

OPERATING MANUAL

WEB MONITORING TOOL for VRF System

UTY-AMGXZ1

Ver. 2.0



CAUTION

Please read the LICENSE AGREEMENT in the manual first.

PART NO. 9708314037

FUJITSU GENERAL LIMITED

LICENSE AGREEMENT for “WEB MONITORING TOOL for VRF SYSTEM”

IMPORTANT-READ CAREFULLY

This “WEB MONITORING TOOL for VRF SYSTEM” License Agreement (LICENSE AGREEMENT) is a legal agreement between you and Fujitsu General Limited (FGL) for the use of VRF WEB MONITORING TOOL products designated below, which includes computer software and printed materials, and may include online or electronic documentation (SOFTWARE PRODUCT or SOFTWARE). By installing, copying, or otherwise using the SOFTWARE PRODUCT, you accept to be bound by all of the terms and conditions of this LICENSE AGREEMENT. If you do not agree to all of the terms and conditions of this LICENSE AGREEMENT, you may not use the SOFTWARE PRODUCT and shall promptly return the SOFTWARE PRODUCT to the place from which you have obtained it.

1. SOFTWARE PRODUCT LICENSE

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as by other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed to you, not sold. FGL owns the title, copyright, and other intellectual property rights in the SOFTWARE PRODUCT.

2. GRANT OF LICENSE

FGL hereby grants you the limited, non-exclusive and non-transferable rights only for the purpose of maintaining and testing VRF air-conditioning system products (VRF) provided you comply with all terms and conditions of this LICENSE AGREEMENT.

3. COPYRIGHT

All right, title, and copyright in and to the SOFTWARE PRODUCT, and any copies of the SOFTWARE PRODUCT are owned by FGL. The SOFTWARE PRODUCT is protected by copyright laws and international treaty provisions. Therefore, you may copy the SOFTWARE PRODUCT solely for backup or archival purposes.

4. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

(1) USE OF SOFTWARE PRODUCT

You may install and use the enclosed SOFTWARE PRODUCT on a single terminal connected to a single computer. You may not network the SOFTWARE or otherwise use it on more than one computer terminal at the same time. The infrastructure necessary to use this software (PC, accessories, etc.), shall be prepared separately by you.

(2) LIMITATIONS ON REVERSE ENGINEERING, DECOMPILATION, AND DISASSEMBLY

You may not reverse engineer, decompile, or disassemble the SOFTWARE PRODUCT, except and only to the extent that applicable law expressly permits such activity notwithstanding this limitation.

(3) RENTAL

You may not rent or lease the SOFTWARE PRODUCT.

(4) SOFTWARE TRANSFER

You may not transfer the SOFTWARE PRODUCT to any person and/or entity (-ies) either payable or free of charge without the written consent of FGL.

(5) TERMINATION

Without prejudice to any other rights, FGL may terminate this LICENSE AGREEMENT if you fail to comply with the terms and conditions of this LICENSE AGREEMENT. In such an event, you shall promptly return all originals and copies of the SOFTWARE PRODUCT to FGL.

5. EXPORT RESTRICTIONS

You acknowledge that the SOFTWARE PRODUCT is of Japan origin. You agree that neither you nor your customers intend to or will, directly or indirectly, export or transmit the SOFTWARE PRODUCT to any country to which such export or transmission is restricted by any applicable regulation or statute, without the prior written consent, if required, of the authorized governmental entity as may have jurisdiction over such export or transmission.

6. NO WARRANTY

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, FGL EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE SOFTWARE PRODUCT. THE SOFTWARE PRODUCT AND ANY RELATED DOCUMENTATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OR MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK ARISING OUT OF USE OR PERFORMANCE OF THE SOFTWARE PRODUCT REMAINS WITH YOU.

7. LIMITATION OF LIABILITY AND CUSTOMER REMEDIES

FGL'S ENTIRE LIABILITY AND YOUR EXCLUSIVE REMEDY UNDER THIS LICENSE AGREEMENT SHALL BE, AT FGL'S OPTION, REPLACEMENT OF THE SOFTWARE WHICH IS RETURNED TO FGL. THIS LICENSE AGREEMENT SHALL ALSO APPLY TO THE REPLACEMENT SOFTWARE SUPPLIED UNDER THIS SECTION 7.

8. NO LIABILITY FOR CONSEQUENTIAL DAMAGES

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL FGL BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFIT, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) DIRECT OR INDIRECT, TO YOU OR TO ANY THIRD PARTY, ARISING OUT OF THE USE OR INABILITY TO USE THIS PRODUCT, EVEN IF FGL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

9. ENTIRE AGREEMENT

This LICENSE AGREEMENT (including any addendum or amendment to this LICENSE AGREEMENT included with the SOFTWARE PRODUCT) is the entire agreement between you and FGL relating to the SOFTWARE PRODUCT and supersedes all prior contemporaneous oral or written communications, proposals and representations with respect to the SOFTWARE PRODUCT or any other subject covered by this LICENSE AGREEMENT.

10. INDEMNITY

You agree to indemnify and hold FGL, and its subsidiaries, affiliates, officers, agents, co-branders or other partners, and employees, harmless from any damage, claim or demand, including without limitation reasonable attorneys' fees, made by any third party due to or arising out of your violation of the terms and conditions of this LICENSE AGREEMENT, or your violation of any rights of another person or entity.

11. GOVERNING LAW AND JURISDICTION

To the maximum extent permitted by applicable law, this LICENSE AGREEMENT is governed by the laws of JAPAN. To the maximum extent permitted by applicable law, you and FGL hereby irrevocably submit to the exclusive jurisdiction of the Tokyo District Court and other higher courts having jurisdiction in Japan for the settlement of disputes arising under or in connection with this LICENSE AGREEMENT.

Contents

1. Safety precautions	7
1-1 Safety precautions	7
1-2 Precautions when using the Web Monitoring Tool	8
2. Outline	9
3. Data acquisition application starting flow	11
3-1 Screen transition	11
3-2 Data acquisition application starting (at initial starting)	12
3-2-1 User registration	12
3-2-2 Login	13
3-2-3 Online Site Data Selection	14
3-2-4 Name Master Database file selection screen	15
3-2-5 Scanning Setting	18
3-2-6 Mismatched Unit List	21
3-3 Data acquisition application starting (automatic starting)	22
4. Data acquisition application right click menu	23
4-1 Outline	23
4-1-1 Menu	23
4-1-2 Screen transition (online)	25
4-2 Re-Scanning	26
4-3 Maintenance	26
4-3-1 Network Topology Analyzer	26
4-3-2 Remote Setting	29
4-3-3 System Time Setting	31
4-3-4 Manual Setting	33
4-3-5 Central Control Forced Release	35
4-3-6 Time Guard Information	37

4-4	Environment Setting	38
4-4-1	Display	38
4-4-2	Error notification e-mail setting	40
4-4-3	Mail Transmission Authentication Setting	41
4-4-4	Remote Operation	43
4-5	Model Data Import	45
4-6	User Setting	46
4-6-1	Register User	47
4-6-2	Change Password	48
4-6-3	Change User ID	49
4-6-4	Delete User	50
4-7	Version	51
4-8	Exit	54
5.	Monitor Application	55
<hr/>		
5-1	Screen transition	55
5-2	Main menu	57
5-3	System List	58
5-3-1	Name and function of each area	58
5-3-2	System List display	61
5-4	Detail Diagram	62
5-4-1	Name and function of each area	62
5-4-2	Detail Diagram specification	70
5-5	Detail Status List	74
5-5-1	Name and function of each area	75
5-5-2	Detail Status List specification	77
5-6	Detail Check List	79
5-6-1	Name and function of each area	80
5-6-2	Detail Check List specification	81
5-6-3	Commissioning Report creation	83

5-7	Operation History	86
5-7-1	Name and function of each area	86
5-7-2	Operation History specification	89
5-8	Error History	91
5-8-1	Name and function of each area	91
5-8-2	Error History display method	92
5-8-3	Unit Memory	95
5-9	Graph	97
5-9-1	Name and function of each area	98
5-9-2	Graph specification	100
5-10	Error List	102
5-11	Data Backup	103
5-11-1	Name and function of each area	104
5-11-2	Procedures for creating backup files	105
5-11-3	Data file download/deletion	106
5-12	Operation Setting	108
5-13	Setting	110
5-13-1	Data Recording Setting	110
5-13-2	Room Temperature Display Selection	112
5-13-3	VRF Sensor Mark List	113
5-13-4	Troubleshooting	113
5-14	WIBU KEY error	115
5-15	Scanning other units	116
6.	Remote Operation	117
<hr/>		
6-1	Enabling the Remote Operation (Web Monitoring Tool operation)	117
6-2	Account registration (first time only)	119
6-2-1	Connection Key issuance (Web Monitoring Tool operation)	119
6-2-2	Account registration (PC operation at remote side)	120

6-3	Login and Remote Operation start (PC operation at remote side)	123
6-4	Remote Operation end and Logout (PC operation at remote side)	126
6-5	Disabling the Remote Operation (Web Monitoring Tool operation)	127
6-6	Remote Operation	128
7.	Troubleshooting	130

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 Network Interface, follow the instructions given in the manual that comes with the product.

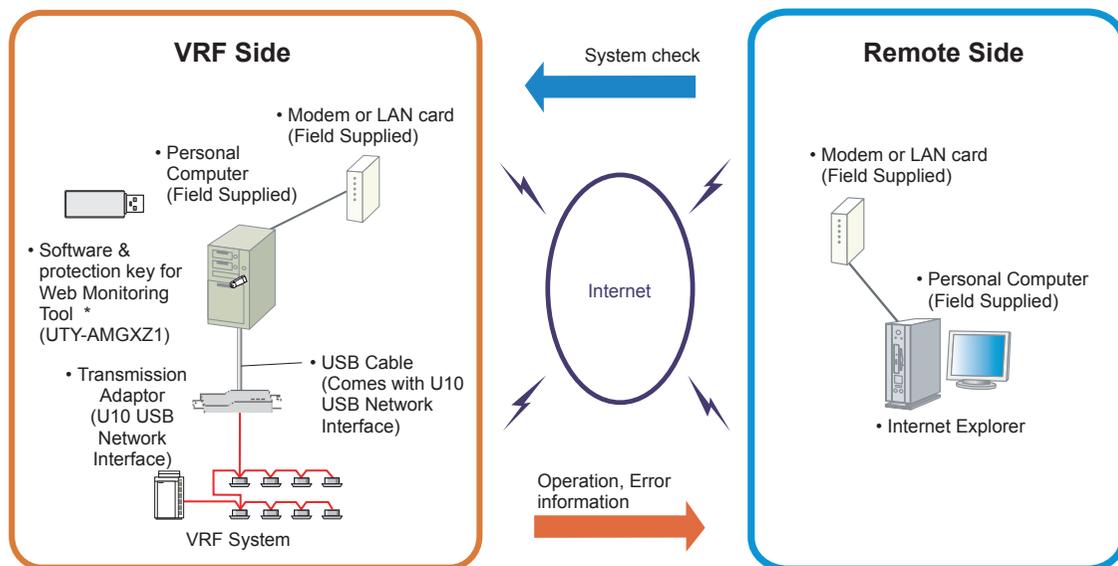
CAUTION

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.
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.
 - 1) Microsoft® .NET Framework
 - 2) Microsoft® SQL Server® 2014 Express
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 Internet Explorer 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** .

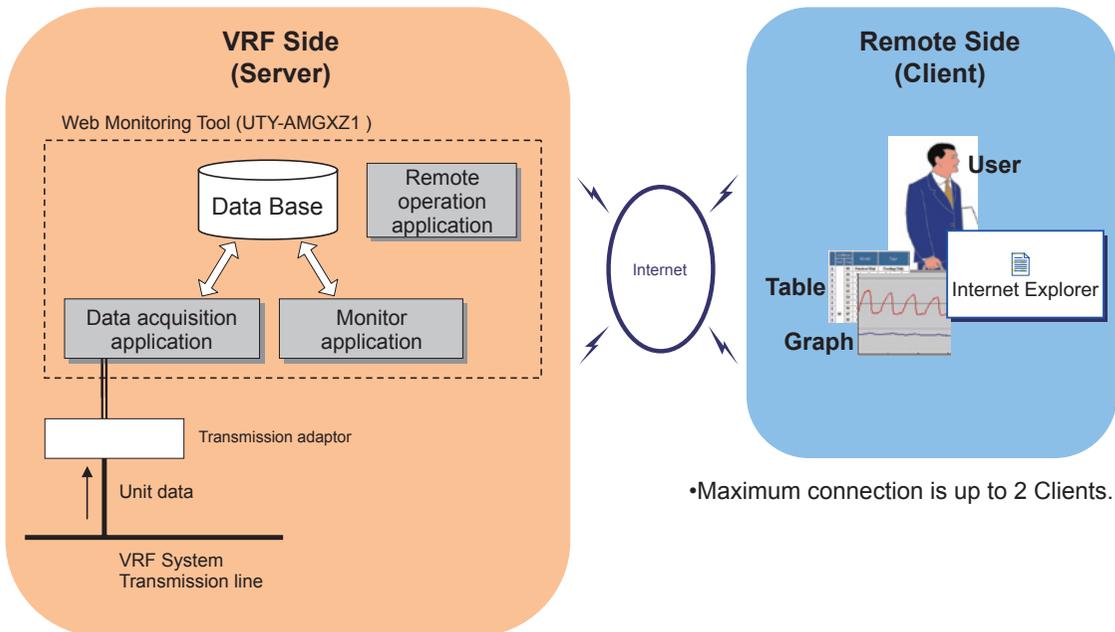
The **Data acquisition application** is a program which resides and run in a background when the Web Monitoring Tool is started, and exchanges data with the VRF System transmission line. It also records the received unit data to a database.



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 (Internet Explorer) 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



Opening



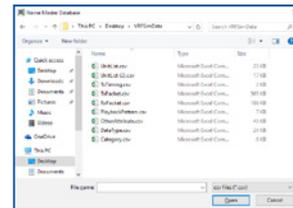
Online Site Data Selection



Login

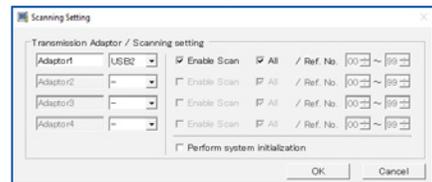


Name Master Database



Cancel
System end

Scanning Setting

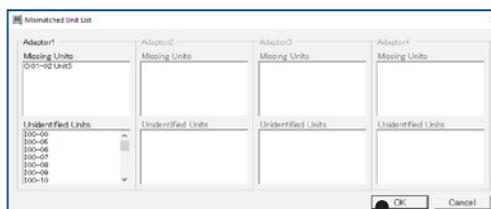


Task Tray Resident



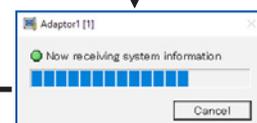
No scanning

Mismatched Unit List



OK

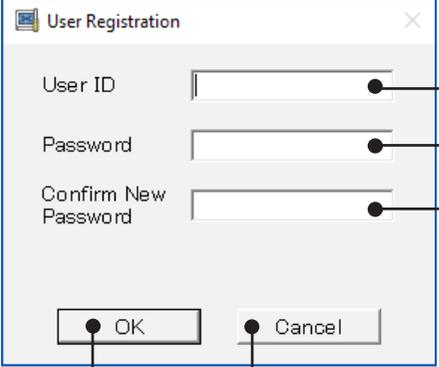
Adaptor [1]



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

②

③

④

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
Input the password again for confirmation. (Up to 20 alphanumeric characters) (*2)
- ④ OK button
Save the inputted data.

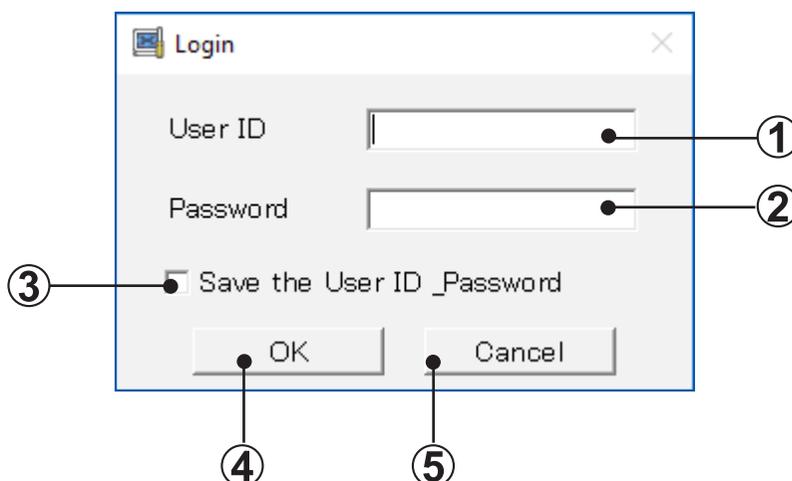
The opening screen is displayed, and operation advances to site data selection processing.
- ⑤ Cancel button
User registration stops and the Web Monitoring Tool ends.



- 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.

3-2-2 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.

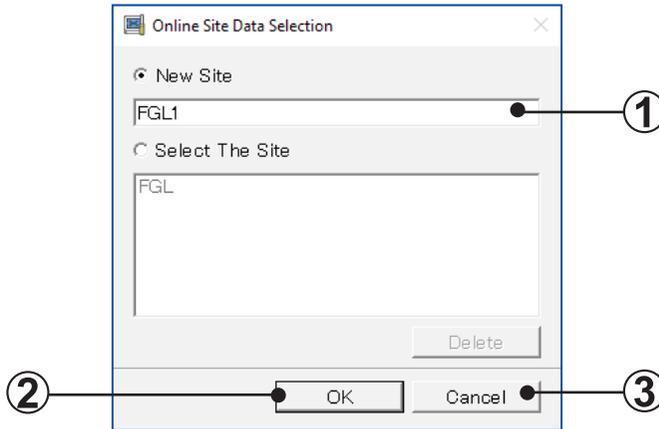
When the Save the User ID & password check box is not checked, the next time the Web Monitoring Tool is started, the user ID and password are not displayed and must be manually inputted.
- ④ **OK button**
The opening screen is displayed, and then operation advances to site data selection processing.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



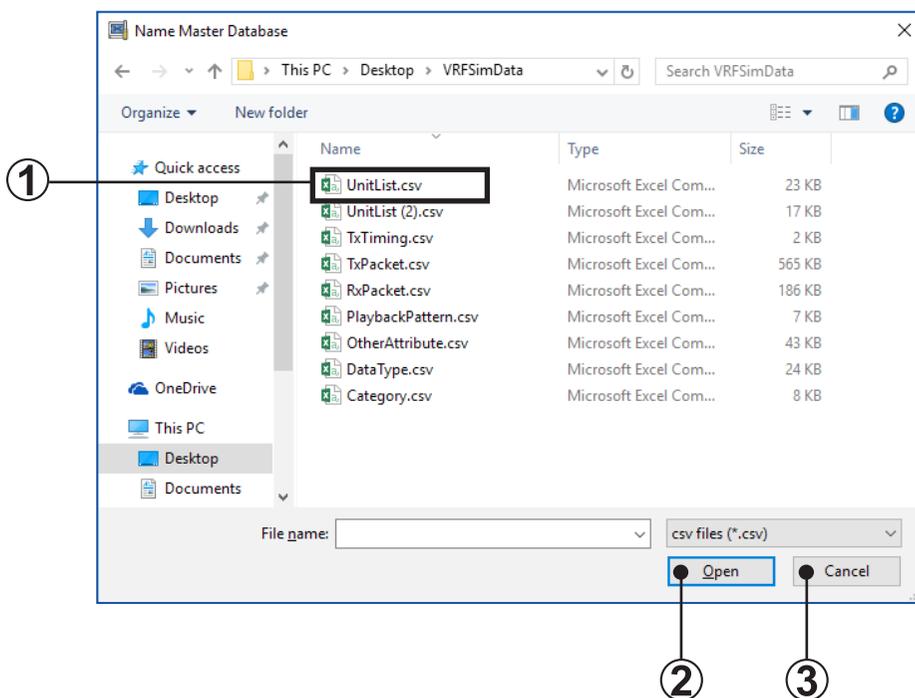
- 1** New site name input field
Input the site name to be registered. Only alphanumeric characters and spaces may be used for the site name. (Up to 20 alphanumerics and spaces)(*1)
- 2** OK button
The name master database file selection screen is displayed.
- 3** Cancel button
The program returns to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



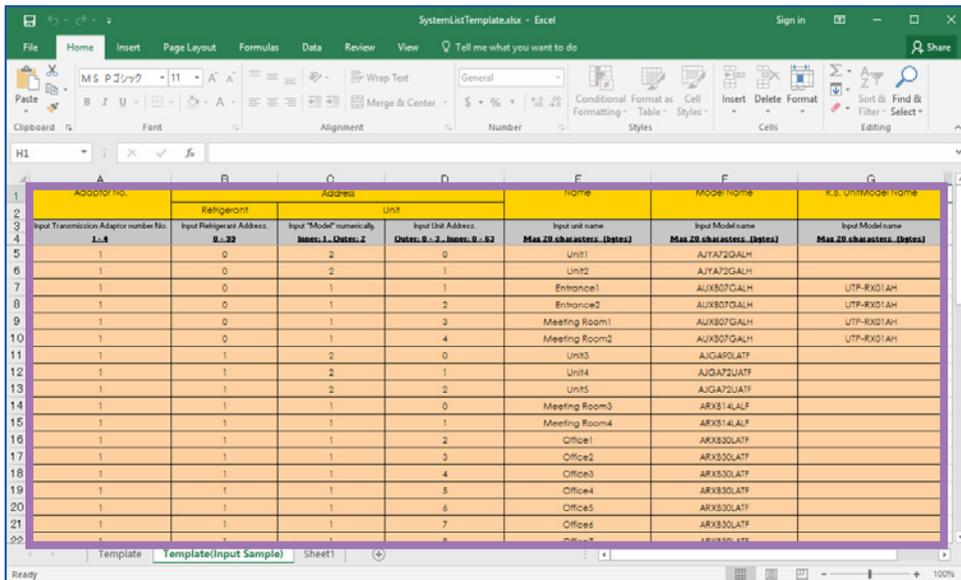
*1 Files other than CSV files cannot be selected and displayed.

*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.

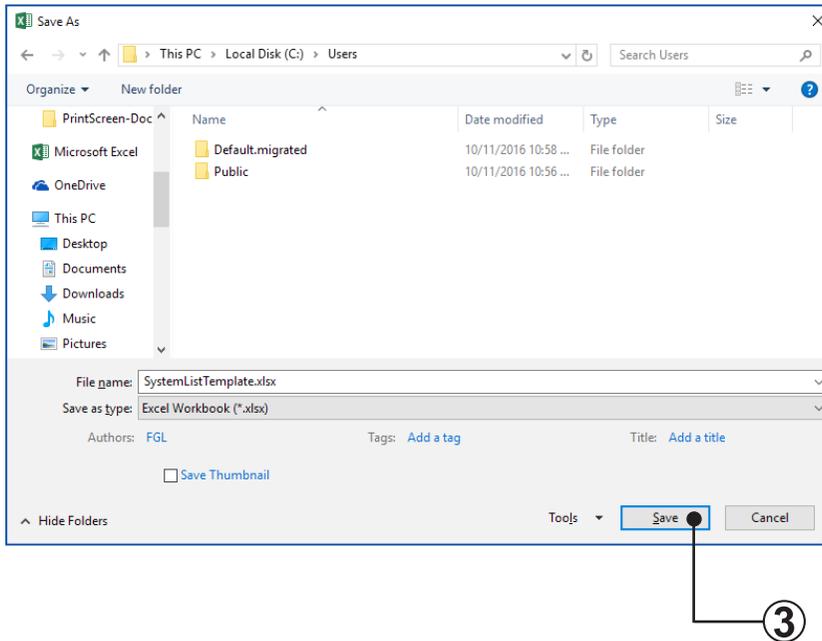
- ① Since the template [SystemListTemplate.xls] is C:\Program Files\AIRSTAGE-Web Monitoring Tool\SystemListTemplate\, open that file with Excel.
(*1) (*2)
- ② Since the following screen is displayed, set a value at each item.



Input contents

Adaptor No.	Enter the Adaptor No. (Range: 1 ~ 4)	
Refrigerant	Enter the refrigerant circuit 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

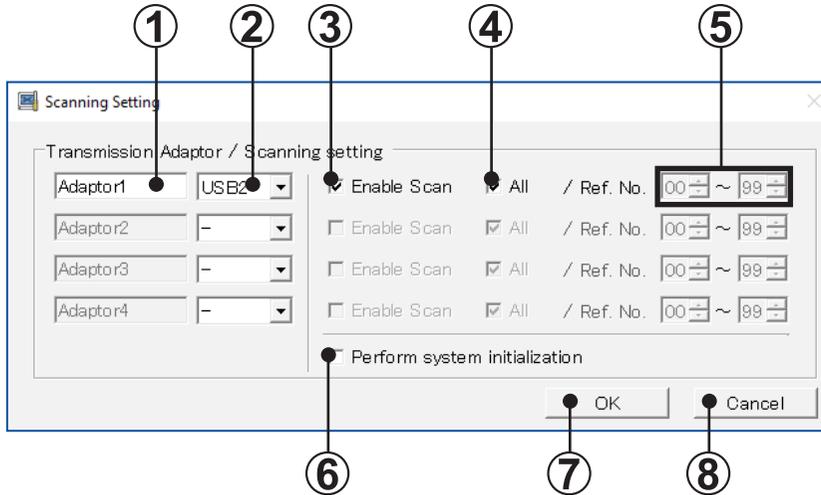


- *1 This template is created by spreadsheet program Excel. Excel must be purchased separately.
- *2 [SystemListTemplate.xls] is in the folder specified when installing the Web Monitoring Tool. When an address other than the default installation address was specified, check that folder. When OS is 64 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.

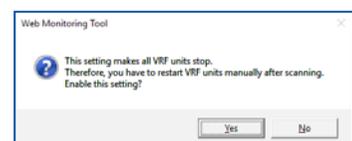
3-2-5 Scanning Setting

■ 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 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 circuits.
At this time, the range of refrigerant circuit 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 circuit addresses to be scanned within the 00 ~ 99 range.
Input the start refrigerant circuit address ~ end refrigerant circuit 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.

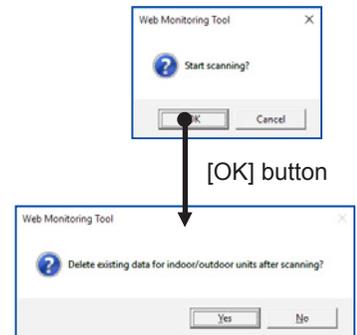
- A communication error has occurred.
- Data collection delay is occurring.

- 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 circuit 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.

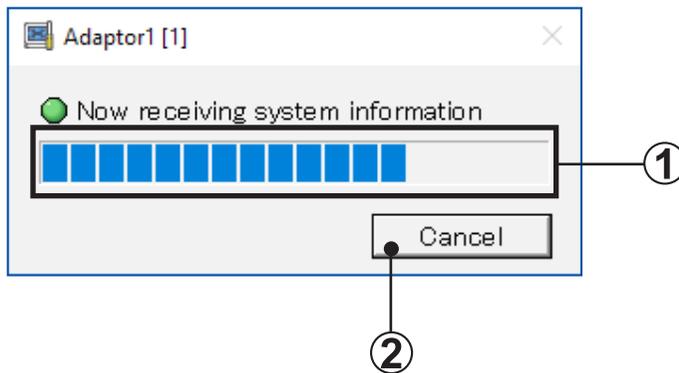
• When Perform System Initialization not checked (S/V series)

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.

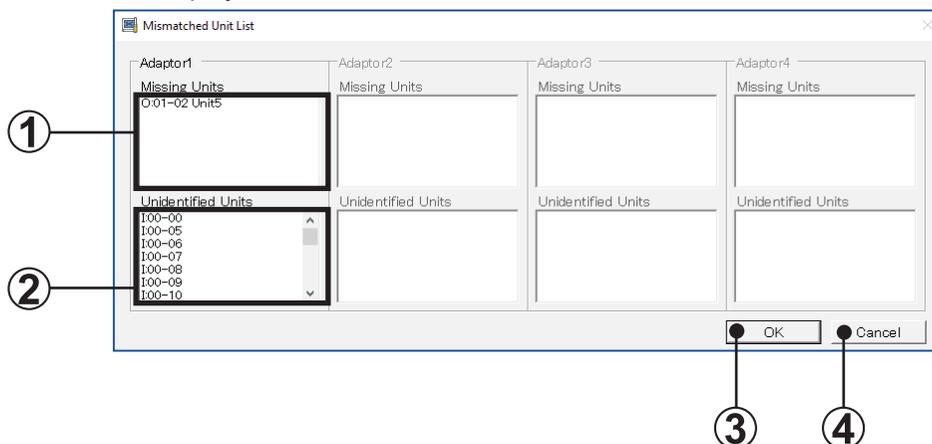


1 Scanning progress display field
Displays the progress of scanning.

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”.

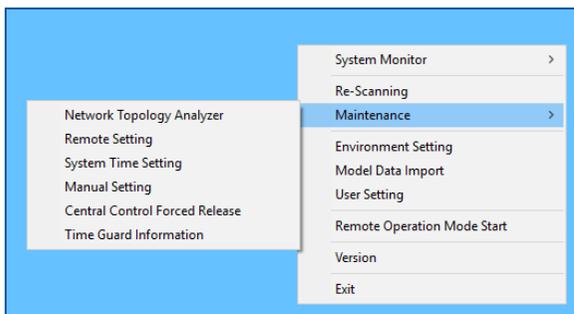
You must be logged in as a user that belongs to an “Administrators Group” in order to be able to start the Web Monitoring Tool.

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-IIIIL/VR-II/V-III series)	par. 4-3-1
Remote Setting	Function (Field) Setting for indoor unit is realized remotely. (V-II/J-II/J-IIS/J-III/J-IIIIL/VR-II/V-III 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-IIIIL/VR-II/V-III 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-IIIIL/VR-II/V-III 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
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

4-2 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”.

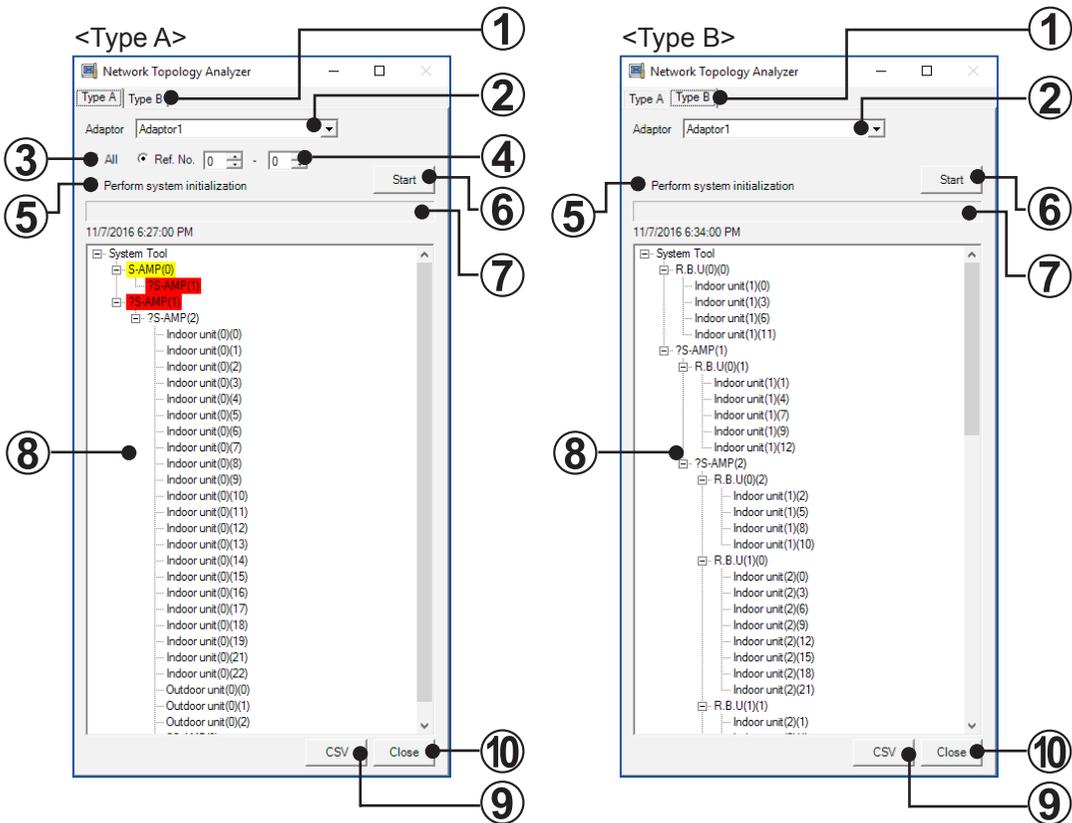
For the scanning method, refer to “par. 3-2-5 Scanning Setting”.

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 series)

This information is also output to a CSV file.



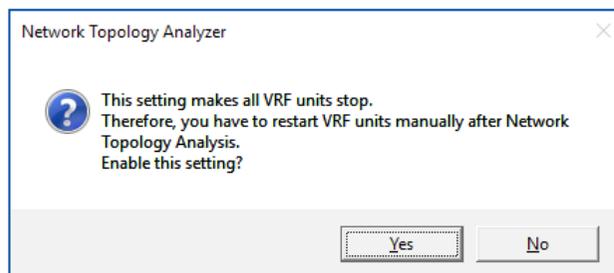
Note When this function is used for VR-II series, do not connect this tool between R.B. unit and indoor unit to obtain the accurate data.

- 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-IIIIL, V-III or later series.

Note 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.

Note 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.

Note



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

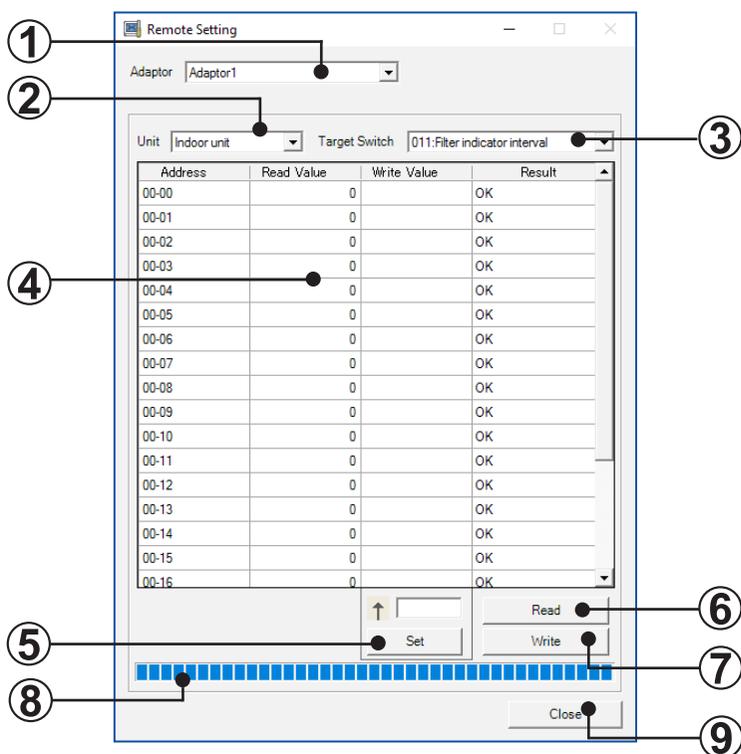
Closes this screen.

4-3-2 Remote Setting

Function (Field) setting can be performed for indoor units by remote controller. (V-II/J-II/J-IIS/J-III/J-IIIIL/VR-II/V-III 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 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.
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

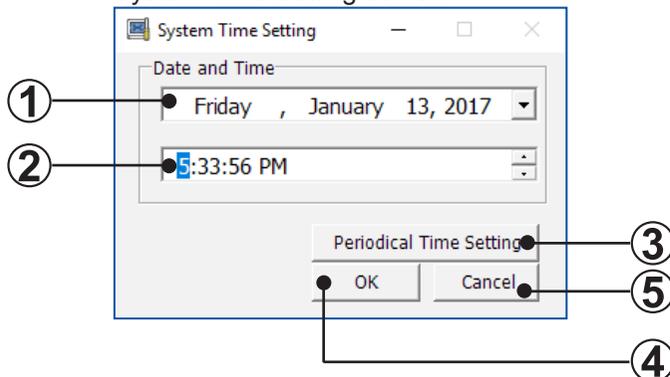
Closes this screen (remote setting screen). However, when read/write processing to unit was performed, confirmation dialog box opens to confirm whether to save the data to a CSV file.

4-3-3 System Time Setting

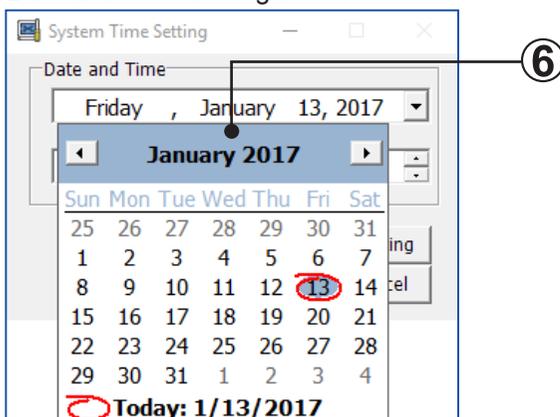
An arbitrary time can be set for VRF System remote controller. (V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III series)

Automatic time adjustment can also be executed periodically.

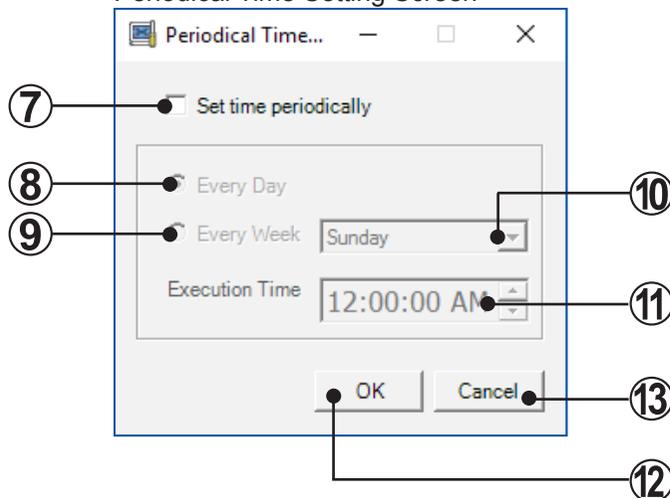
System Time Setting screen



Date and Time Setting screen



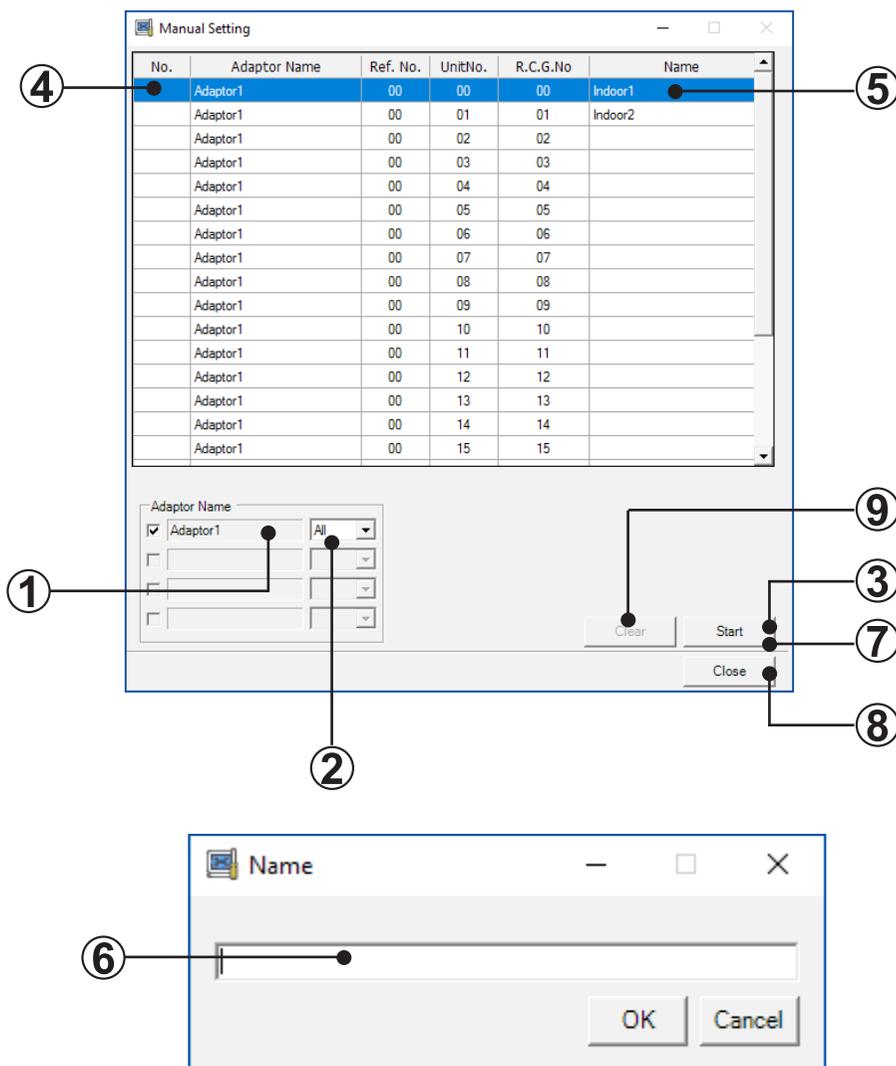
Periodical Time Setting Screen



- 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 circuit 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.

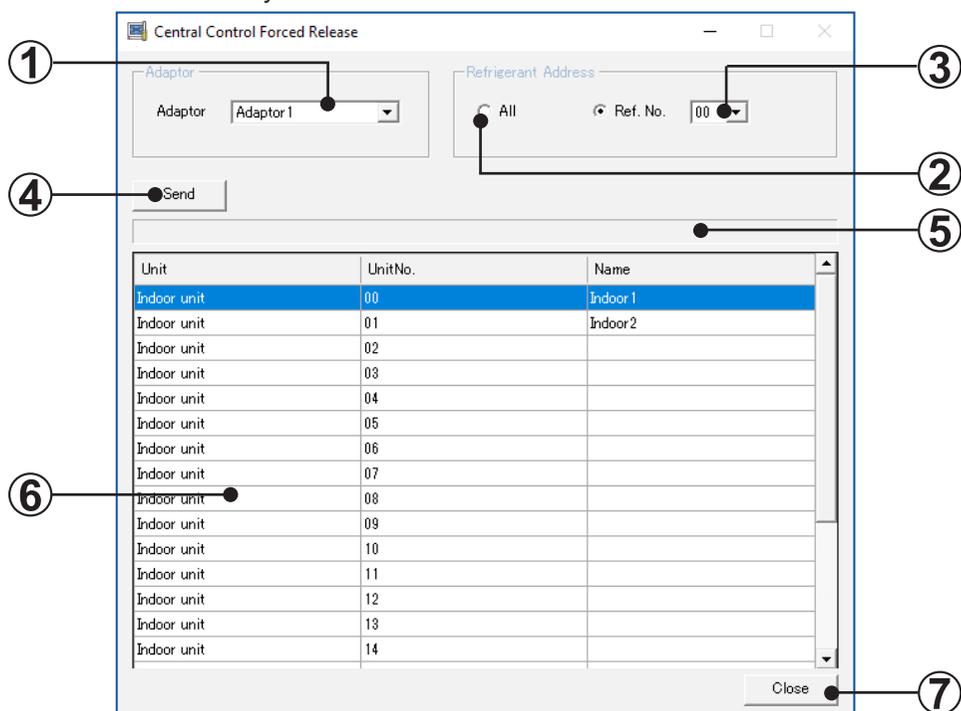
- ⑨ **Clear button**
Clear the No. (④) of an arbitrarily selected indoor unit. When indoor unit was cleared by this operation, the indoor unit can be operated at ④ .

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.

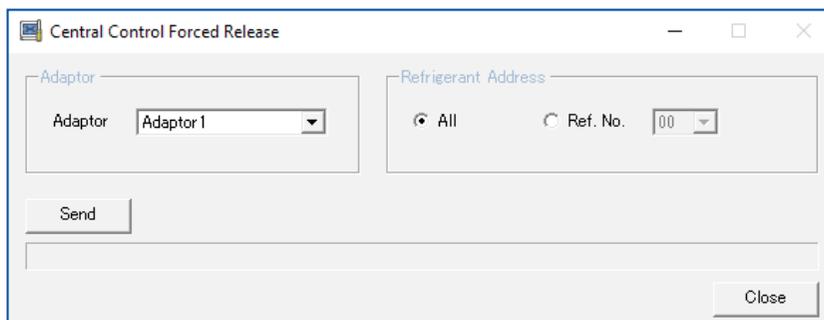
4-3-5 Central Control Forced Release

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 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.

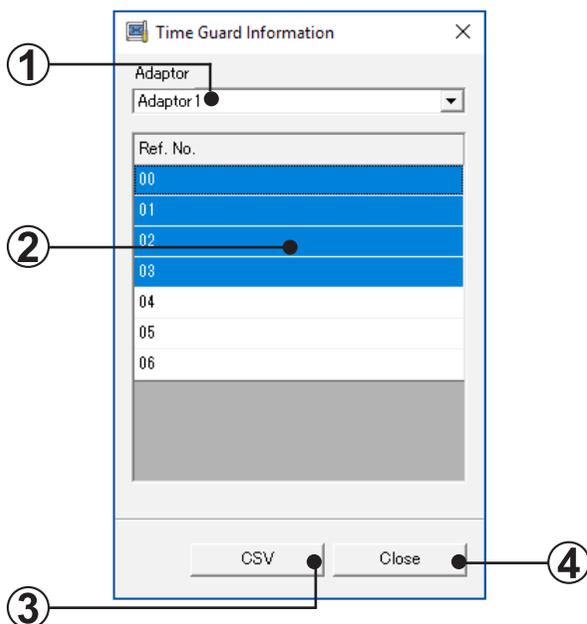


- ③ Refrigerant Address selection
An arbitrary target refrigerant address can be selected.
At this time, the indoor units belonging to the selected refrigerant are displayed at ⑥.

- 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 circuit 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 series)



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

4-4 Environment Setting

Various settings related to the operating environment are performed.

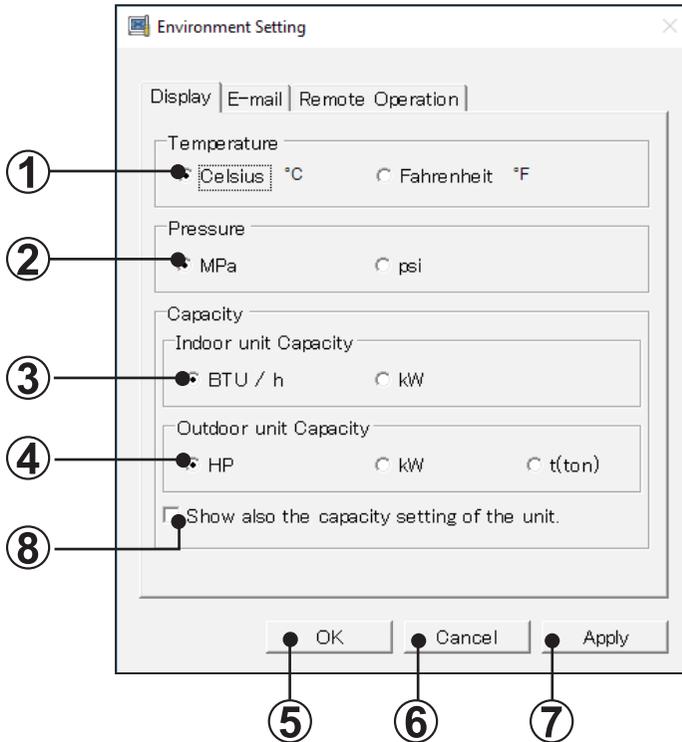
Display tab: Sets the Temperature/Pressure/Capacity display method.

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.

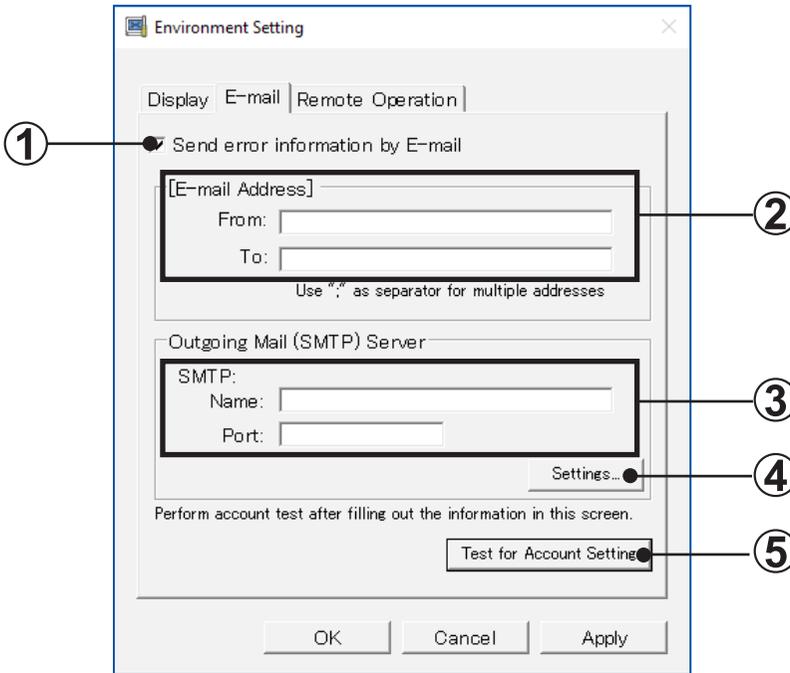
**Note**

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.

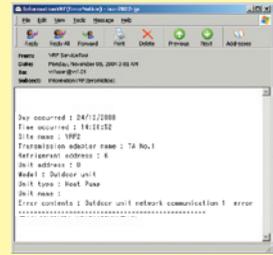


- ①** Error notification check
Check to send a notification e-mail when an error is generated.
When not checked, error e-mail is not sent.
- ②** Transmission address input field
When “Send error information by E-mail” was checked at ①, input the error notification Sender & receiver e-mail address. (*2)
- 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.

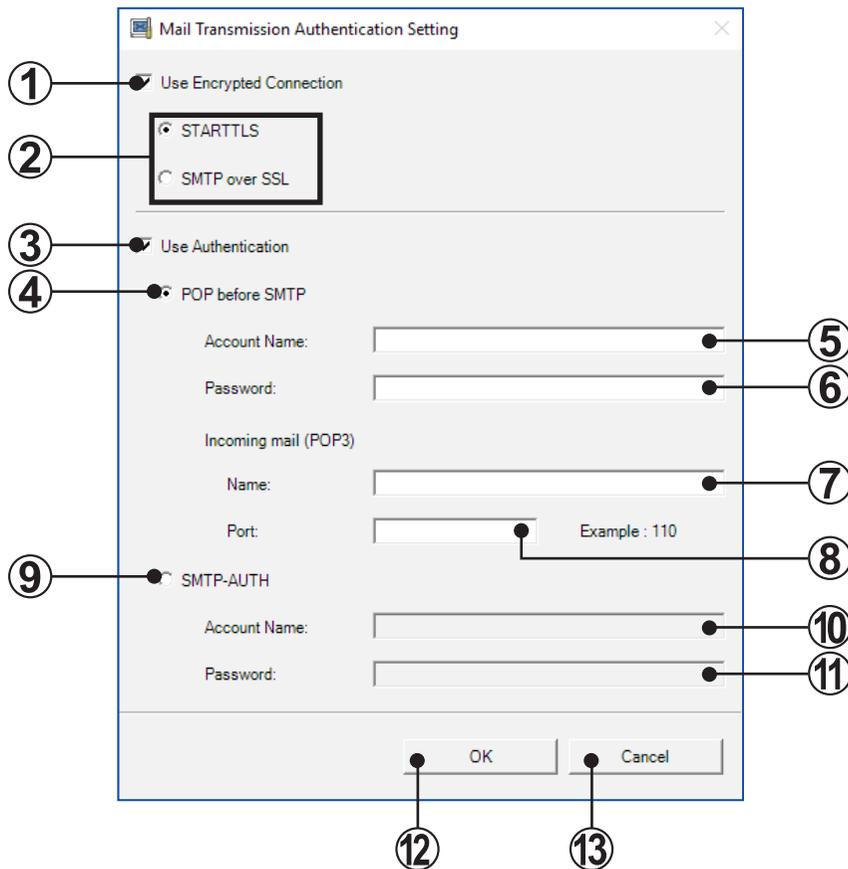


(*2) E-mail is sent under the title InformationVRF (Error Notice).



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.



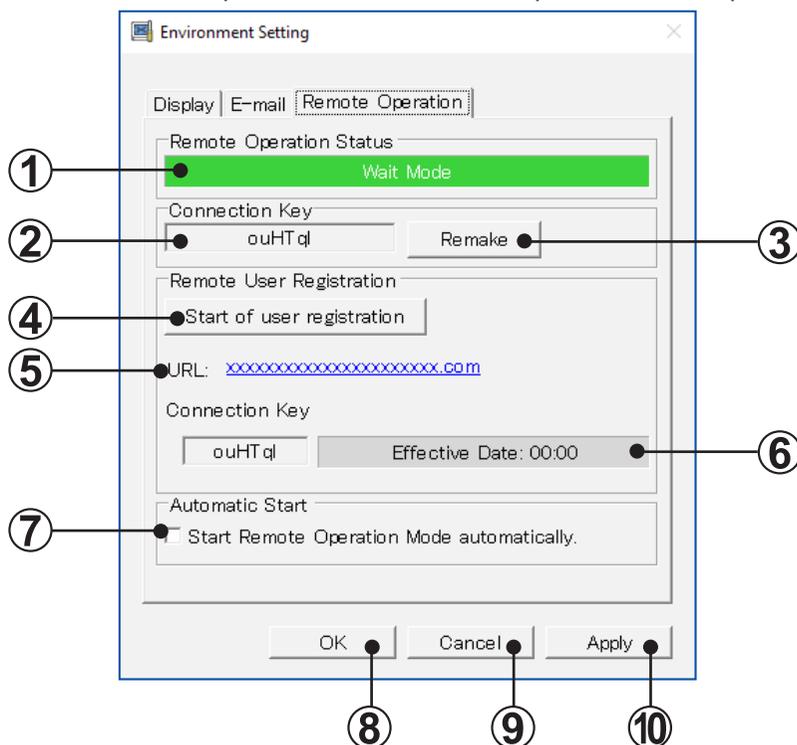
① Use Encrypted Connection check
Enable the SMTP encryption.

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

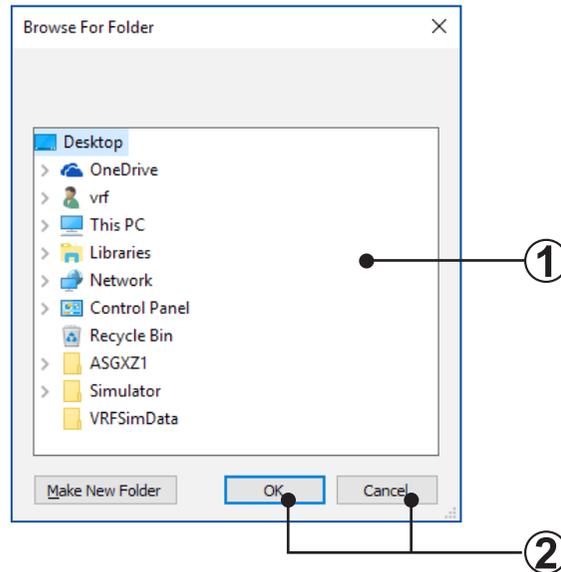
④ Start of user registration button

“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	≤	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.

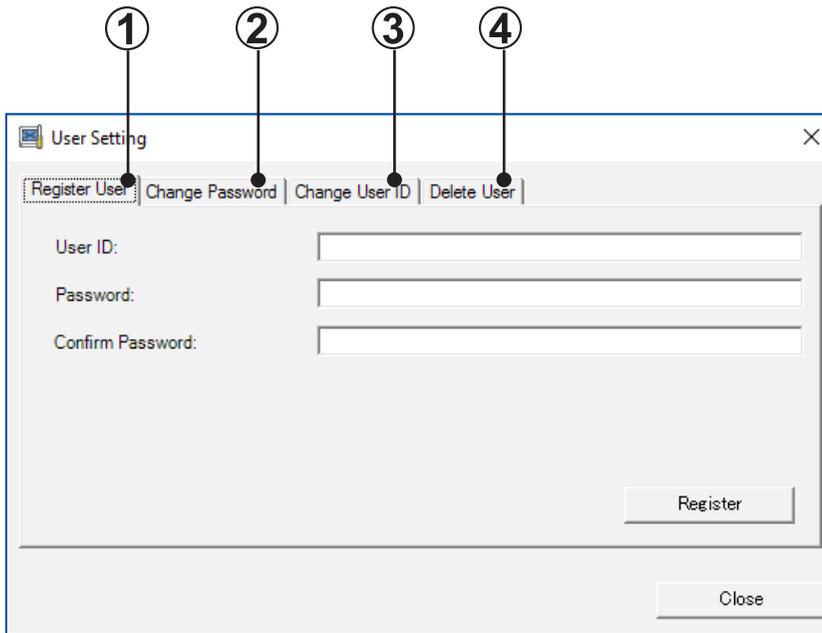
Each version is checked by the following method:

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 close button (X) in the top right corner. Below the title bar, there are four tabs: 'Register User' (selected), 'Change Password', 'Change User ID', and 'Delete User'. The main area contains three input fields: 'User ID:', 'Password:', and 'Confirm Password:'. At the bottom right, there are two buttons: 'Register' and 'Close'. Five numbered callouts (1-5) point to the right side of the dialog box: 1 points to the User ID input field, 2 points to the Password input field, 3 points to the Confirm Password input field, 4 points to the Register button, and 5 points to the Close button.

- 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.

4-6-2 Change Password

The password of a registered user can be changed.

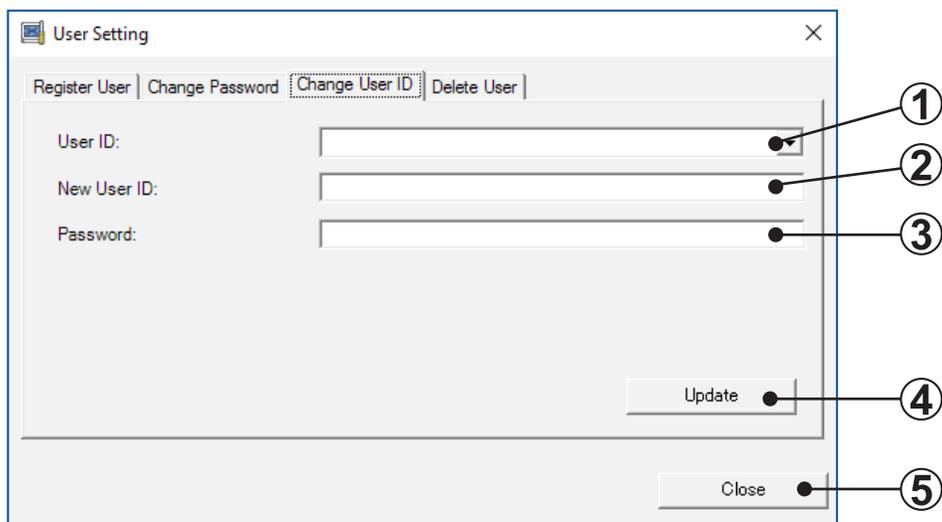
The screenshot shows a 'User Setting' dialog box with a title bar and a close button (X). The dialog contains a menu bar with 'Register User', 'Change Password', 'Change User ID', and 'Delete User'. Below the menu bar are four input fields: 'User ID', 'Password', 'New Password', and 'Confirm New Password'. At the bottom right, there are two buttons: 'Update' and 'Close'. Numbered callouts (1-6) point to the following elements: 1. User ID selection field (dropdown arrow), 2. Password input field, 3. New Password input field, 4. Confirm New Password input field, 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**
- *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.

4-6-3 Change User ID

The User ID of a registered user can be changed.



- 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.

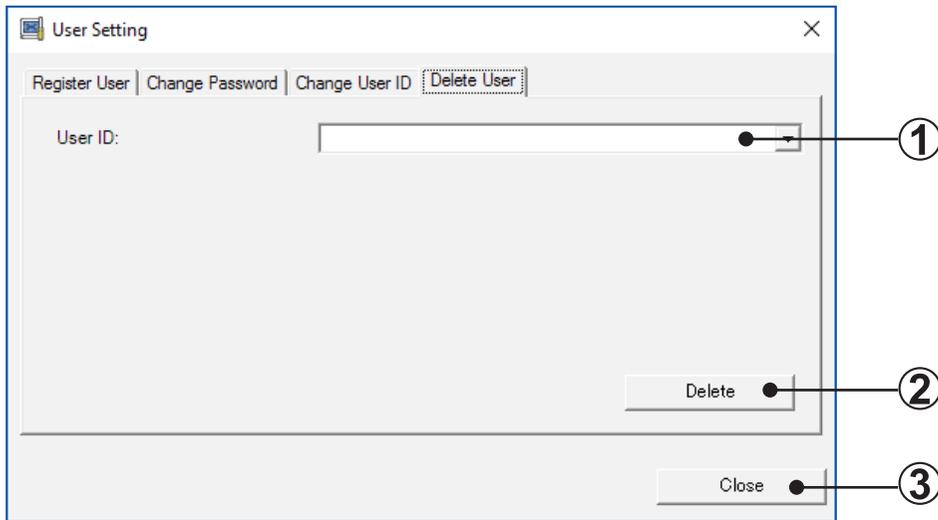
Note



- *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.

4-6-4 Delete User

Deletes registered users.

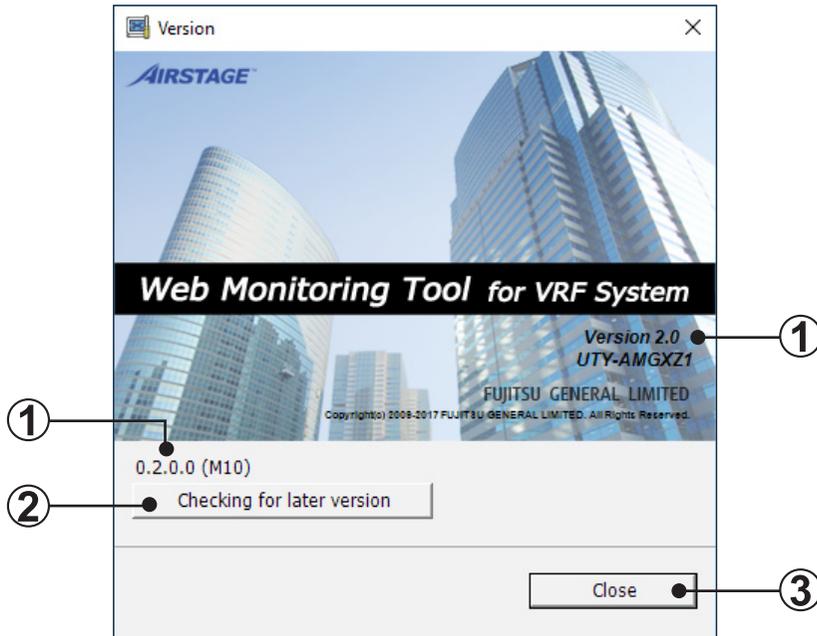


- ①** User ID selection field
Select the user to be deleted.
The currently registered users can be displayed and selected with [▼].
- ②** Delete button
Deletes the selected user. (*1)
Confirmation screen is displayed to confirm whether the deletion is performed. When deleting, click the [OK] button. When not deleting, click the [Cancel] 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.

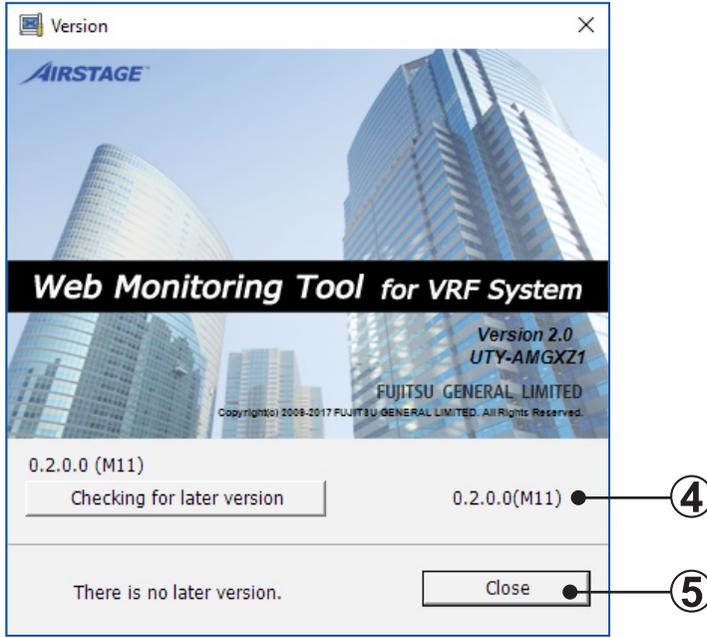
4-7 Version

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



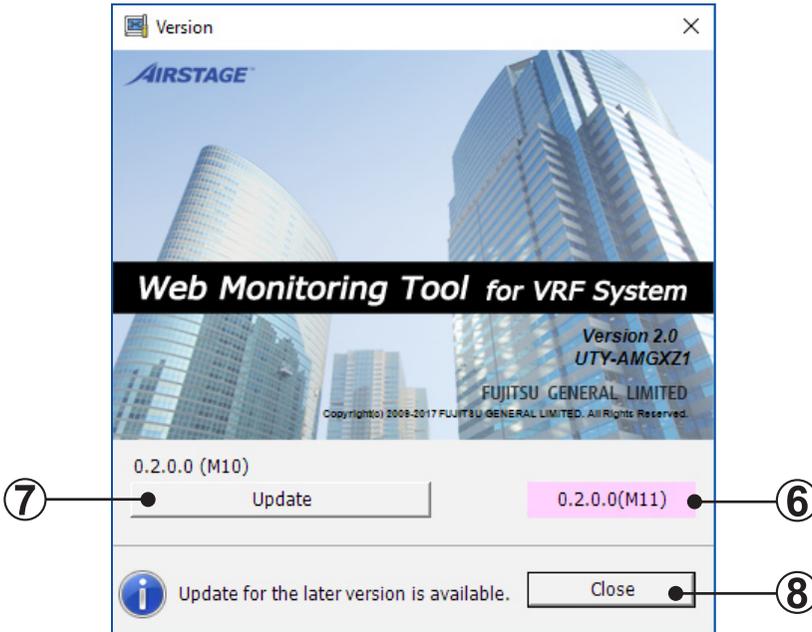
- ① Current software version
Current software version information is displayed.
- ② Checking for later version button
Acquires the software version information from the server and confirms whether the currently used software version is the latest or not.
- ③ Close button
Closes this screen.

When the version information is the latest



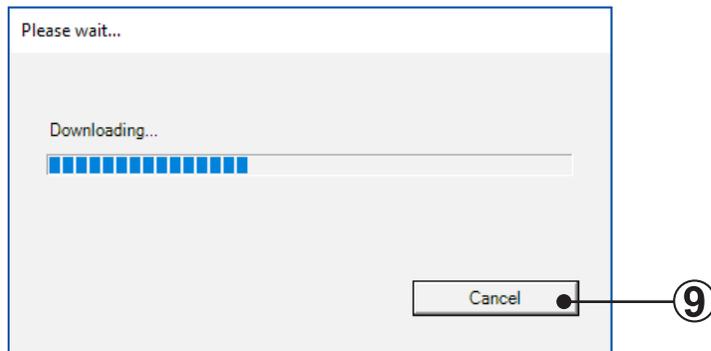
- ④ Version information acquired result (for the latest)
When the version information is the latest, the message “There is no later version.” is displayed. Then, the version information is also displayed.
- ⑤ Close button
Closes this screen.

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

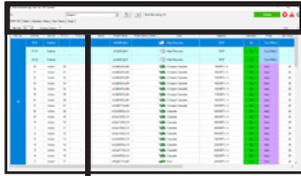
To exit the Web Monitoring Tool, user authentication is necessary. This is a measure so that the Web Monitoring Tool is not exited improperly by a user other than the related user. Since the login screen of par. 3-2-2 is displayed when Exit is selected, input the user ID/password.

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

5. Monitor Application

5-1 Screen transition

Main Screen (System List)

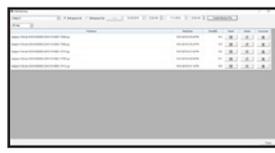


Expanded view

Operation Setting



Data Backup



Setting

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

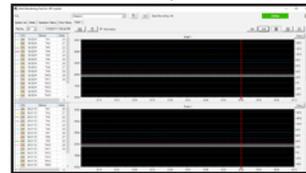
Main menu



Detail Diagram



Graph



Detail Status List



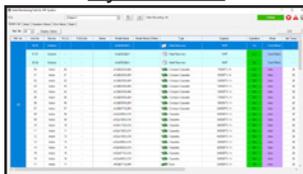
Error History



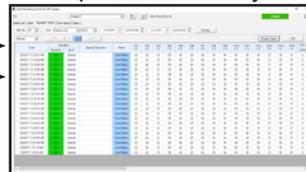
Detail Check List



System List



Operation History



•Operation Setting

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

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 circuit 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 circuit, 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.
 (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. All : indoor units / outdoor units of all refrigerant circuits Ref. No : only indoor units / outdoor units of specified one refrigerant circuit Selected : only indoor units / outdoor units specified by Data Recording Setting

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

Ref. No.	Unit No.	Display Option	CSV
01	01	Outdoor	-
02	02	Outdoor	-
03	03	Indoor	00
04	04	Indoor	01
05	05	Indoor	02
06	06	Indoor	03
07	07	Indoor	04
08	08	Indoor	05
09	09	Indoor	06
10	10	Indoor	07
11	11	Indoor	08
12	12	Indoor	09
13	13	Indoor	10
14	14	Indoor	11
15	15	Indoor	12
16	16	Indoor	13
17	17	Indoor	14

List display area

Control area

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

List display area

Ref. No.	Displays the refrigerant circuit address
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 unit model (Indoor/Outdoor).
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.

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.
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 circuit.
Set Temp.	Displays the setting temperature. (*1)
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 louver position.
Air Flow Direction H.Z.	Displays horizontal louver position.
R.C. Prohibition	Displays the R.C. Prohibition setting. * Display whether the "All prohibition" is enabled or disabled.

- 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). In any case, 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

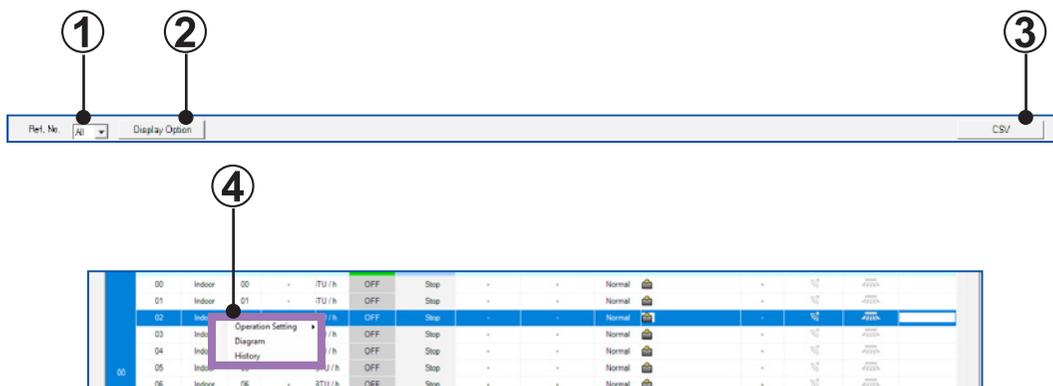
ICON	EXPLANATION
	Oil recovery operation
	Maintenance mode
	Emergency stop
	Forced off operation
	Defrost operation
	Low noise mode operation
	Capacity save operation

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

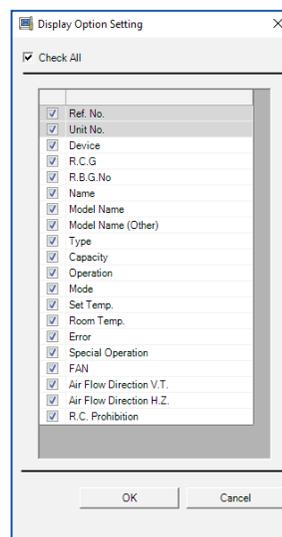
5-3-2 System List display

Only the necessary units can be displayed by specifying the refrigerant circuit 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 circuit selection field
Specifies the refrigerant circuit address.
When "All" is selected, all refrigerant circuits are displayed.
In addition, when Ref. No. is selected by clicking [▼] button, only the selected refrigerant circuit is displayed in a list.

- 2** Display Option button
Selects display / hidden for the item (column) 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

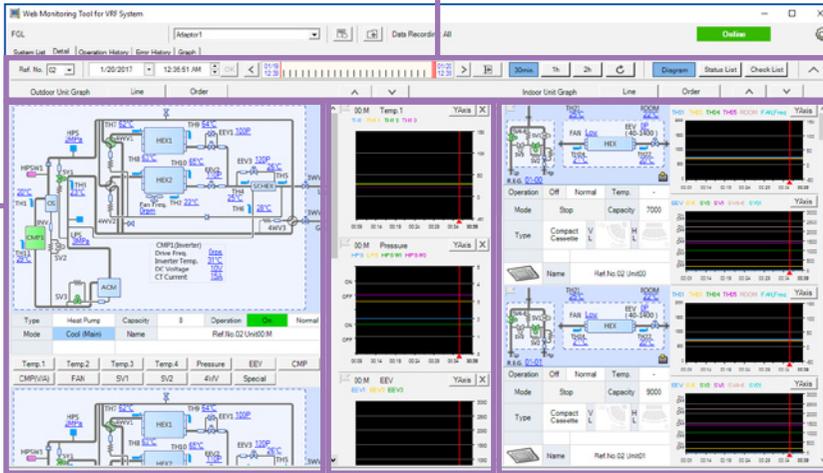
This screen displays the schematic, sensor values, and electrical components operating status of the selected system. At this screen, normal operation checks, and cause specification when an error occurs are performed.

Schematic or Graph screen of all units connected for refrigerant circuit 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 circuit 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.
24-hour gauge	Selects the date and time of the data you want to display by moving the probe or gauge of 24-hour gauge.
 , 	Displays the data that was acquired one before or after the currently displayed data.
Graph X Axis	Specifies the X-axis scale of the Graph.(30 min. / 1 hour / 2 hour)
	 (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")
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)
 , 	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.)

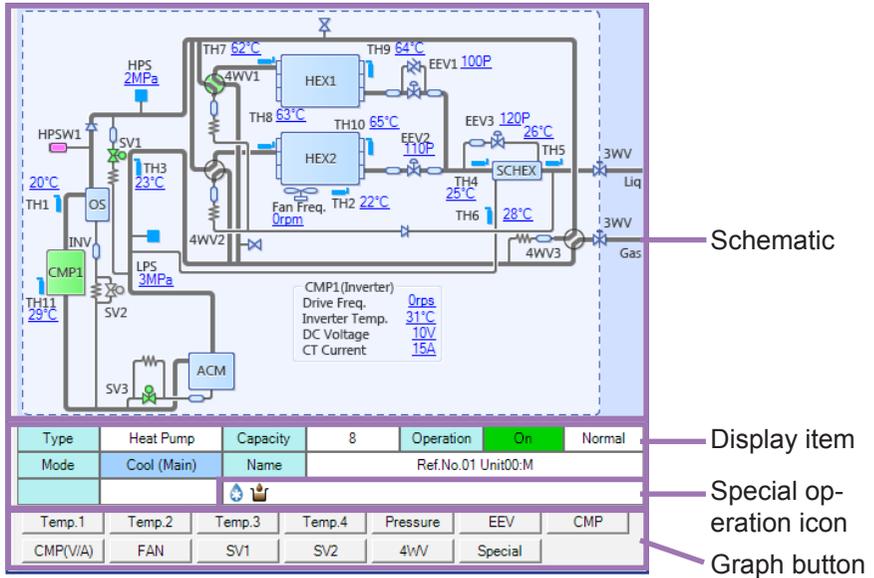
Note



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 circuit 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

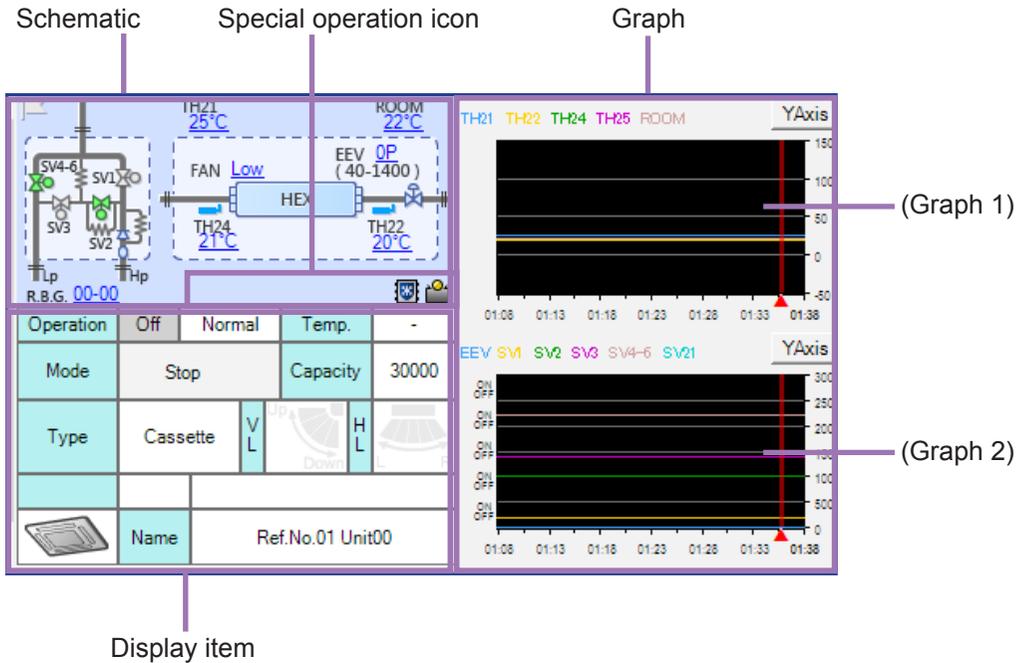
The Graph corresponding to the clicked button is displayed.

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

Temp.1	Displays the 4 temperature graphes 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 circuit 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 circuit 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

Operation	Displays the operating status (ON/OFF) and unit status (Normal/Error).
Mode	Displays the operating mode.
Type	Displays the unit type.
Name	Displays the unit name. (*1)
Temp.	Displays the setting temperature. Units display is [°C] or [°F]. (*2)
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".
VL	Displays the vertical louver position.
HL	Displays the horizontal louver position.
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



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

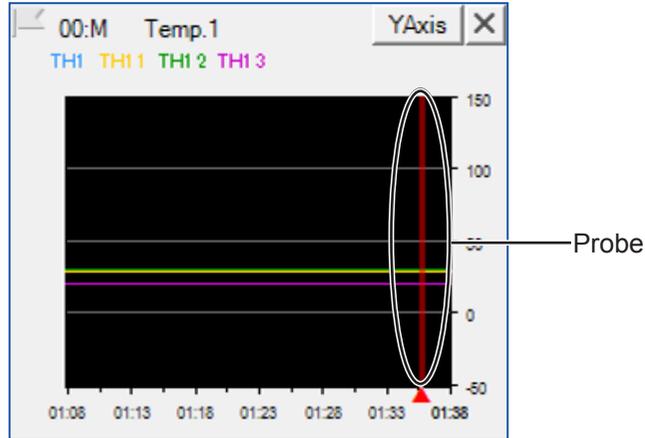
Graph screen of all indoor units connected for the selected refrigerant circuit can be checked by scrolling the screen. Schematic and graph are scrolled at the same time.

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.



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.
[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-IIIIL/VR-II/V-III) and unit type (cooling only / heat pump / heat recovery).

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

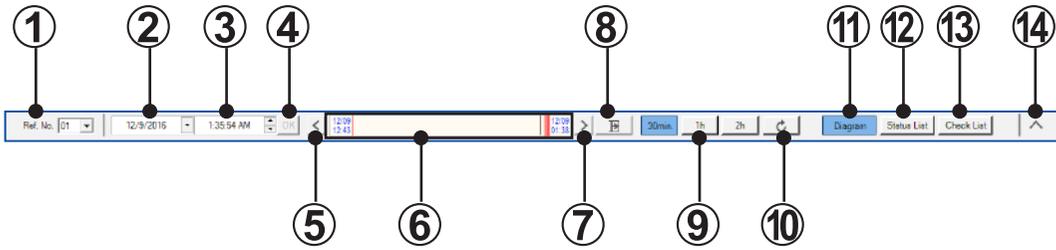
• Outdoor unit

	VRF1, 1-A	1-B	V-II, J-II, J-IIS, J-III, J-IIIIL	VR-II, V-III
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. Inverter Temp. HPTemp. = HPLTemp. LPTemp. = LPLTemp.	
Pressure	HPS, LPS, HPSW1, HPSW2			
EEV	EEV1, EEV2, EEV3			
CMP	CMP1, CMP2, CMP3, Freq.			
CMP (V/A)	DC Voltage, CT 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

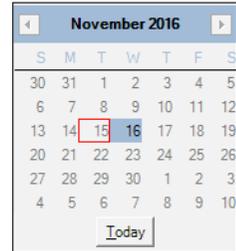
	VRF1, 1-A	1-B	V-II, J-II, J-IIS, J-III, J-IIIIL, VR-II, V-III
Graph1	THHO, THHM, THHI, THIA, THOA	TH21, TH22, TH23	Room Temp., TH21, TH22, TH24, TH25, FAN
Graph2	EEV, SVs, SVd, SVb1, SVb2	EEV	EEV, SV1, SV2, SV3, SV4- 6

5-4-2 Detail Diagram specification



1 Refrigerant circuit selection field
Specifies the refrigerant circuit address.

2 Date setting field
Sets the date of data you want to display at the Schematic screen.
To select 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 that was acquired one before the currently displayed data.

6 24-hour gauge
Selects the date and time you want to display at the Schematic screen or Graph screen by using 24-hour gauge.

There are 2 setting methods.

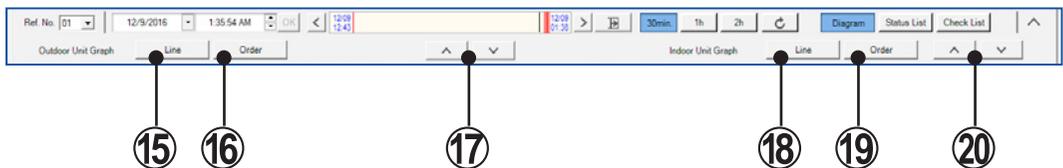
- Date and time setting by probe movement
The date and time are set by moving the probe using the drag and drop of mouse.
- Date and time setting by gauge scroll
The date and time are set by scrolling the gauge using the drag and drop of mouse.

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

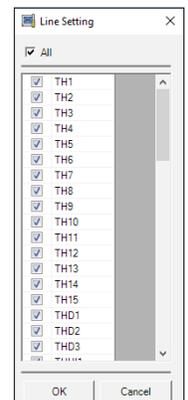
- ⑧ Probe right edge movement button
Moves the probe position at graph to the right edge of the graph.
- ⑨ Graph X Axis selection field
Specifies the X-axis scale (30min/1hour/2hour)of the graph.
- ⑩ Auto Refresh button
Updates the screen to the latest data.
 (Blue): Updates the screen to the latest data automatically.
 (Gray): Does not update the screen automatically.
- ⑪ Diagram button
Displays the Detail Diagram screen.
- ⑫ Status List button
Displays the Detail Status List screen.
- ⑬ Check List button
Displays the Detail Check List screen.
- ⑭ Optional setting button
Displays the Optional setting screen.

■ Optional setting screen

When the Optional setting button (⑭) is clicked, optional setting screen is displayed.

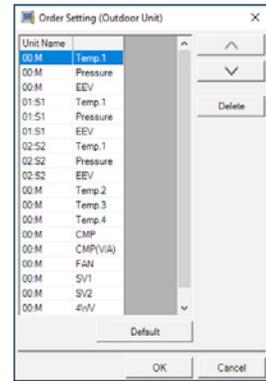


- ⑮ Line button (for outdoor unit)
Selects the sensor to be displayed at the Graph screen of outdoor unit. When all sensors are selected, check the “All” checkbox. When individual sensors are set, check the individual sensor checkboxes. When the selection is complete, click the [OK] button.



16 Order button (for outdoor unit)
Deletes the Graph screen displayed at the Outdoor unit graph area or changes the order of display.

- Delete: 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.
- Default: Returns the displayed item to the initial status. (Setting status when the Web Monitoring Tool is installed to the PC)



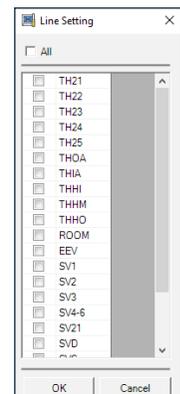
17 **20** Display switching button (Up/Down, **17**: for outdoor unit, **20**: for indoor unit)

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.



18 Line button (for indoor unit)
Selects the sensor to be displayed at the Graph screen of indoor unit.

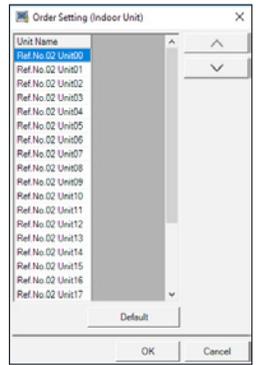
When all sensors are selected, check the "All" checkbox. When individual sensors are set, check the individual sensor checkboxes. When the selection is complete, click the [OK] button.



19**Order button (for indoor unit)**

Changes the displayed order of indoor unit schematic and graph screen. (One schematic and two graphs are in a set for the indoor unit.)

- 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.
- Default: Returns the displayed item to the initial status. (Setting status when the Web Monitoring Tool is installed to the PC)



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 circuit 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 | Operation History | Error History | Graph

Ref. No. [06] | 1:00:2017 | 6:12:00 PM | [Refresh] | [Data Record] | All | [Online]

Outdoor unit | Display Option

Unit No.	Name	Type	Capacity (HP)	Operation	Error	Special Operation	Mode	TH0 (°C)	TH1 (°C)	TH2 (°C)	TH3 (°C)	TH4 (°C)	TH5 (°C)	TH6 (°C)	TH7 (°C)	TH8 (°C)
06M	Ref.No.00 Unit00.M	Heat Recovery	10	On	Normal		Cool (Max)	26	21	22	23	24	25	26	27	28
01S1	Ref.No.00 Unit01.S1	Heat Recovery	14	On	Normal		Cool (Max)	26	21	22	23	24	25	26	27	28
02S2	Ref.No.00 Unit02.S2	Heat Recovery	16	On	Normal		Cool (Max)	26	21	22	23	24	25	26	27	28

Indoor unit | Display Option

Unit No.	R.E.G. No.	Name	Type	Capacity (RTU/No)	Operation	Error	Special Operation	Mode	Set Temp (°C)	Room Temp (°C)	TH21 (°C)	TH22 (°C)	TH23 (°C)	TH24 (°C)	TH25 (°C)
00	-	Ref.No.00 Unit00	Compact Cassette	7000	On	Normal		Auto	26	22	25	20	21	-	-
01	-	Ref.No.00 Unit01	Compact Cassette	9000	On	Normal		Auto	26	22	25	20	21	-	-
02	-	Ref.No.00 Unit02	Compact Cassette	12000	On	Normal		Auto	26	22	25	20	21	-	-
03	-	Ref.No.00 Unit03	Compact Cassette	14000	On	Normal		Auto	26	22	25	20	21	-	-
04	-	Ref.No.00 Unit04	Compact Cassette	14000	On	Normal		Auto	26	22	25	20	21	-	-
05	-	Ref.No.00 Unit05	Compact Cassette	17000	On	Normal		Auto	26	22	25	20	21	-	-
06	-	Ref.No.00 Unit06	Compact Cassette	18000	On	Normal		Auto	26	22	25	20	21	-	-
07	-	Ref.No.00 Unit07	Compact Cassette	24000	On	Normal		Auto	26	22	25	20	21	-	-
08	-	Ref.No.00 Unit08	Cassette	30000	On	Normal		Auto	26	22	25	20	21	-	-
09	-	Ref.No.00 Unit09	Cassette	34000	On	Normal		Auto	26	22	25	20	21	-	-
10	-	Ref.No.00 Unit10	Cassette	36000	On	Normal		Auto	26	22	25	20	21	-	-
11	-	Ref.No.00 Unit11	Cassette	48000	On	Normal		Auto	26	22	25	20	21	-	-
12	-	Ref.No.00 Unit12	Cassette	54000	On	Normal		Auto	26	22	25	20	21	-	-
13	-	Ref.No.00 Unit13	Cassette	18000	On	Normal		Auto	26	22	25	20	21	-	-
14	-	Ref.No.00 Unit14	Cassette	22000	On	Normal		Auto	26	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 circuit 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.
24-hour gauge	Selects the date and time of the data you want to display by moving the probe or gauge of 24-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 (column) 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

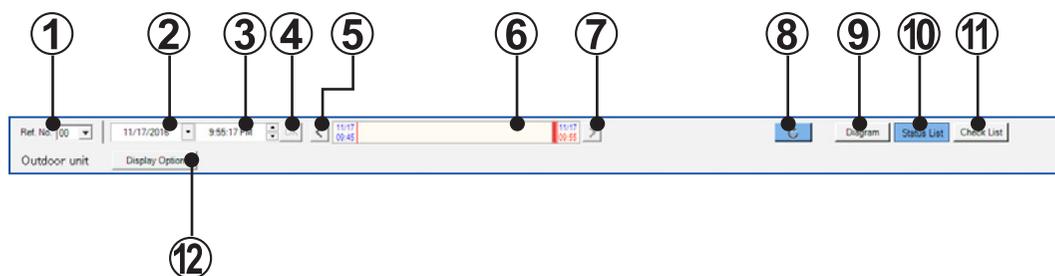
Displays the following operation status of each indoor unit according to the condition given in the Control area.

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].

* 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



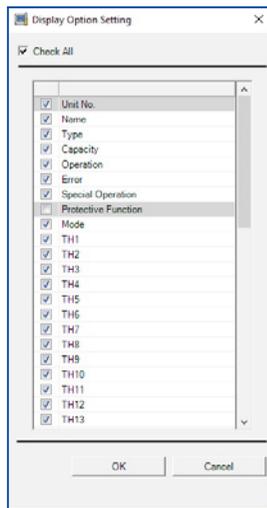
- 1** Refrigerant circuit selection field
Specifies the refrigerant circuit address.
- 2** Date setting field
Sets the date of data you want to display at the Detail Status List screen.
To select the date, select the date from the calendar which appears by clicking [▼] button.
When the background of 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)

November 2016						
S	M	T	W	T	F	S
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10
- 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** 24-hour gauge
Selects the date and time you want to display at the Schematic screen or Graph screen by using 24-hour gauge.
There are 2 setting methods.

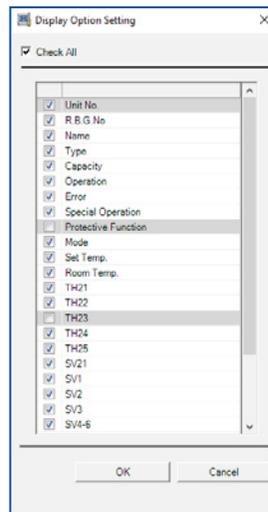
 - Date and time setting by probe movement
The date and time are set by moving the probe using the drag and drop of mouse.
 - Date and time setting by gauge scroll
The date and time are set by scrolling the gauge using the drag and drop of mouse.
- 7** > button
Displays the data that was acquired one 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 (row) 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

The screenshot shows the 'Web Monitoring Tool for VRF System' interface. At the top, there is a navigation bar with a 'Check List' button. Below it is a toolbar with 'Print Data', 'Air Data', and 'CSV' buttons. The main content area is divided into two tables: 'Outdoor unit' and 'Indoor unit'.

Outdoor unit table:

Model Name	TH3	TH1	TH2	TH4	HPTemp	TH1-HPTemp	TH2-HPTemp	TH3	TH10	TH11	HPS	LPTemp	TH1-HPTemp	TH2-HPTemp	LPS	LPS	
00:0 AUG280BLM	22	20	21	23	34.2	-	-	0.2	27	28	29	30	2	50.4	-14.2	-13.2	3
01:51 AUG400BLM	22	20	21	23	34.2	-	-	0.2	27	28	29	30	2	50.4	-14.2	-13.2	3
02:53 AUG400BLM	22	20	21	23	34.2	-	-	0.2	27	28	29	30	2	50.4	-14.2	-13.2	3

Indoor unit table:

Model Name	TH21	TH25	TH21-TH25	TH25-TH21	TH22	TH24	TH24-TH22	HPTemp-TH22
00 AUG28020LBN	25	-	-	-	20	21	-	-
01 AUG28020LBN	25	-	-	-	20	21	-	-
02 AUG28020LBN	25	-	-	-	20	21	-	-
03 AUG28020LBN	25	-	-	-	20	21	-	-
04 AUG28020LBN	25	-	-	-	20	21	-	-
05 AUG28020LBN	25	-	-	-	20	21	-	-
06 AUG28020LBN	25	-	-	-	20	21	-	-
07 AUG28020LBN	25	-	-	-	20	21	-	-
08 AUG28020LBN	25	-	-	-	20	21	-	-
09 AUG28020LBN	25	-	-	-	20	21	-	-
10 AUG28020LBN	25	-	-	-	20	21	-	-

5-6-1 Name and function of each area

■ Control area

Sets display contents specification and automatic refresh on/off.



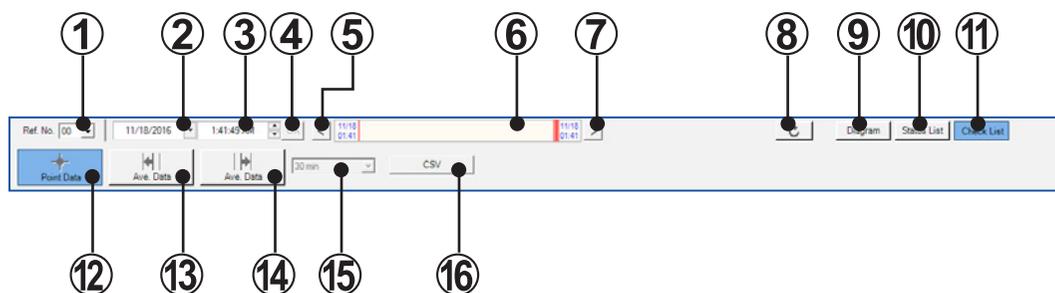
Ref. No.	Displays the refrigerant circuit address
Date, Time	Sets the date and time of the data you want to display.
OK	Confirms the date and time set above and updates the screen to the latest status.
24-hour gauge	Selects the date and time of the data you want to display by moving the probe or gauge of 24-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.
CSV	Saves the specified data to a CSV 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 circuit selection field
Specifies the refrigerant circuit address.
- ②** Date setting field
Sets the date of data you want to display at the Detail Check List screen.
To select 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** 24-hour gauge
Selects the date and time you want to display at the Detail Check List screen by using 24-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** CSV button
Saves the specified data to a CSV 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.

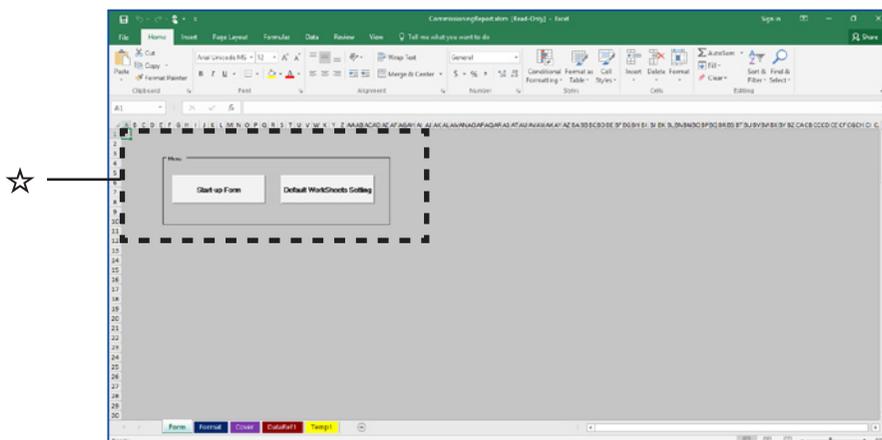
5-6-3 Commissioning Report creation

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

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

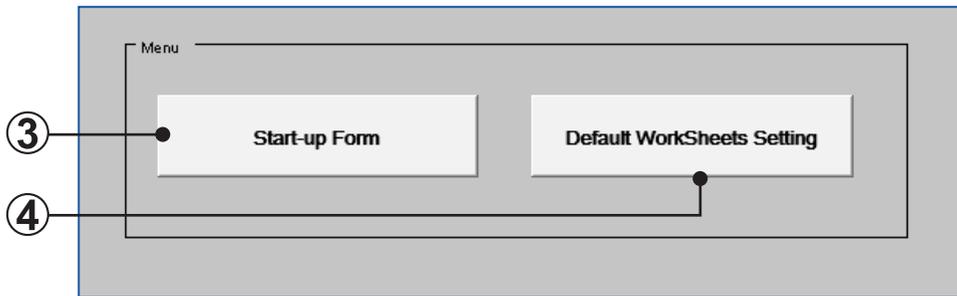
There is a template to easily create a Commissioning Report. (*1)

- ① Since there is a template named “CommissioningReport.xls” 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.



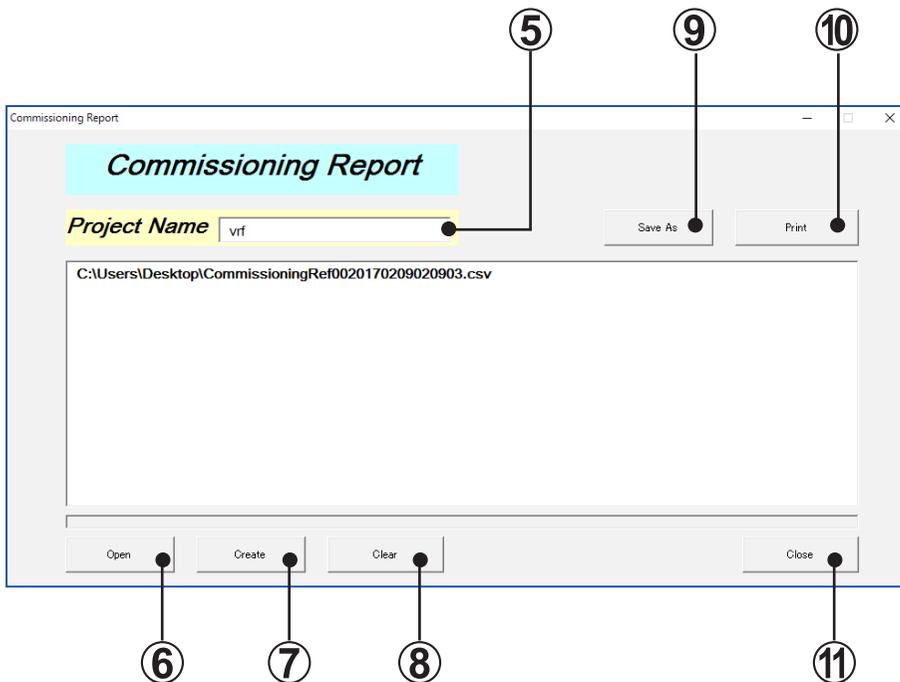
Overview of each sheet

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.

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.

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”.

[SystemListTemplate.xls] is created in the folder specified when installing the Web Monitoring Tool. When an address other than the default installation address was specified, check that folder.

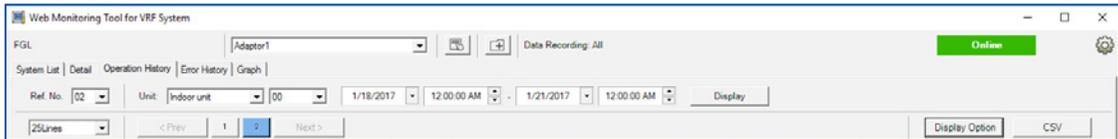
When OS is 32 bit, the folder is C:\Program Files\AIRSTAGE-Web Monitoring Tool\CommissioningReport\.

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 circuit 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 (column) should be displayed or hidden.
CSV	Displays the CSV save window.

Outdoor unit

The screenshot shows a web monitoring interface for a VRF system. It features a table with the following columns: Time, Operation, Special Operation, Mode, Th1 (°C), Th2 (°C), Th3 (°C), Th4 (°C), Th5 (°C), Th6 (°C), Th7 (°C), Th8 (°C), Th9 (°C), Th10 (°C), Th11 (°C), Th12 (°C), Th13 (°C), Th14 (°C), Th15 (°C), and HPS. The data rows show a sequence of operations from 12:07 AM to 1:03:44 AM on 1/20/2017, all in 'Normal' status and 'Cool (Main)' mode, with temperature readings ranging from approximately 20°C to 29°C.

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 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

- Display item

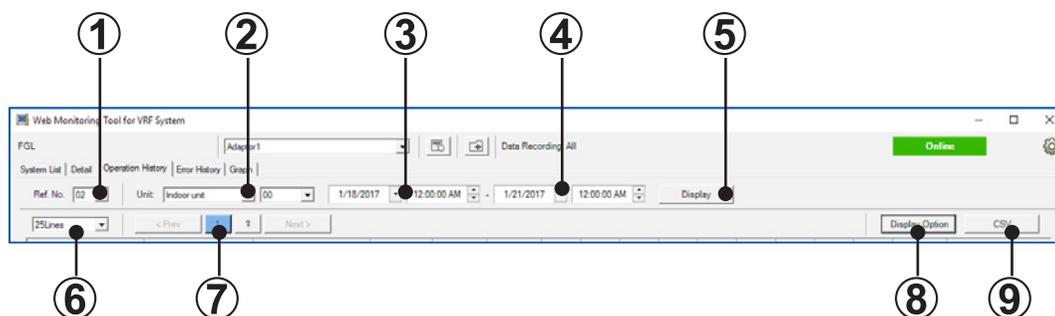
Time	Displays the data acquisition time. (*1) For summer time, (S) is displayed.
Operation	Displays the operating status/unit status.
Special operation	Displays special operation.
Mode	Displays the operating mode.
Set Temp	Displays the setting temperature.

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

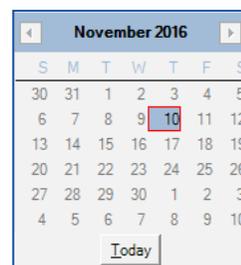
Note *1 Time is displayed according to the time format at the regional setting in the Control panel of Windows.

- 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”.

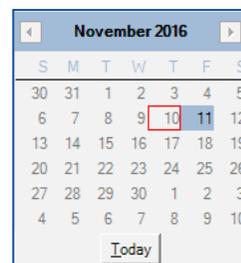
5-7-2 Operation History specification



- ① Refrigerant circuit selection field
Specifies the refrigerant circuit 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.

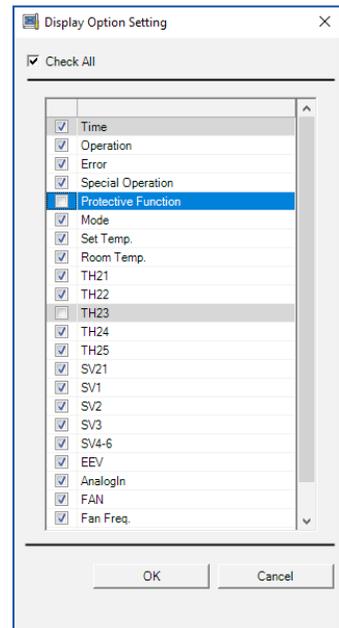


- ⑤ Display button
Displays the history data by specified condition.
- ⑥ Displayed number of lines selection field
Selects the number of lines of the history data to be displayed in a page.

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

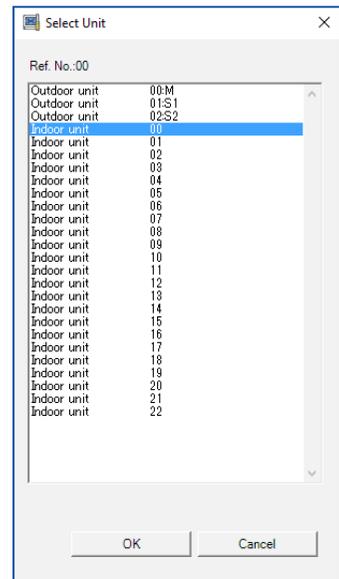
8 Display Option button
Selects display / hidden for the item (row) displayed at list area.

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.)

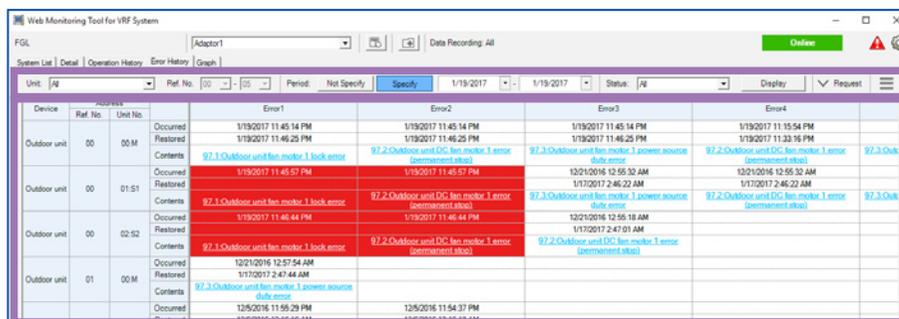
Max. 500 items of displayed the history data can be saved for one unit.



5-8 Error History

Displays the error information for each unit. The error information can sequentially display up to 50 items beginning from the newest error for each unit. The error information can be saved in CSV format.

5-8-1 Name and function of each area



Control area

List display area

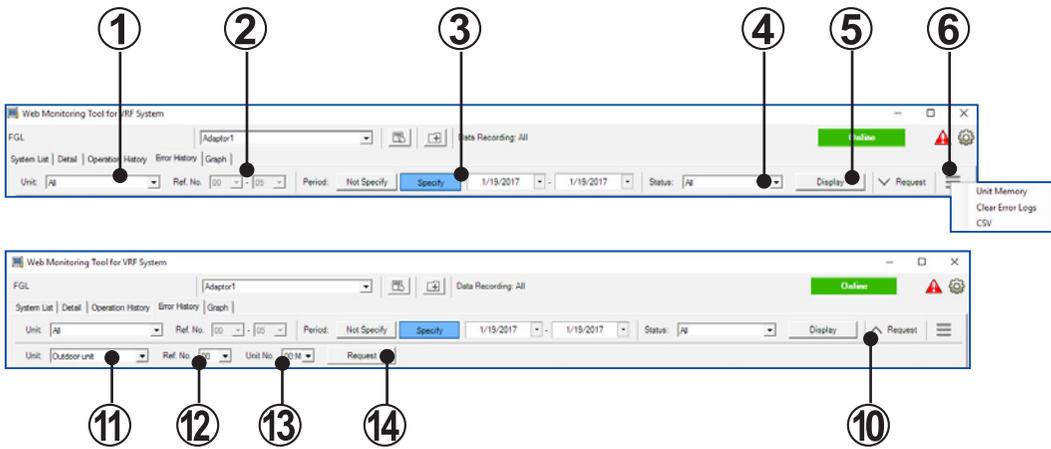
• Control area

Device Section	Specifies the unit model.
Ref. No.	Specifies the refrigerant circuit address (narrow down display)
Period	Specifies the date range to be displayed.
State	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 circuit address/Unit No.) of each unit.
Error1 ~ 50	Displays the error acquisition time and error contents. Displays currently generated errors in red.

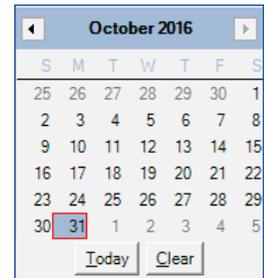
5-8-2 Error History display method



- 1** Unit selection field
Select the unit type in which you want to display the Error history.
- 2** Refrigerant circuit selection field
Sets the range of refrigerant circuit address to display the error history.
- 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 “Error Only”.

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

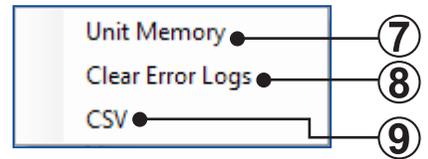
Error Only: Currently occurring error information

- 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 circuit selection field
Selects the refrigerant circuit 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 circuit 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 circuit address selected at 11 can be selected.
Outdoor unit	The Unit No. of outdoor unit in the refrigerant circuit 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.

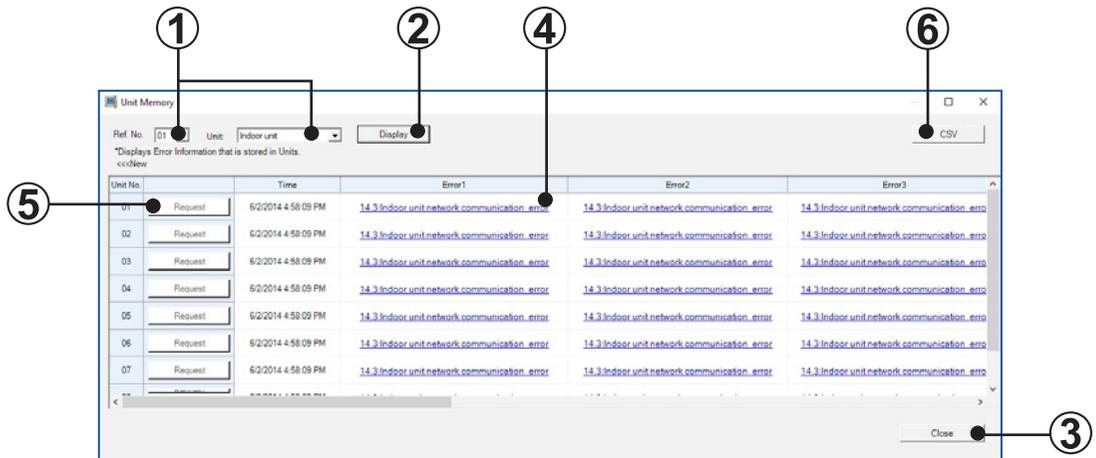


Troubleshooting screen can be displayed by clicking the error contents of the display. However, excluding "TransmissionAdaptor" errors.

*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 circuit address and unit type whose error records are to be displayed. You may only specify unit for the refrigerant circuit of V(Outdoor unit) and V-II(Indoor unit) and V-II/J-II/J-IIS/J-III/J-IIIL/VR-II/V-III (Outdoor unit) series.
- ② Error information for the refrigerant circuit 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 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

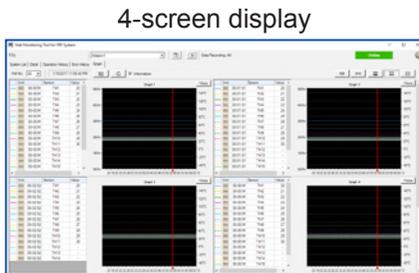
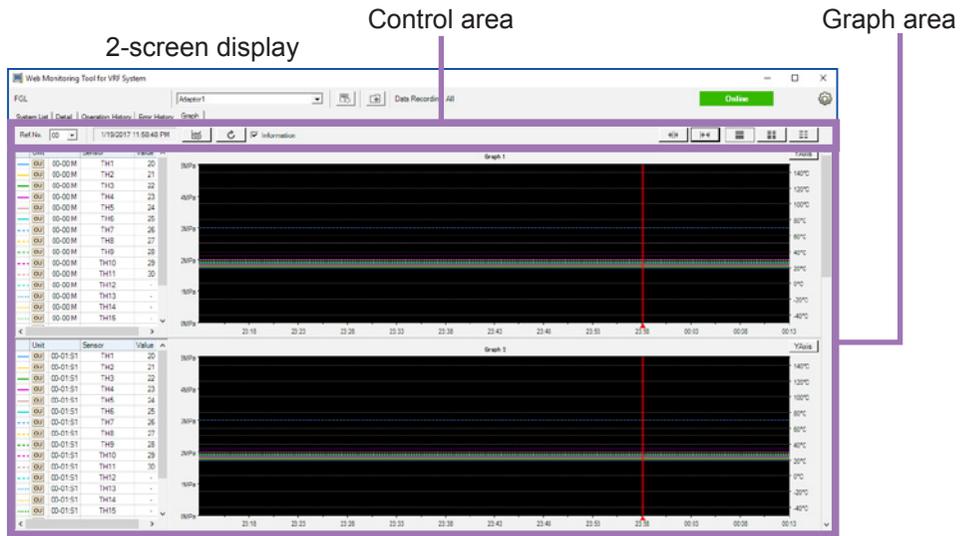
- Error history function displays the error information occurred after the Web Monitoring is connected to the VRF system. The information occurred before connection cannot be displayed.

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.

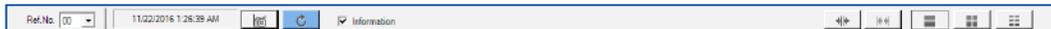
5-9 Graph

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 circuit address.
Date, Time	Displays the date and time indicated by the probe at a graph.
	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. (24hour/12hour/6hour/3hour/1hour/30min)
	Increases the time range displayed at a graph. (30min/1hour/3hour/6hour/12hour/24hour)
	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.

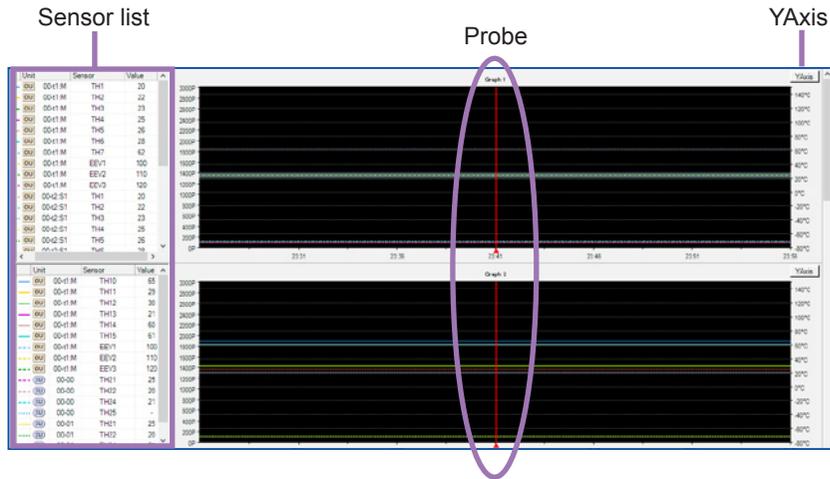
■ Graph area

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.

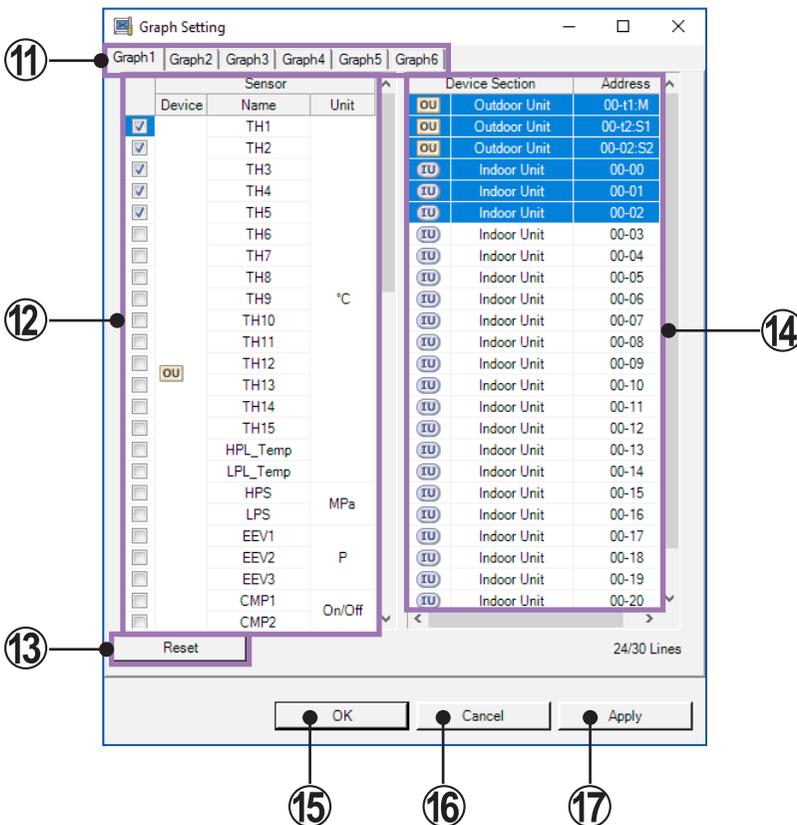


Sensor list	Displays the sensor list and the values displayed at a graph by selecting it. When the checkbox of Information is checked, Sensor list is displayed. If unchecked, Sensor list is not displayed.
YAxis	Sets the upper limit and lower limit of Y axis arbitrarily within the limit range of each 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 circuit selection field
Specifies the refrigerant circuit address.
- ② Date and time display field
Displays the date and time indicated by probe at a graph.
- ③ 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”.



- ⑪ Graph selection tab
Selects the graph No. in which you want to display the sensor.
- ⑫ 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.

13 Reset button
Cancels all the sensors selected at **12**.

14 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.

15 OK button
Closes this screen after the setting is saved.

16 Cancel button
Closes this screen after the setting is deleted.

17 Apply button
Saves the setting. This screen is not closed.

4 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.

5 Information check box
Displays the Sensor list by checking the checkbox of information. When the checkbox is unchecked, the Sensor list is not displayed.

6  button
Decreases the time range to be displayed at X axis of graph each time this button is clicked.
24hour→12hour→6hour→3hour→1hour→30 min.

7  button
Increases the time range to be displayed at X axis of graph each time this button is clicked.
30 min.→1hour→3hour→6hour→12hour→24hour

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

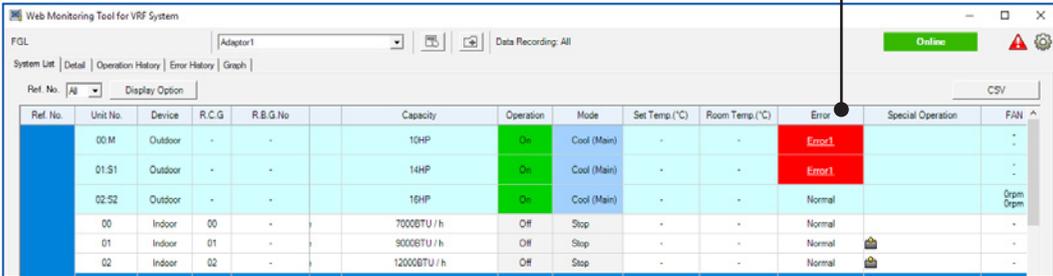
9  button
Displays 4-screen graphs at the same time.
Other 2 screens can be displayed by scrolling.

10  button
Displays 6-screen graphs at the same time.

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.

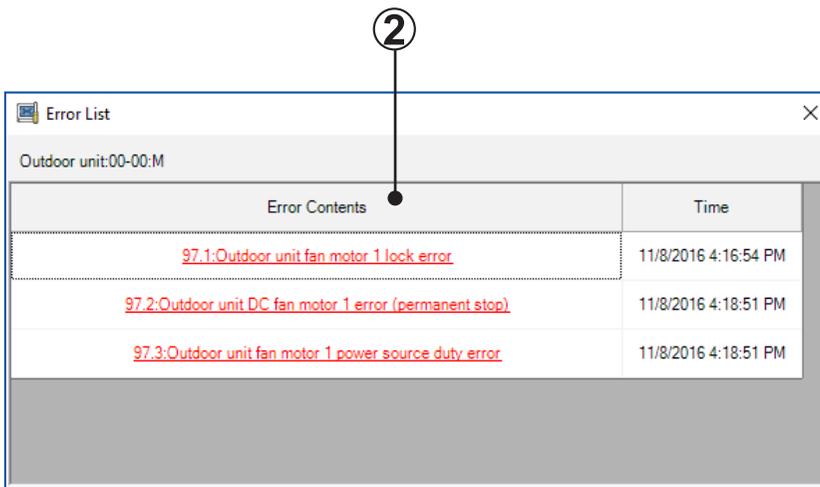
(Example) System List screen



The screenshot shows the 'Web Monitoring Tool for VRF System' interface. The 'System List' tab is active, displaying a table with columns: Ref. No., Unit No., Device, R.C.G, R.B.G.No, Capacity, Operation, Mode, Set Temp (°C), Room Temp (°C), Error, Special Operation, and FAN. The 'Error' column contains 'Error!' for units 01.M and 01.S1, and 'Normal' for others. A circled '1' points to the 'Error' column.

Ref. No.	Unit No.	Device	R.C.G	R.B.G.No	Capacity	Operation	Mode	Set Temp (°C)	Room Temp (°C)	Error	Special Operation	FAN
	00.M	Outdoor	-	-	10HP	On	Cool (Main)	-	-	Error!	-	-
	01.S1	Outdoor	-	-	14HP	On	Cool (Main)	-	-	Error!	-	-
	02.S2	Outdoor	-	-	16HP	On	Cool (Main)	-	-	Normal	-	Opn Opn
	00	Indoor	00	-	7000BTU / h	Off	Stop	-	-	Normal	-	-
	01	Indoor	01	-	9000BTU / h	Off	Stop	-	-	Normal	-	-
	02	Indoor	02	-	12000BTU / h	Off	Stop	-	-	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.



The screenshot shows the 'Error List' window for 'Outdoor unit:00-00:M'. It contains a table with columns 'Error Contents' and 'Time'. The error contents are hyperlinks: '97.1:Outdoor unit fan motor 1 lock error', '97.2:Outdoor unit DC fan motor 1 error (permanent stop)', and '97.3:Outdoor unit fan motor 1 power source duty error'. A circled '2' points to the error content text.

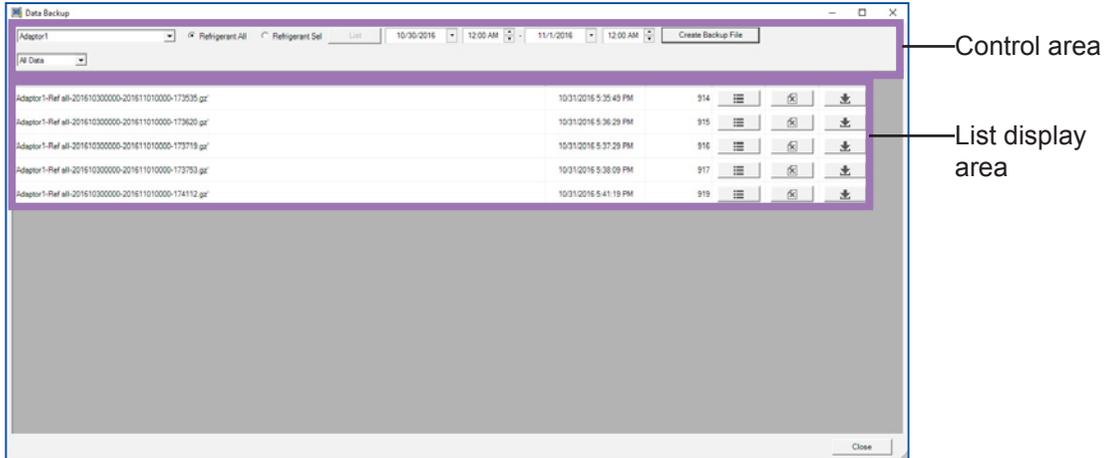
Error Contents	Time
97.1:Outdoor unit fan motor 1 lock error	11/8/2016 4:16:54 PM
97.2:Outdoor unit DC fan motor 1 error (permanent stop)	11/8/2016 4:18:51 PM
97.3:Outdoor unit fan motor 1 power source duty error	11/8/2016 4:18:51 PM

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.

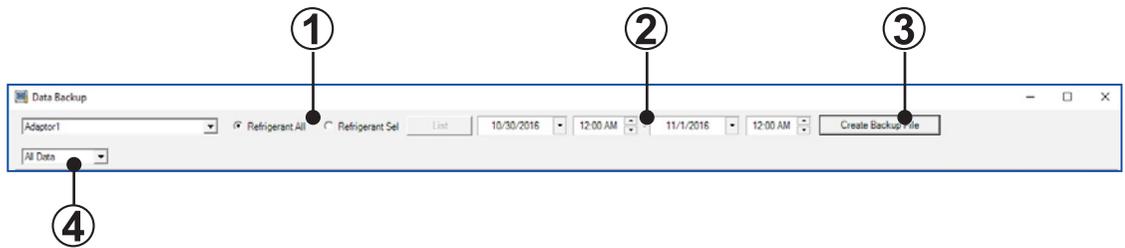
Adaptor	Displays the transmission adaptor name.
Refrigerant All & Refrigerant Sel. [List]	Specify the refrigerant circuit address of the backup file.
Period	Specify the period of the backup file.
Create Backup File	Create the backup file.
Backup file display switching	Switches and displays the files 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.

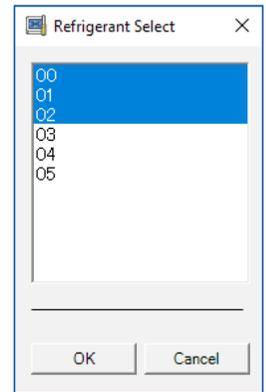
FileName	Display the file names created in the Control area. Also any backup file may be downloaded.
MakeDate	Display date of creation of the backup file.
Size [KB]	Display the size (in KB) of the backup file created. When creation is in progress, display the status of progress.
Detail	Displays the detailed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



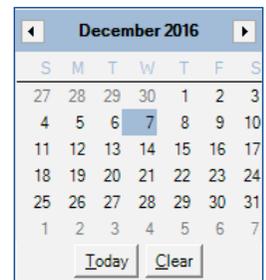
- ①** Refrigerant All & Refrigerant Sel. selection field
Specify the range of refrigerant circuit address of the backup files to be created by one of the following methods. If Refrigerant Sel. is specified, Refrigerant Select screen will appear by clicking the [List] button. Specify the desired refrigerant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

- Refrigerant All All refrigerant circuit addresses are specified.
- Refrigerant Sel. Refrigerant circuit address selected in the refrigerant circuit 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 circuit 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-201610300000-201611010000-173620.gz'	10/31/2016 5:35:49 PM	914	[Detail]	[Delete]	[Download]
'Adaptor1-Ref all-201610300000-201611010000-173620.gz'	10/31/2016 5:36:29 PM	915	[Detail]	[Delete]	[Download]

- 1** File Name display
Display the file names created in the Control area. Also any backup files may be downloaded

FileName format is as follows;

[Transmission adaptor name - Refrigerant All or Refrigerant Sel *- Period - administrator 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 [Close]

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.

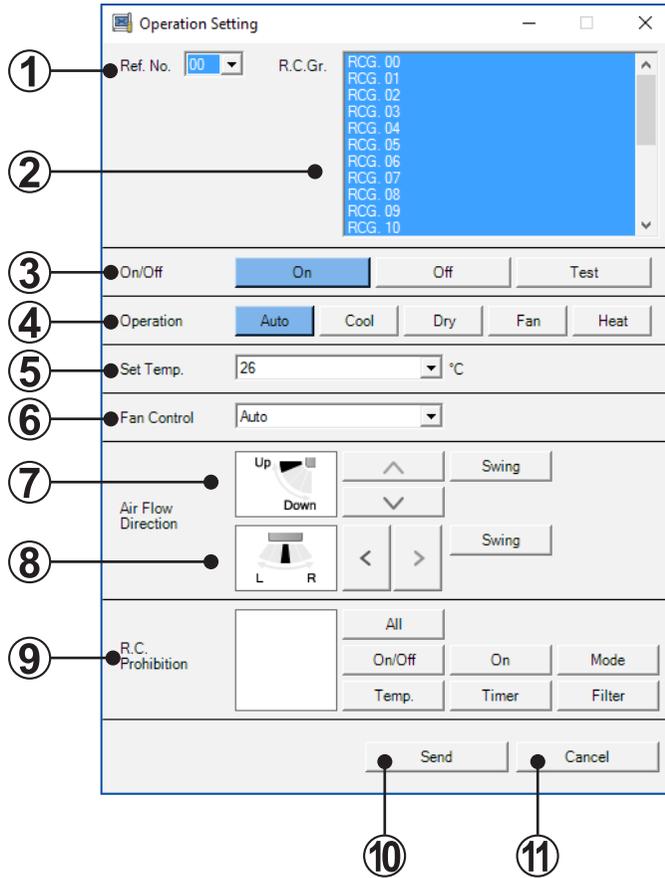
- ⑤ Delete button
Deletes the created backup file.
- ⑥ Download button
Saves the created backup file to the local folder.

5-12 Operation Setting

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

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.



- 1** Ref. No. selection field
Selects the refrigerant circuit address. (The refrigerant circuit 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.
- 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 pull-down menu.
- 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 Cancel button
Closes the screen.

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



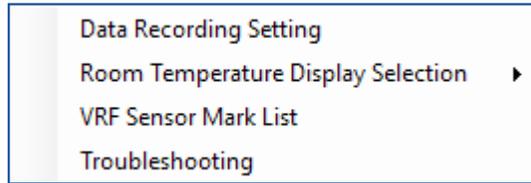
The settable range depends on the series.

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.

5-13 Setting

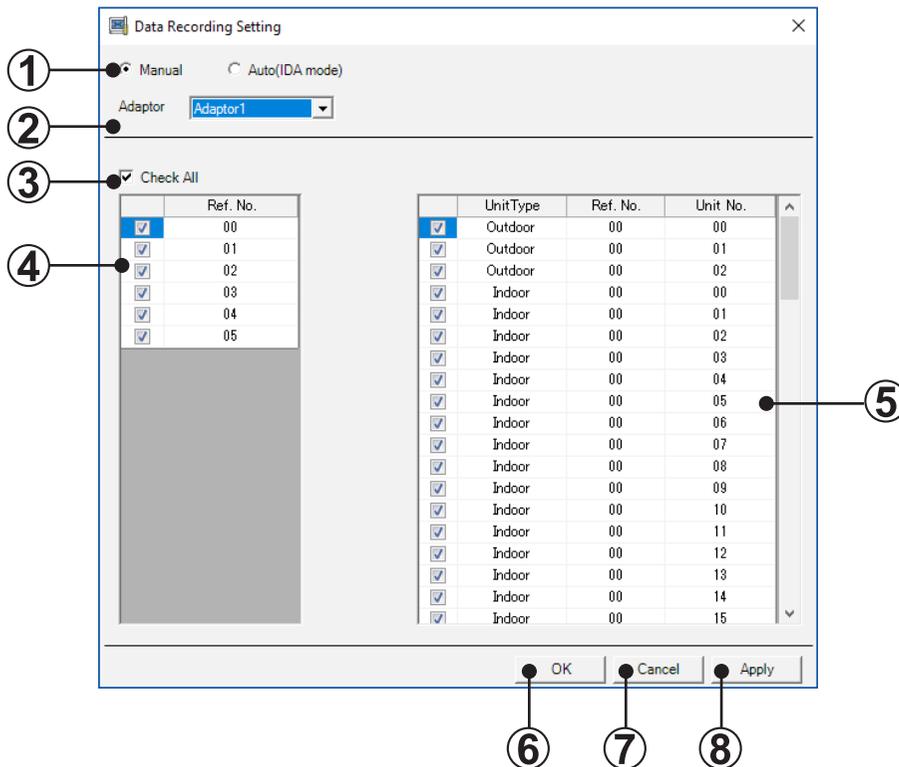
When the  button on the Monitor screen is clicked, the menu of four functions below is displayed. Click the menu you want to set.



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.

Requirement 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 circuits 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 circuits 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 circuits 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 circuit
	Detail Status List screen		
	Detail Check List screen		
	Graph screen		



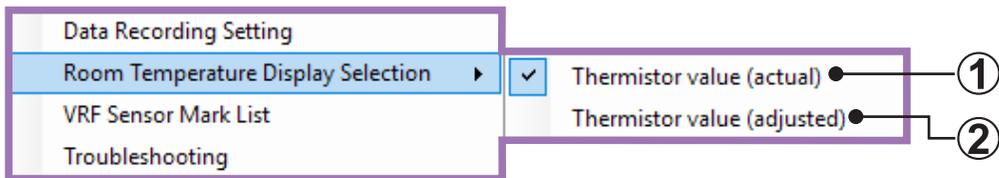
② Adaptor selection field
 Selects the transmission adaptor which connects the target unit.

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 circuit address selection field
Select the refrigerant circuit address.
When the checkbox is checked, all the selected Unit Type connected to refrigerant circuit 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.

Mark	Name
CMP1	Compressor 1 (Inverter type)
Drive Freq. (rps)	Drive frequency
Inverter Temp.	IGBT temperature
DC Voltage (V)	DC voltage
CT Current (A)	CT current
HEX1	Heat exchanger 1
HEX2	Heat exchanger 2
FAN Freq.1	Fan frequency 1
ACM	Accumulator
ACMH	Accumulator heater (reserve)
RCV	Receiver tank

5-13-4 Troubleshooting

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

TROUBLESHOOTING CONTENTS

- INDOOR UNIT(S Series)
- INDOOR UNIT(V Series)
- OUTDOOR UNIT(S Series)
- OUTDOOR UNIT(V Series)
- OUTDOOR/INDOOR UNIT(V)

INDOOR UNIT (S Series) TROUBLESHOOTING

- Model data error
- Microcomputer error
- Power line frequency abnormal
- EEPROM access error
- EEPROM deletion error
- Room temperature thermostat error
- Indoor unit heat exchanger thermostat (mid/die) error
- Indoor unit heat exchanger thermostat (ind/die) error
- Indoor unit heat exchanger thermostat (outlet) error
- Blower temperature thermostat error
- Drum abnormal
- Indoor unit fan Error
- Communication error (indoor unit remote controller)
- Transmission error
- Node setting error
- Parallel communication error
- Outdoor unit Error

INDOOR UNIT (S Series) TROUBLESHOOTING

Model data error

CONTENTS	ERROR CAUSE	REMEDY
1. Generation condition Error in model information memorized in EEPROM when power turned on.		
2. Corresponding operation 1) Relevant indoor unit stopped (not started). 2) Error display to indoor unit LED and error output to communication bus line.	Model information not memorized or reset for some reason.	Replace indoor unit control PC board.
3. Reset condition Model information memorized in EEPROM restored to normal.		

Microcomputer error

CONTENTS	ERROR CAUSE	REMEDY
1. Generation condition Communication between two microcomputers on indoor unit control PC board not performed normally.		
2. Corresponding operation 1) Relevant indoor unit stopped (not started). 2) Error display to indoor unit LED and error output to communication bus line.	1. Effect of extraneous noise.	1. When power turned off, and then turned on again. 2. If error not generated again, PC board is normal. Therefore, remove noise sources near indoor unit. 3. If error generated again, perform the following, in addition to removing noise sources.
3. Reset condition Normal microcomputers communication restored.	2. Indoor unit control PC board faulty.	2. Replace indoor unit control PC board.

Power line frequency abnormal

CONTENTS	ERROR CAUSE	REMEDY
1. Generation condition Indoor unit control PC board detected frequency outside operating.		
2. Corresponding operation 1) Relevant indoor unit stopped (not started). 2) Error display to indoor unit LED and error output to communication bus line.	Power line frequency is below 45Hz or above 65Hz.	Check power line frequency and supply rated frequency.

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 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 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

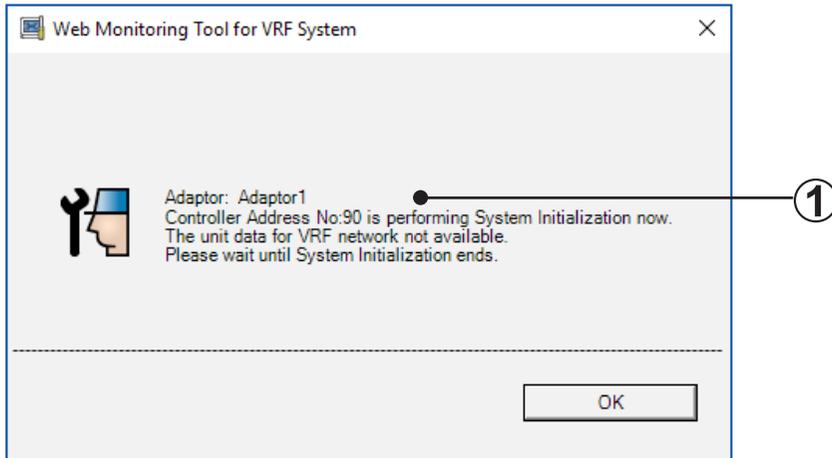


- When an error is occurred while each function operates, the process ends normally. After the error is cancelled, this data can be checked.
- Even when an error is generated, the right-click menu can be operated.
- When an error is generated while sub screen is displayed, only [Cancel] or [Close] button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



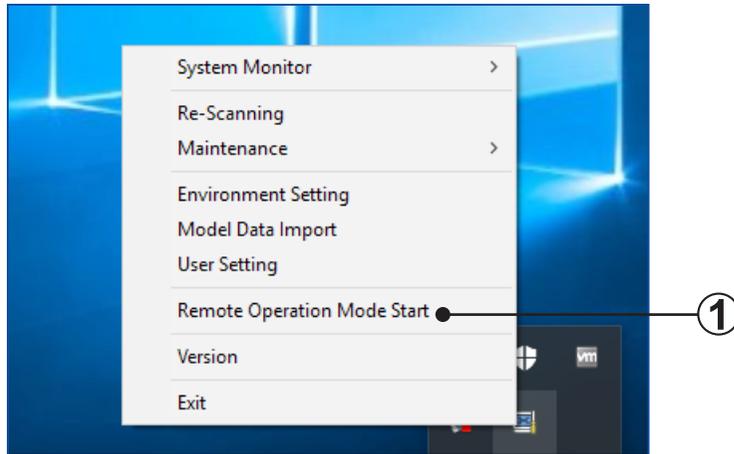
6. Remote Operation

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.

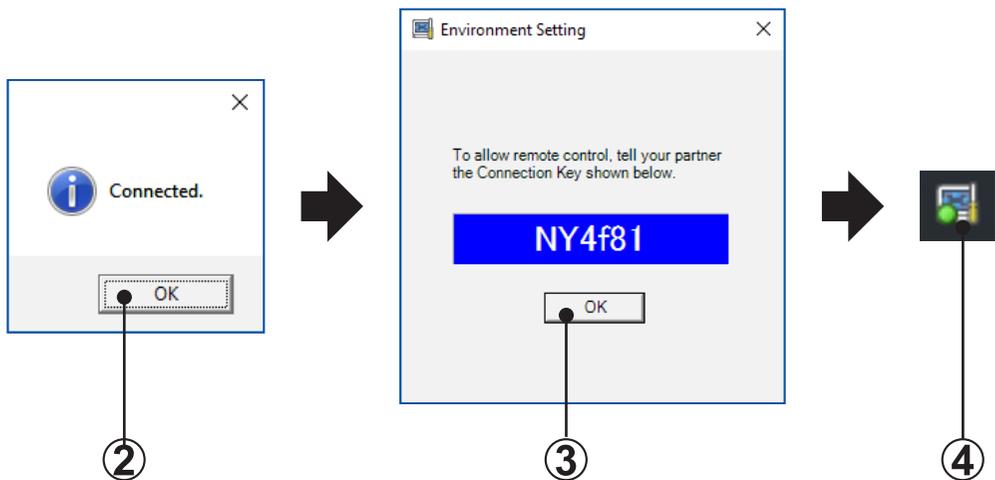
Note When this operation is performed, check if the PC can be connected to the internet in advance.

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.

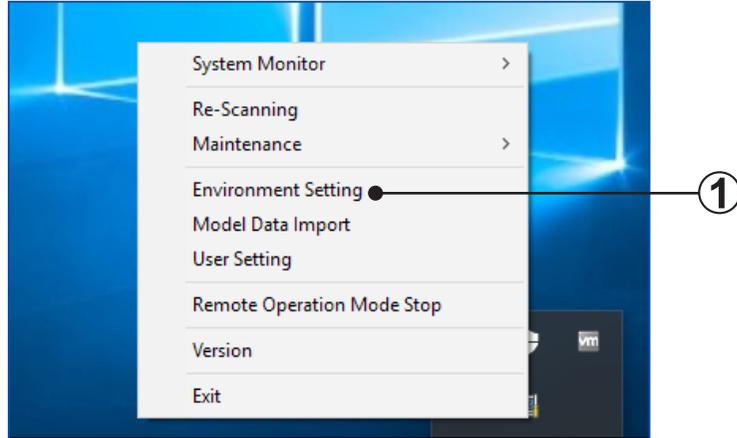


- ② Wait until the message screen appears.
When message screen is displayed, click the [OK] button.
- ③ Wait until the message screen appears.
When message screen is displayed, click the [OK] button.
- ④ The icon in the task tray is displayed.

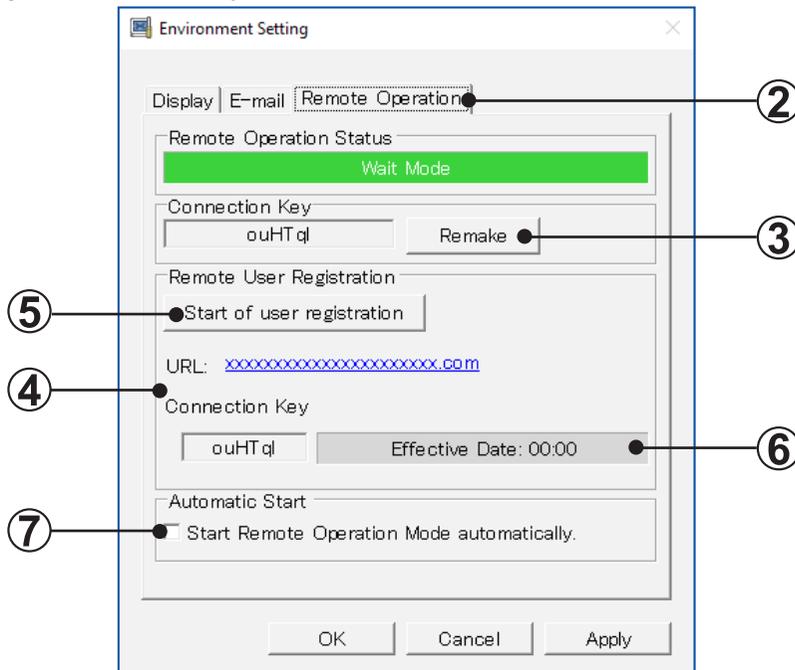
6-2 Account registration (first time only)

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.



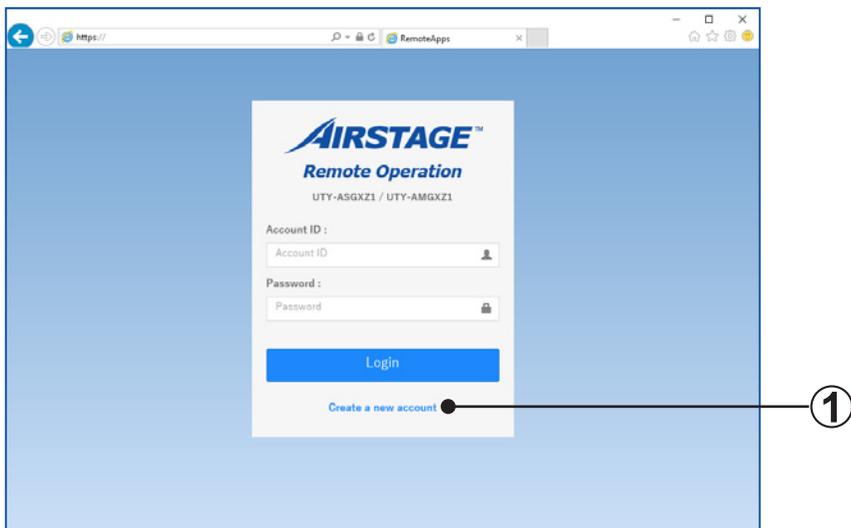
- ② Click the “Remote Operation” tab.

- ③ Change the Connection key

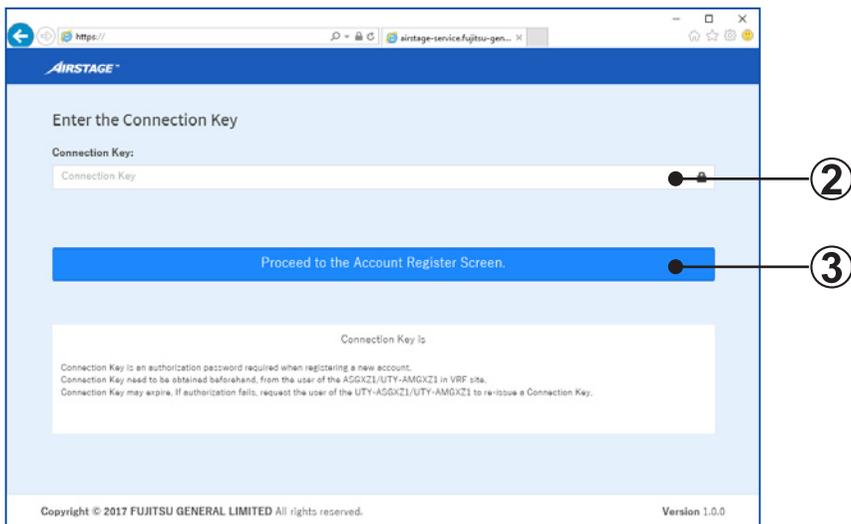
- ④ URL and Connection Key which are necessary for account registration are displayed. Take a note of these not to forget them. In addition, if an actual operator is different, it is necessary to inform the operator about the information of these two URL and Connection Key.
- ⑤ When [Start of user registration] 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)

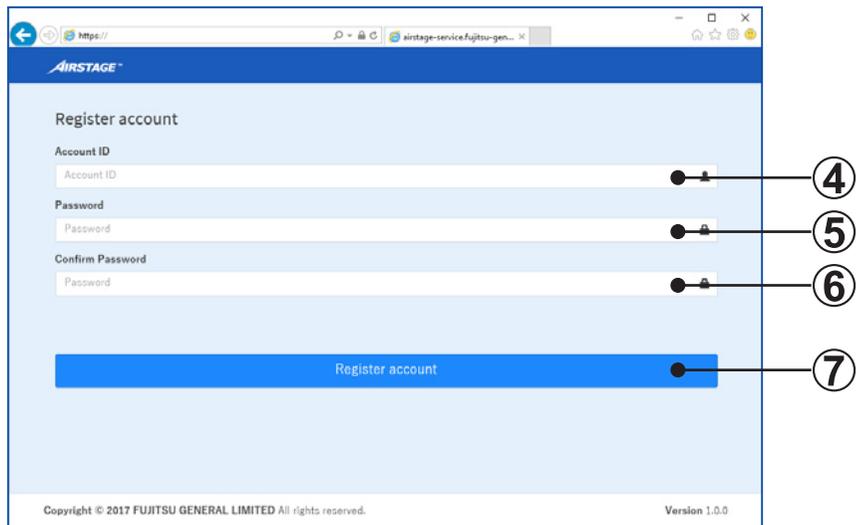
Start the Web browser and enter the specified URL (par. 6-2-1④).
Login screen is displayed.



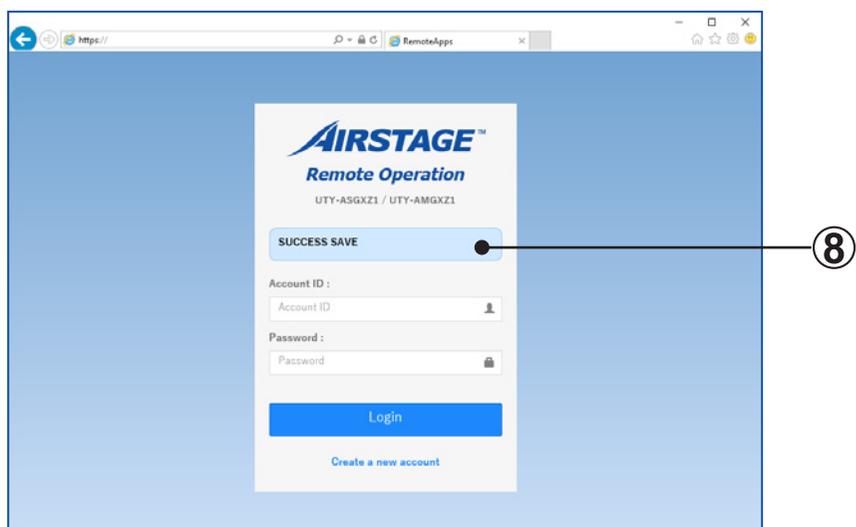
- ① Click the “Create a new account”.



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



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



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

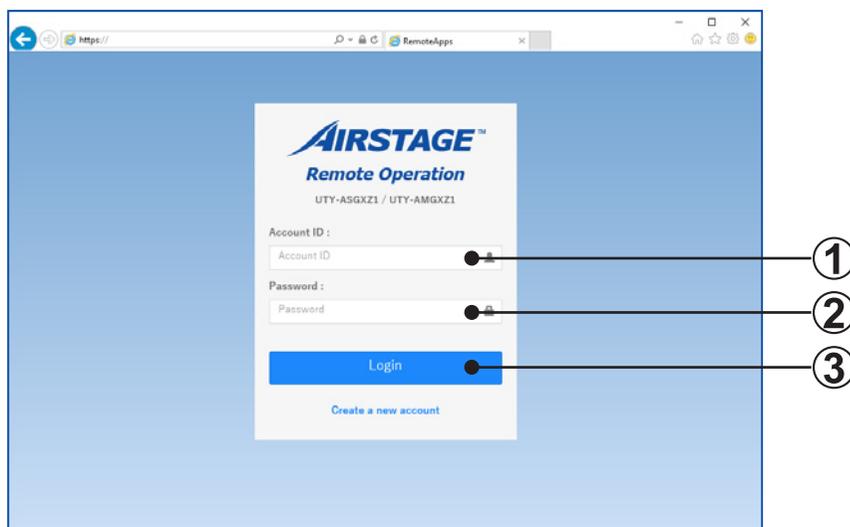
Note



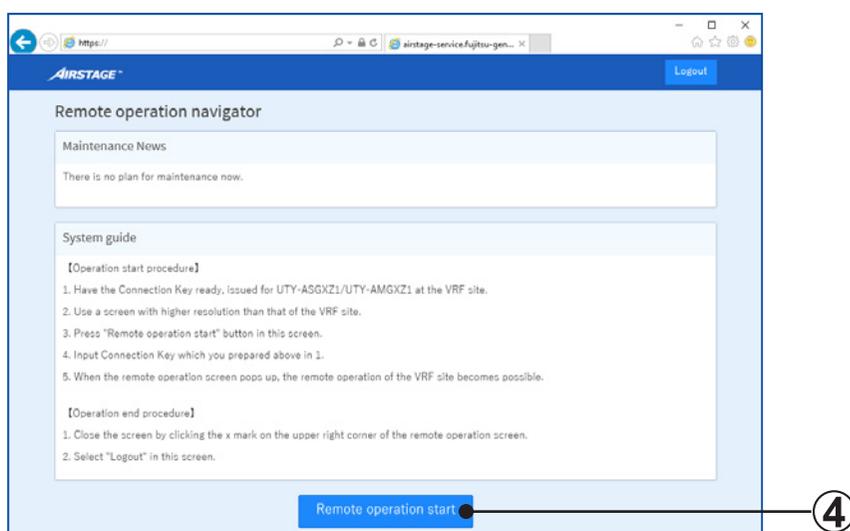
- Once the account is registered, it cannot be deleted or changed.
- Due to the authorization of Remote Operation, pay careful attention to the prevention of account information leakage.

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

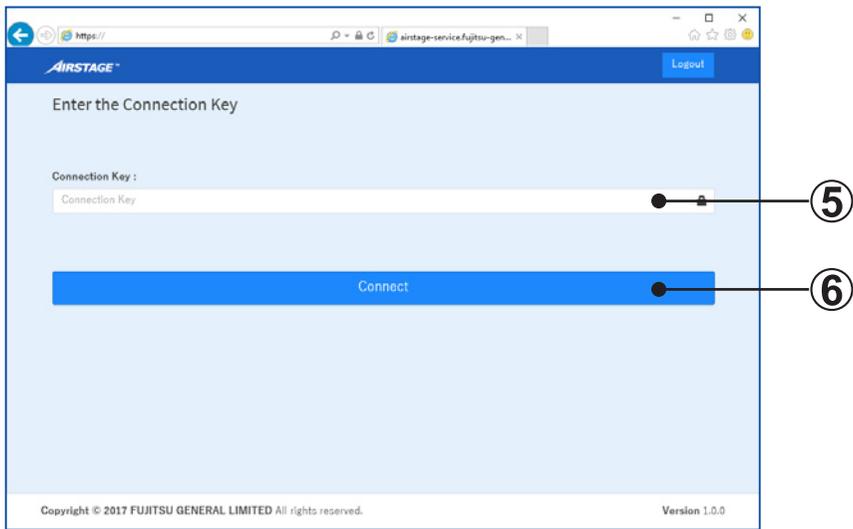
Display the URL specified by Remote side PC (par. 6-2-1④) and log in.



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

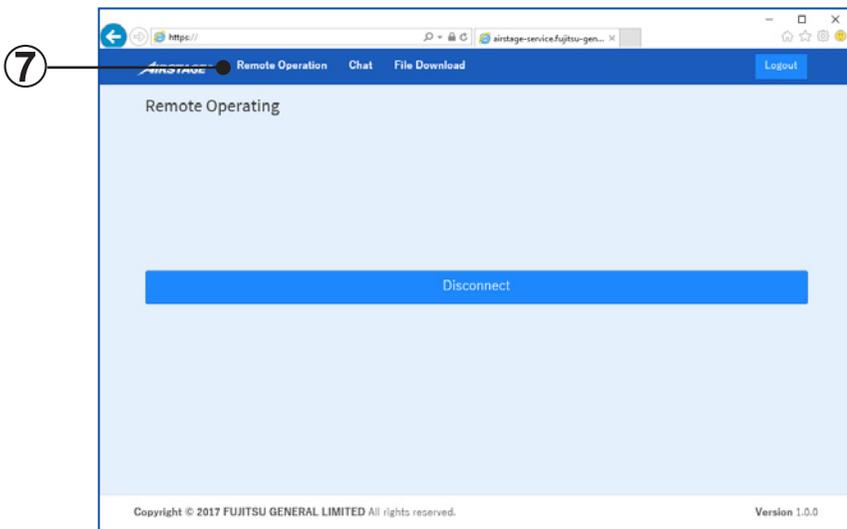


- ④ Click the "Remote operation start" button.



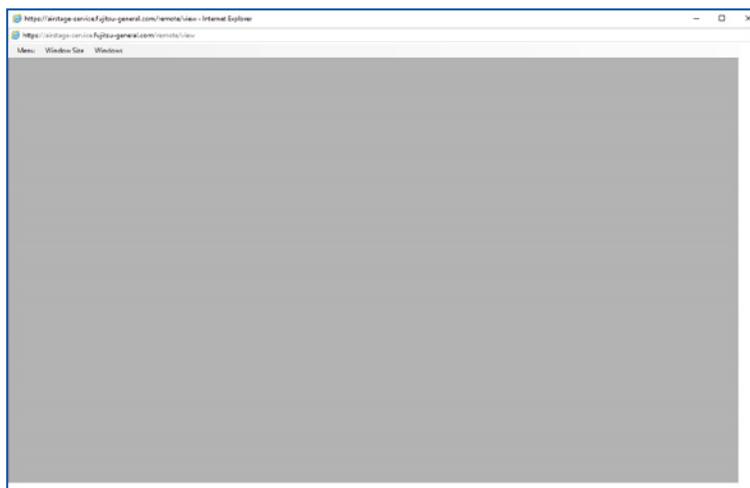
⑤ Enter the Connection key of the Web Monitoring Tool to be operated by Remote Operation.

⑥ Click the "Connect" button.



⑦ Click the "Remote Operation" button.

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



Note



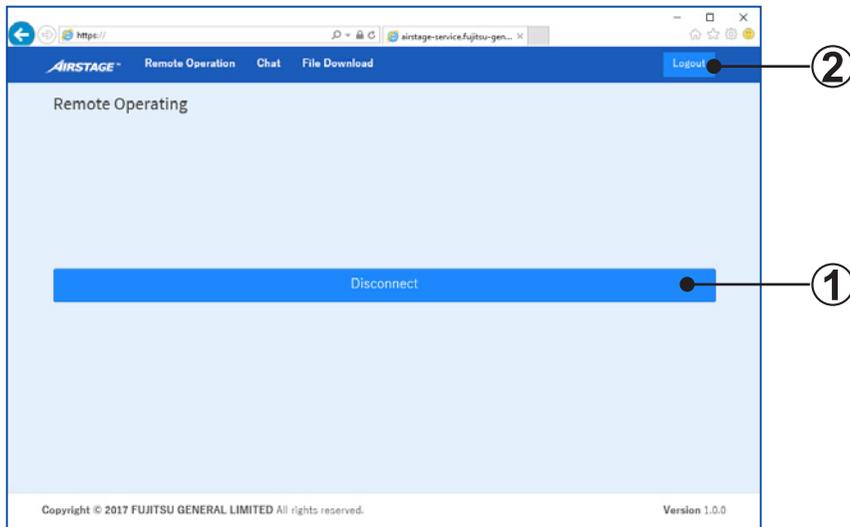
The way of handling is described when the following message appears while the Remote Operating screen is displayed.

- “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”
Remote Operation is performed by other person and operation limit is exceeded. After the operating work is complete, connect again.
- When the following message is displayed on the Web browser.
For IE11
Internet Explorer blocked a pop-up from xxxxxxxxxxxxxxxx.com

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



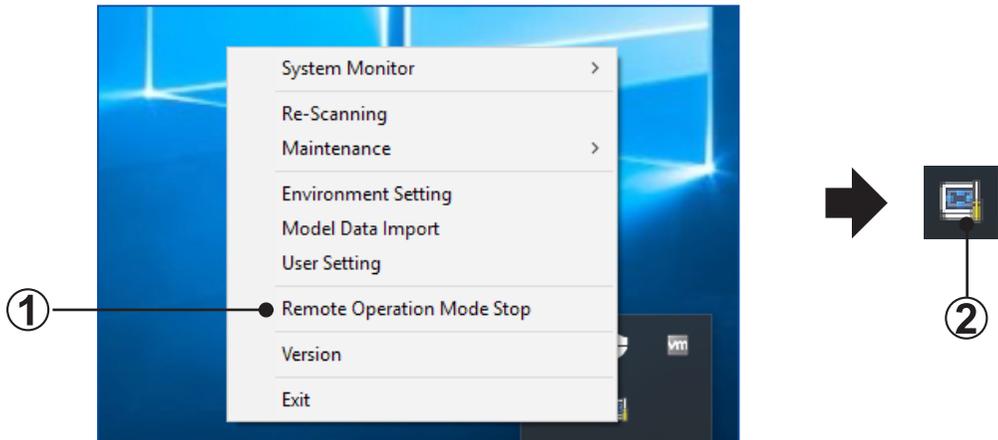
- After login or Remote Operation start, if the operation is not performed for the following period, you will be logged out or the Remote Operation will end automatically.

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.

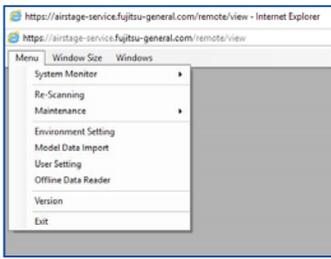
6-6 Remote Operation

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

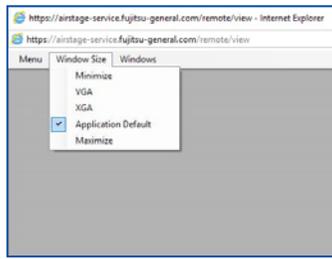
① Remote Operation

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.

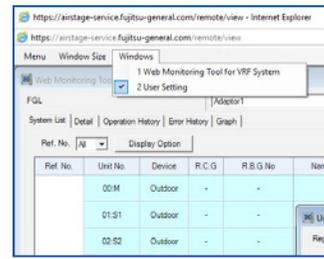
When Menu is selected



When Window Size is selected

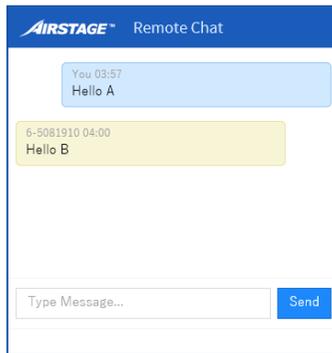


When Windows is selected



② Chat

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

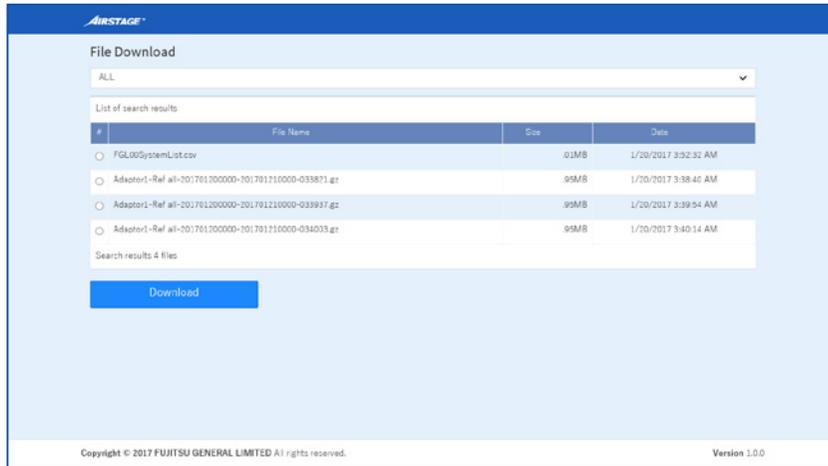


The chat contents can be transmitted only if chat screen is opened mutually at VRF site and Remote site.

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.



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-8 Refrigerant circuit diagram is not displayed for outdoor/indoor unit in the Detail Diagram screen.

(Message “Cannot display refrigerant circuit 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-9 The following message is displayed during use.
“Internet Explorer has stopped working. A problem caused the program to stop working correctly. Windows will close the program and notify you if a solution is available.”

Cause

Add-on function used by Internet Explorer is enabled.

Countermeasure

When using this tool, disable the Add-on functions used by Internet Explorer by the following procedure:

[Internet Explorer] → [Tools] → [Manage Add-ons] → [Toolbars and Extensions] →
Select the displayed Add-on function → Right click → Select [disable]

- 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’.

- 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 IE11 and 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.