). Electric power [kW] = 2 x amount of electricity [kWh] (When 20kW of electricity is used for 30 minutes, the average will be 40kW.)
	Control level	The control level while the peak cut control is performed is displayed in minute increments.

Item	Description
Download	Click [Download] to download the graph being displayed. The data format of the downloaded data is as follows.

Item		Format
First line	File type	121: Temperature data 122: Humidity data 123: Peak cut control data
Second line	Date	yyyy/mm/dd Note: The date format set on Initial Setting Web.will be applied.
Third line	Trend target	Temperature: "Address" + M-NET address + "-" + Sensor No. Humidity: "Address" + M-NET address + "-" + Sensor No. Peak cut control: "Peakcut energy"
Fourth line	Measured item	Temperature: "Time,Temperature(deg C)" Humidity: "Time,Humidity(%)" Peak cut control: " Time,Power(kW),Control level " Note: The power (kW) displayed remains unchanged for 30 minutes.
Fifth line or later	Data	Temperature: hh:MM, Temperature Humidity: hh:MM, Humidity Peak cut control: hh:MM, Average electric power, Control level

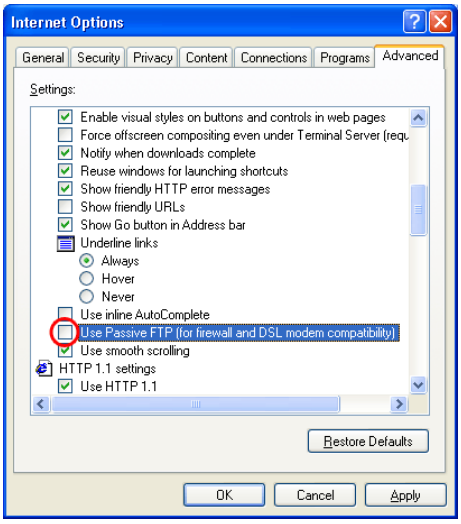
Example of temperature data

```
121
01/04/2007
Address 50-1
Time,Temperature(deg C)
00:00,20.3
00:05,20.1
00:10,19.8
00:15,19.3
    :
23:50,18.8
23:55,18.5
```

Example of peak cut control data

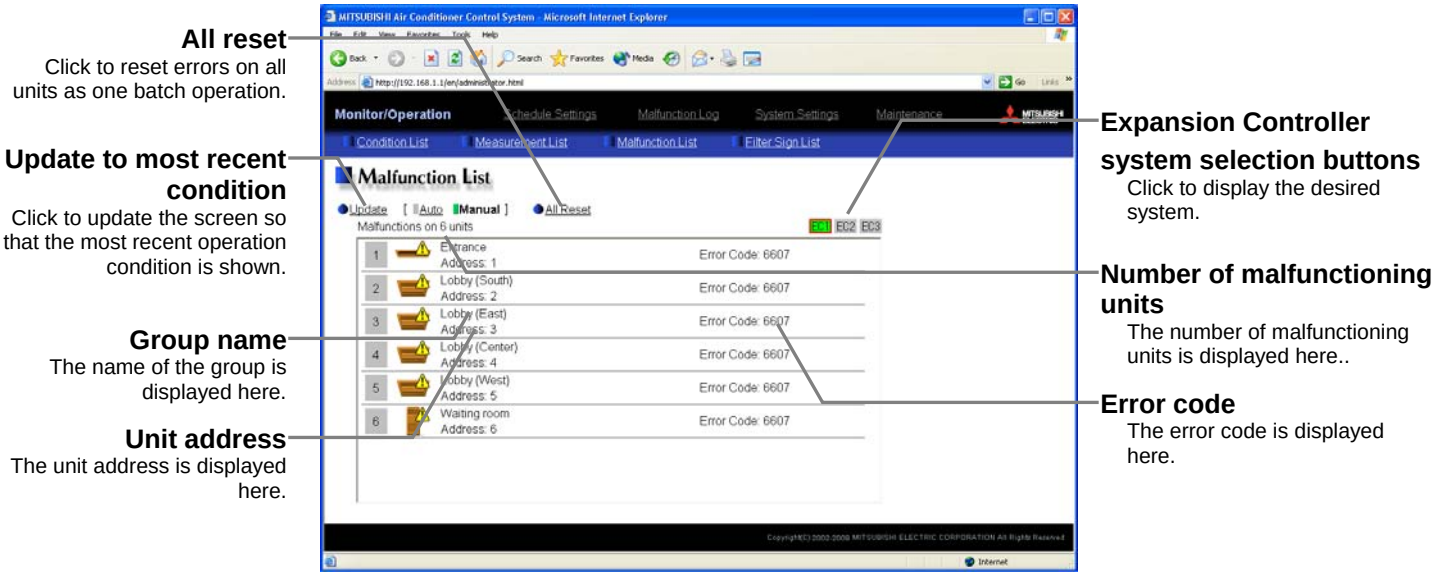
```
123
01/04/2007
Peakcut energy
Time,Power(kW),Control level
00:00,8,1
00:01,8,0
00:02,8,0
00:03,8,0
00:04,8,0
00:05,8,1
    :
23:57,6,0
23:58,6,0
23:59,6,0
```

Note: When the data cannot be downloaded properly, uncheck the "Use Passive FTP (for firewall and DSL modem compatibility) " checkbox. (Refer to the image on the right.)



3-5 Checking the List of Malfunctioning Units

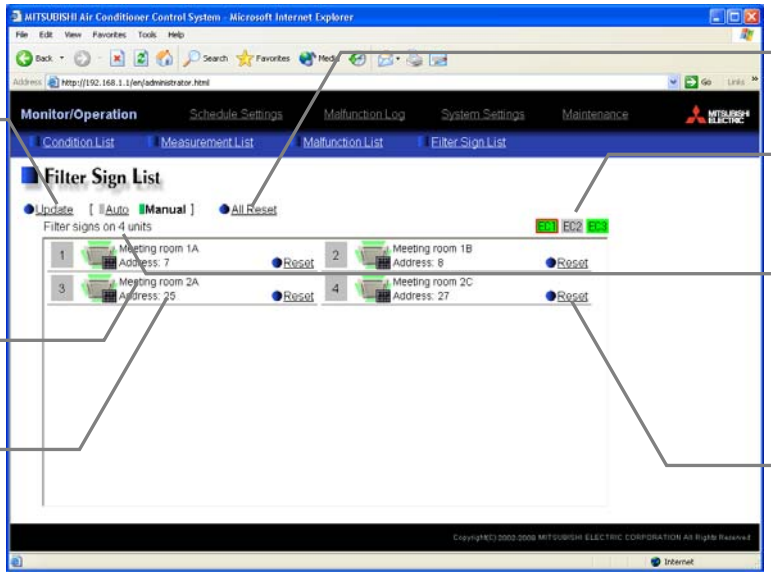
Click the menu item [Monitor/Operation] and then click the sub menu [Malfunction List]. A list of units that are currently malfunctioning appears.



Item	Description
Update to most recent condition	Click [Update] to ensure the displayed items reflect the most recent operation condition. When [Auto] is selected, information is updated automatically every minute to reflect the latest information.
Expansion Controller system selection buttons	Click the button that corresponds to the desired Expansion Controller system to display the units in error in the selected system. Note: Expansion Controller system selection buttons will not appear if no PAC-YG50ECA Expansion Controllers are connected. Note: The system in error will appear in green.
All reset	Click [All Reset] when you want to reset the errors on all the malfunctioning units at once. Note: If Expansion Controllers are connected, the errors on all units in the selected Expansion Controller system will be reset at once.
Number of malfunctioning units	The number of malfunctioning units is displayed. Note: If Expansion Controllers are connected, the number of malfunctioning units in the selected Expansion Controller system will appear.
Group Name	The name of the group is displayed. Note: If a unit, such as an outdoor unit or system controller, has not been registered in a group that is the object of the operation, this area will be blank.
Unit address	The unit address is display
Error code	The error code of the error that is causing the malfunction is displayed.

3-6 Checking the List of Units with a Triggered Filter Sign

Click the menu item [Monitor/Operation] and click the sub menu [Filter Sign List]. A list of the units with a triggered filter sign appears.



Update to most recent condition
Click to update the screen so that the most recent operation condition is shown.

Group name
The name of the group is displayed here.

Unit address
The unit address is displayed here.

All reset
Click to reset the filter sign on all units with triggered filter signs.

Expansion Controller system selection buttons
Click to display the desired system.

Number of units with triggered filter signs
The number of units with currently triggered filter signs is displayed here.

Reset units individually
Click to reset the filter sign for the group the units belong to.

Item	Description
Update to most recent condition	Click [Update] to ensure the displayed items reflect the most recent operation condition. When [Auto] is selected, information is updated automatically every minute to reflect the latest information.
Expansion Controller system selection buttons	Click the button that corresponds to the desired Expansion Controller system to display the units in the system whose filter sigh is turned on. Note: Expansion Controller system selection buttons will not appear if no PAC-YG50ECA Expansion Controllers are connected. Note: The system in which the filter sign on one or more units is turned on will appear in green.
All reset	Click [All Reset] when you want to reset the filter sign on all units with a triggered filter sign at once. Note: If Expansion Controllers are connected, the errors on all units in the selected Expansion Controller system will be reset at once.
Number of units with triggered filter signs	The number of units with currently triggered filter signs is displayed. Note: If Expansion Controllers are connected, the number of units in the Expansion Controller system will appear whose filter sign is turned on.
Group name	The group name is displayed.
Unit address	The unit address is displayed.
Reset units individually	Click [Reset] when you want to reset the filter sign for the group the units belong to.

3-7 Setting Schedules

When a license is registered for [Annual schedule / Weekly schedule], it is possible to use the annual schedule, weekly schedule 1, weekly schedule 2 and today's schedule. If a license has not been acquired, only the weekly schedule 1 functions available can be used.

Note: The same schedule settings that are made via the Web browser can be made on the AG-150A LCD screen.

Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, schedule settings for the groups should be made only on one of the AG-150A controllers.

Without the registered license

Weekly schedule 1

(1) Frequency of operations per day
24 operations

(2) Operation items
[1] ON/OFF/Optimized Start
[2] Operation mode
[3] Temperature setting
[4] Fan direction
[5] Fan speed
[6] Prohibit/enable remote controller operation
Note: Settable items vary according to model.
Note: The CITY MULTI model supports a temperature setting range of 12-28°C / 53-83°F when in Heat mode.

(3) Time setting unit
1 minutes

(4) Season settings
No (The same schedule is followed throughout the year.)

With the registered license

Weekly schedule 1

(1) to (3)
Same as the left under "Without the registered license"

(4) Season settings
Yes (The effective dates for Weekly schedule 1 are set.)

Seasonal schedule setting is possible.

Weekly schedule 2

(1) to (3)
Same as the left under "Without the registered license"

(4) Season settings
Yes (The effective dates for Weekly schedule 2 are set.)

Can set for public holidays.

Annual schedule

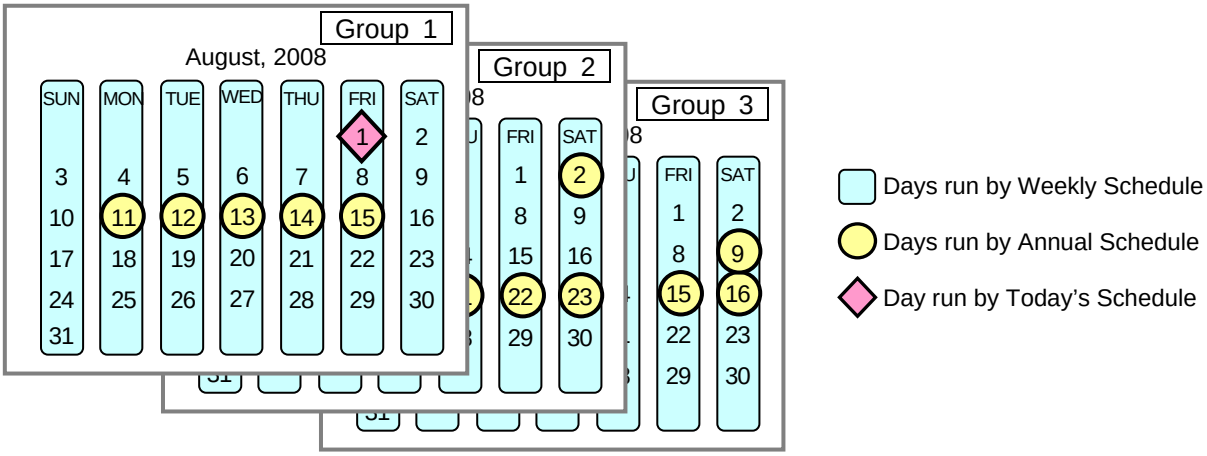
Up to 50 days per year, such as public holidays and summer vacation can be scheduled as days that do not comply with the weekly schedule.

The current day's schedule can be modified.

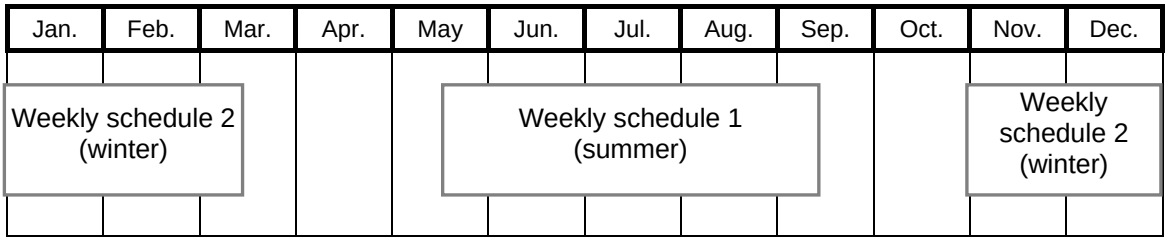
Today's schedule

A schedule for that day can be modified without modifying the weekly schedule or annual schedule.

It is possible to set different weekly/annual/today's schedules for each air conditioner group. Moreover, for any weekly/annual/today's schedule run for a particular day, the priority in which it is run will be from the highest and the order will be [Today's], [Annual], [Weekly].



If the [Annual schedule/Weekly schedule] license has been registered, two sets of weekly schedules (1 Summer and 2 Winter) can be set .



Note: This example shows that the period for Weekly schedule is 1 is set to May 15-Sept. 15 and that the period for Weekly schedule 2 is set to Nov. 1-Mar. 15.

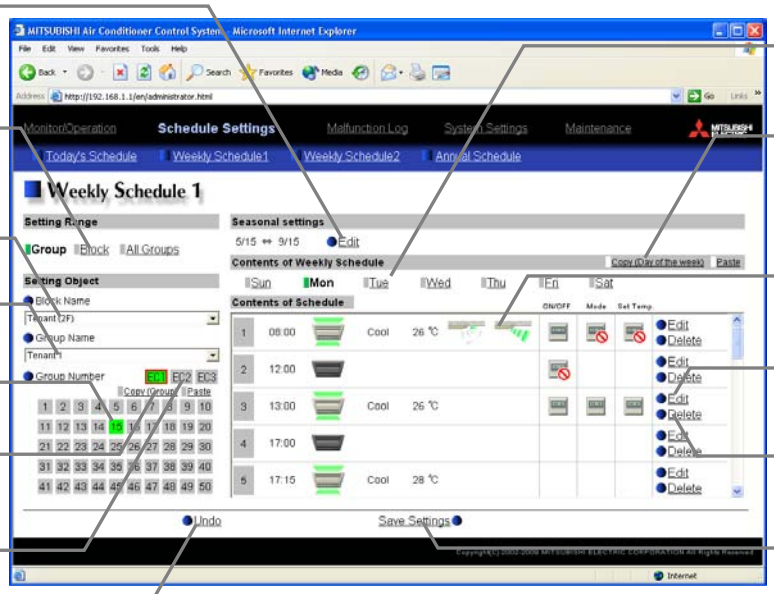
Note: If the periods for Weekly schedule 1 and 2 overlap, Weekly schedule 1 will override the setting for Weekly schedule 2.

3-7-1 Setting the Weekly Schedule

Click the menu item [Schedule Settings] and click [Weekly Schedule 1] or [Weekly Schedule 2] in the sub menu to display the each Weekly Schedule setting screen. To set a weekly schedule, you first must select what will be the target of this schedule and then set the schedule details from Sunday right through to Saturday.

Note: If the [Annual schedule/Weekly schedule] license has not been registered, only the settings for Weekly schedule 1 can be set.

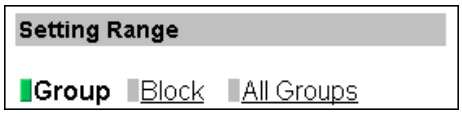
Note: When the contents of an operation are executed as part of a schedule these contents will continue to be in effect until they are changed by a schedule or browser etc. Therefore, if you are setting a schedule that is only for a particular day, be sure to set your schedule in a way that will not impact on the next day's operation.
For example, if you wish to prohibit operations being performed from the remote controller after 17:00, set a Prohibit operation for 17:00 and set an Enable operation for 23:59.



(1) Select the target for the schedule being set

(1-1) Select a particular group

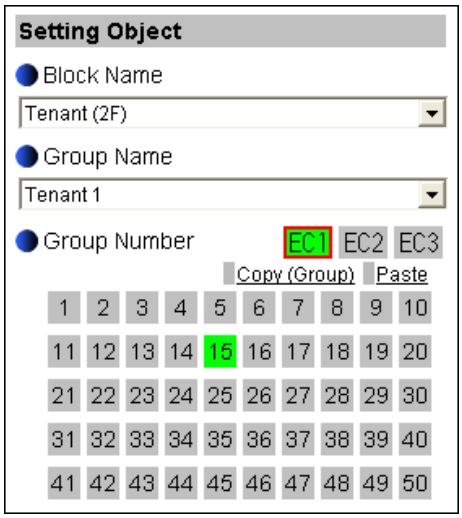
If you wish to set a schedule for a particular group, select [Group] from the Setting Range box.



Select the name of the block that the group belongs to, and then select the group name in the Setting Object box.
Alternatively it is possible to just select the group name and the group number. Once the group is selected, the contents of the schedule saved for that group will be displayed in the Contents of Schedule box.

Note: If Expansion Controllers are connected, Expansion Controller system selection buttons will appear. Select the button that corresponds to the desired system (EC1, EC2, or EC3), and then select the groups in the system.

In the Group Name field, all groups in all Expansion Controller systems are available for selection. (If no name is assigned to a given group, it will appear in the [Expansion Controller number + Group number] format (e.g., Group 1-35)).

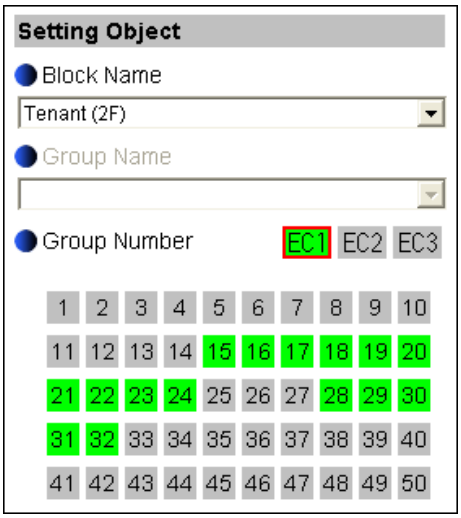


(1-2) Select all groups in a block

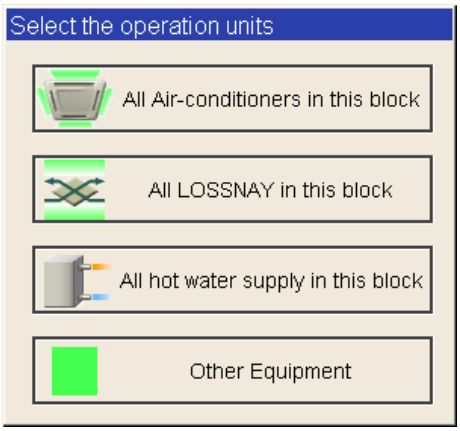
If you want to set a schedule to be used by all groups in a block, select [Block] from the Setting Range box.

Select the name of the block that the groups belong to from the Setting Object box. Alternatively, if you click on a group number, the block that the group belongs to gets selected (groups cannot be selected unless they belong to a block).

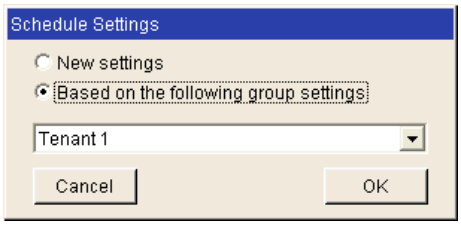
Note: If Expansion Controllers are connected, Expansion Controller system selection buttons will appear. Select the button that corresponds to the desired system (EC1, EC2, or EC3), and then select the groups in the system.



When air conditioner groups, ventilator (LOSSNAY) groups, hot water supply groups, and general equipment groups exist together in the selected block, a new screen will appear to select the group. Click one of the [All air-conditioners in this block], [All LOSSNAY in this block], [All hot water supply in this block], or [Other Equipment] and the screen to set the batch operation will appear.
If the system has only air conditioner groups or only LOSSNAY groups or only hot water supply groups or only general equipment groups, this selection screen will not appear.

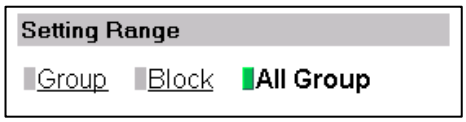


Next a screen to select the schedule setup method will appear. Select either [New settings] or [Based on the following group settings]. If you plan to add to an existing setting, and then choose to base it on an existing setting and select the name of the group you want to base the setting on and click the [OK] button.
If you chose to make a new setting, the Contents of Schedule box will appear completely blank. If you chose to base your setting on an existing group, the contents of the schedule set for that group will appear in the Contents of Schedule box.

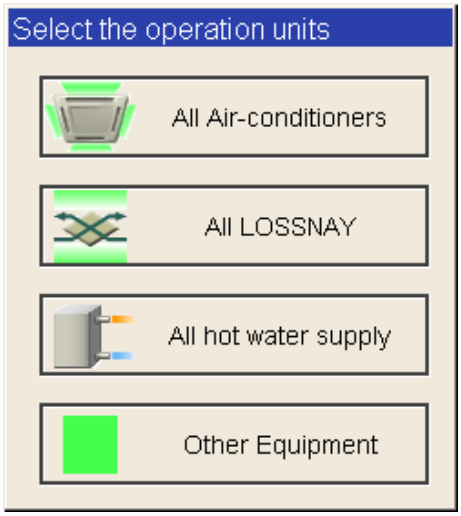


(1-3) Select all groups

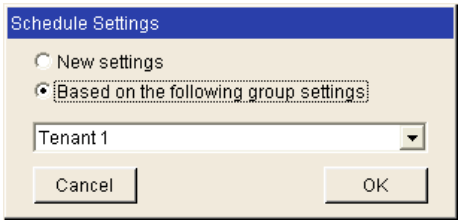
When you want to set a schedule that will apply to all groups, select [All Group] in the Setting Range box.



When air conditioner groups, ventilator (LOSSNAY) groups, hot water supply groups, and general equipment groups exist together in the system, a new screen will appear to select the group. Click one of the [All air-conditioners], [All LOSSNAY], [All hot water supply], or [Other Equipment] and the screen to set the batch operation will appear.
If the system has only air conditioner groups or only LOSSNAY groups or only hot water supply groups or only general equipment groups, this selection screen will not appear.

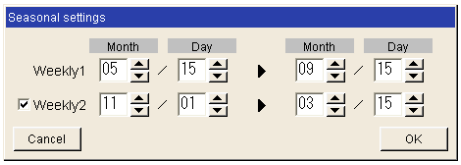


Next a screen to select the schedule setup method will appear. Select either [New settings] or [Based on the following group settings]. If you plan to add to an existing setting, and then choose to base it on an existing setting and select the name of the group you want to base the setting on and click the [OK] button.
If you chose to make a new setting, the Contents of Schedule box will appear completely blank. If you chose to base your setting on an existing group, the contents of the schedule set for that group will appear in the Contents of Schedule box.



(2) Set the starting and ending dates for each schedule type.

Click the [Edit] button on the right top corner of the Seasonal setting window, and set the starting and ending dates for Weekly schedule 1 and 2.



Note: If the [Annual schedule/Weekly schedule] license has not been registered, the same schedule is followed throughout the year, and the starting or ending dates cannot be set.

Note: These dates are common to all groups.

Note: If the periods for Weekly schedule 1 and 2 overlap, Weekly schedule 1 will override the setting for Weekly schedule 2.

(3) Select the day of the week

Click the day of the week listed in the Contents of Weekly Schedule box you want to set the schedule for. You can select from Sunday through to Saturday.

(4) Set the contents of the schedule

When one of the [Edit] buttons in the Contents of Schedule box is clicked, a screen to set a schedule operation will appear. Use this screen to set when to run an operation and set the type of schedule operation (ON/OFF, operation mode, temperature setting, fan direction, fan speed, prohibit remote controller operation) and then press the [OK] button.

It is possible to schedule operation by specifying the settings for selected items (e.g., operation mode only or preset temperature only).

Note: When [Optimized start] is selected, the unit starts 5 - 60 minutes before the scheduled time based on the operation data history in order to reach the scheduled temperature at the scheduled time. (When the unit starts the first time after power reset, the operation starts 30 minutes before the scheduled time.) When using this function, also set the operation mode and setting temperature. If "Prohibit Remote Controller" is set at the same time, remote controller is prohibited at its setting time.
If the room temperature is measured by the air-conditioner's suction temperature sensor, the temperature may not be correct when the air-conditioner is inactive and the air is not fresh. When the temperature is not measured correctly, switch the sensor to external temperature sensor (PAC-SE40TSA / PAC-SE41TSA) or remote control sensor.

Note: The CITY MULTI model supports a temperature setting range of 12-28°C / 53-83°F when in Heat mode. (When S series (PUMY) is used, set the temperature at 17°C-28°C / 63-83°F in heat mode.)

Note: When setting a schedule for all groups or for a block, it is possible to set all operation modes such as Auto mode etc, but if some targeted air conditioner units do not have such a function, then those units will not run in the specified mode. When setting the schedule, consider what functions are supported by the air conditioner units.

Note: When setting a schedule for all groups or for a block, it is possible to set prohibit remote controller items individually. When allowing remote controller operation under K control, however, all items must be set enable.

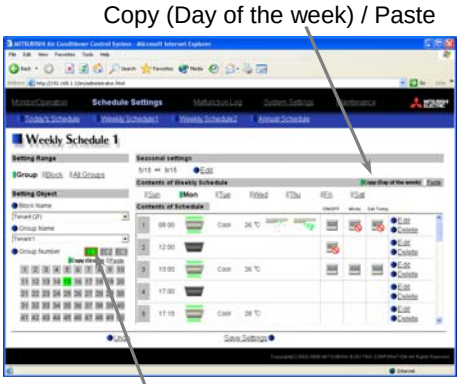
Note: When setting a schedule for ventilator units, the temperature setting and fan direction setting are not displayed. Moreover, the prohibit remote controller operation is simply [ON/OFF].

Note: Note: Only the ON/OFF operation is possible on the general equipment.

(5) Copy a schedule to another day of the week or to another group

When copying a schedule between each day of the week, click "Copy (Day of the week)" button. The color of the button turns to green (which means the button is selected). Select the desired day, and click "Paste" button.

When copying the entire week's schedule between groups, click "Copy (Group)" button. Select the desired group, and click "Paste" button.



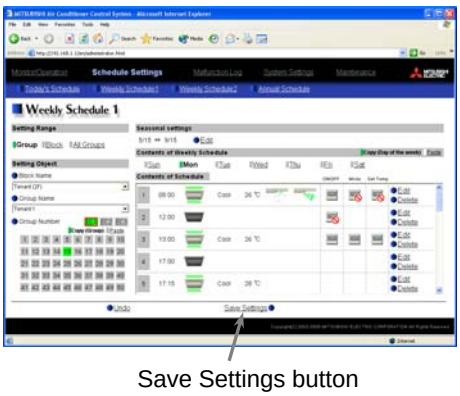
Note: Copied schedule cannot be pasted to different type of equipment. For example, schedule copied on the air conditioner cannot be pasted to the ventilator equipment.

Note: The operation mode that can be pasted and the temperature setting range vary depending on the unit type.

(6) Save the contents of schedule

After you have finished setting the contents of the schedule, save the schedule setting by clicking the [Save Settings] button.

If the contents of the schedule setting have changed since the previous save, you can click the [Undo] button to restore the setting contents back to the saved settings.

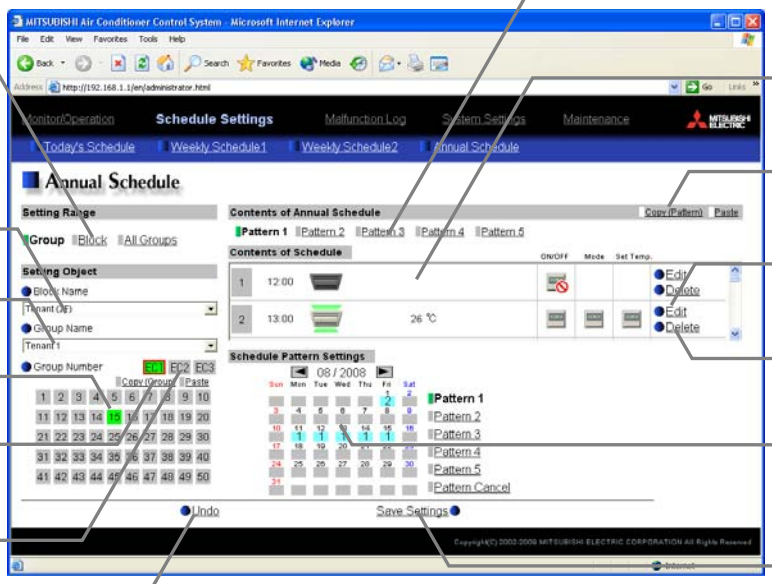


3-7-2 Setting an Annual Schedule

Click the menu item [Schedule Settings] and click [Annual Schedule] in the sub menu to display the Annual Schedule setting screen. You can use the annual schedule to set schedules for days such as public holidays and summer vacation that need to be scheduled differently to the weekly schedule. For each air conditioner group, it is possible to set 50 day-long settings up to 24 months into the future (including the current month). When saving the settings, settings for days that have passed will be deleted automatically.

To set an annual schedule, first select the range and object of the schedule setting and then set the contents of the schedule for each schedule pattern. After setting the contents of the schedule pattern (Pattern 1 – 5), allocate the schedule pattern you wish to use for the days such as public holidays or summer vacation you are setting the annual schedule for.

Note: When the contents of an operation are executed as part of a schedule these contents will continue to be in effect until they are changed by a schedule or browser etc. Therefore, if you are setting a schedule that is only for a particular day, be sure to set your schedule in a way that will not impact on the next day's operation.
For example, if you wish to prohibit operations being performed from the remote controller after 17:00, set a Prohibit operation for 17:00 and set an Enable operation for 23:59.



Setting Range
Select the range that scheduling will be set for.

Block Name
Select the block to be set.

Group Name
Select the group to be set.

Group Number
Select the group to be set.

Copy (Group) / Paste
Click to copy or paste a schedule between groups.

Expansion Controller system selection buttons
Click to display the desired system.

Undo button
Click to undo the changed.

Select the schedule pattern
Select which pattern you wish to set the schedule for.

Contents of Schedule
Operations set for the schedule are displayed here.

Copy (Pattern) / Paste
Click to copy or paste a schedule between each pattern.

Edit button
Click to set a schedule operation.

Delete button
Click to delete a schedule operation.

Calendar
Use the calendar to specify the days that the selected schedule pattern will be allocated for.

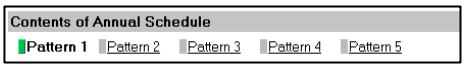
Save Settings button
Click to save the contents of the schedule setting. The schedule settings will not be saved unless this button is pressed.

(1) Select the target for the schedule being set

Follow the procedure outlined for the weekly schedule (see 3-7-1) to select the range and object of the schedule setting.

(2) Select the schedule pattern you want to set

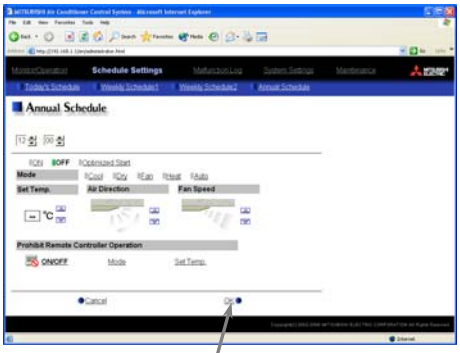
In the Contents of Annual Schedule box situated at the upper right part of the screen, choose the pattern you wish to set from Pattern 1 - 5. (If you do not need to modify any of the existing schedule pattern settings, then skip steps (2) and (3).)



(3) Set the contents of the schedule setting

When one of the [Edit] buttons in the Contents of Schedule box is clicked, a screen to set a schedule operation will appear. Use this screen to set when to run an operation and set the type of schedule operation (ON/OFF, operation mode, temperature setting,fan direction, fan speed, prohibit remote controller operation) and then press the [OK] button.

It is possible to schedule operation by specifying the settings for selected items (e.g., operation mode only or preset temperature only).



OK Button

Note: When [Optimized start] is selected, the unit starts 5 - 60 minutes before the scheduled time based on the operation data history in order to reach the scheduled temperature at the scheduled time. (When the unit starts the first time after power reset, the operation starts 30 minutes before the scheduled time.) When using this function, also set the operation mode and setting temperature. If "Prohibit Remote Controller" is set at the same time, remote controller is prohibited at its setting time.
If the room temperature is measured by the air-conditioner's suction temperature sensor, the temperature may not be correct when the air-conditioner is inactive and the air is not fresh. When the temperature is not measured correctly, switch the sensor to external temperature sensor (PAC-SE40TSA / PAC-SE41TSA) or remote control sensor.

Note: The CITY MULTI model supports a temperature setting range of 12-28°C / 53-83°F when in Heat mode. (When S series (PUMY) is used, set the temperature at 17°C-28°C / 63-83°F in heat mode.)

Note: When setting a schedule for all groups or for a block, it is possible to set all operation modes such as Auto mode etc, but if some targeted air conditioner units do not have such a function, then those units will not run in the specified mode. When setting the schedule, consider what functions are supported by the air conditioner units.

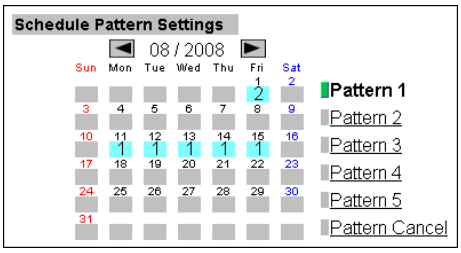
Note: When setting a schedule for all groups or for a block, it is possible to set prohibit remote controller items individually. When allowing remote controller operation under K control, however, all items must be set enable.

Note: When setting a schedule for ventilator units, the temperature setting and fan direction setting are not displayed. Moreover, the prohibit remote controller operation is simply [ON/OFF].

Note: When setting a schedule for hot water supply units, the fan direction setting and fan speed setting is are not displayed.

Note: Only the ON/OFF operation is possible on the general equipment.

(4) Specify the day(s) for pattern allocation

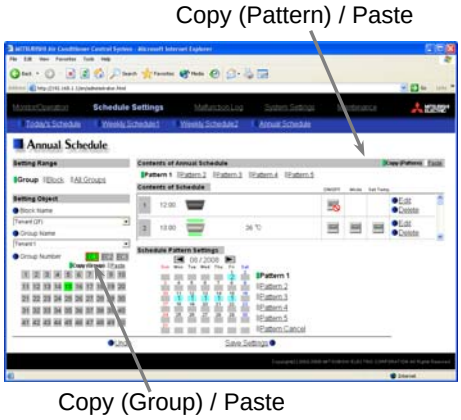


Allocate the set schedule pattern for days such as public holidays or summer vacation that has scheduling requirements different to the weekly schedule.

To allocate a schedule pattern to a day, first click the pattern you wish to allocate to select it and then select the day in the calendar by clicking on the rectangle corresponding to the day. When selected, the day will display the number of the pattern that has been allocated.

If you wish to remove a pattern allocation from a day, select [Pattern Cancel] and then click on that day's rectangle.

(5) Copy a schedule to another pattern or to another group



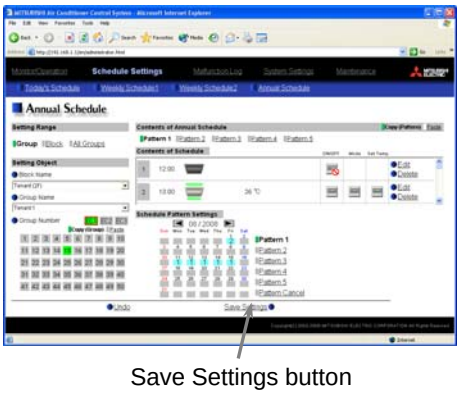
When copying a schedule between each pattern, click "Copy (Pattern)" button. The color of the button turns to green (which means the button is selected). Select the desired pattern, and click "Paste" button.

When copying all patterns of schedules or an allocated day of the pattern between each group, click "Copy (Group)" button. Select the desired group, and click "Paste" button.

Note: Copied schedule cannot be pasted to different type of equipment. For example, schedule copied on the air conditioner cannot be pasted to the ventilator equipment.

Note: The operation mode that can be pasted and the temperature setting range vary depending on the unit type.

(6) Save the contents of schedule



After you finished setting the contents of the schedule, save the schedule setting by clicking the [Save Settings] button.

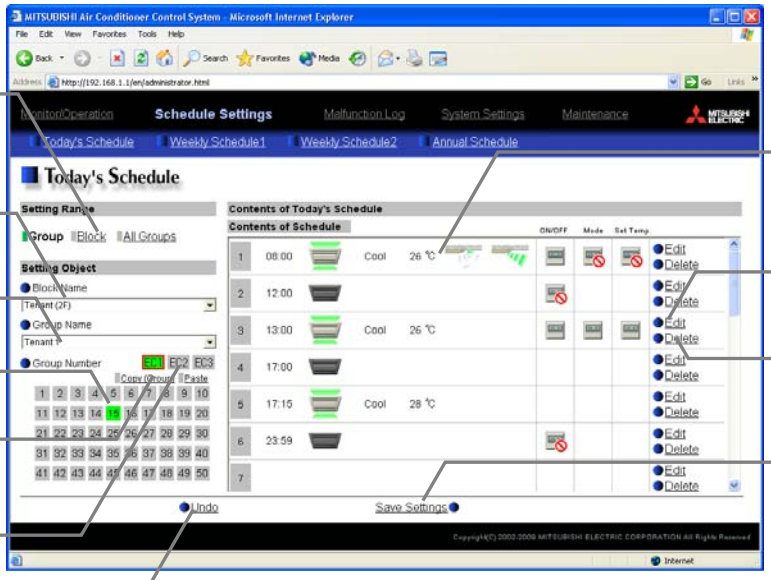
If the contents of the schedule setting have changed since the previous save, you can click the [Undo] button to restore the setting contents back to the saved settings.

3-7-3 Modifying Today's Schedule

Click the menu item [Schedule Settings], or click [Today's Schedule] in the sub menu to display the Today's Schedule setting screen. Today's Schedule can be used to set a valid schedule for just the current day without modifying the weekly or annual schedule.

To set Today's Schedule, first select the range and object of the setting and then set the contents of the schedule.

Note: When the contents of an operation are executed as part of a schedule these contents will continue to be in effect until they are changed by a schedule or browser etc. Therefore, if you are setting a schedule that is only for a particular day, be sure to set your schedule in a way that will not impact on the next day's operation.
For example, if you wish to prohibit operations being performed from the remote controller after 17:00, set a Prohibit operation for 17:00 and set an Enable operation for 23:59.



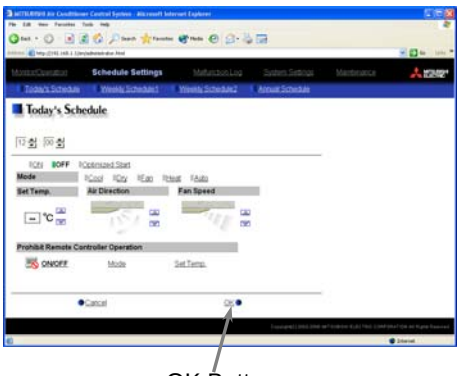
(1) Select the target for the schedule being set

Follow the procedure outlined for the weekly schedule (see 3-7-1) to select the range and object of the schedule setting.

(2) Set the contents of the schedule setting

When one of the [Edit] buttons in the Contents of Schedule box is clicked, a screen to set a schedule operation will appear. Use this screen to set when to run an operation and set the type of schedule operation (ON/OFF, operation mode, temperature setting, fan direction, fan speed, prohibit remote controller operation) and then press the [OK] button.

It is possible to schedule operation by specifying the settings for selected items (e.g., operation mode only or preset temperature only).



Note: When [Optimized start] is selected, the unit starts 5 - 60 minutes before the scheduled time based on the operation data history in order to reach the scheduled temperature at the scheduled time. (When the unit starts the first time after power reset, the operation starts 30 minutes before the scheduled time.) When using this function, also set the operation mode and setting temperature. If "Prohibit Remote Controller" is set at the same time, remote controller is prohibited at its setting time.
If the room temperature is measured by the air-conditioner's suction temperature sensor, the temperature may not be correct when the air-conditioner is inactive and the air is not fresh. When the temperature is not measured correctly, switch the sensor to external temperature sensor (PAC-SE40TSA / PAC-SE41TSA) or remote control sensor.

Note: The CITY MULTI model supports a temperature setting range of 12-28°C / 53-83°F when in Heat mode. (When S series (PUMY) is used, set the temperature at 17°C-28°C / 63-83°F in heat mode.)

Note: When setting a schedule for all groups or for a block, it is possible to set all operation modes such as Auto mode etc, but if some targeted air conditioner units do not have such a function, then those units will not run in the specified mode. When setting the schedule, consider what functions are supported by the air conditioner units.

Note: When setting a schedule for all groups or for a block, it is possible to set prohibit remote controller items individually. When allowing remote controller operation under K control, however, all items must be set enable.

Note: When setting a schedule for ventilator units, the temperature setting and fan direction is not displayed. Moreover, the prohibit remote controller operation is simply [ON/OFF].

Note: When setting a schedule for hot water supply units, the fan direction setting and fan speed setting is are not displayed.

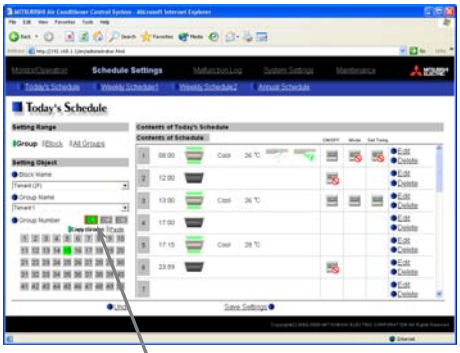
Note: Only the ON/OFF operation is possible on the general equipment.

(3) Copy a schedule to another group

When copying a schedule of the day between each group, click "Copy (Group)". The color of the button turns to green (which means the button is selected). Select the desired group, and click "Paste" button.

Note: Copied schedule cannot be pasted to different type of equipment. For example, schedule copied on the air conditioner cannot be pasted to the ventilator equipment.

Note: The operation mode that can be pasted and the temperature setting range vary depending on the unit type.

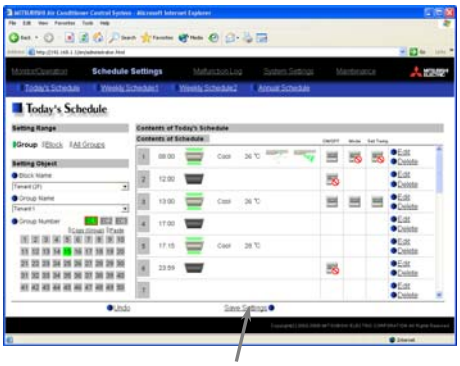


Copy (Group) / Paste

(4) Save the contents of schedule

After you have finished setting the contents of the schedule, save the schedule setting by clicking the [Save Settings] button.

If the contents of the schedule setting have changed since the previous save, you can click the [Undo] button to restore the setting contents back to the saved settings.

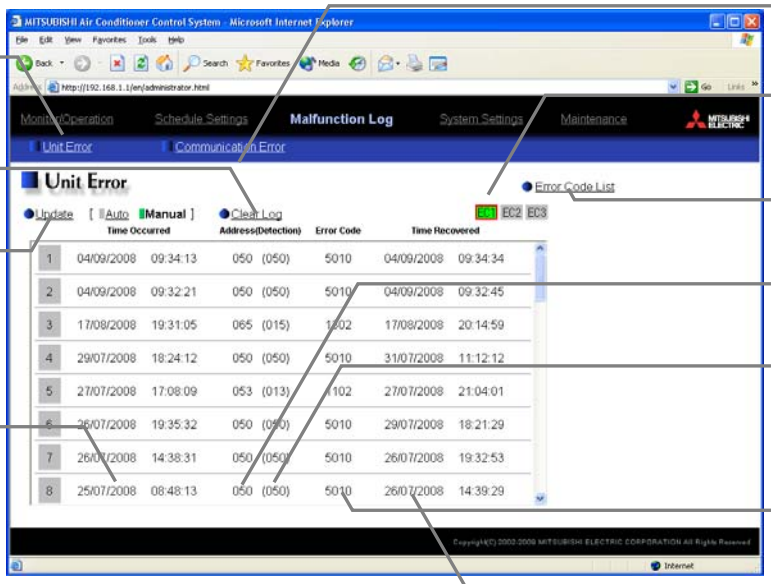


Save Settings button

3-8 Checking the Malfunction Log

Click the menu item [Malfunction Log] to display a log of unit errors (the last 64 errors). Click the sub menu [Communication Error] to display, the M-NET communication error log.

Note: If Expansion Controllers are connected, the latest 64 errors for each Expansion Controller system (EC1, EC2, or EC3) will appear.



Unit error log
Click to display the unit error log.

Clear log
Click to clear the error log.

Update to most recent condition
Click to update the screen so that the most recent operation condition is shown.

Occurred time
The date and time of error is displayed here.

Communication error log
Click to display the communication error log.

Expansion Controller system selection buttons
Click to display the desired system.

Error code list
Click to display a list of error cord definition.

Error source address
The unit address of where the error occurred is displayed here.

Error detection source address
The unit address of where the error was detected is displayed here.

Error code
The error code of the error is displayed here.

Error recovery date and time
The date and time of the error recovery is displayed here.

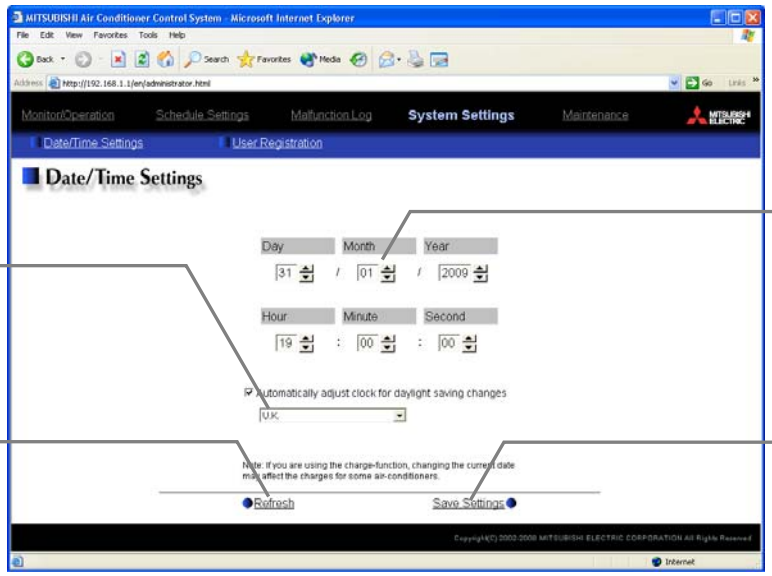
Item	Description
Unit error log	Click [Unit Error] to display the unit error log.
Communication error log	Click [Communication Error] to display the M-NET communication error lo
Update to most recent condition	Click [Update] to ensure the displayed items reflect the most recent condition. When [Auto] is selected, information is updated automatically every minute to reflect the latest information.
Expansion Controller system selection buttons	Click the button that corresponds to the desired Expansion Controller system to display the error history of the selected system. Note: Expansion Controller system selection buttons will not appear if no PAC-YG50ECA Expansion Controllers are connected.
Clear log	Click [Clear Log] to clear the error log that is being displayed. Note: If Expansion Controllers are connected, the error history of the selected Expansion Controller system will be cleared.
Error code list	Click to display a list of error cord definition. Alarm Code - Microsoft Internet Explorer 6607 Communication error - No ACK return 6608 Communication error - No return of response frame 6609 Communication error 6610 Communication error 6700 Communication error - K-transmission abnormality 6701 Communication error - K-transmission error 6702 Communication error - K-address duplicate 6750 Communication error - K abnormality code PO 6751 K abnormality - Room temperature thermistor abnormality 6752 K abnormality - Indoor coil thermistor abnormality, Condensation temperature sensor abnormality 6753 K abnormality - Transmit/receive error 6754 K abnormality - Drain sensor abnormality, Float switch function Close
Time Occurred	The date and time of when the error occurred is displayed.
Error source address	The unit address of where the error occurred is displayed.
Error detection source address	The unit address of where the error was detected is display
Error code	The error code of the error is displayed.
Time Recovered	The date and time of the error recovery is displayed.

3-9 Setting the Current Date and Time

Click the menu item [System Settings] and the Date/Time Setting screen will appear. Enter the current date and time and then press the [Save settings] to set it.

Note: The clock setting made on the screen below will be reflected on the clocks on other units that are connected to the M-NET line, on the Expansion Controllers (PAC-YG50ECA), and on the AG-150A controller whose “Time master setting” is set to Sub (with some exceptions).

⚠ CAUTION	Date and clock settings on Expansion Controllers (PAC-YG50ECA), when connected, must be made with the Expansion Controller properly connected to ensure proper settings.

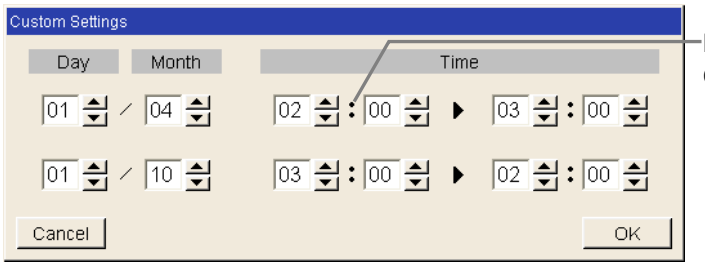


Current date/time
Enter the current date and time here.

Summer time setting
Click to set the daylight saving time.

Refresh
Acquires the current Date and Time from AG-150A.

Save settings
Click to set the current date and time.

Item	Description
Current date/time	Enter the current date and time.
Save Settings	Click the [Save Settings] to set the current date and time.
Refresh	Acquires the current Date and Time from AG-150A.
Summer time setting	Click and tick the "Automatically adjust clock for daylight saving changes" box to adjust the daylight saving time automatically, and select the applicable country. Note: If the applicable country is not in the selection bar, select "Custom Settings". Click "Custom Settings" button that will appear on the right to set the daylight saving time.  **Daylight saving date and time** Set the daylight saving time. Custom Setting Screen

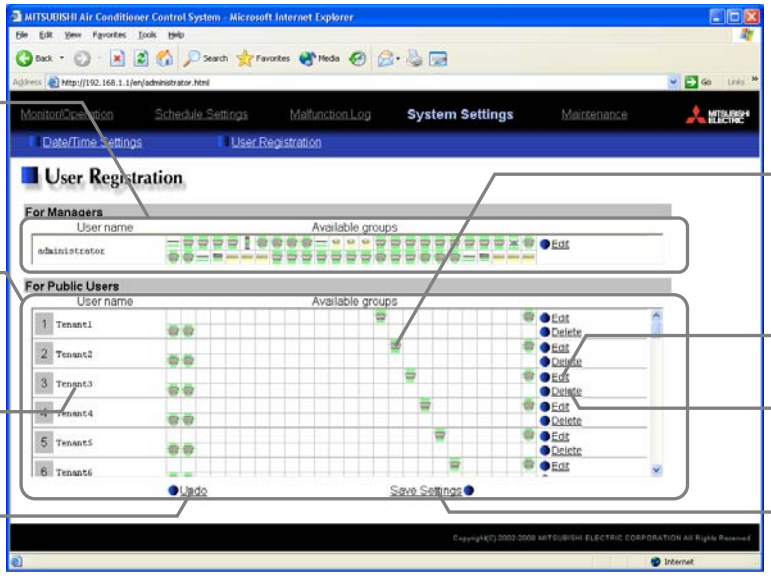
3-10 Registering Users

Click the menu item [System Settings] and then click [User Registration] to display the User Registration screen.

Please use this screen to add or modify a user name and password to login to the AG-150A, and to register an air conditioner that can be operated by a public user. If the air conditioners that can be operated have been specified, when a public user logs in, that user will only be able to view and operate the air conditioners that were specified.

Note: Managers : User who logs in from [../administrator.html].
Public Users : User who logs in from [../index.html].
(Public users can only monitor and operate air conditioners and general equipment.)

Note: To enable public users to operate air conditioners, it is necessary to register the [Personal Web] license.



User information for managers
The manager's user name and the air conditioners that can be used are displayed here.

Public user information
The user names of the public users and the air conditioners that each user can use are displayed here.

User name
The user's name is displayed here.

Undo button
Click to undo any changes.

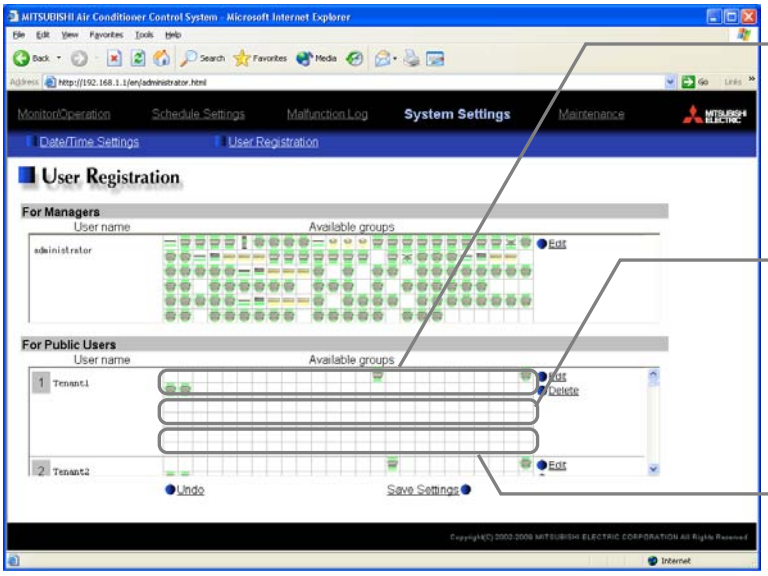
Available units
The units that can be operated are displayed here.
When you position the cursor over an icon, the group name is displayed.

Edit button
Click to set the user information.

Delete button
Click to delete the user information.

Save Settings button
Click to save the user information.
The setting will not be saved unless you click this button.

If PAC-YG50ECA Expansion Controllers are connected, up to 150 groups will be displayed in the "For Managers" and "For Public Users" sections. (See figure below.)



Expansion Controller system 1
Groups in the Expansion Controller system 1 will appear here.

Expansion Controller system 2
Groups in the Expansion Controller system 2 will appear here.

Expansion Controller system 3
Groups in the Expansion Controller system 3 will appear here.

(1) Add or edit user information

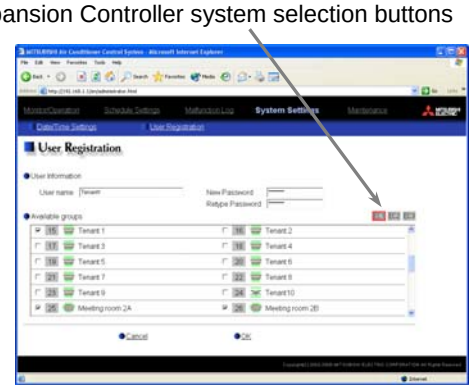
Click an [Edit] button in the User Information display to display the screen for setting user information. Enter the user name, password and select the air conditioners and the general equipment available to that user and click [OK].

Note: When a public user logs in, only the air conditioners and the general equipment specified here will be available to that user.

Note: Because managers can always operate all air conditioners and the general equipment, you cannot select available air conditioners for the manager.

Note: If Expansion Controllers are connected, Expansion Controller system selection buttons will appear. Select the button that corresponds to the desired system (EC1, EC2, or EC3), and then select the groups in the system.

Expansion Controller system selection buttons



OK button

(2) Save user information

When you have completed the user information setting, click the [Save Settings] button to save the user information.

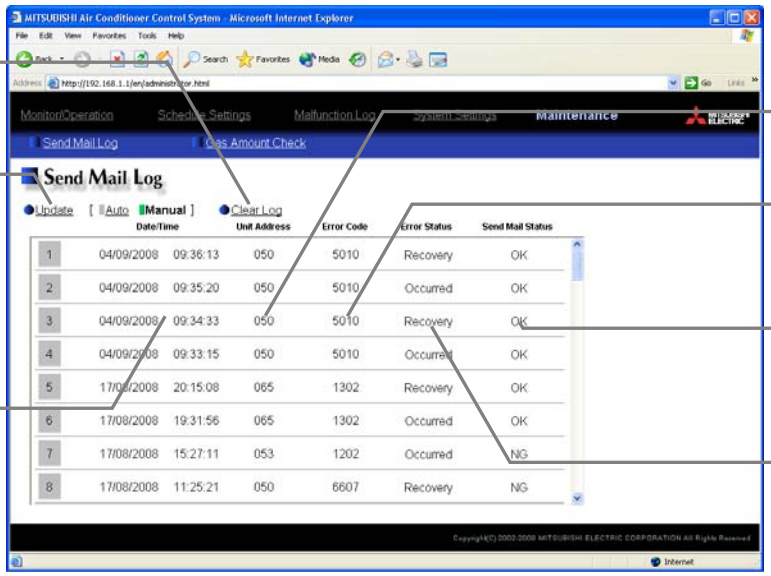
If you want to undo the settings you have just made, click the [Undo] button.

Note: If you make changes to user information but move to another page without clicking the [Save Settings] button, the changes you made will not be reflected. Always save your settings by clicking the [Save Settings] button.

Save Settings button

3-11 Checking the Send Mail Log

Click the menu item [Maintenance] to display the log of mail sent when an error occurred and after error recovery. In order for a mail to be sent when an error occurs, the date related to sending the mail must be to set using Initial Setting Web.



Clear log
Click to clear the send mail log.

Update to most recent condition
Click to update the screen so that the most recent condition is shown.

Send date/time
The date and time when the mail was sent is displayed here.

Error source address
The unit address of where the error occurred is displayed here.

Error code
The error code is displayed here.

Send mail status
This indicates whether the mail was successfully sent by displaying [OK] or [NG].

Error status
This indicates whether mail was sent when error [Occurred] or after error [recovery].

Item	Description
Update to most recent condition	Click [Update] to ensure the displayed items reflect the most recent condition. When [Auto] is selected, information is updated automatically every minute to reflect the latest information.
Clear log	Click [Clear Log] to clear the send mail log.
Send date/time	The date and time of when the error occurred is displayed.
Error source address	The unit address of where the error occurred is displayed. Note: When an error occurs on the general equipment that is connected via PLC, PLC number for General Equipment (row number 1 to 20 that PLC error mail setting is made on initial setting Web) and General Equipment number (up to 32 pieces of general equipment that are controlled by PLC for general equipment) will be displayed. (Example: PLC1-32) Note: When an error occurs on the general equipment that is connected via DIDO controller, M-NET address of the DIDO controller will be displayed. (Which means an error occurs on one of the general equipment that is connected to the DIDO controller) Note: If PAC-YG50ECA Expansion Controllers are connected, Expansion Controller systems (1-3) and M-NET addresses (000-250) will appear (e.g., 1-053).
Error code	The error code of the error is displayed.
Error status	This indicates whether mail was sent when error occurred or after error recovery.
Send mail status	This indicates whether the mail was successfully sent by displaying [OK] or [NG].

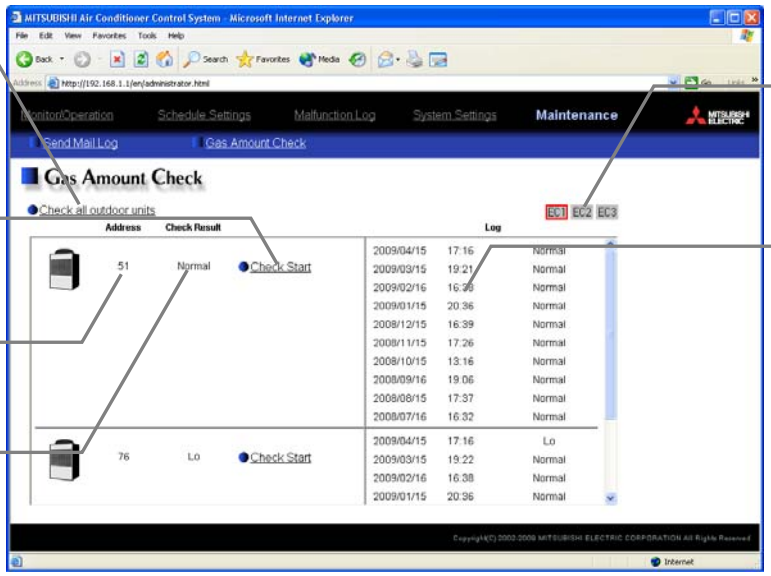
3-12 Checking the Gas Amount

Click [Maintenance] on the menu and then [Gas Amount Check], a screen will appear that allows the user to check the gas amount.

Use this option to check for refrigerant leak from the outdoor unit.

Note: Those outdoor units that do not support the gas amount checking function via the remote command will not appear on this screen.

Note: This check will be performed in a specific operation mode and takes from 30 minutes to 1 hour.



Check all outdoor units
Click to start checking the gas amount on all outdoor units.

Check Start
Click to start checking the gas amount.

Outdoor unit address
Outdoor unit address is displayed here.

Check results
Check results are displayed here.

Expansion Controller system selection buttons
Click to display the desired system.

Log
Up to 10 results can be displayed here.

(1) Start the gas amount check

Click the [Check all outdoor units] button to check all outdoor units, and click the [Check Start] button to check an individual unit.

Click the [Check cancel] button to stop checking.

Note: When the [Check Start] button is clicked, it will change to the [Check cancel] button.

Note: If Expansion Controllers are connected, Expansion Controller system selection buttons will appear. Select the desired Expansion Controller (EC1, EC2, or EC3), and perform a check on outdoor units.

(2) Check the results

This check will be completed in 30 minutes to 1 hour, and upon completion check results will be displayed.

When the amount of refrigerant charge is normal, [Normal] will appear on the screen, and if the outdoor units are low on refrigerant due to leaks, [Lo] will appear.

Note: It is not necessary to keep this page open until checking is completed. Even if the browser is closed, the check results and the log will be displayed next time this page is opened.

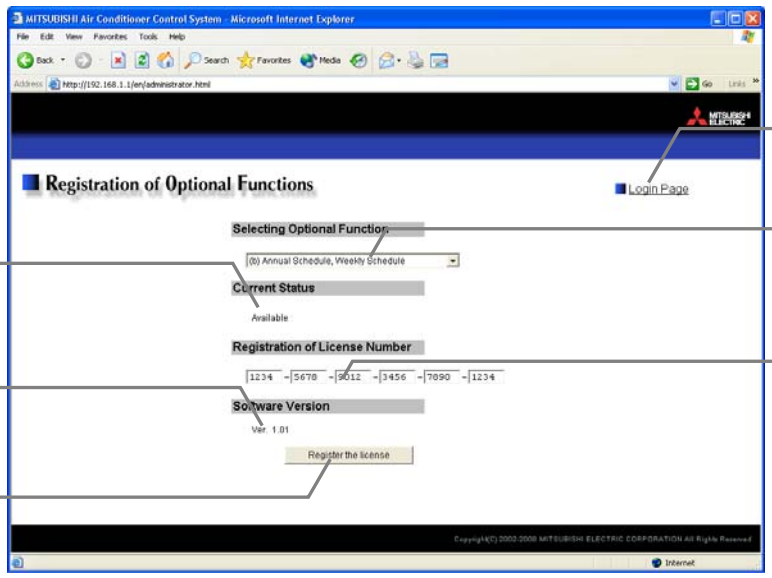
4 Registering a License for Optional Functions

Text below explains how to register a license for optional functions. In the Login screen for managers (see 3-1), click [Registration of Optional Functions] and the Registration of Optional Functions screen will appear.
Please ask the dealer you purchased the product from for more details on the optional functions and how to purchase a license number.

Note: License of "Web Monitor" or "Basic License Pack" is necessary to use the web browser (to operate or monitor the air conditioners). Some licenses are necessary depending on the functions to be used. Register the license key on the LCD screen or on the registration screen.

Note: A one-day license key can be registered on the LCD screen that allows the user to use the "Web Monitor" only on the day of the registration (not applicable to GB-50ADA-A and GB-50ADA-J). Use this license key to use the initial setting browser, or in any other situations when a temporary license key "Web Monitor" is necessary.

Note: When multiple AG-150A controllers are connected by connecting an Expansion Controller to the system, the license to use the optional functions is required only for the AG-150A controller on which the functions are actually used.



Sub menu
Click to return to the Login Page.

Optional function selection box
Select the optional function you want to register.

License number entry field
Enter the license number required for registration.

Current Status
This indicates whether the optional function is available for use.

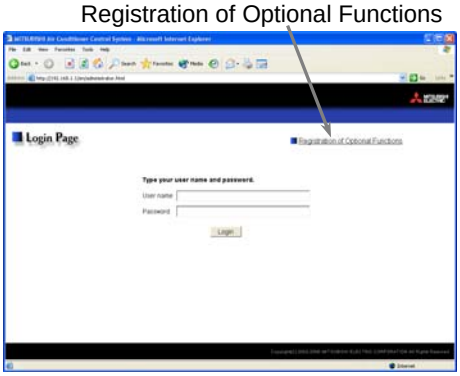
Software version
Software version is displayed.

Registration of license button
Click to register your license.

(1) Open the Registration of Optional Function screen

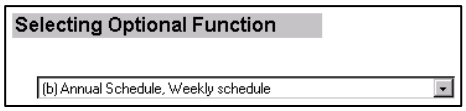
Enter the web page address in the web browser address field, click the Enter key on the keyboard to display the Login screen (see 3-1).
Click on this screen's menu item [Registration of Optional Functions] to open the Registration of Optional Functions screen.

Registration of Optional Functions

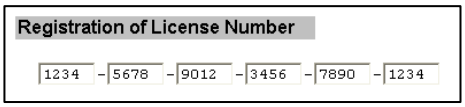


(2) Register an Optional Function

First select the optional function you wish to register from the selection box in the Selecting Optional Function section. When an optional function is selected, the Current Status section will indicate whether it is available for use.



Next enter the license number you purchased for the optional function in the license number entry field and click the [Registration of license] button. Once this is done, the optional function will be available for use.



If you were unsuccessful in registering an optional function, check that you did not enter the wrong license number by mistake, that the correct optional function was selected from the selection box, and that the date and time are set correctly.

This product is designed and intended for use in the residential, commercial and light-industrial environment.

The product at hand is based on the following EU regulations:

- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility Directive, 2004/108/EC

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BLDG. , 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN

WT05490X06