

Superlink WEB & BACnet Gateway WEB MONITORING

SC-WBGW256



This gateway complies with EMC Directive 2014/30/EU, LV Directive 2014/35/EU, RoHS Directive 2011/65/EU. CE marking is applicable to the area of 50 Hz power supply.

Cette passerelle est conforme à la directive CEM 2014/30/UE, à la directive basse tension 2014/35/UE et à la directive RoHS 2011/65/UE. La marque CE s'applique aux régions alimentées en courant de 50 Hz.

Dieses Gateway erfüllt die Richtlinien zur elektromagnetischen Verträglichkeit 2014/30/EU, die Niederspannungsrichtlinien 2014/35/EU und die RoHS-Richtlinie 2011/65/EU. Die CE-Marke gilt für Bereiche mit einer Netzstromversorgung von 50 Hz.

Questo gateway è conforme alla Direttiva EMC 2014/30/UE, alla Direttiva LV 2014/35/UE e alla Direttiva RoHS 2011/65/UE. Il marchio CE è applicabile alla fascia di alimentazione 50 Hz.

Esta puerta de enlace cumple con la Directiva de Compatibilidad Electromagnética 2014/30/UE, con la Directiva de Baja Tensión 2014/35/UE y con la Directiva RoHS 2011/65/UE. La indicación CE solo corresponde al área de suministro eléctrico de 50 Hz.

Deze gateway voldoet aan EMC-Richtlijn 2014/30/EU, LV-Richtlijn 2014/35/EU, RoHS-Richtlijn 2011/65/EU. CE-markering is van toepassing op het gebied met een netstroom van 50 Hz.

Este gateway está em conformidade com a Diretiva EMC 2014/30/UE, a Diretiva LV 2014/35/UE e a Diretiva RoHS 2011/65/UE.

A marca CE aplica-se à zona de fornecimento de energia a 50 Hz.

Αυτή η gateway συμμορφώνεται προς την Οδηγία 2014/30/ΕΕ περί ηλεκτρομαγνητικής συμβατότητας, προς την οδηγία 2014/35/ΕΕ περί χαμηλής τάσης και προς την Οδηγία 2011/65/ΕΕ περί RoHS. Το σήμα CE ισχύει μόνον σε περιοχές όπου η τροφοδοσία είναι 50 Hz.

Этот шлюз соответствует требованиям директивы по электромагнитной совместимости 2014/30/ЕU, директивы по низковольтному оборудованию 2014/35/ЕU, директивы RoHS 2011/65/ЕU. Маркировка CE нанесена в области источника питания, работающего на частоте 50 Гц.

Bu ağ geçidi, 2014/30/EU sayılı EMC Direktifi, 2014/35/EU sayılı LV Direktifi ve 2011/65/EU sayılı RoHS Direktifi ile uyumludur. CE işareti, 50 Hz güç kaynağı için geçerlidir.

本网关符合EMC指令2014/30/EU、LV指令2014/35/EU和RoHS指令2011/65/EU。CE标志适用于使用50 Hz电源的地区。

Thank you for purchasing the Gateway SC- WBGW256.

Before using the product, read this manual thoroughly to ensure you learn how to operate it correctly. After reading this manual, store it in a safe location for future reference. It will be helpful to reference this manual should you have any questions or problems. Also read the user's manual included with the air conditioner.

PRECAUTIONS FOR WASTE DISPOSAL



Your gateway may be marked with this symbol. It means that waste electrical and electronic equipment (WEEE as in directive 2012/19/EU) should not be mixed with general household waste. This gateway should be treated at an authorized treatment facility for reuse, recycling and recovery and not be disposed of in the municipal waste stream.

Please contact the installer or local authority for more information.



This symbol printed on the batteries in your gateway is information for end-users according to the EU directive 2006/66/EC article 20 annex II.

Batteries, at their end-of-life, should be disposed of separately from general household waste.

If a chemical symbol is printed beneath the symbol shown above, this chemical symbol means that the batteries contain a heavy metal at a certain concentration. This will be indicated as follows: Hg:mercury (0.0005%), Cd:cadmium (0.002%) and Pb:lead (0.004%).

Please dispose of batteries correctly at your local community waste collection or recycling center.

Table of contents



■ Before you use	3
■ Safety precautions	3
■ Introduction	5
■ System outline	5
■ Personal computer environment	6
■ Connections	6
■ Personal computer initial configuration	6
■ External dimensions	8
■ Menu item	9
■ Operation	10
■ Basic operation	10
• Logging In	10
• Overview Monitor screen	11
• Common operations in each screen	11
• Individual Monitor screen	13
■ Control operation	14
• Control Command screen	14
• System Stop/Release screen	15
• Schedule Control screen	17
■ System administrator setting	19
• Configuration Menu screen	19
• Basic Configuration Menu screen	20
• Air-conditioner Cell Configuration screen	21
• Air-conditioner Cell Configuration File Upload/Download screen	23
• Network Configuration screen	25
• Date and Time Configuration screen	26
• Security Configuration screen	28
• Authentication Configuration screen	29
• Language Configuration screen	30
• Pulse count & DI status Check screen	31
• Web Configuration Menu screen	32
• WEB Configuration screen	33
• Link Configuration screen	34
• Calendar Configuration screen	35
• Master Schedule Configuration screen	36
• Calendar/Schedule Backup File Upload/Download screen	38
• Accounting File Download screen	39
• Accounting Period Time screen	40
■ Troubleshooting	41
■ After Sales Service	42

■ Before you use





■ Safety precautions

- Please read the precautions written here carefully to operate the gateway properly.

You are required to observe these fully because every item of these instructions is important for safety.

 WARNING	Failure to follow these instructions may result in serious consequences such as death, severe injury, etc.
 CAUTION	Failure to follow these instructions may cause injury, property damage, or serious consequences depending on the circumstances.

- Failure to follow these instructions may cause injury, property damage, or serious consequences depending on the circumstances.

	Never do.		Always follow the instructions given.
	Absolutely keep water away.		Absolutely keep wet hands away.

- Keep this manual in a safe place where you can reference it whenever necessary. Show this manual to installers when moving or repairing the unit. When the ownership of the gateway is transferred, this manual and installation manual should be given to a new owner.
- **Electrical wiring work must be performed only by qualified specialists.**

WARNING



Consult your dealer or a professional contractor to install the unit.

Improper installation made on your own may cause electric shocks, fire or break-down of the unit.



**Consult your dealer when moving, disassembling or repairing the unit.
Never modify the unit.**

Improper handling may result in injury, electric shocks, fire, etc.



**Avoid using combustible substances (hair spray, insecticide, etc.) near the unit.
Do not use benzene or paint thinner to clean the unit.**

It could cause electric shocks or fire.



Stop operation in case of abnormal operation.

If continued, it could result in break-down, electric shocks, fire, etc.

If any abnormal condition (burnt odor, etc.) occurs, stop operation, turn off the power switch and consult your dealer.



Place this gateway in a location that can be locked for the sake of security, and lock it.

The gateway is equipped with an external power supply terminal block.

Please be sure to place it in a protected location to prevent electric shock and wrongful operation of the power switch.



Do not take the lid off this gateway.

This gateway has several precision circuit boards.

If you take the lid off, and make a mistake, this gateway could be broken.

⚠ CAUTION



Do not use or let others use the gateway as play equipment.
Improper operations could cause ill health or health disorders.



Never disassemble the gateway.
If you touch internal parts accidentally, you could get electric shocks or cause trouble.
Consult your dealer when it is necessary to inspect its interior.



Do not wash the gateway with water or liquid.
It could cause electric shocks, fire or break-down.



Do not touch electric parts or operate buttons or switches with wet hands.
It could cause electric shocks, fire or break-down.



Do not dispose of the gateway by yourself.
It could harm the environment. Ask your dealer when it is necessary to dispose of the gateway.

Note



The gateway should not be installed where it is exposed to direct sunlight or the ambient temperatures become higher than 40 deg C or lower than 0 deg C.
It could cause deformation, discoloration or break-down.



Do not use benzene, paint thinner, wipes, etc., to clean the gateway.
It could discolor or break-down the gateway. Wipe it with a piece of cloth which is squeezed tightly after wetting with diluted neutral detergent. Finish up the cleaning by wiping with a piece of dry cloth.



Do not pull or twist the cables of the gateway.
It could cause break-down.

General precautions

We cannot compensate when monthly calculation was not possible by the trouble of the gateway.

Unit specifications

Item	Description
Product dimensions	260 (W) X 140 (H) X 93 (D) mm
Weight	2 kg
Power supply	AC100 / 220–240 V, $\pm 10\%$, 50/60 Hz
Power consumption	6 W
Usage environment	Temperature: 0 to 40 deg C, Relative Humidity: Below 85% (without condensation)
Material	Casing: SECC
Storage environment	Temperature: -20 to 70 deg C, Relative Humidity: 40%–90%

Warning

This is a class A product. In a domestic environment, this gateway may cause radio interference in which case the user may be required to take adequate measures. This gateway is not for domestic use.

■ Introduction

This gateway does centralized monitoring and control of air conditioners from a computer.

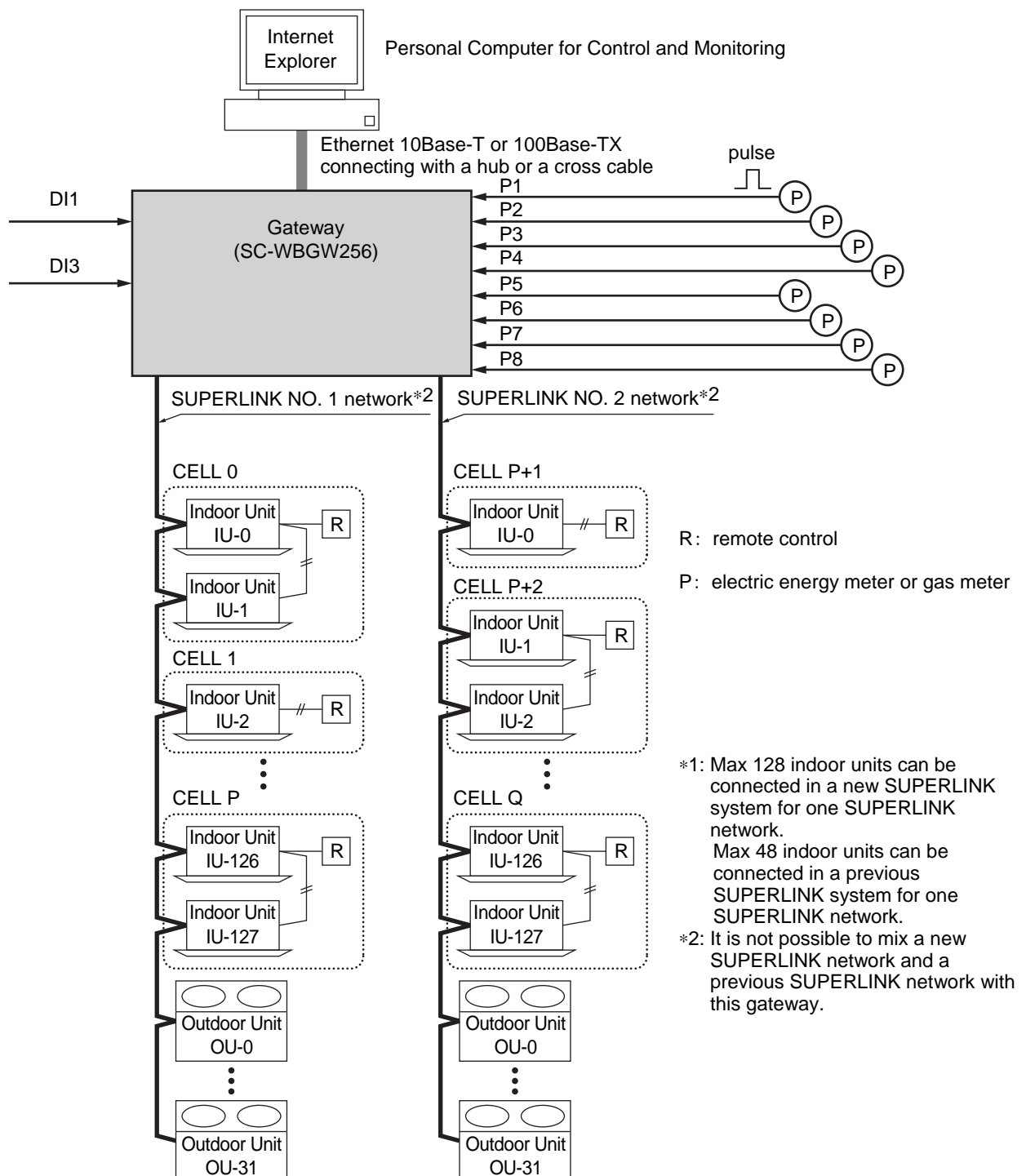
■ System outline

The diagram below shows the system configuration. The gateway connected to air conditioners is connected to the personal computer used for monitoring and control by an Ethernet cable.

A logical unit of monitoring and control is the "Air-conditioner Cell" which consists of air conditioners and corresponds to a remote control group.

By connecting an electric energy meter or gas meter to this gateway, there is a calculating function that proportionally divides gas and electricity energy consumption according to the air conditioning usage for each air conditioning cell.

The calculation is performed on the control and monitoring computer using the included software "WGW256Utility."



■Personal computer environment

●Please check that the computer meets the following specifications

- CPU : 500MHz or higher (2GHz or higher is recommended)
- Memory : 512MB or higher (1GB or higher is recommended)
- Screen size : 1366×768 or higher

●OS and browser

The combination of the OS and Web browser of the control monitoring computer is as follows.

	Internet Explorer 10	Internet Explorer 11
Windows 7	OK	OK
Windows 8.1	NG	OK
Windows 10	NG	NG

OK: Can be used, NG: Cannot be used

■Connections

●If a private Ethernet connection is used (recommended)

This method is used to set up a **private** connection between the gateway and the personal computer used for monitoring and control.

Connection Method

Connect the gateway and personal computer directly using a 10BASE-T or 100BASE-TX Ethernet cable (cross cable).

If a hub is used, do not connect other devices to that hub.

●If an Internet or intranet connection is used

If the gateway is connected via the Internet or an intranet (office LAN) environment, please consult with the dealer. It is possible for them to arrange for connections on a charged work basis.

■Personal computer initial configuration

●Configuration in the case of a private Ethernet connection

Communication settings (TCP/IP settings) in the monitoring and control personal computer are necessary. For details, please read the operation manual supplied with your personal computer.

If the gateway is used as the factory set IP address, the settings for the computer are as shown below.

- IP Address : 192.168.0.1 - 192.168.0.254

(However, the gateway uses 192.168.0.110, so use an IP address other than this.)

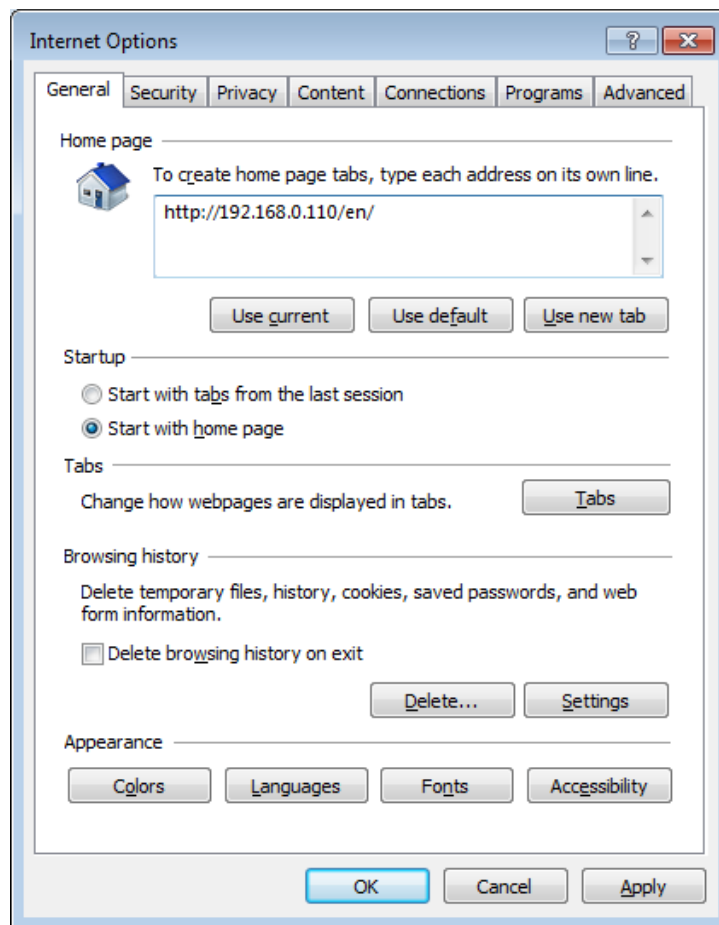
- Subnet Mask : 255.255.255.0
- Default Gateway : Not specified
- Preferred DNS Server : Not specified
- Alternate DNS Server : Not specified

●Configuration in the case of Internet or intranet connections

Please consult with the dealer. It is possible for them to arrange for connections on a charged work basis.

•Browser (Internet Explorer) Configuration

Open Internet Explorer, then select “Internet Options” from the “Tools” menu at the top of the screen and carry out the following settings.



•In “General”

Home Page

<http://192.168.0.110/en/>

(If you changed the IP address of the gateway, you have to input that IP address instead of 192.168.0.110 in the address column. By entering the IP address of the gateway, the gateway login screen will open when your browser is started.)

•In “Security”

Internet

Default Level “Medium”

After clicking the Internet tab, click the “Default Level” button.

Local Intranet

Default Level “Medium-low”

After clicking the Local Intranet tab, click the “Default Level” button.

•In “Privacy”

Default Level “Medium”

Click the “Default” button.

If the privacy setting is set to “Medium-high” or higher, the gateway cannot be used, so be sure to set the default value to “Medium.”

•In “Connections”

Set it so a proxy server is not used.

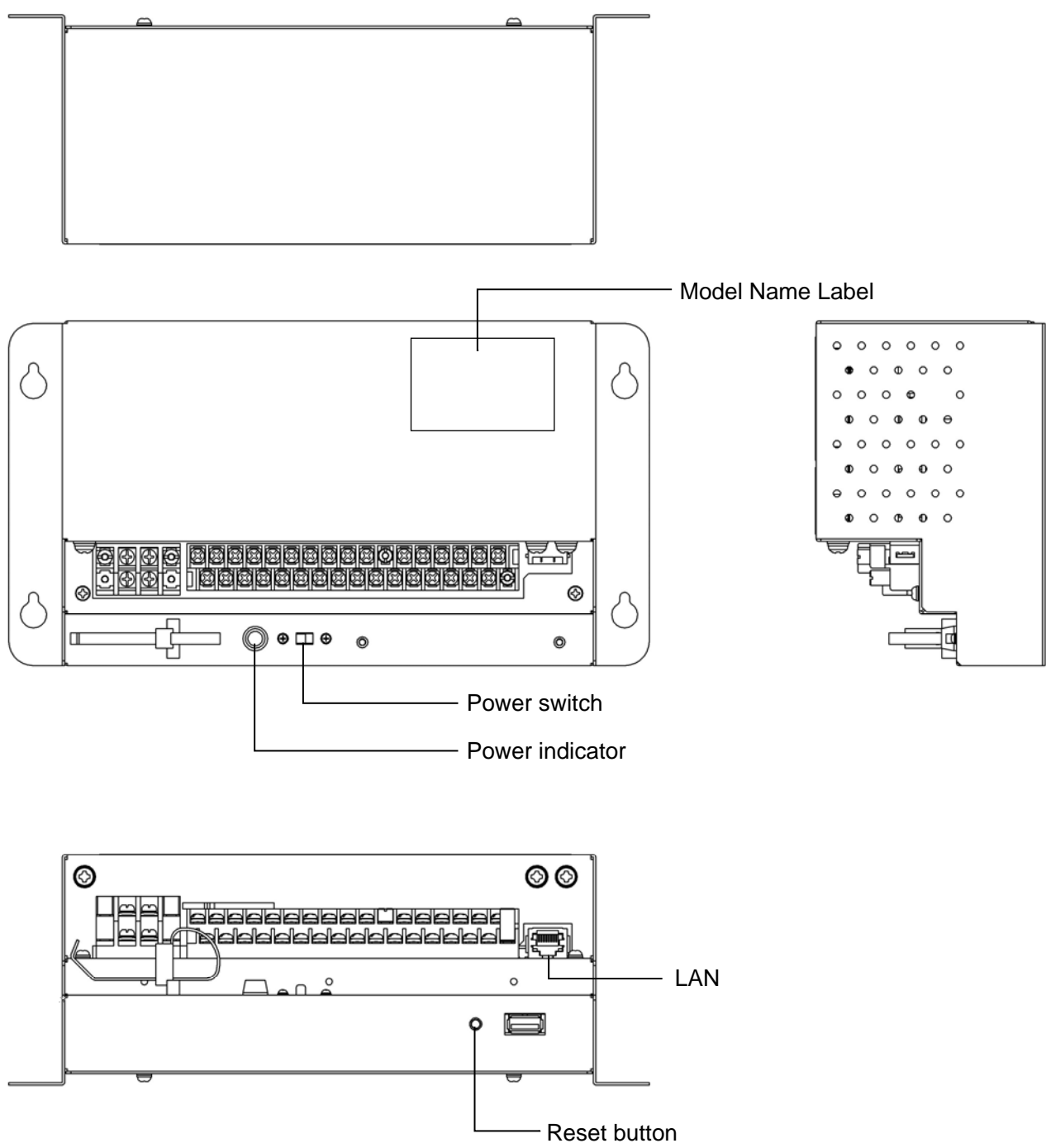
•In “Advanced”

Default Value

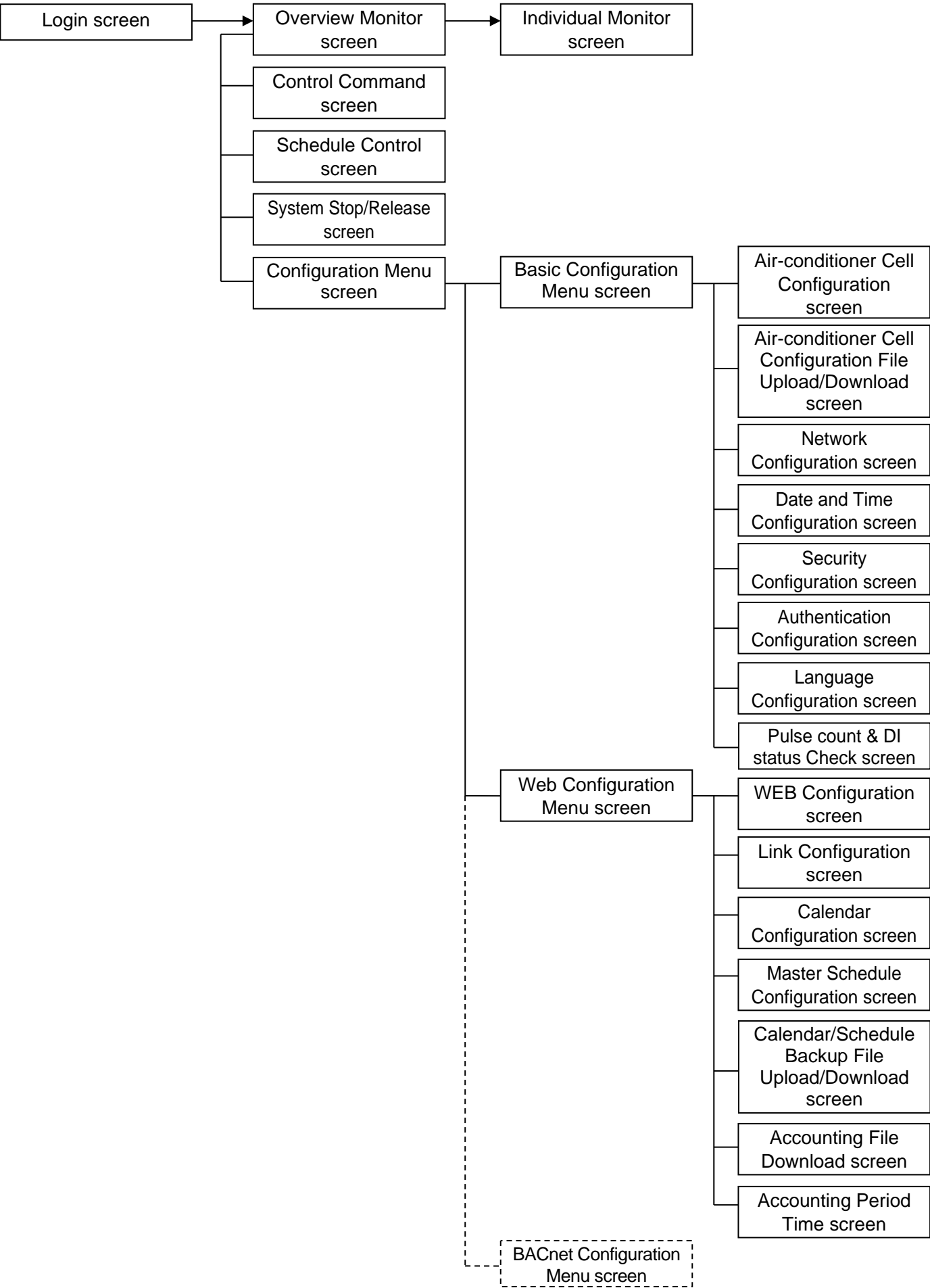
It is recommended that the browser be used with the default values. Click the “Restore Defaults” button.

When you are finished with all the settings, click the “Apply” button, then click the “OK” button.

■External dimensions



■Menu item



■ Operation

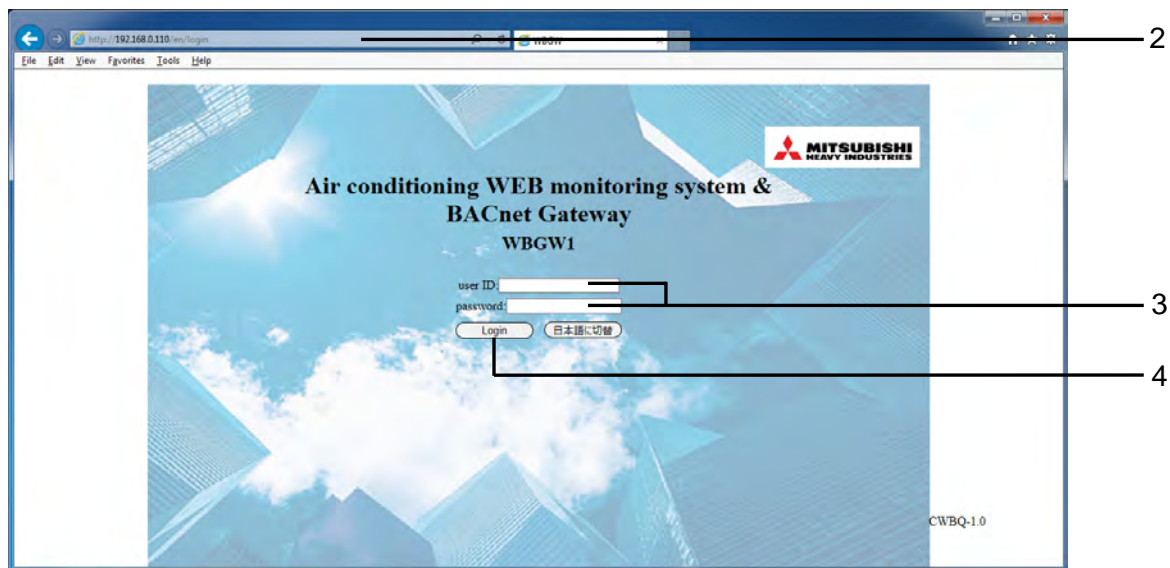
■ Basic operation

● Logging In

The login screen is the starting screen for the gateway. The login screen is displayed by inputting the URL of the gateway from the computer's web browser.

1. **Start the computer's browser** (Internet Explorer).
2. **Input the following URL, `http://192.168.0.110/en/`, in the address bar, then press the Enter key.**

If your gateway's IP address has been changed, the above IP address "192.168.0.110" should be replaced by the new IP address.



Login screen

3. Input the User ID and Password

This screen is a screen for logging in to this gateway and authenticating the user who performs control monitoring operation with the user ID and password.

There are differences in authority depending on the user who logs in, with the following three categories of authority.

- System Administrator : Can operate all screens.
- Control and Monitoring User : Cannot operate the Configuration menu.
- Monitoring User : Is authorized to use the monitoring screen only and cannot perform any control operations.

• Factory default user ID and password of each user

User Category	user ID	password
System Administrator	Admin	123456
Control and Monitoring User	Controller	123456
Monitoring User	User	123456

4. Click the "Login" button.

Note

The User ID and Password can be changed in the Authentication Configuration screen. (See page 29.)
Click the "日本語に切替" button to switch to the Japanese display.

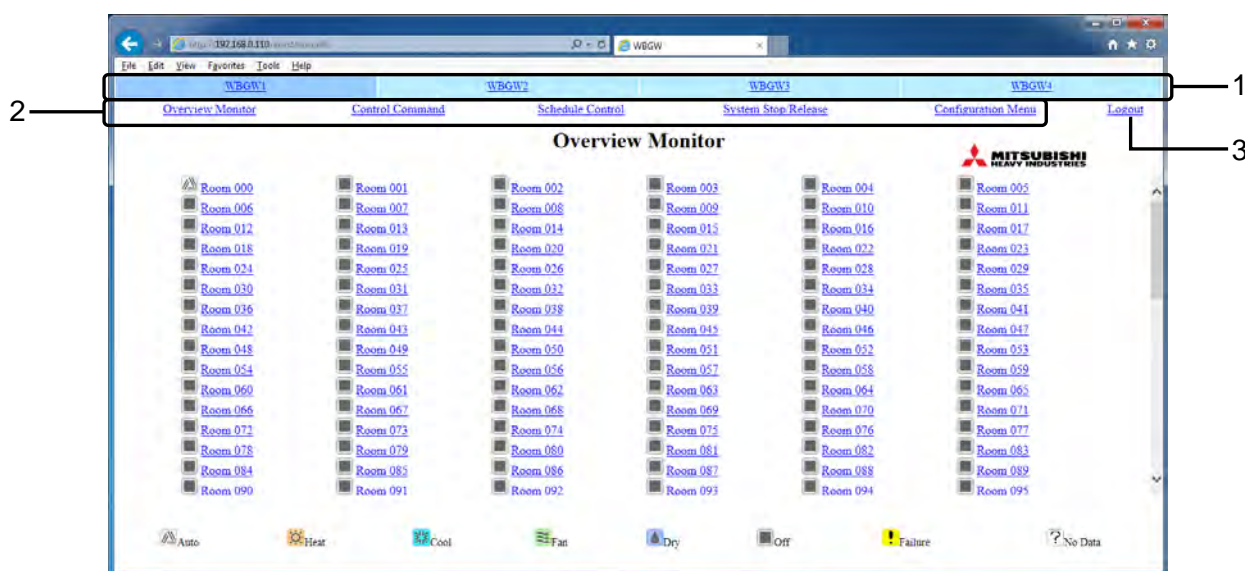
●Overview Monitor screen

This screen is displayed when you log in.

This screen is for monitoring the overview of the whole air conditioner system. It is capable of monitoring up to 256 Air-conditioner Cells (air conditioner remote control group connection units). It displays the name of each Air-conditioner Cell, an error display icon, and the On/Off/Operation Mode icon.

Note

- The Overview Monitor screen is refreshed automatically (automatic update) at regular intervals. Refreshing the screen may take several seconds depending on the network's status and the computer's performance.
The refresh interval can be set to 10-180 seconds. (See page 33.)
- The characters and icons on the screen might move slightly when the screen is refreshed, but this is a characteristic of Internet Explorer.



Overview Monitor screen

●Common operations in each screen

1. Displaying a different gateway (when multiple gateways are connected)

Currently, the Overview Monitor screen of the gateway on the left end is displayed. To display the screen of other gateways, click the name of the gateway.

2. Displaying a different function screen

To display each function screen, click the function screen name ("Control Command", "Schedule control", etc.) from the menu at the top of the screen.

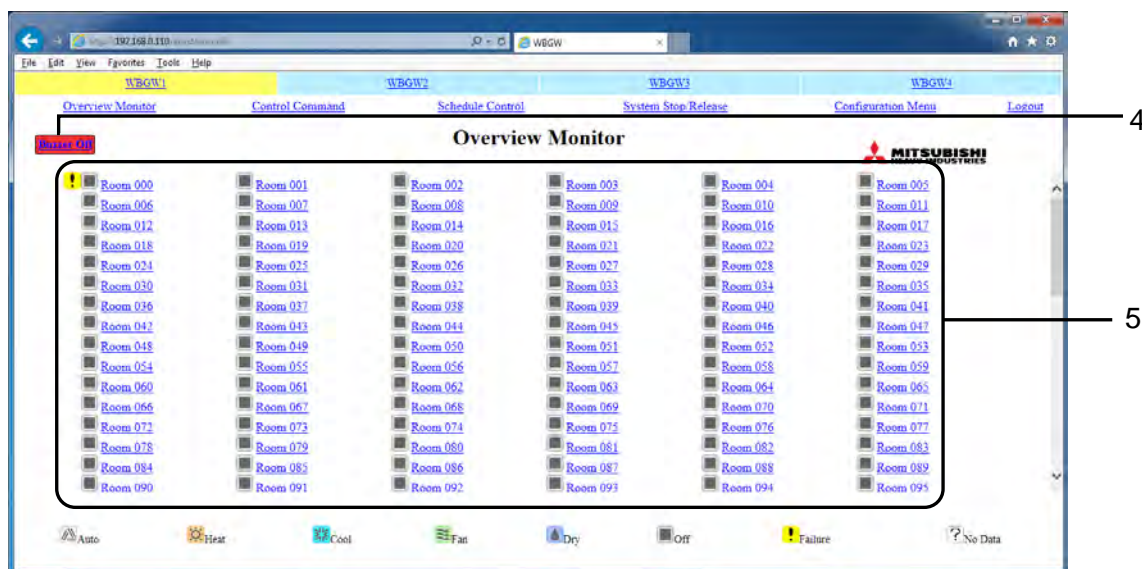
3. To log out

Click "Logout" from the menu at the top of the screen.
You will be logged out and return to the login screen.

- When “Buzzer ON” is selected on the WEB Configuration screen, the alarm buzzer function that gives the warning by sounding the buzzer when any error has occurred in an Air-conditioner Cell, is enabled. (See page 33.)

The alarm buzzer function works not only on this screen but also on any screen of this gateway.

When the buzzer is sounding, the Buzzer Off button is shown at the left side of the screen on all screens.



Overview Monitor screen when the buzzer is sounding

4. To stop the buzzer

- Click the “Buzzer Off” button. This stops the buzzer sounding on the Overview Monitor computer connected to this gateway.
- Since the volume of buzzer sound is set on the Overview Monitor computer, adjust the volume, if necessary, on the computer.
- When the buzzer sounds while this screen is minimized, maximize the screen, and then click the Buzzer Off button.
- When the window for another application is in front of the Internet Explorer window, bring this screen to the front, and then click the Buzzer Off button.

Note

If the login screen is displayed when you click the link on the screen such as “Control Command”, that means the power of the gateway was turned off and on again. Please log in again. (See page 10.)

●Individual Monitor screen

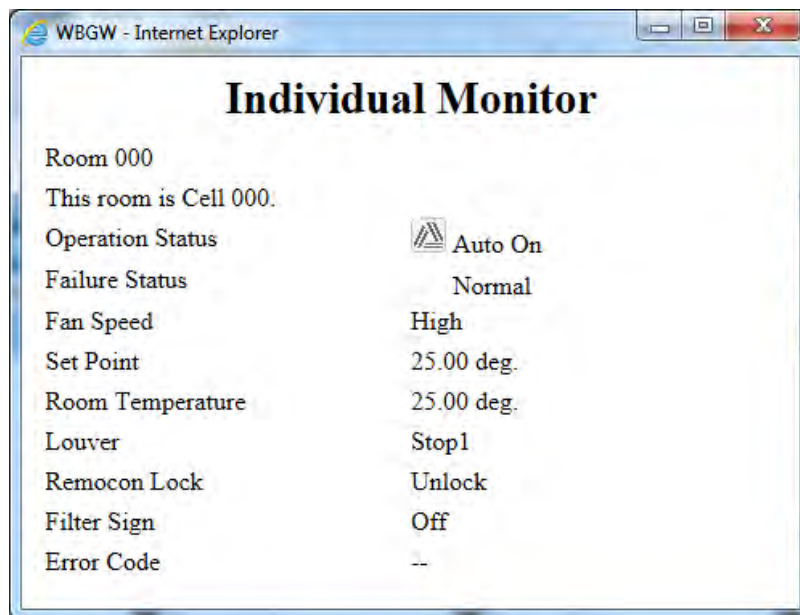
This screen is for indicating the detailed information on one Air-conditioner Cell in a pop-up window on the Overview Monitor screen.

5. Click the name of the Air-conditioner Cell you would like to monitor on the Overview Monitor screen.

The individual monitor screen will be displayed in a pop-up window.

Note

- The Individual Monitor screen is refreshed automatically (automatic update) at regular intervals. Refreshing the screen may take several seconds depending on the network's status and the computer's performance.
The refresh interval can be set to 10-180 seconds. (See page 33.)
- The characters and icons on the screen might move slightly when the screen is refreshed, but this is a characteristic of Internet Explorer.
After the pop-up window opens, clicking a different Air-conditioner Cell name will cause the previously opened pop-up window to close and a new pop-up window to open in the same place.



Individual Monitor screen

•Operation Status

- On : At least one air conditioner is running in the Air-conditioner Cell.
- Off : All air conditioners have stopped in the Air-conditioner Cell.

The operation mode of the running air conditioner with the smallest address in the Air- conditioner Cell is shown.

•Failure Status

- Normal : All air conditioners in the cell are not malfunctioning.
- Failure : One or more air conditioners in the cell are malfunctioning.

•FAN, SET TEMP., ROOM TEMP., LOUVER, LOCK

The current state of the running air conditioner with the smallest address in the Air- conditioner Cell is shown.

•Filter sign

- On : At least one air conditioner's filter sign is on in the Air-conditioner Cell.
- Off : All air conditioners' filter signs are off in the Air-conditioner Cell.

•ERROR CODE

The error code for the air conditioner with the smallest address in the Air- conditioner Cell is shown.

■Control operation

You can use the control operation only when you log in as "System Administrator" or "Control and Monitoring User".

●Control Command screen

Use this screen to set the control commands for each Air-conditioner Cell.

Note

In some models of air conditioners, it is not possible to set and display "POWERFUL".

If you select anything other than blank in an item in the ALL row, the settings will be applied to all registered Air-conditioner Cells.

1. Click "Control Command" from the menu at the top of the screen.

The Control Command screen will be displayed. (Displaying the screen may take several seconds depending on the state of the network, etc.)

The current setting status is displayed.

2. Select control command values from the pull-down menus for each control item.

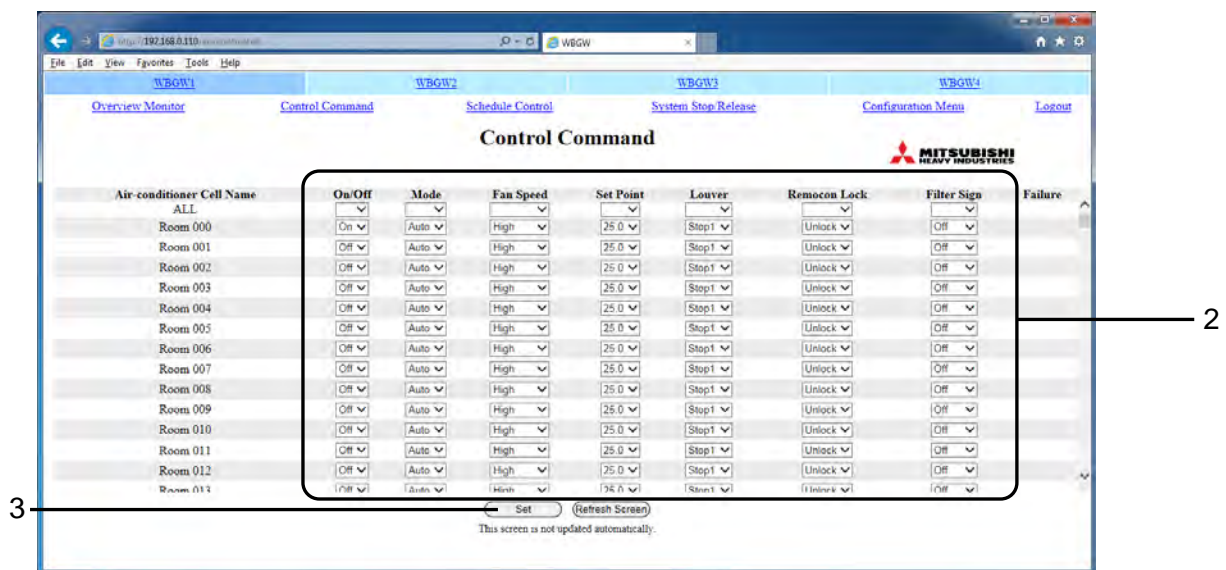
Select each control command value, if necessary.

The setting range of the set temperature is limited as follows depending on the operation mode.

- On/Off : On / Off
- Mode : Auto / Cool / Dry / Fan / Heat
- Fan Speed : Powerful / High / Medium / Low
- Set Point : 16-30 deg C (Mode : no setting)
(0.5 deg C intervals) 10-30 deg C (Mode : Heat)
16-35 deg C (Mode : other than Heat)
- Louver : Swing / Stop1 / Stop2 / Stop3 / Stop4
- Remocon Lock : Lock / Unlock
- Filter Sign : RESET (turn off the filter sign)
- Failure : If an error occurs, an error code is displayed. Operation is not possible.

3. Click the Set button.

The contents set in step 2 above are transmitted to the Air-conditioner Cells.



Control Command screen

●System Stop/Release screen

Use this screen to stop or release all the air conditioners connected to the gateway.

<System Stop>

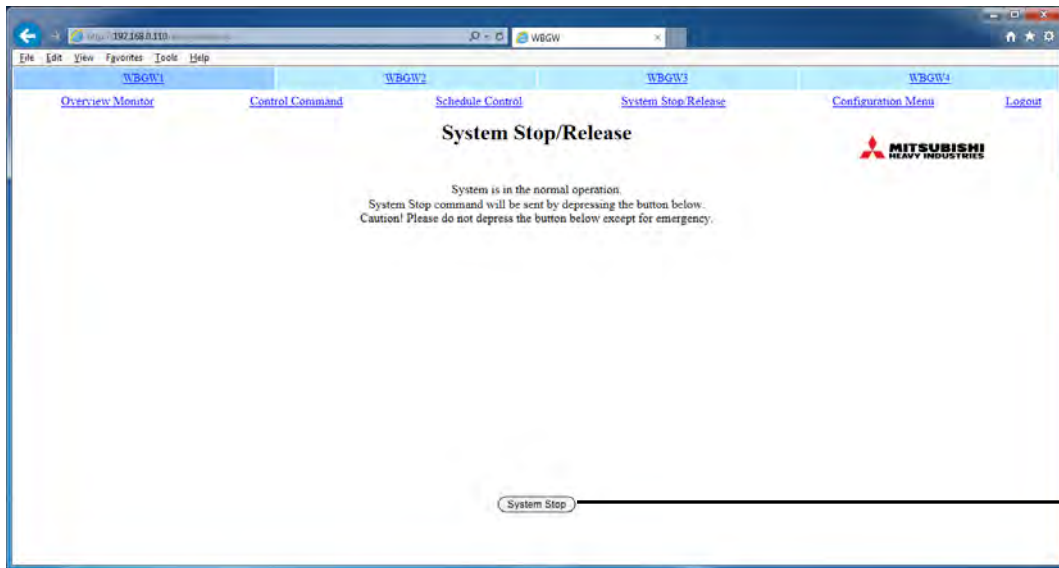
1. Click “System Stop/Release” from the menu at the top of the screen.

The System Stop/Release screen will be displayed.

2. Click the “System Stop” button.

All the air conditioners under this gateway immediately stop and are set to the Remote control Lock mode. Then, the screen will return to the Overview Monitor screen.

Even if a system stop command is received from the host computer by BACnet communication, or when the contact connected to the system stop input terminal (DI1) becomes "closed" by a fire alarm device, etc., it will be forcibly stopped.



System Stop/Release screen

<System Release>

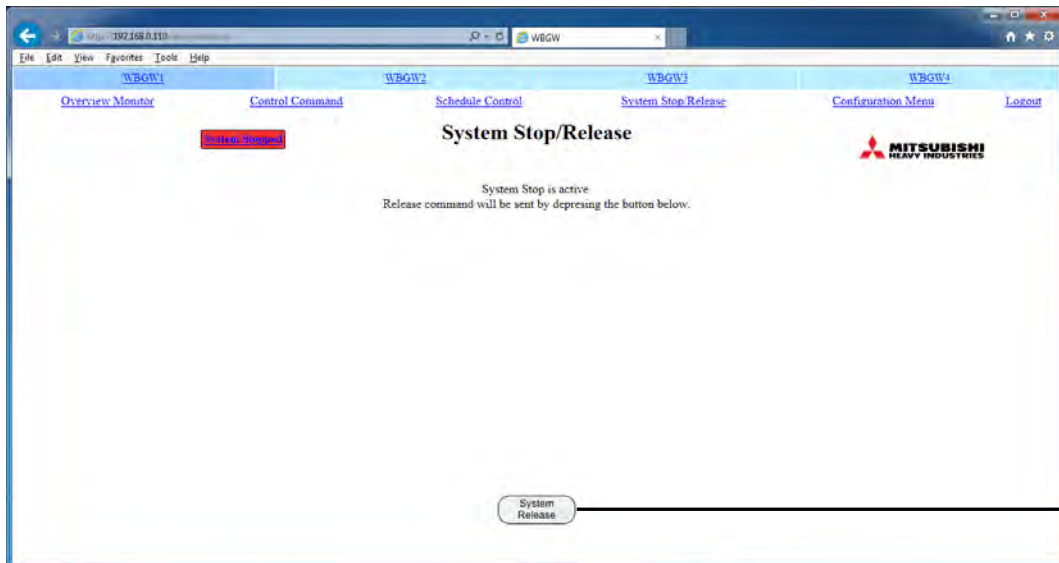
1. Click the “System Release” button during a System Stop.

The stop setting for all air conditioners will be released, the Overview Monitor screen will be displayed, and the scheduled operation from that point on will be enabled.

The remote control operation returns to the state before the System Stop.

Note

- While the contact connected to the system stop input terminal (DI1) is "closed", the stopped state cannot be released by this screen. The system stop condition becomes released when the contact connected to the system stop input terminal (DI1) becomes "open" in the state where two minutes or more has passed since the system stop condition by terminal (DI1) was started.
- Even when the system stop condition becomes released, the air conditioners will not start operating automatically. Start the operation manually.



System Stop/Release screen during a System Stop

●Schedule Control screen

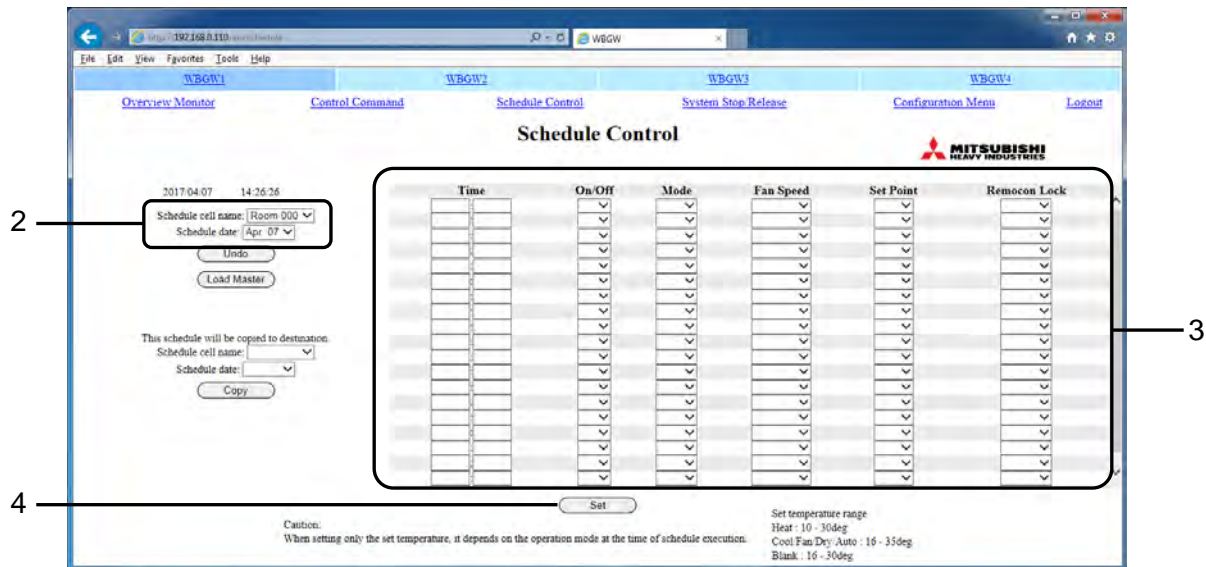
This screen displays the Schedule Control composed of the Master Schedule and calendar for each Air-conditioner Cell, and is used to input data and edit the Schedule Control. Every day, at the change of the date, the data of the Schedule Control is shifted by one day, and one day's data is copied from the Master Schedule to the 7th day's schedule data of the Schedule Control.

Note

- If you want to change the schedule within 7 days from the current day, change the schedule in this Schedule Control screen.
- If you jump to the screen for another month without clicking the Set button, or if you click the "Undo" button, all the contents input in this screen will be deleted, so exercise caution.
- If you click the "Undo" button, the contents input will be deleted and the saved content is displayed again.
- Clicking the "Load Master" button causes the schedule to be loaded from the annual calendar and Master Schedule and displayed on the screen. If the "Set" button is then clicked, the Schedule Control is set from the Master Schedule.
- The instructions and display contents in this screen can be copied to another Air-conditioner Cell or another date. Select the Air-conditioner Cell name and corresponding schedule date that is the destination, then click "Copy". When "ALL" is selected, the settings are copied to all the Air-conditioner Cells.
- This gateway updates the Schedule Control once a day at 00:00 in the middle of the night.
- The actual operation schedule is in accordance with the Schedule Control displayed in this screen, but when the system is operated using the remote control, etc., it may not run in accordance with the schedule.
- When all the air conditioners stop by system stop, not only does operation stop, but the entire Schedule Control will not be executed.
- In some models of air conditioners, it is not possible to set and display "POWERFUL".

1. Click “Schedule Control” from the menu at the top of the screen.

In the initial screen, the Schedule Control of the cell with the lowest cell No. is displayed.
(It may take several seconds to display this screen depending on network conditions.)



Schedule Control screen

2. Select the Air-conditioner Cell name and corresponding schedule date.

Select the Air-conditioner Cell name and corresponding schedule for the Air-conditioner Cell that is being displayed and edited. A seven-day Schedule Control from the current day to 6 days in advance can be displayed and edited.

3. Select and input each schedule item.

The following items can be set as schedule items in this screen.

- Time : 00:00–23:59 (1-minute intervals)
- On/Off : Blank (not specified), On, Off
- Mode : Blank (not specified), Auto, Heat, Cool, Fan, Dry
- Fan Speed : Blank (not specified), Powerful, High, Medium, Low
- Set Point : Blank (not specified), Depending on the operation mode, it can be selected within the following ranges. (0.5°C increments)
 - 16-30 deg C (Mode : no setting)
 - 10-30 deg C (Mode : Heat)
 - 16-35 deg C (Mode : other than Heat)
- Remocon Lock/Unlock : Blank (not specified), Lock, Unlock

One time can be set with a combination of up to 5 items (On/Off, Mode, Fan Speed, Set Point, Remocon Lock). Up to 20 settings can be set.

4. Click the “Set” button.

■System administrator setting

You must log in as a system administrator to make these settings.

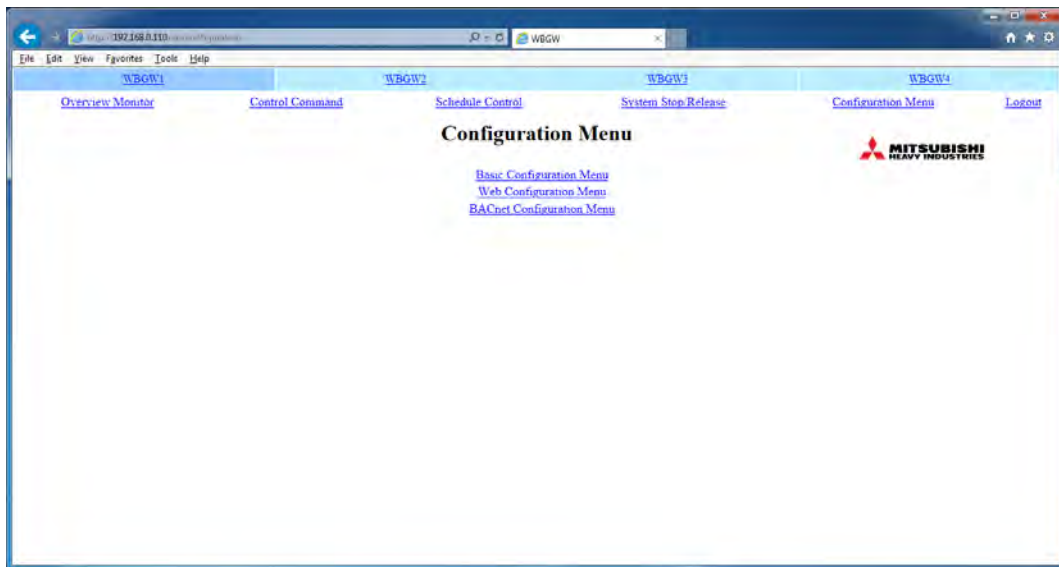
●Configuration Menu screen

This screen is displayed when “Configuration Menu” is clicked from the menu at the top of the screen. The following Configuration menus are available.

- Basic Configuration Menu
- Web Configuration Menu
- BACnet Configuration Menu

Note

The BACnet function setting screen is not used. Click the return button to return to the setting menu screen.



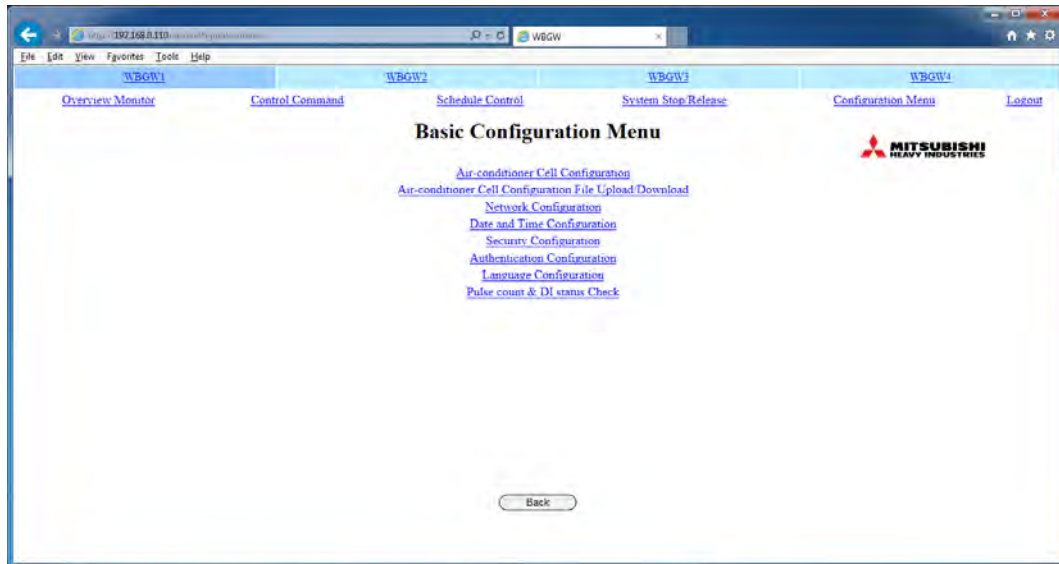
Configuration Menu screen

●Basic Configuration Menu screen

This screen is displayed when the “Basic Configuration Menu” link is clicked on the Configuration Menu screen.

The following Basic Configuration menus are available.

- Air-conditioner Cell Configuration
- Air-conditioner Cell Configuration File Upload/Download
- Network Configuration
- Date and Time Configuration
- Security Configuration
- Authentication Configuration
- Language Configuration
- Pulse count & DI status Check



Basic Configuration Menu screen

●Air-conditioner Cell Configuration screen

This screen is used to define the air conditioners that comprise each Air conditioner Cell and to set the name for each Air conditioner Cell, such as "Conference Room A".

Calculation Interval [hour] 1

1

2

3

4

5

SL Sys No.	SL Address	CELL No.	Air-conditioner Cell Name	Description	Accounting Type	Capacity [kW]
S1	U000	C000	Room 000	This room is Cell 000.	RUN/STOP	0.0
S1	U001	C001	Room 001	This room is Cell 001.	RUN/STOP	0.0
S1	U002	C002	Room 002	This room is Cell 002.	RUN/STOP	0.0
S1	U003	C003	Room 003	This room is Cell 003.	RUN/STOP	0.0
S1	U004	C004	Room 004	This room is Cell 004.	RUN/STOP	0.0
S1	U005	C005	Room 005	This room is Cell 005.	RUN/STOP	0.0
S1	U006	C006	Room 006	This room is Cell 006.	RUN/STOP	0.0
S1	U007	C007	Room 007	This room is Cell 007.	RUN/STOP	0.0
S1	U008	C008	Room 008	This room is Cell 008.	RUN/STOP	0.0
S1	U009	C009	Room 009	This room is Cell 009.	RUN/STOP	0.0
S1	U010	C010	Room 010	This room is Cell 010.	RUN/STOP	0.0
S1	U011	C011	Room 011	This room is Cell 011.	RUN/STOP	0.0
S1	U012	C012	Room 012	This room is Cell 012.	RUN/STOP	0.0
S1	U013	C013	Room 013	This room is Cell 013.	RUN/STOP	0.0
S1	U014	C014	Room 014	This room is Cell 014.	RUN/STOP	0.0

Accounting Type: MULTI1: Accounting according to the amount of refrigerant flow. MULTI2: Accounting according to the thermo ON-OFF. RUN/STOP: Accounting according to the unit operating time.

Set Back

Please enter only the setting related to charge function when using with BACnet function. When using with the WEB function, please set with the utility software.

Air-conditioner Cell Configuration screen

1. Click “Air-conditioner Cell Configuration” in the Basic Configuration Menu screen.

(See page 20.)

A list of air conditioners constituting each Air conditioner Cell will be displayed.

(Displaying the screen may take several seconds depending on the network state.)

2. Assign Air-conditioner Cell numbers by giving each one an SL (Superlink) System No. and SL (Superlink) Address.

Inputting the same Air-conditioner Cell No. for multiple air conditioners (SL Addresses) defines them as being in the same group (Air-conditioner Cell). Make sure that the Air-condition Cell corresponds to a remote control group. An Air-conditioner Cell can be defined with only one air conditioner.

Note

The maximum number of air conditioners, which can be registered in an Air-conditioner Cell, is 16.

3. Input the Air-conditioner Cell names and descriptions.

You can input the Air-conditioner Cell name and description on the line of the air conditioner with the lowest SL Address in the Air-conditioner Cell.

Note

- It is possible to input an Air-conditioner Cell name with up to 16 one-byte characters.
- It is possible to input a description with up to 64 one-byte characters, and display it on the individual monitoring screen.
- The contents of the Air-conditioner Cell Configuration can be saved in CSV files or XML files and uploaded. (See page 23.)

4. Select the Accounting Type and Capacity.

The Accounting Types are shown below.

- MULTI1 : Calculating according to the amount of refrigerant flow. Used for KX Series.
- MULTI2 : Calculating according to Thermo ON/OFF. Used for KX Series.
- RUN/STOP : Calculating according to the operating time. Used for KX series, and single split PAC series connected by a Superlink adapter.

Note

Wrong settings may cause a significant error in the calculating results for electricity or gas.

5. Click the Set button.

The settings are updated using the revised information.

Note

*The meter connection information and meter information (WATT/GAS and unit quantity per pulse) of each air conditioner are set using WGW256Utility, so setting on this screen is unnecessary.
It is also unnecessary to set the Calculation Interval.

●Air-conditioner Cell Configuration File Upload/Download screen

This screen is used to download the Air-conditioner Cell Configuration information which was set on the Air-conditioner Cell Configuration screen to a computer, or upload an Air-conditioner Cell Configuration File from a computer for control and monitoring to this gateway.

An Air-conditioner Cell Configuration file is a CSV file or XML file containing a list of the SL system No., SL address, Accounting Type, Capacity, Air-conditioner Cell name, Description, meter information, and Calculation interval of each air conditioner in Air-conditioner Cells indexed by the Air-conditioner Cell No. When either the CSV or XML format is selected and the file is exported, the Air-conditioner Cell Configuration File "PACinfo256.csv" or "PACinfo256.xml" will be saved to the computer. It is possible to edit files with spreadsheet software, etc.

If a CSV file (PACinfo256.csv) or XML file (PACinfo256.xml) on a computer is uploaded to this gateway, the contents of this file will be used for the Air-conditioner Cell Configuration screen.

<Examples of Air-conditioner Cell Configuration>

CELL_NO	PLACE	PLACE_SHORT	SL_LINE	SL_ADDRESS	KAKIN_TYPE	ABILITY	P1	T1	C1	...	P8	T8	C8	INTERVAL
C000	This room is Cell 000.	Room 000	S1	U000	MULTI1	5.6								1
C001	This room is Cell 001.	Room 001	S1	U001	MULTI1	7.1								1
C001	This room is Cell 001.	Room 001	S1	U002	RUN/STOP	7.1								1
C001	This room is Cell 001.	Room 001	S1	U004	RUN/STOP	14								1
...

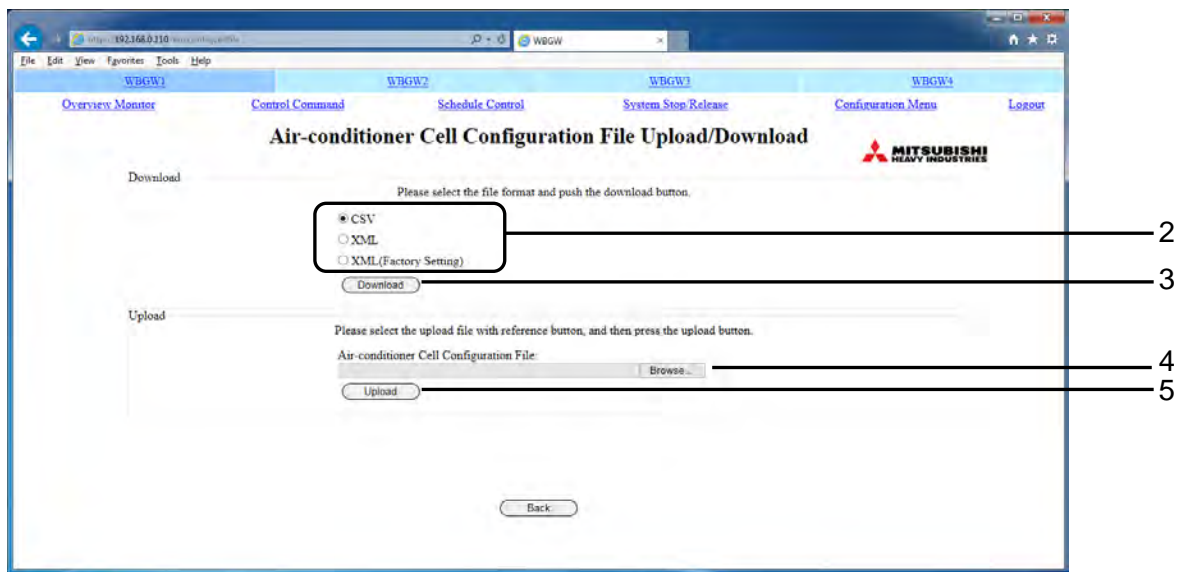
<How to interpret the above table.>

- Items are as follows.
 - Air-conditioner Cell Number : CELL_NO
 - Description : PLACE
 - Air-conditioner Cell Name : PLACE_SHORT
 - SL System Number : SL_LINE
 - SL Address : SL_ADDRESS
 - Accounting Type : KAKIN_TYPE
 - Capacity[kW] : ABILITY
 - Meter Connection Information : P1~P8
 - Meter Information
- WATT/GAS : T1~T8
- Unit Quantity Per Pulse : C1~C8
 - Calculation Interval : INTERVAL
- The air conditioner with the SL address U000 in the Superlink system SL1 is set in Air-conditioner Cell No. C000.
- Air conditioners with SL address U001, U002 and U004, respectively, in the Superlink system SL1, are set in Air-conditioner Cell C001, and these three air conditioners are grouped together as a single logical object. The air conditioner with the lower SL address becomes the representative unit in the Air-conditioner Cell, and the Air-conditioner Cell name and Description are set.
- The address U003 is omitted, but this indicates that air conditioner U003 is not currently connected.

<To create / edit the Air-conditioner Cell Configuration File on a computer>

- When the air conditioner which has been listed is not connected, it's possible to delete each row. Even if the corresponding line is deleted, it shows that the air conditioner is not connected.
- Air-conditioner Cell No. designation does not have to be in serial order, but in the Overview Monitor screen, the Air-conditioner Cells are displayed in the order of their cell No.
- Set the Accounting Type to "MULTI1", "MULTI2", or "RUN/STOP" using one-byte uppercase characters.
- Set the Capacity from 0.0 to 224.0 using one-byte numerals to one decimal place.
- Do not use ", & < >" for each input item. If you enter these characters and upload the file, the screen may not be displayed correctly. In this case, turn off the power of this gateway, turn on the power again, and upload the file without ", & < >"

1. In the Basic Configuration Menu screen, click “Air-conditioner Cell Configuration File Upload/Download”. (See page 20.)



Air-conditioner Cell Configuration File Upload/Download screen

<To download>

2. Select a file format to download.

3. Click the Download button

Specify the save destination, and then save the file.

- CSV : "PACinfo256.csv" file will be saved.
- XML : "PACinfo256.xml" file will be saved.
- XML(Factory Setting) : "defaultPACinfo256xml" file will be saved.

Note

If spreadsheet software, etc., is installed on your computer, you can open the downloaded file in the software and edit it directly.

<To upload>

4. Click the “Browse” button and select “PACinfo256.csv” or “PACinfo256.xml” saved on the computer.

5. Click the “Upload” button.

The setting contents of the file are reflected in the Air-conditioner Cell configuration.

Note

The Air-conditioner Cell Configuration File of the SC-WGWNB(256)-A/-B and SC-WGWNB(256)-A/-B gateways and earlier cannot be uploaded.

●Network Configuration screen

This screen is used to set the IP address of web browser.

1. In the Basic Configuration Menu screen, click “Network Configuration”. (See page 20.)

2. When the IP Address was changed.

2-1. Input the desired IP Address and the Subnet Mask.

Caution

If a wrong IP Address is input, you will not be able to access the gateway anymore.

2-2. If necessary, input the Default Gateway IP address.

Note

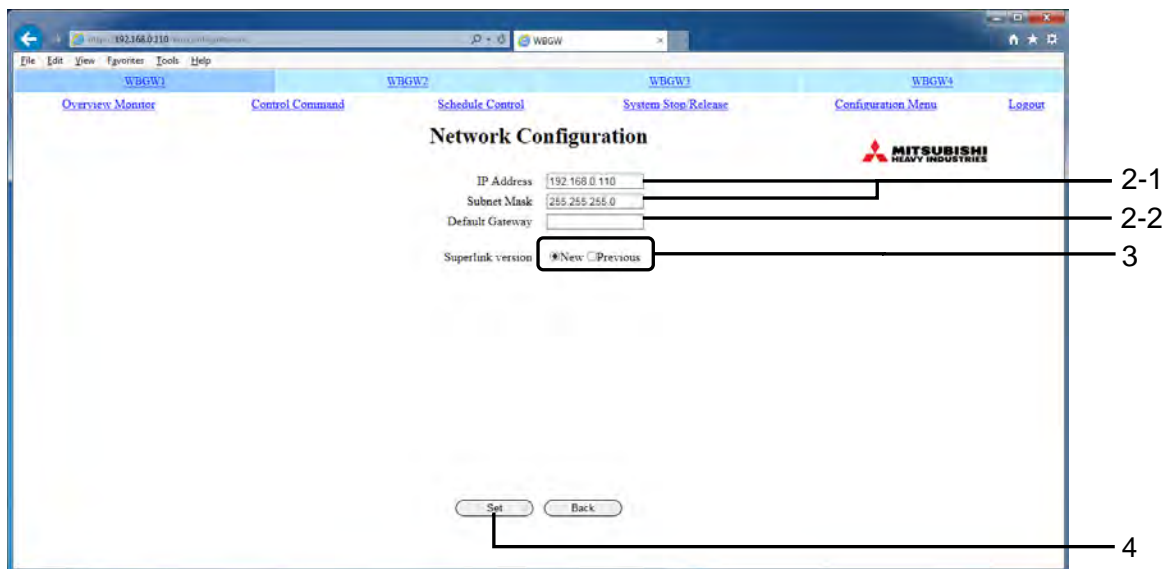
Consult with the network administrator to determine if a Default Gateway setting is necessary or not.

3. Select the Superlink version "New" or "Previous".

4. Click the “Set” button.

Note

The gateway will be rebooted automatically when the "Set" button is clicked. After that, the gateway cannot be accessed for about 5 minutes. Please log in again with the changed IP Address after about 5 minutes.



Network Configuration screen

●Date and Time Configuration screen

This screen is used to set the internal time clock of the gateway or match it automatically according to the NTP server on the network.

The Schedule Control is executed in accordance with this clock setting, so in order to assure correct operation, it is necessary to correct the setting on this clock regularly.

1. In the Basic Configuration Menu screen, click “Date and Time Configuration”.

(See page 20.)

In the initial screen, the gateway's current time is set in the time input column.

Currently set time
2017/04/07 14:35:52

Please enter the time difference of installation location.
Time zone (Time difference from UTC) [UTC+09:00] Please be sure to enter the time difference.

Manual adjust
Please enter the time to change.
Date (YYYY/MM/DD): [2017] / [04] / [07] Time (HH:MM): [14] : [35]
Please be aware that significant changes in time may affect billing data.

Automatic adjust
Using NTP: ☐ NTP Server IP Address:

Set Back

Date and Time Configuration screen

2. Select the Time zone (Time difference from UTC) of the area where the gateway is used.

Caution

Be sure to set the Time zone.

If the "Time zone" is not set correctly, the gateway's clock will be set to the wrong time.

<For Manual adjust>

3. Input the current date and time.

The Date and Time can be input within the following ranges.

- AD Year : 2000 ~ 2038
- Month : 1 ~ 12
- Day : 1 ~ 31
- Hour : 0 ~ 23 (24-hour notation)
- Minute : 0 ~ 59

<For Automatic adjust>

4. Select the "Using NTP" check box and input the IP address of the NTP server.

Note

Consult with the network administrator about the IP address of the NTP server.

When you enable NTP, you cannot input the current date and time setting manually in **step 3.** above.

5. Click the "Set" button.

Note

- The time is refreshed automatically once every 2 seconds, but there is a variance of several seconds. The time needed for a refresh screen may take several seconds.
- Leap year processing is also executed automatically.
- A significant change in the time may affect the calculating data.
- The gateway will be rebooted automatically when the "Set" button is clicked. After that, the gateway cannot be accessed for about 5 minutes. Log in again after about 5 minutes.

●Security Configuration screen

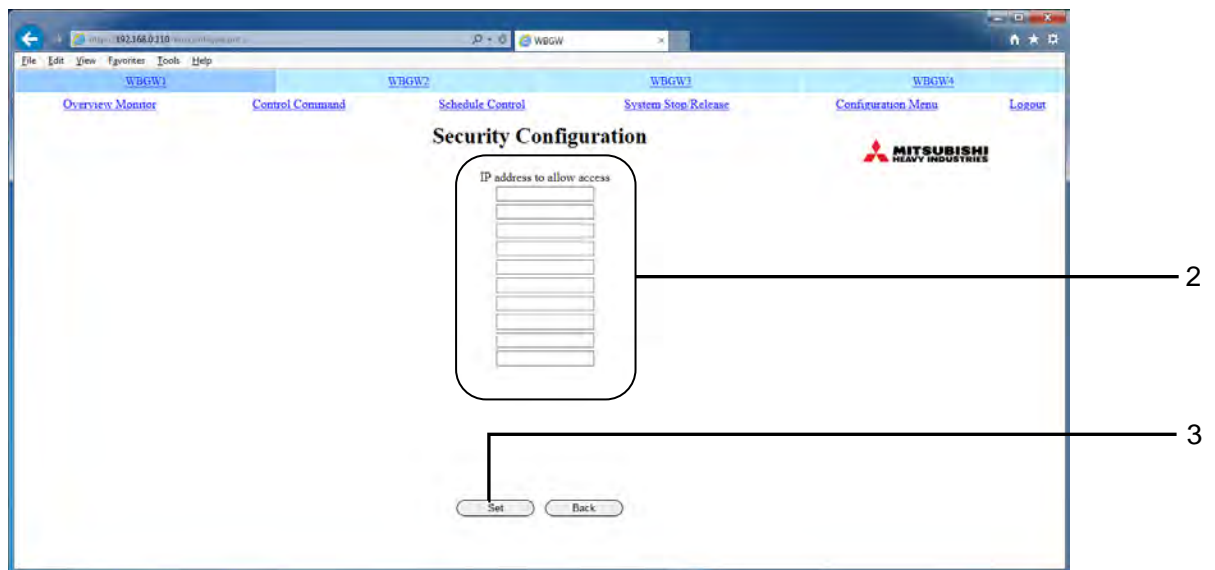
This screen is for specifying the IP address of the computer that allows the gateway to log in.

Caution

Be careful not to make any mistakes in setting the IP address.

No addresses are set at the factory, so any computer with any IP address can access the gateway. However, if even one IP address is entered in this screen for which access is permitted, the gateway can be accessed from only the computer with that address.

1. In the Basic Configuration Menu screen, click “Security Configuration”. (See page 20.)
2. Input the IP address of the computer for which access is permitted.
3. Click the Set button.



Security Configuration screen

●Authentication Configuration screen

This screen is used to set and change the User ID and Password for logging in to the gateway.

1. In the Basic Configuration Menu screen, click “Authentication Configuration”.

(See page 20.)

2. Input the User ID and Password of each Authentication. (See page 10.)

Input the User ID using 4-16 one-byte alphanumeric characters and the Password using 6-16 one-byte alphanumeric characters.

3. Click the “Set” button.

Authentication Configuration screen

●Language Configuration screen

This screen is used to switch the display language, and to upload or download the language configuration file ("language.xml").

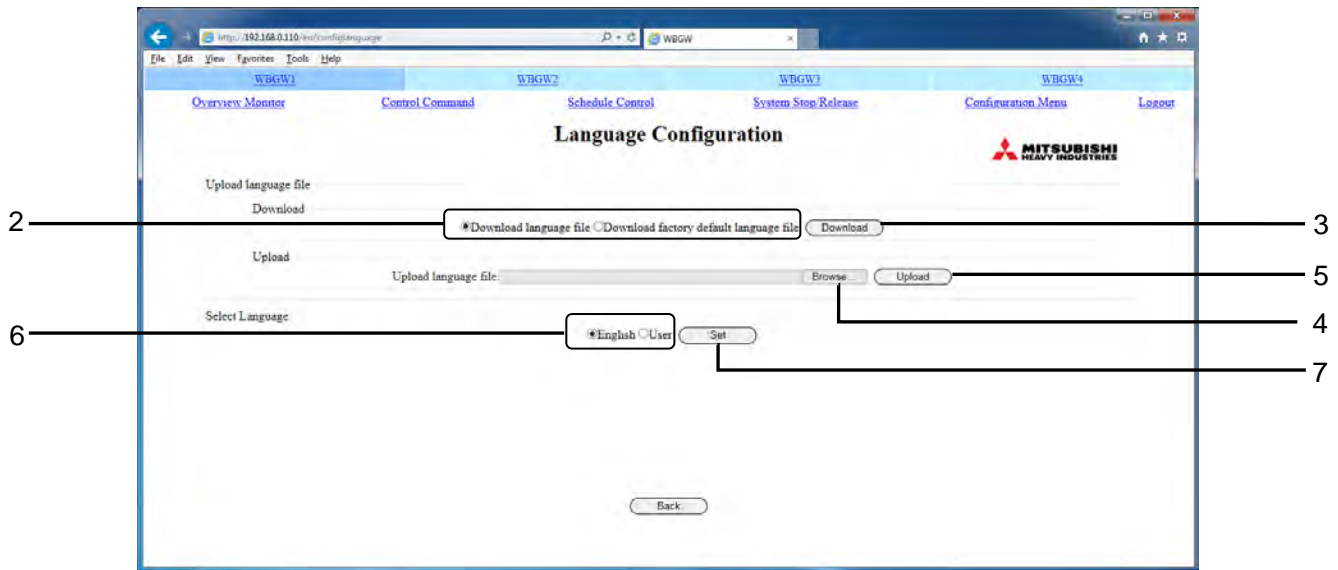
The language configuration file is in the XML file format. This file is a comparison list of English and the user's language. It is possible to edit this file with spreadsheet software, etc.

Note

Do not use ", & < >" in the language setting file. If you enter these characters and upload the file, the screen may not be displayed correctly. In this case, turn off the power of this gateway, turn on the power again, and upload the file without ", & < >" .

1. From the Basic Configuration Menu screen, click "Language Configuration".

(See page 20.)



Language Configuration screen

<To download>

2. Select "Download language file" or "Download factory language file".

3. Click the "Download" button.

The "language.xml" file will be saved.

<To upload>

4. Click the "Browse" button and select the "language.xml" file.

5. Click the "Upload" button.

<To change the display language>

6. Select "English" or "User".

7. Click the "Set" button.

The display switches to the display of the selected language.

Note

The language configuration file of the SC-WGWN(256)-A/-B and SC-WGWN(256)-A/-B gateways and earlier cannot be uploaded.

●Pulse count & DI status Check screen

You can check the total number of input pulses (updated every 1 minute) of the pulse input terminals (P1 to P8) and the input state (Open / Close) of the contact signal input terminals (DI1 to DI3).

1. From the Basic Configuration Menu screen, click “Pulse count & DI status Check”.

(See page 20.)

When the "Reset" button is clicked, the display value of the pulse number becomes 0.

This screen is a test screen for checking the operation of the terminals, and resetting the number of pulses displayed does not affect information calculated internally at all.

Click the "BACK" button to return to the Basic Configuration Menu screen.



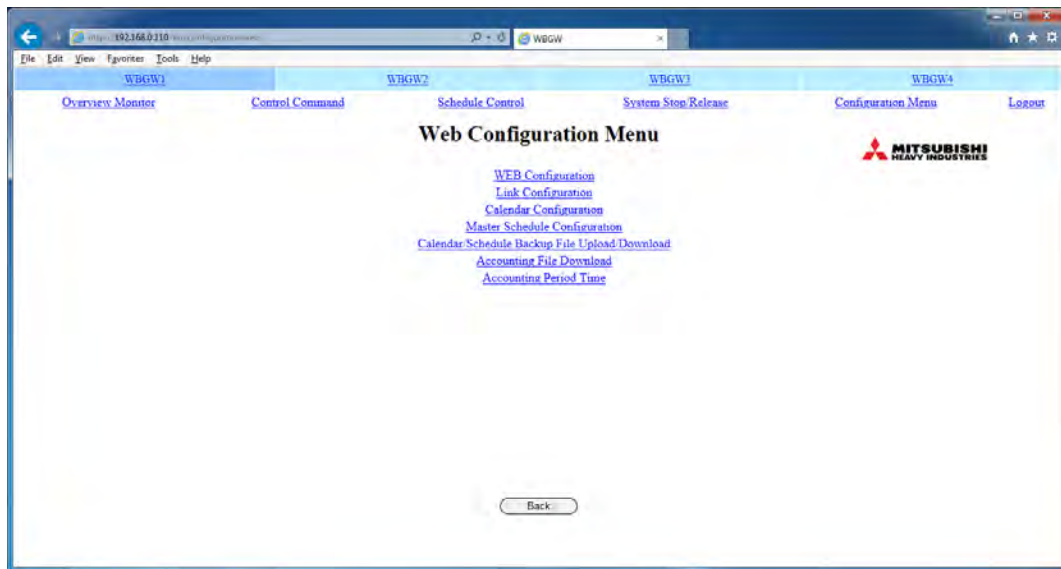
Pulse count & DI status Check screen

●Web Configuration Menu screen

This screen is displayed when the “Web Configuration Menu” link is clicked on the Configuration Menu screen.

The following Web Configuration menus are available.

- WEB Configuration
- Link Configuration
- Calendar Configuration
- Master Schedule Configuration
- Calendar/Schedule Backup File Upload/Download
- Accounting File Download
- Accounting Period Time



Web Configuration Menu screen

●WEB Configuration screen

This screen is for setting the refresh interval of the monitoring screen of the web browser.

1. From the Web Configuration Menu screen, click “WEB Configuration”. (See page 32.)

2. Set the Screen Refresh Interval.

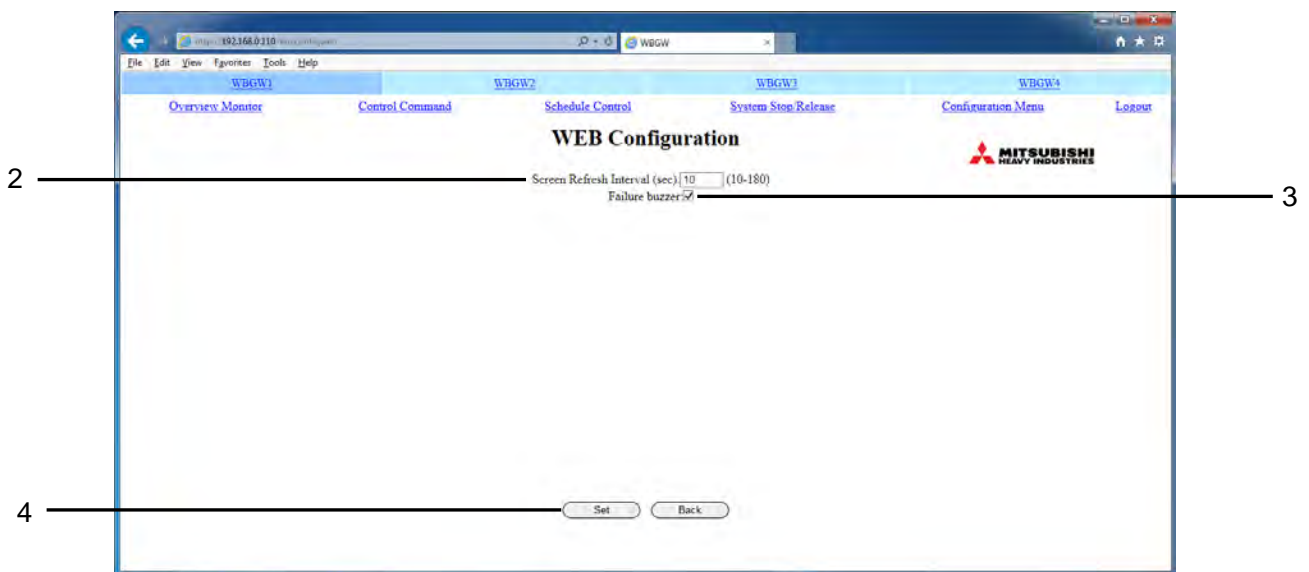
Set the screen refresh interval to 10-180 seconds. (It is set at 30 seconds at the factory.)

Note

The maximum delay time from the time the air conditioner's status changes until the change is reflected on the computer screen is virtually decided by this setting. If the time set for this interval is short, there may be some flickering on the screen from the web browser, so it is recommended that the refresh time be set at about 30 seconds.

3. When using the alarm buzzer function, select the "Failure buzzer" check box.

4. Click the “Set” button.



WEB Configuration screen

●Link Configuration screen

This screen is used to set the web linkages among a number of gateways. The linkages are a function for switching and manipulating multiple gateways in the browser. Up to 4 gateways can be set including the currently logged in gateway.

1. In the Web Configuration Menu screen, click “Link Configuration”. (See page 32.)

2. Input the Linkage Gateway Name and IP Address of the destination gateways.

Note

- Input the "Linkage Gateway Name" and "IP Address" together as a set.
- It is possible to input "Linkage Gateway Name" with up to 16 one-byte characters.
- Enter the "IP address" using one-byte numerals and "."
- The order of the text boxes to be inputted corresponds to the display position in the link tab menu.
- Be sure to include the currently logged in gateway.

The gateway recognizes the input name as its own Link Name when the input IP address matches its own IP address. Then its own Link Name Tab is displayed in dark blue.

The links cannot be set together with the SC-WGWN(256)-A/-B and SC-WGWN(256)-A/-B gateways and earlier.

3. Click the “Set” button.

Linkage Gateway Name 1: WBGW1, IP Address: 192.168.0.110

Linkage Gateway Name 2: WBGW2, IP Address: 192.168.0.112

Linkage Gateway Name 3: WBGW3, IP Address: 192.168.0.113

Linkage Gateway Name 4: WBGW4, IP Address: 192.168.0.114

Buttons: Set, Back

Link Configuration screen

●Calendar Configuration screen

This screen is used to set the special dates for the coming 12 months.

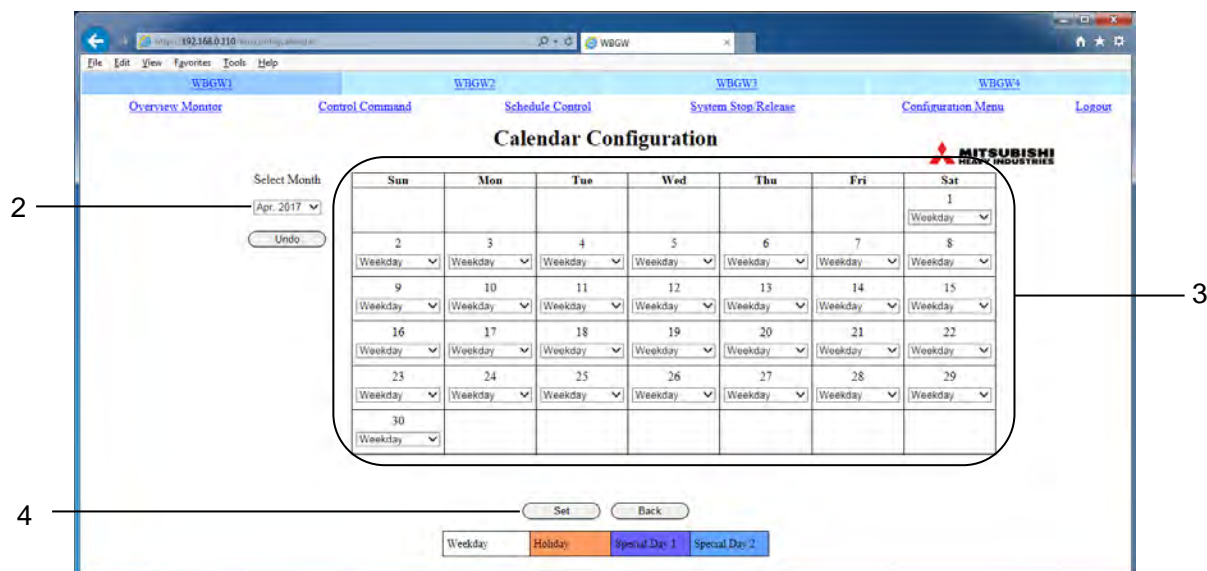
Caution

The schedule within 7 days from the current day cannot be changed, even if Calendar Configuration is changed.

You must change the schedule in the Schedule Control screen. (See page 17.)

1. In the Web Configuration Menu screen, click “Calendar Configuration”. (See page 32.)

The calendar for the current month will be displayed.



Calendar Configuration screen

2. Select the month that you would like to set.

The calendar for the month you selected will be displayed.

(It may take several seconds to display the calendar screen depending on the network conditions, etc.)

3. Select an item from the pull-down menu.

Weekday	Date for setting the Master Schedule for each day of the week
Holiday, Special Day 1, Special Day 2	Date for setting a special Master Schedule regardless of which day of the week it is

When setting individual days one by one, select Weekday, Holiday, Special day 1 or Special day 2 from the pull-down menus.

4. Click the “Set” button.

Note

- If you jump to the screen for another month without clicking the “Set” button, or if you click the “Undo” button, all the contents input in this screen will be deleted, so exercise caution.
- If you click the “Undo” button, the saved content is displayed again.
- There is one calendar for one gateway. All Air-conditioner Cells in a gateway are run from the same calendar.
- When the month changes, all days of a new month (12th month) will be created as a Weekday.
- The calendar settings of the past day will be erased when the month changes.
- Even if the gateway’s power is turned off, the calendar settings are saved to memory.
- If you manually advance the time of this gateway, the past calendar may be deleted.

●Master Schedule Configuration screen

The Master Schedule is the data decided by the kinds of days defined in the Calendar (10 types: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, Holiday, Special Day 1, and Special Day 2). The actual schedule actions are executed by the Schedule Control. (See page 17.)

Every day, at the change of the date, the data of the Schedule Control is shifted by one day, and one day's data is copied from the Master Schedule to the 7th day data of the Schedule Control.

Caution

- The data of the Master Schedule will copied and activated from 7 days after.
- The schedule within 7 days from the current day will not be reflected even if you change this Master Schedule. You must change the schedule in the Schedule Control screen. (See page 17.)

1. In the Web Configuration Menu screen, click “Master Schedule Configuration”.

(See page 32.)

In the initial screen, the Monday of the Air-conditioner Cell with the lowest number is displayed in the Air-conditioner Cell column on the left side of the screen.

Master Schedule Configuration screen

2. Select the Air-conditioner Cell Name and the Schedule date.

The display will change to the corresponding Master Schedule Configuration screen.

3. Select and input the desired settings for each schedule item.

In this screen, the following items can be set as schedule items.

- Time : 00:00–23:59 (1-minute intervals)
 - On/Off : Blank (not specified), On, Off
 - Mode : Blank (not specified), Auto, Heat, Cool, Fan, Dry
 - Fan Speed : Blank (not specified), Powerful, High, Medium, Low
 - Set Point : Blank (not specified), Depending on the operation mode, select within the following ranges. (0.5°C increments)
 - 16-30 deg C (Mode : no setting)
 - 10-30 deg C (Mode : Heat)
 - 16-35 deg C (Mode : other than Heat)
 - Remocon Lock : Blank (not specified), Lock, Unlock
- 5 items (On/Off, Mode, Fan Speed, Set Point, Remocon Lock) can be set together for 1 time setting. Up to 20 settings can be set.

4. Click the “Set” button.

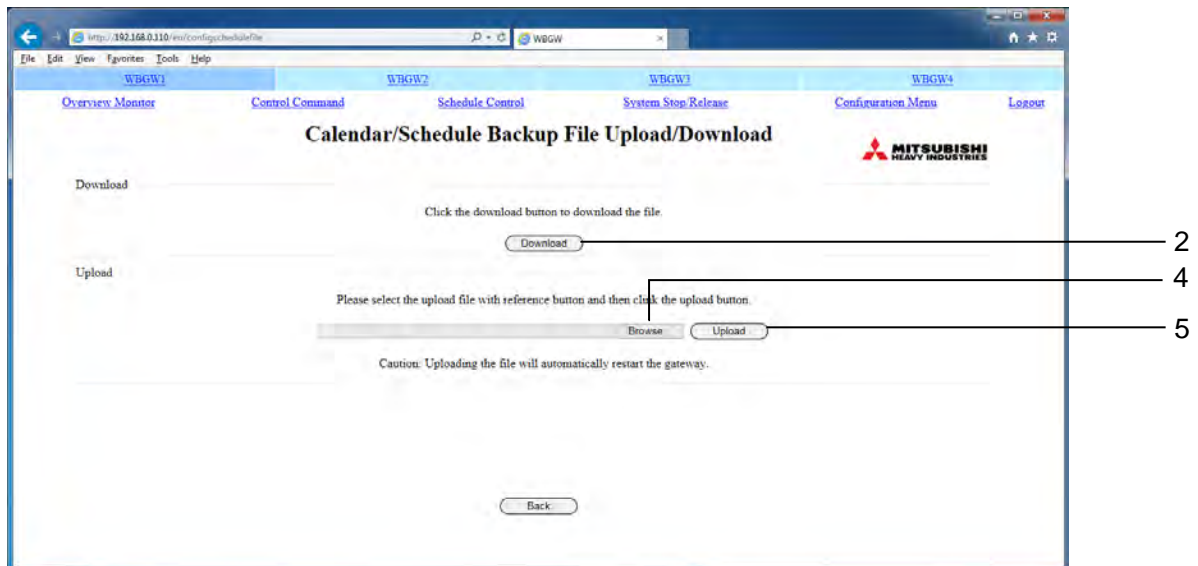
Note

- If you jump to the screen for another month without clicking the “Set” button, or if you click the “Undo” button, all the contents input in this screen will be deleted, so exercise caution.
- If you click the “Undo” button, the saved content is displayed again.
- Even if the Master Schedule is changed, it has no influence on the current Schedule Control.
- The Master Schedule can be copied to another Master Schedule.
Select the Air-conditioner Cell name and desired schedule date of the destination, then click “Copy”.
When "ALL" is selected, the settings are copied to all the Air-conditioner Cells.
- In some models of air conditioners, it is not possible to set and display "POWERFUL".
- Even if the gateway's power is turned off, the Master Schedule Configuration is saved to memory.

●Calendar/Schedule Backup File Upload/Download screen

This screen is used to download or upload the backup files for the Calendar Configuration, Master Schedule Configuration and Schedule Control (called hereafter the schedule backup files).

1. From the Web Configuration Menu screen, click "Calendar/Schedule Backup File Upload/Download". (See page 32.)



Calendar/Schedule Backup File Upload/Download screen

<To download>

2. Click the Download button.
3. Specify the saving address and save.

The file "schedule256.tgz" is saved.

<To upload>

4. After clicking the "Browse" button, select the file to upload.

Note

Since a schedule backup file is a binary file special to the gateway, the downloaded file cannot be edited and uploaded.

5. Click the Upload button.

Note

- After the upload of a schedule backup file, the gateway reboots automatically. Please log in again after about 5 minutes.
- The schedule backup files of the SC-WGWN(256)-A/-B and SC-WGWN(256)-A/-B gateways and earlier cannot be uploaded.

●Accounting File Download screen

This screen is used to download the accounting data files.

Accounting data files are binary files special to WGW256Utility.

Data of the last 12 months including this month is saved in the gateway and downloaded. Data in earlier months is deleted automatically. Once the data is deleted, it can no longer be downloaded.

Accounting data files cannot be deleted or reset manually.

1. From the Web Configuration Menu screen, click "Accounting File Download".

(See page 32.)



Accounting File Download screen

2. Click the Download button of the Accounting configuration file Download.

Configure the Air-conditioner Cell before the download. (See page 21.)

3. Click the Download button of the Accounting data file Download.

Click the enabled (not grayed out) Download button.

The latest data at the time the Download button is clicked is downloaded.

4. Make the monthly reports.

The monthly reports are created on a computer using "WGW256Utility".

Please see "WGW256Utility Operation Manual".

●Accounting Period Time screen

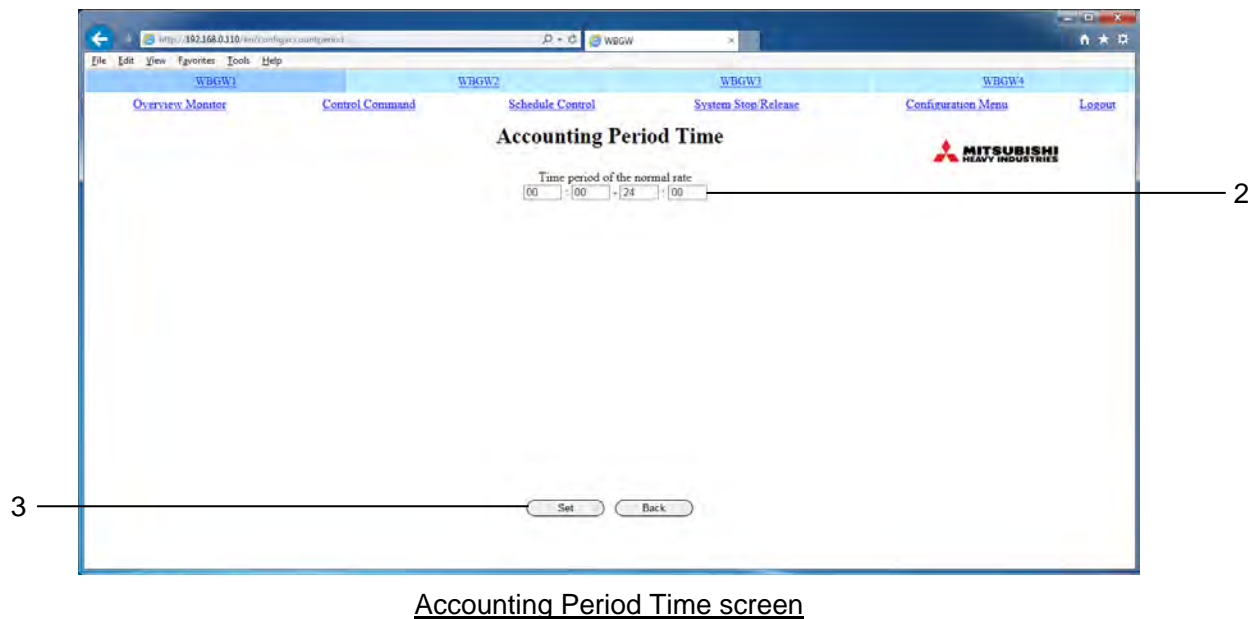
This screen is used to configure the time period to collect the accounting data.

Accounting is calculated by dividing a day into two period times of in-time/out-time. (Common to all air conditioners)

The time period for the “in-time” is configured on this screen.

The time period other than this configuration is calculated as the “out-time”.

1. From the Web Configuration Menu screen, click “Accounting Period Time”.
(See page 32.)



2. Input the time.

The input ranges are as follows.

- Hour : 0-24 (24-hour indication)
- Minute : 0-59 (1-minute intervals)

3. Click the Set button.

■ Troubleshooting

Phenomenon	Cause	Way of Coping
IP address was forgotten.		Consult with the dealer where you purchased this product.
Incorrect IP address was configured.		
Password was forgotten.		
Security setting IP address was forgotten.		
The screen flickers.	While the screen is being refreshed, this occurs for an instant until the new screen is displayed. This is an inherent characteristic of Internet Explorer and there is no problem.	If the flickering becomes pronounced, set the screen refresh interval to 60 seconds or more.
The pop-up window cannot be seen.	After a pop-up window opens up to display an individual monitoring screen, if you click the Overview Monitor screen window in the background, the individual monitoring screen will be hidden.	Select the pop-up window again by clicking the button in the taskbar at the bottom of the screen, or select the desired individual monitoring screen from the Overview Monitor screen again.
The screen shows connection errors.	The browser has malfunctioned.	Click the "Update" button in Internet Explorer. Next, restart Internet Explorer.
The computer freezes.	The computer has malfunctioned.	Restart the computer. Restart Internet Explorer regularly. Change the screen refresh interval to 60 seconds or more.

■ After Sales Service

● Have the following information available when requesting repairs.

Model name	
Installation date	
Problem status, as detailed as possible	
Address	
Name	
Telephone number	

● Relocation

Since expert techniques are required, always contact your dealer.

In such cases, there will be a fee for relocation.

● Repairs after the free service warranty period.

Consult your dealer.

Warranty period is one year from installation.

It will be charged when repair is required after the period. Please consult your dealer.

● Questions

For after sales service, consult your dealer.

Dealer Information

Please fill in the following information for the after sales service.

Dealer's Name : _____

Person in charge : _____

Phone Number : _____

Purchase Date : _____



MITSUBISHI HEAVY INDUSTRIES THERMAL SYSTEMS, LTD.

16-5 Konan 2-chome, Minato-ku, Tokyo, 108-8215, Japan

<http://www.mhi-mth.co.jp>

MITSUBISHI HEAVY INDUSTRIES AIR-CONDITIONING EUROPE, LTD.

7 Roundwood Avenue, Stockley Park, Uxbridge, Middlesex, UB11 1AX, United Kingdom

Tel : +44-20-7025-2750

Fax : +44-20-7025-2751

<http://www.mhiaec.com>

三菱重工空调系统（上海）有限公司

中国上海市長寧区延安西路2299号 上海世贸商城29楼 邮编:200336

Tel : +86-21-6236-3030

Fax : +86-21-5877-7330

<http://www.mhi-ac.com>

MITSUBISHI HEAVY INDUSTRIES AIR-CONDITIONERS AUSTRALIA, PTY. LTD.

9C Commercial Road Kingsgrove NSW 2208 PO BOX 318 Kingsgrove NSW 1480

Tel : +61-2-8571-7977

Fax : +61-2-8571-7992

<http://www.mhiaa.com.au>

MITSUBISHI HEAVY INDUSTRIES - MAHAJAK AIR CONDITIONERS CO., LTD.

220 Soi Chalongkrung 31, Kwang Lamplatiw, Khet Lad Krabang, Bangkok 10520, Thailand

Tel: +66-2-326-0401

Fax: +66-2-326-0419

<http://www.maco.co.th/>