

OPERATING MANUAL

WEB MONITORING TOOL for VRF System

UTY-AMGXZ1

Ver. 2.5



CAUTION

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PART NO. 9708314051-08

FUJITSU GENERAL LIMITED

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1. Safety precautions


1-1 Safety precautions

- Before using Web Monitoring Tool, read this “Safety precautions” thoroughly to ensure the correct operation.
- This section describes the important safety information to operate Web Monitoring Tool.
- The meanings of “WARNING” and “CAUTION” are explained as follows.

 WARNING	This mark indicates the procedures, which might result in the death of or serious injury to the user or service personnel if improperly performed.
 CAUTION	This mark indicates the procedures, which might result in personal harm to the user or damage to property if improperly performed.

This manual is for service personnel authorized to use the Web Monitoring Tool. Always keep this manual in an easily accessible place for use by authorized service personnel.

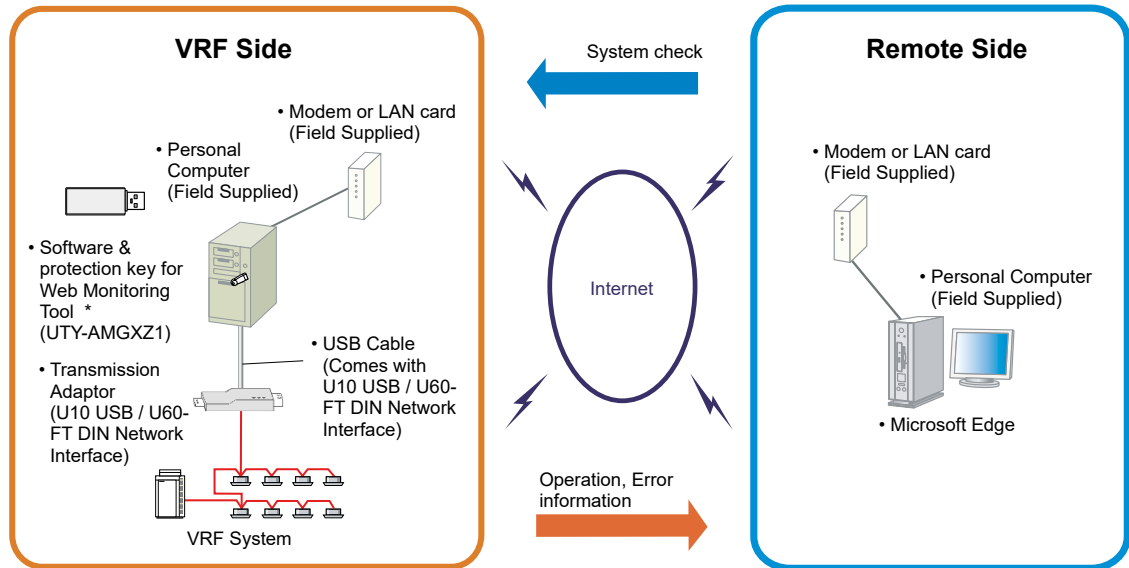
 WARNING
1. When using U10 USB / U60-FT DIN Network Interface, follow the instructions given in the manual that comes with the product.

 CAUTION
Web Monitoring Tool can control the air-conditioner system on a personal computer. Be careful not to turn off the power supply of the personal computer, or not to finish the application compulsorily during operation. Otherwise, Web Monitoring Tool might malfunction. For personal computer used as Web Monitoring Tool, refer to the setting manual.

1-2 Precautions when using the Web Monitoring Tool

1. Please read and fully understand the Operating Manual. Fujitsu General Limited is not responsible for improper use.
2. Fujitsu General Limited is not responsible if the settings in this software or data used for the controlling are deleted. We request that the customer take responsibility for the administration of the settings and control data.
3. If the personal computer operating this software stops, immediately restart the computer and restart this software. Also, if the unit equipment stops due to a power supply interruption, restart this software immediately as there is the potential for malfunctioning.
4. The WIBU-KEY and WHITE-USB-KEY (Software protection key and installation key) will not be reissued. Be careful not to lose them.
5. For information about operating your personal computer, refer to the operating manual for the PC and the store that sold it.
6. Never start this software simultaneously with other software as this may cause malfunctioning. The PC running this software must be dedicated for the use of this product.
7. When Web Monitoring Tool program is running, do not set/adjust the time and date of the PC to prevent data becoming inconsistent.
If time has been adjusted backward toward the past, wait for the time to elapse until the adjusted time catches up with the original time before adjustment. You may then start the Web Monitoring Tool, again.
8. When program executional environment of Windows is corrupted or abnormal, or other softwares that interfere with the operation of Web Monitoring Tool is installed or running, Web Monitoring Tool may not install or run properly. It is usually extremely difficult to detect such conditions, if it occurs.
9. Web Monitoring Tool product is provided with softwares, drivers, components listed below.
 - 1) Microsoft® .NET Framework
 - 2) Microsoft® SQL Server® 2022 Express
10. If the same kind of softwares, drivers, components with different version is installed on the same PC, Web Monitoring Tool may not install or run properly.
11. Before use, set the resolution so that the resolution of PC monitor screen at remote operation side is higher than that of local side. Otherwise, the browser outer frame area in the screen is not displayed because monitor screen is displayed using browser at remote operation side.

2. Outline



* WIBU-KEY of UTY-AMGX can be used.

This operating manual explains the operating procedures for the software of Web Monitoring Tools for the VRF control system.

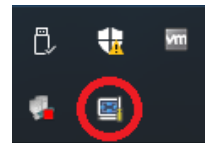
This tool lets you check a VRF System installed at a distant place from the remote side by internet. If a personal computer connectable to the network and Microsoft Edge are available at the remote side, VRF System checks can be carried out at the same level as the Service Tool.

When an error occurs in the VRF System, the error is displayed at the remote side monitor. If internet is selected as the communications method, the error can be reported to a pre-registered address by e-mail. Moreover, since unit data for up to the last past week is recorded at the VRF side, defect phenomena for on-site repair can be grasped in advance by checking the unit data from a remote place when a defect occurred.

■ Software construction

The Web Monitoring Tool software consists of the **Data acquisition application** and **Monitor application**.

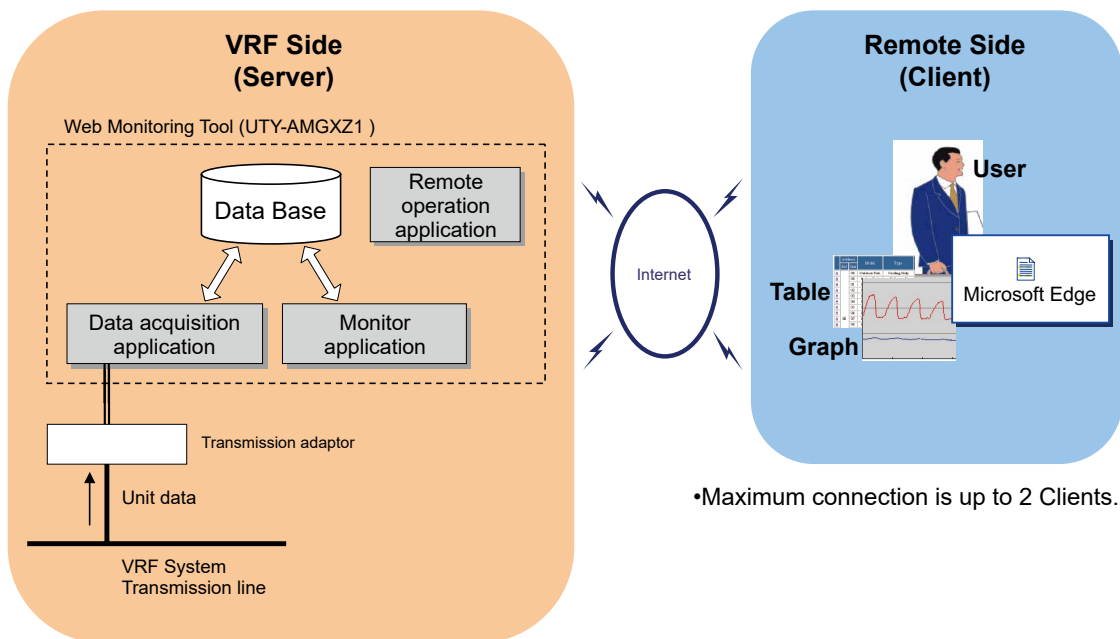
The **Data acquisition application** is a program which resides and run in a background when the Web Monitoring Tool is started, and exchanges data with the VRF System transmission line. It also records the received unit data to a database.



The **Monitor application** is a Web server and a collection of server side program and scripts which converts the acquired Unit data to Table and Graph, and displays them to a browser (Microsoft Edge) upon request from remote side. It also converts operations input from the User and passes them to the Data acquisition application through the Database. In this manual, **Monitor application** will refer to the collection of server side program and scripts.

The **Remote operation application** is the application to perform the remote operation. The

Remote operation application operates only when the remote operation mode is valid.



•Maximum connection is up to 2 Clients.



Note • Hereinafter, the following will be used in the descriptions in this operating manual:

VRF Side	→	Server
Remote Side	→	Client

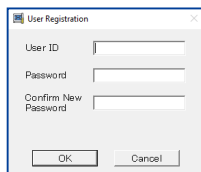
3. Data acquisition application starting flow

3-1 Screen transition

By default, Data acquisition application of Web Monitoring Tool will start automatically upon power up of PC. Data acquisition application may be accessed by a right click menu of an icon in a task tray. The application may be terminated from this right click menu also. Refer Section 3.3 and 4 for detail.

- * Since the operation is performed on the desktop mode for Windows 10, switch the screen as necessary.

User Registration

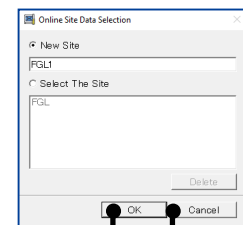


User Registration dialog box with fields for User ID, Password, and Confirm New Password. It includes OK and Cancel buttons.

Opening

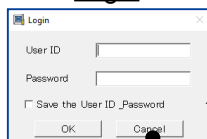


Online Site Data Selection



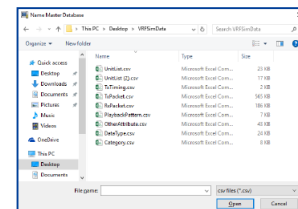
Online Site Data Selection dialog box with radio buttons for 'New Site' and 'Select The Site'. It includes a list box for site selection and OK/Cancel buttons.

Login



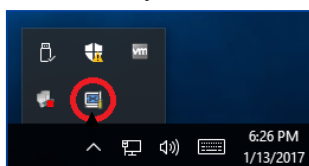
Login dialog box with fields for User ID and Password, a checkbox for 'Save the User ID, Password', and OK/Cancel buttons.

Name Master Database



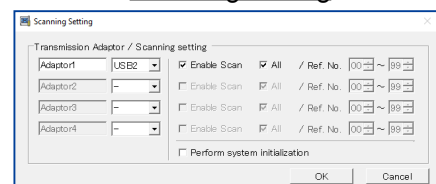
Name Master Database dialog box showing a list of units with columns for Name, Type, and Size. It includes a search bar and OK/Cancel buttons.

Task Tray Resident



No scanning

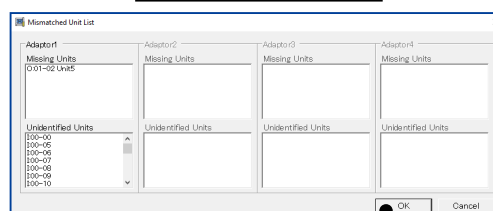
Scanning Setting



Scanning Setting dialog box with tabs for Transmission Adaptor and Scanning setting. It includes checkboxes for 'Enable Scan' and 'Perform system initialization', and OK/Cancel buttons.

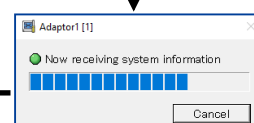
Scanning

Mismatched Unit List



Mismatched Unit List dialog box showing a table of mismatched units with columns for Adaptor, Missing Units, and Identified Units. It includes OK and Cancel buttons.

OK

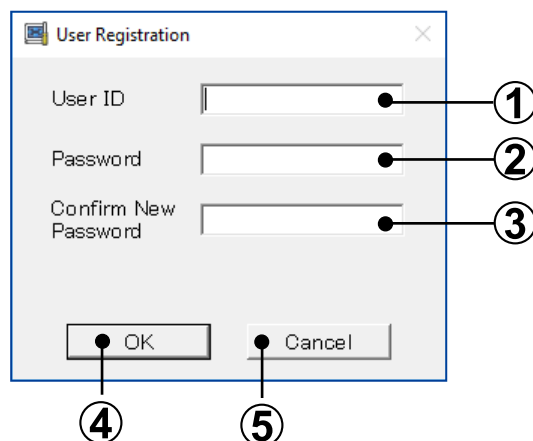


Adaptor1 [1] dialog box showing a progress bar and the text 'Now receiving system information'. It includes a Cancel button.

3-2 Data acquisition application starting (at initial starting)

3-2-1 User registration

User registration, change, and deletion can also be performed at "par. 4-6 User Setting". The use of this software is restricted to authorized person. User ID and password is used for authentication. When you start this software for the first time, you will be prompted to register User ID and Password of the User using this screen.



- ① User ID input field
Input the user ID. (Up to 20 alphanumeric characters) (*1)
- ② Password input field
Input the password. (Up to 20 alphanumeric characters) (*1)
- ③ Password confirmation input field
Input the password again for confirmation. (Up to 20 alphanumeric characters) (*2)
- ④ OK button
Save the inputted data.

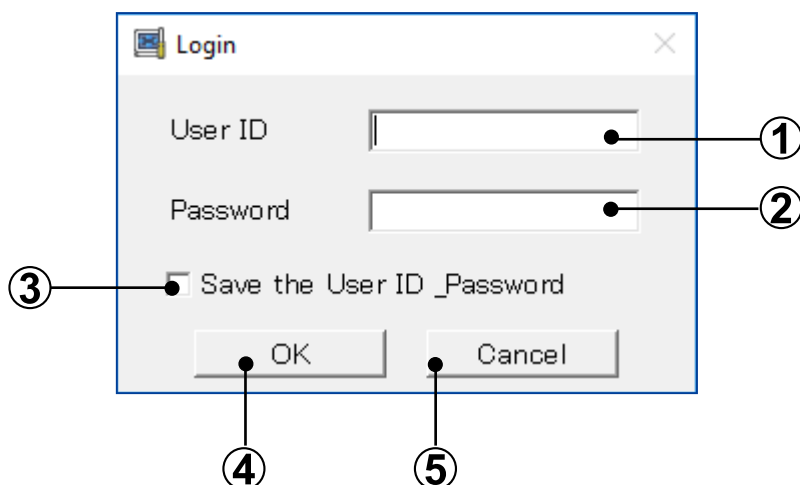
The opening screen is displayed, and operation advances to site data selection processing.
- ⑤ Cancel button
User registration stops and the Web Monitoring Tool ends.



- Note**
- *1 When the user ID and password input fields are not inputted, an error message is displayed.
 - *2 When the password and password confirmation input contents are different, an error message is displayed.
 - *3 Keep your user ID and password secret from anyone.
 - *4 Set a strong password and do not use a easily guessed password. In addition, do not reuse passwords.

3-2-2 Login

Login by registered user. The login screen is also displayed when security is necessary for certain actions.



- ① **User ID input field**
Input the ID of the user to be logged in. (Up to 20 alphanumeric characters) (*1)
- ② **Password input field**
Input the password of the user to be logged in. (Up to 20 alphanumeric characters) (*1)
- ③ **Save the User ID & password check box**
When the Save the User ID & password check box was checked, the same user ID and password are automatically displayed the next time the Web Monitoring Tool is started.

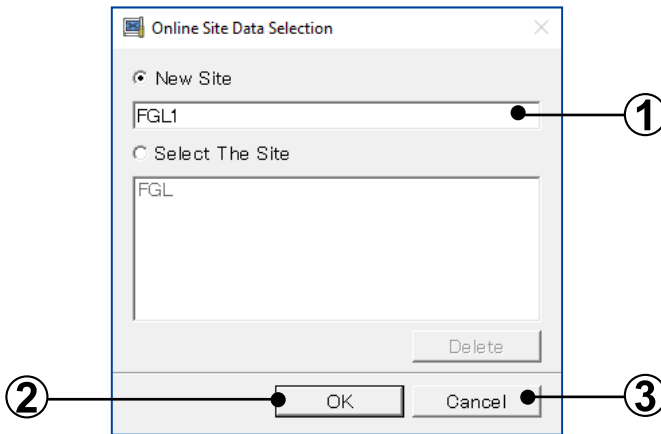
When the Save the User ID & password check box is not checked, the next time the Web Monitoring Tool is started, the user ID and password are not displayed and must be manually inputted.
- ④ **OK button**
The opening screen is displayed, and then operation advances to site data selection processing.
- ⑤ **Cancel button**
The Web Monitoring Tool ends.



Note *1 When the user ID and password input fields are not inputted, an error message is displayed.

3-2-3 Online Site Data Selection

This screen is displayed when registering a new site at initial starting. Only 1 site managed by Web Monitoring Tool can be registered.



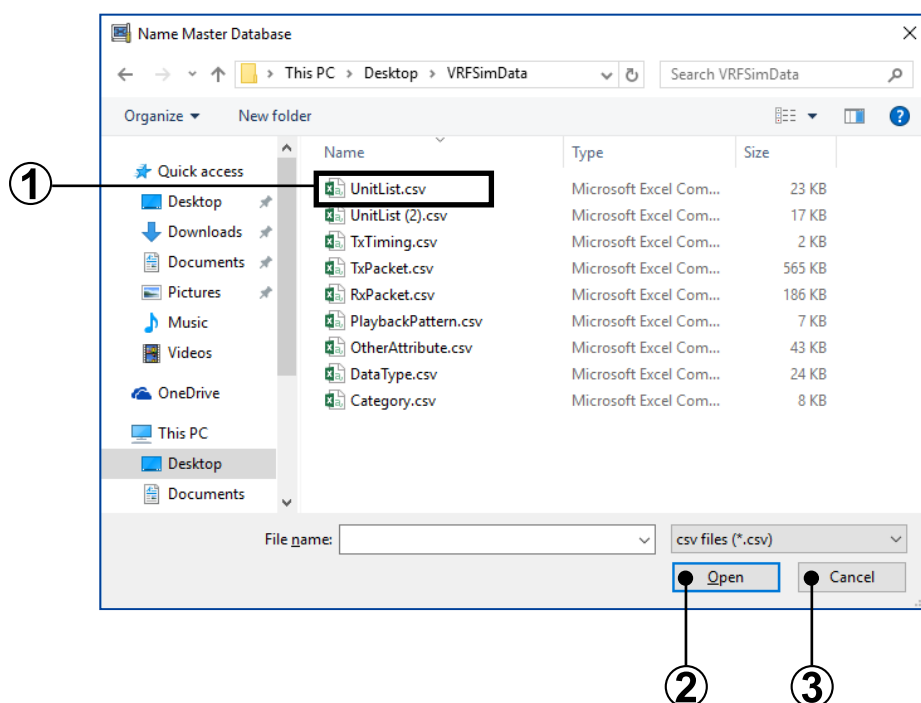
- ①** New site name input field
Input the site name to be registered. Only alphanumeric characters and spaces may be used for the site name. (Up to 20 alphanumerics and spaces)(*1)
- ②** OK button
The name master database file selection screen is displayed.
- ③** Cancel button
The program returns to the login screen.

Note *1 When deleting site data, execute the following batch file.
i C:\Program Files\VRF System\Web Monitoring Tool\Deletesite.bat
When OS is 64 bit, the folder is C:\Program Files(x86)\VRF System\Web Monitoring Tool\Deletesite.bat.
This batch file exist in the Web Monitoring Tool software installation directory. The above directory shows the case where the software installation was performed using the default installation directory. When this batch file is executed, all the site data, including past unit data, is deleted and the site selection screen can be displayed the next time the Web Monitoring Tool is started. It is strongly recommended that you save the data for the current site before deletion.

3-2-4 Name Master Database file selection screen

When scanning is performed by specifying a name master database file (.CSV), the specified file and the unit data actually scanned are collated, and the Mismatched Unit List of par. 3-2-6 can be performed.

Create the name master database file in advance and specify it from this screen.



- ① CSV file selection**
Select a name master database file (.CSV) containing the unit data. (*1)
- ② Open button**
The scanning setting screen is displayed, and after the end of scanning, the differences between the name master database file and actual scanning result can be confirmed.
- ③ Cancel button**
When scanning is performed without selecting a name master database file (.CSV), click this button. (The scanning setting screen is displayed.) In this case, the mismatched unit list screen is not displayed after scanning. (*2)

Note



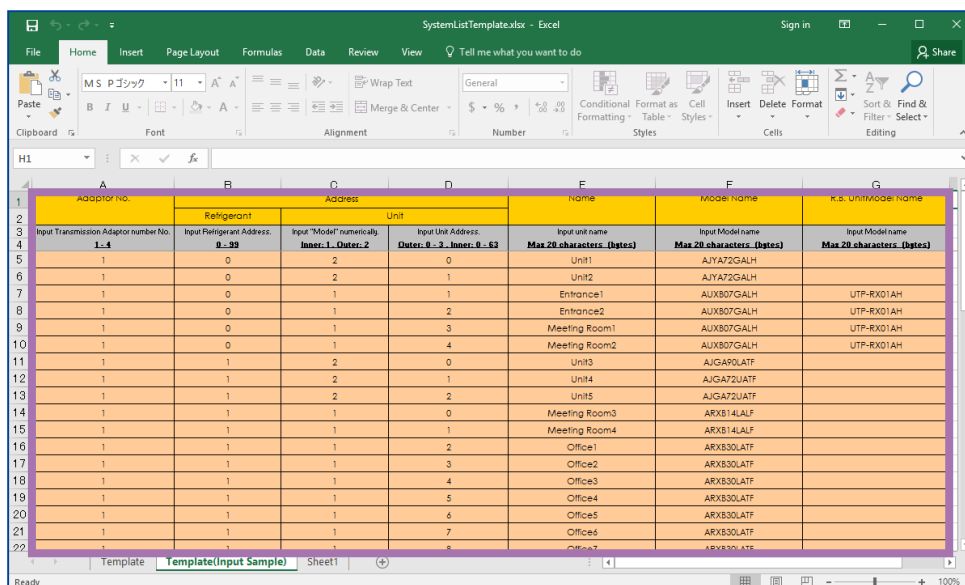
*1 Files other than CSV files cannot be selected and displayed.

*2 When selecting [Cancel] button, an error is not displayed even if there are units which cannot receive the address information normally.

■ Name Master Database file (.CSV) preparation

The address, name, and other information which becomes the comparison source during scanning are saved beforehand in CSV format.

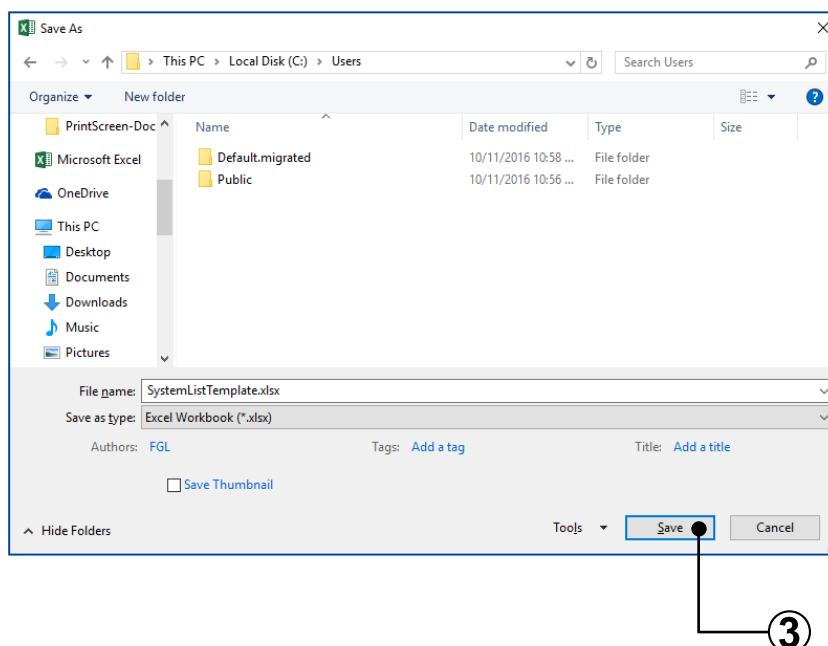
- ① Since the template [SystemListTemplate.xls] is C:\Program Files\AIRSTAGE-Web Monitoring Tool\SystemListTemplate\, open that file with Excel.
(*1) (*2)
- ② Since the following screen is displayed, set a value at each item.



Input contents

Adaptor No.		Enter the Adaptor No. (Range: 1 ~ 4)
Refrigerant		Enter the refrigerant system address (Range: 0 ~ 99)
Unit	Input "Model" numerically	Enter the unit model. (Inner: 1, Outer: 2)
	Input Unit Address	Enter the unit No. (When "1" is inputted in "Model" field, input within the 0 ~ 3 range. When "2" is inputted in "Model" field, input within the 0 ~ 63 range.)
Name		Enter a name which allows easy classification of units. When a name is entered in this field, it is displayed on the Web Monitoring Tool. Entry is not always necessary. When nothing is entered, the name is displayed as a blank. Only alpha-numeric characters and spaces may be used for the unit name.
Model Name		Enter a correct model name for each unit, using alphanumeric characters, "-" and "#". If the model name is unknown, keep the cell blank.
R.B. Unit Model Name		Enter the model name of the R.B. unit connected to each indoor unit using alphanumeric characters, "-" and "#". If the model name is unknown, keep the cell blank.

- ③ Select “Microsoft® Excel workbook (*.CSV)” at Save as type.
Confirm that the file name extension is (.CSV) and then click the [Save] Button. (*3)



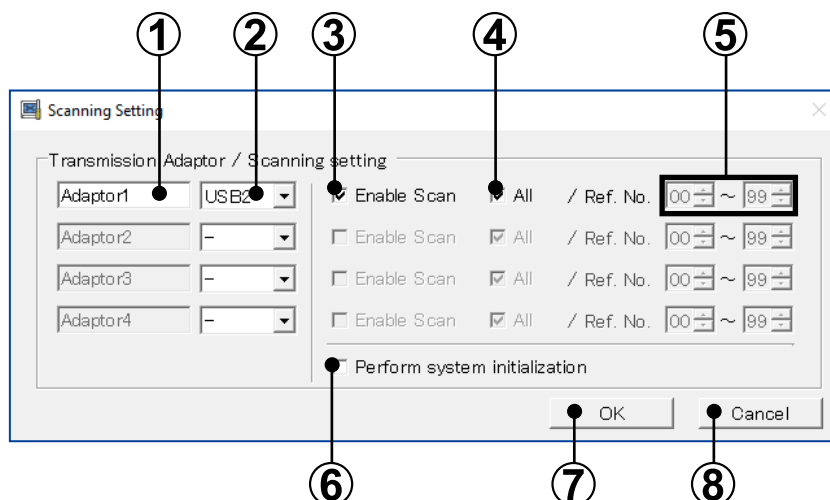
- Note**
- *1 This template is created by spreadsheet program Excel. Excel must be purchased separately.
 - *2 [SystemListTemplate.xls] is in the folder specified when installing the Web Monitoring Tool. When an address other than the default installation address was specified, check that folder.
When OS is 64 bit, the folder is C:\Program Files(x86)\AIRSTAGE-Web Monitoring Tool\SystemListTemplate\.
 - *3 Since a CSV file is not created in formats other than “Microsoft® Excel workbook (*.CSV)” at Save as type, it cannot be used at the name master database file selection screen.

3-2-5 Scanning Setting

■ Scanning Setting screen

The air conditioner indoor units and outdoor units are connected by a transmission bus line and each have unique address information. Scanning collects this information.

Since the Web Monitoring Tool can connect up to 4 transmission adaptors, each adaptor must be set before scanning is performed.



- ① **Transmission adaptor entry field**
The transmission adaptors which can be currently used are displayed. Enter the name to identify the transmission adaptor (up to 10 alphanumeric characters and spaces).

- ② **USB port selection field**
Select the USB port which connects the transmission adaptor.

- ③ **Scan execution setting check**
Check to execute scanning.
Do not check when using existing site data which is currently being read. (*1)

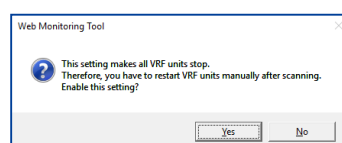
- ④ **Ref. No. range (ALL) check**
Check to scan all the refrigerant systems.
At this time, the range of refrigerant system addresses to be scanned is automatically set to 00 ~ 99.

- ⑤ **Ref. No. range input field**
When ALL is not checked at step ④, input the refrigerant system addresses to be scanned within the 00 ~ 99 range.
Input the start refrigerant system address ~ end refrigerant system address range.

- ⑥ **Perform System Initialization check**
Can be used only when ③ is checked.
Check when you want to acquire more detailed information by scanning. (*2)

When checked, a confirmation screen is displayed. When the [Yes] button is clicked, all the units in the VRF System may be stopped.

When the [No] button was clicked, the check mark is removed.



7 OK button

- When "Enable Scan" checked

Scanning starts and scanning progress is displayed on the scanning progress screen.

Before scanning starts, whether or not scanning is to be performed is displayed on a confirmation screen.

When re-scanning, dialog box will appear confirming whether the existing indoor/outdoor units data (operation data, etc.) may be deleted, after selecting the start of scan.

Yes ... delete the data after scanning, No ... Keep the data,

- * When "No" is selected, please confirm that the number of units is the same as the data currently held.

If "No" is selected and the number of units differs before and after scanning, the following reasons are possible.

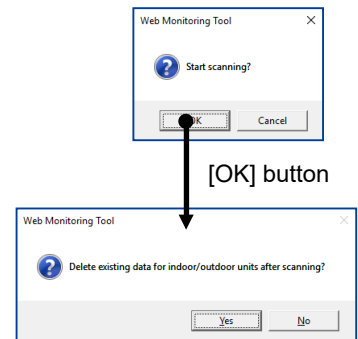
- A communication error has occurred.
- Data collection delay is occurring.

- When "Enable Scan" not checked

The system list screen is displayed without scanning. But when CSV formatted Name Master File (par. 3-2-4) has been already read, the corresponding Name of the unit will be updated.

8 Cancel button

Displays the online site selection screen.



Note

*1 When not checked, since scanning is not performed, the scanning objective refrigerant system address cannot be set.

*2 • When Perform System Initialization checked

Normally, perform bus priority mode scanning. Full scanning which can receive detail data is performed. However, since each unit performs scan dedicated special operation, the units of the entire VRF System temporarily stop. To start scanning, check if the VRF System can be completely stopped, then execute scanning. Since the units remain stopped even when scanning is finished, a restart command must be sent from the control unit.

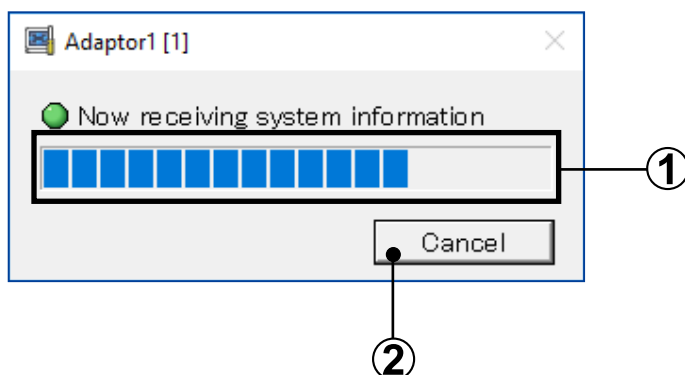
• When Perform System Initialization not checked (S/V series)

Use when scanning at sites at which the VRF System cannot be stopped. In this mode, scanning can be performed without affecting the operating status of the VRF System. However, since R.C group data cannot be received, it is not full scanning. Operation is not controlled in R.C. group units.

• When Single-Split Adaptor (UTR-YRDA) is connected within the VRF system, be sure to check the "Perform System Initialization" when performing scanning in order to recognized the equipment and display correct information.

■ Scanning progress screen

Scanning is started and the scanning progress is displayed.

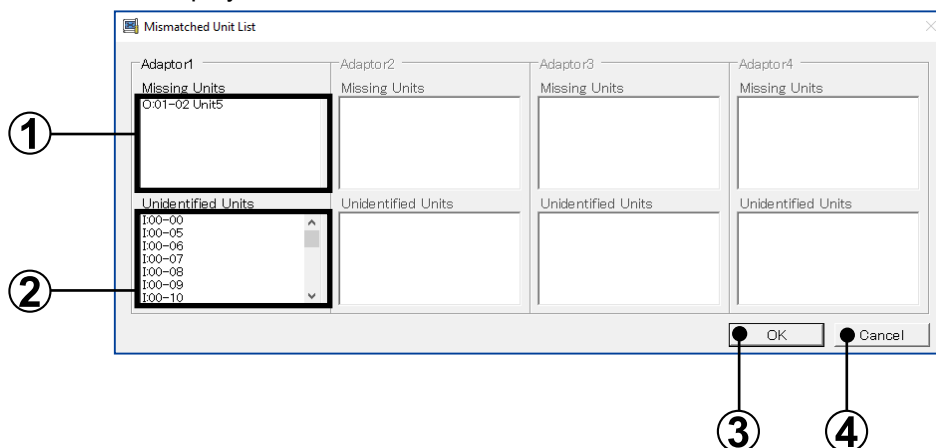


① Scanning progress display field
Displays the progress of scanning.

② Cancel button
Scanning stops and the program returns to the scanning setting screen.

3-2-6 Mismatched Unit List

When a Name Master Database file is specified at "par. 3-2-4 Name Master Database file selection screen", the unit data of the database file and the unit data actually scanned are collated. If there is a mismatch, that unit address is displayed. Therefore, correct the address setting on the board of the displayed unit and then re-scan. Repeat this work until a mismatched unit is not displayed.




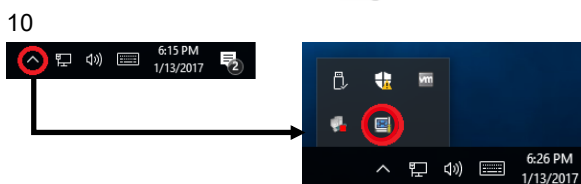
- ① Missing units address display field**
This field displays the unit addresses and unit names whose unit data is defined by name master database, but the relevant data could not be acquired during scanning.
- ② Unidentified units address field**
This field displays the unit address and unit model (indoor unit, outdoor unit) whose address was received during scanning, but whose unit data is not defined by name master database file.
- ③ OK button**
The scanning acquisition data is stored and the system list screen (Refer to "par. 5-3 System List") is displayed. The application icon is also displayed at the task tray.

If there is a unit mismatch, return to the scanning setting screen by clicking the [Cancel] button and repeat collation with the scanning acquired data until there are no mismatches. After confirming that there are not mismatches, click the [OK] button. If the [OK] button was clicked when there is a mismatch, the unit data acquired by scanning is displayed on the system list screen unchanged.
- ④ Cancel button**
The program returns to the scan setting screen.

3-3 Data acquisition application starting (automatic starting)

When initial setting (user registration, site registration) was already completed, the data acquisition application is automatically started and the application icon is displayed on the task tray at the 2nd and subsequent startings. (The data acquisition application of the Web Monitoring Tool is also started automatically when the PC was automatically restored from a power failure, etc.)

When you want to perform each type of operation of the Web Monitoring Tool in the state in which the data acquisition application was already started, perform operation from the right click menu of the application icon of the task tray .




You may also start the Web Monitoring Tool manually when it is not running. When you do so, select “Web Monitoring Tool” in the “VRF System” folder in the “Start Menu”.

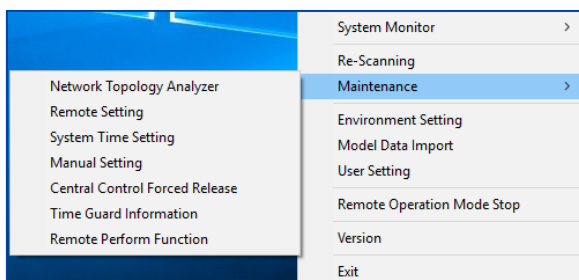
You must be logged in as a user that belongs to an “Administrators Group” in order to be able to start the Web Monitoring Tool.

4. Data acquisition application right click menu

4-1 Outline

4-1-1 Menu

A menu is displayed and various operations can be performed by right-clicking the  application icon on the task tray.

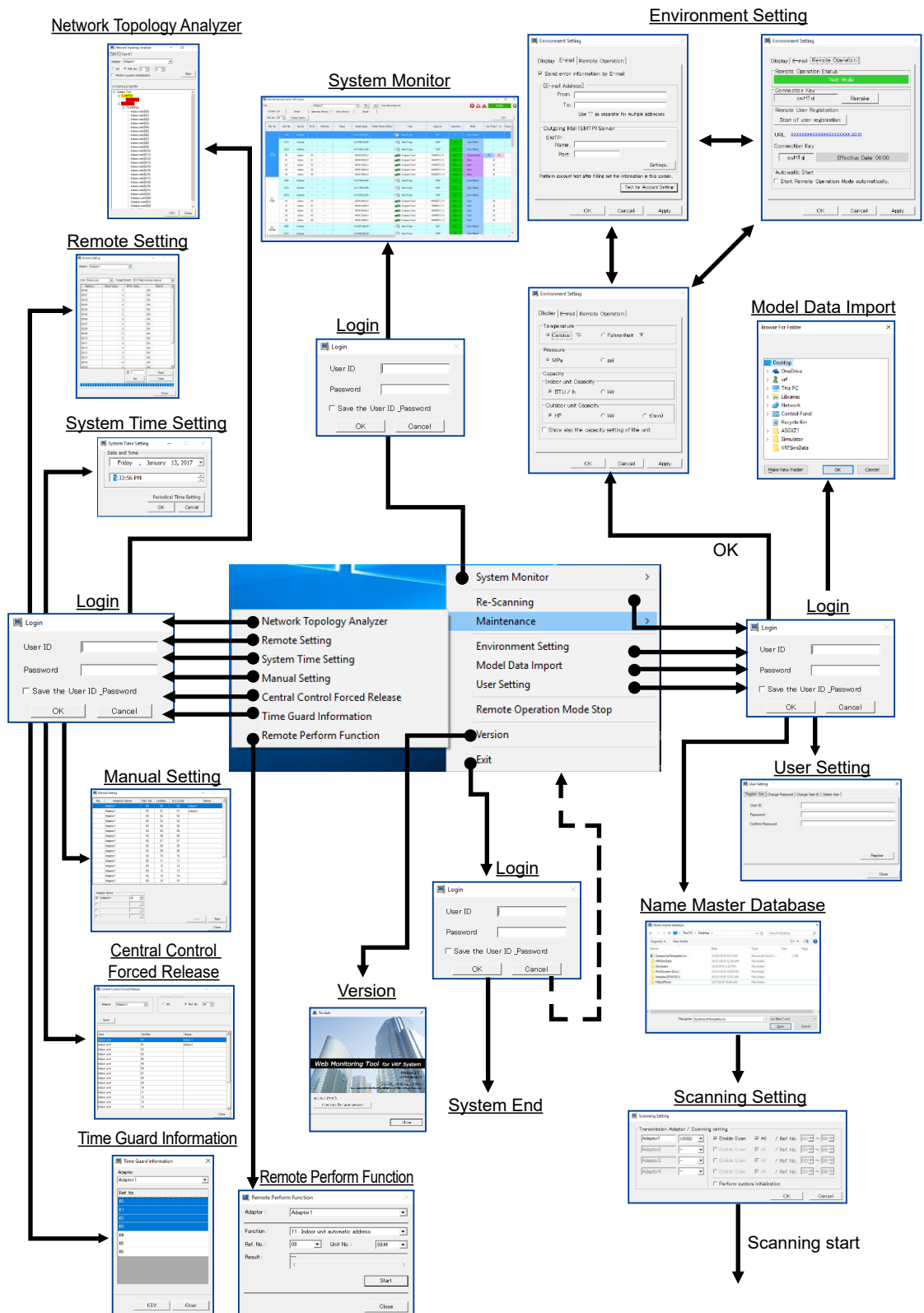


System Monitor	System Monitor screen is displayed.	—
Re-Scanning	Scanning Setting screen is displayed. However, before it is displayed, name master database selection screen is displayed first.	par. 3-2-5
Maintenance	Maintenance sub-menu is displayed.	par. 4-3
Network Topology Analyzer	A list of units connected to the VRF system network is displayed in network segments in tree form. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series)	par. 4-3-1
Remote Setting	Function (Field) Setting for indoor unit and outdoor unit is changed remotely. (J-IIS/J-III/J-IIIL/VR-II/V-III or later series)	par. 4-3-2
System Time Setting	An arbitrary time is set for all the remote controllers within the system. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series)	par. 4-3-3
Manual Setting	Manual Setting screen is displayed.	par. 4-3-4
Central Control Forced Release	The operation setting restriction function of the indoor units set from the controller can be forcibly released. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series)	par. 4-3-5
Time Guard Information	The reference data is output in a CSV file to judge the maintenance time for indoor unit and outdoor unit.	par. 4-3-6
Remote Perform Function	Function of outdoor unit is performed remotely. (J-IIS/J-III/J-IIIL/VR-II/V-III or later series) Not displayed when offline.	par. 4-3-7
Environment Setting	Environment Setting screen is displayed.	par. 4-4
Display	The unit representation setting screen for temperature, pressure, and capacity is displayed.	par. 4-4-1
E-mail	Sets the notification destination e-mail address when an error occurs.	par. 4-4-2 par. 4-4-3
Remote Operation	This screen is displayed only when the remote operation function starts. The setting for remote operation function can be set and the operating status can be checked.	par. 4-4-4

Model Data Import	The newly released model data of VRF indoor unit and outdoor unit is imported.	par. 4-5
User Setting	User setting (registration, change, and deletion) screen is displayed.	par. 4-6
Version	The version information of this application can be checked. If the version is not latest, it can be updated.	par. 4-7
Exit	Exit from the application.	par. 4-8

4-1-2 Screen transition (online)

The following shows transition of the screens which are started from the right click online menu.



4-2 Re-Scanning

Before re-scanning is performed, the login screen of “par. 3-2-2 Login” is displayed. After user authentication is performed, perform operation by the procedure described in “par. 3-2-4 Name Master Database file selection screen”.

For the scanning method, refer to “par. 3-2-5 Scanning Setting”.

4-3 Maintenance

4-3-1 Network Topology Analyzer

A list of units connected to the VRF system network is displayed in tree form in network segments. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series)

This information is also output to a CSV file.



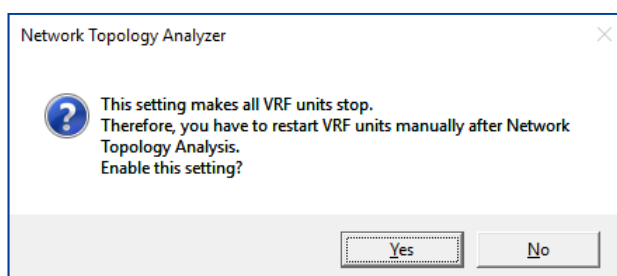
Note When this function is used for VR-II series, do not connect this tool between R.B. unit and indoor unit to obtain the accurate data.

- ① Analyzer type selection tab
Select the type of network topology analyzer from either “Type A” or “Type B”. “Type A” is used for V-II and J-II series, and “Type B” for VR-II, J-IIS, J-III, J-IIIL, V-III or later series.



If the analyzer type is incorrect, the correct results will not be displayed.

- ② Adaptor selection
Selects the transmission adaptor which acquires the connection data.
- ③ Refrigerant system selection
Selects the intended refrigerant address. The type is selected from all refrigerant systems or arbitrary refrigerant system range.
- ④ Refrigerant system range input
Enters the intended refrigerant of this function over the 00 to 99 range when “Ref. No.” is selected at step ③.
- ⑤ “Perform System Initialization” check
When checked, the verification screen is displayed. When the [Yes] button is clicked, all the units in the VRF system stop.
When the [No] button is checked, check mark is removed.



- ⑥ Start button
Starts this processing.



It takes up to 1 hour from start to the end of this process.
However, this process time may be shorten depending on the setting of ④ or ⑤.

- ⑦ Progress bar
Displays the progress of this processing.



When Type B is used, the progress bar display shows the 1000 units of the maximum number of responding units as 100%. Consequently, check the progress state by considering that the last display position depends on the number of responding units.

⑧ Network Topology display

Displays in tree form the data acquired when this tool (System Tool) started.
In addition, the date and time when displayed are displayed at the top of the tree.

Notation contents

S-AMP(X)···Signal Amplifier (address)

Blue background: When the number of units connected in 1 segment exceeded 64.

Red background: When the address of signal amplifier is redundant.

When matched up to the connection point, S-AMP(x) count (number duplicated) is displayed.

Yellow background: When data cannot be acquired from signal amplifier, but they exist in the data acquired from another unit (indoor unit, etc.).(*1)

White background : Normal state other than the above.

Indoor Unit(X)(Y)···Indoor unit (refrigerant address)(unit address)

Outdoor Unit(X)(Y)···Outdoor unit (refrigerant address)(unit address)

Controller(X)(Y)···Peripheral unit (system address)(unit address)

R.B.U(X)(Y)···R.B.unit(refrigerant address)(unit address)

When the same address exists in indoor unit, outdoor unit, and controller respectively, red background is displayed.

In addition, “?” is added before the unit name for the unit corresponding to both “Type A” and “Type B”. In this case, confirm by relevant type of each series described in ① .

Note *1 In the case of Type B, the signal amplifier of yellow background color and the units connected to it are not displayed at the correct segment position.

⑨ CSV button

The information displayed at ⑧ can be saved to CSV file.

[CSV configuration]

- Communication data (reference data) of each unit acquired by this processing

Note Since the address of each unit is the address used in communication, it is different from the screen display address.

- Tree display displayed on the screen

Note

- The signal amplifier background color is replaced by the following symbols.
White : None / Blue: * / Red: ** / Yellow: ***
- The indoor unit, outdoor unit and controller background color are replaced by the following symbols.
White: None / Red: **

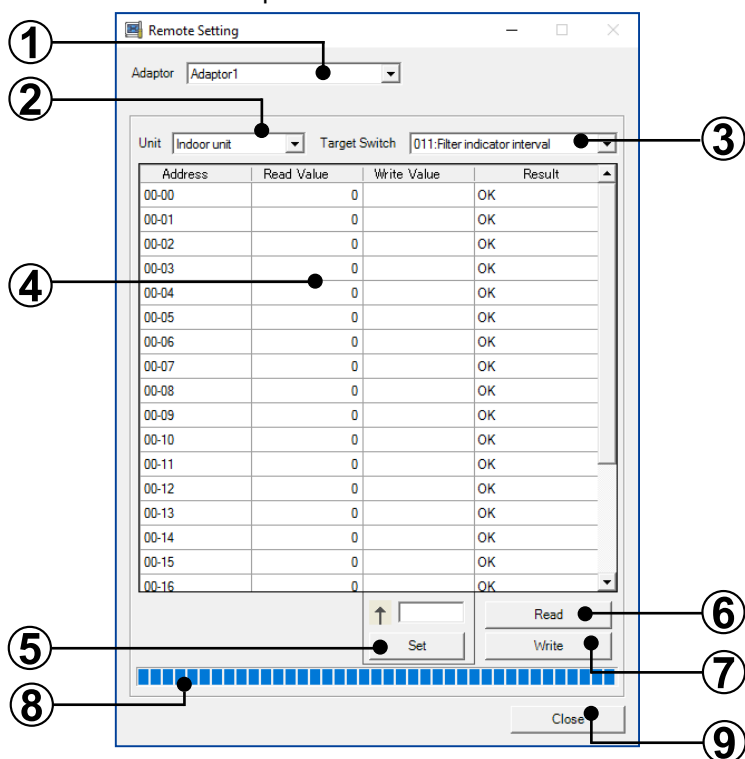
⑩ Close button

Closes this screen.

4-3-2 Remote Setting

Function (Field) setting of the indoor unit and Function (Field) setting defined as Function mode [F2] on the outdoor unit can be changed remotely. (J-IIS/J-III/J-IIIL/VR-II/V-III or later series) (Some settings cannot be supported.)

The processed result can also be output to a CSV file.



- ① **Adaptor selection**
Selects the transmission adaptors which connect the system containing units which perform processing.
- ② **Unit type**
Selects the unit type of the indoor unit and outdoor unit which is to perform processing.
- ③ **Target switch**
Displays the item of the local Function(Field) setting item. (No. + name)
- ④ **Unit list**
Displays a list of addresses (refrigerant No. - unit No.) of the target unit selected at ① and ②.
In addition, multiple units can be handled simultaneously by arbitrary selection (background blue color) for target unit selection.

This list displays the following information, in addition to address.

- Read value

Displays the value of the item selected by combo box of ③ acquired from the target unit.

- Write value

Displays the set value specified at ⑤.

- Result

Displays the result (OK/NG) of execution of ⑥ or ⑦.

When outside the target, '--' is displayed.

⑤ Write value input

The value input here is set at the write value field of the unit selected at ④.

This input value becomes the setting change value of the item selected at ③.



Note For the set value of each Function, refer to the "DESIGN & TECHNICAL MANUAL" or the "INSTALLATION MANUAL" packed with the indoor unit or the outdoor unit.

When clearing the write value, click the [Set] button with the field blank after selecting the target unit.

⑥ Read button

Acquires the value of the item selected at ③ from the unit selected at ④ and displays it at the read value field of ④.

After execution, subsequent processing can be cancelled by clicking the button again.

⑦ Write button

Executes setting of the value input at the write value field of ④ for the unit selected at ④.

Thereafter, the setting contents result is displayed at the read value field of ④ for check use.

After execution, subsequent processing can be cancelled by clicking the button again.

⑧ Progress bar

Displays the state of progress of ⑥ or ⑦ execution.

⑨ Close button

Closes this screen (remote setting screen). However, when read/write processing to unit was performed, confirmation dialog box opens to confirm whether to save the data to a CSV file.



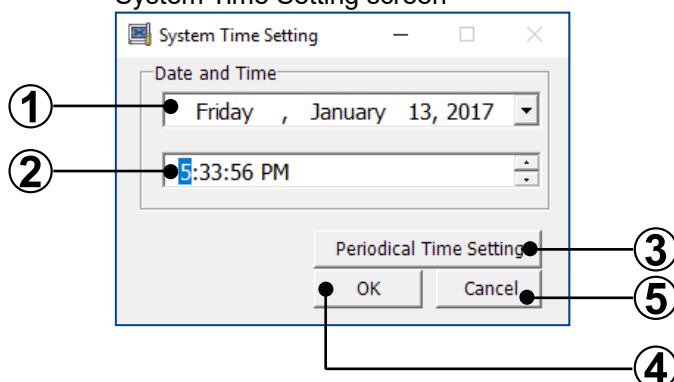
- When both remote setting of the outdoor unit and the setting from the push button on the PCB of the outdoor unit are performed, the setting performed later will be valid.
 - When the remote setting of the outdoor unit and the setting from the push button on the PCB of the outdoor unit are performed at the same time, the remote setting will be invalid.
- Check that the push button is not used before starting the remote setting.

4-3-3 System Time Setting

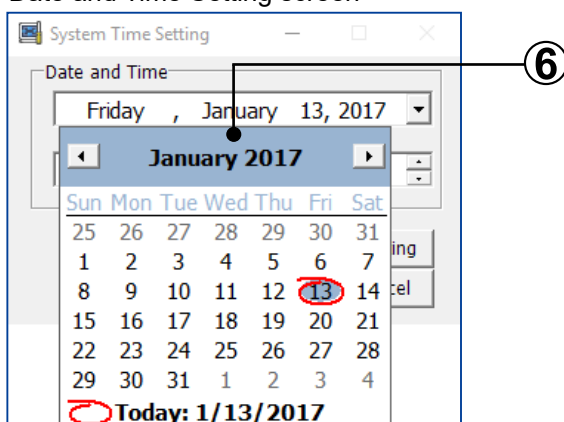
An arbitrary time can be set for VRF System remote controller. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series)

Automatic time adjustment can also be executed periodically.

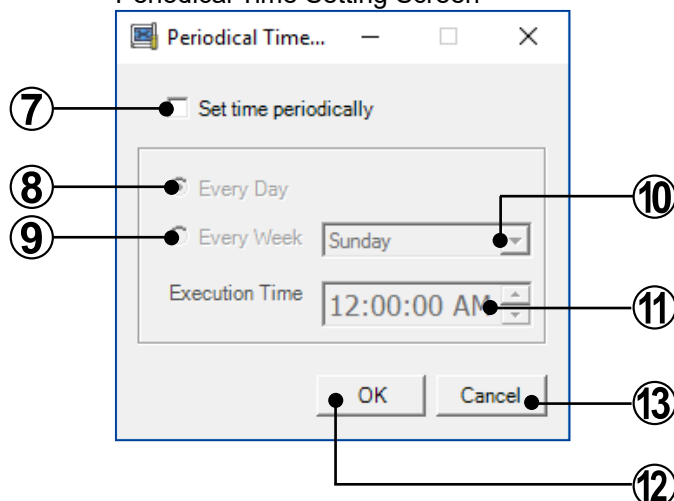
System Time Setting screen



Date and Time Setting screen



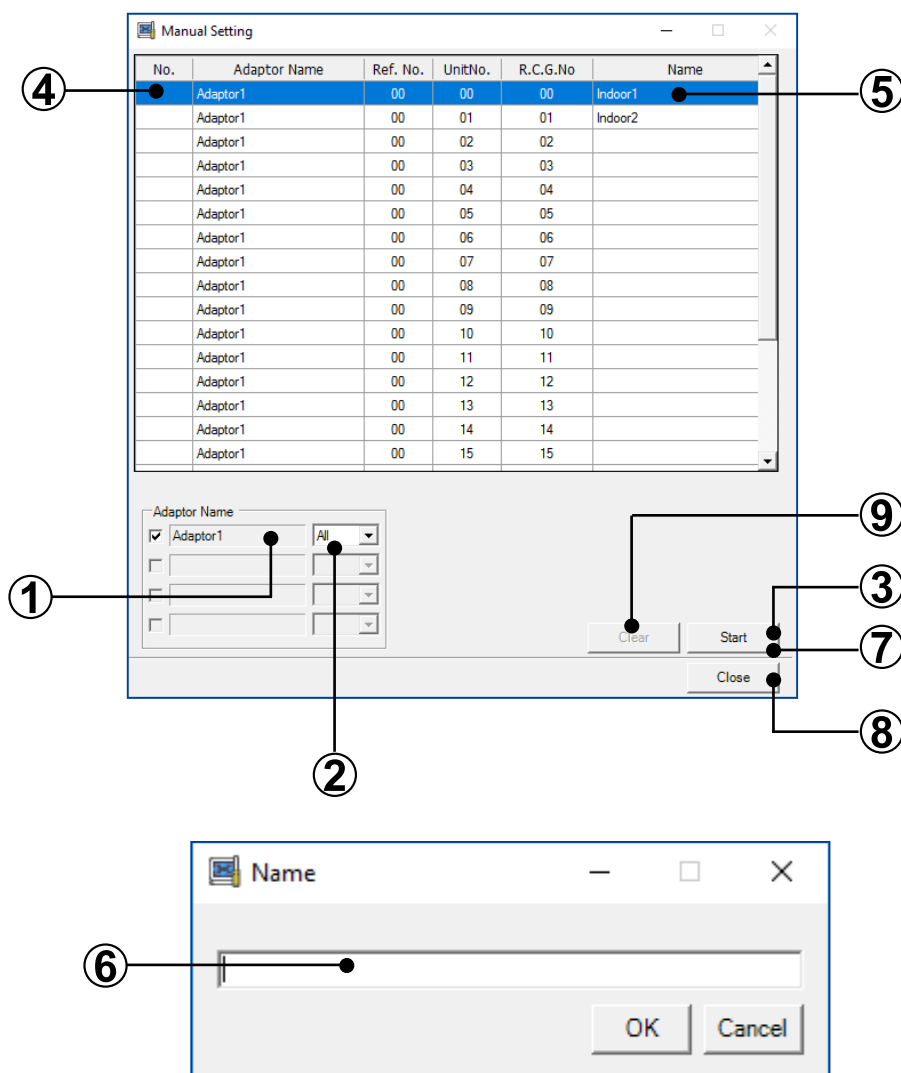
Periodical Time Setting Screen



- ① **Date**
Specifies the date to be set. When this specification field is selected, calendar ⑥ is displayed.
The initial display is the current date.
- ② **Time**
Specifies the time to be set. The initial display is the current time.
- ③ **Periodical Time Setting button**
When clicked, periodical time setting dialog box opens.
- ④ **OK button**
Executes date/time setting using the contents specified at ① ②.
- ⑤ **Cancel button**
Closes this screen.
- ⑥ **Calendar**
Arbitrarily selects from a calendar the date to be set.
- ⑦ **Periodical Time Setting check box**
When checked, time setting is executed periodically at the date/time of ⑧ to ⑪
- ⑧ **Every day button**
When checked, the clock is set to the right time at the time set at ⑪ Execution time every day.
- ⑨ **Every Week button**
When checked, the clock is set to the right time at the time set at ⑪ Execution time of the day of week at ⑩ Day of week setting combo box.
- ⑩ **Day of week setting**
Selects the day of week at which the clock is set to the right time when ⑨ Every week radio button is checked.
- ⑪ **Execution Time setting**
Specifies the time setting of clock to the right time is to be executed.
- ⑫ **OK button**
Enters the set contents of ⑦ to ⑪ and closes the periodical time setting dialog box.
- ⑬ **Cancel button**
Cancels the set contents of ⑦ to ⑪ and closes the periodical time setting dialog box.

4-3-4 Manual Setting

Manual unit name registration by Manual Setting can be performed. Manual Setting enables you to register the names for each scanned unit, by operating each unit ON, one by one.



- ① **Adaptor selection**
Select the network to which manual setting operation is to be performed, by checking the transmission adaptor.
- ② **Select "All" or the desired refrigerant system address to perform manual setting operation.**
- ③ **Start registration**
Click to start. When manual setting operation starts, this button changes to "Stop".

④ Unit operation

Go to the unit location and start the unit operation with a remote controller. The units started will be listed in the order they are started on this list and will be numbered in that order.



Note For the indoor units already allocated a No., No. cannot be updated even by executing this operation. When No. must be reallocated, execute it after clearing the No. (⑨)

⑤ Selecting units

When units are recognized and numbered, double click on the unit. The name registration dialog box will appear.

⑥ Naming units

Enter the name for the unit and click "OK".

⑦ Stop registration

Click "Stop" when finished with the registration.



Note When the operation ③ was executed, always end registration by this operation. If this operation was not performed, the indoor unit will not operate properly thereafter. (Indoor unit fan will not operate.)

⑧ End registration

Click "Close" to end manual setting registration.

⑨ Clear button

Clear the No. (④) of an arbitrarily selected indoor unit. When indoor unit was cleared by this operation, the indoor unit can be operated at ④.

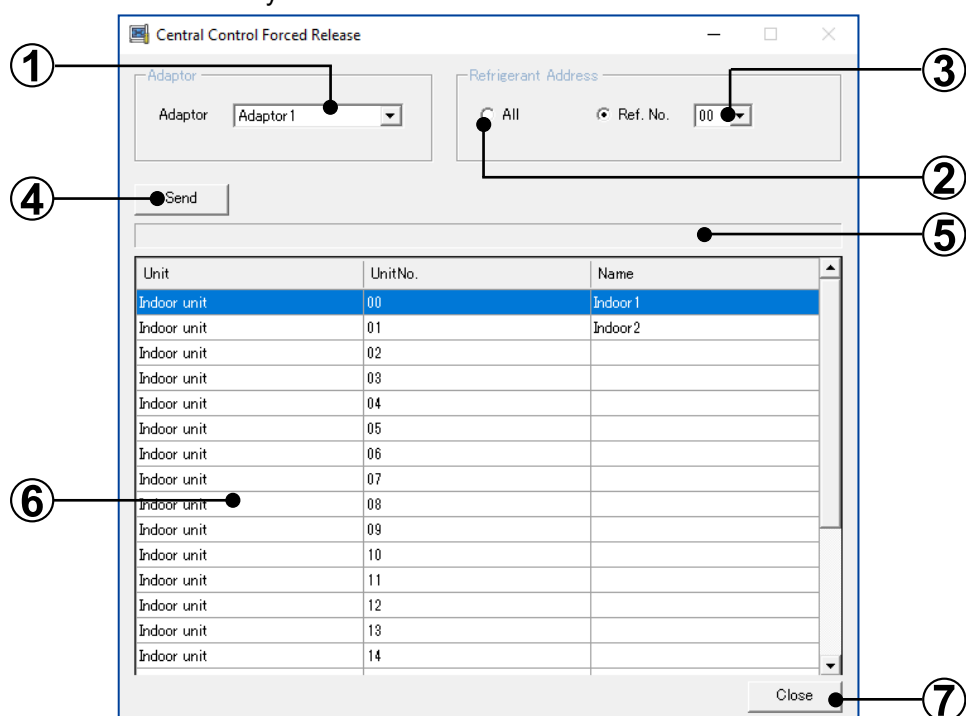


Note Instead of registering names for each start operation, you may operate all the units and name all the units at once after stopping registration.

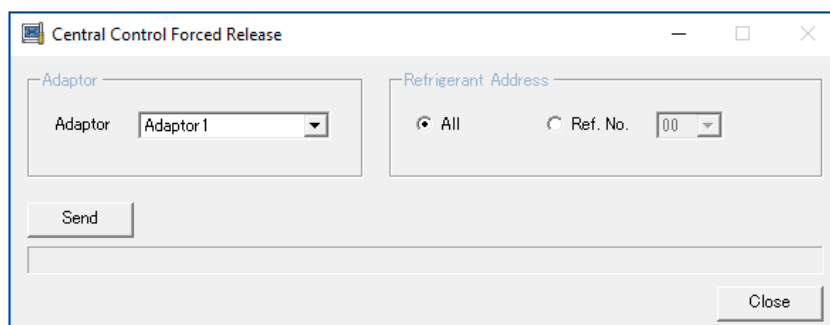
4-3-5 Central Control Forced Release

The operation setting restriction function (remote controller inhibit, temperature upper/lower limit setting) set from the controller can be forcibly released. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series)

When the controller cannot be used for various reasons, the condition can be released and the controller can be used by this function.



- ① Adaptor selection
Selects the transmission adaptor which connects the target unit.
- ② Refrigerant Address selection
Selects the target refrigerant address. Makes the selection from 2 types of all refrigerant and refrigerant 1 as the type of selection.
When "All" is selected, nothing is displayed at ⑥ as shown below.

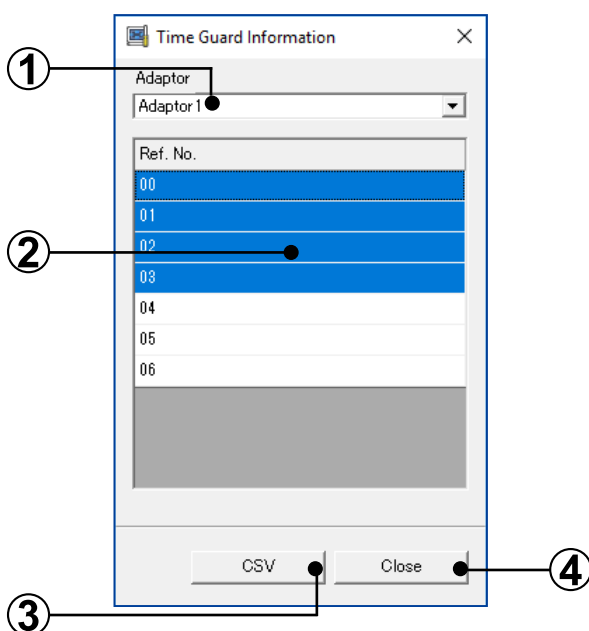


- ③ Refrigerant Address selection
An arbitrary target refrigerant address can be selected.
At this time, the indoor units belonging to the selected refrigerant are displayed at ⑥.

- ④ Send button
Execute Central Control Forced Release for the target indoor unit.
- ⑤ Progress bar
Display the progress of Send.
- ⑥ Unit list
Displays the indoor units belonging to the refrigerant system selected at ③.
Also selects the target indoor unit of this processing.
- ⑦ Close button
Closes this screen.

4-3-6 Time Guard Information

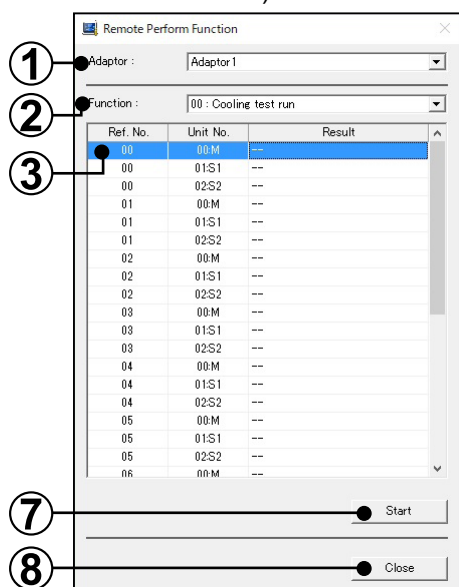
Reference data for judging the maintenance period of indoor and outdoor units (compressor, FAN, etc. integrated time) is output to a CSV file. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series)



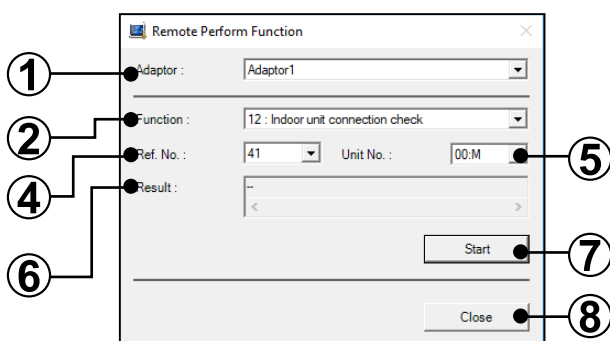
- ① **Adaptor name selection**
Selects the transmission adaptor which connects the target unit.
- ② **Refrigerant system address selection**
Specified the units which acquires this data in refrigerant system units.
- ③ **CSV button**
Outputs the Time Guard data of the indoor units and outdoor units belonging to the refrigerant system address selected at ① and ②.
- ④ **Close button**
Closes this screen.

4-3-7 Remote Perform Function

Function defined as [F3] on the outdoor unit can be performed remotely. (J-IIS/J-III/J-IIIL/VR-II/V-III or later series)



When selecting the function applied to multiple outdoor units



When selecting the function applied to one outdoor unit

- ① Adaptor name selection
Selects the transmission adaptor which connects the target unit.
- ② Function selection
Selects the function to be operated remotely. The window display varies depending on the selected function.
- ③ Outdoor unit selection (for the function applied to multiple outdoor units)
Specifies the outdoor unit to be operated remotely. After the function is performed, the result is displayed.
- ④ Refrigerant system address selection
Specifies the refrigerant system address which the outdoor unit to be operated remotely belongs to.
- ⑤ Outdoor unit selection
Specifies the outdoor unit to be operated remotely.
- ⑥ Result (for the function applied to one outdoor unit)
After the function is performed, the result is displayed.
- ⑦ Start button
Starts the remote operation.



Close button

Closes this screen.

Note



- Even if you perform another function by the remote perform function or the push button on the PCB of the outdoor unit while a function is operating, the function may not be changed.
- When the remote perform function and the function by the push button on the PCB of the outdoor unit are performed at the same time, the remote perform function will not be operated.

Check that the push button is not used before starting the remote perform function.

4-4 Environment Setting

Various settings related to the operating environment are performed.

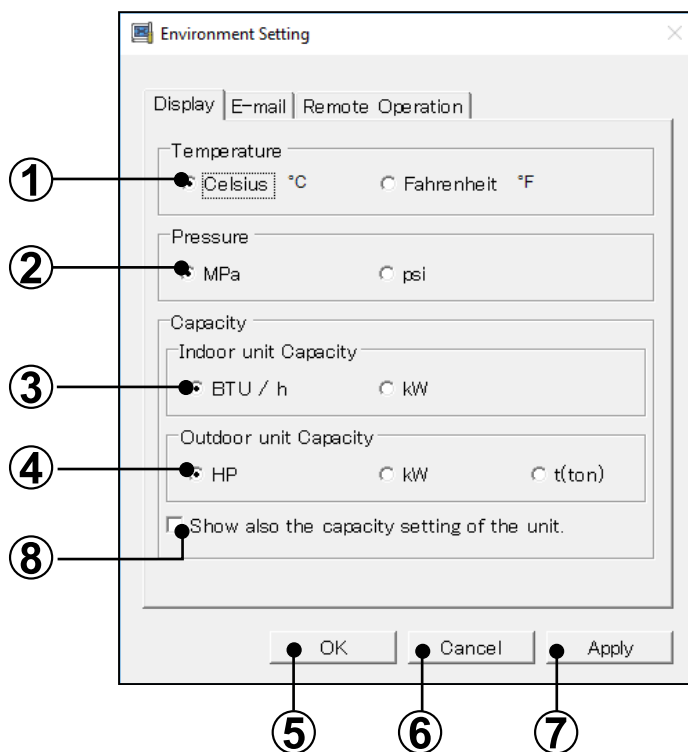
Display tab: Sets the Temperature/Pressure/Capacity display method.

E-mail tab: Sets the notification destination e-mail address when an error occurs.

Remote Operation tab: Sets the Remote Operation function.

4-4-1 Display

Sets the display method of the Temperature/Pressure/Capacity to be displayed by the Monitor application.



- ①** Temperature selection item
Sets the temperature display units.
When you want to display the temperature in centigrade, select “Centigrade °C”.
When you want to display the temperature in fahrenheit, select “Fahrenheit °F”.
- ②** Pressure selection item
Select the pressure display units from “MPa” or “psi”.
- ③** Indoor unit capacity selection item
Select the units of capacity of the displayed indoor unit from “BTU/h” or “kW”.
- ④** Outdoor unit capacity selection item
Select the units of capacity of the displayed outdoor unit from “HP”, “kW” or “t (ton)”.
However, when the unit different from outdoor unit destination is specified, “-” is displayed and the value may not be displayed.

- ⑤ OK button
The set contents are saved and the screen is closed.
- ⑥ Cancel button
Environment setting stops and the screen closes.
- ⑦ Apply button
The set contents are saved.
- ⑧ Show also the capacity setting of the unit.
Simultaneously shows the capacity value set by PCB of each indoor unit and outdoor unit at the capacity display field on each screen. When displayed, it is displayed by {capacity value} to distinguish it from the capacity specified by each model. However, when the unit different from outdoor unit destination is specified, “ - ” is displayed and the value may not be displayed.

**Note**

- This set value is used for switching the capacity of air conditioning control. Since the set value may not correspond to the capacity specified by each model, use it only as a guide. (Slight deviation due to destination differences and setting mistakes at PCB replacement, etc.)
- “kW” of outdoor unit is not displayed because this function is not supported.
- S and V series indoor unit and outdoor unit are not displayed.

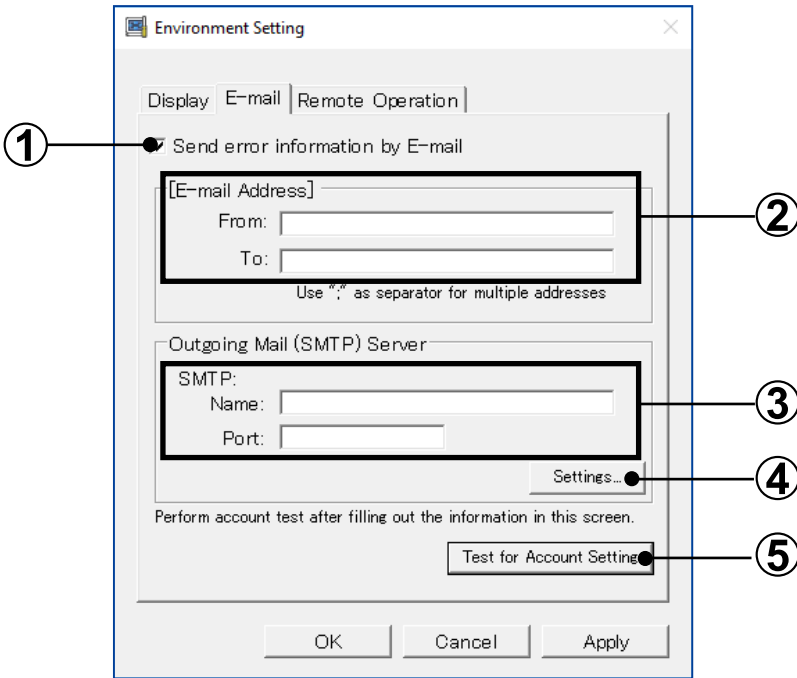
**Note**

After changing the display settings, the changes will take effect only from the Monitor application newly started from the Menu screen.
In order for the changes to take effect, re-display the Monitor application from the Menu Screen (Refer to “par. 5-2 Main menu”).

4-4-2 Error notification e-mail setting

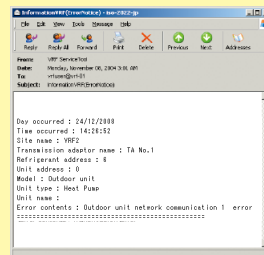
By setting, e-mail can be sent to a pre-registered destination when an error was generated at the VRF system. (*1) The destination e-mail address when an error occurs is set at this screen.

When setting was performed, check whether or not an error is generated at a 5 minutes interval. Even if the error continues 5 minutes or more, e-mail is sent only once at the time of error occurrence. When new error occurs in addition to the error, one e-mail is sent all together.



- ① Error notification check**
Check to send a notification e-mail when an error is generated.
When not checked, error e-mail is not sent.
- ② Transmission address input field**
When “Send error information by E-mail” was checked at ①, input the error notification Sender & receiver e-mail address. (*2)
- ③ E-mail server Name and Port number input field.**
Input the E-mail (SMTP) server name and port number.
- ④ Settings... button**
Opens the Mail Transmission Authentication Setting screen.
- ⑤ Test for Account Setting button**
Sends a test mail by current set value (set value at ① to ③ and mail authentication screen).
When the button is clicked, a transmission result message is displayed.
When the “Test mail transmission succeeded.” message is displayed, check this test mail can be received at the specified address.

- Note** (*1) A contract with the internet connection provider is necessary.
 (*2) E-mail is sent under the title InformationVRF (Error Notice).



4-4-3 Mail Transmission Authentication Setting

When [Settings...] button is clicked at par. 4-4-2 ④, "Mail Transmission Authentication Setting" screen is displayed.

The dialog box is titled "Mail Transmission Authentication Setting". It contains the following elements:

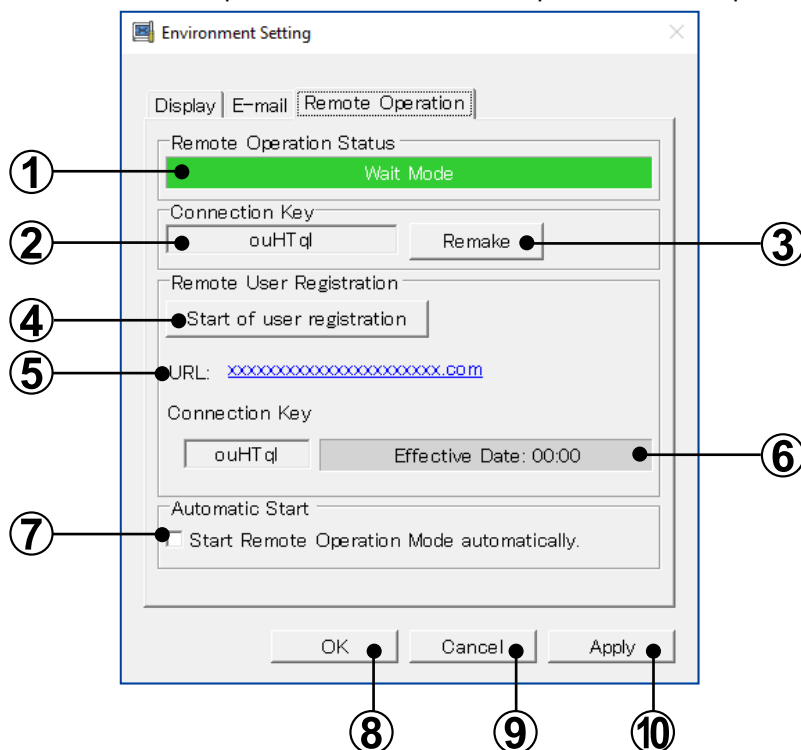
- 1**: Checkmark for "Use Encrypted Connection".
- 2**: Radio button selection for "STARTTLS" (selected) and "SMTP over SSL".
- 3**: Checkmark for "Use Authentication".
- 4**: Checkmark for "POP before SMTP".
- 5**: Text input field for "Account Name".
- 6**: Password input field for "Password".
- 7**: Text input field for "Name" under "Incoming mail (POP3)".
- 8**: Text input field for "Port" under "Incoming mail (POP3)", with an example value of "110".
- 9**: Checkmark for "SMTP-AUTH".
- 10**: Text input field for "Account Name" under "SMTP-AUTH".
- 11**: Password input field for "Password" under "SMTP-AUTH".
- 12**: "OK" button.
- 13**: "Cancel" button.

- ①** Use Encrypted Connection check
Enable the SMTP encryption.
- ②** Encryption protocol selection radio button
Select "STARTTLS" or "SMTP over SSL" for encrypted protocol.

- ③ Use Authentication check**
Select whether or not mail transmission authentication is performed. If checked, authentication is performed. If not checked, authentication is not performed. When checked, **④** or later items below can be set.
- ④ POP before SMTP selection radio button**
Select the mail transmission authentication method.
Set values of **⑤** to **⑥** can be changed.
- ⑤ Account Name input field**
Enter the account name of POP server.
- ⑥ Password input field**
Enter the POP server password. All passwords are displayed by “*”.
- ⑦ Incoming mail (POP3) Name input field**
Enter the name and IP address of POP server used.
- ⑧ Incoming mail (POP3) Port input field**
Enter the port number of POP server used.
- ⑨ SMTP-AUTH (authentication) selection radio button**
Select the mail transmission authentication method.
Set values of **⑩** to **⑪** can be changed.
- ⑩ Account Name input field**
Enter the account name of SMTP server.
- ⑪ Password input field**
Enter the SMTP server password. All passwords are displayed by “*”.
- ⑫ OK button**
Save the set value and close the screen.
- ⑬ Cancel button**
Cancel the set value and close the screen.

4-4-4 Remote Operation

Remote Operation tab is operated only when remote operation function is being executed. The remote operation function can be set and the operating status can be checked. (For the execution method of Remote Operation function, refer to “par. 6 Remote Operation”.)



- ① Remote Operation Status**
The operation mode of current Remote Operation function is displayed.

Wait Mode:

The remote operation function is being executed, however user does not connect to the remote operation site.

Remote Operating Mode:

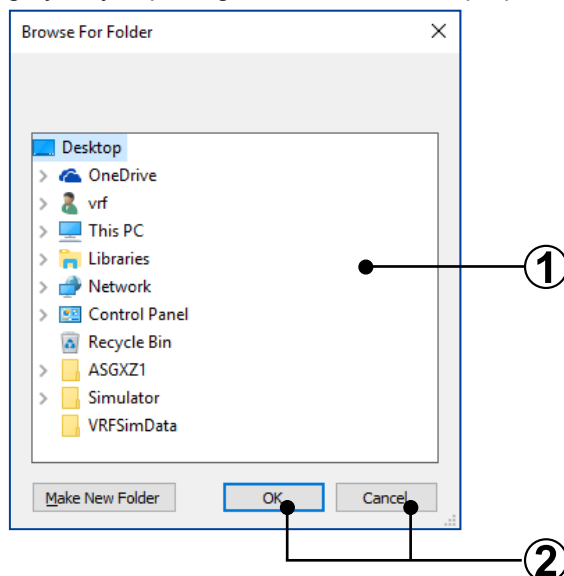
The remote operation function is being executed and user connects to the remote operation site.

- ② Connection Key**
The “Connection key” necessary for starting the remote operation at remote operation site is displayed. The “Connection key” is made up of the six-digit one-byte alphabets and numbers.
- ③ Remake button**
Change the Connection key
- ④ Start of user registration button**
“Connection key” is enabled.

- ⑤ **Linked URL for user registration site**
Linked URL used for registering user ID and password to log in the remote operation site is displayed.
- ⑥ **User registration deadline**
The deadline to create login account to remote operation site is displayed by count-down.
- ⑦ **Start Remote Operation Mode automatically check**
When checking the checkbox, Remote Operation Mode starts automatically at Web Monitoring Tool start-up.
- ⑧ **OK button**
Closes this screen after the setting is saved.
- ⑨ **Cancel button**
Closes this screen after the setting is deleted.
- ⑩ **Apply button**
Saves the setting. This screen is not closed.

4-5 Model Data Import

The newly released model data of VRF indoor unit and outdoor unit can be imported. This function makes it possible to display the new circuit diagrams of indoor unit and outdoor unit and troubleshooting by only importing the dedicated data prepared in advance.



- ① Folder designation
Select the folder containing the model data file acquired beforehand.
- ② OK/Cancel button
OK: Imports the model data in the designated file.
Cancel: Cancels the model data import.



- Note**
- Do not change the file configurations such as the model data file deletion, the file name change, etc.
 - This tool and the model data consist of the following 2 versions:
Version...Version that identifies the tool to be imported (application version)
Data Version...Version that identifies the kind of model data
When using this function, the conditions of each version must be satisfied.

<Target conditions>

This tool	Condition	Model data
Version	=	Version
Data Version	\leq	Data Version

- * If these conditions are not satisfied, the version of the tool itself must be upgraded or the newest version of the model data must be acquired.

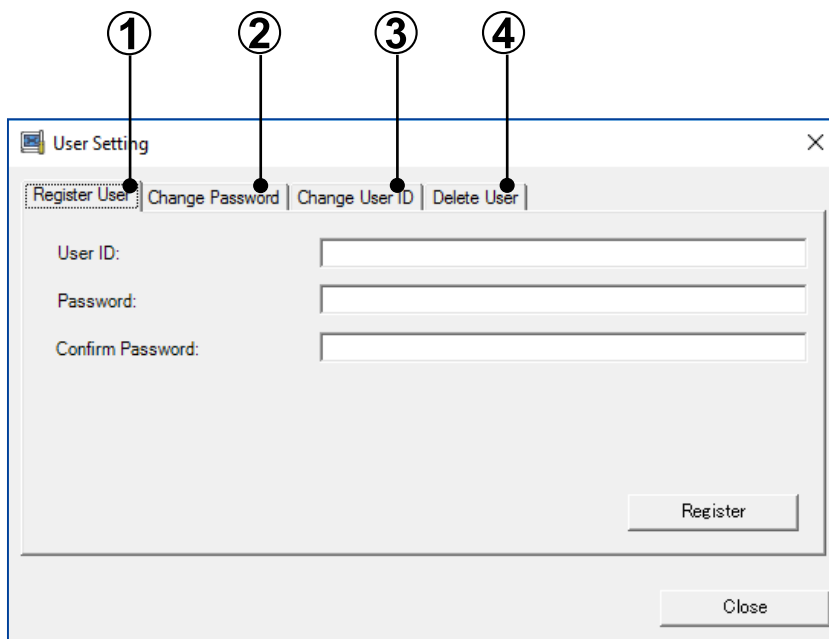
Each version is checked by the following method:

This tool...Task tray icon right click menu → Version selection

Model data...Refer to ReadmeFirst.

4-6 User Setting

Performs Register User, Change Password, Change User ID and Delete User. When User Setting is selected from right-click menu, User Setting screen is displayed.



- ①** Register User tab
Displays the Register User screen.
- ②** Change Password tab
Displays the Change Password screen.
- ③** Change User ID tab
Displays the Change User ID screen.
- ④** Delete User tab
Displays the Delete User screen.

4-6-1 Register User

Registers new user ID and password. A data acquisition application start user can be added.

The screenshot shows a 'User Setting' dialog box with a title bar and a close button (X). Inside, there are four tabs: 'Register User' (selected), 'Change Password', 'Change User ID', and 'Delete User'. Below the tabs are three input fields: 'User ID:', 'Password:', and 'Confirm Password:'. To the right of each input field is a black dot with a line pointing to a circled number: 1 for User ID, 2 for Password, and 3 for Confirm Password. At the bottom right of the dialog are two buttons: 'Register' and 'Close'. A black dot with a line points to the 'Register' button (4) and another points to the 'Close' button (5).

- ① User ID input field
Input the user ID. (Up to 20 alphanumeric characters) (*1)
- ② Password input field
Input the password. (Up to 20 alphanumeric characters) (*1)
- ③ Password confirmation input field
For confirmation, input the password again. (Up to 20 alphanumeric characters) (*2)
- ④ Register button
Registers the inputted contents. (*3)
- ⑤ Close button
Closes this screen.



- Note**
- *1 If the user ID and password input fields are not inputted, an error message is displayed.
 - *2 If there is a difference in the password and password confirmation input contents, an error message is displayed.
 - *3 If the same user ID is already registered, an error message is displayed.
 - *4 Keep your user ID and password secret from anyone.
 - *5 Set a strong password and do not use a easily guessed password. In addition, do not reuse passwords.

4-6-2 Change Password

The password of a registered user can be changed.

The screenshot shows a 'User Setting' dialog box with a title bar and a close button (X). Inside, there are four tabs: 'Register User', 'Change Password' (which is selected), 'Change User ID', and 'Delete User'. Below the tabs are four input fields: 'User ID:', 'Password:', 'New Password:', and 'Confirm New Password:'. Each field has a dropdown arrow on its right side. At the bottom right of the dialog are two buttons: 'Update' and 'Close'. Numbered callouts point to the following elements: 1. User ID dropdown arrow, 2. Password dropdown arrow, 3. New Password dropdown arrow, 4. Confirm New Password dropdown arrow, 5. Update button, and 6. Close button.

- ①** User ID selection field
Select the user to be changed.
The currently registered users can be displayed and selected with [▼].
- ②** Password input field
Input the password of the user to be changed. (Up to 20 alphanumeric characters) (*1)
- ③** New password input field
Input the password to be newly registered. (Up to 20 alphanumeric characters) (*1)
- ④** New password confirmation input field
For confirmation, input the password again. Input the same password as the new password. (*2)
- ⑤** Update button
Performs change processing according to the inputted contents. (*3)
- ⑥** Close button
Closes this screen.


- Note** **i** *1 When the password and new password input fields are not inputted, an error message is displayed.
- *2 When the contents input at the new password and new password confirmation input fields do not match, an error message is displayed.
- *3 When the password of the selected user ID is incorrect, an error message is displayed.
- *4 Keep your password secret from anyone.
- *5 Set a strong password and do not use a easily guessed password. In addition, do not reuse passwords.

4-6-3 Change User ID

The User ID of a registered user can be changed.

The screenshot shows a 'User Setting' dialog box with a title bar and a close button (X). Inside, there are four tabs: 'Register User', 'Change Password', 'Change User ID' (which is selected and highlighted with a dotted border), and 'Delete User'. Below the tabs, there are three input fields: 'User ID:' with a dropdown arrow (callout 1), 'New User ID:' (callout 2), and 'Password:' (callout 3). At the bottom right, there are two buttons: 'Update' (callout 4) and 'Close' (callout 5).

- ① User ID selection field
Select the user to be changed.
The currently registered users can be displayed and selected with [▼].
- ② New User ID input field
Input the new user ID to be newly registered. (Up to 20 alphanumeric characters) (*1)
- ③ Password input field
Input the password of the user to be changed. (Up to 20 alphanumeric characters) (*1)
- ④ Update button
Registers the inputted contents. (*2)
- ⑤ Close button
Closes this screen.

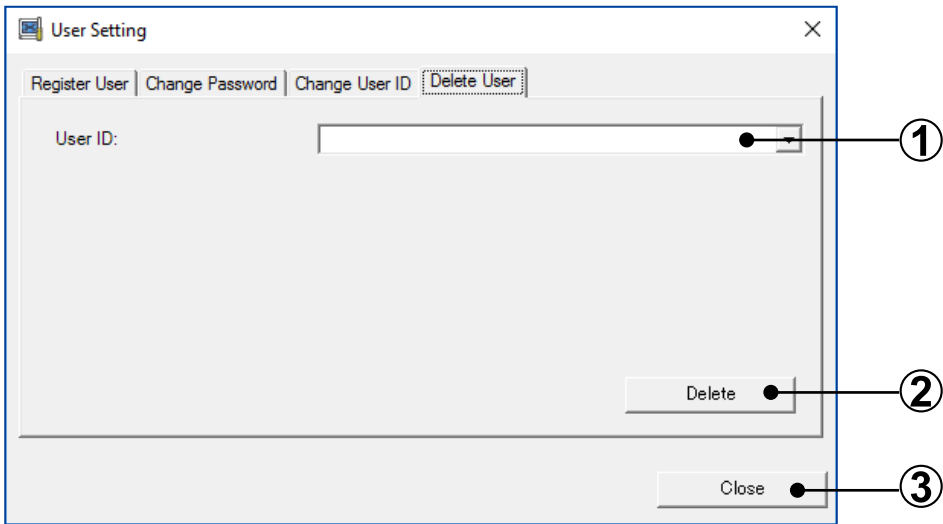
Note  *1 When the new user ID and password input fields are not inputted, an error message is displayed.

*2 When the password of the selected user ID is incorrect, an error message is displayed.

*3 Keep your user ID secret from anyone.

4-6-4 Delete User

Deletes registered users.



- 1** User ID selection field
Select the user to be deleted.
The currently registered users can be displayed and selected with [▼].
- 2** Delete button
Deletes the selected user. (*1)
Confirmation screen is displayed to confirm whether the deletion is performed. When deleting, click the [Yes] button. When not deleting, click the [No] button.
- 3** Close button
Closes this screen.

Note *1 When the [Delete] button is clicked, if the selected User ID is used, it cannot be deleted.

*2 If you are not using the “WEB MONITORING TOOL for VRF System” any more, be sure to delete your user so as that your customer information will be appropriately erased.

4-7 Version

Software version information can be checked and software can be updated to the latest version.

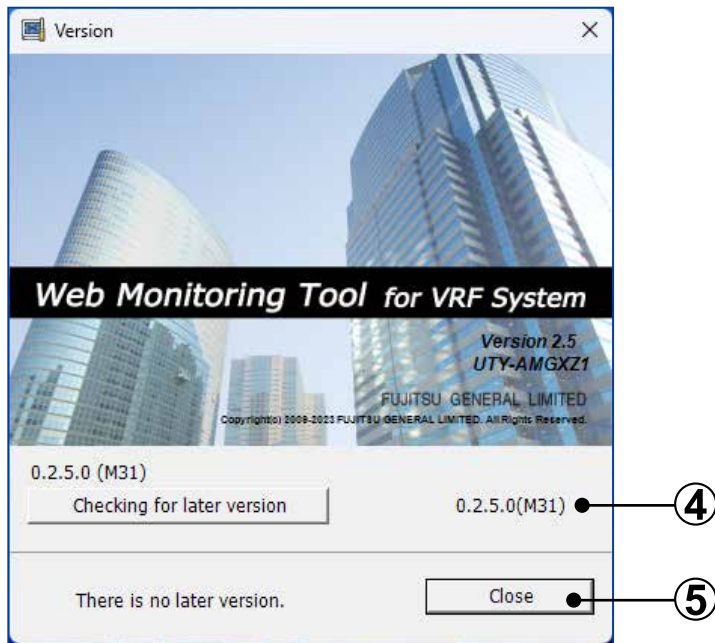


- ① **Current software version**
Current software version information is displayed.
- ② **Checking for later version button**
Acquires the software version information from the server and confirms whether the currently used software version is the latest or not.
- ③ **Close button**
Closes this screen.



Note • Make sure to keep your “WEB MONITORING TOOL for VRF System” up-to-date with the latest version.

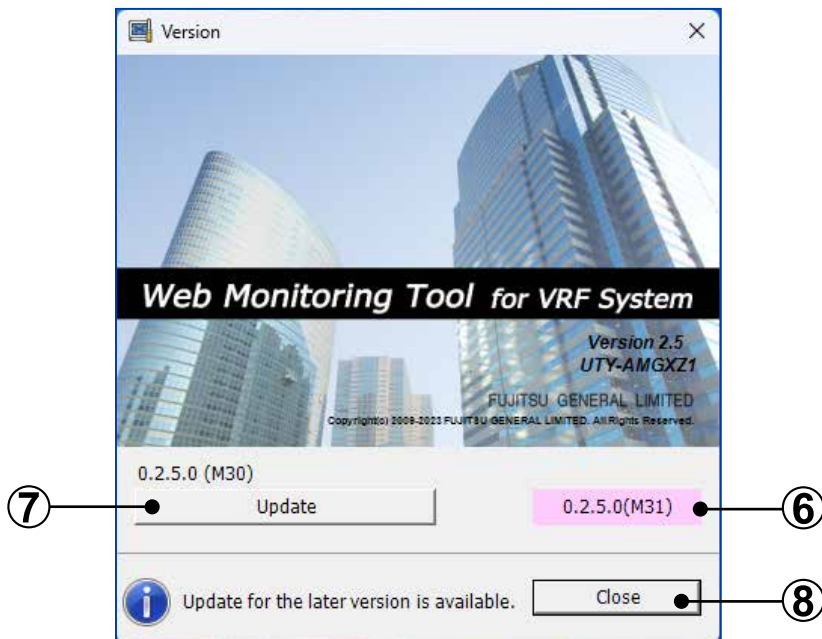
When the version information is the latest



- ④ Version information acquired result (for the latest)
When the version information is the latest, the message “There is no later version.” is displayed. Then, the version information is also displayed.

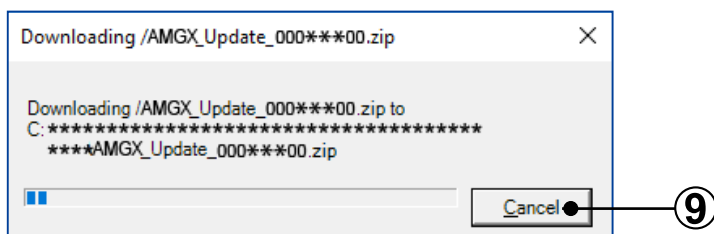
- ⑤ Close button
Closes this screen.

When the version information is not the latest



- ⑥ Version information acquired result (for not the latest)
When the version information is not the latest, the message “Update for the later version is available” is displayed. Then, the usable latest version information is displayed. The background color of latest version information is pink.
- ⑦ Update button
Update starts and update progress is displayed on the update progress screen.
- ⑧ Close button
Closes this screen.

Update progress screen



- ⑨ Cancel button
Stops the update progress and returns to the previous screen.

- After the Update progress screen is displayed, follow the on-screen instructions to operate.
- When the installation execution screen is displayed, perform the installation after shutting down the Web Monitoring Tool.



- When the communication with the server fails, the message “Cannot access the server” is displayed. Check the internet environment and perform the communication with the server again.

4-8 Exit

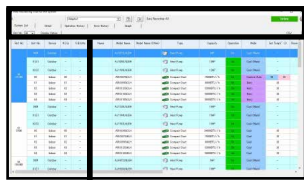
To exit the Web Monitoring Tool, user authentication is necessary. This is a measure so that the Web Monitoring Tool is not exited improperly by a user other than the related user. Since the login screen of par. 3-2-2 is displayed when Exit is selected, input the user ID/password.

The Web Monitoring Tool can be exited only when the user was authenticated.

5. Monitor Application

5-1 Screen transition

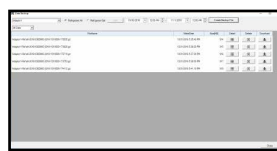
Main Screen (System List)



Operation Setting



Data Backup



Setting

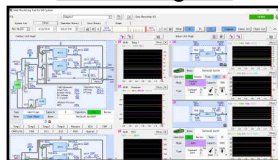
- Data Recording Setting
- Room Temperature Display Selection
- VRF Sensor Mark List
- Troubleshooting

Expanded view

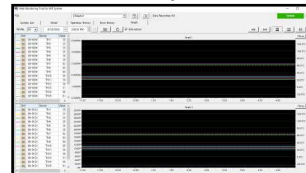
Main menu



Detail Diagram



Graph

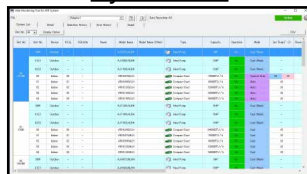


Detail Status List

Error History

Detail Check List

System List



Operation History

•Operation Setting

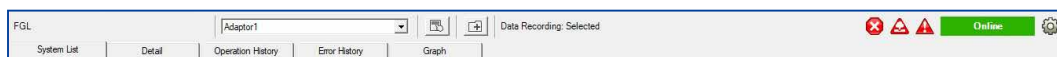
* For details, refer to the description of each screen.




* For dashed arrows, the screen can be moved from right-click menu on the system list.

Screen	Function	Par.
System List screen	Lists the status of each unit and the overall operating status can be grasped. This screen is displayed when shifting from the menu screen.	par. 5-3
Detail Diagram screen	Performs normal operation check and cause specification when an error was occurred from the detailed status display of the units.	par. 5-4
Detail Status List screen	Detail data for all the units in the specified refrigerant system will be displayed at a certain point of time.	par. 5-5
Detail Check List screen	Calculates each check item by the value of sensor inside the outdoor unit or indoor unit and judges whether the results are normal or not.	par. 5-6
Operation History screen	Displays the indoor units or outdoor units operating history information for each unit.	par. 5-7
Error History screen	Displays the error information for each unit.	par. 5-8
Graph screen	Displays the sensor information by more detailed graph.	par. 5-9
Operation Setting screen	Operation of each refrigerant system, indoor unit, or R.C. group can be controlled.	par. 5-12
Data Backup screen	Any unit data currently displayed can be saved.	par. 5-11
Setting	Data Recording Setting and Room Temperature Display Selection can be operated and VRF Sensor Mark List and Troubleshooting can be checked.	par. 5-13

5-2 Main menu

Menu which is displayed at the top of the screen. Each time the button is clicked, the display shifts to the screen of the next function.



Site Name	Displays the site name registered and selected by "Online Site Data Selection".
Adaptor	Displays the name of the transmission adaptor being used.
Online/Offline	Displays Online work status or Offline work status.
System List	Shifts to the System List screen.
Detail	Shifts to the Detail screen.
Operation History	Shifts to the Operation History screen.
Error History	Shifts to the Error History screen.
Graph	Shifts to the Graph screen.
Operation Setting	Displays the Operation Setting screen.
Data Backup	Displays the Data Backup screen.
Setting	Displays the Setting menu. When you select the item you want to operate or check, Data Recording Setting and Room Temperature Display Selection can be operated and VRF Sensor Mark List and Troubleshooting can be checked.
 (Emergency Stop)	When Emergency Stop is operated, this icon is displayed.
 (Refrigerant Leak)	When Refrigerant Leak is detected, this icon is displayed.
 (Error)	When an error occurs, this icon is displayed. When the icon is clicked, the screen shifts to the Error History screen.
Data Recording	Displays the intended operating data of indoor units / outdoor units (sensor data, etc.) to be acquired. <div style="margin-left: 40px;"> All : indoor units / outdoor units of all refrigerant systems Ref. No : only indoor units / outdoor units of specified one refrigerant system Selected : only indoor units / outdoor units specified by Data Recording Setting </div>

5-3 System List

This screen grasps the overall operating status from a list of the status of each unit. When an error unit is detected at this screen, shift to the system detail screen (Refer to "par. 5-4 Detail Diagram") and then check the detailed status.

5-3-1 Name and function of each area

Control area

Service Tool for VRF System

FGLBuilding

System List

Detail

Operation History

Error History

Graph

Record Display: All

Online

Ref. No.

Unit No.

Display Option

CSV

Ref. No.	Unit No.	Device	R.C.G.	R.B.G. No.	Name	Model Name	Model Name (Other)	Ref. Type	Type	Capacity(HP)	Operation	Mode	Set Temp.(°C)	Room Temp.(°C)
00 (48 T/C)	00 M	Outdoor	-	-	AJY040KCTAH			R32	Heat Pump	4HP	On	Cool	-	-
	01 S1	Outdoor	-	-	AJY040KCTAH			R32	Heat Pump	5HP	On	Cool	-	-
	02 S2	Outdoor	-	-	AJY040KCTAH			R32	Heat Pump	6HP	On	Cool	-	-
	00	Indoor	00	-	AJUB12TLAV2		-	-	Compact Duct	12000BTU / h	On	Cool	20	22
	01	Indoor	01	-	AJUB14TLAV2		-	-	Compact Duct	14000BTU / h	On	Dry	20	22
	02	Indoor	02	-	AJUB12TLAV2		-	-	Compact Duct	12000BTU / h	On	Cool	20	22
	03	Indoor	03	-	AJUB14TLAV2		-	-	Compact Duct	14000BTU / h	On	Fan	-	-
	04	Indoor	04	-	AJUB12TLAV2		-	-	Duct	12000BTU / h	On	Cool	20	22
	00 M	Outdoor	-	-	AJH040KCTAH			R410	Heat Pump	4HP	On	Cool	-	-
	01 S1	Outdoor	-	-	AJH040KCTAH			R410	Heat Pump	5HP	On	Cool	-	-
01 (48 T/C)	02 S2	Outdoor	-	-	AJH040KCTAH			R410	Heat Pump	6HP	On	Cool	-	-
	00	Indoor	00	-	AJUB12TLAV2		-	-	Duct	12000BTU / h	On	Cool	20	22
	01	Indoor	01	-	AJUB14TLAV2		-	-	Compact Duct	14000BTU / h	On	Dry	20	22
	02	Indoor	02	-	AJUB12TLAV2		-	-	Duct	12000BTU / h	On	Cool	20	22
	03	Indoor	03	-	AJUB14TLAV2		-	-	Duct	14000BTU / h	On	Fan	-	-
	04	Indoor	04	-	AJUB12TLAV2		-	-	Duct	12000BTU / h	On	Cool	20	22
	00 M	Outdoor	-	-	AJUA20ULCV5			R410	Heat Pump	8HP	On	Cool	-	-
	01 S1	Outdoor	-	-	AJUA20ULCV5			R410	Heat Pump	10HP	On	Cool	-	-



List display area

Control area

Ref. No.	Specifies the refrigerant system address (narrow down display)
Display Option	Selects display / hidden for the item displayed at list area.
CSV	Saves the specified data to a CSV file.

List display area

Ref. No.	Displays the refrigerant system address Displays the capacity ratio of the indoor units connected to 1 refrigerant system.
Unit No.	Displays the Unit No. and master / slave operation for outdoor unit. Shifted to unit detail screen of the selected Unit No. by click operation.
Device	Displays the Indoor unit or Outdoor unit.
R.C.G.	Displays the R.C. Group No.
R.B.G.No.	Displays the R.B. unit group No.
Name	Displays the unit name.
Model Name	Displays the model name of the unit. If the model name is with "[]" brackets, the name was written after shipment. If the model name is with "()" brackets, the name was read from the Name master database file.

Model Name (Other)	Displays the model name of the attached unit of the unit.
Ref. Type	Displays the type of refrigerant being used.
Type	Displays the unit type.
Capacity	Displays the indoor unit and outdoor unit capacity. However, S and V series outdoor units are not displayed. Indoor unit capacity is displayed in [BTU/h] or [kW] units. Outdoor unit capacity is displayed in [HP] or [ton] , [kW] units. Displays {capacity value} when it is set at "par. 4-4-1 Display".
Operation	Displays the operating status. When auto off timer is set at Operation settings,  is displayed in this column.
Mode	Displays the operating mode.  icon, if displayed, signifies that mode mismatch has occurred due to illegal operation. When "(Auto)" is displayed, operation is linked to the "Auto" mode of the master indoor unit of the refrigerant system.
Set Temp.	Displays the setting temperature. (*1) Displays the setting temperatures of "Cool" (left side) and "Heat" (right side) in "Set Temp." field when "Custom Auto" is displayed in "Mode".
Room Temp.	Displays the room temperature. (*1)
Error	When a unit is currently generating an error, displays [Error]. The Troubleshooting screen (refer to "par. 5-13-4 Troubleshooting") is displayed by clicking.
Special Operation	Displays special operation with icon. Refer to "List of icon for special operation" below.
FAN	Displays the fan status. (*2)
Air Flow Direction V.T.	Displays vertical airflow louver position. When "Individual" is displayed, vertical airflow louver is set individually.
Air Flow Direction H.Z.	Displays horizontal airflow louver position. When "Individual" is displayed, horizontal airflow louver is set individually.
R.C. Prohibition	Displays the R.C. Prohibition setting. * Display whether the "All prohibition" is enabled or disabled.
Human Sensing Function	Displays the "Auto Saving", "Auto ON/OFF" and "Auto OFF" status of "Human Sensing Function".











Note *1 Units display is [°C] or [°F]. The display format depends on the setting at the data acquisition application. (Refer to "par. 4-4 Environment Setting")













*2 Sometimes, it may take time for the FAN status display to be updated in the System List screen. The delay time is proportional to the number of existing indoor units and may take approximately 2 minutes for 100 indoor units (the time does not have anything to do with the number of indoor units being controlled). But, the actual control operation to the indoor units are performed immediately after control operation from the Control screen, only the display delays.

■ List of icon for special operation

Outdoor unit

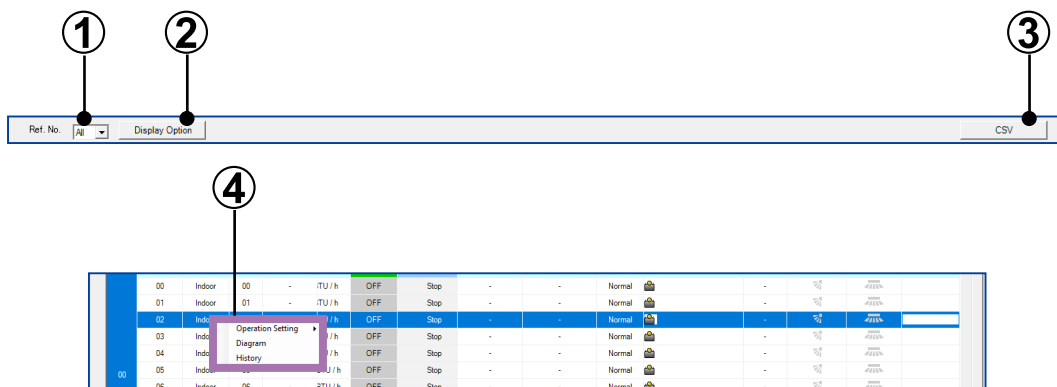
ICON	EXPLANATION
	Oil recovery operation
	Maintenance mode
	Emergency stop
	Forced off operation
	Defrost operation
	Low noise mode operation
	Capacity save operation
	Refrigerant leak detection

Indoor unit

ICON	EXPLANATION
	Freeze prevention operation
	Anti-freeze operation
	Anti-freeze setting
	Maintenance mode
	Master indoor unit
	Operation mode controlled by external unit
	Operation mode controlled by master indoor unit
	Emergency stop
	Energy save operation / Economy operation
	All operations invalid
	Refrigerant leak detection
	Power shutdown

5-3-2 System List display

Only the necessary units can be displayed by specifying the refrigerant system range. This is convenient when you want to display only the objective unit in the state in which a large number of units are connected to the system.



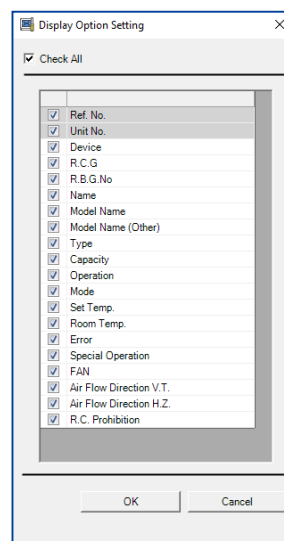
- ① **Refrigerant system selection field**
Specifies the refrigerant system address.
When "All" is selected, all refrigerant systems are displayed.
In addition, when Ref. No. is selected by clicking [▼] button, only the selected refrigerant system is displayed in a list.

- ② **Display Option button**
Selects display / hidden for the item displayed at list area.
Checked ...display, Unchecked ...hidden

- ③ **CSV button**
Saves the specified data to a CSV file.

- ④ **Menu display by right click**
When the line of unit on System List screen is right-clicked, the following menu is displayed. Click the menu you want to operate.

- Operation Setting (only when indoor unit is selected)
On: Turns the operation status On. Off: Turns the operation status Off.
Detail: Displays the Operation Setting screen.
- Diagram
Shifts to Detail Diagram screen.
- History
Shifts to Operation History screen.



5-4 Detail Diagram

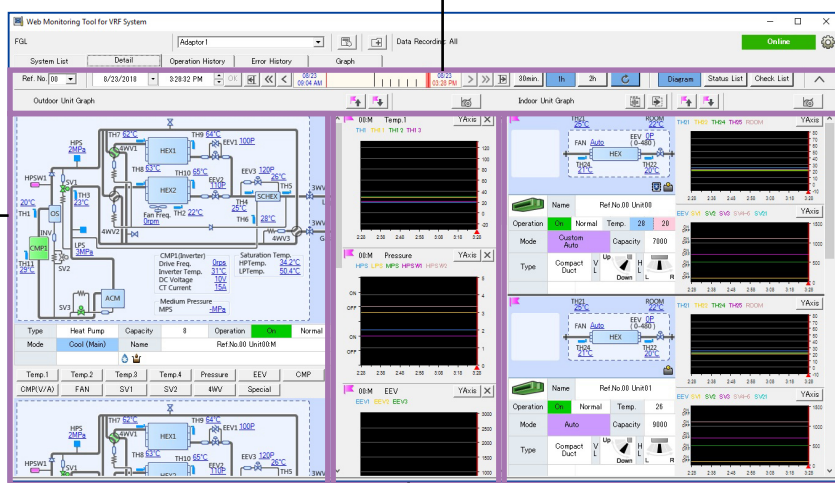
This screen displays the schematic, sensor values, and electrical components operating status of the selected system. At this screen, normal operation checks, and cause specification when an error occurs are performed.

Schematic or Graph screen of all units connected for refrigerant system can be checked by scrolling the screen.

Outdoor unit
schematic area

Control area

Indoor unit schematic
and graph area

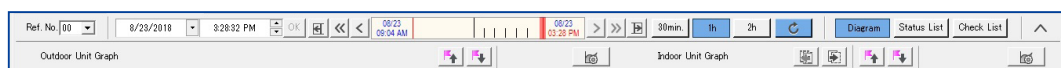

















Outdoor unit graph area

5-4-1 Name and function of each area

■ Control area

Sets display contents specification and automatic refresh on/off.



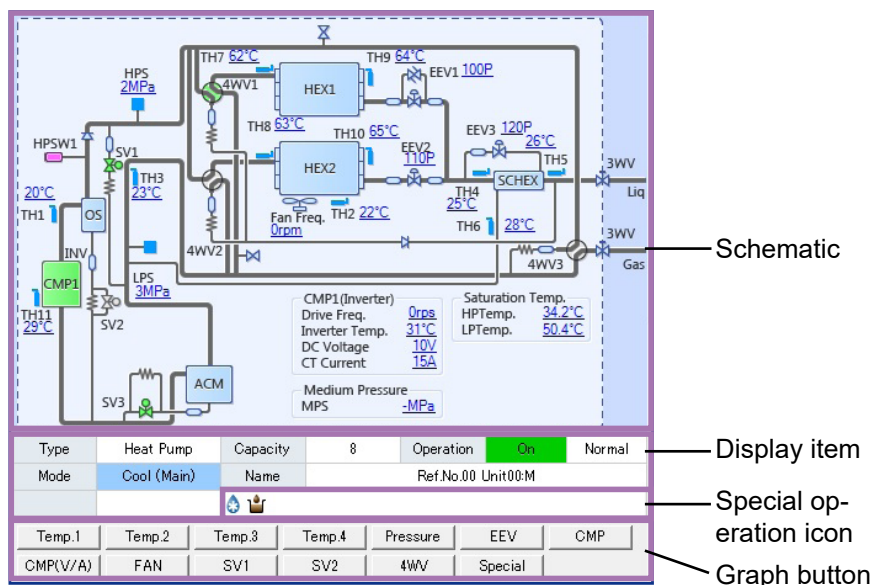
Ref. No.	Displays the refrigerant system address	
Date, Time	Sets the date and time of the data you want to display.	
OK	Confirms the date and time set above and updates the screen to the latest status.	
12-hour gauge	Selects the date and time of the data you want to display by moving the probe or gauge of 12-hour gauge.	
 , 	Displays the data that was acquired one before or after the currently displayed data.	
 , 	Displays the data so that the time indicated by probe is at the left edge or right edge. (The display may not be changed depending on the data acquisition status.)	
 , 	Displays the data before or after the specified time (30 min. / 1 hour / 2 hours) from currently displayed data.	
Graph X Axis	Specifies the X-axis scale of the Graph.(30 min. / 1 hour / 2 hours)	
	 (Blue): Updates the screen to the latest data automatically.  (Gray): Does not update the screen automatically.	
Diagram	Switch to the Detail Diagram screen.	
Status List	Switch to the Detail Status List screen. (Refer to "par. 5-5 Detail Status List")	
Check List	Switch to the Detail Check List screen. (Refer to "par. 5-6 Detail Check List")	
 , 	Moves only graph screen and schematic in which flag mark is highlighted () instantaneously. (Only Graph screen is moved at the outdoor unit graph area. Schematic screen and Graph screen are moved at the same time at the indoor unit schematic and graph area.)	
	Line	Selects the sensor which displays the data in the graph screen. The sensor type which can be displayed differs depending on the indoor unit area or the outdoor unit area. (for outdoor unit graph area , for indoor unit schematic and graph area)
	Order	Deletes the displayed graph or change the order. (for outdoor unit graph area) Changes the order of the displayed schematic and graph. (for indoor unit schematic and graph area)
	Default graph	Sets the graph type and the upper/lower limit value of each graph to be displayed on the screen by default after scanning new sites or scanning again.
 , 	Switches the status display item of indoor unit.	





Note Time is displayed according to the time format at the regional setting in the Control panel of Windows.

■ Outdoor unit schematic area

Displays the schematic of all outdoor units connected to refrigerant system selected at the Control area. For the meaning of each symbol, refer to the “Design & Technical Manual”. For the meaning of each item in the schematic, refer to the later “Schematic /Graph display item”.



Schematic

Schematic	Displays the schematic for outdoor unit.
Compressor 	Displays the compressor status. On: Green Off: Gray
4-way valve/solenoid valve 	Displays the 4-way valve/solenoid valve status. On: Green Off: Gray *The outdoor unit of S series (VRF1/1A) does not change of status. (gray display)

Display items

Type	Displays the unit type.
Capacity	Displays the capacity of outdoor unit. (*1) Units display is [HP] or [t(ton)] , [kW]. Displays {capacity value} when it is set at “par. 4-4-1 Display”.
Operation	Displays the operating status (ON/OFF) and unit status (Normal/Error).
Mode	Displays the operating mode.
Name	Displays the unit name. (*2)
Special operation icon	Displays the special operation status using icon. Refer to "List of icon for special operation" of "par. 5-3 System List".

- Note** *1 The display format differs depending on the data acquisition application setting. (Refer to “par. 4-4 Environment Setting”.)
- *2 Only when preset. (Refer to “par. 3-2-4 Name Master Database file selection screen”)

Graph button

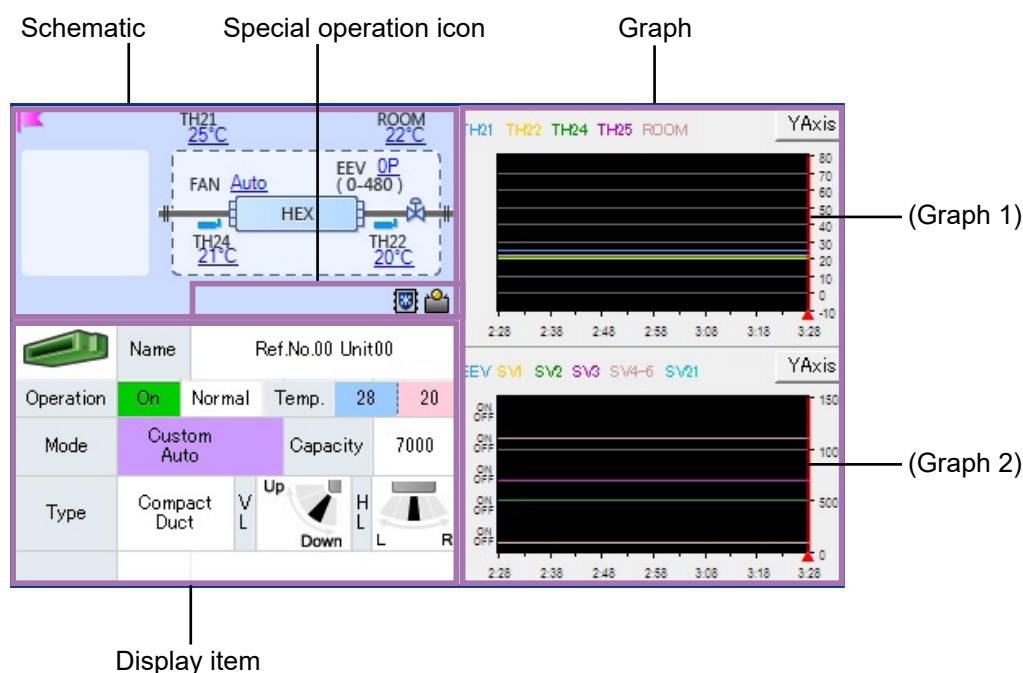
The Graph corresponding to the clicked button is displayed.

For the operation method of Graph, refer to “Outdoor unit graph area” below.

Temp.1	Displays the 4 temperature graphs at the graph area. For the kinds of temperature displayed in each graph, refer to “Schematic/Graph display item” .
Temp.2	
Temp.3	
Temp.4	
Pressure	Displays a pressure graph at the graph area.
EEV	Displays an electrical expansion valve opening pulse graph at the graph area.
CMP	Displays the operating status of the compressor at the graph area. For an inverter compressor, the operation frequency is also displayed.
CMP(V/A)	Displays the inverter voltage value and current value of compressor.
FAN	Displays the operation status of fan at the graph area.
SV1	Displays the operation status of solenoid valve at the graph area.
SV2	
4WV	Displays the operation status of 4-way valve at the graph area.
Special	Displays the special operation status at the graph area.

■ Indoor unit schematic and graph area


Displays the schematic and graph of all indoor units connected to refrigerant system selected at the Control area. For the meaning of each item in the schematic, refer to the later "Schematic/graph display item".




Schematic

Schematic	Displays the schematic for indoor unit. The R.B. unit status will only be displayed beside the refrigerant system when the system type is heat recovery.
Special operation icon	Displays the special operation status using icon. Refer to "List of icon for special operation" of "par. 5-3 System List".

Display items

Indoor Unit Icon 	Displays the status of the indoor units. The display color depends on the status. On: Green Off: Gray Test: Orange On (Error): Red Off (Error): Red Test (Error): Red
Name	Displays the unit name. (*1)
Operation	Displays the operating status (ON/OFF) and unit status (Normal/Error).
Temp.	Displays the setting temperature. Units display is [°C] or [°F]. (*2) Displays the setting temperatures of "Cool" (left side) and "Heat" (right side) in "Temp." field when "Custom Auto" is set.
Mode	Displays the operating mode.
Capacity	Displays the capacity. Units display is [BTU/h] or [kW]. (*2) Displays {capacity value} when it is set at "par. 4-4-1 Display".
Type	Displays the unit type.
VL	Displays the vertical airflow louver position. When "Indiv." is displayed, vertical airflow louver is set individually.
HL	Displays the horizontal airflow louver position. When "Indiv." is displayed, horizontal airflow louver is set individually.
Human Sensing Function	Displays the "Auto Saving", "Auto ON/OFF" and "Auto OFF" status of "Human Sensing Function".

- Note**  *1 Only when preset. (Refer to "par. 3-2-4 Name Master Database file selection screen")
- *2 The display format depends on the setting at the data acquisition application. (Refer to "par. 4-4 Environment Setting")

Graph

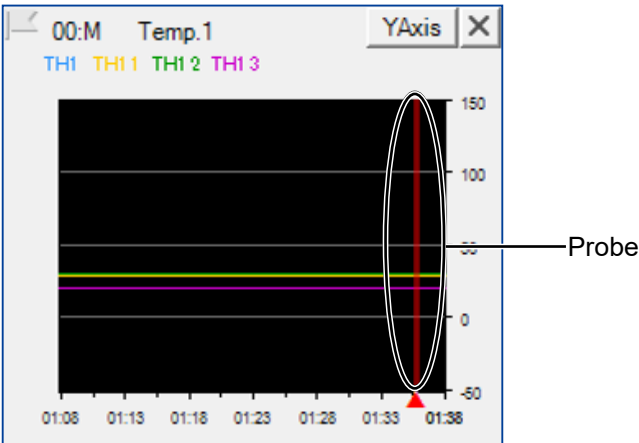
Graph screen of all indoor units connected for the selected refrigerant system can be checked by scrolling the screen. Schematic and graph are scrolled at the same time.

2 types of graphs are displayed for one indoor unit. Graph screen cannot be added or deleted.

For the operation method of Graph, refer to "Indoor unit graph area" in the subsequent paragraph.

■ Outdoor unit graph area / Indoor unit graph area

Checks the specified sensor value at the graph screen as time passes.
When graph area is double clicked, enlarged graph screen is displayed.



Name	The graph item/unit name (if set) are displayed at the top left-hand corner of the graph area.
YAxis	Sets the upper limit and lower limit of Y axis arbitrarily within the limit range of each sensor value. When “Change all the same graphs displayed.” checkbox is checked, the graphs displayed in the graph area are changed at the same time as follows. Indoor unit: Graphs of the same unit (°C, P, etc.) Outdoor unit: Graphs of the same graph name and the same unit (°C, MPa, etc.)
[X] button	Closes the graph. (Outdoor unit graph only)
Probe	The probe is moved to the left and right by dragging it with the mouse. The unit status received at the past time at the probe position is reflected on the schematic. When a past unit status is referenced, the “Auto refresh” check mark is automatically removed.

Note After upper and lower limit is set, scale for the Y axis will evenly be apportioned. Therefore, the scale may slightly be different from the actual value.

■ Schematic/graph display item

Shows the item names and contents displayed on the Schematic and Graph screens. The items in the graph button field can be graphically displayed with the graph button of the relevant name. However, there are also items which may not be displayed, depending on the unit series (S / V / V-II / J-II / J-IIS / J-III/J-IIIL/VR-II/V-III or later) and unit type (cooling only / heat pump / heat recovery).

For the sensor information, refer to the “par. 5-13-3 VRF Sensor Mark List”.

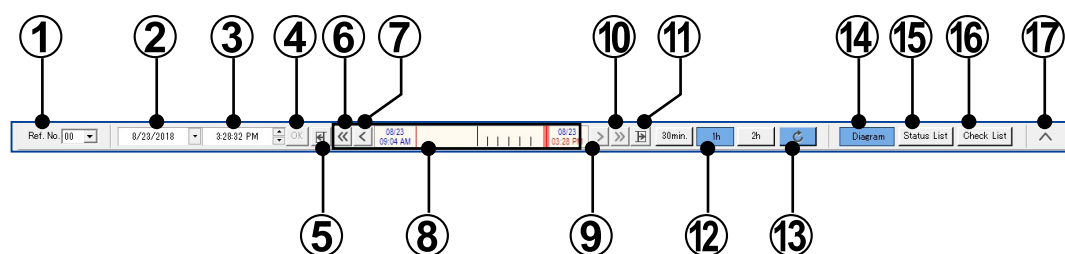
• Outdoor unit




	VRF1, 1-A	1-B	V-II, J-II, J-IIS, J-III, J-IIIL, J-IV, J-IVS, J-IVL, J-VS	VR-II, V-III, VR-IV, V-V, VU-V
Temp.1	THD1, THD2, THD3	TH1, TH2, TH3	TH1, TH2, TH10, TH11	TH1, TH11, TH12, TH13
Temp.2	THS, THO	TH4, TH9, TH10, TH12	TH3, TH5, TH6, TH7	TH7, TH8, TH9, TH10, TH14, TH15
Temp.3	THHI1, THHI2, THHI3, THHO1 THHO2, THHO3	TH5, TH6, TH7 TH8, TH11, H13	TH4, TH8, TH9	TH2, TH3, TH4, TH5, TH6
Temp.4			HPTemp. , LPTemp. Inverter1 Temp. , Inverter2 Temp.	
Pressure	HPS, LPS, HPSW1, HPSW2, MPS			
EEV	EEV1, EEV2, EEV3			
CMP	CMP1, CMP2, CMP3, Inverter1 Freq. , Inverter2 Freq.			
CMP (V/A)	Inverter1 Voltage , Inverter2 Voltage, Inverter1 Current , Inverter2 Current , Constant Current			
FAN	FAN Freq.			
SOL V1	SV1, SV2 ,SV3, SV4, SV5, SV6			
SOL V2	SV7, SV8, SV9			
4WV	4WV1, 4WV2, 4WV3			
Special	Oil recovery operation, Defrost operation		Oil recovery operation, Defrost operation, Low noise, Capacity save operation, Out- door unit stopped	

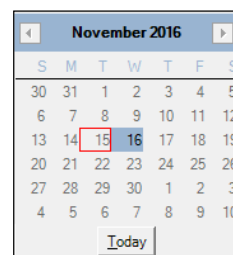
• Indoor unit

	VRF1, 1-A	1-B	V-II or later
Graph1	THHO, THHM, THHI, THIA, THOA	TH21, TH22, TH23	Room Temp., TH21, TH22, TH24, TH25, FAN
Graph2	EEV, SVs, SVd, SVb1, SVb2	EEV	EEV, SV1, SV2, SV3, SV4- 6

5-4-2 Detail Diagram specification








- ① Refrigerant system selection field
Specifies the refrigerant system address.
- ② Date setting field
Sets the date of data you want to display at the Schematic screen.
To set the date, select the date from the calendar which appears by clicking [▼] button.
When the background of Date setting field is pink, the user is editing the date and the data displayed at each display is not confirmed. When the date is confirmed, the field background becomes white. (*1)
- ③ Time setting field
Sets the time of data you want to display at the Schematic screen.
When the background of Date setting field is pink, the user is editing the time and the data displayed at each display is not confirmed. When the time is confirmed, the field background becomes white. (*1)
- ④ OK button
Confirms the date and time set at ② and ③ and updates the screen.
- ⑤  button
Displays the data so that the time indicated by probe is at the left edge. (The display may not be changed depending on the data acquisition status.)
- ⑥  button
Displays the data before the specified time (30 min. / 1 hour / 2 hours) from currently displayed data.
- ⑦  button
Displays the data that was acquired one before the currently displayed data.
- ⑧ 12-hour gauge
Selects the date and time you want to display at the Schematic screen or Graph screen by using 12-hour gauge.



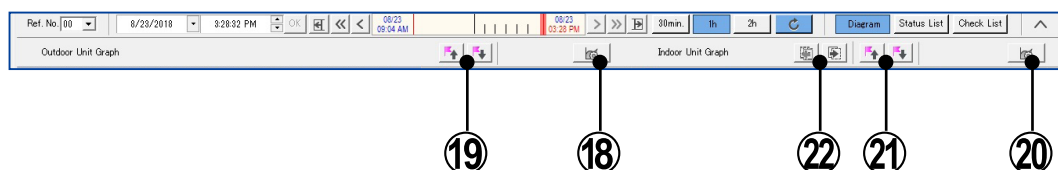
There are 2 setting methods.

- Date and time setting by probe movement
The date and time are set by moving the probe using the drag and drop of mouse.
- Date and time setting by gauge scroll
The date and time are set by scrolling the gauge using the drag and drop of mouse.

- ⑨  button
Displays the data that was acquired one after the currently displayed data.
- ⑩  button
Displays the data after the specified time (30 min. / 1 hour / 2 hours) from currently displayed data.
- ⑪  button
Displays the data so that the time indicated by probe is at the right edge. (The display may not be changed depending on the data acquisition status.)
- ⑫ Graph X Axis selection field
Specifies the X-axis scale (30 min/1 hour/2 hours) of the graph.
- ⑬ Auto Refresh button
Updates the screen to the latest data.
 (Blue): Updates the screen to the latest data automatically.
 (Gray): Does not update the screen automatically.
- ⑭ Diagram button
Displays the Detail Diagram screen.
- ⑮ Status List button
Displays the Detail Status List screen.
- ⑯ Check List button
Displays the Detail Check List screen.
- ⑰ Optional setting button
Displays the Optional setting screen.

■ Optional setting screen

When the Optional setting button (17) is clicked, optional setting screen is displayed.



18 20 Setting button (18 : for outdoor unit, 20 : for indoor unit)

Changes the setting for graph screen. The setting screen is composed of the following 3 tabs.

Line tab: Selects the sensor to be displayed at the Graph screen of the unit.

Order tab: Deletes the Graph screen displayed or changes the displayed order of the unit schematic and graph screen.

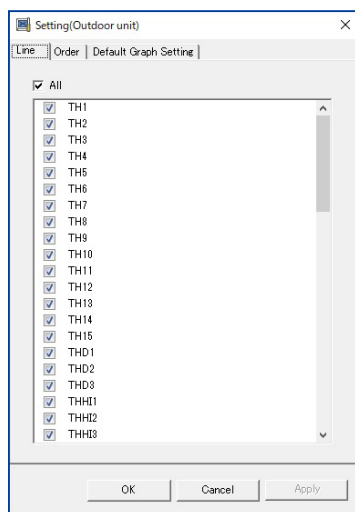
Default Graph Setting tab: Sets the graph type to be displayed on the screen by default after scanning new property or scanning again, and sets the upper limit value and lower limit value of each graph.

■ Line tab

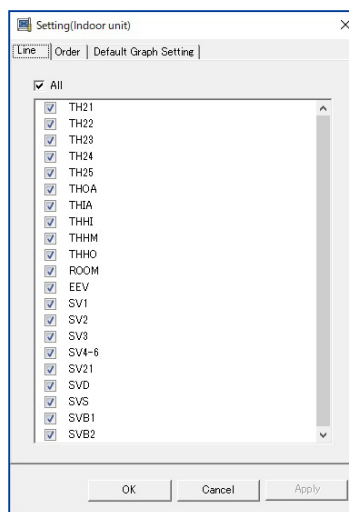
Selects the sensor to be displayed at the Graph screen of the unit.

When all sensors are selected, check the "All" check box. When individual sensors are set, check the individual sensor checkboxes. When the selection is complete, click the [OK] button.

For outdoor unit



For indoor unit



■ Order tab

Deletes the Graph screen displayed or Changes the displayed order of the unit schematic and graph screen.

- Delete: (For outdoor unit only) Selects the item you want to delete and clicks the [Delete] button.
- Change of display order: Selects the item you want to change and changes the display order using [^] and [v] button. When the order is decided, click the [OK] button. (For the indoor unit, one schematic and two graphs are in a set.)
- Default: Returns the displayed item to the initial status. (Setting status when the Web Monitoring Tool is installed to the PC)

For indoor unit

For outdoor unit

■ Default Graph Setting tab

Sets the graph type and the upper/lower limit value of each graph to be displayed on the screen by default after scanning new sites or scanning again.

- Check box (For outdoor unit only): Selects the item you want to display.
- Default: Returns the displayed item to the initial status. (Setting status when the Web Monitoring Tool is installed to the PC)

For indoor unit

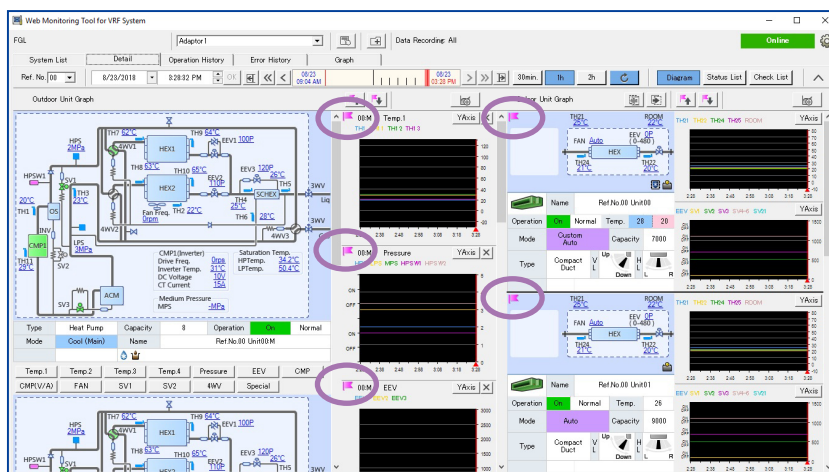
GraphName	Default Y-Axis Value		Unit
	Lower	Upper	
UpperGraph (-80~185° C)	-10	80	* C
LowerGraph (0~3000P)	0	1500	P

For outdoor unit

GraphName	Lower	Upper	Unit	
				<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Temp.2 (-80~185° C)	-30	60	* C
<input checked="" type="checkbox"/>	Temp.3 (-80~185° C)	-30	60	* C
<input checked="" type="checkbox"/>	Temp.4 (-80~185° C)	-30	60	* C
<input checked="" type="checkbox"/>	Pressure (-1~5MPa)	0	5	MPa
<input checked="" type="checkbox"/>	EEV (0~3000P)	0	3000	P
<input checked="" type="checkbox"/>	CMP (0~300rps)	0	300	rps
<input checked="" type="checkbox"/>	CMP(V/A) (0~2540V)	0	2540	V

①⑨ ②① Display switching button (Up/Down, ①⑨: for outdoor unit, ②①: for indoor unit)

There are flag marks at top left of outdoor unit graph and at top left of indoor unit schematic. When the flag mark is clicked, it is highlighted (selecting status). When this scroll button is clicked, only highlighted graph screen and schematic screen are shifted instantaneously.



②② Status display screen switching button

Switches the status display part of indoor unit.

Note *1 If a time earlier than the time of the oldest data acquired by the Web Monitoring Tool is specified, the oldest one of the times of data already acquired by Web Monitoring Tool is selected.

Similarly, if a time later than the time of the latest data acquired by the Web Monitoring Tool is specified, the latest one of the times of data already acquired by Web Monitoring Tool is selected.

5-5 Detail Status List

The Detail Status List screen can be displayed by clicking [Status List] button at the Control area.

In this screen, detail data for all the units in the specified refrigerant system will be displayed at a certain point of time.

Outdoor unit status list area

Control area

Indoor unit status list area

Web Monitoring Tool for VRF System

System List

Detail

Operations

Functions

Error Messages

Check

Log

Adaptor1

Data Recorder

All

Online

Ref No.08

8/28/2018

9:48:01 PM

OK

08:23

08/24 AM

08:23

08/24 PM

Diagram

Status List

Check List

Outdoor unit

Display Option

Unit No.	Name	Type	Capacity (HP)	Operation		Special Operation	Mode	TH1 (°C)	TH2 (°C)	TH3 (°C)	TH4 (°C)	TH5 (°C)	TH6 (°C)	TH7 (°C)	TH8 (°C)	
				Operation	Error											
08M	Ref No.08 Unit08M	Heat Pump	8	ON	Normal		Cool (Main)	28	22	23	25	26	28	62	63	64
81S1	Ref No.08 Unit01S1	Heat Pump	10	ON	Normal		Cool (Main)	28	22	23	25	26	28	62	63	64
82S2	Ref No.08 Unit02S2	Heat Pump	12	ON	Normal		Cool (Main)	28	22	23	25	26	28	62	63	64

Indoor unit

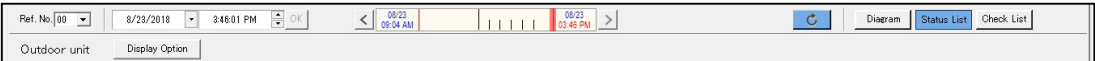
Display Option






Unit No.	R/E/G No.	Name	Type	Capacity (BTU/h)	Operation		Special Operation	Mode	Set Temp (°C)	Room Temp (°C)	TH1 (°C)	TH2 (°C)	TH3 (°C)	TH4 (°C)
					Operation	Error								
08	-	Ref No.08 Unit08	Compact Duct	7000	ON	Normal		Custom Auto	28	20	22	25	20	21
01	-	Ref No.08 Unit01	Compact Duct	9000	ON	Normal		Auto	28	22	25	20	21	
02	-	Ref No.08 Unit02	Compact Duct	12000	ON	Normal		Auto	28	22	25	20	21	
03	-	Ref No.08 Unit03	Compact Duct	14000	ON	Normal		Auto	28	22	25	20	21	
04	-	Ref No.08 Unit04	Compact Duct	16000	ON	Normal		Auto	28	22	25	20	21	

5-5-1 Name and function of each area

■ Control area

Sets display contents specification and automatic refresh on/off.



Ref. No.	Displays the refrigerant system address
Date, Time	Sets the date and time of the data you want to display.
OK	Confirms the date and time set above and updates the screen to the latest status.
12-hour gauge	Selects the date and time of the data you want to display by moving the probe or gauge of 12-hour gauge.
 , 	Displays the data that was acquired one before or after the currently displayed data.
	 (Blue): Updates the screen to the latest data automatically.  (Gray): Does not update the screen automatically.
Diagram	Switch to the Detail Diagram screen. (Refer to “par. 5-4 Detail Diagram”)
Status List	Switch to the Detail Status List screen.
Check List	Switch to the Detail Check List screen. (Refer to “par. 5-6 Detail Check List”)
Display Option	Set whether Display item should be displayed or hidden.

■ Outdoor unit status list area

Displays the following operation status of each outdoor unit according to the condition given in the Control area.

Unit No.	Displays the unit No.
Name	Displays the unit name.
Type	Displays the unit type.
Capacity	Displays the capacity of outdoor unit. Units display is [HP] or [t(ton)] , [kW]. When the capacity value set by each unit is displayed, it is displayed by {capacity value}.
Operation	Displays the operating status (ON/OFF).
Error	Displays the error status (Normal/Error).
Special operation	Displays special operation.(*1)
Mode	Displays the operating mode.

* For each sensor information, refer to the "par. 5-13-3 VRF Sensor Mark List".

*1 For the meaning of the displayed icons, refer to "List of icon for special operation" of "par. 5-3 System List".

■ Indoor unit status list area

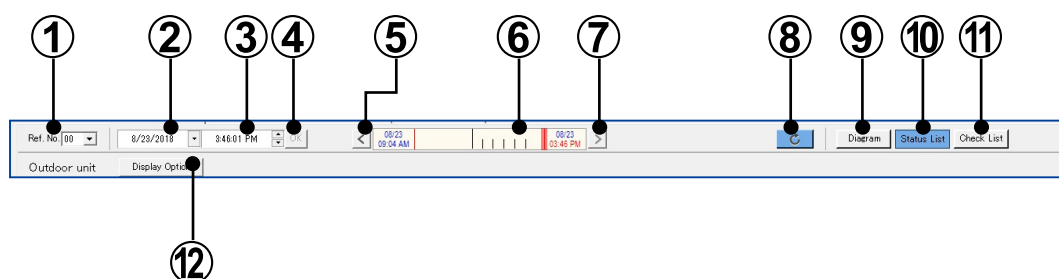
Displays the following operation status of each indoor unit according to the condition given in the Control area.

Unit No.	Displays the unit No.
R.B.G.No.	Displays the RB unit group address.
Name	Displays the unit name.
Type	Displays the unit type.
Capacity	Displays the capacity. Units display is [BTU/h] or [kW]. When the capacity value set by each unit is displayed, it is displayed by {capacity value}.
Operation	Displays the operating status (ON/OFF).
Error	Displays the error status (Normal/Error).
Special operation	Displays special operation.(*1)
Mode	Displays the operating mode.
Set Temp.	Displays the setting temperature. Units display is [°C] or [°F]. Displays the setting temperatures of "Cool" (left side) and Heat" (right side) in "Set Temp." field when "Custom Auto" is displayed in "Mode".
Air Flow Direction V.T.	Displays vertical airflow louver position. When "Individual" is displayed, vertical airflow louver is set individually.
Air Flow Direction H.Z.	Displays horizontal airflow louver position. When "Individual" is displayed, horizontal airflow louver is set individually.
Human Sensing Function	Displays the "Auto Saving", "Auto ON/OFF" and "Auto OFF" status of "Human Sensing Function".

* For each sensor information, refer to the "par. 5-13-3 VRF Sensor Mark List".

*1 For the meaning of the displayed icons, refer to "List of icon for special operation" of "par. 5-3 System List".

5-5-2 Detail Status List specification

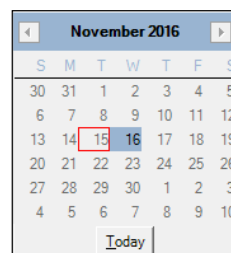


- ① Refrigerant system selection field
Specifies the refrigerant system address.

- ② Date setting field
Sets the date of data you want to display at the Detail Status List screen.

To set the date, select the date from the calendar which appears by clicking [▼] button.

When the background of Date setting field is pink, the user is editing the date and the data displayed at each display is not confirmed. When the date is confirmed, the field background becomes white. (*1)



- ③ Time setting field
Sets the time of data you want to display at the Detail Status List screen.
When the background of Time setting field is pink, the user is editing the time and the data displayed at each display is not confirmed. When the time is confirmed, the field background becomes white. (*1)

- ④ OK button
Confirms the date and time set at ② and ③ and updates the screen.



- ⑤ < button
Displays the data that was acquired one before the currently displayed data.

- ⑥ 12-hour gauge
Selects the date and time you want to display at the Schematic screen or Graph screen by using 12-hour gauge.

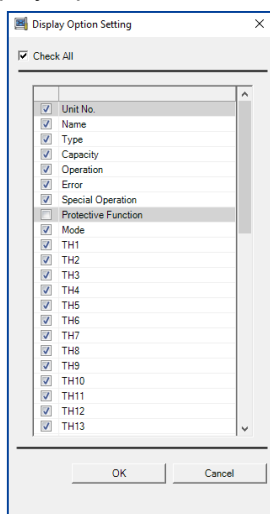
There are 2 setting methods.

- Date and time setting by probe movement
The date and time are set by moving the probe using the drag and drop of mouse.
- Date and time setting by gauge scroll
The date and time are set by scrolling the gauge using the drag and drop of mouse.

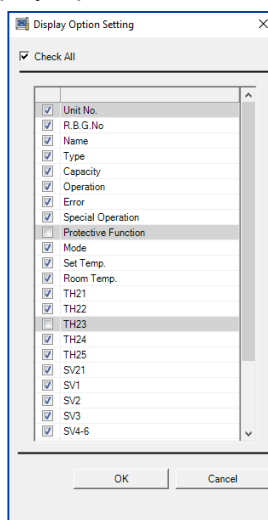
- ⑦ > button
Displays the data that was acquired one after the currently displayed data.

- 8** Auto Refresh button
Updates the screen to the latest data.
 (Blue): Updates the screen to the latest data automatically.
 (Gray): Does not update the screen automatically.
- 9** Diagram button
Displays the Detail Diagram screen.
- 10** Status List button
Displays the Detail Status List screen.
- 11** Check List button
Displays the Detail Check List screen.
- 12** Display Option button
Selects display / hidden for the item displayed at list area.
Checked ...display, Unchecked ...hidden
The Display Option button of the Indoor unit is also the same.

Display Option for outdoor unit



Display Option for indoor unit



Note *1 If a time earlier than the time of the oldest data acquired by the Web Monitoring Tool is specified, the oldest one of the times of data already acquired by Web Monitoring Tool is selected.
Similarly, if a time later than the time of the latest data acquired by the Web Monitoring Tool is specified, the latest one of the times of data already acquired by Web Monitoring Tool is selected.

5-6 Detail Check List

The Detail Check List screen can be displayed by clicking [Check List] button at the Control area.

Each check item is calculated by the sensor value inside the outdoor unit or indoor unit and the results are judged whether they are normal or not.

Outdoor unit check
list area

Control area

Indoor unit check list area

Web Monitoring Tool for VRF System

FGL

Adaptor1

System List

Detail

Operation History

Error History

Graph

Data Recording All

Online

Ref No [00]

0/23/2013

00:02 PM

00:23 00:04 AM

00:23 04:01 PM

Diagram

Status List

Check List

Print Data

Save Data

Save Data

10 min

Detailed Report

Add to List Box

Open List Box

Quick Report

Create

Outdoor unit	Outdoor Temp	Discharge Temp	Suction Temp	HP Saturation Temp	ΔT(Super Heat)	ΔT(Sub Cool)	SOEHX Inlet Temp	SOEHX Outlet Temp	Comp Temp	High Pressure	LP Saturation Temp	ΔT(Super Heat Discharge)	Low Pressure					
	°C	°C	°C	°C	°C	°C	°C	°C	°C	MPa	°C	°C	MPa					
	-	100 °C >= [value]	0 ~ 20 °C		0 ~ 5deg (Heating)	5 ~ 25deg (Cooling)	(Cooling)	(Cooling)	-	25 ~ 3.3MPa		10deg <= [value]	0.7 ~ 1.2MPa (Cooling) 0.5 ~ 1.2MPa (Heating)					
Model Name	TH2	TH1	TH3	HP Temp	TH1-HP Temp	TH2-HP Temp	TH3-HP Temp	TH4	TH5	TH11	HPS	LP Temp	TH1-HP Temp	LPS	LPS			
00M AJY072LNLBH	22	20	-	23	14.2	-	-	0.2	25	28	29	-	2	58.4	-14.2	-	3	-
01S1 AJY098LNLBH	22	20	-	23	14.2	-	-	0.2	25	28	29	-	2	58.4	-14.2	-	3	-
02S2 AJY108LNLBH	22	20	-	23	14.2	-	-	0.2	25	28	29	-	2	58.4	-14.2	-	3	-

Indoor unit

	Suction Air Temp	Offcoil Temp	ΔTair (Cooling)	ΔTair (Heating)	HEX Temp	ΔT(Super Cool)		
	°C	°C	°C	°C	°C	°C		
	-	-	10 °C <= [value]	10° °C <= [value]	-	0 ~ 5deg 4 ~ 5deg		
Model Name	TH21	TH25	TH21-TH25	TH25-TH21	TH22	TH24	TH24-TH22	HP Temp-TH22
00 AR0409GOLH	25	-	-	-	20	21	-	-
01 AR0409GOLH	25	-	-	-	20	21	-	-
02 AR0414GOLH	25	-	-	-	20	21	-	-
03 AR0414GOLH	25	-	-	-	20	21	-	-
04 AR0418GOLH	25	-	-	-	20	21	-	-



5-6-1 Name and function of each area

■ Control area

Sets display contents specification and automatic refresh on/off.

The screenshot shows a control panel with the following elements:

- Ref. No. dropdown set to 00.
- Date/Time selector set to 8/23/2018 4:01:02 PM.
- OK button.
- Navigation buttons: < (Previous), > (Next).
- Time range selector: 08:23 08:24 AM to 08:23 04:01 PM.
- Buttons: Diagram, Status List, Check List.
- Point Data button (blue icon).
- Ave. Data buttons (previous and following).
- Period selector: 10 min.
- Detailed Report button.
- Add to List Box button.
- Open List Box button.
- Quick Report button.
- Create button.

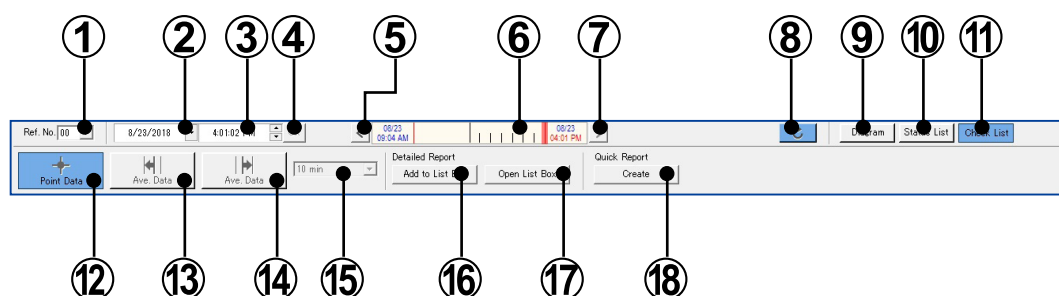
Ref. No.	Displays the refrigerant system address
Date, Time	Sets the date and time of the data you want to display.
OK	Confirms the date and time set above and updates the screen to the latest status.
12-hour gauge	Selects the date and time of the data you want to display by moving the probe or gauge of 12-hour gauge.
<, >	Displays the data that was acquired one before or after the currently displayed data.
	(Blue): Updates the screen to the latest data automatically.
	(Gray): Does not update the screen automatically.
Diagram	Switch to the Detail Diagram screen. (Refer to "par. 5-4 Detail Diagram")
Status List	Switch to the Detail Status List screen. (Refer to "par. 5-5 Detail Status List")
Check List	Switch to the Detail Check List screen.
Point Data	Judges each check item by using the sensor instantaneous value acquired at the specified time.
Ave. Data (previous)	Calculates the average of sensor value acquired for a certain period of time before the specified time and judges each check item by using the average value.
Ave. Data (following)	Calculates the average of sensor value acquired for a certain period of time after the specified time and judges each check item by using the average value.
Period	Selects the period to calculate the average value of sensor value.
Add to List Box	Adds the currently displayed refrigerant system data to the Commissioning List box and displays the Commissioning List box.
Open List Box	Displays the Commissioning List box.
Create	Outputs the commissioning report of currently displayed refrigerant system in a PDF file.

■ Outdoor unit check list area / Indoor unit check list area

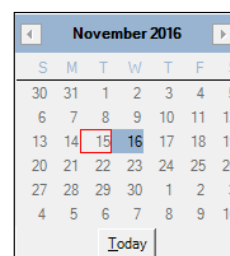
The sensor value calculated in the condition set at Control area is displayed for each outdoor / indoor unit. The judgment results are also displayed. If the calculated sensor value is deviated from the normal value, the background of the data cell becomes red.





For each sensor information, refer to the "par. 5-13-3 VRF Sensor Mark List".

5-6-2 Detail Check List specification



- ① Refrigerant system selection field
Specifies the refrigerant system address.
- ② Date setting field
Sets the date of data you want to display at the Detail Check List screen.
To set the date, select the date from the calendar which appears by clicking [▼] button.
When the background of Date setting field is pink, the user is editing the date and the data displayed at each display is not confirmed. When the date is confirmed, the field background becomes white. (*1)
- ③ Time setting field
Sets the time of data you want to display at the Detail Check List screen.
When the background of Time setting field is pink, the user is editing the time and the data displayed at each display is not confirmed. When the time is confirmed, the field background becomes white. (*1)
- ④ OK button
Confirms the date and time set at ② and ③ and updates the screen.
- ⑤ < button
Displays the data that was acquired one before the currently displayed data.
- ⑥ 12-hour gauge
Selects the date and time you want to display at the Detail Check List screen by using 12-hour gauge.
There are 2 setting methods.
 - Date and time setting by probe movement
The date and time are set by moving the probe using the drag and drop of mouse.
 - Date and time setting by gauge scroll
The date and time are set by scrolling the gauge using the drag and drop of mouse.
- ⑦ > button
Displays the data that was acquired one after the currently displayed data.



- ⑧ **Auto Refresh button**
Updates the screen to the latest status.
 (Blue): Updates the screen to the latest data automatically.
 (Gray): Does not update the screen automatically.
- ⑨ **Diagram button**
Displays the Detail Diagram screen.
- ⑩ **Status List button**
Displays the Detail Status List screen.
- ⑪ **Check List button**
Displays the Detail Check List screen.
- ⑫ **Point Data button**
Judges each check item by using the sensor instantaneous value acquired at the specified time.
- ⑬ **Ave. Data (previous) button**
Calculates the average of sensor value acquired between the specified time and the time before the period selected at ⑮ and judges each check item by using the average value.
When  button is blue, this button cannot be selected.
- ⑭ **Ave. Data (following) button**
Calculates the average of sensor value acquired between the specified time and the time after the period selected at ⑮ and judges each check item by using the average value.
When  button is blue, this button cannot be selected.
- ⑮ **Data collection period setting field**
Selects the period (10 min / 30 min / 1 hour) for calculating the average value of sensor value.
- ⑯ **Add to List Box button**
Adds the currently displayed refrigerant system data to the Commissioning List box and displays the Commissioning List box.
- ⑰ **Open List Box button**
Displays the Commissioning List box.
- ⑱ **Create button**
Outputs the commissioning report of currently displayed refrigerant system in a PDF file.

Note *1

If a time earlier than the time of the oldest data acquired by the Web Monitoring Tool is specified, the oldest one of the times of data already acquired by Web Monitoring Tool is selected.

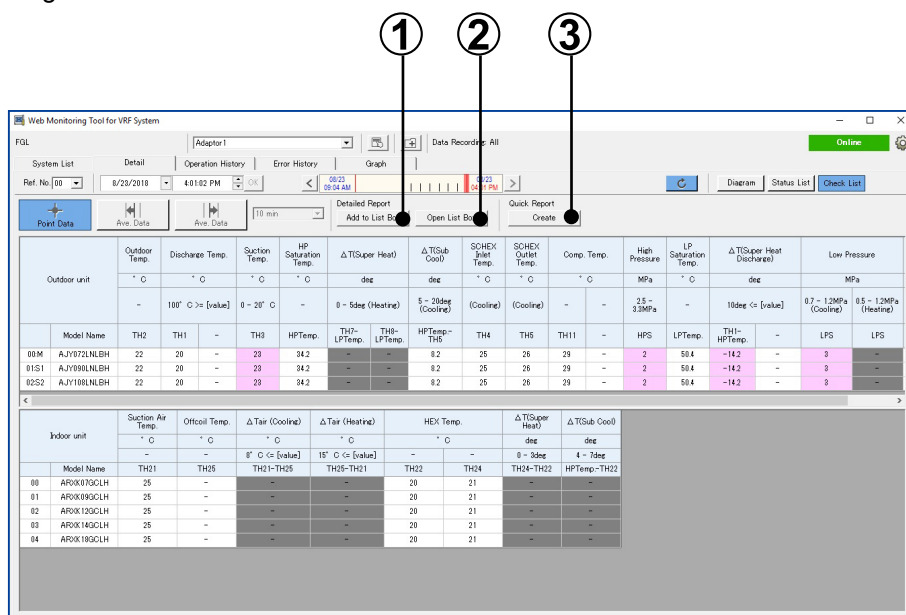
Similarly, if a time later than the time of the latest data acquired by the Web Monitoring Tool is specified, the latest one of the times of data already acquired by Web Monitoring Tool is selected.

5-6-3 Commissioning Report creation

Commissioning Report is a tool which outputs the commissioning diagnosis in the form of report.

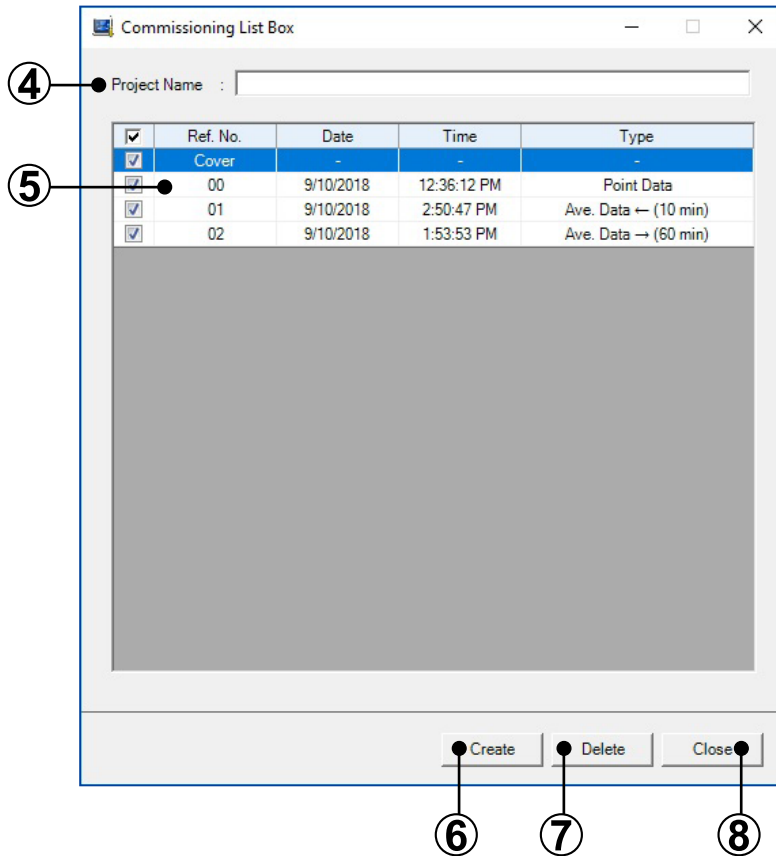
■ Create the Commissioning Report in a PDF format.

Commissioning Report in a PDF format can be easily created by using this function of Web Monitoring Tool.



- ① "Add to List Box" button
Adds the currently displayed refrigerant system data to the Commissioning List box and displays the Commissioning List box.
- ② "Open List Box" button
Displays the Commissioning List box.
- ③ "Create" button
Outputs the commissioning report of currently displayed refrigerant system in a PDF file.

■ Commissioning List Box



④ Project Name field
Enter the Project Name of Commissioning Report.

⑤ Commissioning List
Displays the data added in the unit detail check list screen. (Cover is displayed from the beginning.)

* When you exit the Web Monitoring Tool, all added data are deleted. If you want to save them, select "Save Export file _Exit" on the Exit screen.

Check Box	Selects the refrigerant system to be operated.
Ref. No.	Refrigerant system
Date, Time	Date and time of added data displayed on Detail check list
Type	Calculation method of added data
Point Data	Judges each check item by using the sensor instantaneous value acquired at the specified time.
Ave.Data ←(xx min)	Calculates the average of sensor value acquired for a certain period of time before the specified time and judges each check item by using the average value.
Ave.Data →(xx min)	Calculates the average of sensor value acquired for a certain period of time after the specified time and judges each check item by using the average value.

- ⑥ "Create" button
Opens the Commissioning Report Edit screen of the refrigerant system selected in ⑤.
- ⑦ "Delete" button
Deletes the refrigerant system selected in ⑤.
- * When "Cover" is selected, the contents you entered at Editing area on the Cover Edit screen are deleted.
- ⑧ "Close" button
Closes this screen.

■ Commissioning Report Edit screen

Cover Edit screen

⑨

⑩

⑪

⑫

Edit screen other than Cover

⑨

⑩

⑪

⑫

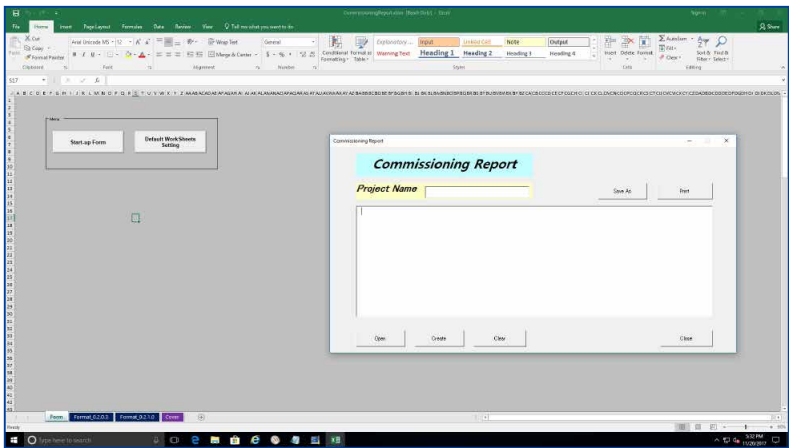
- ⑨ Ref. No.
Selects the cover or refrigerant system to be edited.
- ⑩ Editing area
Edits the Commissioning report.
- ⑪ "PDF" button
Outputs the Commissioning Report in a PDF format.
- ⑫ "Close" button
Closes this screen. The contents edited in ⑩ are saved.

■ Create the Commissioning Report by using CSV file created by Web Monitoring Tool Ver. 2.1 or earlier.

A Commissioning Report can be easily created by reading the CSV file created by the Detail Check List.

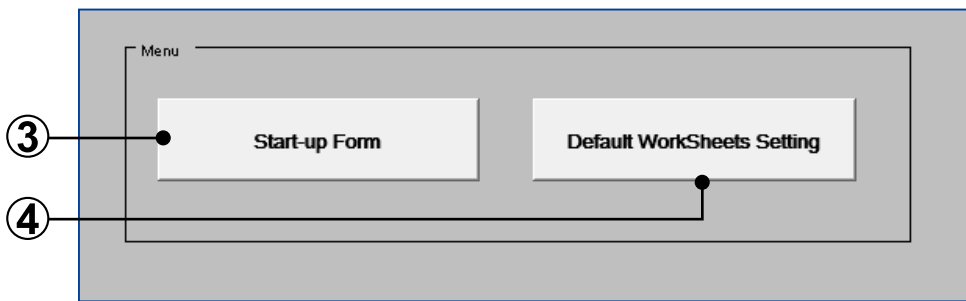
There is a template to easily create a Commissioning Report. (*1)

- ① Since there is a template named "CommissioningReport.xlsm" at C:\Program Files(x86)\AIRSTAGE-Web Monitoring Tool\CommissioningReport\ open that file with Excel. (*1)
- ② Display the started Excel "Form" sheet.
A screen like that shown below is displayed.

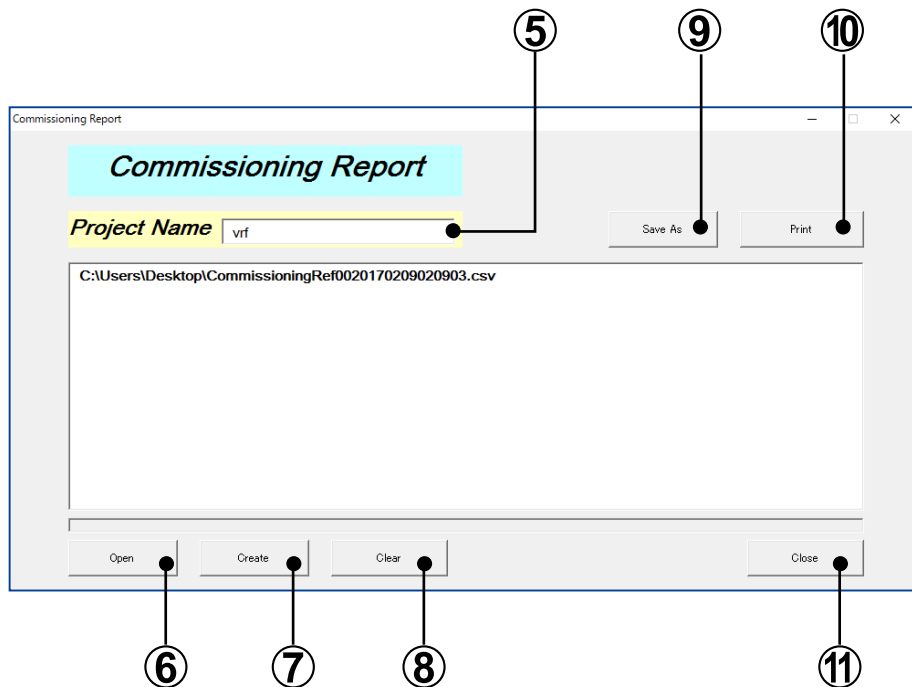


Overview of each sheet

Form	Displays the form for creating Commissioning Report or changes this excel file back to the default.
Format	Commissioning Report Format
Cover	Commissioning Report cover
DataRefN(N=1,2,...)	Displays the created Commissioning Report. (This sheet will be displayed after Commissioning Report was created at ⑦.)
TempN(N=1,2,...)	Displays the CSV file data selected at ⑥. (This sheet will be displayed after Commissioning Report was created at ⑦.)




- ③ Start-up Form button**
Displays the following screen to create the Commissioning Report.
When the screen to create the Commissioning Report is not displayed, click this button.
- ④ Default WorkSheets Setting button**
Changes this excel sheet back to the default. This button is enabled after Commissioning Report was created at ⑦.



- ⑤ Project Name field**
Enter the Project Name of Commissioning Report.
- ⑥ Open button**
Select the CSV file to create Commissioning Report. (Multiple files can be selected. Select the CSV file saved in the Detail Check List.)
- ⑦ Create button**
Creates the Commissioning Report of CSV file selected at ⑥.

- 8** Clear button
Deletes all CSV files selected at **6** from the screen.
- 9** Save As button
Save the Commissioning Report (DataRef sheet) created at **7** and cover (Cover sheet) in separate excel files.
- 10** Print button
Prints the Commissioning Report (DataRef sheet) created at **7** and cover (Cover sheet).
- 11** Close button
Closes this screen.
When you display the screen to create the Commissioning Report again, click the [Start-up Form] button.

Note *1 This template is created by Excel spreadsheet program.
 Excel must be purchased separately.
When opening the file, you may be asked if you want to enable macro, depending on the security level set within Excel. In such cases, select "Enable Macros".
When OS is 32 bit, the folder is C:\Program Files\AIRSTAGE-Web Monitoring Tool\CommissioningReport\.

5-7 Operation History

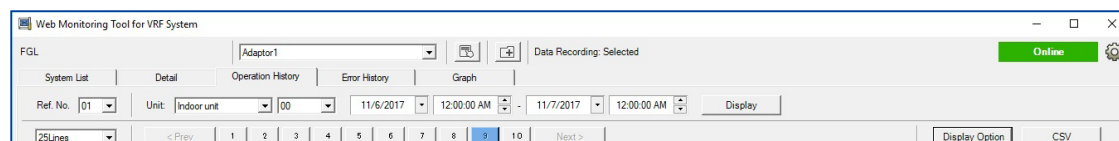
The indoor units or outdoor unit operation history is displayed for each unit.

The displayed operation history can be saved to a CSV file.

History display can display up to 500 items for the specified period.

5-7-1 Name and function of each area

■ Control area (common)



Ref. No.	Specifies the refrigerant system address
Unit	Switches outdoor unit/indoor unit and selects the Unit No.
Start date and time	Displays the start date and time of the history data to be displayed.
End date and time	Displays the end date and time of the history data to be displayed.
Display	Displays the data of the unit of the specified conditions.
Number of lines	Displays the displayed number of lines of the history data in a screen
Page No. <Prev , Next>	Switches the page by clicking the page button ([1],[2],[3]...). Only every 10 pages switching is available by clicking [Prev] or [Next] button.
Display Option	Sets whether Display item should be displayed or hidden.
CSV	Displays the CSV save window.

Outdoor unit

Web Monitoring Tool for VRF System

FGL Adaptor1 Data Recording: Selected Online

System List Detail Operation History Error History Graph

Ref. No. 01 Unit: Outdoor unit 00M 11/6/2017 12:00:00 AM 11/7/2017 12:00:00 AM Display

25Lines Prev 1 2 3 4 5 6 7 8 9 10 Next Display Option CSV

Time	Operation	Special Operation	Mode	TH1	TH2	TH3	TH4	TH5	TH6	TH7	TH8	TH9	TH10	TH11	TH12	TH13	TH14	TH15	HPS
11/6/2017 9:56:32 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:56:45 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:56:59 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:57:13 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:57:26 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:57:40 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:57:54 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:58:08 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:58:22 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:58:36 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:58:50 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:59:04 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:59:18 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:59:32 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 9:59:46 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:00:00 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:00:14 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:00:28 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:00:42 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:00:56 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:01:10 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:01:24 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:01:38 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:01:52 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2
11/6/2017 10:02:06 PM	Normal		Cool (Main)	20	22	23	25	26	28	62	63	64	65	29	30	21	60	61	2

Display item

Time	Displays the data acquisition time. (*1) For summer time, (S) is displayed.
Operation	Displays the operating status/unit status
Special operation	Displays special operation in icon. Refer to "List of icon for special operation" of "par. 5-3 System List".
Mode	Displays the operating mode

* For each sensor information, refer to the “par. 5-13-3 VRF Sensor Mark List”.

Note *1 Time is displayed according to the time format at the regional setting in the Control panel of Windows.

■ Indoor unit

Web Monitoring Tool for VRF System

System List: Detail | Operation History | Error History | Graph | Data Recording: Selected | Online

Ref. No. [01] | Unit: Indoor unit | 11/6/2017 | 12:00:00 AM | 11/7/2017 | 12:00:00 AM | Display

25 Lines | < Prev | 1 2 3 4 5 6 7 8 9 10 | Next >

Time	Operation	Special Operation	Mode	Set Temp (°C)	Room Temp (°C)	TH21 (°C)	TH22 (°C)	TH24 (°C)	TH25 (°C)	SV21	SV2	SV3	SV4-6	EEV (P)	FAN	A
11/6/2017 9:56:32 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:56:45 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:56:59 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:57:13 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:57:26 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:57:45 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:57:59 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:58:13 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:58:26 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:58:40 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:58:54 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:59:07 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:59:21 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:59:35 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 9:59:48 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:00:02 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:00:16 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:00:29 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:00:46 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:01:00 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:01:13 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:01:27 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	
11/6/2017 10:01:41 PM	Normal		Custom Auto	24	20	22	25	20	21	-	Off	On	On	0	Auto	

Display item

• Display item

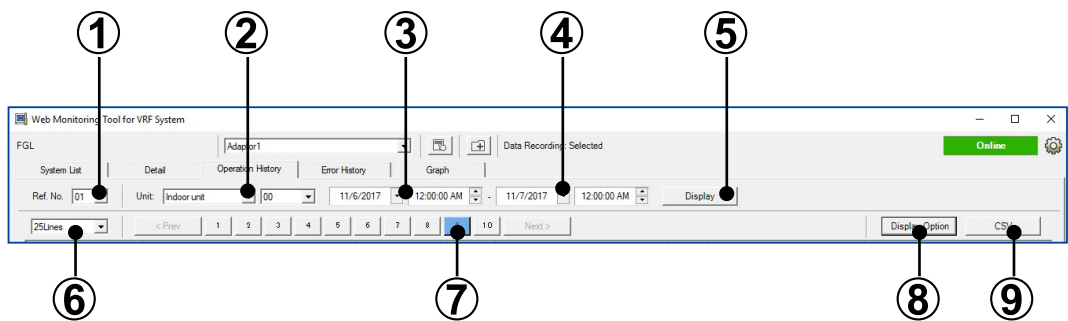
Time	Displays the data acquisition time. (*1) For summer time, (S) is displayed.
Operation	Displays the operating status/unit status.
Special operation	Displays special operation.
Mode	Displays the operating mode.
Set Temp	Displays the setting temperature. Displays the setting temperatures of "Cool" (left side) and "Heat" (right side) in "Set Temp." field when "Custom Auto" is displayed in "Mode".
Air Flow Direction V.T.	Displays vertical airflow louver position. When "Individual" is displayed, vertical airflow louver is set individually.
Air Flow Direction H.Z.	Displays horizontal airflow louver position. When "Individual" is displayed, horizontal airflow louver is set individually.
Human Sensing Function	Displays the "Auto Saving", "Auto ON/OFF" and "Auto OFF" status of "Human Sensing Function".

* For each sensor information, refer to the "par. 5-13-3 VRF Sensor Mark List".

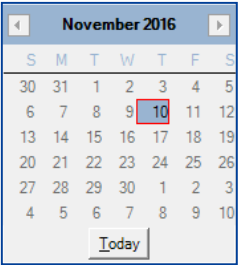
Note *1 Time is displayed according to the time format at the regional setting in the Control panel of Windows.

- List of icon for special operation
For each icon information, refer to the "List of icon for special operation" of "par. 5-3 System List".

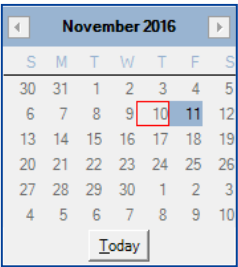
5-7-2 Operation History specification



- 1** Refrigerant system selection field
Specifies the refrigerant system address.
- 2** Unit selection field
Switches outdoor unit/indoor unit and selects the Unit No.
- 3** Start date and time selection field
Specifies the start date and time of the history data to be displayed.
To select the date, select the appropriate date from the calendar which appears by clicking [▼] button.



- 4** End date and time selection field
Specifies the end date and time of the history data to be displayed.
To select the date, select the appropriate date from the calendar which appears by clicking [▼] button.

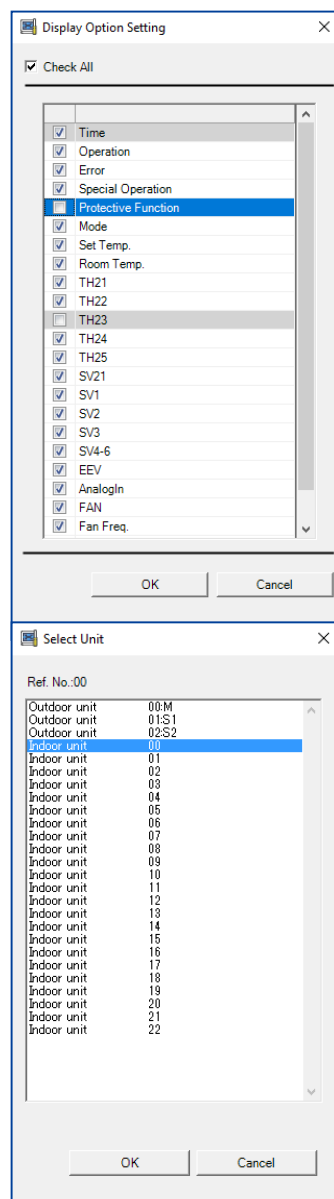


- 5** Display button
Displays the history data by specified condition.
- 6** Displayed number of lines selection field
Selects the number of lines of the history data to be displayed in a page.

7 Page selection field
Selects the page number to be displayed.

8 Display Option button
Selects display / hidden for the item displayed at list area.
Checked ...display, Unchecked ...hidden

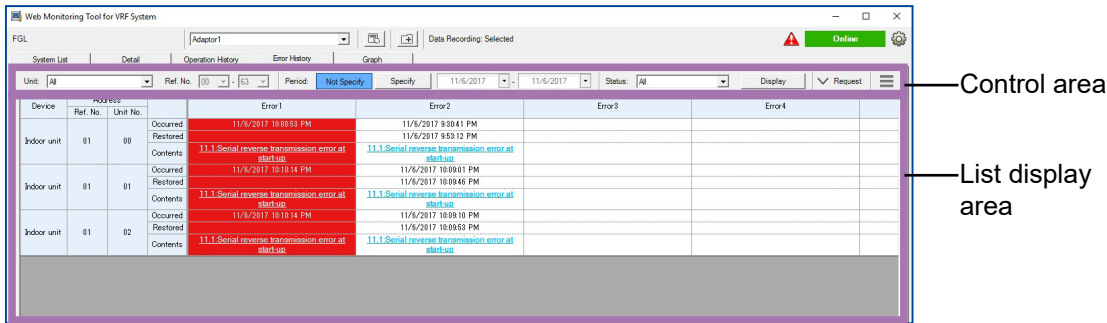
9 CSV button
Saves the displayed operation history to a CSV file.
Setting screen is displayed by clicking the [CSV] button.
Select the units to be saved and then click the [OK] button.(Multiple units can be selected at the same time.)
Max. 500 items of displayed the history data can be saved for one unit.



5-8 Error History

The error information is displayed for each unit. As for the error information, up to 50 errors can be displayed for each unit in the order from the newest error. The error information can be saved in CSV format.

5-8-1 Name and function of each area



Control area

Unit	Specifies the unit model.
Ref. No.	Specifies the refrigerant system address (narrow down display)
Period	Specifies the date range to be displayed.
Status	Specifies the conditions for error display.
Display	Refreshes the display screen according to the specified conditions.
Request	Displays the setting area for selecting the unit from which you want to acquire the error information.
Optional menu	The following 3 menus can be used. <ul style="list-style-type: none"> • Unit Memory • Clear Error Logs • CSV

List display area

Device	Displays the unit model.
Address	Displays the address information (Refrigerant system address/Unit No.) of each unit.
Error1 ~ 50	Displays the error acquisition time and error contents. Displays currently generated errors in red.

5-8-2 Error History display method

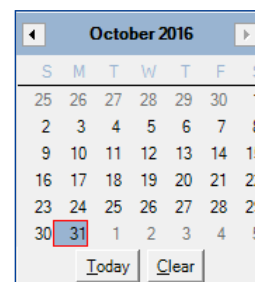


- ①** Unit selection field
Select the unit type in which you want to display the Error history.
- ②** Refrigerant system selection field
Sets the range of refrigerant system address to display the error history.
Only when "In/Out door Unit" is selected at ①, this item can be set.

- ③** Date period selection field
Sets the date period to display the error history

When date period is not set: Click the [Not Specify] button.

When date period is set : Click the [Specify] button and set the display "start date and time" and "end date and time".
Select the appropriate date from the calendar which appears by clicking [▼] button.



- ④** Status selection field
Selects "All" or "Currently Occurring".

All: Currently occurring error information and past error information (Recovered)

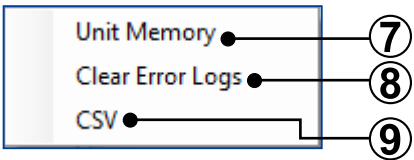
Currently Occurring: Currently occurring error information

- ⑤** Display button
Refreshes the display data according to the selected conditions. (*1)

■ Optional setting menu

- ⑥** Optional setting button
Displays the optional setting menu of “Unit Memory”, “Clear Error Logs” and “CSV”.

Optional setting menu



- ⑦** Unit Memory menu
Displays the Unit Memory screen.
When “Peripheral Device” is selected at **①** “Unit selection field”, this menu cannot be selected.
For the details of operations, refer to "par. 5-8-3 Unit Memory".
- ⑧** Clear Error Logs menu
Clears the recovered error information. The cleared error cannot be restored.
- ⑨** CSV menu
Saves the currently specified data to a CSV file.

■ Request setting area (online only)

- ⑩** Request button
Displays the setting area for selecting the unit from which you want to acquire the error information.
- ⑪** Unit selection field
Selects the unit from which you want to acquire the error information. The selectable items at **⑪** differs depending on the selected items at **①**.

Selected items at ①	Selectable items at ⑪			
	Indoor unit	Outdoor unit	Central remote controller	Network converter
All	○	○	○	○
In/Out door Unit	○	○	—	—
Peripheral Device	—	—	○	○

- ⑫** Refrigerant system selection field
Selects the refrigerant system address to display the error history. The selectable items at **⑫** differs depending on the selected items at **⑪**.

Selected items at ⑪	Selectable items at ⑫
Indoor unit	The refrigerant system address number acquired by scanning can be selected.
Outdoor unit	
Central remote controller	200 (Fixed value)
Network converter	240 (Fixed value)

13

Unit No. selection field

Selects the Unit No. of indoor unit and outdoor unit. The selectable items at 13 differs depending on the selected items at 11.

Selected items at 11	Selectable items at 13
Indoor unit	The Unit No. of indoor unit in the refrigerant system address selected at 11 can be selected.
Outdoor unit	The Unit No. of outdoor unit in the refrigerant system address selected at 11 can be selected.
Central remote controller	1 to 100 (*2)
Network converter	

14

Request button

Acquires the current error state of an arbitrarily specified indoor unit or outdoor unit. However, when an error is not occurred, nothing is displayed after execution.

Note



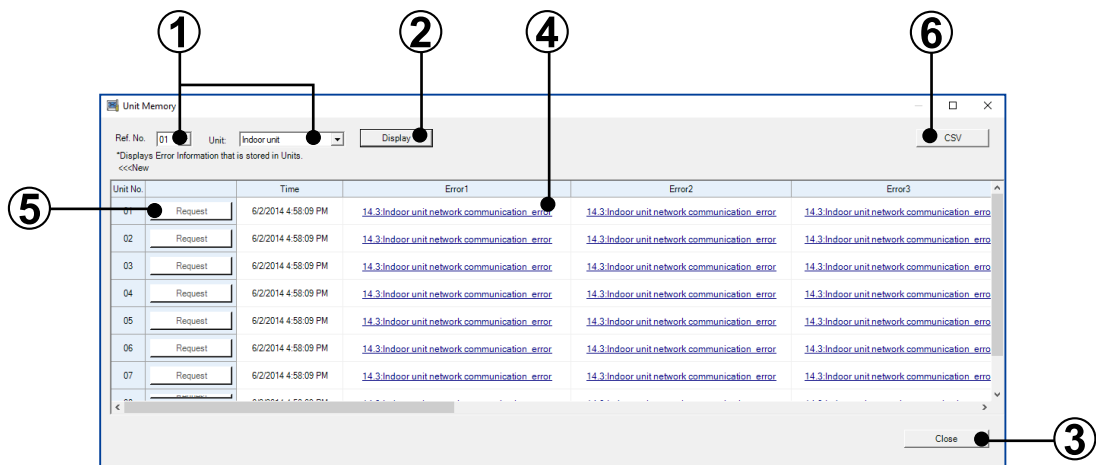
*1 Displays only the units with an error history list.

Troubleshooting screen can be displayed by clicking the error contents of the display. However, excluding "TransmissionAdaptor" errors.

*2 Address number differs depending on these Peripheral Device settings. Check the information of target building.

5-8-3 Unit Memory

By clicking the “Unit Memory” menu, the most recent error information recorded in the indoor / outdoor unit will be displayed. Using this screen, you can display the maximum of 20 error information of any specified indoor / outdoor unit.



- 1 Specify refrigerant system address and unit type whose error records are to be displayed. You may only specify unit for the refrigerant system of V(Outdoor unit) and V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series (Indoor unit/Outdoor unit).
- 2 Error information for the refrigerant system address specified in 1 are displayed below.
- 3 Close this screen.
- 4 Display error information as described below.

Unit	Displays unit address.
Time	Displays the date & time when the error information was acquired from the unit.
Error n n=20 for V series n=10 for V-II/J-II/J-IIS/ J-III/J-IIIL/VR-II/V-III or later series	Error n displays error names acquired from the unit. When blank, no error exists. Errors will be sorted by time, [Error1] being the most recent error.

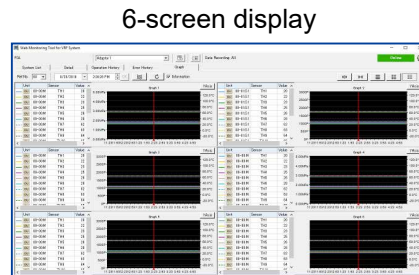
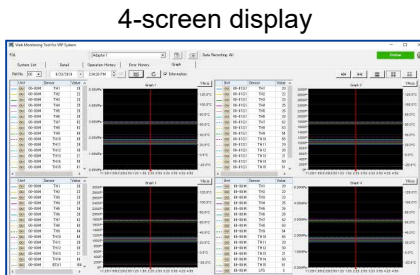
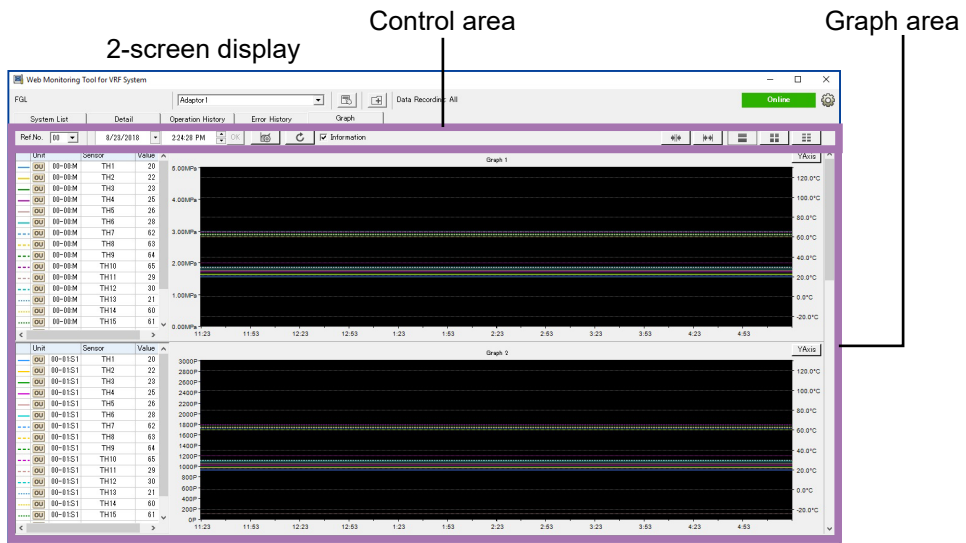
- 5 Request error history.
Acquires the error history for any unit.
- 6 Saves the currently displayed error history data to a CSV file.

Note

- Error history function displays the error information occurred after the Web Monitoring is connected to the VRF system. The information occurred before connection cannot be displayed.
Therefore, by using Unit Memory function, you can check the error information occurred before the Web Monitoring is connected, which cannot be checked by Error History.
- There are cases where the information in Unit Memory screen and that of Error History screen do not match. This is because of the differences in the displayed information between the 2 screens.
- Errors in Unit Memory screen do not have information on dates.

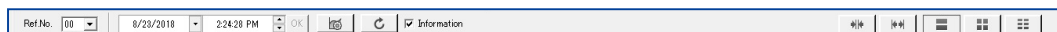
5-9 Graph










The sensors which user wants to check can be selected freely and their graphs combined as you like can be displayed. In this screen, more detailed and easy-to-see graph can be displayed. Max. 6-screen can be displayed at a graph at the same time.



5-9-1 Name and function of each area

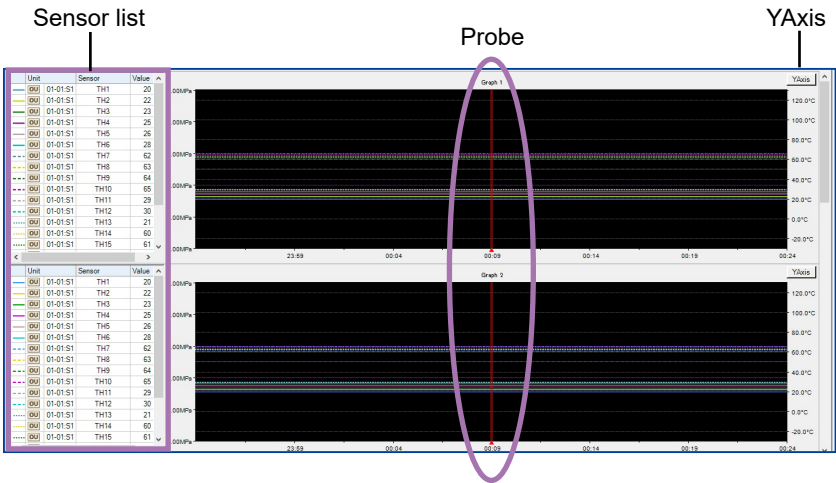
■ Control area



Ref. No.	Displays the refrigerant system address.
Date, Time	Sets the date and time of the data you want to display.
	Selects the sensor to be displayed at a graph.
	 (Blue): Updates the screen to the latest data automatically.  (Gray): Does not update the screen automatically.
Information	Selects display / hidden for the sensor list at the side of graph.
	Decreases the time range displayed at a graph. (24 hours/12 hours/6 hours/3 hours/1 hour/30 min)
	Increases the time range displayed at a graph. (30 min/1 hour/3 hours/6 hours/12 hours/24 hours)
	Displays the 2-screen graphs at the same time.
	Displays the 4-screen graphs at the same time.
	Displays the 6-screen graphs at the same time.

■ Graph area

- Up to 30 sensors selected by user can be displayed at a graph.
- Up to 6 screens can be displayed at a graph at the same time.
- The sensors of outdoor unit and indoor unit can be displayed at the same graph.
- Up to 2 types of sensor units can be displayed at one graph.



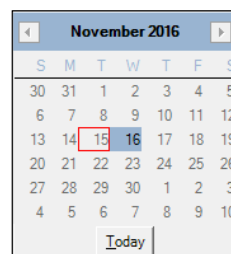
Sensor list	Displays the sensor list and the values displayed at a graph by selecting it. When the checkbox of Information is checked, Sensor list is displayed. If unchecked, Sensor list is not displayed.
YAxis	Sets the upper limit and lower limit of Y axis arbitrarily within the limit range of each sensor value.
Probe	The probe is moved to the left and right by dragging it with the mouse. The sensor value acquired at the probe position time is displayed at the value field of Sensor list.

5-9-2 Graph specification



- ① Refrigerant system selection field
Specifies the refrigerant system address.

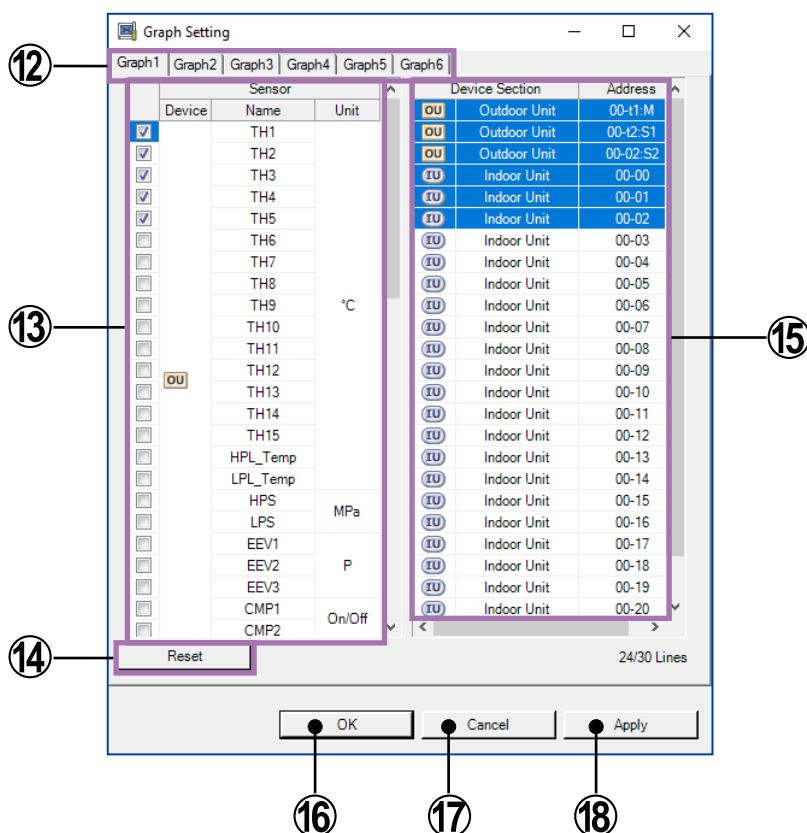
- ② Date setting field
Sets the date of data you want to display at the Schematic screen.
To set the date, select the date from the calendar which appears by clicking [▼] button.








When the background of Date setting field is pink, the user is editing the date and the data displayed at each display is not confirmed. When the date is confirmed, the field background becomes white. (*1)

- ③ Time setting field
Sets the time of data you want to display at the Schematic screen.
When the background of Date setting field is pink, the user is editing the time and the data displayed at each display is not confirmed. When the time is confirmed, the field background becomes white. (*1)

- ④ Graph Setting button
Selects the Sensor and Device (Device Section and Address) to be displayed at a graph. For each sensor information, refer to the “par. 5-13-3 VRF Sensor Mark List”.



- 12** Graph selection tab
Selects the graph No. in which you want to display the sensor.
- 13** Sensor selection field
Checks the checkbox of the sensors you want to display at a graph. [OU] display in the Device field indicates the outdoor unit sensor information. [IU] display indicates the indoor unit sensor information.
Up to 2 types of sensor units can be displayed at one graph.
- 14** Reset button
Cancels all the sensors selected at **13**.
- 15** Device Section and Address selection field
Selects the Device you want to display at a graph. When the line of Device you want to display at a graph is clicked, the background becomes blue and it is selected status. Multiple Devices can be selected at the same time by pressing Ctrl key.
- 16** OK button
Closes this screen after the setting is saved.
- 17** Cancel button
Closes this screen after the setting is deleted.
- 18** Apply button
Saves the setting. This screen is not closed.
- 5** Auto Refresh button
Updates the screen to the latest data.
 (Blue): Updates the screen to the latest data automatically.
 (Gray): Does not update the screen automatically.
- 6** Information check box
Displays the Sensor list by checking the checkbox of information. When the checkbox is unchecked, the Sensor list is not displayed.
- 7**  button
Decreases the time range to be displayed at X axis of graph each time this button is clicked.
24 hours→12 hours→6 hours→3 hours→1 hour→30 min.
- 8**  button
Increases the time range to be displayed at X axis of graph each time this button is clicked.
30 min.→1 hour→3 hours→6 hours→12 hours→24 hours
- 9**  button
Displays 2-screen graphs at the same time.
Other 4 screens can be displayed by scrolling.

10



button

Displays 4-screen graphs at the same time.
Other 2 screens can be displayed by scrolling.

11



button

Displays 6-screen graphs at the same time.

Note *1 If a time earlier than the time of the oldest data acquired by the Web Monitoring Tool is specified, the oldest one of the times of data already acquired by Web Monitoring Tool is selected.
Similarly, if a time later than the time of the latest data acquired by the Web Monitoring Tool is specified, the latest one of the times of data already acquired by Web Monitoring Tool is selected.

5-10 Error List



If an error occurs, error detailed information can be displayed from System List screen, Detail Diagram screen, Detail Status List screen, and Operation History screen.

(Example) System List screen

Web Monitoring Tool for VRF System

FGL

Adaptor1



Data Recording: Selected

System List

Detail

Operation History

Error History












Graph

Ref. No.

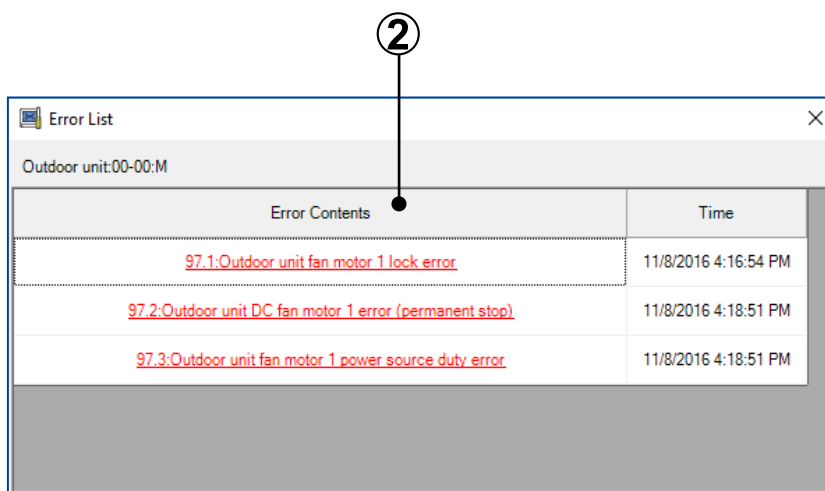
All

Display Option

CSV

Ref. No.	Unit No.	Device	R.C.G	R.B.G.No	Type	Capacity	Operation	Mode	Set Temp.(°C)	Room Temp.(°C)	Error	Special Operation
00	02 S2	Outdoor	-	-	 Heat Pump	12HP	-	-	-	-	Normal	
01	00	Indoor	00	-	 Compact Duct	24000BTU / h	On	Custom Auto	24	20	22	Error1 
	01	Indoor	01	-	 Compact Duct	7000BTU / h	On	Custom Auto	24	20	22	Error1 
	02	Indoor	02	-	 Compact Duct	9000BTU / h	On	Custom Auto	24	20	22	Error1 
	03	Indoor	03	-	 Compact Duct	12000BTU / h	On	Custom Auto	24	20	22	Normal 
	04	Indoor	04	-	 Compact Duct	14000BTU / h	On	Custom Auto	24	20	22	Normal 

- ① If an error occurs, error link is displayed at System List screen, Detail Diagram screen, Detail Status List screen, and Operation History screen. When the error link is clicked, the Error List screen is displayed.



Error List


Outdoor unit:00-00:M

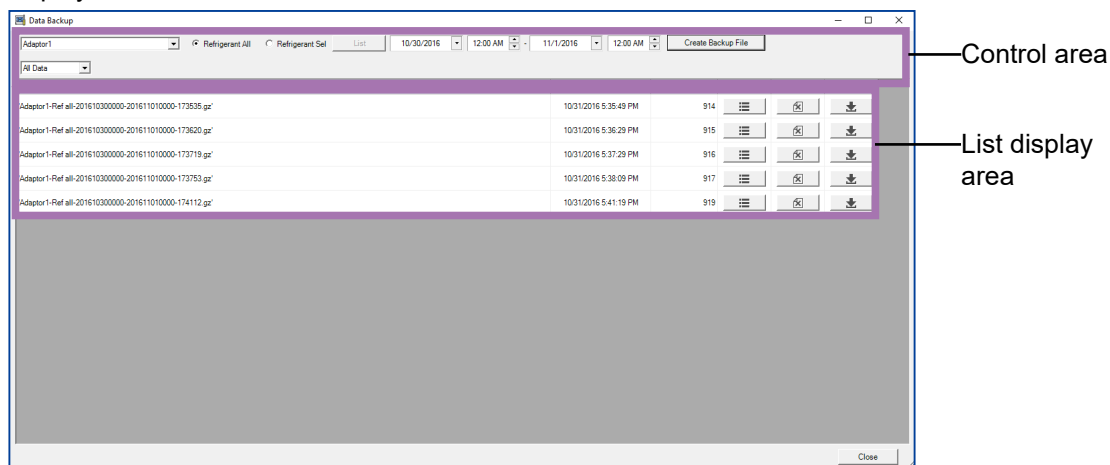
Error Contents	Time
97.1:Outdoor unit fan motor 1 lock error	11/8/2016 4:16:54 PM
97.2:Outdoor unit DC fan motor 1 error (permanent stop)	11/8/2016 4:18:51 PM
97.3:Outdoor unit fan motor 1 power source duty error	11/8/2016 4:18:51 PM

- ② When the error name displayed at Error Contents is clicked, the Troubleshooting screen is displayed.

5-11 Data Backup

Any unit data currently displayed can be saved. The saved data may be displayed as offline data for Web Monitoring Tool Ver. 2.0.

When the  button is clicked from Monitor screen, the following Data Backup screen is displayed.



5-11-1 Name and function of each area

■ Control area

Specify the conditions and creation of the backup file to be downloaded.

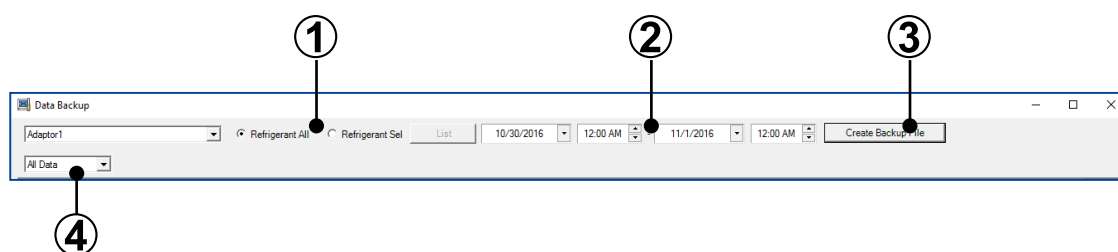
Adaptor	Displays the transmission adaptor name.
Refrigerant All & Refrigerant Sel. [List]	Specify the refrigerant system address of the backup file.
Period	Specify the period of the backup file.
Create Backup File	Create the backup file.
Backup file display switching	Switches and displays the files displayed at the list display area for each of the following types. All Data / Manual Data / Auto Data

■ List display area

Display the list of created the backup files. Also, any backup files may be specified for download and/or deletion.

FileName	Display the file names created in the Control area. Also any backup file may be downloaded.
MakeDate	Display date of creation of the backup file.
Size [KB]	Display the size (in KB) of the backup file created. When creation is in progress, display the status of progress.
Detail	Displays the detailed data of the created backup file.
Delete	Delete the backup file.
Download	Saves the created backup file to the local folder.

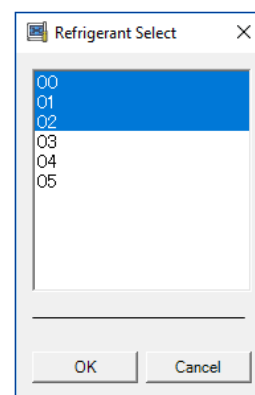
5-11-2 Procedures for creating backup files



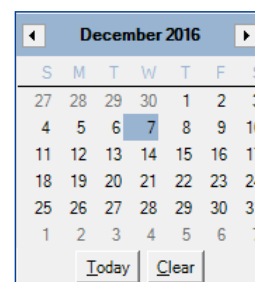
- ① Refrigerant All & Refrigerant Sel. selection field**
Specify the range of refrigerant system address of the backup files to be created by one of the following methods. If Refrigerant Sel. is specified, Refrigerant Select screen will appear by clicking the [List] button. Specify the desired refrigerant system address here.

- Refrigerant All All refrigerant system addresses are specified.
- Refrigerant Sel. Refrigerant system address selected in the refrigerant system address selection screen will be specified.
The background of selected items is blue.
(Multiple units can be selected at the same time.)

When the selection of refrigerant system address is complete, click [OK] button.



- ② Period selection field**
Specify the period (date and time) of the backup file to be created.
Select the appropriate date from the calendar which appears by clicking [▼] button.



- ③ Create Backup File button**
Sub screen is displayed and then click the [OK] button. Start creating the backup files using the condition specified by ①, ②.

- ④ Backup file display switching field**
Switches and displays the backup files for each of the following types.

- All Data Displays all the backup files. (Manual Data and Auto Data)
- Manual Data Displays only the backup files created at ③
- Auto Data Displays only backup files (Data for 1 week) that are created automatically every Sunday (3 o'clock). This file holds the backup files for up to 1 month before. Backup files before this are automatically deleted.

5-11-3 Data file download/deletion

①	②	③	④	⑤	⑥
FileName	MakeDate	Size[KB]	Detail	Delete	Download
'Adaptor1-Ref all-201610300000-201611010000-173635.gz'	10/31/2016 5:35:49 PM	914			
'Adaptor1-Ref all-201610300000-201611010000-173620.gz'	10/31/2016 5:36:29 PM	915			

- ①

File Name display

Display the file names created in the Control area. Also any backup files may be down-loaded

FileName format is as follows;

[Transmission adaptor name - Refrigerant All or Refrigerant Sel *- Period - adminis-trator No.]

* Refrigerant All ... Ref all / Refrigerant Sel ... Ref multi
- ②

Make Date display

Display date of creation of the backup file.
- ③

Size [KB] display

Displays the size (Unit: KB) of the created backup file.

Progress bar is displayed during creating.

If the backup file is not created after creation is complete, the field is blank.
- ④

Detail button

Displays the detail screen of the created backup file.

Backup file detail screen

Detail

FileName

: Adaptor1-Ref all-201610300000-201611010000-173620.gz

MakeDate

: 10/31/2016 5:36:29 PM

Site name

: FGL

Adaptor Name

: Adaptor1

Ref. No.

: All

Period

: 10/30/2016 12:00:00 AM - 11/1/2016 12:00:00 AM

Delete

Download

Close


When [Delete] button is clicked, the backup file is deleted.

When [Download] button is clicked, the created backup file is saved to the local folder.

When [Close] button is clicked, this detail screen is closed.

- ⑤ Delete button
Deletes the created backup file.
- ⑥ Download button
Saves the created backup file to the local folder.

5-12 Operation Setting

When the  button is clicked from Monitor screen, the following Operation Setting screen is displayed.

Operation Setting tab:

Sets the On/Off/Operation/Set Temp./Fan Control/Air Flow Direction/R.C. Prohibition.

Auto Off Timer Status tab:

Checks the operation status of Auto Off timer or deletes the setting of Auto Off timer.

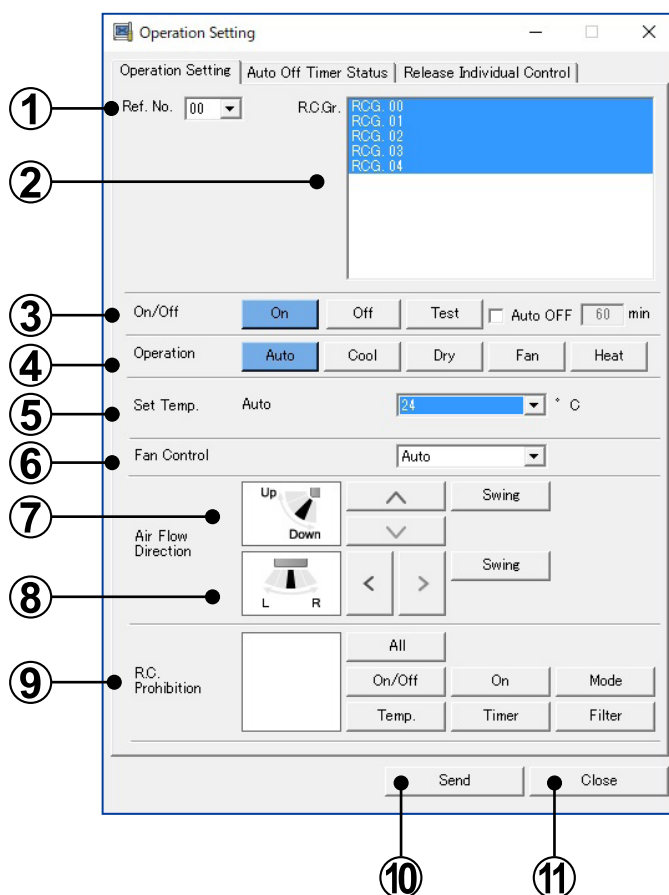
Release Individual Control tab:

Releases individual control settings of airflow direction.

In addition, when the line of indoor units in which you want to set the operation is right-clicked on the System List screen, and “Operation Setting” → “Detail” in the displayed screen is left-clicked, Operation Setting screen is displayed in the same way.

The selected R.C.Gr. (indoor unit) can be operated.

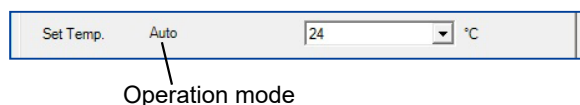
5-12-1 Operation Setting



- ① Ref. No. selection field
Selects the refrigerant system address. (The refrigerant system address to be registered can be selected.)

- ② R.C.Gr. selection field**
Selects the unit you want to operate in each R.C.Gr. The background of selected R.C.Gr. is blue.
Multiple units can be selected by pressing the Ctrl key while selecting.
- ③ On/Off selection field**
Selects the On/Off mode.
The mode can be selected from [On] button, [Off] button, or [Test] button.
When "Auto OFF" is checked, operation stops after the specified time goes on.
- ④ Operation selection field**
Selects the operation mode.
The mode can be selected from [Auto] button, [Cool] button, [Dry] button, [Fan] button, or [Heat] button.
- ⑤ Set Temp. selection field**
Sets the desired temperature. (*1)
The set temperature is selected from pulldown menu.
The setting screen of "Set Temp." differs depending on the connected indoor units.
When "Custom Auto" is displayed, set the two temperatures of "Cool" and "Heat".

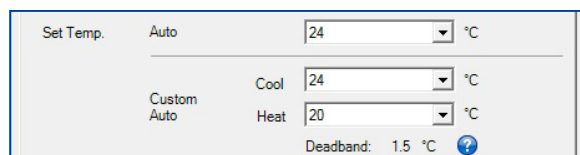
When selecting only the indoor unit to which "Auto" mode can be set (When the mode is other than "Auto" mode, operation mode is not displayed)



When selecting only the indoor unit to which "Custom Auto" mode can be set



When selecting both the indoor unit to which "Auto" mode can be set and the indoor unit to which "Custom Auto" mode can be set



- ⑥ Fan Control selection field**
Controls the fan speed.
The set fan speed is selected from pull-down menu.
- ⑦ Air Flow Direction (Up-Down) selection field**
Adjusts the vertical airflow direction.
When [Swing] button is clicked, automatic up-down swing mode is set.
- ⑧ Air Flow Direction (L-R) selection field**
Adjusts the horizontal airflow direction.
When [Swing] button is clicked, automatic left-right swing mode is set.

- ⑨** R.C. Prohibition selection field (*2)
Prohibits the operations of wireless remote controller and wired remote controller.
When [All] button, [On/Off] button, [On] button, [Mode] button, [Temp.] button, [Timer] button, or [Filter] button is clicked, icon is displayed in the frame at the left. When the icon is displayed in the frame, the operation of the function is prohibited.
- ⑩** Send button
Transfer the operating data set at ③ to ⑨ to the R.C. Gr. selected at ① and ②.
- ⑪** Close button
Closes the screen.

Note *1 Displayed in Centigrade or Fahrenheit depending on the data acquisition application setting.

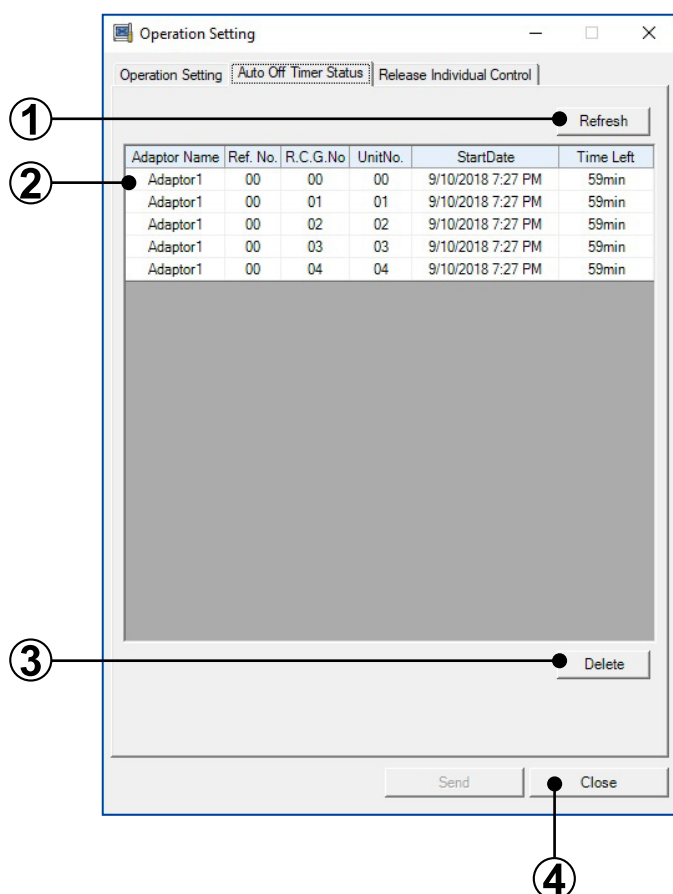


The settable range depends on the series.

Mode	Series	Centigrade	Fahrenheit
Auto / Cool / Dry	All	18~30°C	64~88°F
Heat	S	16~30°C	60~88°F
	Except S series	10~30°C	48~88°F

- *2 When setting the R.C. Prohibition, be sure to release the prohibition afterward.

5-12-2 Auto Off Timer Status



- ① Refresh button
Updates the display contents of the Auto Off timer operating status list.

- ② Auto Off timer operating status list

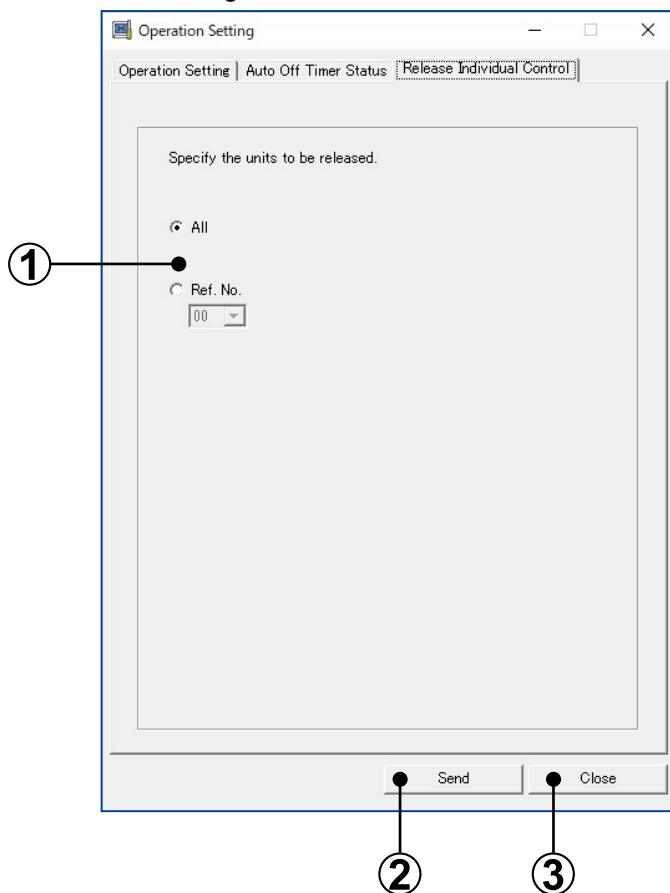
Adaptor Name	Adaptor name
Ref. No	Refrigerant system No.
R.C.G. No.	Remote controller group No.
Unit No.	Unit No.
Start Date	Start time of stop timer
Time Left	Time left until stop timer starts

- ③ Delete button
Delete the setting of Auto Off timer of the selected unit.

- ④ Close button
Closes the screen.


5-12-3 Release Individual Control

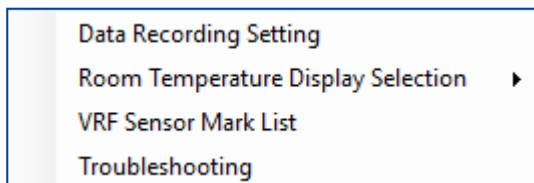
Releases the individual control setting of Air Flow Direction.



- ①** Refrigerant system selection
Selects all refrigerant system addresses or arbitrary refrigerant system address.
- ②** Send button
Transfers the release individual control data to the R.C. Gr. selected at **①**.
- ③** Close button
Closes the screen.

5-13 Setting

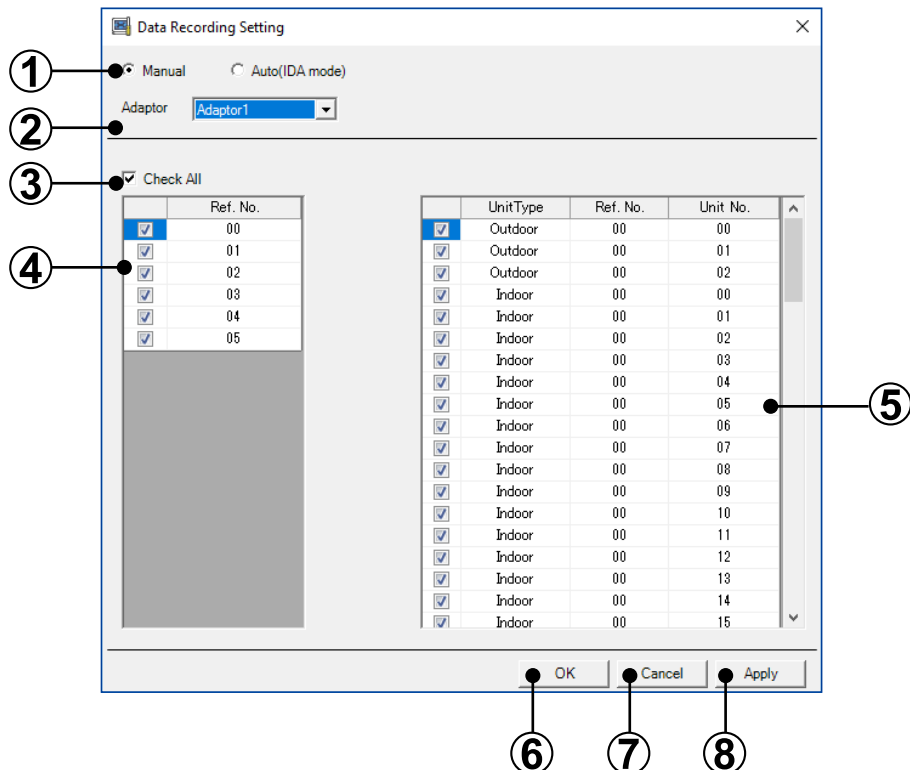
When the  button on the Monitor screen is clicked, the menu of four functions below is displayed. Click the menu you want to set.



Data Recording Setting	Select the unit in which the individual information is required.
Room Temperature Display Selection	Sets the display method of the room temperature to be displayed by the Monitor application.
VRF Sensor Mark List	Displays the list of abbreviations.
Troubleshooting	Displays the error contents and corrective action. Display is performed from also Error History screen.

5-13-1 Data Recording Setting

Select the unit in which the individual information is required.



1

Individual information requirement method selection field
Selects the individual information requirement method (Auto/Manual)

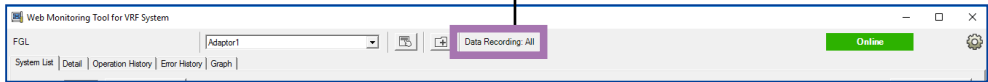
Manual: Manually selects the unit in which the individual information is required.

Auto (IDA mode): Automatically selects the unit in which the individual information is required. The selection of the unit in which the individual information is required differs depending on the monitor screen display state.
(Refer to the table below.)

When Auto is selected, 2 to 5 are not displayed.

Require-ment method	Monitor screen display state	State	Target in which the individual information is required
Manual	----- (Target in which the individual information is required does not depend on the display state)	All	Units in all refrigerant systems connected to the adaptor selecting on this setting screen (when all checkboxes of Ref. No. and Unit No. are checked by this setting)
		Selected	Some refrigerant systems and units connected to the adaptor selecting on this setting screen
Auto (IDA mode)	Not displayed	Not displayed	All units
	System List screen	All	Units in all refrigerant systems connected to the adaptor selecting on the displayed monitor screen
	Operation History screen		
	Error History screen		
	Detail Diagram screen	Ref. No. value	Units in the adaptor selecting on the displayed monitor screen or in the refrigerant system
	Detail Status List screen		
	Detail Check List screen		
	Graph screen		

State



2

Adaptor selection field
Selects the transmission adaptor which connects the target unit.

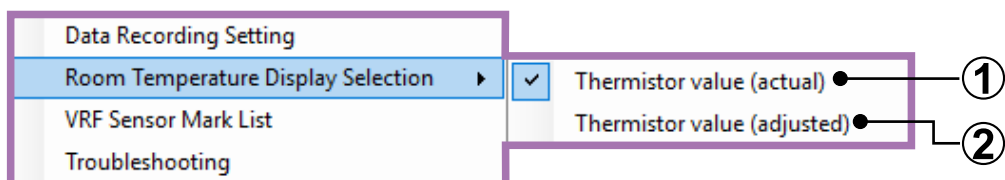
3

Check All setting field
When this checkbox is checked, all Unit Types at 4 and 5 are selected. (When the checkbox is unchecked at the list of 5, the selection can be cancelled individually.)

- ④ Refrigerant system address selection field
Select the refrigerant system address.
When the checkbox is checked, all the selected Unit Type connected to refrigerant system address are selected at the list of ⑤. (When the checkbox is unchecked at the list of ⑤, the selection can be cancelled individually.)
- ⑤ Unit Type selection field
Selects or cancels the Unit Type in which the individual information is required for each unit.
- ⑥ OK button
Saves the set contents and closes the screen.
- ⑦ Cancel button
Deletes the set contents and closes the screen.
- ⑧ Apply button
Saves the set contents. (The screen is not closed.)

5-13-2 Room Temperature Display Selection

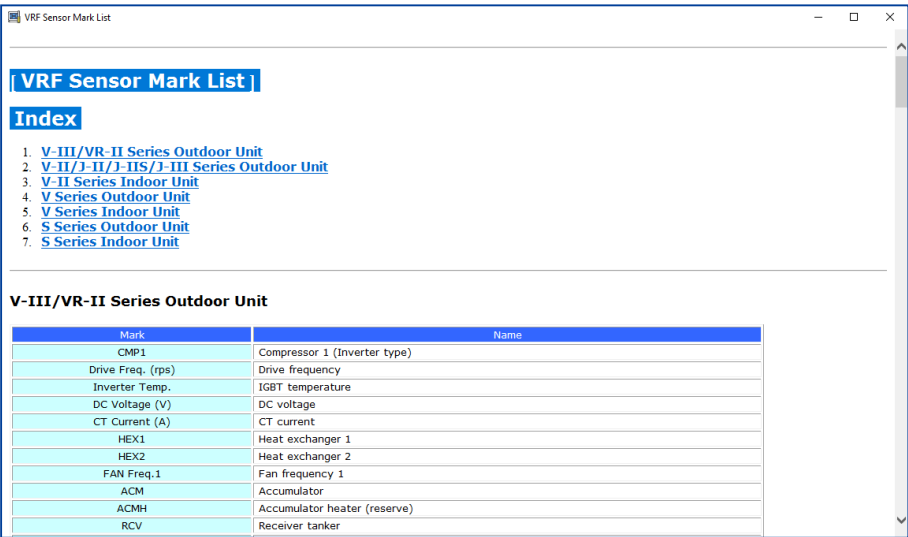
Sets the display method of the room temperature to be displayed by the Monitor application.



- ① When you want to display the room temperature detected by sensor unchanged, select “actual”.
- ② When you want to display the room temperature corrected (used in control) by the unit, select “adjusted”.

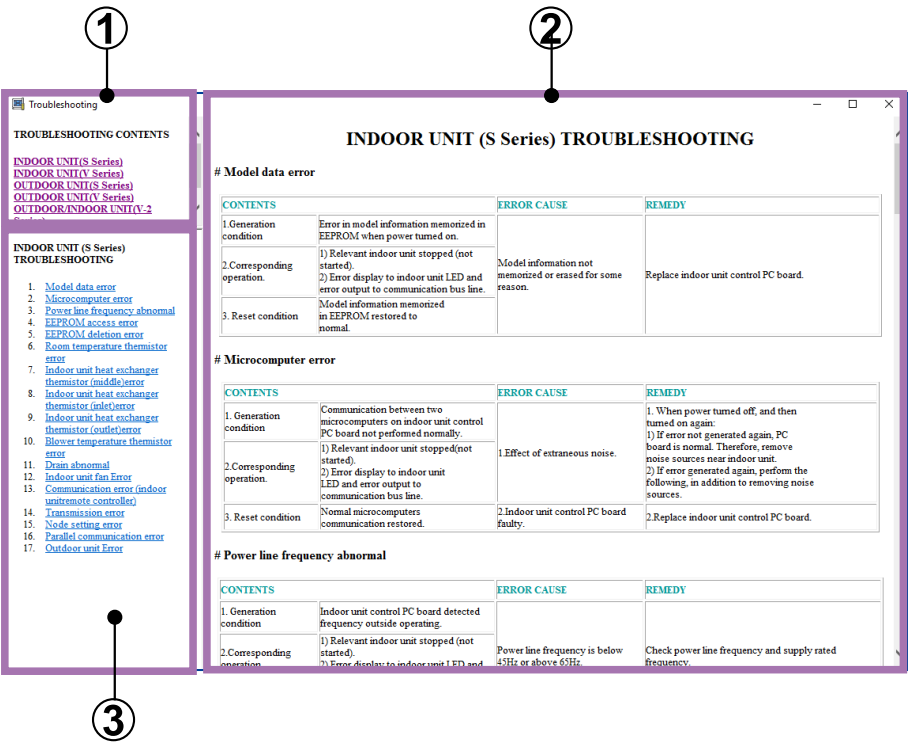
5-13-3 VRF Sensor Mark List

Displays the list of abbreviations.



5-13-4 Troubleshooting


Displays the error contents and corrective action. Display is performed from the Monitor screen and Error History screen.



- ① **Contents area by type**
When contents are clicked, the contents of the error contents are displayed.
- ② **Troubleshooting contents display area**
Displays the error details.

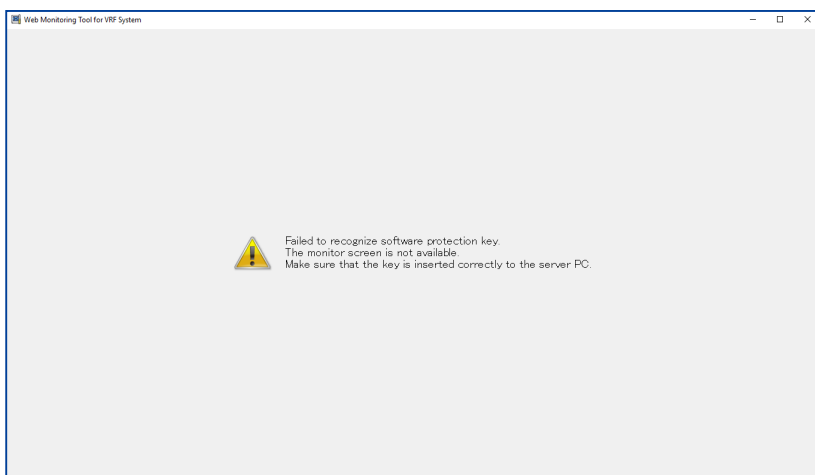
For V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series, this area will be displayed full screen.
- ③ **Contents area for each error contents**
When contents are clicked, those contents are displayed.

This area will not be displayed for V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III series.

Note  When V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III or later series is selected, Troubleshooting section from service manual will be displayed. This will give you a precise and detailed instruction on Troubleshooting.

5-14 WIBU KEY error

When the WIBU KEY is pulled out during operation, when expiration date of WIBU KEY(with expiration date) is passed during operation, or when the system is started by the expired WIBU KEY, WIBU KEY error screen is displayed.



- ① When the WIBU KEY is pulled out during operation
Insert the WIBU KEY again. When authentication process is complete, the error screen disappears and the normal monitor screen is displayed.
- ② When expiration date of WIBU KEY(with expiration date) is passed during operation
Insert a WIBU KEY that is within the expiry date. When authentication process is complete, the error screen disappears and the normal monitor screen is displayed.
- ③ When the system is started by the expired WIBU KEY
Insert a WIBU KEY that is within the expiry date. When authentication process is complete, the error screen disappears and the normal monitor screen is displayed.

Note

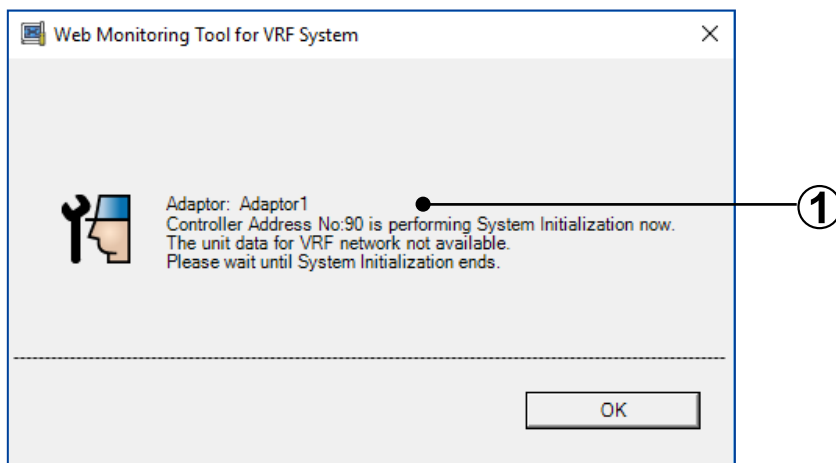


- When an error is occurred while each function operates, the process ends normally. After the error is cancelled, this data can be checked.
- Even when an error is generated, the right-click menu can be operated.
- When an error is generated while sub screen is displayed, only [Cancel] or [Close] button is valid.
- When the progress screen is displayed, the screen is closed after the process is complete.

5-15 Scanning other units

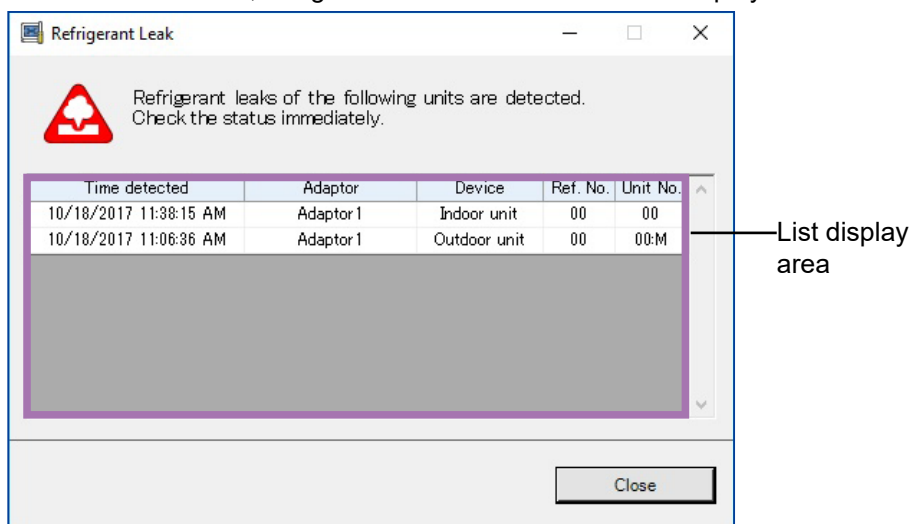
Displays when bus priority processing was generated at another unit (Touch Panel Controller, other System Controller). In this case, all operations which perform communication become impossible. When scanning ends, the display automatically returns to the processing screen and operation becomes possible.

- ① Message
The unit name being scanned is displayed.

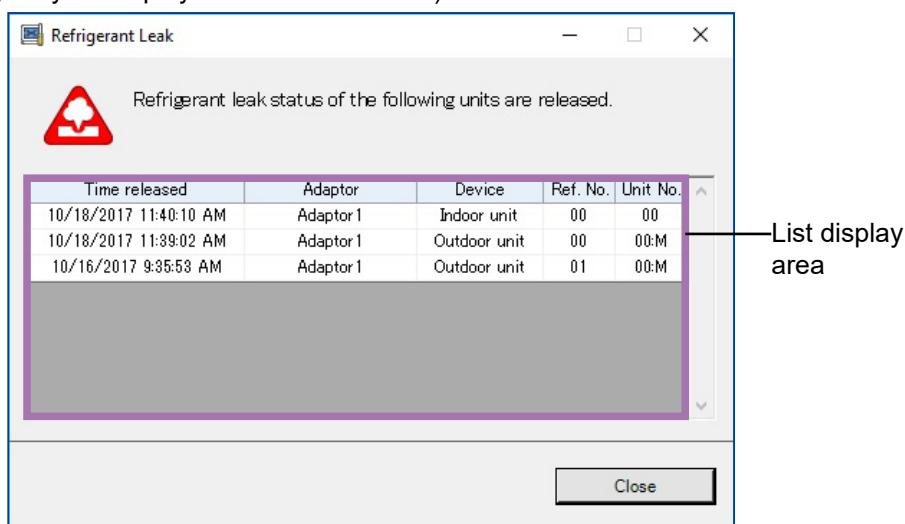


5-16 Refrigerant Leak notification

- When refrigerant leak is detected, refrigerant leak detection screen is displayed.



- When refrigerant leak is released, refrigerant leak release screen is displayed.
(Past history may be displayed at the same time.)



List display area

Time detected	Displays the date and time when refrigerant leak is detected.
Time released	Displays the date and time when refrigerant leak is released.
Adaptor	Displays the transmission adaptor name.
Device	Displays the Indoor unit or Outdoor unit.
Ref. No.	Displays the refrigerant system address.
Unit No.	Displays the unit No.

6. Remote Operation

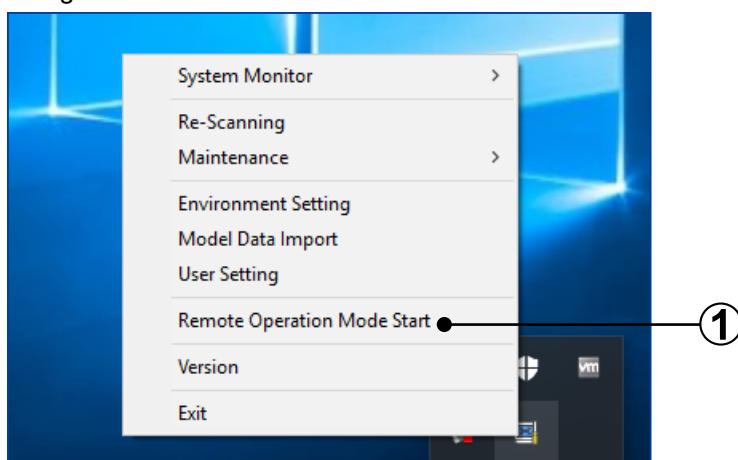
Web Monitoring Tool can be controlled by the operation of external PC (remote side PC). When Web Monitoring Tool is operated by remote side PC, the login by the previously registered account is necessary. In addition, when using for the first time, account registration is also necessary in advance. This operation is possible only when Remote Operation usage is enabled by Web Monitoring Tool user. 2 external PCs (remote side PC) can be connected remotely at the same time.



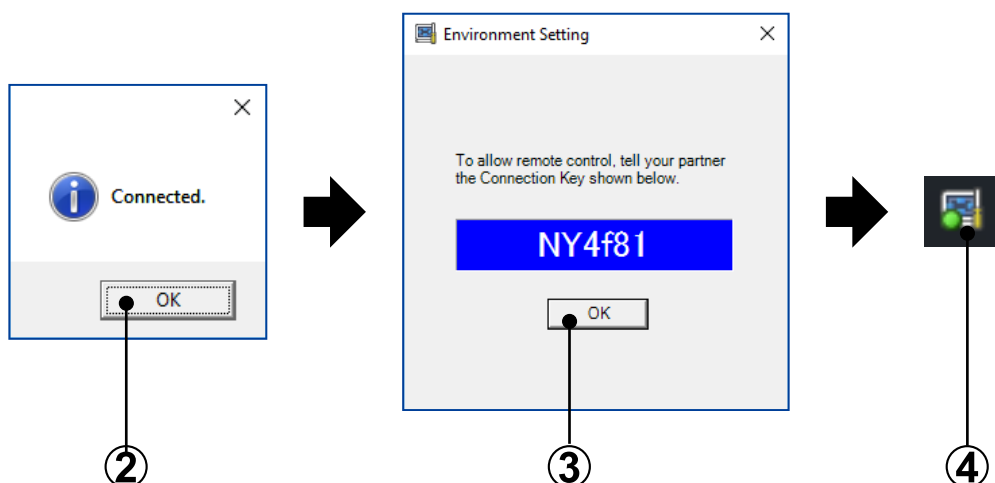
- When this operation is performed, check if the PC can be connected to the internet in advance.
- Do not start Remote Operation when the application which is always displayed at the forefront is running on the PC at VRF site.
- If you want to use the Microsoft Edge (Web browser), be sure to use it in the Internet Explorer mode (IE mode).

6-1 Enabling the Remote Operation (Web Monitoring Tool operation)

When Remote Operation is performed, it is necessary to enable the Remote Operation function from Web Monitoring Tool in advance.



- ① Click the “Remote Operation Mode Start” from the right click menu.

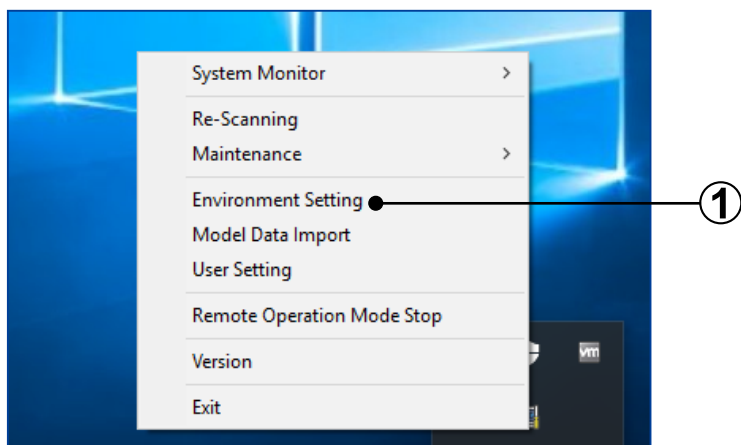


- ② Wait until the message screen appears.
When message screen is displayed, click the [OK] button.
- ③ Wait until the message screen appears.
When message screen is displayed, click the [OK] button.
- ④ The icon in the task tray is displayed.

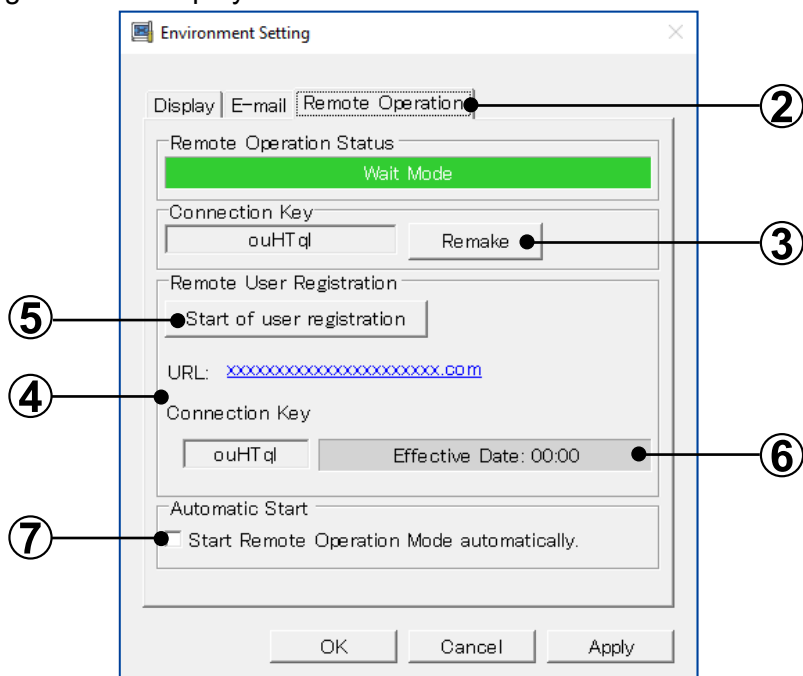
6-2 Account registration (first time only)

Account is used to provide the authorization of Remote Operation.

6-2-1 Connection Key issuance (Web Monitoring Tool operation)



- ① When “Environment Setting” is clicked from right click menu, Environment Setting screen is displayed.



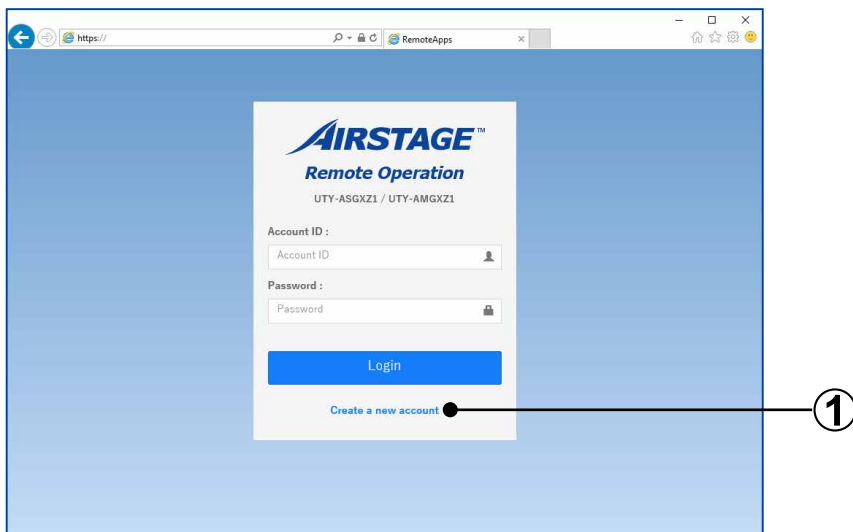
- ② Click the “Remote Operation” tab.

- ③ Change the Connection key

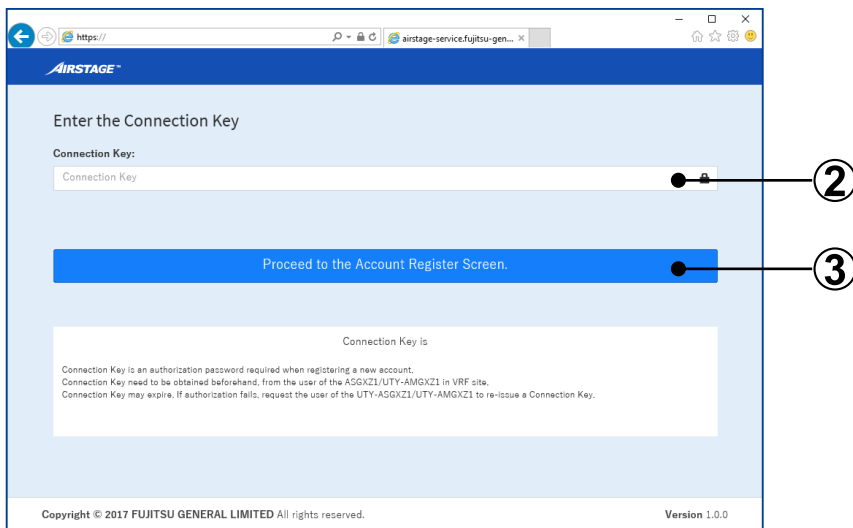
- ④ URL and Connection Key which are necessary for account registration are displayed. Take a note of these not to forget them. In addition, if an actual operator is different, it is necessary to inform the operator about the information of these two URL and Connection Key.
- ⑤ When [Start of user registration] button is clicked, effective date of account registration is set.
- ⑥ Countdown for effective date of account registration starts. Register the new account within 15 minutes.
- ⑦ When checking the checkbox, Remote Operation Mode starts automatically at Web Monitoring Tool start-up.

6-2-2 Account registration (PC operation at remote side)

Start the Web browser and enter the specified URL (par. 6-2-1④).
Login screen is displayed.



- ① Click the “Create a new account”.



- ② Enter the connection key (par. 6-2-1④).
- ③ Click the “Proceed to the Account Register Screen.” button.

Register account

Account ID

Password

Confirm Password

Register account

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- ④ Enter the Account ID.
- ⑤ Enter the Password.
- ⑥ Enter the same Password as ⑤.
- ⑦ Click the “Register account” button.

AIRSTAGE™
Remote Operation
UTY-ASGXZ1 / UTY-AMGXZ1

SUCCESS SAVE

Account ID :

Password :

Login

Create a new account

⑧ When the registration is complete, the “SUCCESS SAVE” is displayed.

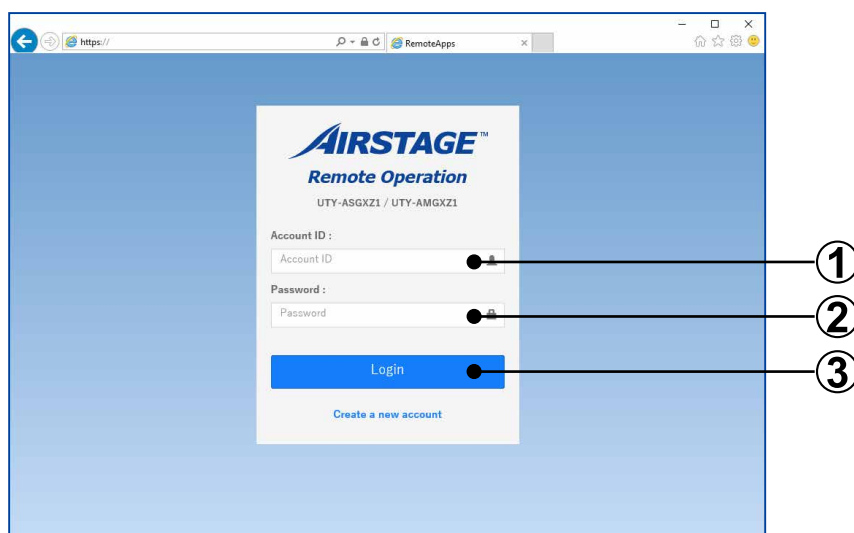
Note



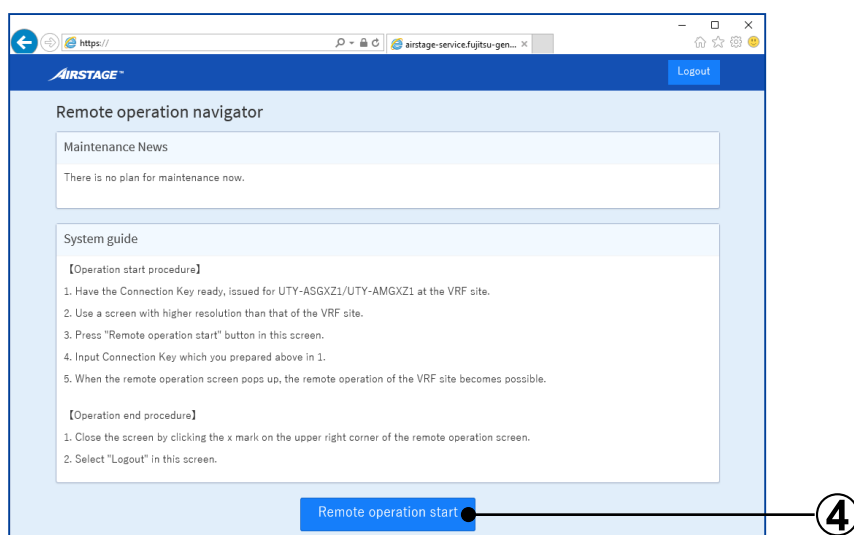
- Once the account is registered, it cannot be deleted or changed.
- Due to the authorization of Remote Operation, pay careful attention to the prevention of account information leakage.
- Keep your Account ID and password secret from anyone.
- Set a strong password and do not use a easily guessed password. In addition, do not reuse passwords.

6-3 Login and Remote Operation start (PC operation at remote side)

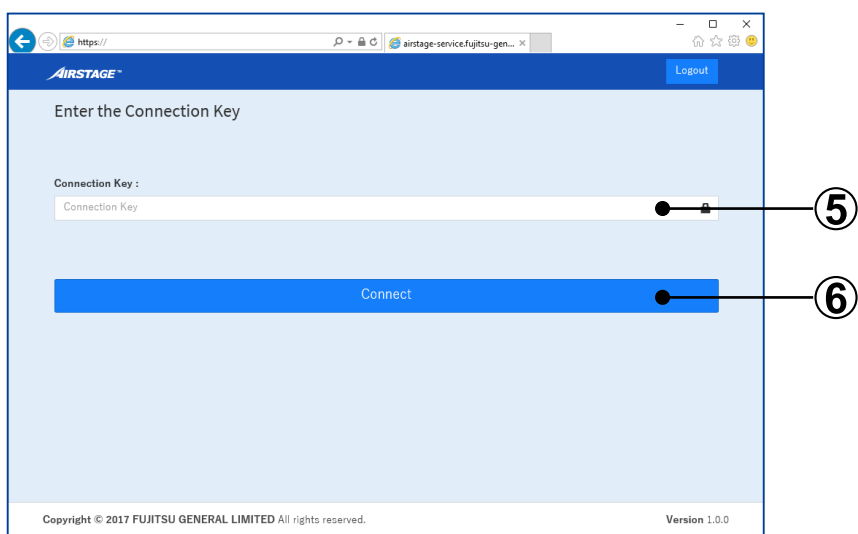
Display the URL specified by Remote side PC (par. 6-2-1④) and log in.



- ① Enter the Account ID.
- ② Enter the Password.
- ③ Click the "Login" button.

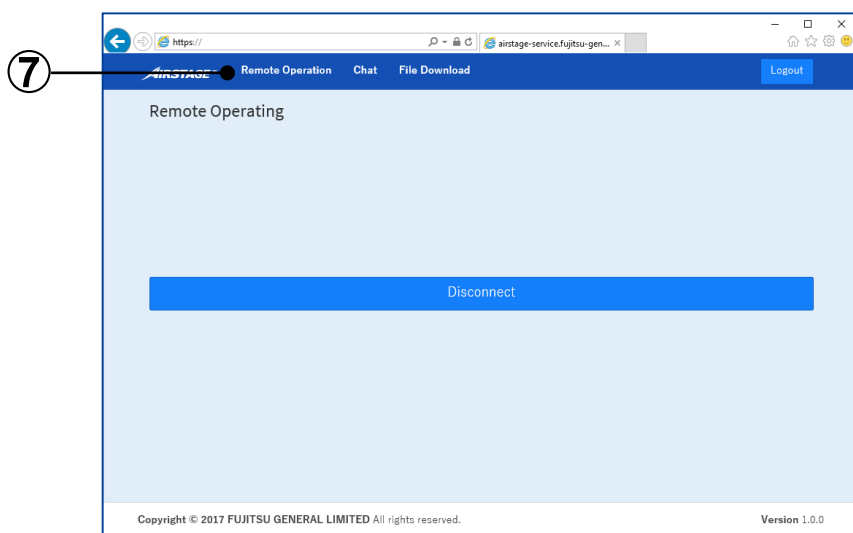


- ④ Click the "Remote operation start" button.



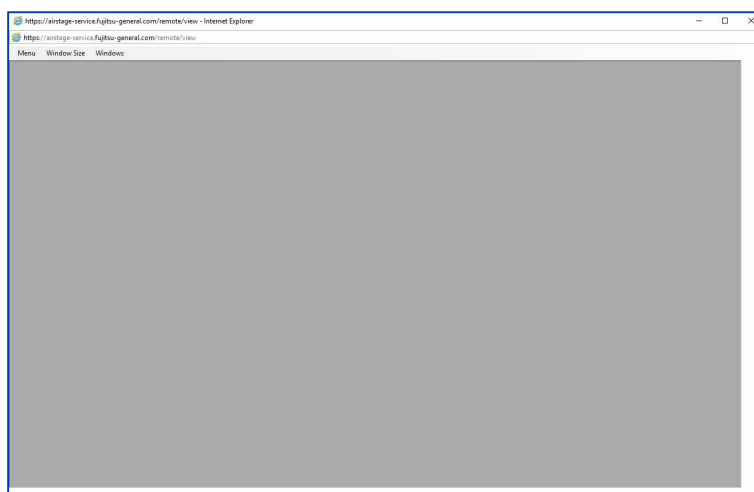
⑤ Enter the Connection key of the Web Monitoring Tool to be operated by Remote Operation.

⑥ Click the "Connect" button.



⑦ Click the "Remote Operation" button.

When it becomes the connecting status, Remote Operation screen is displayed on the Web browser.



Note The way of handling is described when the following message appears while the Remote Operation screen is displayed.

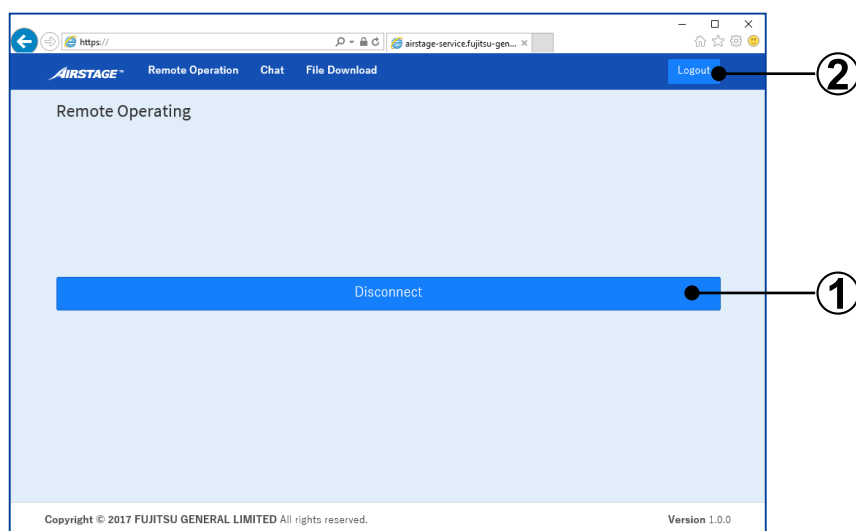


- “The connecting site is currently busy. Try Later.”
When the function other than “System monitor” is displayed from the right click menu of Web Monitoring Tool, Remote Operation cannot be started. To start the operation, close the function displayed currently by Web Monitoring Tool once and connect again.
- “CONNECTION LIMITED OVER”
Connection limit is exceeded because Remote Operation is performed by other person. After the Remote Operation work by other person is complete, connect again.
- When the following message is displayed on the Web browser.

For Edge
Microsoft Edge blocked a pop-up from xxxxxxxxxxxxxxxx.com

Popup block is effective. Select the button to be displayed and display the Remote Operation screen.
- “The connecting PC screen is locked. The screen must be unlocked in order to connect.”
This message is displayed when the screen saver appears or the screen is locked on the PC at VRF site.
For performing remote operation, you need to ask the operator to release these statuses at the PC on VRF site if necessary.

6-4 Remote Operation end and Logout (PC operation at remote side)



① When “Disconnect” button is clicked, Remote Operating screen is closed.

② When “Logout” button is clicked, it switches to the Login screen.



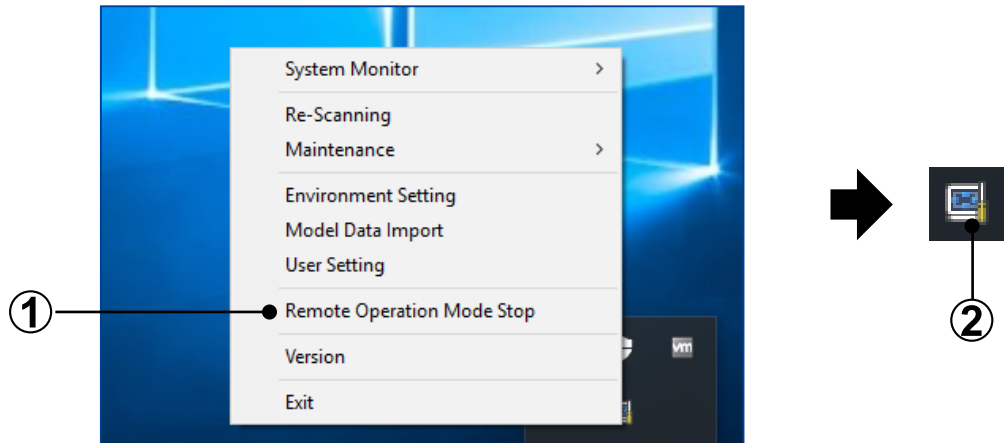
- Note**
- After login or Remote Operation start, if the operation is not performed for the following period, you will be logged out or the Remote Operation will end automatically.

Logout time No operation for 24 hours

Remote Operation end time No operation for 1 hour

6-5 Disabling the Remote Operation (Web Monitoring Tool operation)

The Remote Operation function at the Web Monitoring Tool cannot be used by disabling the Remote Operation.



- ① Click "Remote Operation Mode Stop" from right click menu.
- ② The icon at task tray is displayed.

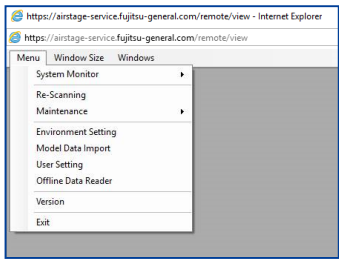
6-6 Remote Operation

The following functions can be used on the Remote Operating screen.

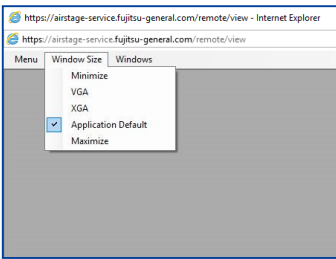
① Remote Operation

Menu	Functions of Web Monitoring Tool can be used. For the usage of each function, refer to the description of Chapter 4 and 5.
Window Size	Displayed screen size is set.
Windows	Multiple displayed functions (screens) can be arbitrarily switched to the display at the forefront.

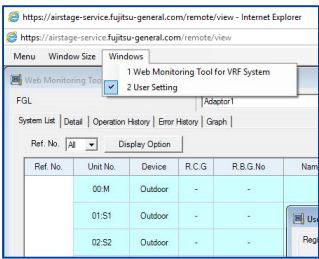
When Menu is selected



When Window Size is selected

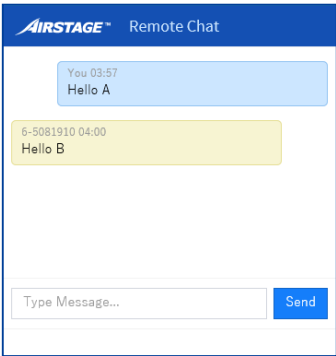


When Windows is selected



② Chat

Character input and talking in real time between Web Monitoring Tool side and Remote side operators can be performed.




Note The chat contents can be transmitted only if chat screen is opened mutually at VRF site and Remote site.
In addition, when the chat screen is closed, the history of chat will be deleted.

3

File Download

Various files output from Web Monitoring Tool during Remote Operation can be downloaded.



File Download

ALL
▼

List of search results

#	File Name	Size	Date
<input type="radio"/>	FGL00SystemList.csv	.01MB	1/20/2017 3:52:32 AM
<input type="radio"/>	Adaptor1-Ref all-201701200000-201701210000-033821.gz	.95MB	1/20/2017 3:38:40 AM
<input type="radio"/>	Adaptor1-Ref all-201701200000-201701210000-033937.gz	.95MB	1/20/2017 3:39:54 AM
<input type="radio"/>	Adaptor1-Ref all-201701200000-201701210000-034003.gz	.95MB	1/20/2017 3:40:14 AM

Search results 4 files

Download

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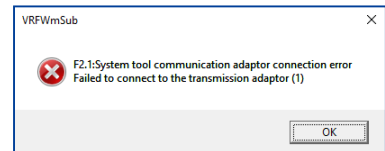
7. Troubleshooting

When a problem occurred during operation, refer to this section. This section describes assumed problems and how to solve them.

- T-1 A transmission adaptor connection error was generated.

Cause

- ① Driver is not installed.
- ② Power is not supplied to the transmission adaptor.



Countermeasure

- ① To use this product, install necessary drivers/software for this product following the ***QUICK START*** enclosed with this product.
- ② Make sure that USB equipment (USB hub, etc.) that this product is connected to, is not overloaded (power supplied thru the interface does not exceeds the maximum limit).

- T-2 Data is not displayed on the monitor screen (System List screen or Detail Diagram screen, etc.)

Cause

Data cannot be displayed because the unit data which is the display objective was not received.

Countermeasure

Change the setting by Data Recording Setting. For details, refer to “par. 5-13-1 Data Recording Setting”.

- T-3 During scanning, PC power was dropped by a power failure or erroneous operation and operation became unstable.

Countermeasure

At a power failure, incomplete data remains and operation may be performed with this incomplete data at the next starting. Repeat scanning. When the power was interrupted during another operation, the operation may return to normal by the same operation after resetting.

To permanently prevent these, installation of a UPS is recommended.

T-4 E-mail was not received at the set address.

Cause

- ① E-mail address setting is incorrect.
- ② Transmission mode setting at environment was not set to match the usage environment.
- ③ Service was temporarily stopped due to line congestion or provider maintenance.

Countermeasures

- ① Check the e-mail address setting.
⇒ Check “par. 4-4-2 Error notification e-mail setting”.
- ② The provider used may not be in an unusable state. Since the system tries to send every 5 minutes, wait until the provider recovers.

T-5 Air conditioner is not controlled in R.C. group units.

Cause

R.C group data cannot be acquired.

Countermeasure

Repeat scanning by detailed information scanning setting.

T-6 Cannot connect from client to server.

Cause

- ① Connection environment between server and client is not created.
- ② Network setting is incorrect.

Countermeasures

- ① Inspect and check the following contents regarding the connection environment.
 - Check the physical connection. (Cable not connected? Connection point correct?)
 - Check the operation status by network device error lamps, etc.
 - Contact the network service company and check the state of the line.
 - Ask the provider about the trouble status.
- ② Check the network settings.
 - Check the IP address/subnet mask settings.
⇒ Select the items in order of [start menu] → [Accessories] or [Windows System] → [Command Prompt] and open the Command Prompt screen. When “ipconfig” is input and “Enter” is pressed, currently set IP address and subnet information are displayed.

T-7 Suddenly cannot connect to server.

Cause

- ① Web Monitoring Tool application was exited at server.
- ② Service temporarily stopped due to line congestion, provider maintenance, etc.
- ③ Setting of DNS service at provider takes time.

Countermeasures

- ① Start the Web Monitoring Tool application.
- ② After waiting a while, reconnect.
- ③ Perform internet connection and after waiting a while, login to the server.

T-8 Response was slow when Web Monitoring Tool server was accessed.

Cause

- ① Transmission line speed may be slow.
- ② Specifications of installed PC may be slow.

Countermeasures

- ① Switch transmission line contract to fast line.
- ② Operate with a PC that satisfies the published specifications.

T-9 Refrigerant system diagram is not displayed for outdoor/indoor unit in the Detail Diagram screen.
(Message "Cannot display refrigerant system diagram" is displayed).

Cause

- ① Model name was not acquired from indoor/outdoor unit.
- ② The model names corresponding to the Web Monitoring Tool may not be registered.

Countermeasure

- ① Perform scan again (Refer to "par. 3-2-5 Scanning Setting").
After scanning, check that the model name is displayed in the System List screen.
If the name is not displayed in the System List screen, enter the correct model name for the unit in the Name master database file (Refer to "par. 3-2-4 Name Master Database file selection screen") and select "re-scanning" from the right-circle menu in the task tray.
When requested for the Name master database file, specify the file, but the following scan may be cancelled.
- ② Latest Model Data needs to be updated. For the procedure, refer to "par.4-5 Model Data Import". In addition, it is necessary to acquire the Model data in advance. For details, consult the sales dealer.

T-10 Troubleshooting for VRF is not displayed on 'Adobe Acrobat Reader'.

Countermeasure

- ① Start the 'Adobe Acrobat Reader'.
- ② Select [Edit] menu → [Preferences...] → [Security(Enhanced)]
- ③ Remove the check mark of the 'Enable Protected Mode at startup'.

T-11 Data is not displayed in the USB port selection field on the scan settings screen.

Cause

The "Memory Integrity" is turned on.

Countermeasure

Follow the steps below to turn off the "Memory Integrity" .

- ① [Start Menu]→[Windows Security]→[Device security]→[Core isolation details]
- ② Turn off the "Memory Integrity" .

Q-1 Can the Web Monitoring Tool be restarted by installing it on the same PC as the System Controller or other Software tool and using the same transmission adaptor?

Answer

The Web Monitoring Tool can be installed on the same PC, but simultaneous operation is outside the warranty. Also, each application cannot simultaneously share 1 transmission adaptor.

Q-2 Can the browsers other than Microsoft Edge be used at remote operation side when remote operation function is used?

Answer

Other browsers cannot be used because they are not supported.

Q-3 Can multiple servers at a large type site be collectively monitored with 1 network line contract?

Answer

An LAN must be built through a router at the server side. For more information, contact the network administrator or service personnel.