INSTALLATION & OPERATION MANUAL

BACnet Gateway for VRF System
UTR-YLBA

Version 1.0

FUJITSU GENERAL LIMITED

CAUTION
Please read the LICENSE AGREEMENT in the manual first.

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Contents

1. SAFETY PRECAUTIONS

- Before using BACnet Gateway, read this “SAFETY PRECAUTIONS” thoroughly to ensure the correct operation.
- This section describes the important safety information to operate BACnet Gateway.
- The meanings of “CAUTION” are explained as follows.

⚠ **CAUTION!**	This mark indicates the procedures, which might result in the death of or serious injury to the user or service personnel if improperly performed.

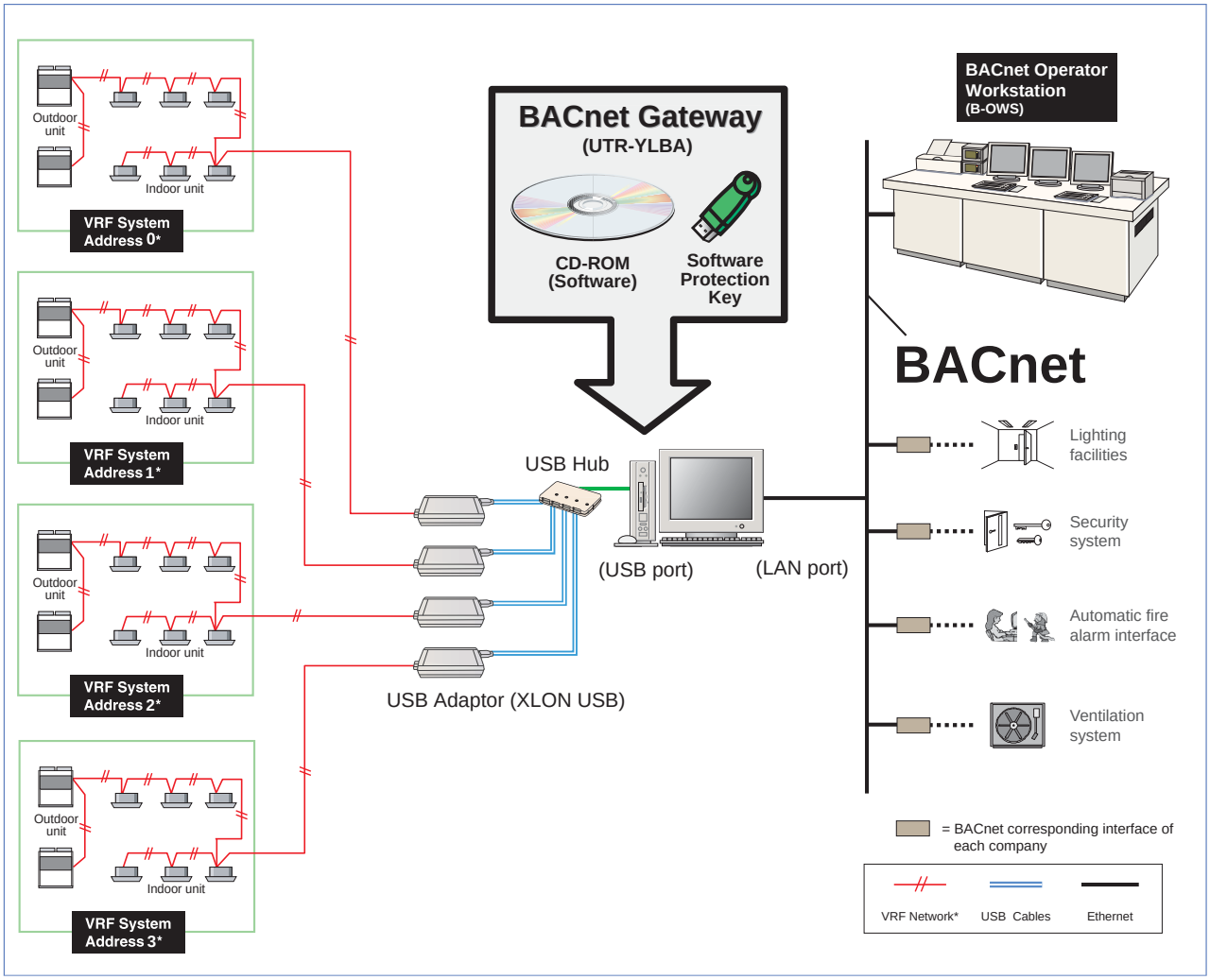
This manual is for service personnel authorized to use the BACnet Gateway. Always keep this manual in an easily accessible place for use by authorized service personnel.

⚠ CAUTION

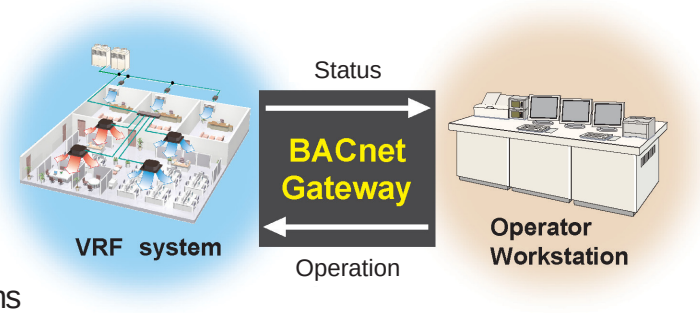
BACnet Gateway for VRF System is a software product running on a PC that controls air-conditioners. Be careful not to turn off the power supply of the PC, nor to finish the application during operation. Otherwise, BACnet Gateway might malfunction.

- **For the personal computer used as BACnet Gateway, refer to the instruction manual supplied by the PC vendor.**
- **For XLON USB adaptor used with the BACnet Gateway, refer to the instruction manual supplied by the vendor.**
- **For use of XLON adaptor, make sure that you follow the instruction manual supplied by the vendor.**
- **Fujitsu General Limited does not take any responsibility whatsoever for influence that may be caused by use of this product.**

2. SYSTEM OUTLINE



ANSI / ASHRAE Standards 135-2001
BACnet Application Specific Controller (B-ASC)
BACnet / IP over Ethernet



The maximum number of connecting systems

VRF System	4 systems

For the numbers of the Units that can connect with one VRF system, Indoor and Outdoor Units are up to 400 units and up to 100 units respectively.

* VRF System Address:
The numbers from 0 to 3, which are assigned to each VRF system in the BACnet Gateway.
(Refer to **4-3. USB Adaptor Connections** on page 15.)

3. SPECIFICATION TABLE

Accessories

CD-ROM (Application and Manual) ..... (1)
USB Software Protection Key ..... (1)

System Requirements for Application

PC (*1)	PC AT Compatible
OS (English Version)	Microsoft® Windows® XP or 2000 (SP3 or later)
CPU	Intel® Pentium® Processor 400 MHz or higher
MEMORY	256 MB or more
DISPLAY	1024 X 768 dots or more, high color or more (Recommended)
CD-ROM DRIVE	For use of reading manuals, Software and Software Protection Key Driver Installation
FLOPPY DISK DRIVE	For use of XLON USB Driver Installation (Downloadable)
INTERFACE (*2)	BACnet Network: Ethernet LAN port, UTP cable VRF Network: XLON USB Adaptor (*3) for USB port connection, twisted pair cable

Notes

(*1) As Network Converter.

(*2) Use an Ethernet LAN port for BACnet side and a USB port connection XLON Adaptor for VRF System side. When your PC is equipped with USB ports, which have the same number as the XLON USB Adaptors you need, the adaptors may be connected direct to the USB ports without USB hub. Note that an additional port for the Software Protection Key is required.

(*3) Use XLON USB Adaptor (USB4-WM-FTT) by DH electronics GmbH.
The XLON USB Adaptor requires a power supply (100mA) that will be supplied via a USB hub.

Operation guaranteed specifications (Operation is not guaranteed in other environments.)

4. INSTALLATION

4-1. .NET Framework 1.1 Installation

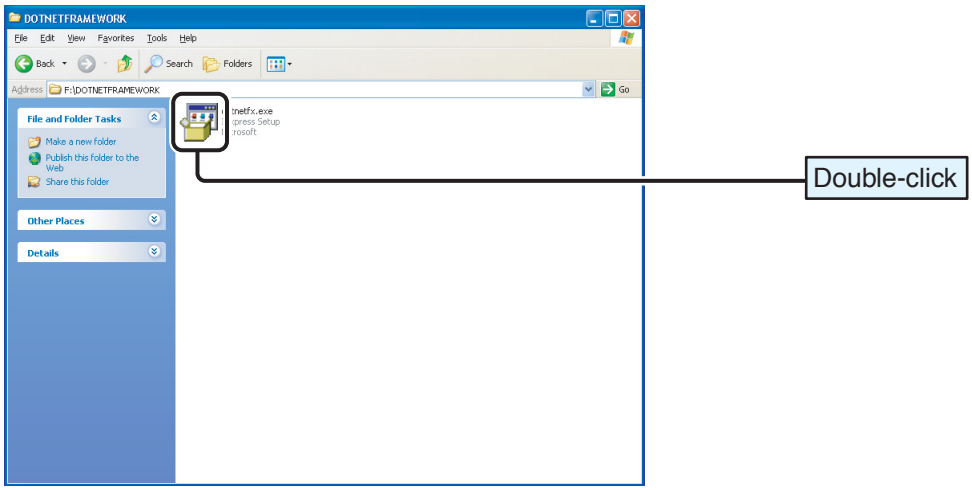
Login your PC as administrator in Windows Windows XP or 2000.

This software is contained in the provided CD-ROM (Application Disc). Please use the latest version on the Microsoft website at http:/www.microsoft.com/downloads/, if available.

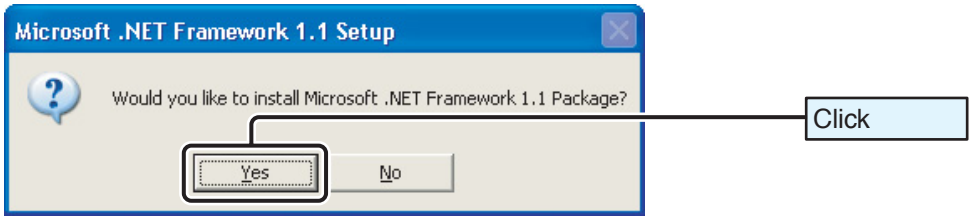
① Set the Application Disc in a CD-ROM Drive.

② Click the icons in the following order to open the DOTNETFRAMEWORK folder.
[My Computer] (on Desktop)→ **[CD-ROM]**→ **[DOTNET Framework]**

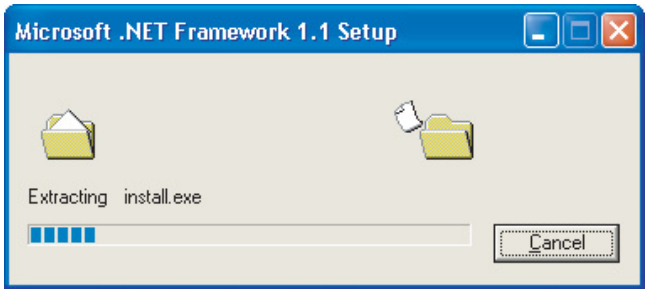
③ Double-click the **[dotnetfx.exe]** file in the DOTNETFRAMEWORK folder.



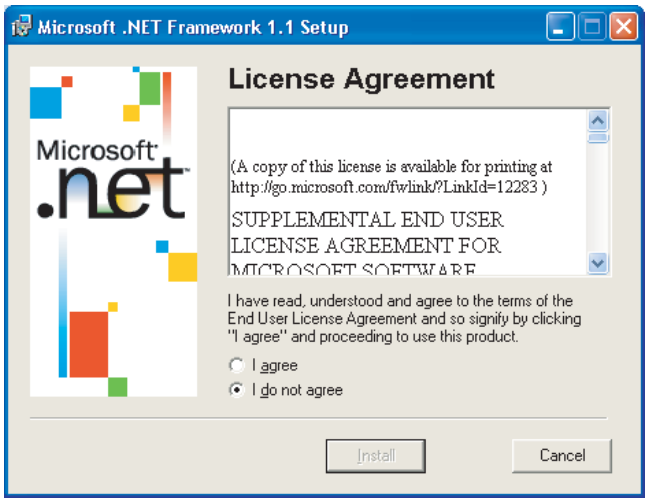
④ Click the Yes button to start the installation.



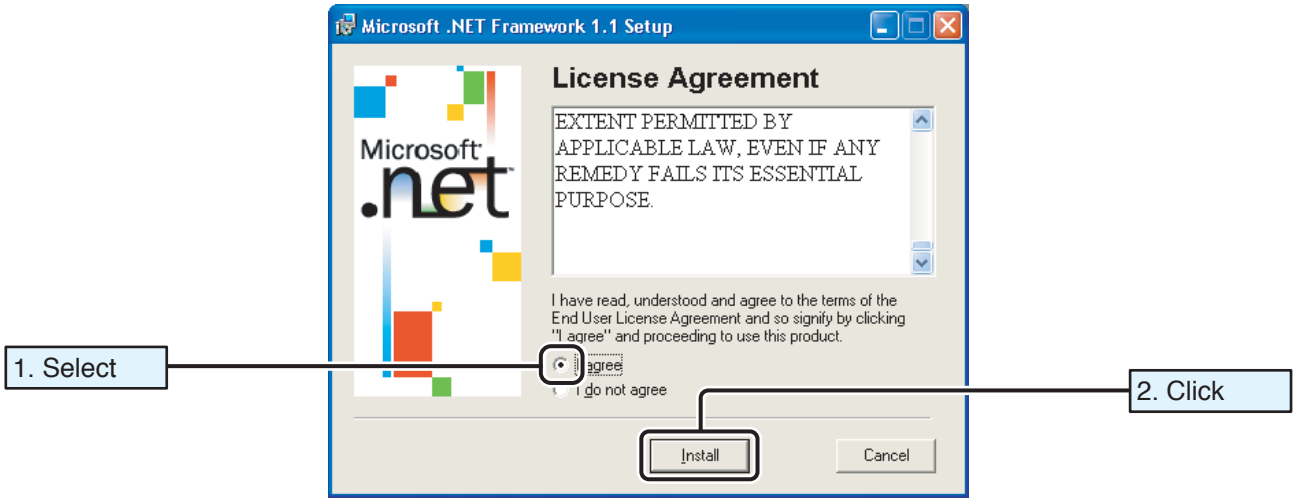
⑤ When the extraction starts, the window shown below appears.



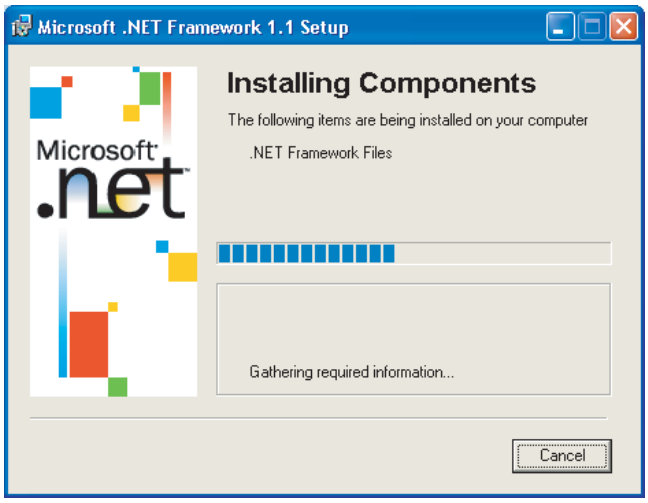
⑥ The window shown below appears.



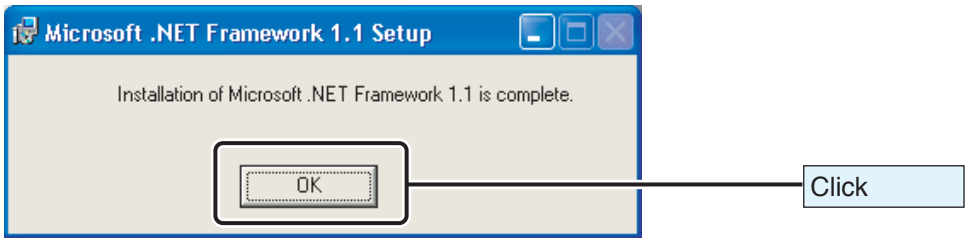
⑦ Agree to the contents of the License Agreement, and then select **[I agree]** and click the Install button.



⑧ When the installation starts, the window shown below appears.



⑨ When the installation is complete, the window shown below appears. Click the OK button.

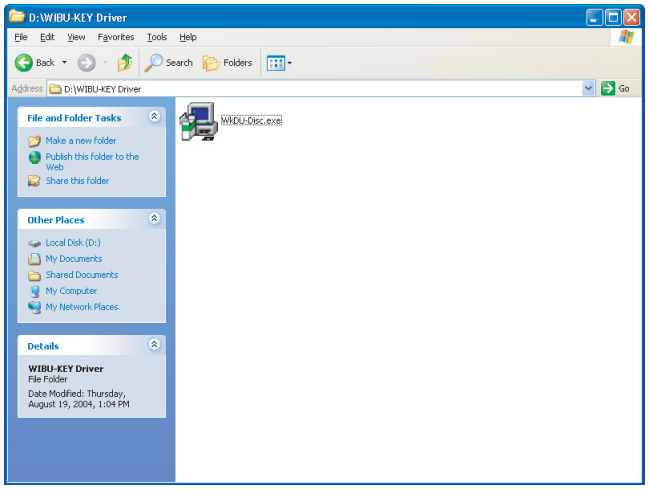


4-2. Software Protection Key (WIBU-KEY) Installation

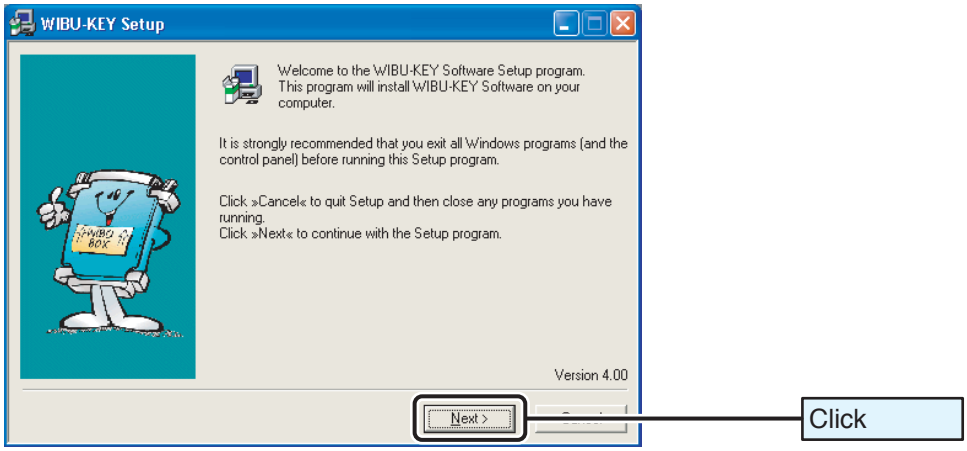
① Set the Application Disc in a CD-ROM Drive.

② Double-click the icons in the following order to open the WIBU-KEY Driver folder.
[My Computer] (on desktop)→ **[CD-ROM]**→ **[WIBE-KEY Driver]**

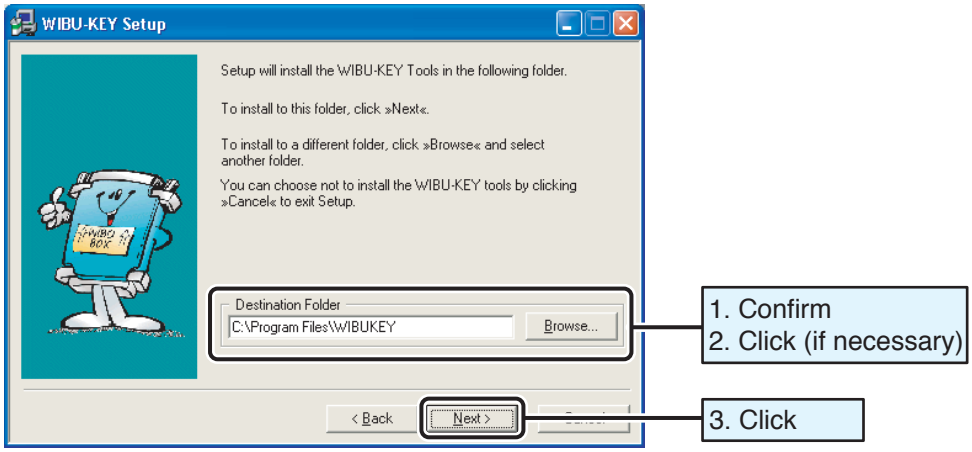
③ Double-click the **[WkDU-Disc.exe]** file in the WIBU-KEY Driver folder.



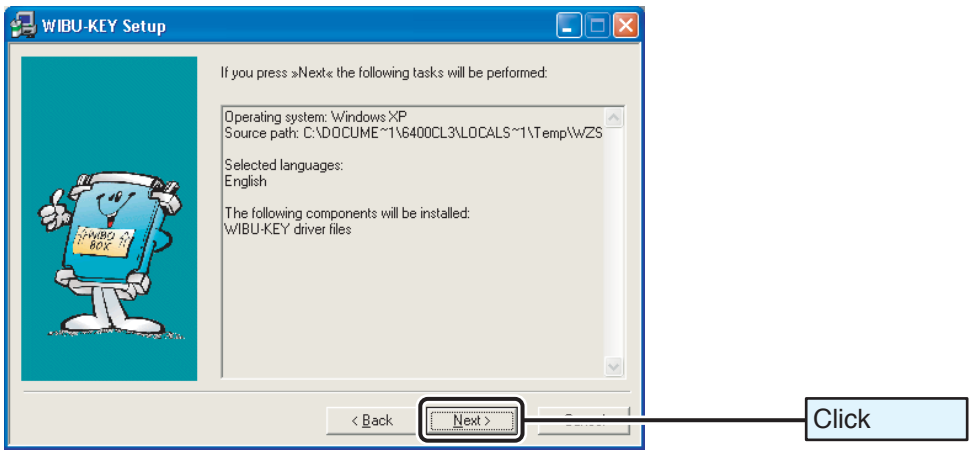
④ Click the Next > button to start the installation.



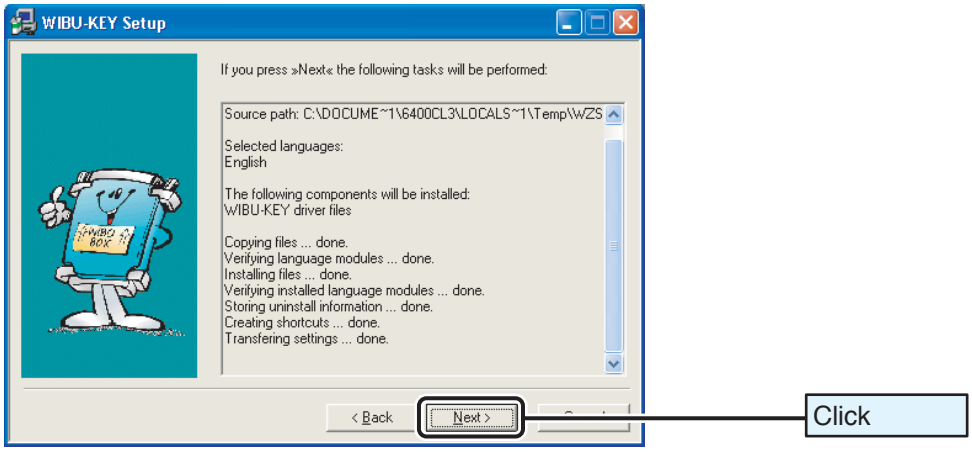
⑤ Confirm the folder to be installed and click the Next > button. When you wish to change the folder, click the Browse button and specified it.



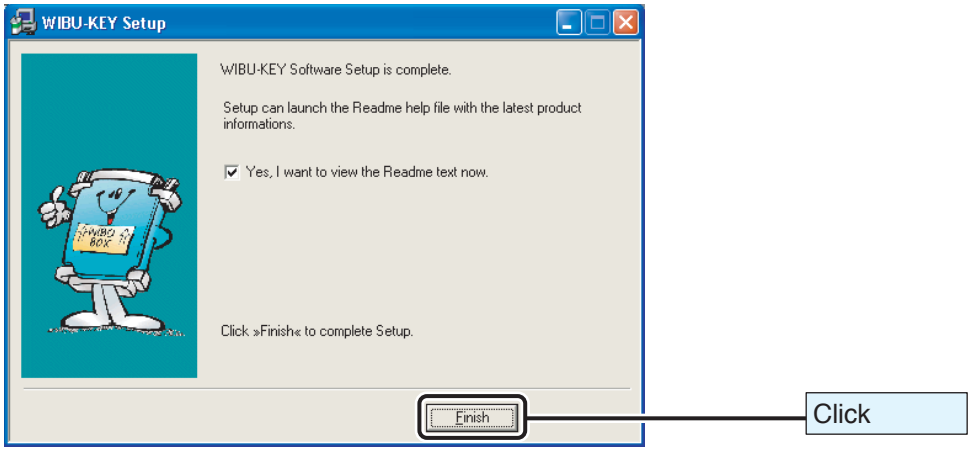
⑥ Click the Next > button.



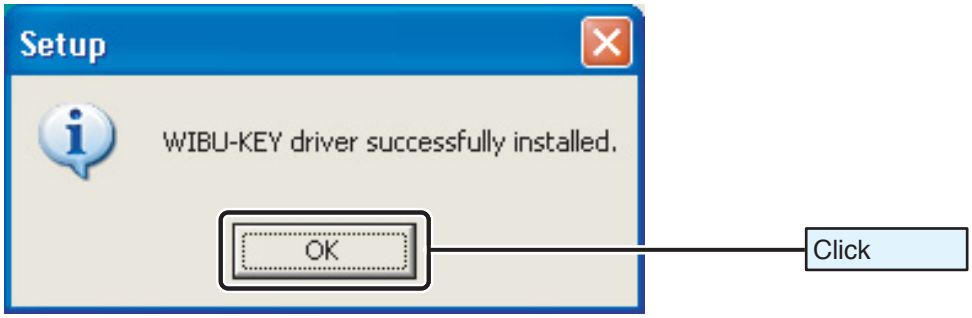
⑦ Click the Next > button.



⑧ When the installation is complete, the window shown below appears. Click the Finish button.



⑨ Click the OK button. Once the installation has been completed, insert the Software Protection Key (WIBU-KEY) into a USB port.

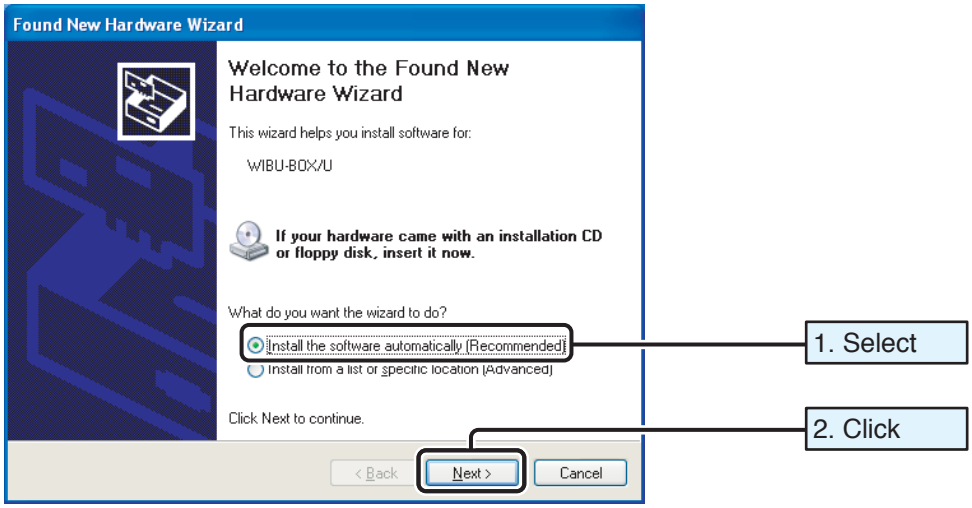


⑩ The hardware is found and installation automatically starts. The windows shown below appear. (For Windows 2000 only)

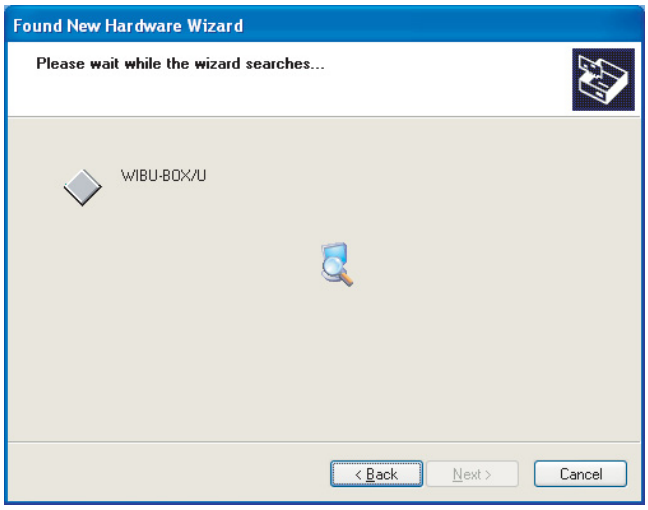
(Procedure ⑪ - ⑬ is described for Windows XP only.)

⑪ The message “Found New Hardware WIBU-BOX/U” appears on the screen as shown below. Install the driver according to the Wizard.

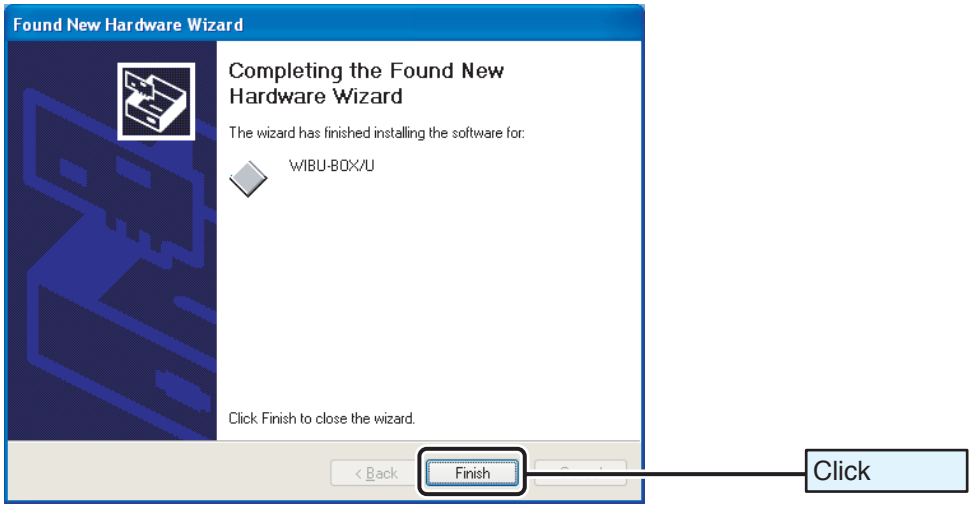
⑫ Select **[Install the software automatically (Recommended)]** and click the Next > button to start the installation.



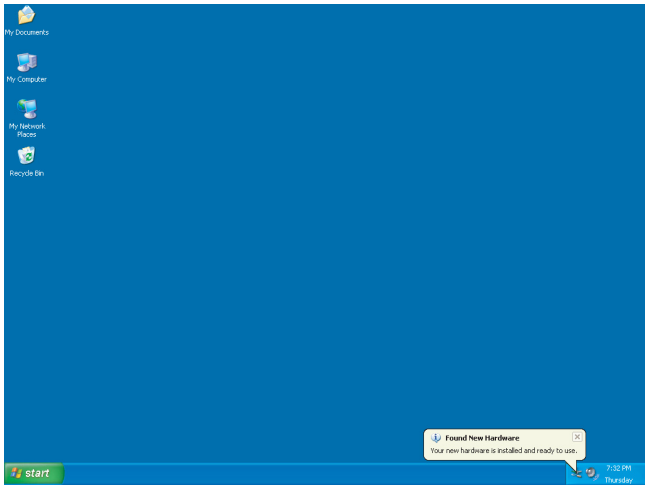
Window when the driver is being installed.



⑬ When the installation is complete, the window shown below appears. Then, click the Finish button.



When the driver has been successfully installed, the message “Found New Hardware” appears on the screen as shown below.

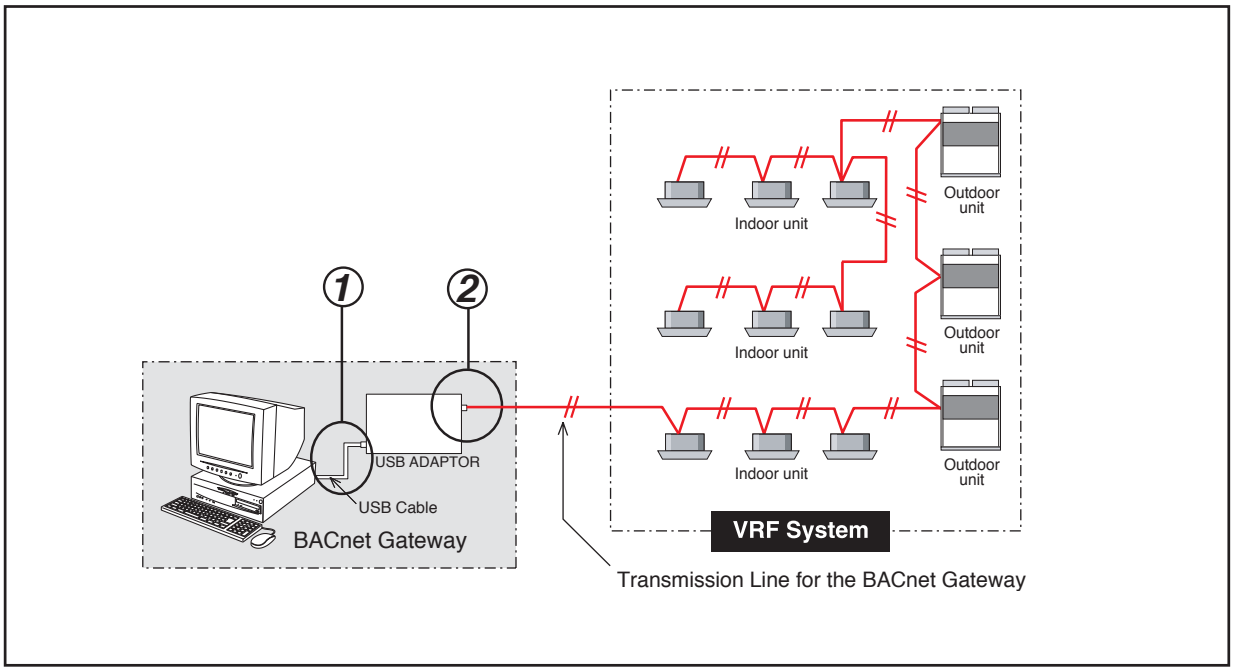


4-3. USB Adaptor Connections

Before USB Adaptor Connections, make necessary wiring of VRF Network Transmission Line for the BACnet Gateway. The wiring shall be made before applying power supply of VRF System.

① Connect between a PC (unused USB port) and the XLON USB Adaptor with the provided USB cable after completion of PC startup.

② Insert the connector attached with the Transmission Line (non-polar, 2-conductor cable) to the XLON USB Adaptor.



For Wiring of the Transmission Line for the BACnet Gateway

* Connect Transmission Line for the BACnet Gateway to Indoor or Outdoor unit. (And, connect shield of the Transmission Line to the earth terminal of the unit side.)

For VRF System Address and the XLON USB Adaptor

* VRF System Addresses are assigned in order of the connection of USB adaptors to PC. (Refer to **2. SYSTEM OUTLINE** on page 5 for the outline and NOTES on page 22 for checking address.)
* Installation of XLON USB Driver is required for each USB port. Install the USB Driver according to **4-5. XLON USB DEVICE DRIVER INSTALLATION** on page 23 when the USB Adaptor is connected to a port that the Driver has not been installed.

For USB Hub

- Use a USB hub with 4 ports or more and power supply for supplying power to the XLON USB Adaptor.
- When your PC is equipped with USB ports, which have the same number as the XLON USB Adaptors you need, the adaptors may be connected direct to the USB ports without USB hub. Note that an additional port for the Software Protection Key is required.

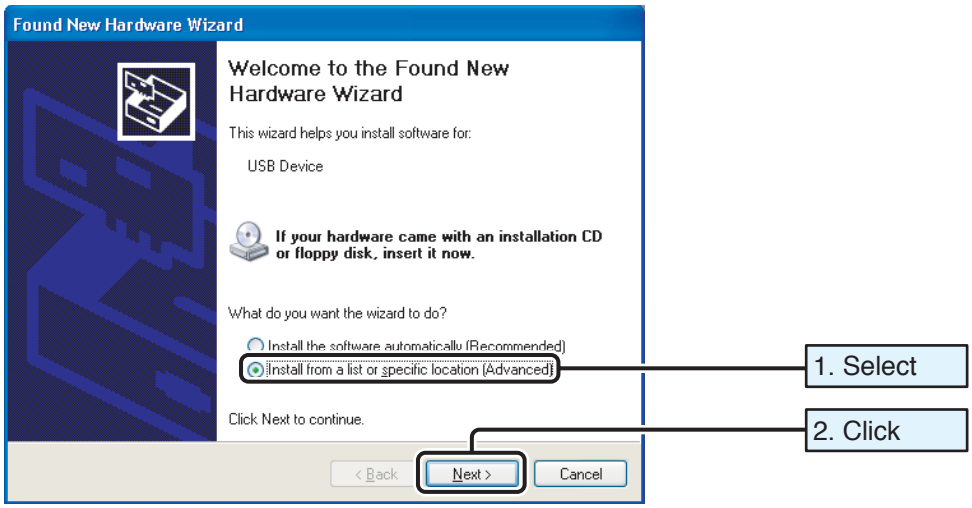
4-4. XLON USB Device Driver Installation

On completion of the connection between a PC and the USB Adaptor (Refer to **4-3. USB Adaptor Connections**.), the Installation Wizard Window shown below is automatically displayed.

If the XLON USB Device Drivers have already been installed on a PC, this installation is not required. The display in the procedure: ① does not appear.

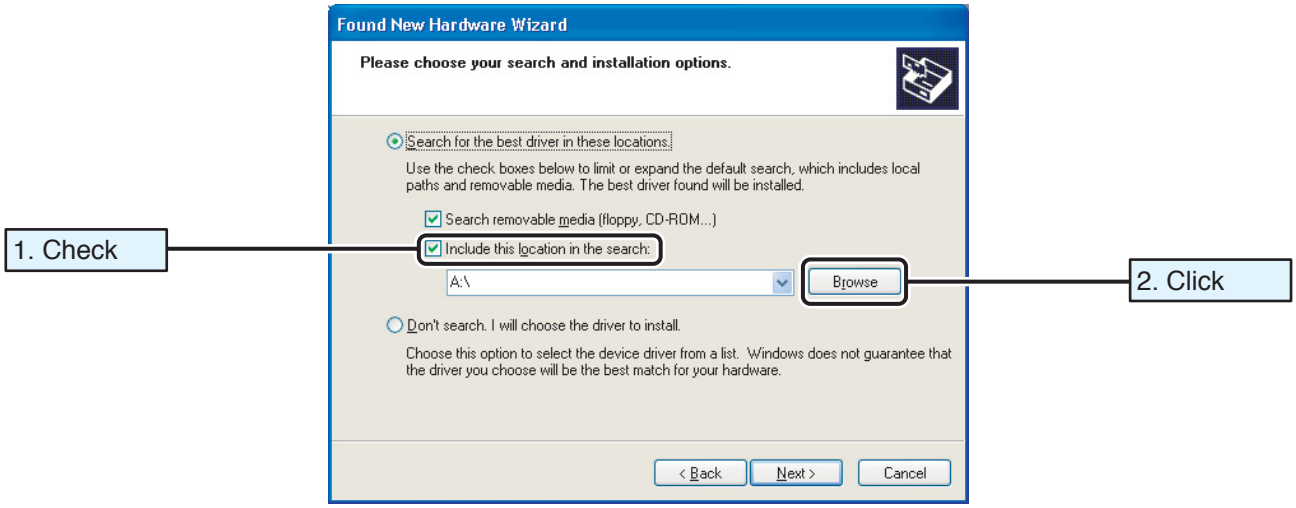
Floppy Disk attached in the XLON USB Adaptor contains the drivers. Please use the latest version on the website at http://www.dh-electronics.de/eindex.htm, if available.

① Select **[Install from a list or specific location (Advanced)]** and click the Next > button.

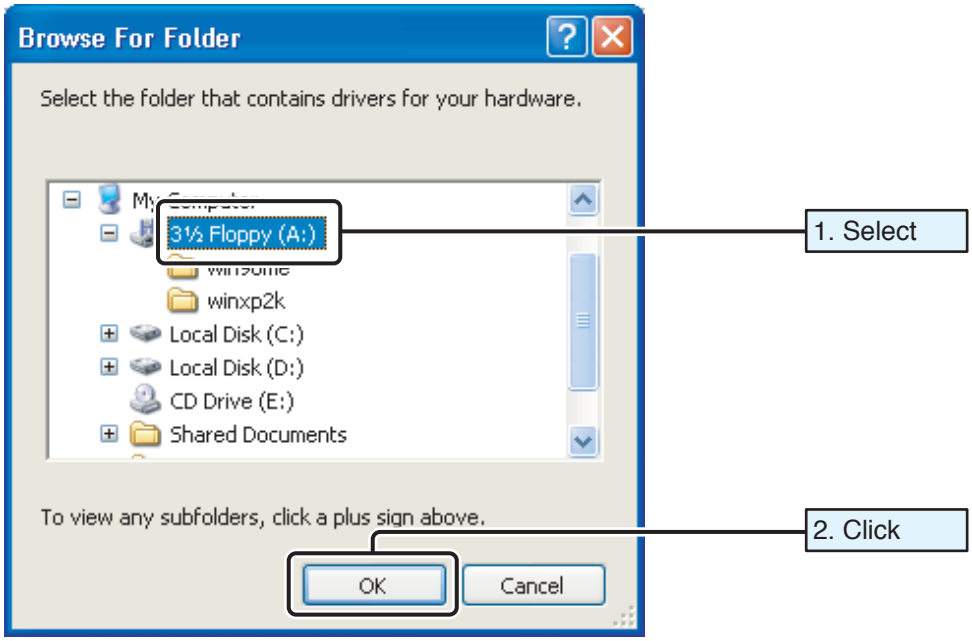


② Insert the Floppy Disk into a Floppy Disk Drive.

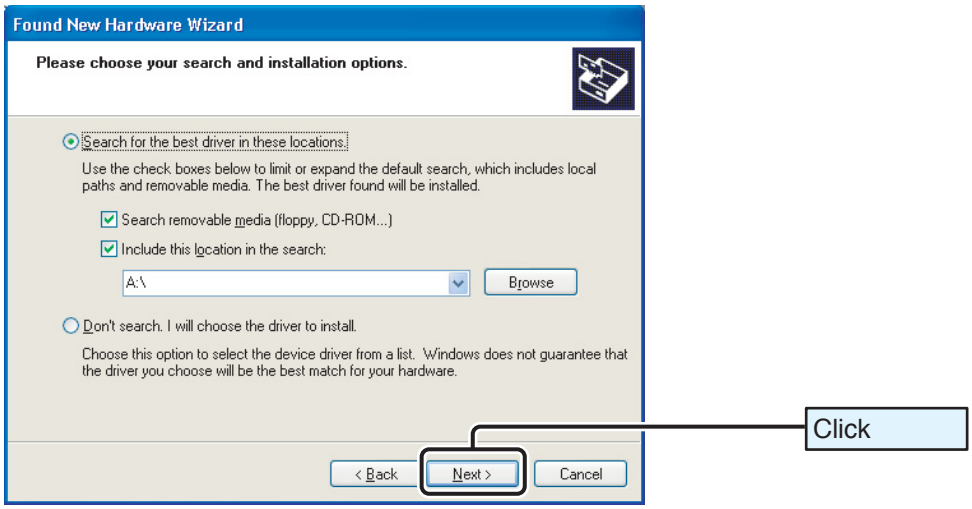
③ Check **[Include this location in the search:]** and click the Browse button.



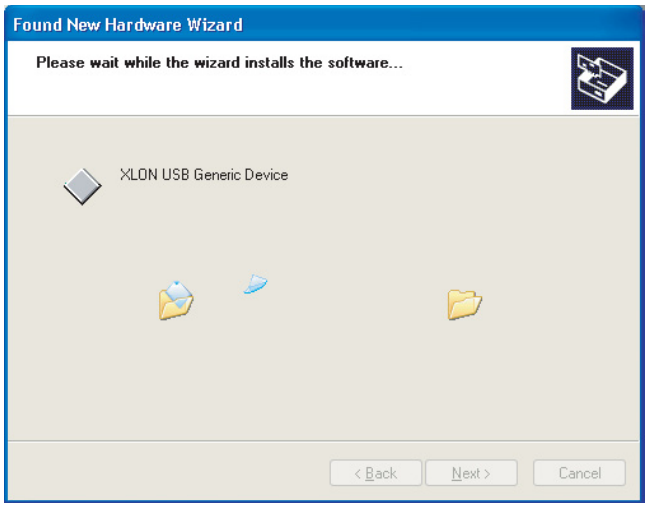
④ Select **[3 1/2 Floppy (A:)]** and click the OK button.



⑤ Click the Next > button. The driver is found and the installation starts.

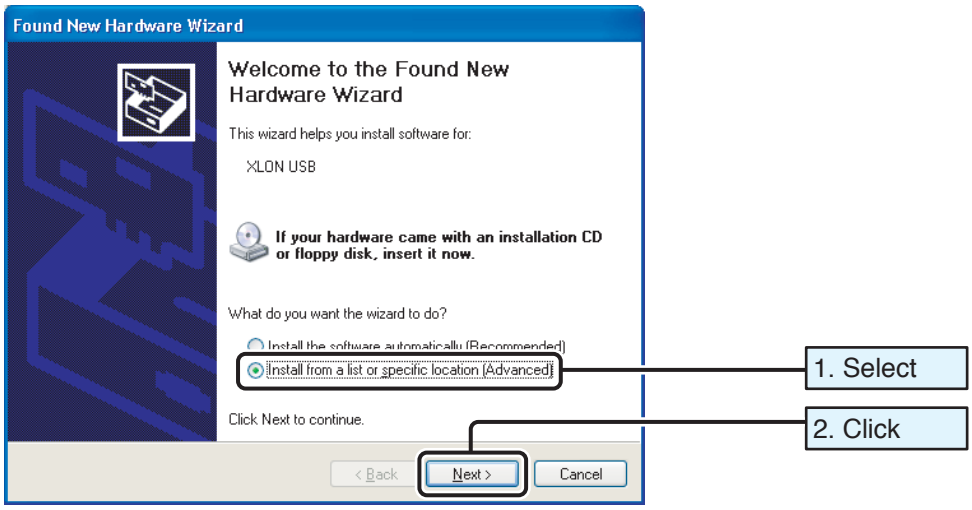


Window display while the driver is being installed.

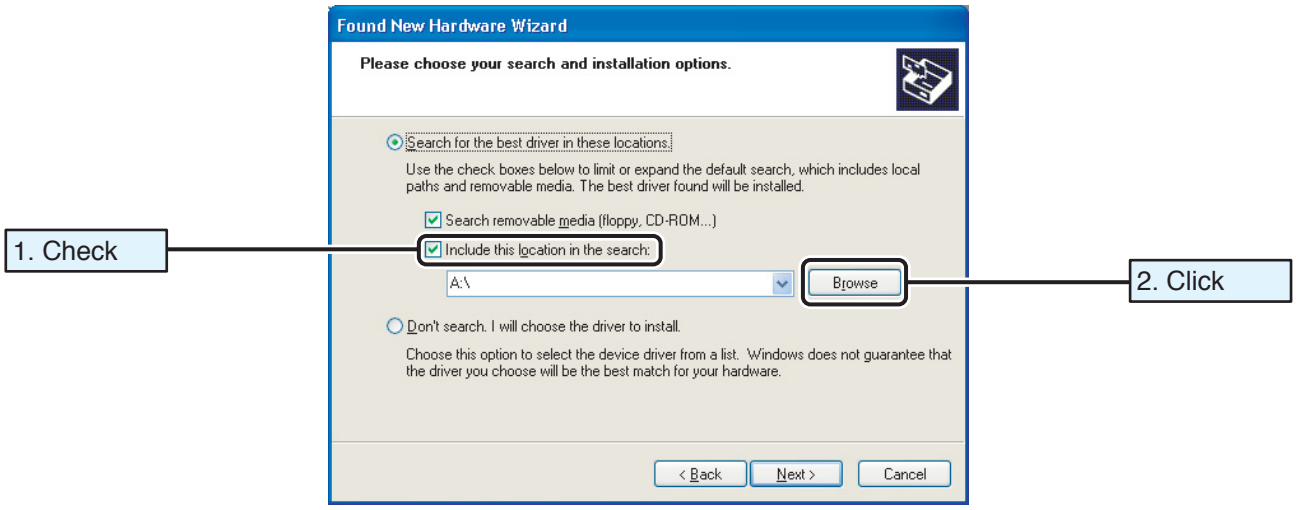


⑥ When the installation of the first driver is complete, the window shown below appears. Then, click the Finish button.

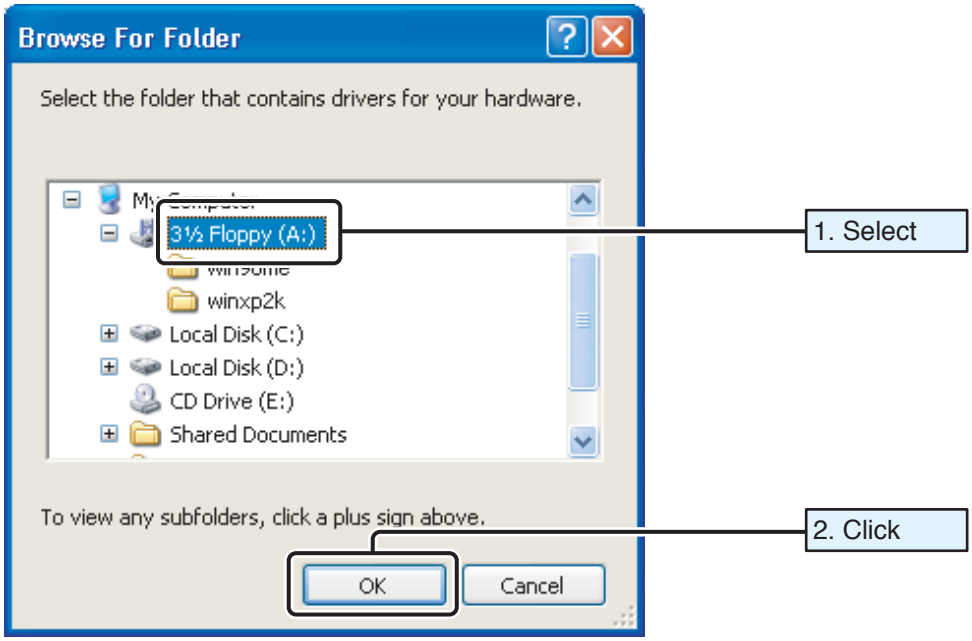
⑦ The installation of the second driver automatically starts.
Select **[Install from a list or specific location (Advanced)]** and click the Next > button.



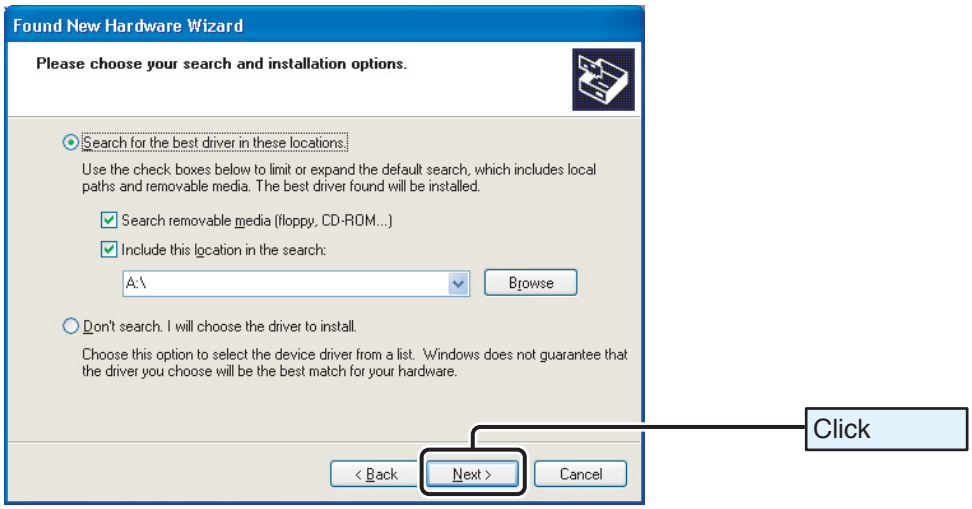
⑧ Check **[Include this location in the search:]** and click the Browse button.



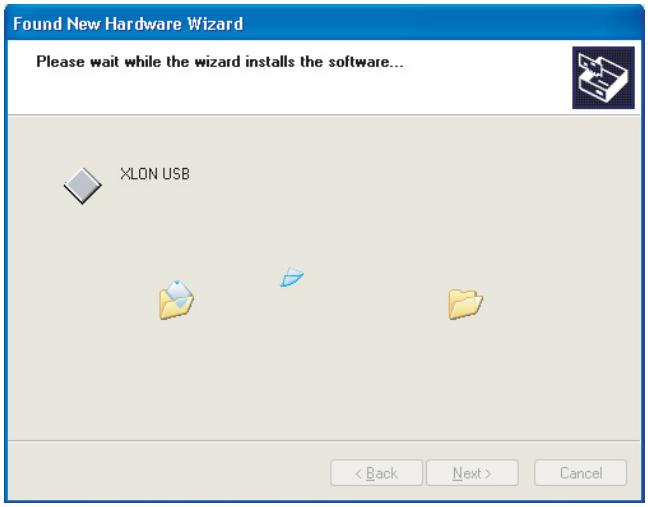
⑨ Select **[3 1/2 Floppy (A:)]** and click the OK button.



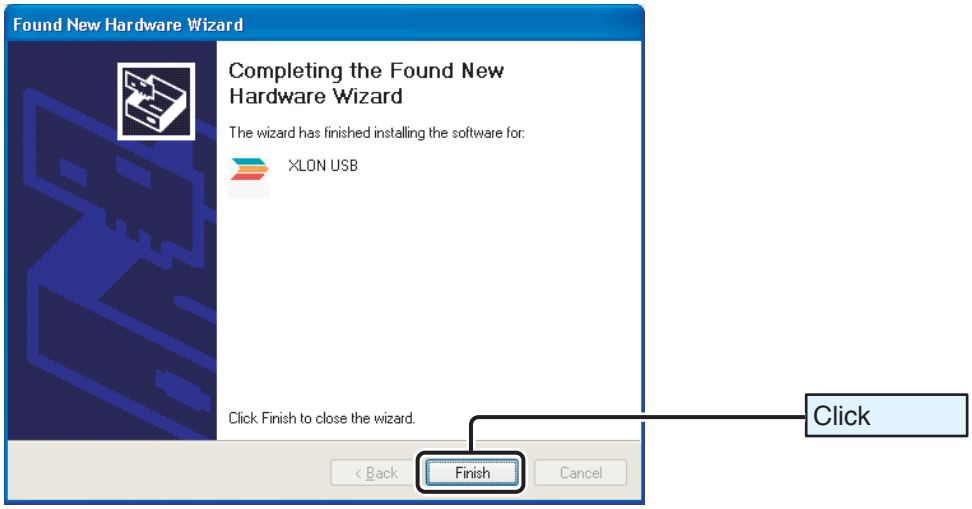
⑩ Click the Next > button. The driver is found and the installation starts.



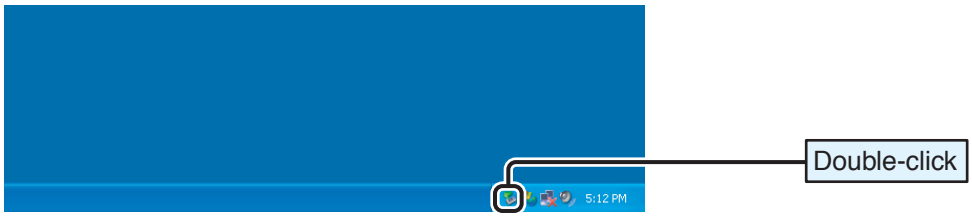
Window display while the driver is being installed.



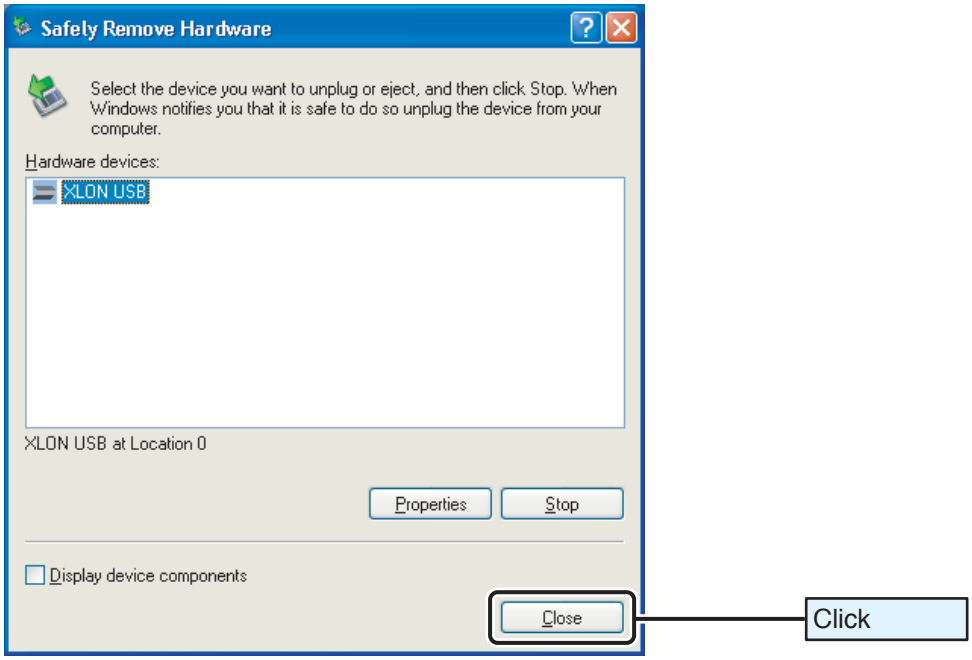
⑪ When the installation of the second driver is complete, the window shown below appears. Then, click the Finish button.



⑫ Double-click the icon on the Windows desktop.



⑬ **[XLON USB]** appears on the window if the device drivers have been successfully installed. Click the Close button.



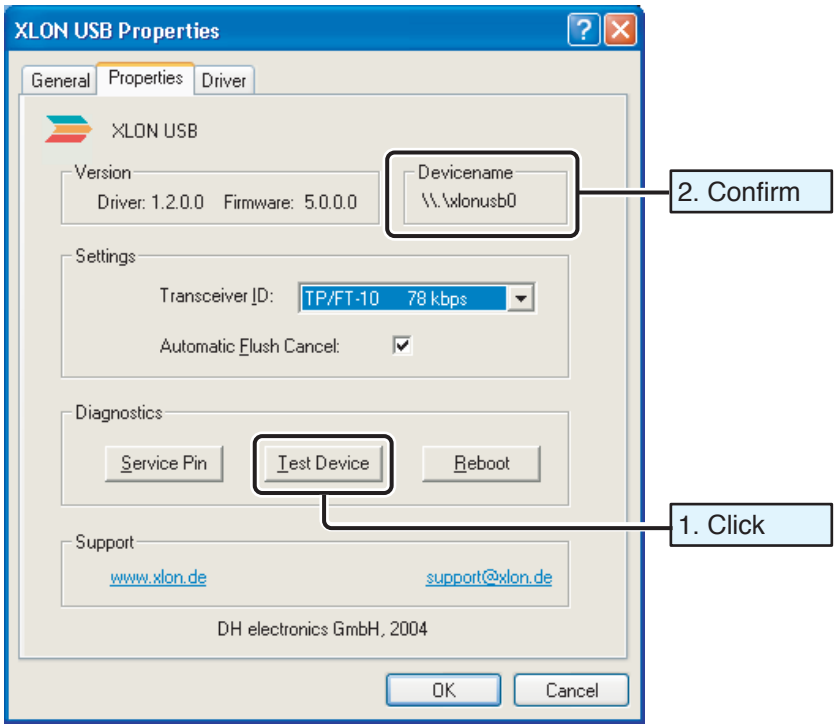
Notes

1. XLON USB Adaptor can be tested whether it is working properly. After the above procedure ⑫, click the [Properties] button in the procedure ⑬. And, click the [Test Device] button on the window of **[XLON USB Properties]** shown below. Then, yellow LED on the adaptor flashes for a moment.
   * **[XLON USB Properties]** can also be referred from the Device Manager.
   * Do not execute **[Test Device]**, **[Service Pin]** and **[Reboot]** of the **[Diagnostics]** column during the BACnet Gateway is in operation.

2. Relationship between XLON USB Adaptor and VRF System Address on the BACnet Gateway can be checked on the window of **[XLON USB Properties]**.

   A recognition number, which is a VRF System Address, is indicated in the **[Devicename]** column on the window of **[XLON USB Properties]**. (Refer to **2. SYSTEM OUTLINE** on the page 5.)

   Ex.) \\.\xlonusb0 → VRF System Address connected to this adaptor is "0".

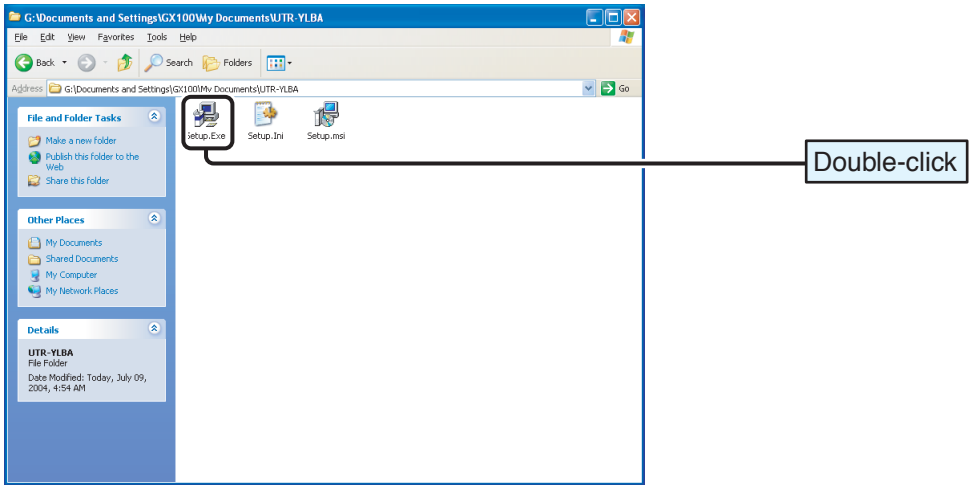


4-5. BACnet Gateway Application Installation

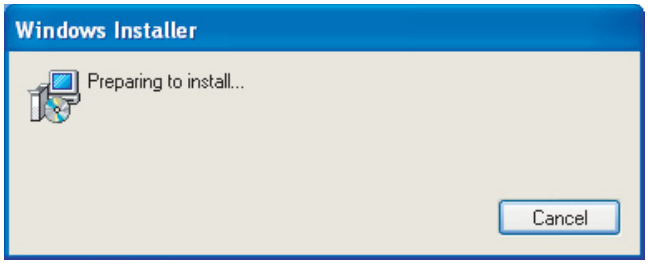
■ BACnet Gateway Application Installation

① Set the Application Disc in a CD-ROM Drive.

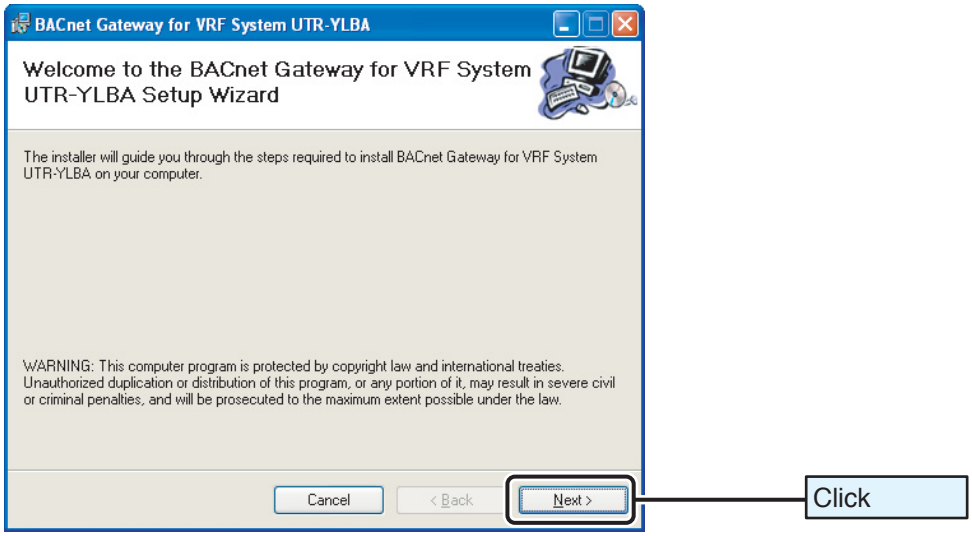
② Double-click [**Setup.exe**] on the root directory of the Application CD-ROM.



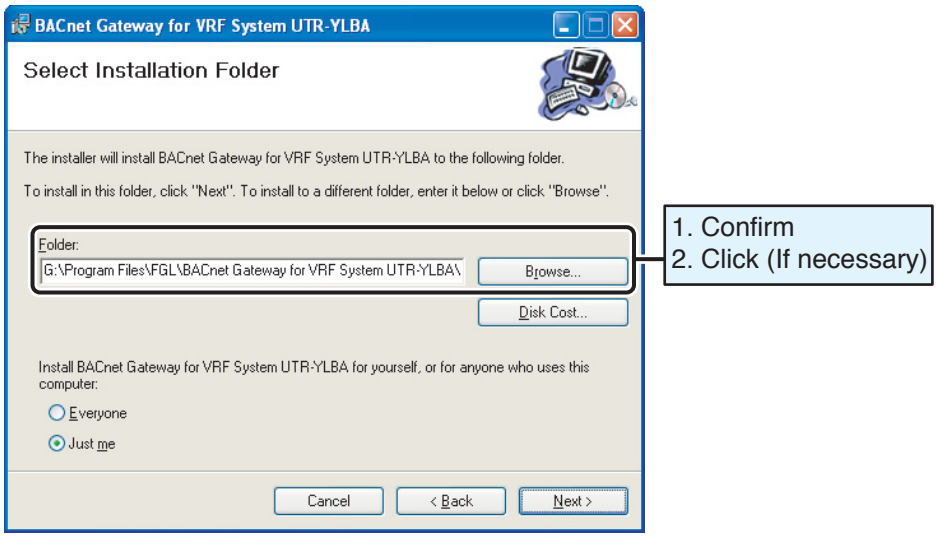
③ The window shown below appears and the installation starts.



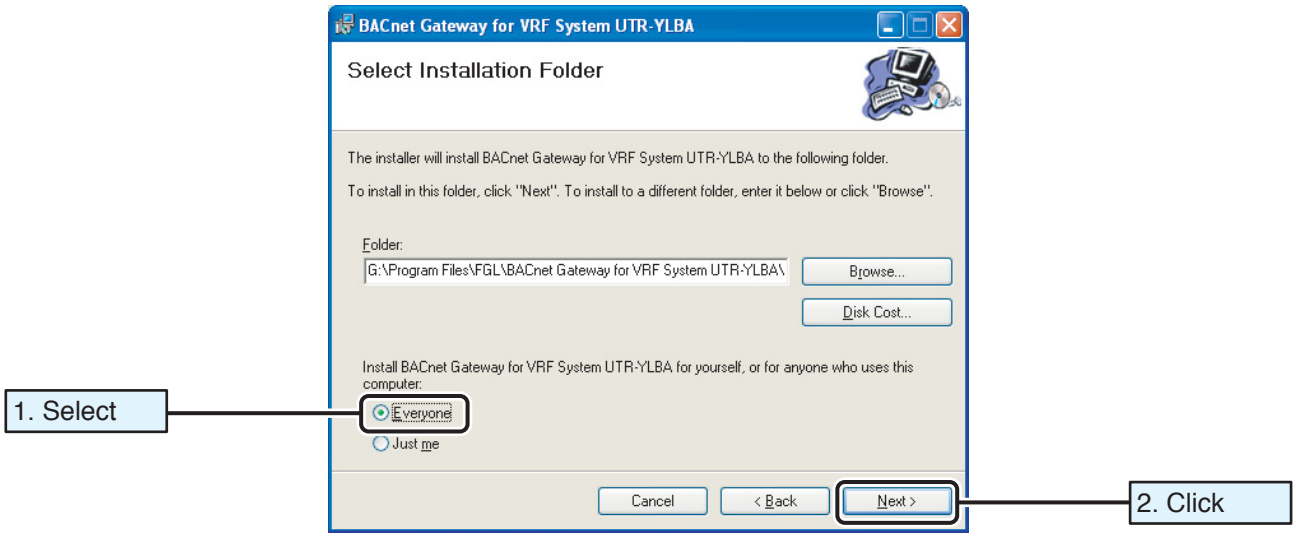
④ Click the Next > button on the window shown below.



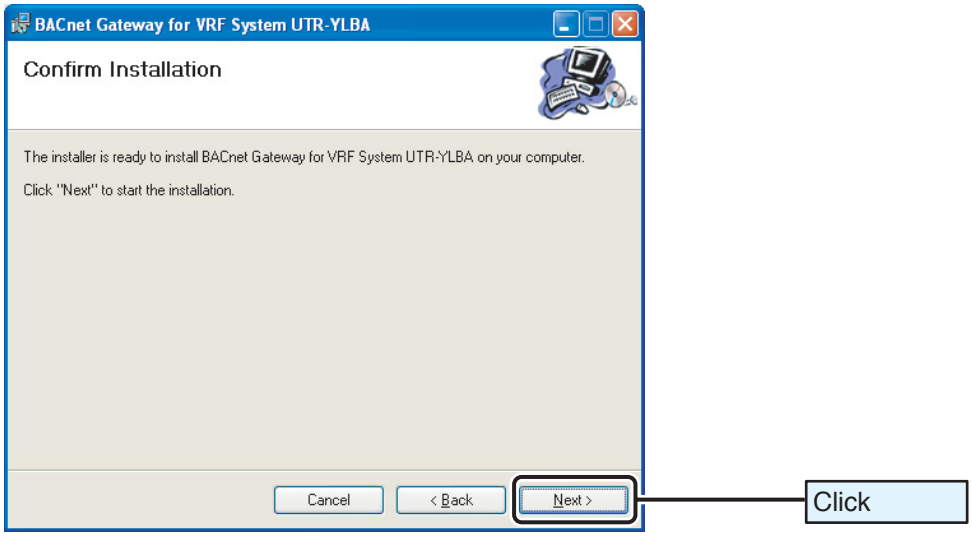
⑤ Confirm the folder to be installed. When you wish to change the folder, click the Browse button and specify it.



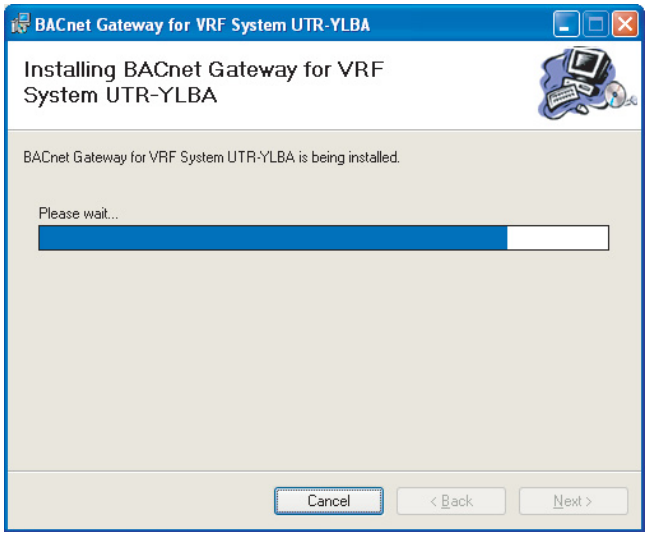
⑥ Select **[Everyone]** and click the Next > button.



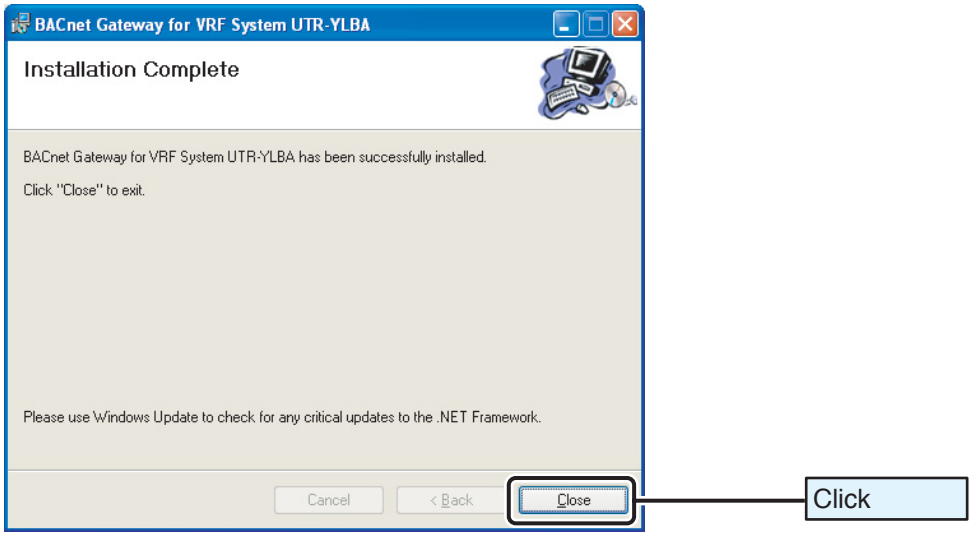
⑦ Click the Next > button on the window shown below.



⑧ When the installation starts, the window shown below appears.



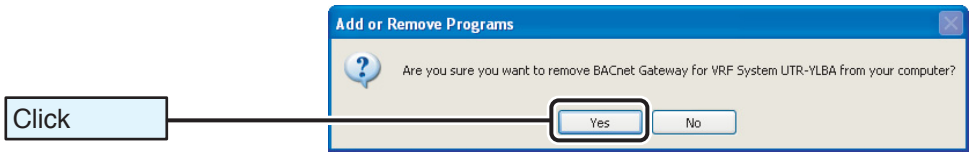
⑨ When the installation is complete, the window shown below appears. Click the Close button.



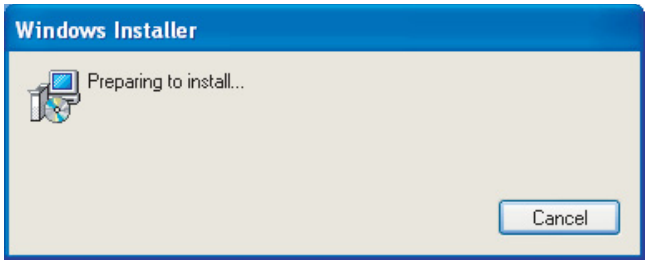
■ BACnet Gateway Application Uninstallation

① Click the icons in the following order.
[Control Panel] → [Add or Remove Programs] → [BACnet Gateway for VRF System UTR-YLBA] → [Remove Remove]

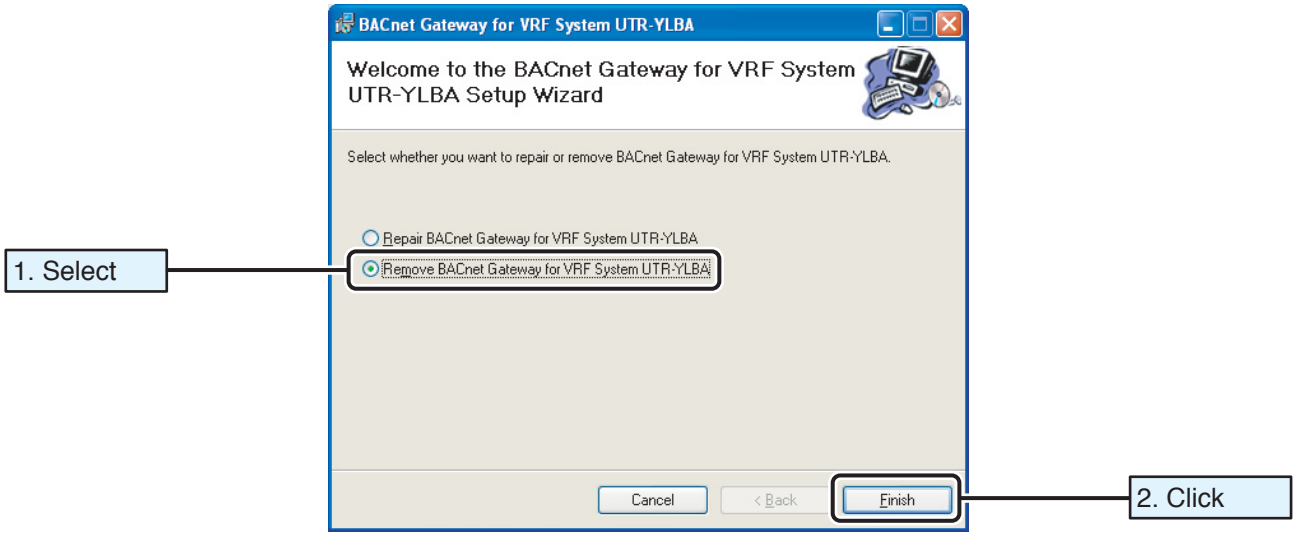
② Click the Yes button.



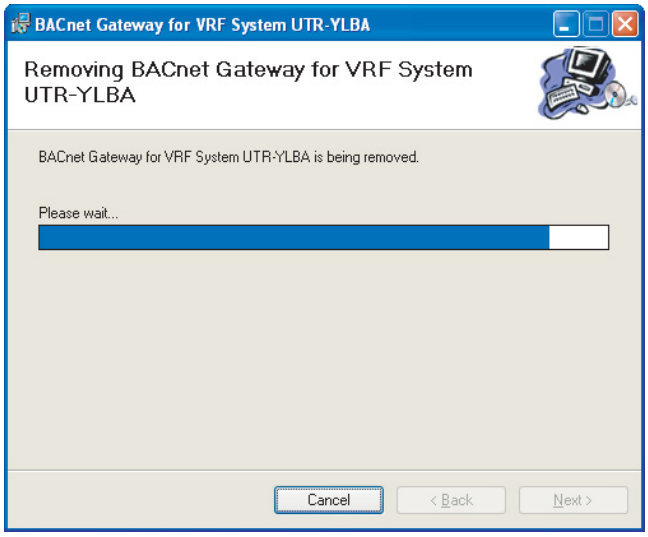
③ The window shown below appears.



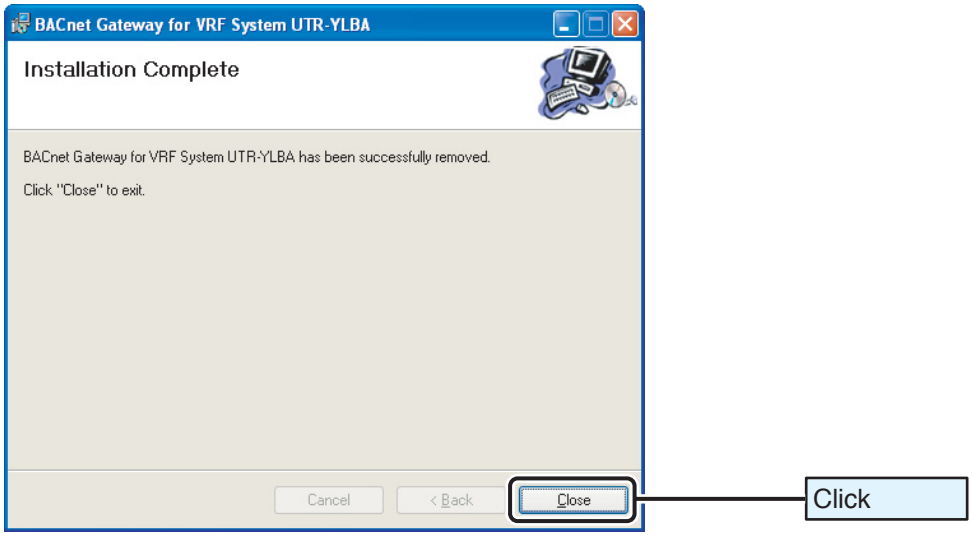
④ When the window shown below appears, select **[Remove BACnet Gateway for VRF System UTR-YLBA]** and click the Finish button.



⑤ The uninstallation starts and the window shown below appears.



⑥ When the uninstallation is complete, the window shown below appears. Click the Close button.



* Even though the uninstallation is successfully completed, some setting files may remain. Delete the corresponding files manually if necessary.

5. INITIAL SETTING

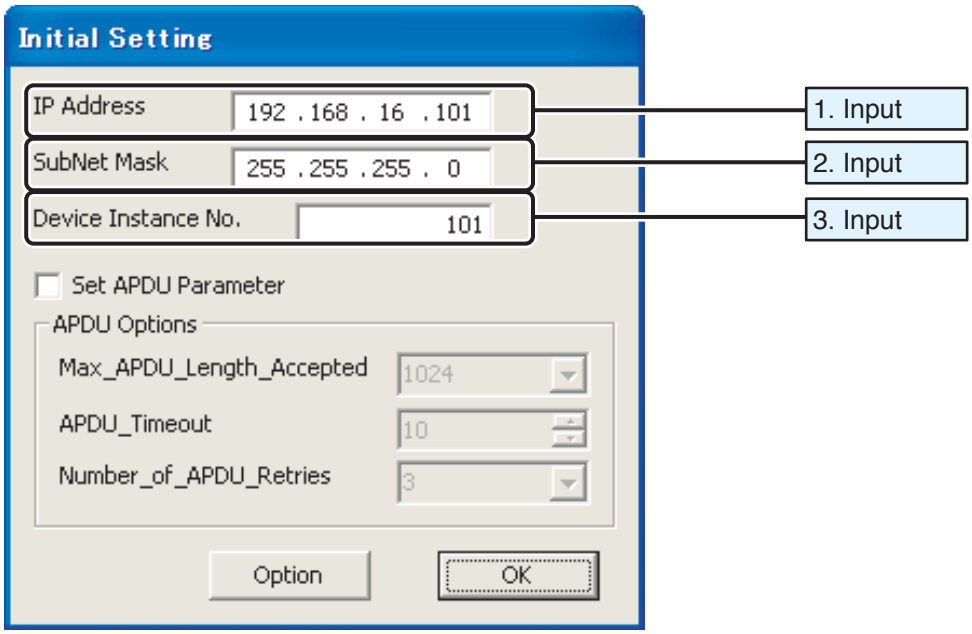
Set the Initial Setting under the condition that the USB Adaptor is connected. (Refer to page 15.) And, make sure that power supply for VRF System (all Indoor and Outdoor units) are applied.

When the application (VRF Gateway.exe) starts for the first time, the Initial Setting window shown below appears.

From the second time onwards, set up the initial setting from the command of **[Tool]** → **[Reset]**. (Refer to **6-2. Main Screen**, ■ **Explanation for items in the menu bar** on page 33.)

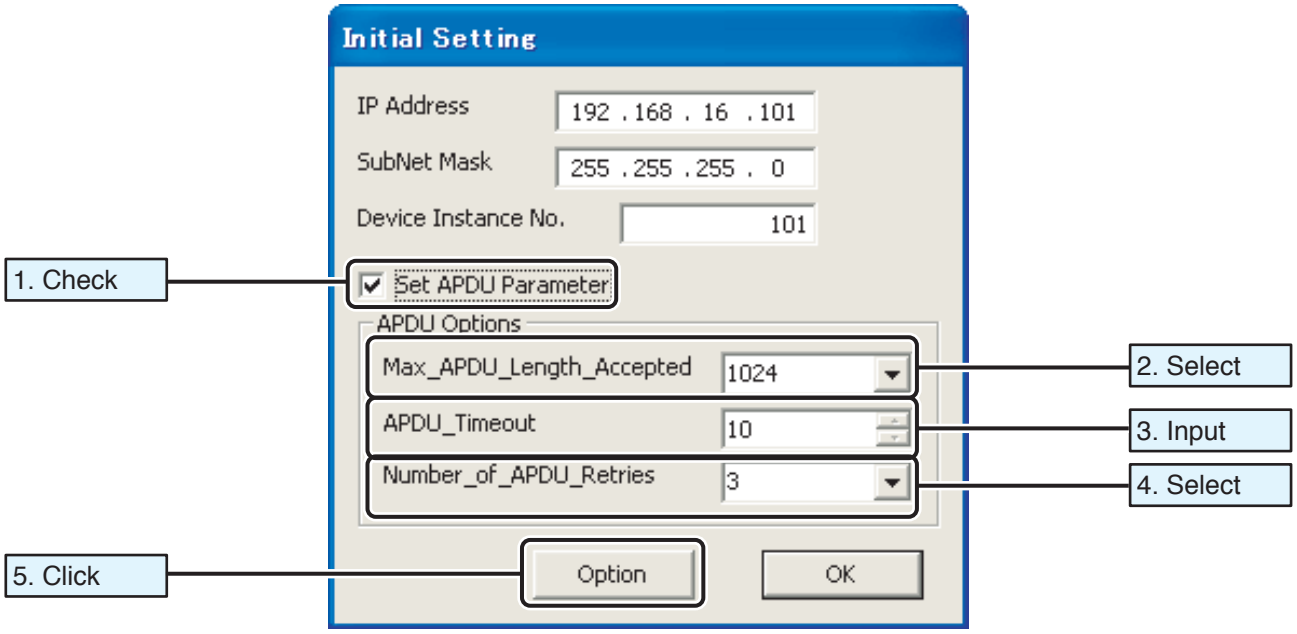
① Input each initial setting item.

1. Input “IP Address” in the column of **[IP Address]**.
2. Input “Subnet Mask of application” in the column of **[Subnet Mask]**.
3. Input “Device Instance number of BACnet Gateway” in the column of **[Device Instance]**.



② Set APDU Parameter.

1. Check in the column of **[Set APDU Parameter]**.
2. Select an arbitrary number of the max. APDU length (byte) from the pull-down menu of **[Max_APDU_Length_Accepted]**.
3. Input an arbitrary number of APDU time-out of **[APDU_Timeout]**.
4. Select an arbitrary number of APDU retries from the pull-down menu of **[Number_of_APU_Retries]**.
5. Click the Option button.



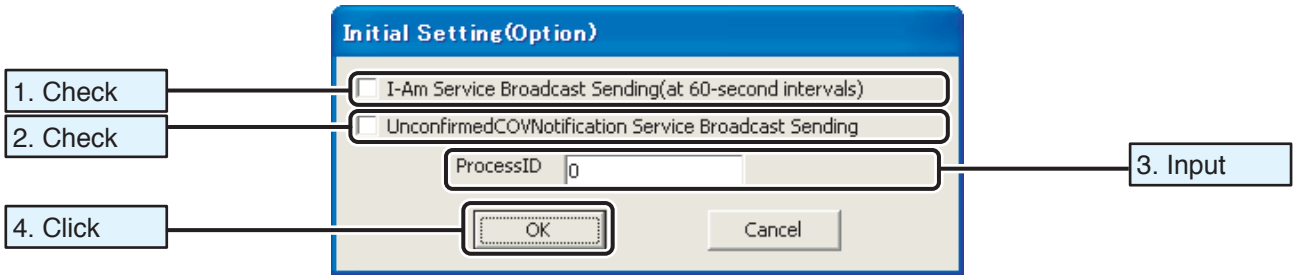
③ Set Initial Setting (Option).

1. Check in the box of **[I-Am Service Broadcast Sending (at 60-second intervals)]** if necessary.

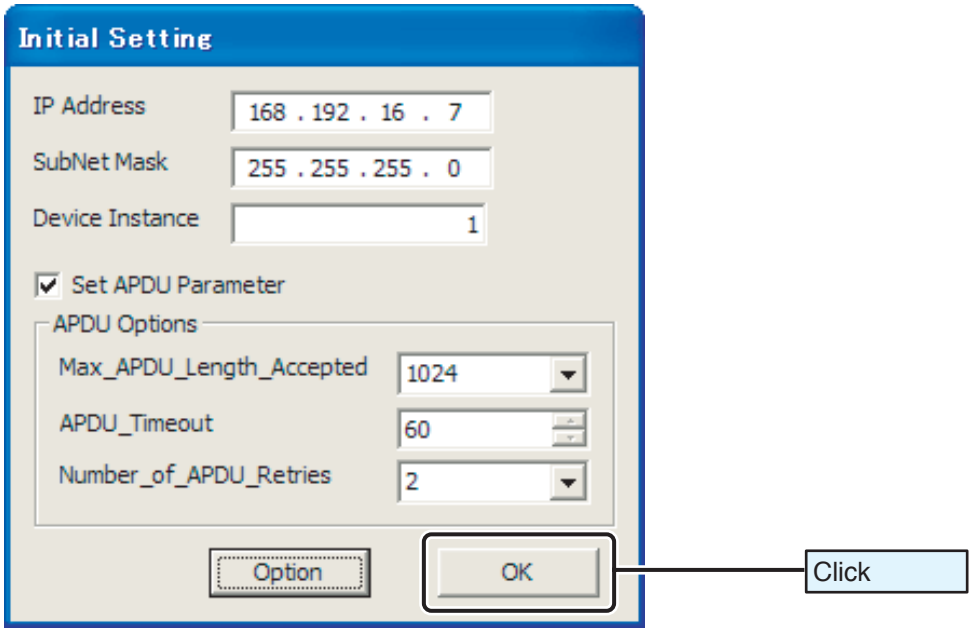
2. Check in the box of **[UnconfirmedCOVNotification Service Broadcast Sending]** if necessary.

3. Input the process ID for COV Notification.

4. Click the OK button.

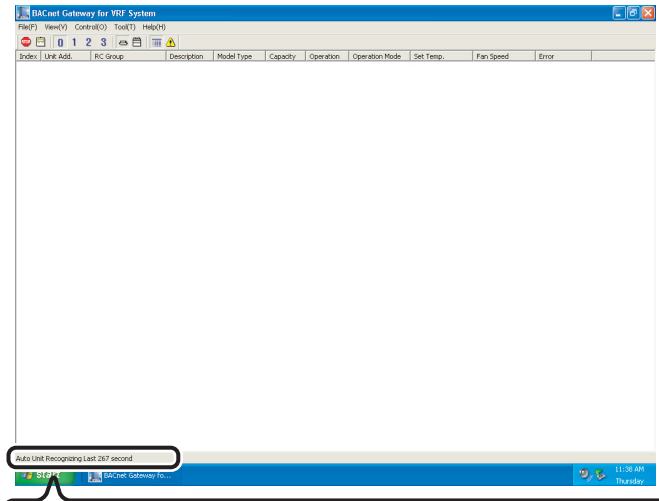


④ Click the OK button. The Initial Setting window is closed and unit recognition process for indoor and outdoor units starts.



⑤ The message “Auto Unit Recognizing Last XXX second” appears in the lower left corner of the window shown below when the Unit Recognition Process is in operation. The process is automatically complete and this message disappears. It will take about 5 minutes or more for this process to be completed.

Window display when Unit Recognition Process in operation



"Auto Unit Recognizing Last XXX second"
When the process is complete, this message disappears.

6. OPERATION

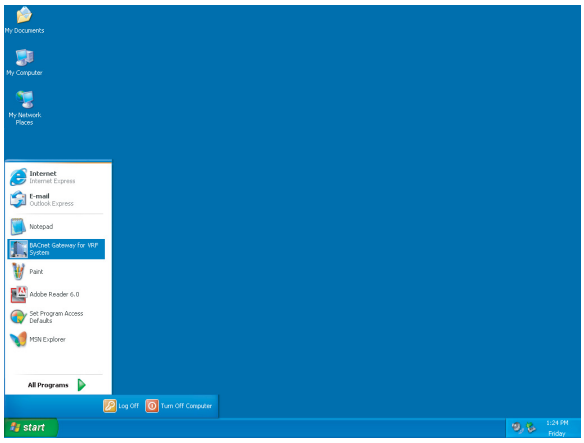
6-1. Startup and Shutdown (Close) of the BACnet Gateway

■ Startup of Application

Make sure that USB Adaptor Connections (Refer to page 15.) are completed and the Ethernet cable for the BACnet Gateway is connected to LAN port of the PC before starting up the application.

(a) Select **[BACnet Gateway for VRF System]** from the Windows START menu.
Or
(b) Double-click the icon: **[BACnet Gateway for VRF System]** on Desktop.

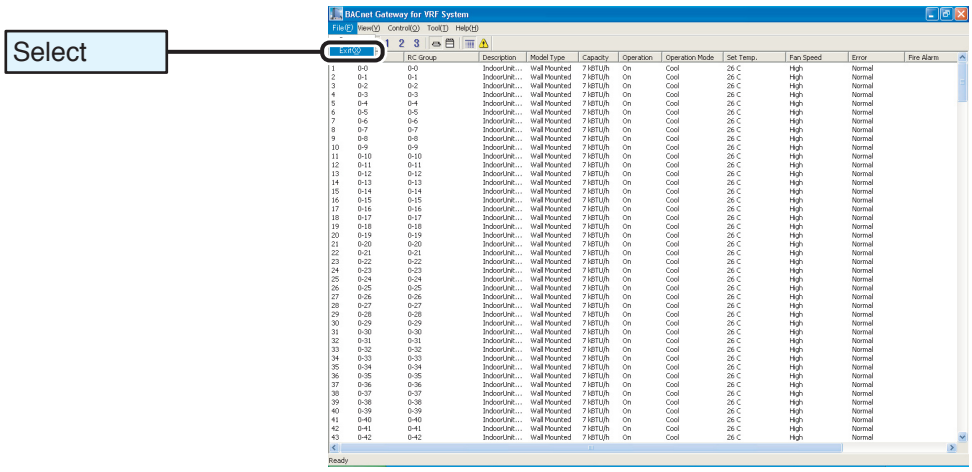
(a) From START menu



(b) On Desktop

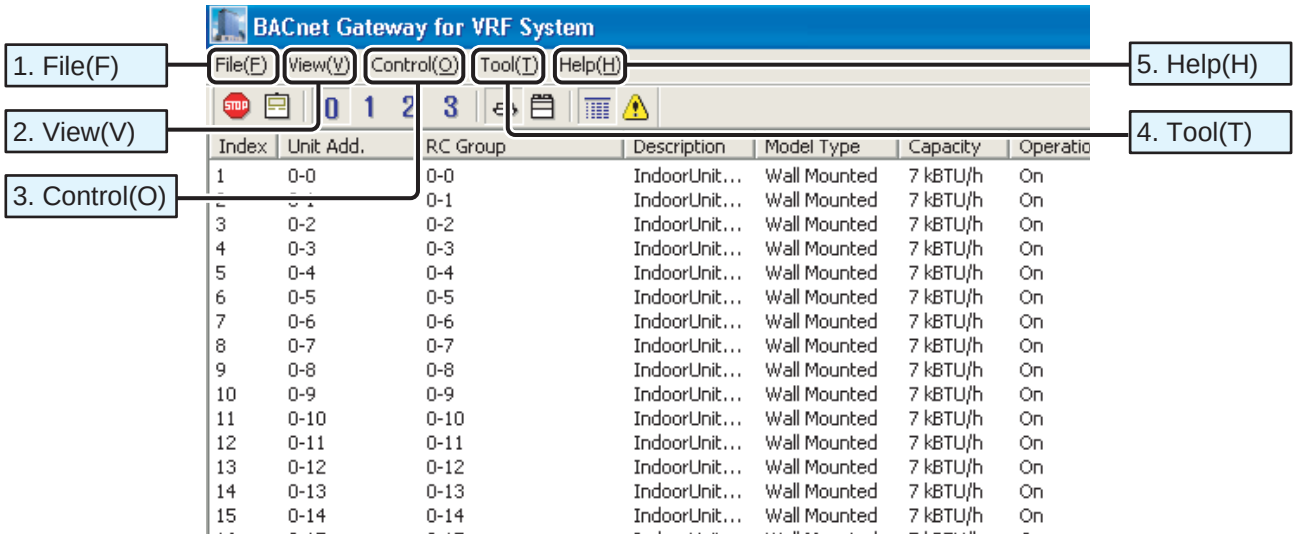
■ Shutdown (Close) of Application

Select the menu items in order of **[File(F)]** → **[Exit(X)]** from the menu bar.



6-2. Main Screen

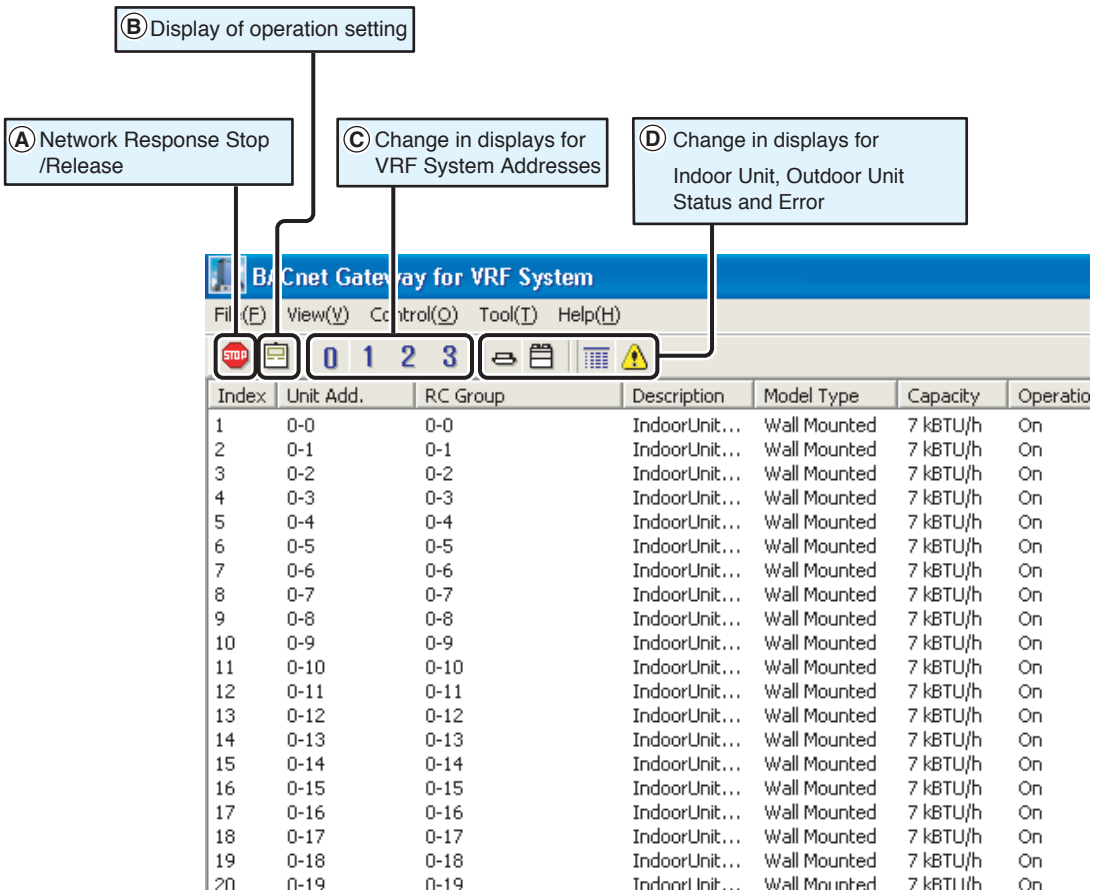
■ Explanation for items in the menu bar



(Reference)

Command name		Contents		Tool bar
1. File(F)	Save	Unit File	Unit address file is saved.	-
	Exit	-	Application is closed.	
2. View(V)	VRF System	0	Display is changed to a list for the System Address: 0.	Ⓒ Ⓓ
		1	Display is changed to a list for the System Address: 1.	
		2	Display is changed to a list for the System Address: 2.	
		3	Display is changed to a list for the System Address: 3.	
	Unit	Indoor Unit	Display is changed to a list for Indoor Units.	
		Outdoor Unit	Display is changed to a list for Outdoor Units.	
	List	Status	Display is changed to a list for Status.	
		Error	Display is changed to a list for Error.	
3. Control(O)	Gateway Stop	-	Stop Network Response (BACnet side).	Ⓐ
	Out of Service	False	"Out of Service" for all objects of indoor / outdoor units is released.	-
	Setting Indoor Unit	-	Operation screen for Indoor Units is displayed.	Ⓑ
4. Tool(T)	Reset	-	Command for Initial Setting. (Refer to page 28.)	-
	(Fire Alarm Setting)	-	Fire Alarm Setting. * Applicable only at Option Setting	
	Description Setting	-	Setting Description property of objects for Indoor and Outdoor Units.	
	Add Setting Status List	-	Command items that are sent from other BACnet devices to this Gateway for Indoor Units are additionally displayed in a Status List.	
5. Help(H)	Version Info.	-	Version information is displayed.	-

■ Explanation for function of the tool bar buttons



Ⓐ Stop and Release Network Response

When the button is clicked, a response is stopped. When the button is clicked again, the response is released. (Refer to **6-6. Stop of Network Response**.)

Ⓑ Display of Operation Setting Screen

When the button is clicked, an operation screen is displayed.

Ⓒ Change in displays of lists for VRF System Addresses: 0-3

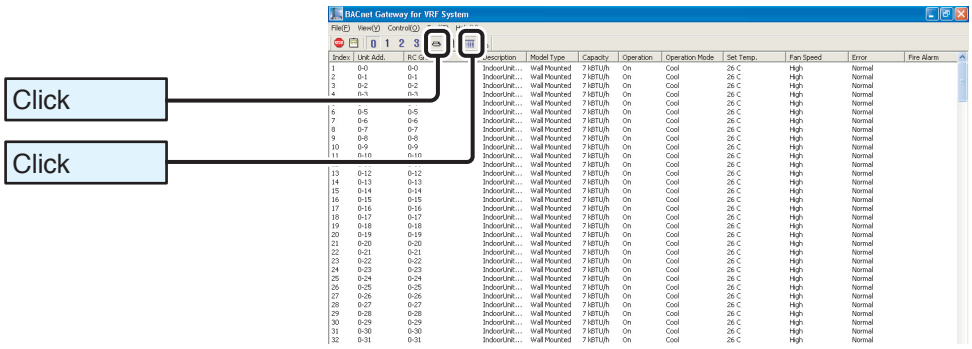
When a button is clicked, a list of addresses for the clicked number is displayed.

Ⓓ Indoor and Outdoor units, and their conditions (Status/Error) are displayed. In default, Status in Indoor Units is displayed.

■ Explanation for display items

Ⓐ Status of Indoor Units (Default)

Click the (Indoor Unit) and (Status) buttons to display Status of Indoor Units.



Items displayed in the Status List of Indoor Units

Items	Remarks
Index	1 - 400 (In numerical order of unit address)
Unit Add.	0 - 99, 0 - 63
RC Group	0 - 99, 0 - 63 (When remote control group is set up.)
Description	Explanation for Indoor units (Items in Description Properties)
Model Type	Type name of models
Capacity	Capacity of Indoor units
Operation	Status of Operation
Operation Mode	Status of Operation mode * When “Operation” is in OFF, this item is not reflected.
Status of Set Temperature	Status of Temperature setting
Fan Speed	Status of Fan speed
Error	Error status: “Normal” / “Abnormal”
(Fire Alarm) * Applicable at Option Setting.	Each Instance No. for Device, Multi-state Input and Binary Value * Displayed only when setup for Instance No. is completed.
(Emergency Status) * Applicable at Option Setting.	Status of “Normal”, “Fire Emergency” and “Waiting for Release”

The above Status List and Status List of setting (Blue letters) from BACnet are alternately displayed by the **[Add Setting Status List]** command.

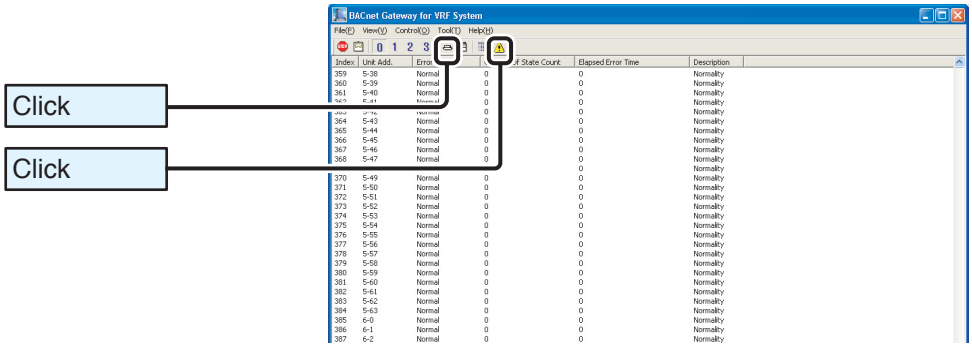
Items displayed in the Status List of Indoor Units setting, which are added by the **[Add Setting Status List]** command.

Items	Remarks
Operation	Status of Operation setting
Operation Mode	Status of Operation mode setting
Set Temp.	Status of Temperature setting
Fan Speed	Status of Fan speed setting

Note: For the items without setup from BACnet, hyphen: (-) is displayed.

Ⓑ Error of Indoor Units

Click the (Indoor Unit) and (Error) buttons to display Error of Indoor Units.

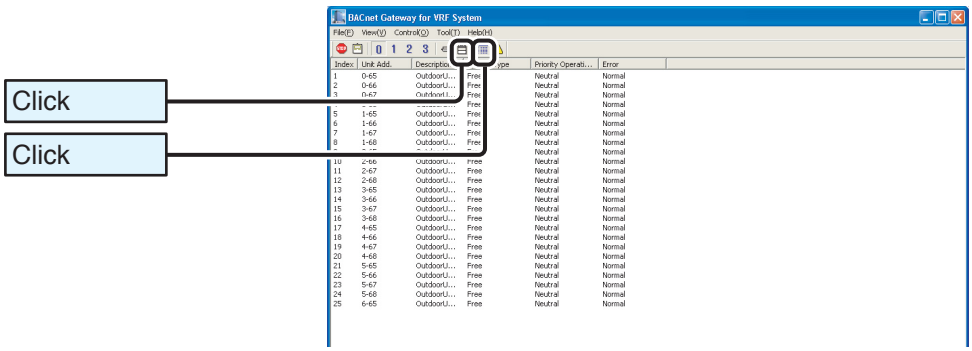


Items displayed in the Error List of Indoor Units

Items	Remarks
Index	1 - 400 (In numerical order of unit address)
Unit Add.	0 - 99, 0 - 63
Error	Status of Error “Normal” / “Abnormal”
Change Of State Count	The number of error occurrence * Set of error occurrence and restoration is counted as once.
Elapsed Error Time	Elapsed time from error occurrence * At intervals of 0.5 hours (30 minutes)
Description	Error items

Ⓒ Status of Outdoor Units

Click the (Outdoor Unit) and (Status) buttons to display Status of Outdoor Units.

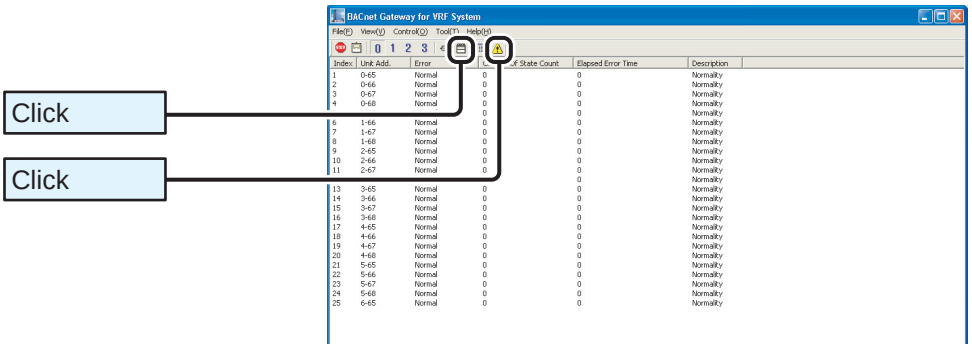


Items displayed in the Status List of Outdoor Units

Items	Remarks
Index	1 - 100 (In numerical order of unit address)
Unit Add.	0 - 99, 65 - 68 * The unit “65” is master unit and the units from “66” to “68” are slave unit.
Description	Explanation of Outdoor Units (Description in “Description Properties”)
System Type	System Type * For slave units, it is the same as master units’.
Priority Operation Mode	Status of Priority Operation * For slave units, it is the same as master units’.
Error	Error status: “Normal” / “Abnormal”

Ⓓ Error of Outdoor Units

Click the (Outdoor Unit) and (Error) buttons to display Error of Outdoor Units.



Items displayed in the Error List of Outdoor Units

Items	Remarks
Index	1 - 100 (In numerical order of unit address)
Unit Add.	0 - 99, 65 - 68 * The unit “65” is master unit and the units from “66” to “68” are slave units.
Error	Status of Error “Normal” / “Abnormal”
Change Of State Count	Number of error occurrence * Set of error occurrence and restoration is counted as once.
Elapsed Error Time	Elapsed time from error occurrence * At intervals of 0.5 hours (30 minutes)
Description	Error Items

Notes

1. If communication error between this BACnet Gateway and units (Indoor and/or Outdoor), items on respective lists of corresponding units turn to red color.
2. The item in the **[Index]** column is displayed with red letters when other peripheral devices such as Central PC and PC-Controller are executing the initial setting in VRF System. The display returns to the original display in a few minutes or when the setting is completed. (This means that the **[Out of Service]** property of all objects for the respective indoor and outdoor units is in “True”. It can be released by the command of **[Control]** → **[Out of Service]** → **[False]**.)

6-3. Setting Indoor Unit

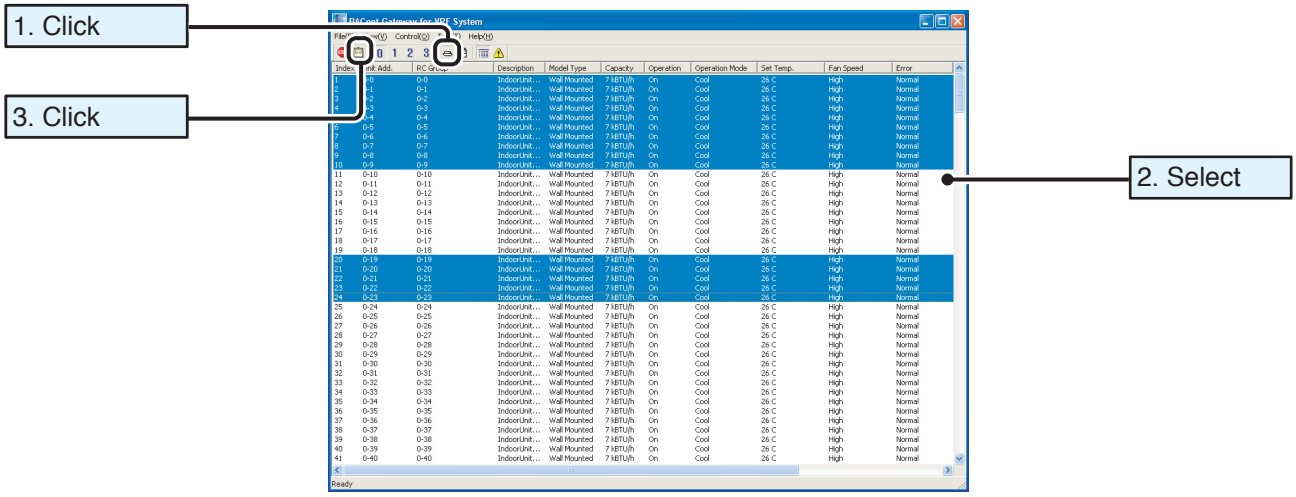
■ Explanation for Simple Setting of Indoor Units

① Display of Setting Screen (Indoor Units)

1. Click the button.

2. Click lines (units) that you wish to display.
   When you wish to display two or more units, click corresponding lines together with the **[Ctrl]** key pressed. For group selection, click lines together with the **[Shift]** key pressed.

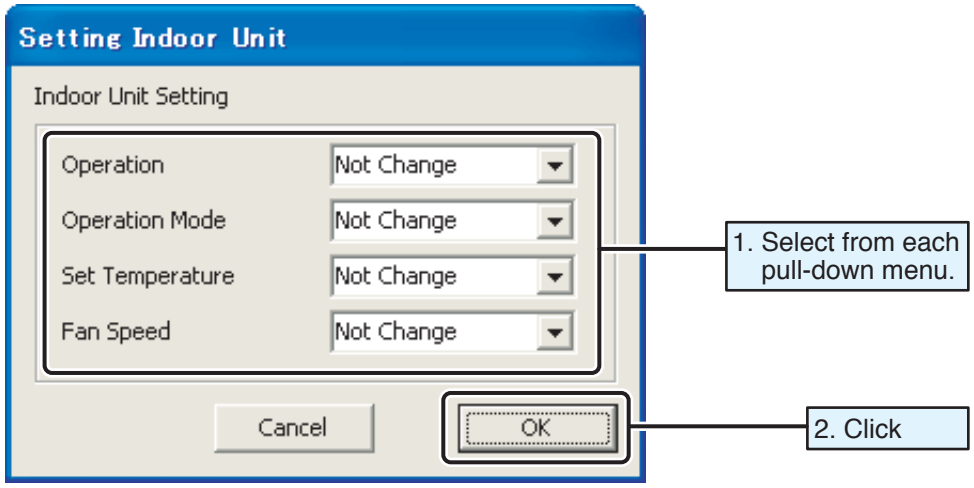
3. Click the button.



② Indoor Unit Setting.

1. Select arbitrary items of **[Operation]**, **[Operation Mode]**, **[Set Temperature]** and **[Fan Speed]** from each pull-down menu.

2. Click the OK button.



Combo Box	List
Operation	Not Change
	On
	Off
Operation Mode	Not Change
	Auto
	Cool
	Dry
	Fan
	Heat
Set Temperature	Not Change
	16 (°C)
	...
	30 (°C)
Fan Speed	Not Change
	Auto
	High
	Med
	Low

6-4. Fire Alarm Setting (Applicable only at Option Setting)

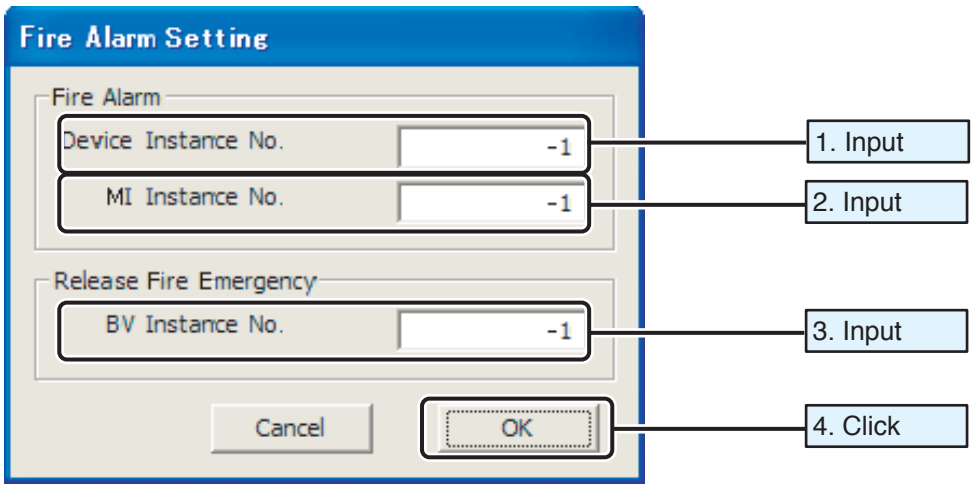
This setting is applicable only for system that performs “Fire Emergency Stop Control”. (Usually not used.)

1. Input Device Instance number of BACnet Device. (Source Devices of Fire Alarm, such as Anti-disasters Sub System)

2. Input Multi-State Input Instance number of Fire Alarm (UnconfirmedEventNotification Service).

3. Input Binary Value (in this gateway) Instance number. (For Fire Emergency Release.)

4. Click the OK button.



Note

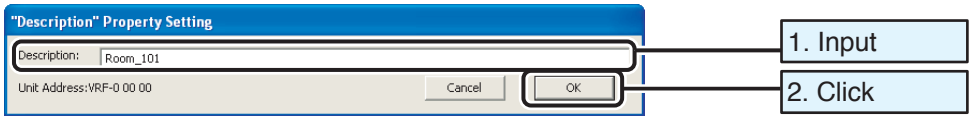
To cancel the Fire Alarm Setting, input “-1” in all the boxes from 1. to 3. and press the OK button.

6-5. Description Setting

■ Explanation for Description Property Setting for Indoor / Outdoor Units

1. Input any alphanumeric characters of up to 64 characters.
   Examples: Room 101, Meeting Room 301
   (Default: Indoor Unit_"Address of Y_YY_YY [Address of Indoor Unit]")

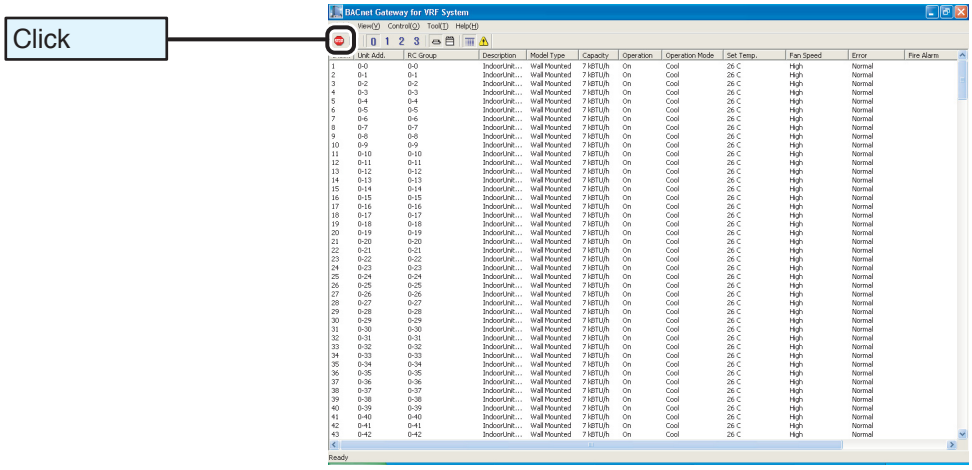
2. Click the OK button.



6-6. Stop of Network Response

■ Explanation for Stop of Network Response (BACnet side)

① Click the button to stop Network Response.



② In order to release “Stop of Network Response”, click the button again on the main screen and click the OK button on the window of **[Release the stop of BACnet network response]** shown below.

7. TROUBLESHOOTING

■ There are problems on application startup or application in operation.

< Cases >

- Program abnormally ends displaying message at application starting or when application is in operation.
- There are problems on application operation, or the system is unstable.

< Shooting >

- This application requires “Software Protection Key (WIBU-KEY)”. When the Software Protection Key has not been inserted into a USB port (When the Software Protection Key is not recognized), a message is displayed and program automatically ends after a while. Software Protection Key Driver Installation is required for recognition of Software Protection Key. (Refer to **4-2. Software Protection Key [WIBU-KEY] Installation** on page 10.)
- This application does not work on the PC that “.NET Framework” has not been installed. Install “.NET Framework” in your PC. (Refer to **4-1. .NET Framework 1.1 Installation** on page 7.)
- When the operation of this application is unstable, restart the application or OS.

■ IP address cannot be set up or changed.

< Cases >

- IP address cannot be set up at gateway initial setting.

< Shooting >

- IP address setting for TCP/IP protocol is required.
  (Refer to Microsoft Windows Network Setting.)

■ There are problems on communications with indoor units and/or outdoor units.

< Cases >

- Indoor unit/s and/or outdoor unit/s are not recognized. (At gateway initial setting)
- Status of indoor unit/s and/or outdoor unit/s is not obtained. Or settings of indoor units are not possible.
- Communications error for indoor units and/or outdoor units occurs.

< Shooting >

- Check the connection of VRF Network communications equipment and the connection of XLON USB Adaptors.
- Check that XLON USB is connected to PC or is working properly.
- Check VRF System Address and that their address numbers are correct.

■ XLON USB Adaptor is not working properly.

< Cases >

•There are problems on XLON USB installation.

• XLON USB Adaptor is not recognized.

< Shooting >

• Check that XLON USB Device is working properly with Microsoft Windows Device Manager. If XLON USB installation has not been completed, install the Driver again after uninstalling XLON USB. (Refer to **4-4. XLON USB Device Installation** on page 16.)

• Confirm the proper use of USB.

Power supply capacity of USB port depends on the PC to be used. Make sure that power supply to XLON USB Adaptor is sufficient. If USB hubs are used, check the connecting layers of the hubs as well. The maximum number of connecting layers by cascade (tree) connections is “6” according to the USB specifications.

* In case that USB port equipped in PC includes a USB hub, it is counted as the first layer. (Although the cascade connections are permitted up to 6 layers, the maximum number of USB connecting equipment are 127 units regardless of the permitted connections number.) The maximum length of cable between USB equipment is 5 meters.

■ VRF System Address is unknown. (When two or more VRF Systems are connected.)

< Cases >

• You wish to check VRF System Address.

• You wish to know how to set up XLON USB Adaptor and VRF System Address. You wish to change VRF System Address.

< Shooting >

• Check “XLON USB Properties” of Microsoft Windows Device Manager. Number shown in the “Devicename” column denotes VRF System Address for the adaptor. (Refer to **4-4. XLON USB Device Driver Installation** on page 16.)

• VRF System Address is automatically assigned in the order (starting from “0”) XLON USB Adaptors is connected to the PC in operation. These address numbers are never changed unless a XLON USB adaptor is disconnected. (These address numbers are not changed even if the PC restarts as long as XLON USB Adaptor connection is not changed.)

Remove all the XLON USB Adaptors for reassignment. Addresses are newly assigned in order of the connection when all USB adaptors are connected again. When these adaptors were connected to USB ports that XLON USB Driver has not been installed, XLON USB Driver Installation is required. For the following cases, resetting the numbers would be recommended.

1. Case that USB adaptor connection configuration was changed.
2. Case that some adaptors were disconnected.
3. Case that USB hub was changed.

■ There are problems on communications with BACnet Network.

< Cases >

- Communications with this gateway cannot be possible. No response from gateway.
- Error report is sent from this gateway.
- A large amount of data is sent from this gateway.

< Shooting >

- Check the connection to BACnet communication (transmission) lines. Check IP address setting and communication lines whether LAN port is working properly.
- Check that this gateway is not “Network Response Disable” status. When gateway is in “Network Response Disable” status, it does not communicate at BACnet side. (Except Device Communication Service)
- Check the maximum length of ADPU. Packets exceeding this length cannot be sent. (Refer to **5. INITIAL SETTING** on page 28.)
- When intrinsic notification or COV notification, especially “UnconfirmedCOVNotification Service” has been set up, a large amount of data may be sent. Change the setting if there are any problems. (Refer to **5. INITIAL SETTING** on page 28.)

■ There are problems on operation setting for indoor units.

< Cases >

- Temperature setting for indoor units cannot be possible.
- Operation mode setting for indoor units cannot be possible.

< Shooting >

- Pay attention when you set up a temperature range. Setting range for cooling is 18-30 °C and for heating, 16-30 °C (For S-up series, 10-30 °C.)
- When operation mode is in “OFF”, setting is not reflected. (When operation mode is in “ON”, setting is reflected.)
- For single split type models, whenever **[Operation Mode]** is set as “Fan”, setting temperature is always 0 °C.

■ Status of Outdoor Units (Slave Units) cannot be observed.

< Cases >

- The **[System Type]** and/or **[Priority Operation Mode]** object/s is/are not displayed on the screen of Status List of Outdoor Units.

< Shooting >

- This is not abnormal operation. For Outdoor Units (Slave Units) (Addresses: 66-68), items in **[System Type]** and **[Priority Operation Mode]** are the same as the respective master units

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