

# Air-conditioner Network System

## Centralized Controller

**AG-150A**

**AG-150A-A**

**GB-50ADA-A**

**GB-50ADA-J**

Instruction Book  
(Web browser for User)

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

# 1 Introduction

Special features of Mitsubishi Electric Corporation's "Centralized Controller AG-150A," "Centralized Controller AG-150A-A," "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.

The document explains the procedures to monitor the status of and to operate the centralized controller on the Web browser are described.

Hereinafter, Centralized controller AG-150A, AG-150A-A, 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 (PWFY)".

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            | Windows   | Microsoft® Internet Explorer 6.0<br>Microsoft® Internet Explorer 7.0<br>Microsoft® Internet Explorer 8.0<br>Microsoft® Internet Explorer 9.0<br>Note: You must have a Java execution environment.<br>(Oracle® Java Plug-in Ver.1.6.0_02–Ver.1.6.0_33, Ver.1.7.0_07, 09)<br>Note: You can check the Oracle® Java Plug-in version in "Java" in a control panel.<br>Note: Install Oracle® Java Plug-in that is appropriate for your operating system. When using 64-bit Internet Explorer, install 64-bit Java Plug-in.<br>Note: When using Oracle® 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." |
|                               | Macintosh | Safari (with Mac OS X)<br>Note: You must have a Java execution environment.<br>(Oracle Java Plug-in Ver. 1.6.0_31).<br>You can download from Apple Computer's homepage.<br>Note: You can check the Oracle Java Plug-in version at the [Help]-[Installed Plug-ins] on the Safari browser.<br>Note: When using Oracle® 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.

Oracle and Java are trademarks or registered trademarks of Oracle Inc. in the United States and/or other countries.

## 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.

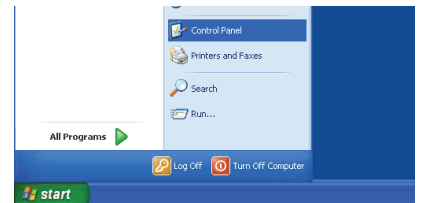
### 2-1 Setting the PC IP Address

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].

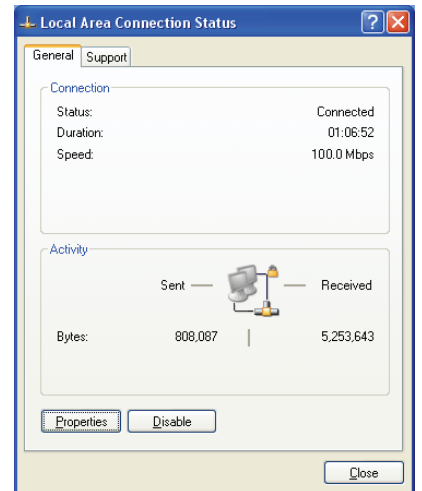
If the AG-150A is connected to an existing LAN, ask the LAN administrator to decide what PC IP address to use.

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]

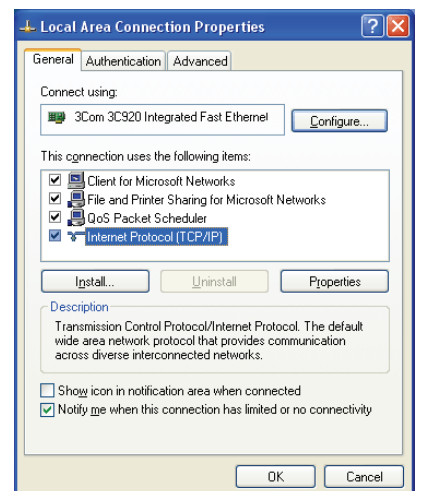
(1) Click on [Control Panel] under [Start] to open the Control Panel.



(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.

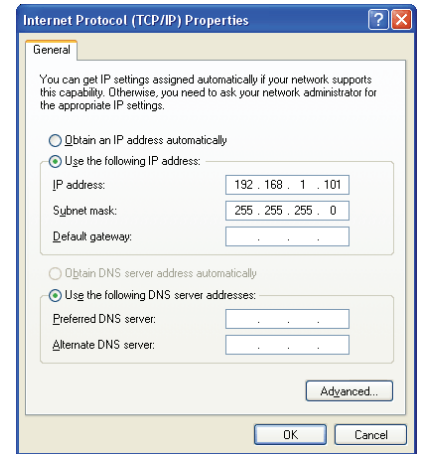


(4) In the [Internet Protocol (TCP/IP) Properties] dialog, click [Use the following IP address] and enter the IP address (for example, “192.168.1.101”) that you want to set in the IP address field.

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.

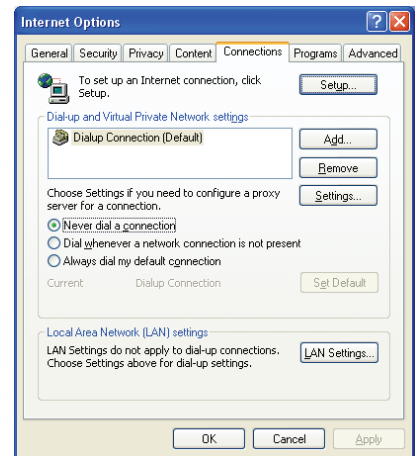
### 2-2-1 No Internet Connection

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...]



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



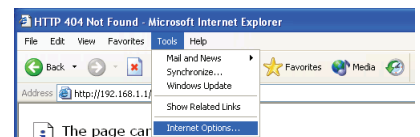
- (3) Select [Never dial a connection] in the Dial-up settings section and click the [OK] button to close the dialog.

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

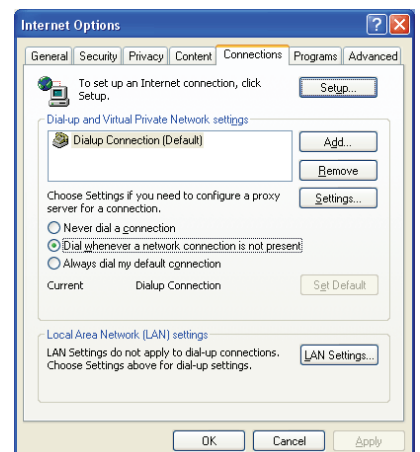
If the PC you use for monitoring air conditioners and performing operations is going to connect to the Internet via a dial-up connection, use the procedure given below to set the web browser environment settings.

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...]



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



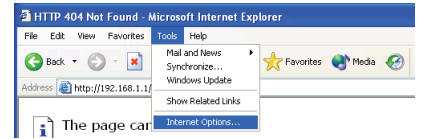
- (3) Select [Dial whenever a network connection is not present] in the Dial-up settings section and click the [OK] button to close the dialog.

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

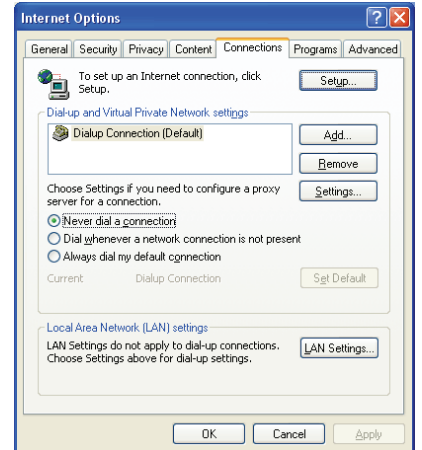
If the PC you use for monitoring air conditioners and performing operations is going to access the Internet via proxy server by connecting to an existing LAN such as a LAN within your company, use the procedure given below to set the web browser environment settings.

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.



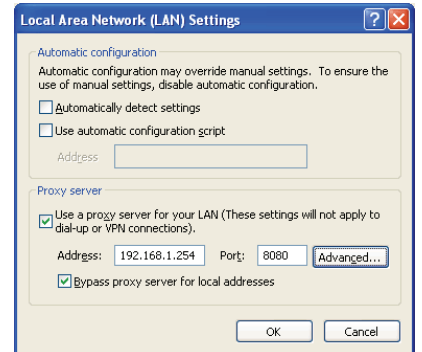
- (2) In the [Internet Options] tabbed dialog, click the [Connections] tab to display.



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

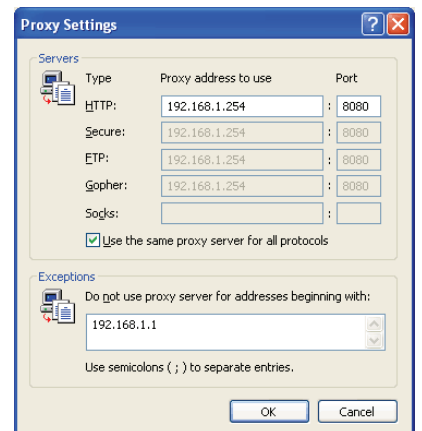
- (4) Click the [LAN Setting ...] button in the Local Area Network (LAN) settings section to display the Local Area Network (LAN) Settings dialog.

- (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\*].



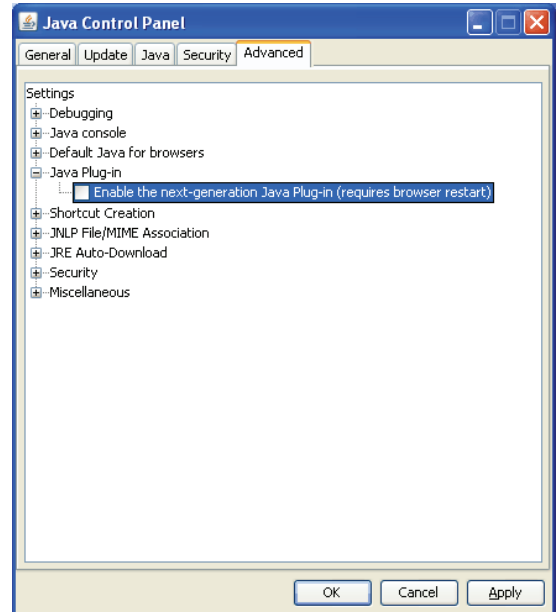
## 2-3 Setting the Java Execution Environment

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.)].  
\*The checkbox cannot be unchecked depending on your PC environment. In this case, update the version of Java Plug-in to 1.6.0\_30 or later.  
\*The above steps must be taken every time Java version is updated.



# 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

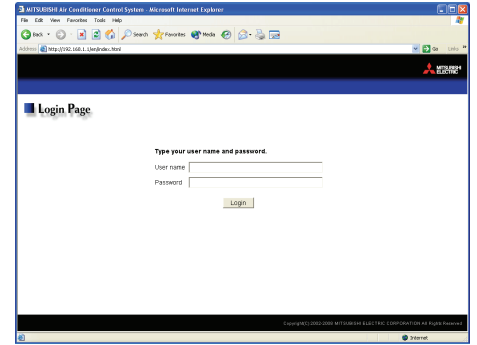
### 3-1-1 Logging in on the AG-150A

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

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

Press the [Enter] key on the keyboard. A screen appears for login.

Note: For example, type "http://192.168.1.1/index.html" if the AG-150A IP address is [192.168.1.1].



\*If the login screen does not appear then take the steps below to delete the temporary files as it may help with the problem.

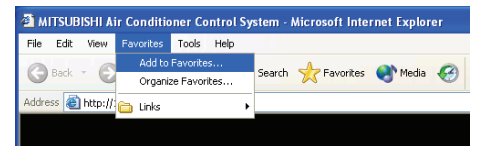
<Internet Explorer>

- 1. Open Internet Explorer and click on Tools.
- 2. Click on Internet Options.
- 3. On the General Tab, in the middle of the screen, click on Delete Files.

<Java>

- 1. Click Start > Control Panel.
- 2. Double-click the Java icon in the control panel to launch the Java Control Panel.
- 3. On the General Tab, click on Settings under Temporary Internet Files.
- 4. Click on Delete Files.

- (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 the Favorites folder and the AG-150A page will appear.



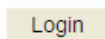
- (3) Enter the user name and the password in the login screen, and click the [Login] button. The screen for monitoring the operation condition will appear. An explanation on how to perform operations in the normal operation screen begins from the next page.

Note: Consult your administrator for your user name and password.

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.

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

Note: When the license of "Web Monitor" is not registered, the following message will appear when the [Login] button is clicked.



License is not registered.  
Register the web license "Web Monitor" .



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

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

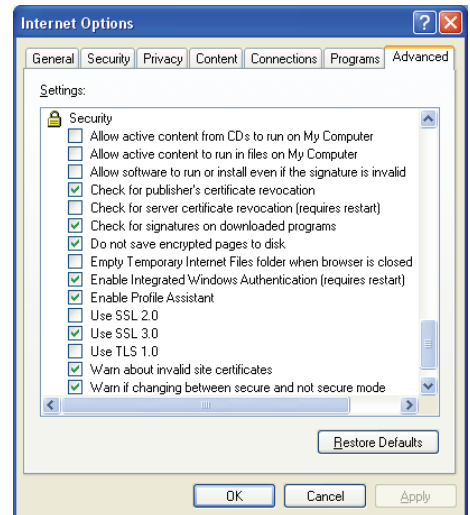
When connecting the AG-150A to the LAN that can be accessed by the general public, it is recommended that the following settings be made so that the units are monitored and controlled on the encrypted Web page.

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.   |

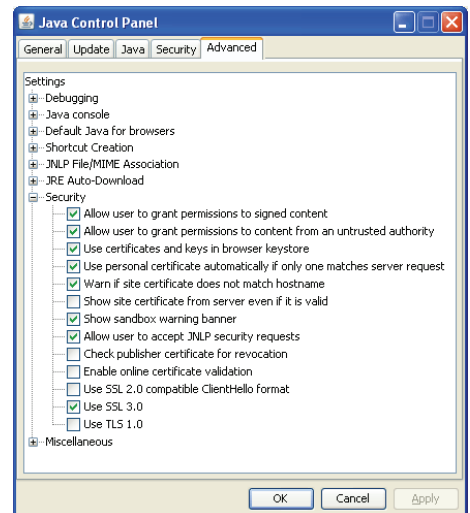
Note: Some of the settings may have different names depending on the Web browser version.



- (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.

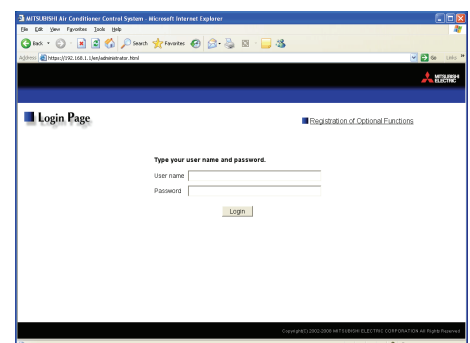


- (3) Prefix the Web address with [https], enter the address, and hit the [Enter] (Return) key on the keyboard.

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

Note: For example, type "https://192.168.1.1/index.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 data 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.

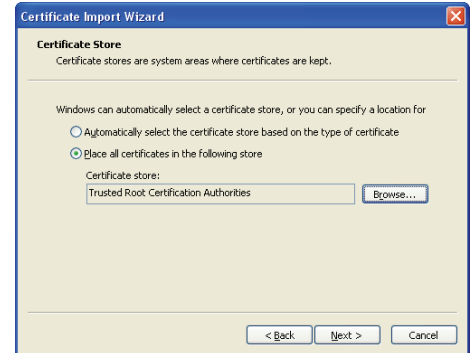
Note: Disable the security alert that appears every time the browser is opened, take the following two steps:

- 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.

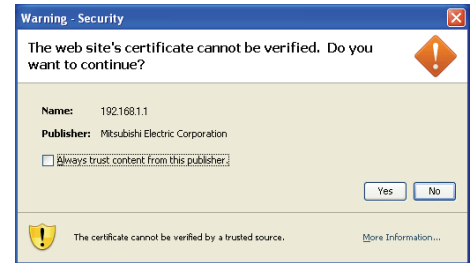
| Item                                 | Checkbox setting |
|--------------------------------------|------------------|
| Warn about invalid site certificates | Uncheck the box. |



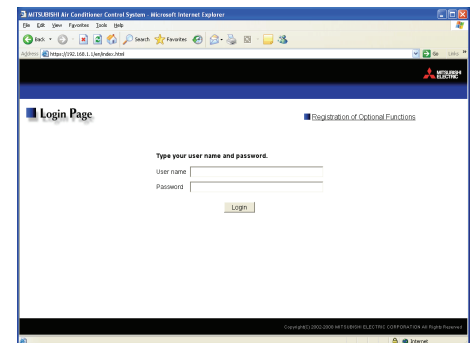
- (5) A Java security alert message will appear after you click [Yes] in step (4) above, click [Yes] again to proceed.

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

When you login correctly using the Login Screen, the screen used to monitor the operation conditions of air conditioner, ventilator (LOSSNAY), Air To Water (PWFY) groups, and general equipment will appear. If you wish to operate, click the group icon to switch to the operation screen.

Note: The operation condition display will not update automatically. If you wish to view the very latest condition, click [Update] on each screen.

The screenshot shows a web browser window titled "MITSUBISHI Air Conditioner Control System - Microsoft Internet Explorer". The main content area is titled "Monitor/Operation" and "Condition List". It displays a grid of room operation conditions. The grid has columns for "Tenant 1", "Meeting room 2A", "Meeting room 2B", and "Meeting room 2C". Each room entry shows "Cool" as the operation mode, "27 °C" as the room temperature, and "27 °C" as the set temperature. A "Weekly 1 in period" indicator is shown above the grid. The interface includes buttons for "Update" and "Batch Operations".

**Batch operation**  
Click to perform an operation on all groups at once.

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

**Group name**  
Group names are displayed.

**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.

**Operation mode display**  
The operation mode is displayed here.

**Air-conditioners display**  
Click to display the operation condition of groups in air-conditioner group and various groups.















































































**HWHP display**  
Click to display the operation condition of groups in HWHP (CAHV) group.































**Weekly schedule number**  
Indicates the weekly schedule that is currently effective.

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

**Set temperature display**  
The set temperature is displayed here.

| Item                            | Description   |
|---------------------------------|---|
| Update to most recent condition | Click [Update] to ensure the displayed items reflect the most recent operation condition.   |
| Batch Operation                 | Click [Batch Operations] if you want to perform an operation on all groups at once.   |
| Weekly schedule number          | Indicates the weekly schedule that is currently effective.<br>"Weekly * in period"<br>Note: The schedule number (1 through 5) that is currently effective is displayed in " * ".  |
| Air-conditioners display        | Switch to the screen where you can check the operation condition of air conditioner, LOSSNAY, Air To Water (PWFY), general equipment groups.<br>This screen will not appear unless the HWHP (CAHV) group has been registered. |
| HWHP display                    | Switch to the screen where you can check the operation condition of HWHP (CAHV) groups.<br>This screen will not appear unless the HWHP (CAHV) group has been registered.  |
| Group name                      | Group names are displayed.  |

| Item   | Description  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|--|--|---|---|---|---|---|---|---|---|---------------------------|----------------------------|--------------|---|---|---|---|---|---------------|------------|----------------------------------|----------------------|---|---|---|---|
| Group icon   | <p>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.</p>  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  | <p>(1) Air conditioner group operation condition</p>   |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  | <table border="1"> <thead> <tr> <th data-bbox="491 297 715 331">ON</th> <th data-bbox="715 297 938 331">OFF</th> <th data-bbox="938 297 1161 331">Error</th> <th data-bbox="1161 297 1385 331">Filter sign</th> </tr> </thead> <tbody> <tr> <td data-bbox="491 331 715 427"></td> <td data-bbox="715 331 938 427"></td> <td data-bbox="938 331 1161 427"></td> <td data-bbox="1161 331 1385 427"></td> </tr> <tr> <td data-bbox="491 427 715 483">Interlocked ventilator ON</td> <td data-bbox="715 427 938 483">Interlocked ventilator OFF</td> <td data-bbox="938 427 1161 483">Schedule set</td> <td data-bbox="1161 427 1385 483">Schedule Not Available</td> </tr> <tr> <td data-bbox="491 483 715 589"></td> <td data-bbox="715 483 938 589"></td> <td data-bbox="938 483 1161 589"></td> <td data-bbox="1161 483 1385 589"></td> </tr> <tr> <td data-bbox="491 589 715 645">Energy saving</td> <td data-bbox="715 589 938 645">Setback ON</td> <td data-bbox="938 589 1161 645">Unknown (during initial startup)</td> <td data-bbox="1161 589 1385 645">The room temperature</td> </tr> <tr> <td data-bbox="491 645 715 741"></td> <td data-bbox="715 645 938 741"></td> <td data-bbox="938 645 1161 741"></td> <td data-bbox="1161 645 1385 741"></td> </tr> </tbody> </table> | ON  | OFF   | Error   | Filter sign   |    |      |    |  | Interlocked ventilator ON | Interlocked ventilator OFF | Schedule set | Schedule Not Available  |    |      |  |  | Energy saving | Setback ON | Unknown (during initial startup) | The room temperature |  |  |  |  |
|  | ON   | OFF   | Error   | Filter sign   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  |   |      |    |  |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  | Interlocked ventilator ON  | Interlocked ventilator OFF  | Schedule set  | Schedule Not Available  |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  |   |      |    |  |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  | Energy saving  | Setback ON  | Unknown (during initial startup)  | The room temperature  |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  |   |      |    |  |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|  | <p>Note: Other than 4-airflow icons, 2-airflow or ceiling-suspended icons are also available. Select the icon type on Initial Setting Web.</p>   |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <p>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.</p>   |  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <p>Note: When setting ventilation interlock with Mr. Slim units (M-series units, P-series 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)</p>  |  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <p>Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, "Schedule set," "Schedule Not Available," "Energy saving," and "Setback ON" will be displayed only on the AG-150A controller that is executing these functions.</p>   |  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <p>(2) Ventilator (Lossnay) group operation condition</p>  |  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <table border="1"> <thead> <tr> <th data-bbox="491 1055 715 1088">ON</th> <th data-bbox="715 1055 938 1088">OFF</th> <th data-bbox="938 1055 1161 1088">Error</th> <th data-bbox="1161 1055 1385 1088">Filter sign</th> </tr> </thead> <tbody> <tr> <td data-bbox="491 1088 715 1184"></td> <td data-bbox="715 1088 938 1184"></td> <td data-bbox="938 1088 1161 1184"></td> <td data-bbox="1161 1088 1385 1184"></td> </tr> <tr> <td data-bbox="491 1184 715 1240">Schedule set</td> <td data-bbox="715 1184 938 1240">Schedule Not Available</td> <td data-bbox="938 1184 1161 1240">Energy saving</td> <td></td> </tr> <tr> <td data-bbox="491 1240 715 1346"></td> <td data-bbox="715 1240 938 1346"></td> <td data-bbox="938 1240 1161 1346"></td> <td></td> </tr> </tbody> </table> | ON   | OFF   | Error   | Filter sign   |  |  |  |  | Schedule set  | Schedule Not Available    | Energy saving              |              |  |  |  |   |   |               |            |                                  |                      |   |   |   |   |
| ON   | OFF  | Error   | Filter sign   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|   |   |  |  |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| Schedule set   | Schedule Not Available   | Energy saving   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|   |   |  |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <p>Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, "Schedule set," "Schedule Not Available," and "Energy saving" will be displayed only on the AG-150A controller that is executing these functions.</p>   |  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <p>(3) Air To Water (PWFY) group operation condition</p>   |  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <table border="1"> <thead> <tr> <th data-bbox="497 1487 721 1520">ON</th> <th data-bbox="721 1487 944 1520">OFF</th> <th data-bbox="944 1487 1168 1520">Error</th> <th data-bbox="1168 1487 1391 1520">Check water</th> </tr> </thead> <tbody> <tr> <td data-bbox="497 1520 721 1639"></td> <td data-bbox="721 1520 944 1639"></td> <td data-bbox="944 1520 1168 1639"></td> <td data-bbox="1168 1520 1391 1639"></td> </tr> <tr> <td data-bbox="497 1639 721 1695">Schedule set</td> <td data-bbox="721 1639 944 1695">Schedule Not Available</td> <td data-bbox="944 1639 1168 1695">Energy saving</td> <td></td> </tr> <tr> <td data-bbox="497 1695 721 1800"></td> <td data-bbox="721 1695 944 1800"></td> <td data-bbox="944 1695 1168 1800"></td> <td></td> </tr> </tbody> </table> | ON   | OFF   | Error   | Check water   |  |  |  |  | Schedule set  | Schedule Not Available    | Energy saving              |              |  |  |  |   |   |               |            |                                  |                      |   |   |   |   |
| ON   | OFF  | Error   | Check water   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|   |   |  |  |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| Schedule set   | Schedule Not Available   | Energy saving   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
|   |   |  |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |
| <p>Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, "Schedule set," "Schedule Not Available," and "Energy saving" will be displayed only on the AG-150A controller that is executing these functions.</p>   |  |   |   |   |   |   |   |   |   |                           |                            |              |   |   |   |   |   |               |            |                                  |                      |   |   |   |   |

| Item  | Description   |   |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
|---|---|---|---|---|--------------|------------------------|---|---|--|---|---|----|-----|-------|---|---|---|--------------|--|------------------------|---|---|--|
|   | <p>(4) General equipment group operation condition</p> <table border="1" data-bbox="491 232 1469 409"> <thead> <tr> <th data-bbox="491 232 687 293">ON</th> <th data-bbox="687 232 884 293">OFF</th> <th data-bbox="884 232 1080 293">Error</th> <th data-bbox="1080 232 1276 293">Schedule set</th> <th data-bbox="1276 232 1469 293">Schedule Not Available</th> </tr> </thead> <tbody> <tr> <td data-bbox="491 293 687 409"></td> <td data-bbox="687 293 884 409"></td> <td data-bbox="884 293 1080 409"></td> <td data-bbox="1080 293 1276 409"></td> <td data-bbox="1276 293 1469 409"></td> </tr> </tbody> </table> <p>Note: Other than lighting icons, pump or card key icons are also available.<br/> Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, "Schedule set" and "Schedule Not Available" will be displayed only on the AG-150A controller that is executing these functions.</p> <p>(5) HWHP (CAHV) group operation condition</p> <table border="1" data-bbox="491 589 1163 880"> <thead> <tr> <th data-bbox="491 589 715 627">ON</th> <th data-bbox="715 589 938 627">OFF</th> <th data-bbox="938 589 1163 627">Error</th> </tr> </thead> <tbody> <tr> <td data-bbox="491 627 715 719"></td> <td data-bbox="715 627 938 719"></td> <td data-bbox="938 627 1163 719"></td> </tr> <tr> <td colspan="2" data-bbox="491 719 938 779">Schedule set</td> <td data-bbox="938 719 1163 779">Schedule Not Available</td> </tr> <tr> <td data-bbox="491 779 715 880"></td> <td data-bbox="715 779 938 880"></td> <td data-bbox="938 779 1163 880"></td> </tr> </tbody> </table> <p>Note: When connecting multiple AG-150A controllers by connecting an Expansion Controller to the system, "Schedule set" and "Schedule Not Available" will be displayed only on the AG-150A controller that is executing these functions.</p> | ON  | OFF   | Error   | Schedule set | Schedule Not Available |  |  |  |  |  | ON | OFF | Error |  |  |  | Schedule set |  | Schedule Not Available |  |  |  |
| ON  | OFF   | Error   | Schedule set  | Schedule Not Available  |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
|  |    |   |  |  |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
| ON  | OFF   | Error   |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
|  |    |  |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
| Schedule set  |   | Schedule Not Available  |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
|  |    |   |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
| Operation mode display  | The operation mode is displayed here.   |   |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
| Set temperature display   | The set temperature is displayed here.<br>Note: The water temperature setting will be displayed for the Air To Water (PWFY) group.<br>Note: The temperature display can be in either Celsius (°C) or Fahrenheit (°F) depending on the setting.  |   |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |
| Room temperature display  | The temperature of the indoor unit's intake is displayed here.<br>Note: Because the temperature displayed here is of the indoor unit's intake, it could be different from the actual room temperature.<br>Note: The current water temperature will be displayed for the Air To Water (PWFY) group.<br>Note: The temperature display can be in either Celsius (°C) or Fahrenheit (°F) depending on the setting.  |   |   |   |              |                        |   |   |  |   |   |    |     |       |   |   |   |              |  |                        |   |   |  |

## 3-3 Performing the Operations

Text below explains how to perform air conditioner, ventilator (LOSSNAY), Air To Water (PWFY), or general equipment operations, and how to perform HWHP (CAHV) operations.

### 3-3-1 Performing the operations of air conditioner and various groups

Text below explains how to perform air conditioner, ventilator (LOSSNAY), Air To Water (PWFY), or general equipment operations.

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

When you click on a group icon in the operation condition monitoring screen, 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.

The screenshot shows the 'Monitor/Operation' screen for a Mitsubishi Air Conditioner Control System. The interface includes a 'Condition List' section with 'Tenant (2F)' and 'Tenant 1' listed. Below this, there are controls for 'Mode' (ON/OFF), 'Set Temp.' (27°C), 'Air Direction', 'Fan Speed', and 'Ventilation' (ON/OFF). There are also 'Filter Sign Reset' and 'Reset' buttons. The interface is titled 'MITSUBISHI Air Conditioner Control System - Microsoft Internet Explorer'.

**Block name**  
The name of the block is displayed here.

**ON/OFF**  
Click to switch to ON or OFF.

**Operation prohibition mark**  
If the prohibit setting has been set for an operation, the prohibition mark will be displayed.

**Operation mode**  
Click to switch the operation mode.

**Set temperature**  
Click to adjust the set temperature.

**Air direction**  
Click to adjust the air direction.

**Filter sign**  
Click to reset the filter sign.

**Cancel button**  
Click to cancel all operations.

**Group name**  
The name of the group is displayed here.

**Central control mark**  
This is displayed when the units are centrally controlled.









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

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

**Fan speed**  
Click to adjust the fan speed.

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

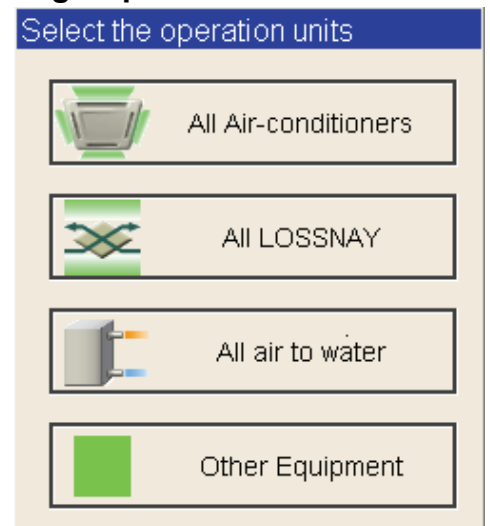
| Item  | Description  |   |  |
|---|--|---|--|
| ON/OFF *1   | Click [ON] or [OFF] to switch to ON or OFF.<br>Note: Ventilation units that are interlocked with a given group of indoor units will turn on and off when this switch is turned on and off. To switch on/off the interlocked ventilation units only, use the "Ventilation ON/OFF" button.   |   |  |
| Operation mode  | Click [Cool], [Dry], [Fan], [Heat] or [Auto] to switch the operation mode.<br>Note: This item will not appear if the operation mode switching function is not available.<br>Note: Some unit models do not support certain operation modes. Unsupported operation modes are not displayed.<br>Note: For K control models, all modes are displayed, however, choose only the modes that can be operated.<br>Note: If it is a ventilator group, select [Bypass], [Heat Recovery] or [Auto].<br>Note: When making the settings for the Air To Water (PWFY) group, elect from [Heating], [Heating ECO], [Hot Water], [Anti-freeze], and [Cooling].  |   |  |
| Set temperature   | Click  to adjust the set temperature.<br>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.<br>Note: This item will not appear if the temperature setting function is not available.<br>Note: The temperature setting range varies depending on the unit model.<br>Note: If the setting range for set temperature is restricted, the temperature setting range will be smaller.<br>Note: The temperature setting range for the Air To Water (PWFY) group is as follows:<br><table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>[Booster unit]</p> <p>Heating: 30°C ~ 50°C / 87°F ~ 122°F</p> <p>Heating ECO: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Hot Water: 30°C ~ 70°C / 87°F ~ 158°F</p> <p>Anti-freeze: 10°C ~ 45°C / 50°F ~ 113°F</p> <p>Cooling: Invalid</p> </td> <td style="width: 50%; vertical-align: top;"> <p>[Water HEX unit]</p> <p>Heating: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Heating ECO: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Hot Water: Invalid</p> <p>Anti-freeze: 10°C ~ 45°C / 50°F ~ 113°F</p> <p>Cooling: 10°C ~ 30°C / 50°F ~ 87°F</p> </td> </tr> </table> <p>Note: The temperature display can be set to display in either Celsius (°C) or Fahrenheit (°F).</p> | <p>[Booster unit]</p> <p>Heating: 30°C ~ 50°C / 87°F ~ 122°F</p> <p>Heating ECO: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Hot Water: 30°C ~ 70°C / 87°F ~ 158°F</p> <p>Anti-freeze: 10°C ~ 45°C / 50°F ~ 113°F</p> <p>Cooling: Invalid</p> | <p>[Water HEX unit]</p> <p>Heating: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Heating ECO: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Hot Water: Invalid</p> <p>Anti-freeze: 10°C ~ 45°C / 50°F ~ 113°F</p> <p>Cooling: 10°C ~ 30°C / 50°F ~ 87°F</p> |
| <p>[Booster unit]</p> <p>Heating: 30°C ~ 50°C / 87°F ~ 122°F</p> <p>Heating ECO: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Hot Water: 30°C ~ 70°C / 87°F ~ 158°F</p> <p>Anti-freeze: 10°C ~ 45°C / 50°F ~ 113°F</p> <p>Cooling: Invalid</p> | <p>[Water HEX unit]</p> <p>Heating: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Heating ECO: 30°C ~ 45°C / 87°F ~ 113°F</p> <p>Hot Water: Invalid</p> <p>Anti-freeze: 10°C ~ 45°C / 50°F ~ 113°F</p> <p>Cooling: 10°C ~ 30°C / 50°F ~ 87°F</p>   |   |  |

| Item                                | Description  |
|-------------------------------------|--|
| Air direction                       | Click   to adjust the air direction.<br>Note: If it is a model that does not support air direction adjustment, this item is not displayed.<br>Note: Available functions vary depending on the unit model.  |
| Fan speed                           | Click   to adjust the fan speed.<br>Note: If it is a model that does not support fan speed adjustment, this item is not displayed.<br>Note: Available functions vary depending on the unit model.  |
| 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]).<br>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.<br>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.<br>Note: For groups that are not connected to an interlocked ventilator, the items related to interlocked ventilators are not displayed.  |
| Operation Prohibition mark          | When air conditioners are centrally controlled, a mark that indicates so will be displayed, and if the prohibit setting has been set for any operations, the operation prohibition mark [  ] will be displayed next to those operation items.<br>If the prohibit setting has been set for an item, it is not possible to operate that item. |

\*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.

### 3-3-1-2 Adjusting the operation conditions that target all groups

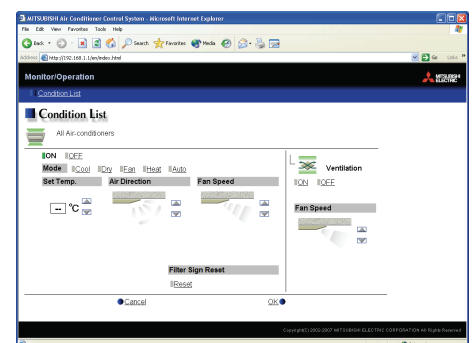
- (1) Click [Batch Operation] from the operation condition monitoring screen that displays all groups in a list. When air conditioner groups, ventilator (LOSSNAY) groups, and general equipment groups exist together in the List, a new screen will appear to select the group. Click one of the [All Air-conditioners], [All LOSSNAY], [All Air To Water], or [Other Equipment] and the screen to set the batch operation will appear.
- If there are only air conditioner groups or only LOSSNAY groups or only Air To Water (PWFY) 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 only the items for which operation was performed will be sent to all the air conditioner, ventilator (LOSSNAY) groups, Air To Water (PWFY) groups or general equipment groups.
- To return to the previous screen without performing any operations, click [Cancel].

Note: If the setting range for set temperature is restricted, the temperature setting range will be smaller.

Note: If operation of an item has been prohibited, then operation is not possible for that item.





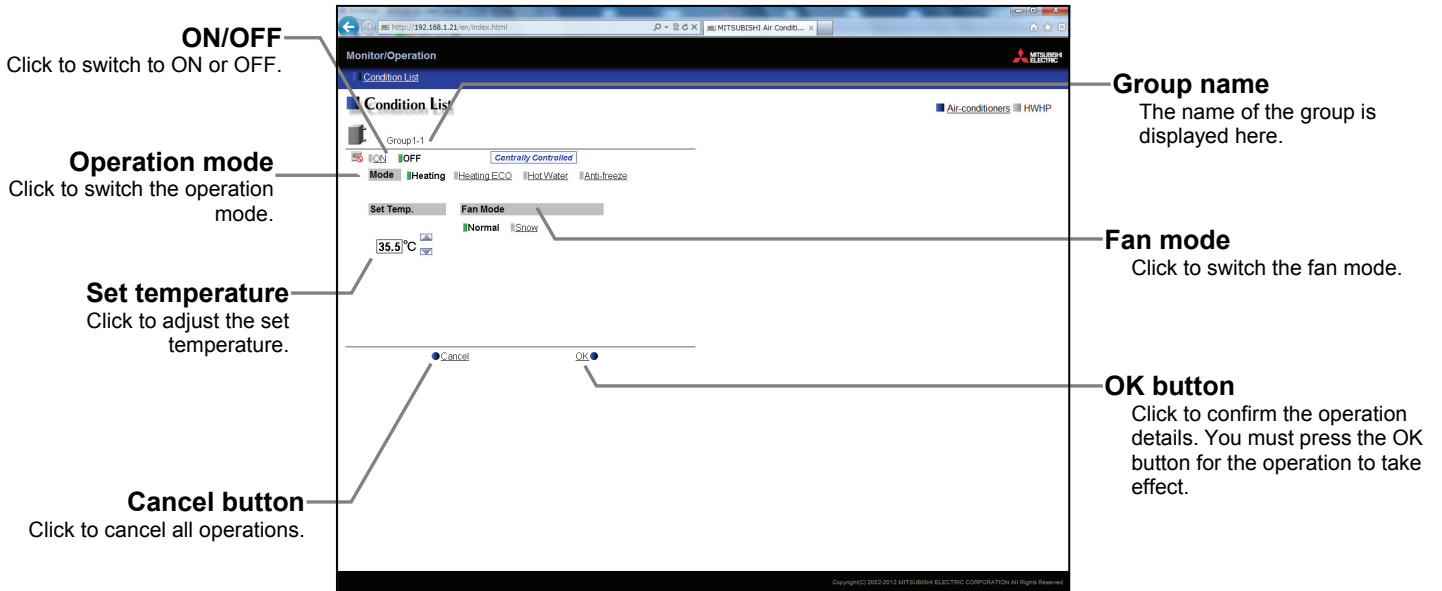
### 3-3-2 Performing the operations of HWHP (CAHV) group



Text below explains how to perform HWHP (CAHV) operations.

#### 3-3-2-1 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, 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: 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.



| Item            | Description   |
|-----------------|---|
| ON/OFF          | Click [ON] or [OFF] to switch to ON or OFF.   |
| Operation mode  | Click [Heating], [Heating ECO], [Hot Water] or [Anti-freeze] to switch the operation mode.  |
| Set temperature | Click   to adjust the set temperature.<br>Note: The temperature setting range is as follows:<br>Heating: 25-70°C / 77-158°F<br>Heating ECO: Invalid<br>Hot Water: 25-70°C / 77-158°F<br>Anti-freeze: Invalid (fixed at 25°C/77°F) |
| Fan mode        | Click [Normal] or [Snow] to switch the fan mode.<br>Note: A function to prevent an accumulation of snow on top of the fan guard by forcing the fan to operate even while the unit is stopped  |

#### 3-3-2-2 Performing the operations that target all groups

Click [Batch Operation] from the operation condition monitoring screen, and the screen to set the batch operation will appear.

After you have made settings on the screen for batch operation, click [OK] and the operation settings for only the adjusted items will be sent to all the HWHP (CAHV) groups.

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

Note: If operation of an item has been prohibited, then operation is not possible for that item.



**[Modification list]**

| Ver. | Category     | Item  | Contents   | Page/Section                         |
|------|--------------|---|--|--------------------------------------|
| X11  | New Function | Weekly schedule number display                    | The Monitor/Operation screen was modified to display the weekly schedule number that is currently effective.   | P10 Section 3-2                      |
|      | Modification | Note about Java execution environment             | A note regarding Java Plug-in execution environment was added.   | P6 Section 2-3-1                     |
|      | Modification | “Web Monitor” license: unregistered error message | An explanation of new error message, which appears when the license of “Web Monitor” is not registered, was added.   | P7 Section 3-1                       |
| X12  | New Function | Group Schedule Available/Not Available            | Schedule Available/Not Available icon for individual groups has been added.  | P10 Section 3-2                      |
|      | Modification | Note about Java execution environment             | The company name Sun Microsystems was changed to Oracle.<br>Information about compatible versions of Java Plug-in was added.   | P1 Section 1-2                       |
|      | Modification | Note about Java execution environment             | A note regarding Java Plug-in execution environment was added.   | P6 Section 2-3-1                     |
| X13  | New Function | Monitoring function of HWHP (CAHV)                | The item on the operation status of HWHP (CAHV) group was added.<br>The item on switching between Air-conditioner and HWHP (CAHV) screens was added.<br>The item on group operation of HWHP (CAHV) groups was added. | P10 Section 3-2<br>P15 Section 3-3-2 |
|      | Modification | Note about Recommended Browser                    | Internet Explorer and Java Plug-in versions were added.  | P1 Section 1-2                       |
|      | Modification | The structure of Section 3-3 was changed.         | The structure of the table of contents was changed to accommodate the addition of HWHP (CAHV) control screen.  | P13 Section 3-3                      |





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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**

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