



Mitsubishi Electric Building Air Conditioning Control System

MJ-310E

Operation Manual (Remote Operation)

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This manual refers to Microsoft® WindowsNT® Version 4.0 as WindowsNT or WindowsNT4.0, Windows® 2000 Professional as Windows 2000, Windows98 Second Edition as Windows 98SE, Windows Millennium Edition as WindowsME, and Windows® XP Professional as WindowsXP.



Microsoft® Excel 2000/XP is referred to as MS-EXCEL2000/XP, and Microsoft® Internet Explorer as IE.

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1. Safety Precautions

- Please read the Safety Precautions section very carefully before using the unit.
- The safety cautions provided here are very important for your safety. Please observe them at all times.
- The degree of danger involved with incorrect operation of the unit are indicated in this manual using the following symbols.

 WARNING	Incorrect operation could result in death or severe injury.
 CAUTION	Incorrect operation could result in injury or damage to property.

- After reading this information, please keep this manual together with the operation manual (Management) in a location where the operator can see it. Also, when changing operators give both of these manuals to the new operator.

Note:

- Please observe the safety precautions detailed in the installation manuals and operation manuals of the other machines such as computers, peripherals, and air conditioners.

WARNING

Read the installation manuals and operation manuals for the computer, peripherals and other machines.

Improper operation could result in fire or damage to the computer or peripherals.

Read the installation manual and operation manual for the air conditioner controller.

Improper operation could result in fire or damage to the air conditioner controller.

CAUTION

Do not use the product for any other purpose.

This product is for use with the Mitsubishi Electric Building Air Conditioning Control System. Do not use it with any other air conditioning control system or for any other application. Doing so may cause the unit to malfunction.

Warning to all users (User Agreement)

This document is a contract between the customer and Mitsubishi Electric Corporation. By using this application, you agree to the following conditions and are considered a user.

- Mitsubishi Electric and associated suppliers are not responsible for any collateral, secondary, or special damages, even if notified by the distributor of the possibility of a certain type of damage. Mitsubishi Electric is not responsible for any rights claimed by a third-party.

2. System Conditions

2.1 Requirements (recommended system)

The following PC specifications and software are recommended for use on the remote machine.

Component	Description	Remarks
CPU	MMX Pentium 200MHz or faster	
Memory	64MB or more	
Hard disk drive	1GB or more	
Screen resolution	1024 X 768 or higher, 65536 colors or more	
Communications port	56K modem, TA or LAN	
Operating system	(1) Windows 95/98/98SE/ME (2) Windows NT4.0 (3) Windows 2000 (4) Windows XP	* The Standard version may be used with Windows2000, and the Home version with WindowsXP.
Browser	IE Ver.5.0 or later	Java Virtual Machine installed

2.2 Restrictions

The following restrictions apply to remote monitoring and operation.

- (1) Connection to MJ-310E
The system does not permit simultaneous multiple connection for remote access (monitoring and operation).
If connection is not possible, wait and try again.
- (2) Functions Limiting
Remote monitoring and operation are not possible for functions not supported by the connected MJ-310E, and screens and functions for which access privileges have not been granted.
Some trend output functions do not operate during certain time periods.

2.3 Cautions in Use

- (1) Do not reveal your ID or password for connection to the MJ-310E to a third party.
- (2) This system permits remote monitoring and operation of air conditioning units. Always ensure that connected PCs are managed and operated appropriately.
- (3) Remote monitoring and operation employs phone circuits, and thus incurs phone charges while the system is connected.
- (4) Always ensure that PCs and peripheral equipment are handled in accordance with the relevant installation and users manuals.
- (5) It is recommended that the agreement of the building owner and tenants be obtained for remote operation of the equipment.
- (6) Never operate the air conditioning units during a fire alarm.
- (7) Do not operate the air-conditioning unit during demand control.
- (8) The most recent virus scanning software and security patches should be used on the remote access PC.

3. Setting Up the Remote Monitoring Tool

3.1 Preparations for Setup

The following files are required for remote monitoring and operation.

Necessary files: MJ310Web.exe
Located in the Tool folder on the master CD.

3.2 Setup Method

Setup differs slightly according to the operating system used. The following describes setup for each operating system.

3.2.1 Windows 95/98/98SE/ME

Install the modem driver

Connect the modem and install the modem driver.

- 1) Switch the modem power supply ON.
- 2) Double-click on Modems on the control panel.
- 3) Install the modem driver in accordance with the Install New Modem Wizard.

Install the Dial-up Adapter

- 1) Double-click on Add/Remove Programs on the control panel.
- 2) Select Communications from the Windows Setup TAB, and click on [Details].
- 3) Check Dial-up Networking and click on [OK].
- 4) Following the instructions on the screen. Restart the computer when the restart message appears.

Install the remote monitoring tool

- 1) Create the folder "C:\mj310web".
- 2) Copy the file "MJ310Web.exe" to the folder created in 1).
- 3) Create a shortcut icon for "MJ310Web.exe" and place it on the desktop.

Note:

- If the modem driver and Dial-up Adapter have already been installed, they need not be installed again.
- The modem driver and Dial-up Adapter need not be installed if the system is to be used with a LAN (for connection within the building).
- The instructions displayed on the screen when installing the modem driver and Dial-up Adapter differ depending on the OS. For the details, refer to the manual for the OS.

3.2.2 Windows NT4.0

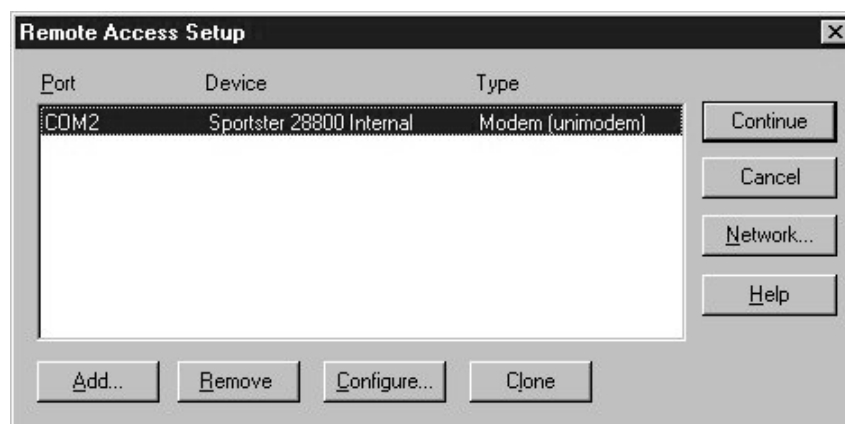
Install the modem driver

Connect the modem and install the modem driver.

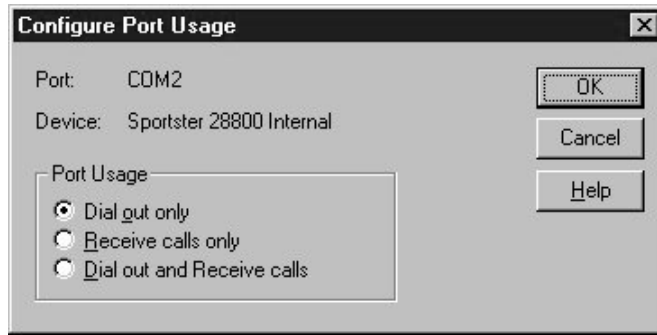
- 1) Switch the modem power supply ON.
- 2) Double-click on Modems on the control panel.
- 3) Install the modem driver in accordance with the Install New Modem Wizard.

Install Remote Access Service

- 1) Double-click on Networking on the control panel.
- 2) Select the Service TAB and click on [Add].
- 3) Select "Remote Access Service" from the services list, and click on [OK].
- 4) The installed modems are listed in the "Remote Access Setup" window. Select the desired modem, and click on Configure.

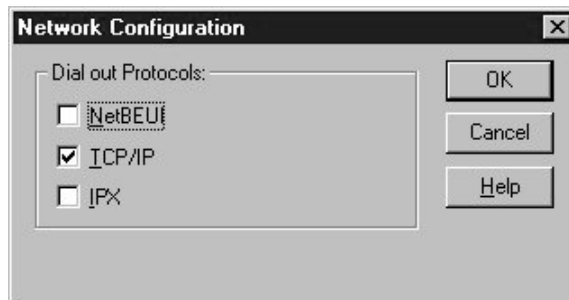


5) "Configure Port Usage" window is displayed. Select "Dial out only" option and click on [OK].



6) The system returns to the "Remote Access Setup" window. Click on [Network].

7) "The Network Configuration" window is displayed. Check "TCP/IP" only, and click on [OK].



8) Restart the computer when the restart message appears.

Install the remote monitoring tool

- 1) Create the folder "C: \ mj310web".
- 2) Copy the file "MJ310Web.exe" to the folder created in 1).
- 3) Create a shortcut icon for "MJ310Web.exe" and place it on the desktop.

Note:

- If the modem driver and Remote Access Service have already been installed, they need not be installed again.
- The modem driver and Remote Access Service need not be installed if the system is to be used with a LAN (for connection within the building).

3.2.3 Windows 2000/XP

Install the modem driver

Connect the modem and install the modem driver.

- 1) Switch the modem power supply ON.
- 2) Double-click on Modems on the control panel.
- 3) Install the modem driver in accordance with the Install New Modem Wizard.

Install the remote monitoring tool

- 1) Create the folder "C: \ mj310web".
- 2) Copy the file "MJ310Web.exe" to the folder created in 1).
- 3) Create a shortcut icon for "MJ310Web.exe" and place it on the desktop.

Note:

- If the modem driver has already been installed, it need not be installed again.
- The modem driver need not be installed if the system is to be used with a LAN (for connection within the building).
- The Remote Access Service is already installed with Windows 2000.

4. Initializing the Remote Monitoring Tool

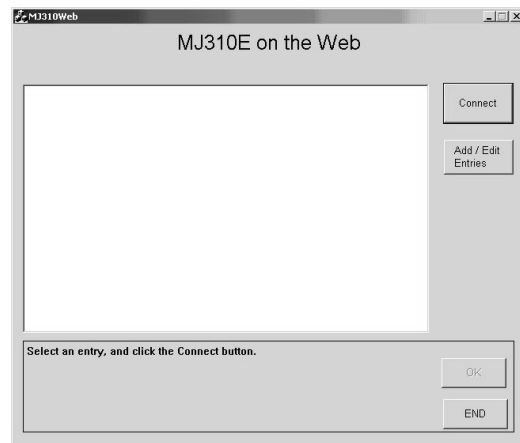
4.1 Registering the Monitoring Site

Registering the sites to be remotely connected simplifies subsequent connection.

4.1.1 Starting the Remote Monitoring Tool

Start the remote monitoring tool

- 1) Double-click on the "MJ310Web.exe" icon
Click on the "MJ310Web.exe" icon on the desktop.
The MJ310E on the Web screen appears.



4.1.2 Creating the Dial-up Connection

Note:

- This operation is run only once when first registering the monitored site.
- This operation is not required if Dial-up/LAN includes "MJ-310E" or if there is a LAN connection. In such cases skip to the next Registering Monitored sites stage.

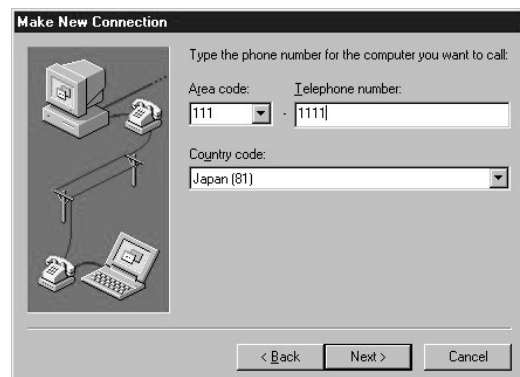
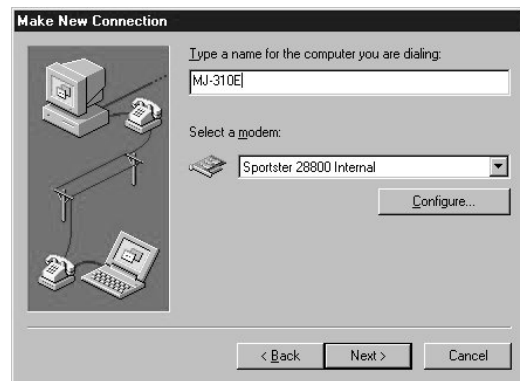
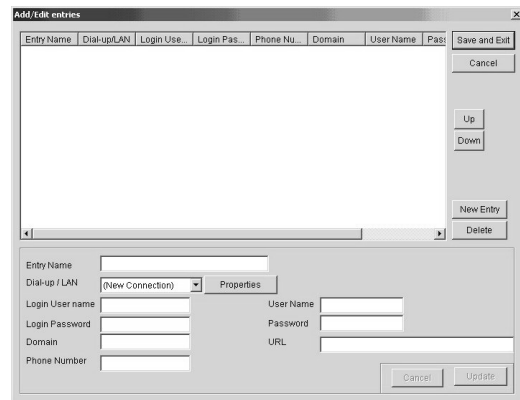
(1) Windows 95/98/98SE/ME

- 1) Click on [Add/Edit Entries]
The Add/Edit Entries screen appears.
- 2) Click on Dial-up/LAN ▼
Select New Connection.
- 3) Click on [Properties]
Make New Connection appears.
- 4) Enter a name for the computer
Enter "MJ-310E".
- 5) Click on Select Modem ▼
Select your modem.
- 6) Click on [Next]
The phone number setup screen appears.
- 7) Enter the Area Code and Phone Number
Enter "111" for the Area Code, and "1111" for the Phone Number.

Note:

- As a phone number is not used in remote monitoring and operation, any number may be entered.

- 8) Click on Country Code ▼
Select the relevant country.



- 9) Click on [Next]

Make New Connection is terminated, and “MJ-310E” is added to Dial-up/LAN.
- 10) Click on Dial-up/LAN ▼

Select “MJ-310E”.
- 11) Click on [Properties]

The MJ-310E network setup (server type) screen appears.
- 12) Click on [Server Type]

“Server Types” appears.
- 13) Click on “Type of Dial-Up Server” ▼

Select “PPP: Windows 95, Windows NT3.5, Internet”.
- 14) Check “Log on to network”

Check the box.
- 15) Check TCP/IP

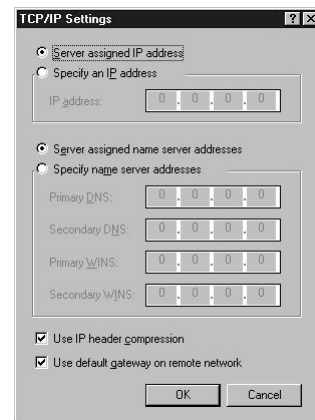
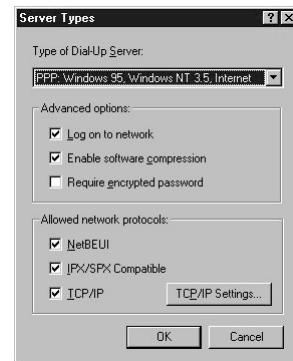
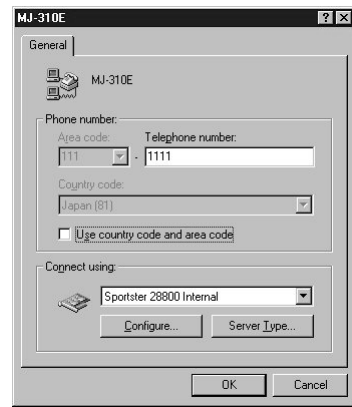
Check the box.
- 16) Click on [TCP/IP Settings...]

“TCP/IP Settings” setup screen appears.
- 17) Select “Server assigned IP address”

Leave the other settings at the default values.
- 18) Click on [OK]

“TCP/IP settings” is now complete.
- 19) Click on [OK]

MJ-310E network setup is now complete.



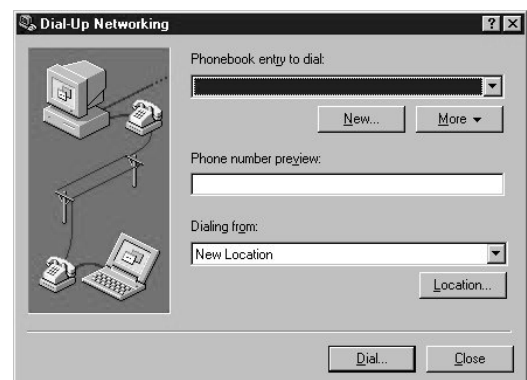
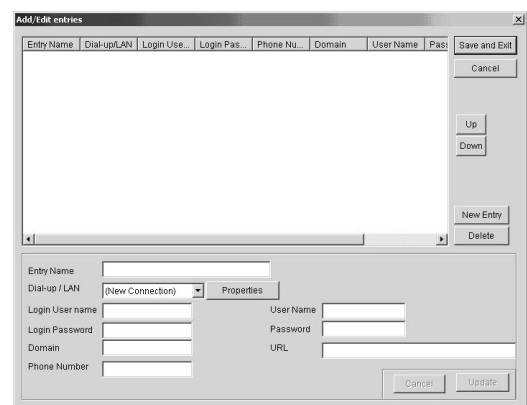
(2) Windows NT

- 1) Click on [Add/Edit Entries]

The Add/Edit Entries screen appears.
- 2) Click on Dial-up/LAN ▼

Select New Connection.
- 3) Click on [Properties]

“Dial-up Networking” appears.



4) Click on [New]

The wizard or Properties screen appears.
If the Properties screen appears, skip to 12).

5) Enter the entry name

Enter "MJ-310E".

6) Click on [Next]

"Server" appears.

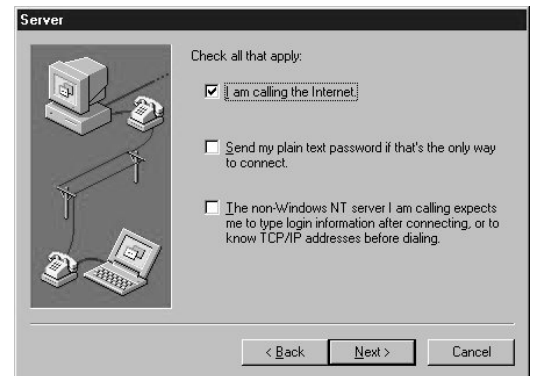


7) Check I am calling the Internet

Check the box.

8) Click on [Next]

"Phone Number" appears.



9) Enter the Phone Number

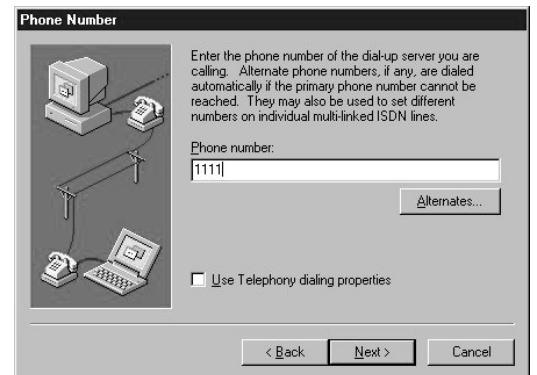
Enter "1111" for the Phone Number.

Note:

- As a phone number is not used in remote monitoring and operation, any number may be entered.

10) Click on [Next]

Dial-up Networking is terminated, and "MJ-310E" is added to Dial-up/LAN.



11) Click on Dial-up/LAN ▼

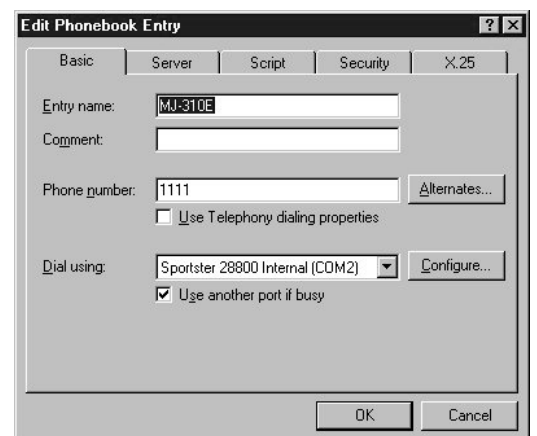
Select "MJ-310E".

12) Click on [Properties]

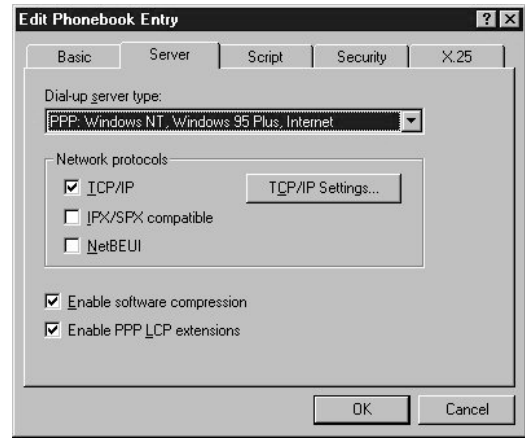
"Edit Phonebook Entry (Basic)" appears.

When skipping directly to the Properties screen, enter "MJ-310E" for Entry Name, and "1111" for Phone number, and check that the desired modem has been selected.

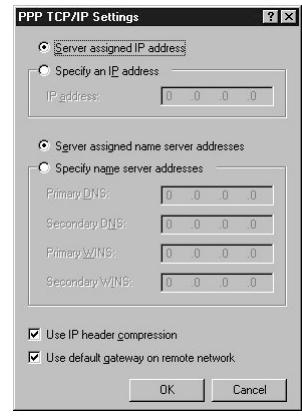
If Entry Name and Phone Number cannot be entered, enter "MJ-310E" for Entry Name, and "1111" for Phone Number.



- 13) Click on the Server TAB
Edit Phonebook Entry (server) appears.
- 14) Click on Dial-up Server Type ▼
Select "PPP: Windows NT, Windows 95 Plus, Internet".
- 15) Check TCP/IP
Check the box.
- 16) Click on [TCP/IP Settings...]
"PPP TCP/IP Settings" appears.

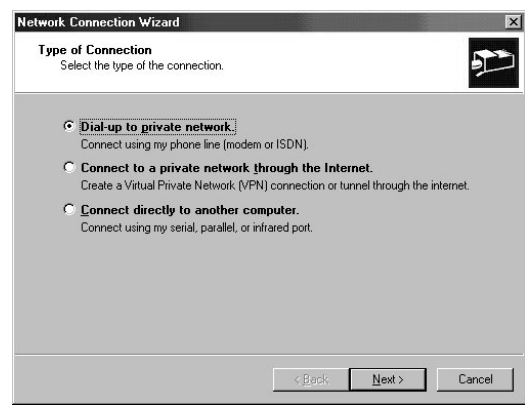
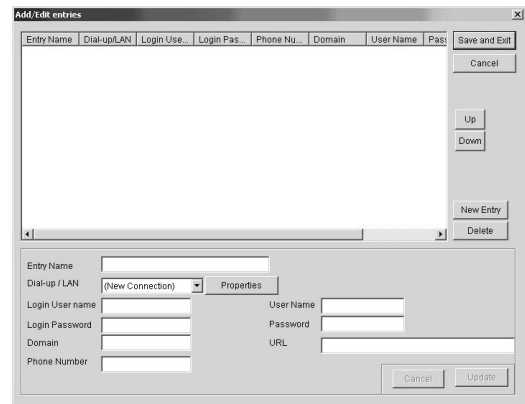


- 17) Select "Server assigned IP address"
Leave the other settings at the default values.
- 18) Click on [OK]
"TCP/IP settings" is now complete.
- 19) Click on [OK]
MJ-310E network setup is now complete.



(3) Windows 2000

- 1) Click on [Add/Edit Entries]
The Add/Edit Entries screen appears.
- 2) Click on Dial-up/LAN ▼
Select New Connection.
- 3) Click on [Properties]
"Network Connection Wizard" appears.
- 4) Select the connection type
Select Dial-up to private network.
- 5) Click on [Next]
"Phone Number to Dial" appears.



6) Enter the Phone Number

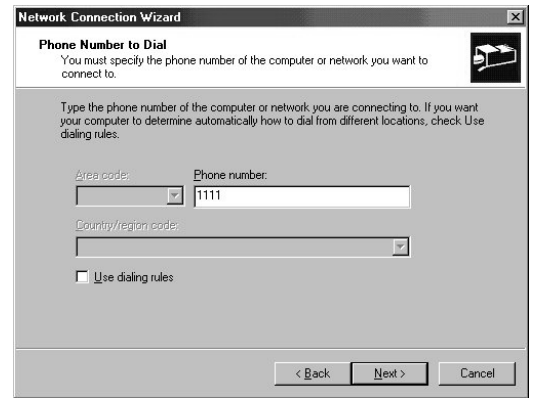
Enter "1111" for the Phone Number.

Note:

- As a phone number is not used in remote monitoring and operation, any number may be entered.

7) Click on [Next]

"Connection Availability" appears.



8) Specify the users able to connect

Select "For all users".

9) Click on [Next]

The connection name entry screen appears.

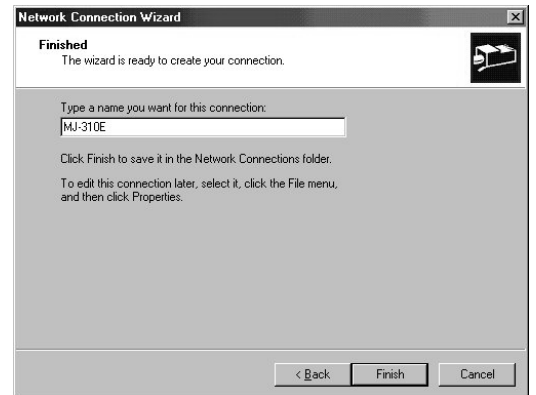


10) Enter the Connection Name

Enter "MJ-310E" in Connection Name.

11) Click on [Finish]

Network Connection Wizard is terminated, and "MJ-310E" is added to Dial-up/LAN.



12) Click on Dial-up/LAN ▼

Select "MJ-310E".

13) Click on [Properties]

The MJ-310E Connection Setup screen (General) appears.



14) Click on the Options TAB
The MJ-310E Connection Setup screen (Options) appears.

15) Uncheck all dialing options

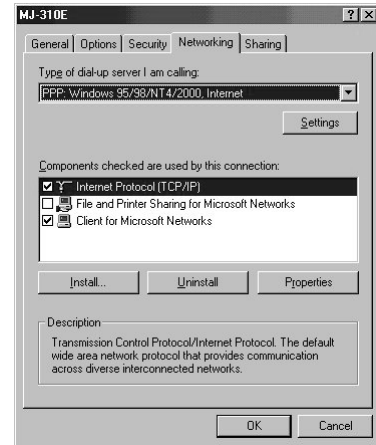


16) Click on the Network TAB
The MJ-310E Connection Setup screen (Networking) appears.

17) Click on "Type of dial-up Server I am calling" ▼
Select "PPP: Windows 95/98/NT4/2000, Internet".

18) Check Internet Protocol (TCP/IP)
Check the box.

19) Click on [OK]
MJ-310E connection setup is now complete.



(4) Windows XP

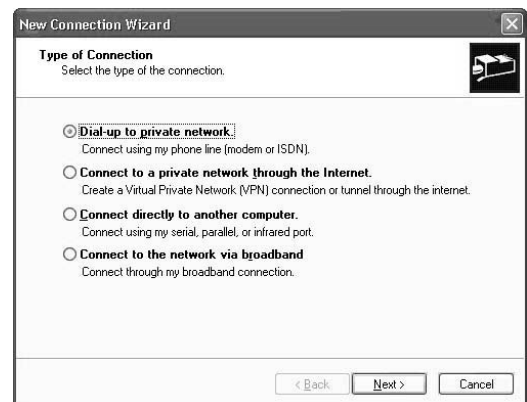
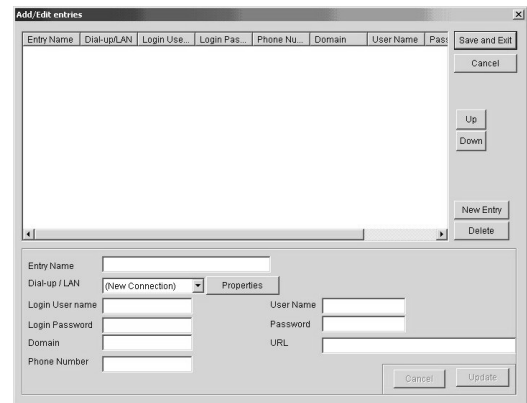
1) Click on [Add/Edit Entries]
The Add/Edit Entries screen appears.

2) Click on Dial-up/LAN ▼
Select New Connection.

3) Click on [Properties]
"New Connection Wizard" appears.

4) Select the connection type
Select Dial-up to private network.

5) Click on [Next]
"Phone Number to Dial" appears.

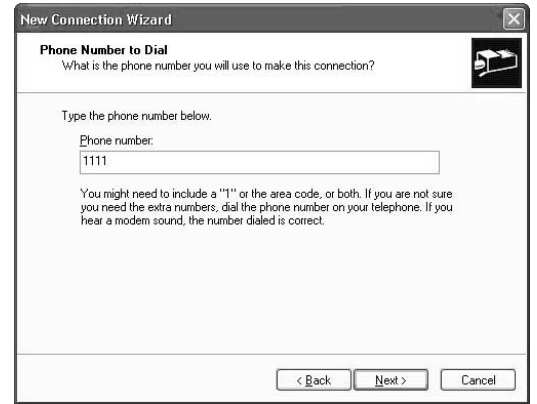


6) Enter the Phone Number

Enter "1111" for the Phone Number.

Note:

- As a phone number is not used in remote monitoring and operation, any number may be entered.



7) Click on [Next]

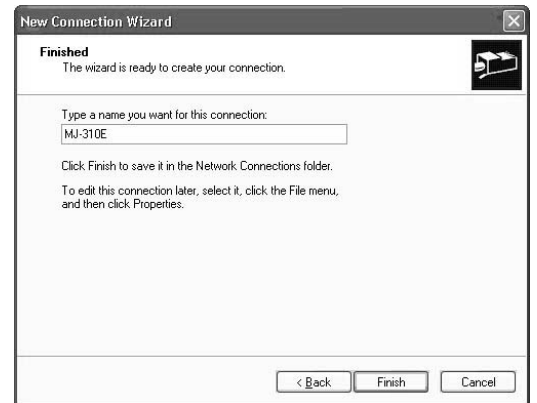
"Connection Availability" appears.

8) Enter the Connection Name

Enter "MJ-310E" in Connection Name.

9) Click on [Finish]

New Connection Wizard is terminated, and "MJ-310E" is added to Dial-up/LAN.



10) Click on Dial-up/LAN ▼

Select "MJ-310E".

11) Click on [Properties]

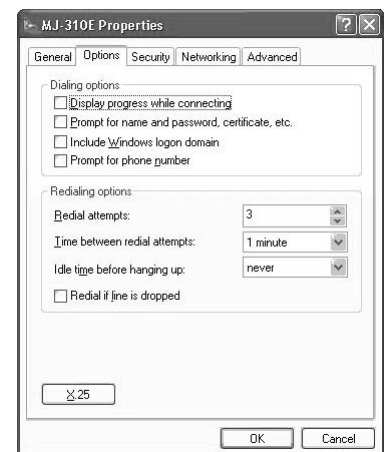
The MJ-310E Connection Setup screen (General) appears.



12) Click on the Options TAB

The MJ-310E Connection Setup screen (Options) appears.

13) Remove all dialing options



14) Click on the Networking TAB

The MJ-310E Connection Setup screen (Networking) appears.

15) Click on "Type of dial-up Server I am calling" ▼

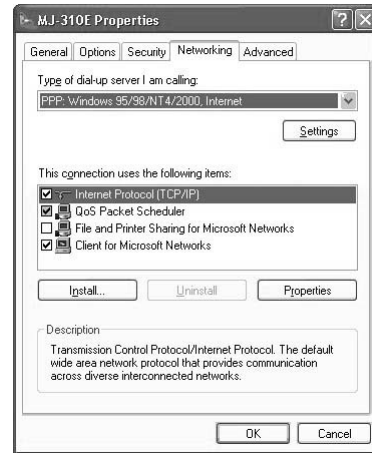
Select "PPP: Windows 95/98/NT4/2000, Internet".

16) Check Internet Protocol (TCP/IP)

Check the box.

17) Click on [OK]

MJ-310E connection setup is now complete.



4.1.3 Registering Monitored Sites

Register a monitored site

The MJ310E on the Web screen appears.

1) Click on [Add/Edit Entries]

The Add/Edit Entries screen appears.

2) Click on [New Entry]

Setup the connected site.

3) Enter the Entry Name

Enter the display name (eg. name of the connected building) in the Entry Name field.

4) Click on Dial-up/LAN ▼

Select MJ-310E.

Note:
- This manual assumes remote connection of the modem. If connecting to a LAN, select LAN.
- Some settings are unnecessary if selecting a LAN. In this case, skip the sections below noted as "not required with LAN".

5) Enter the Login User name (not required with LAN)

Enter the User Name set with the MJ-310E call received setting (See Chapter 1 of Sheet 2 in the Site adjustment.).

6) Enter the Login Password (not required with LAN)

Enter the Password set with the MJ-310E call received setting (See Chapter 1 of Sheet 2 in the Site Adjustment.).

7) Enter the Domain (not required with LAN)

Enter the name of the connected computer.

8) Enter the Phone Number (not required with LAN)

Enter the connected phone number.

9) Enter the User Name

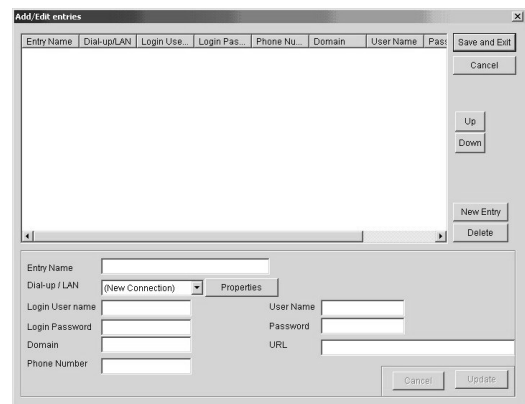
Enter the user name for MJ-310E remote monitoring.
Enter the user name set with MJ-310E remote monitoring connection setup (See section 8.12 in the Site adjustment).

Note:
- This sometimes differs from the Login User Name.

10) Enter the Password

Enter the Password for MJ-310E remote monitoring.
Enter the Password set with MJ-310E remote monitoring connection setup (See section 8.12 in the Site adjustment).

Note:
- This sometimes differs from the Login Password.



11) Enter the URL

Enter the MJ-310E start-up screen URL
(eg. <http://192.168.100.1/mj310e/Default.asp>)

Note:

- The URL varies with the computer on which MJ-310E is installed. Contact your MJ-310E system administrator for details.

12) Click on Add

The site is added to the Add/Edit Entries list.

13) Repeat steps 2)~12)

Repeat setup for multiple sites.

14) Click on [Save and Exit]

When all sites have been registered, click on [Save and Exit].

4.2 Editing Monitored Sites

Editing monitored sites

The MJ310E on the Web screen appears.

1) Click on [Add/Edit Entries]

The Add/Edit Entries screen appears.

2) Select the Entry Name to be edited

Select the Entry Name from the Add/Edit Entries registration site list.
The selected property data is displayed in the setup field.

3) Change the required details

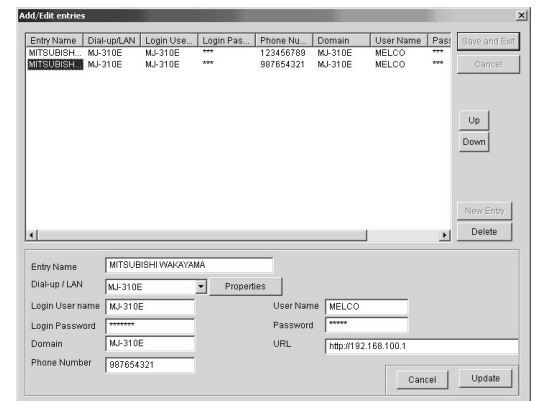
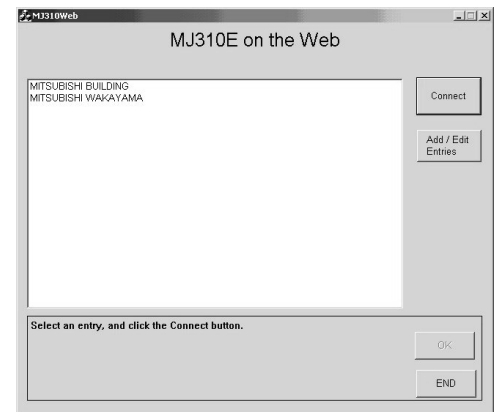
Change the required details.

4) Click on [Update]

After completing the changes, click on [Update].

5) Click on [Save and Exit]

Save the changes.



4.3 Deleting Monitored Sites

Deleting monitored sites

The MJ310 on the Web screen appears.

1) Click on Add/Edit Entries

The Add/Edit Entries screen appears.

2) Select the Entry Name to be deleted

Select the Entry Name to be deleted from the Add/Edit Entries registration site list.

3) Click on [Delete]

The selected Entry Name is deleted.

4) Click on [Save and Exit]

Save the changes.

5. Remote Monitoring and Operation

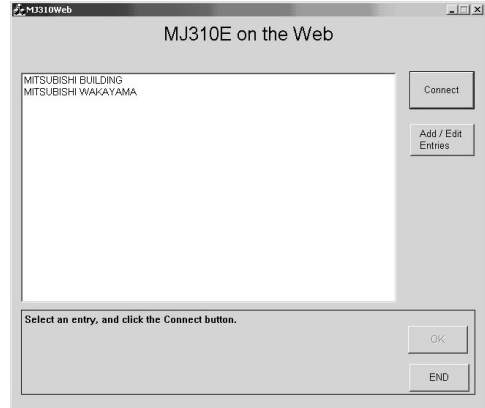
5.1 Remote Connection

Remote Connection

The section describes remote connection to the MJ-310E.
This operation allows simple remote connection to the MJ-310E.

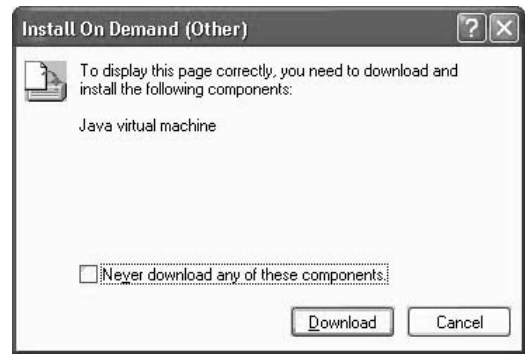
[Procedure]

- 1) Double-click on the "MJ310Web.exe" icon
Click on the "MJ310Web.exe" icon on the desktop.
The "MJ310 on the Web" screen appears.
- 2) Select the site to be connected
Select the site to be connected from the registered site list.
- 3) Click on [Connect]
Begin connection to the selected site.
The whole Building appears when connection is completed normally.



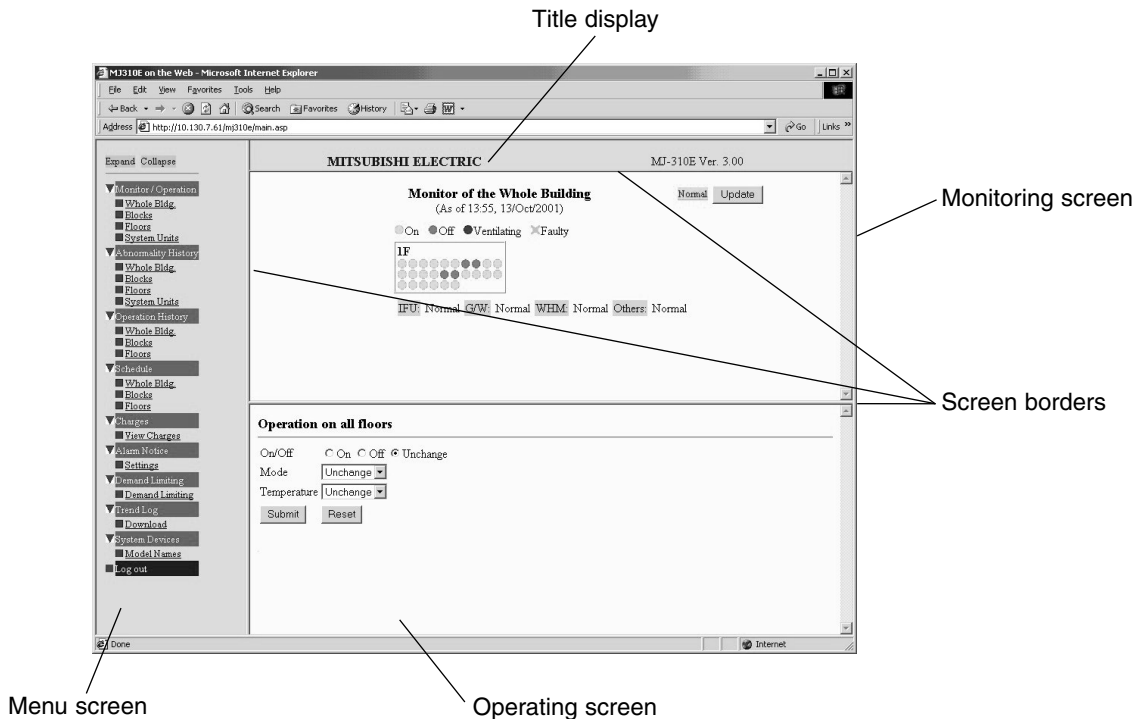
Caution:

- The Java Virtual Machine may not be installed as standard when using WindowsXP (IE6.0 or later). Install the Java Virtual Machine if Fig.A is displayed at remote connection.



5.2 Screen Components and Functions

Describes screen components and functions



- Menu screen: Displays a menu of the various functions. Click on each function to display the relevant monitoring screen or operating screen.
- Title display: Displays the title and item name.
- Monitoring screen: Displays the monitoring screen for the selected function.
- Operating screen: Displays the operating screen for the selected function.
- Screen borders: Drag to alter the screen size.

Note:

- Some user names do not permit display of all screens.

5.3 Monitoring and Operation

Displays monitoring and operation for the entire building

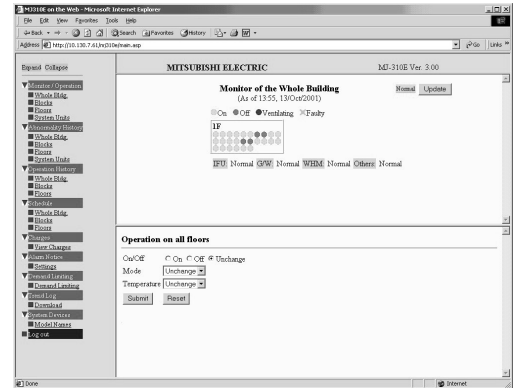
1) Select Monitor/Operation - Whole Bldg. on the menu.

The monitoring and operation screen for the entire building is displayed.

Monitoring screen

[Description]

- 1) Displays group operation, stopping, or errors for each floor.
- 2) Green: On, Red: Off, Blue: Ventilating, Yellow: Faulty
- 3) Operating status of the unit, fire alarms, and demand data, are available at a glance.
- 4) [Update] is used to display the most recent data.
- 5) By clicking a floor on the whole Building, the screen for that floor is displayed. (The group of ○ symbols indicate a floor.)



Note:

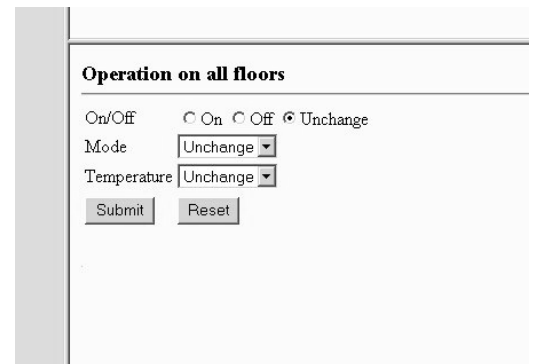
- If [Update] is not used, the screen is updated automatically at five minute intervals.

Operation screen

Permits operation for the entire building.

[Procedure]

- 1) Select the On/Off option
Select "On", "Off", or "Unchange".
- 2) Click on Mode ▼
Select "Unchange", "FAN", "Cool", "Heat", "Dry", or "Auto".
- 3) Click on Temperature ▼
Select 19°C to 28°C or "Unchange".
- 4) When the above settings have been entered, click on [Submit]
The set conditions are sent to the MJ-310E.
Click on [Reset] to reset to the default conditions.



Note:

- Selection of a function not supported by the unit will not result in operation.
- After sending the set conditions to the MJ-310E, click on [Update] to verify operation.

Maintenance tip

- Operating the system during demand control operation or a fire alarm may result in incorrect operation.

Displays monitoring and operation for the entire block

1) Select Monitor/Operation - Blocks on the menu

The monitoring and operation screen for the entire block is displayed.

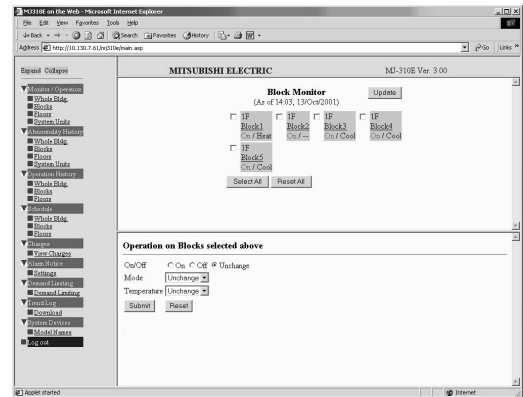
Monitoring screen

[Description]

- 1) Displays operation status for each block.
- 2) [Update] is used to display the most recent data.
- 3) Check the relevant box to permit operation for that block.

Note:

- If [Update] is not used, the screen is updated automatically at five minute intervals.



Operation screen

Permits operation for the entire block.

This operation relates only to groups for which the boxes on the monitoring screen are checked.

[Procedure]

1) Select the On/Off option

Select "On", "Off", or "Unchange".

2) Click on Mode ▼

Select "Unchange", "FAN", "Cool", "Heat", "Dry", or "Auto".

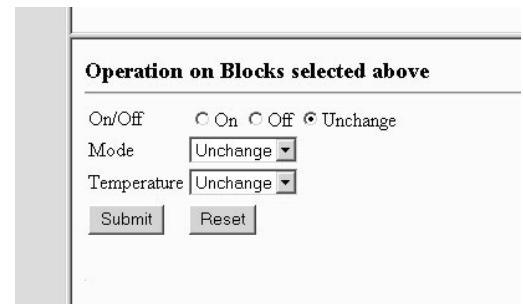
3) Click on Temperature ▼

Select 19°C to 28°C or "Unchange".

4) When the above settings have been entered, click on [Submit]

The set conditions are sent to the MJ-310E.

Click on [Reset] to reset to the default conditions.



Note:

- Selection of a function not supported by the unit will not result in operation.
- After sending the set conditions to the MJ-310E, click on [Update] to verify operation.
- The indoor unit has priority when included in the block.

Maintenance tip

- Operating the system during demand control operation or a fire alarm may result in incorrect operation.

Displays monitoring and operation for the entire floor

1) Select Monitor/Operation - Floors on the menu

The monitoring and operation screen for the entire floor is displayed.

Monitoring screen

[Description]

1) Displays group operation status for each floor.

Status display for each item is as follows.

On/Off:	On, Off, Ventilating, Faulty
Mode:	FAN, Cool, Heat, Dry, Auto
Temperature setting:	17°C to 30°C (set temperature displayed)
Room temperature:	Room temperature displayed.
Operation Restricted:	Yes, No (displays whether or not operation with the remote is possible).
Filter sign:	Normal, Maintenance (maintain the filter when Maintenance is displayed).
Total Run Time (H):	Total Run time displayed.
Demand Limiting:	Active, No (Demand displayed during demand control operation.)

2) Update is used to display the most recent data.

3) Check the relevant box to permit operation for that group.

Note:

- If [Update] is not used, the screen is updated automatically at five minute intervals.

Operation screen

Permits operation for each group.

This operation relates only to groups for which the boxes on the monitoring screen are checked.

[Procedure]

1) Select the On/Off option

Select "On", "Off", or "Unchange".

2) Click on Mode ▼

Select "Unchange", "FAN", "Cool", "Heat", "Dry", or "Auto".

3) Click on Temperature ▼

Select 17°C to 30°C or "Unchange".

The settable temperature range differs with the mode.

4) When the above settings have been entered, click on the [Submit]

The set conditions are sent to the MJ-310E.

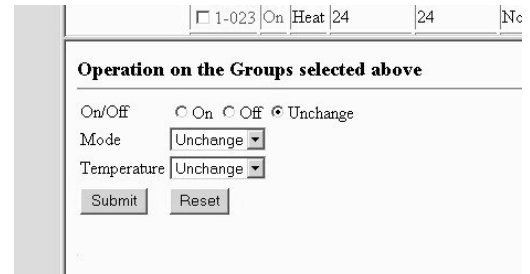
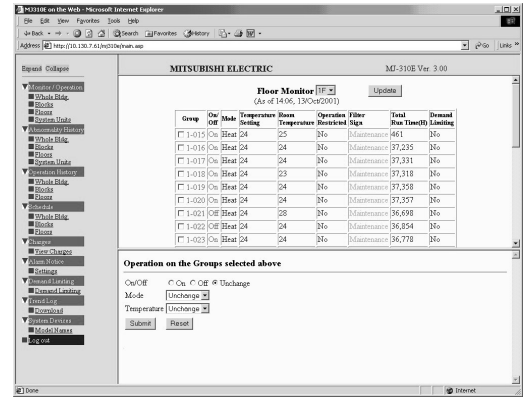
Click on [Reset] to reset to the default conditions.

Note:

- Selection of a function not supported by the unit will not result in operation. For example, setting the target temperature to a value outside the temperature range will result in operation in accordance with a value within the range.
- After sending the set conditions to the MJ-310E, click on [Update] to verify operation.
- Only operation and stop are possible for Lossnay.

Maintenance tip

- Operating the system during demand control operation or a fire alarm may result in incorrect operation.



Displays monitoring and operation for the system

1) Select Monitor/Operation - System Units on the menu

The monitoring and operation screen for the system unit is displayed.

Monitoring screen

[Description]

1) Displays the status of the system unit for each floor, or for each WHM.

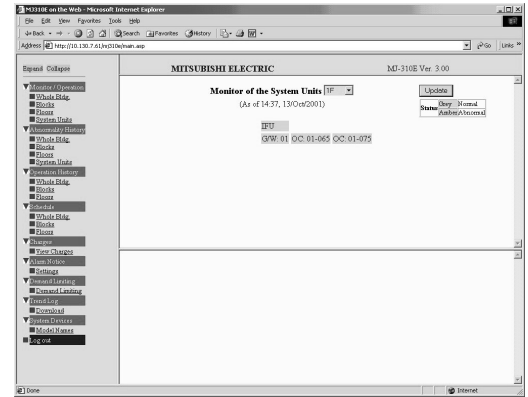
Gray display: Indicates normal

Amber display: Indicates Abnormal

2) Screen Update is used to display the most recent data.

Note:

- If [Update] is not used, the screen is updated automatically at five minute intervals.



5.4 Abnormality History

Displays Abnormality history monitoring and search for entire building

1) Select Abnormality History - Whole Bldg. on the menu

The Abnormality history monitoring and search screen for the entire building is displayed.

Occured At	Recovered At	Address	Location	Description
22:18:46	08:53:33			
30/Aug/2001	31/Aug/2001		00	IFU (0003)
19:08:12	19:15:26			
30/Aug/2001	30/Aug/2001		00	IFU (0003)
12:24:28	16:05:18			
30/Aug/2001	30/Aug/2001		00	IFU (0003)
09:21:24	08:57:34			
30/Aug/2001	31/Aug/2001		00-003	00-003 (0001)
20:48:30	09:24:54			
29/Aug/2001	30/Aug/2001		00	IFU (0003)
17:46:03	17:46:38			
29/Aug/2001	29/Aug/2001		00	IFU (0003)
14:44:07	14:44:50			
			00	IFU (0003)

Monitoring screen

[Description]

1) Displays the Abnormality history for the entire building.

Details for each item are as follows.

Occured At:	Displays the date and time the error occurred.
Recovered At:	Displays the date and time the system recovered from the error.
Address:	Displays the address at which the error occurred in the unit.
Occurrence point:	Displays the name of the floor and unit at which the error occurred.
Contents:	Displays the error code and error details.

2) Update is used to display the most recent data.

Note:

- Search Results is displayed when the results of the search are displayed.
- [Next Page] (Previous Page) is displayed if more than 100 items are found in the search.

Operation screen

Permits searching of the error history.

[Procedure]

1) Select search conditions

Check the boxes for the required search conditions. The search conditions are as follows.

Occured on:	Select the date at which the error occurred.
Recovery:	Select the date at which the system recovered from the error.
Device:	Select the address at which the error occurred in the unit.
Error code:	Enter the error code.

Search Conditions

Occured on [13] [Oct] [2001]

Recovery

Recovered on [13] [Oct] [2001]

Unrecovered

Device

IFU

G/W [<ALL>]

Unit [G/W <ALL>] Unit [<ALL>]

WHM [WHM1]

Error Code []

[Search] [Reset]

Note:

- Enter "6****" to search for all error codes in the 6000s.

2) Enter the search item and click on [Submit]

The search results are displayed on the monitoring screen.

Click on [Reset] to reset to the default conditions.

Note:

- In addition to the error history monitoring and search items above for the entire building, the following items are also available.
Operation is the same as for Whole Bldg.
"Blocks", "Floors", "System Units"

5.5 Operation History

Displays operation history monitor and search for entire building

- 1) Select Operation History - Whole Bldg. on the menu

The operation history monitoring and search screen for the entire building is displayed.

Monitoring screen

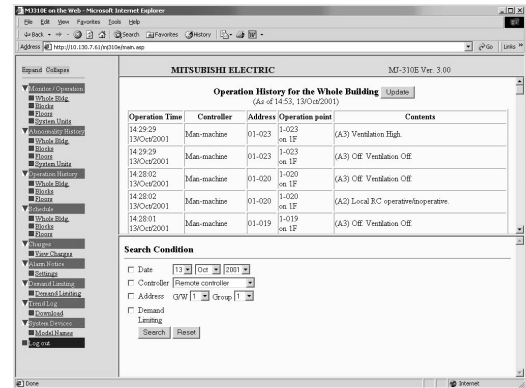
[Description]

- 1) Displays the operation history for the entire building.

Details for each item are as follows.

- Operation Time: Displays the date and time of the operation.
- Controller: Displays the controller from which the operation occurred.
- Address: Displays the address of the operated unit.
- Operation point: Displays the name of the floor and address at which the operated unit is located.
- Contents: Displays the error code and error details.

- 2) [Update] is used to display the most recent data.



Note:

- Search Results is displayed when the results of the search are displayed.
- [Next Page] (Previous Page) is displayed if more than 100 items are found in the search.

Operation screen

Permits searching of the operation history.

[Procedure]

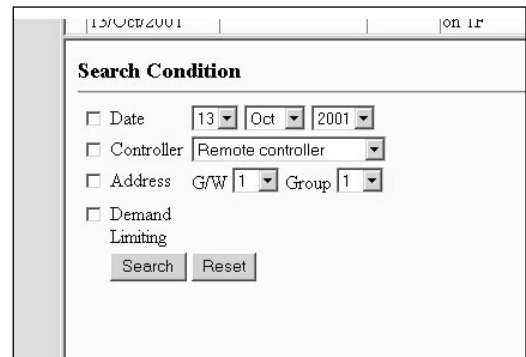
- 1) Select search conditions

Check the boxes for the required search conditions. The search conditions are as follows.

- Date: Select the date at which the operation occurred.
- Controller: Select the controller from which operation occurred.
- Address: Select the address of the controlled unit.
- Demand Limiting: Check the box for the demand operation to be searched.

- 2) Enter the search item and click on [Submit]

The search results are displayed on the monitoring screen.
Click on [Reset] to reset to the default conditions.



Note:

- In addition to the operation history monitoring and search items above for the whole building, the following items are also available.
Operation is the same as for Whole Bldg.
"Blocks", "Floors"

5.6 Schedule

Displays schedule for whole building

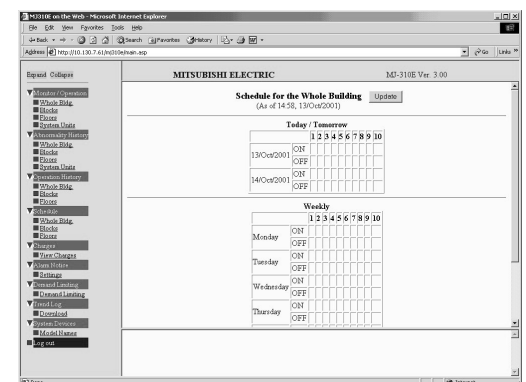
- 1) Select Schedule - Whole Bldg. on the menu

The schedule screen for the whole building is displayed.

Monitoring screen

[Description]

- 1) Displays the schedules for today, tomorrow, and the week for the whole building.



Note:

- “**.*” is displayed if the schedule does not match.
- In addition to the schedules monitor items above for the whole building, the following items are also available.
Operation is the same as for Whole Bldg.
“Blocks”, “Floors”

5.7 Charges (Billing)

5.7.1 Without WHM Connection

Displays charges

- 1) Select Charges - View Charges on the menu

The Charges screen is displayed.

Monitoring screen

[Description]

- 1) Displays the items below for each block for a period of three months.
 - Calculated Electric Energy (kWh): A temporary calculation of electric power based on capacity of the indoor unit and amount of operation.
 - Calculated Charge (currency unit): A temporary charge for air conditioning based on the value for electric power above.
 - Percentage of Charge (%): Ratio of charges for each block.

Note:

- Values in black are normal, values in red are abnormal, and values in blue are maintenance values.
- Air conditioning charges relate only to power usage associated with the use of a cooling medium in the units within the M control indoor. Power and charges are temporary calculations based on capacity of indoor units and the amount of operation, and cannot be used as is. Differs from air conditioning charges with WHM connections.

Operation screen

Permits output of the charging data file.

[Procedure]

- 1) Select Month

Last month, Two months ago, or Three months ago may be selected.

- 2) Select Output Format

Standard, Detailed on units, or Detailed on service times may be selected.

- 3) When the items above have been entered, click on [Download]

The data is output to a file.

Note:

- The file is in CSV format.
 - The file names are as follows, however they may be saved under any file name.
 - Last Month/Standard: Charges(Std)-1.csv
 - Last Month/By Unit: Charges(OnUnits)-1.csv
 - Last Month/In/Outside Hours: Charges(OnSvcTimes)-1.csv
- “2” represents 2 Months Ago, “3” represents 3 Months Ago.

5.7.2 With WHM Connection

Displays charges

- 1) Select Charges - View Charges on the menu

The Charges screen is displayed.

Monitoring screen

[Description]

- 1) Displays the items below for each block for a period of three months.
 - Apportioned Electric Energy (kWh): A value for electric power apportioned to each block.
 - Apportioned Charge (currency unit): Charges for electric power apportioned to each block.
- 2) Displays the items below for each WHM for a period of three months.
 - Consumed Electric Energy (kWh): A value for electric power apportioned to each WHM.
 - Charge on Consumed Energy (currency unit): Charges for electric power apportioned to each WHM.

Note:

- Values in black are normal, values in red are abnormal, and values in blue are maintenance values.

Operation screen

Permits output of the charging data file.

[Procedure]

- 1) Select Month

Last Month, Two months ago, or Three Months ago may be selected.

- 2) Select the output type

Standard, Detailed on units, or Detailed on service times may be selected.

- 3) When the items above have been entered, click on [Download]

The data is output to a file.

Note:

- The file is in CSV format.
 - The file names are as follows, however they may be saved under any file name.
 - Last Month/Standard: Charges(Std)-1.csv
 - Last Month/By Unit: Charges(OnUnits)-1.csv
 - Last Month/In/Outside Hours: Charges(OnSvcTimes)-1.csv
- “2” represents 2 Months Ago, “3” represents 3 Months Ago.

Block name	Apportioned Electric Energy [kWh]			Apportioned Charge [YEN]		
	Three months ago	Two months ago	Last month	Three months ago	Two months ago	Last month
Block1	0.0	0.0	350,301.8	200.00	200.00	32,030,383.33
Block2	0.0	0.0	1,148,958.2	200.00	200.00	114,896,033.33
Block3	0.0	0.0	644,033.7	200.00	200.00	64,403,566.67
Block4	0.0	0.0	761,699.7	200.00	200.00	76,170,166.67
Block5	0.0	0.0	29,043.7	200.00	200.00	2,904,566.67
Total	0.0	0.0	2,903,137.2	1,000.00	1,000.00	290,314,716.67

5.8 Alarm Notice

Displays alarm notice

- 1) Select Alarm Notice - Settings on the menu

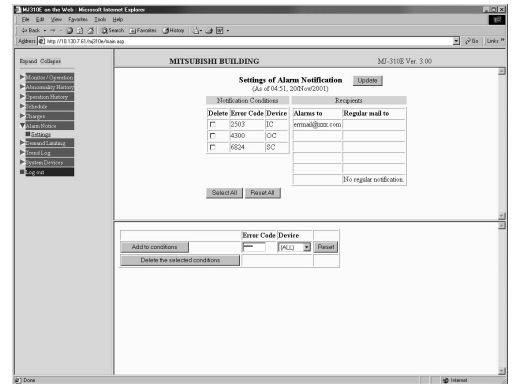
The alarm notice screen is displayed.

Monitoring screen

[Description]

- 1) Displays the following items.

Notification Condition:	Conditions for alarm e-mail.
Destination address of alarm e-mail:	Destination address of alarm e-mail
Destination address for Regular e-mail:	Destination address for Regular e-mail (an e-mail is sent daily when MJ-310E is operating normally).
Time for Regular e-mail:	Time at which Regular e-mail is sent.



Operation screen

Permits addition and deletion of alarm conditions.

[Addition]

- 1) Set the Error Code

Enter the error code.

- 2) Click on Device ▼

Select the device.

Note:

- Enter "6****" to search for all error codes in the 6000s.

- 3) Click on [Add to conditions]

Permits addition of notification conditions.

[Deletion]

- 1) Check Delete

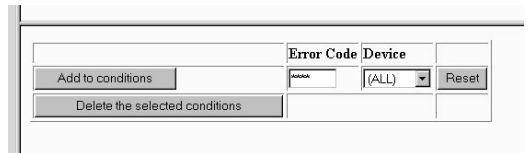
On the monitoring screen, check the boxes for the alarm conditions to be deleted.

- 2) Click on [Delete the selected conditions]

The selected conditions are deleted.

Note:

- A change in the notification conditions applies to all sites previously set for notification (i.e. individual sites cannot be set for notification).



5.9 Demand Limiting

Displays demand limiting

- 1) Select Demand Limiting - Demand Limiting on the menu

The demand limiting screen is displayed.

Monitoring screen

[Description]

- 1) The following items are displayed.
 - Current demand control: Current demand level.
 - Limiting level over the Web: Demand level and remaining valid time input remotely.
 - Limiting level by MJ-310E: Demand level received from external inputs (or WHM).
- 2) Details to be displayed in the event of a fire alarm or abnormal WHM.

Note:

- The higher the demand level the greater the priority.

Operation screen

Allows input of the demand level.

[Procedure]

- 1) Click on Limiting Level ▼

Select demand level or Disable.

Note:

- The number of levels set for the MJ-310E (up to five levels) are selectable as demand levels.

- 2) Click on Lasting hours ▼

Select the continuous demand time. Selectable in units of one hour between 1 and 24 hours.

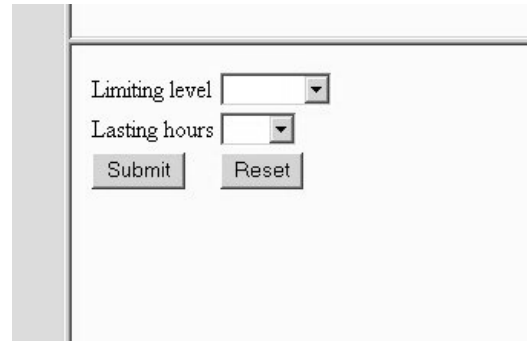
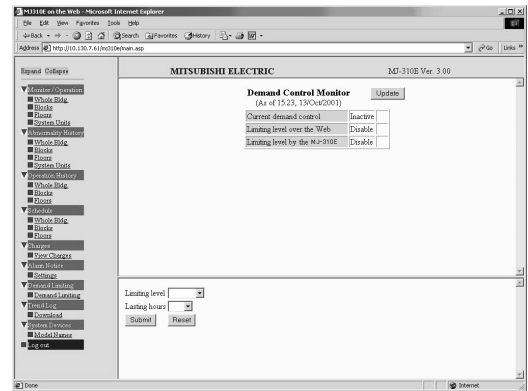
Note:

- Continuous demand time is the time for which demand continues when demand control is input with remote operation.

- 3) Click on [Submit]

Demand control operates.

Click on [Reset] to reset to the default conditions.



5.10 Trend Log

Displays trend log

- 1) Select Trend Log -Download on the menu
The trend log screen is displayed.

Operation screen

Permits output of trend data as a file.

[Procedure]

- 1) Click on Classification
Select the items.
Item details: Temperature, Electric Energy (Blocks)
Electric Energy (Indoor units), WHM

- 2) Click on ▼ for each of selections
Select the object of output trend data.

Note:

- The details of the selections differ in accordance with the selection in 1).

- 3) Set the period
Set the period for file output.

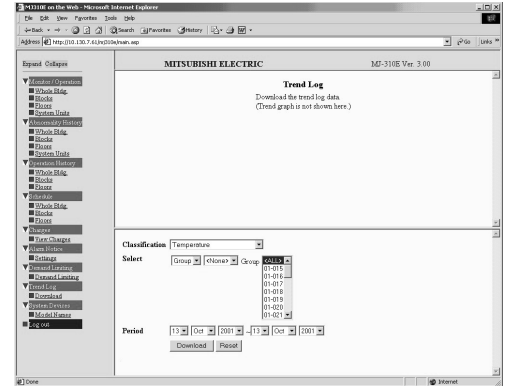
- 4) Click on [Download]
The data is output to a file.

Note:

- The file is in CSV format.
- The file name is TrendXX.csv (XX are consecutive numbers), however it may be saved under any file name.
- Time is required in outputting trend data to a file. This may result in significant phone charges with remote access via a phone line.

Maintenance tip

- Do not output trend is for AM4:00~4:30 as this may affect charging calculations.



5.11 System Devices

Displays system devices

- 1) Select System devices - Model Names on the menu
The System devices screen is displayed.

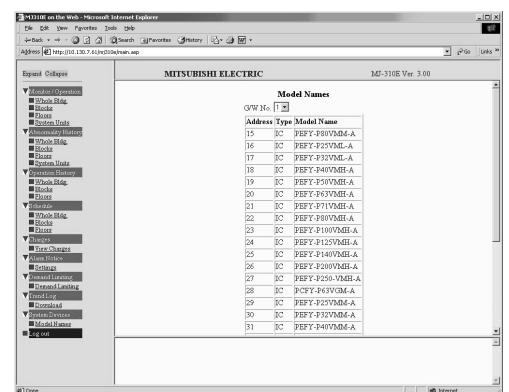
Monitoring screen

[Description]

- 1) Permits monitoring of the addresses and model names of the indoor and outdoor units connected to each G/W.

Note:

- The displayed model name is that set in Step 3 of MJ-310E system configuration setup.
- Used to verify the unit name during maintenance etc.



5.12 Terminating remote connection

Terminating remote connection

How to terminate the remote connection is described below.

[Procedure]

1) Select “Log out” on the menu

“Are you sure you want to log out?” is displayed.

2) Click the “OK” button

The termination screen is displayed.

3) “MJ310E on the web” is displayed

4) Click the “Hang up” button

The telephone line is disconnected.



Note:

- The telephone line is not disconnected by simply logging off. Click the “Hang up” button.

