### Warning

Ask your dealer or other qualified personnel to carry out installation work.

Do not attempt to install the unit yourself. Improper installation may result in an electric shock or fire.

Do not relocate or reinstall the unit yourself.
Improper installation work may result in an electric shock or fire.
Ask your local dealer to carry out relocation and reinstallation of the unit.

Install the unit in accordance with the instructions in this installation manual.
Improper installation may result in an electric shock or fire.

Be sure to use only the specified accessories and parts for installation work.
Failure to use the specified parts may result in the unit falling, an electric shock, or fire.

Always perform installation work with the power supply shut off.
Touching energized electric parts causes an electric shock.

Do not disassemble, modify or repair the unit.
An electric shock or fire may be caused.

Make sure that all wires are secured, that the specified wires are used, and that there is no strain on the terminal connections or wires.
Improper connection or securing of wires may result in abnormal heat buildup or fire.

The choice of materials and installations must comply with the applicable national and international standards.

Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.
Insufficient power supply capacity or improper electrical construction may lead to an electric shock or fire.

When wiring the power supply and connecting the transmission wires, position the wires so that the electric parts box lid can be securely fastened.
Improper positioning of the electric parts box lid may result in an abnormal heat buildup or electric shock, or fire.

### Caution

Be very careful about product transportation.

Safety dispose of the packing materials.

To avoid sharp edges and points, plastic wrapping bags are often used.

Never throw away plastic packaging bags so that children will not play with them.

In a domestic environment, this product may cause radio interference.

In such cases, the user may be required to take adequate measures.

Disposal requirements: Dismantling of the unit, treatment of the refrigerant, of oil and other parts must be done in accordance with relevant local and national legislation.

Fill the wiring hole with putty.
Entry of water or insects may result in electric leakage or malfunction.

Do not operate with wet hands.
An electric shock and malfunction may be caused.

Do not wash this unit with water.
An electric shock or fire may be caused.

### System Outline

This adaptor is an interface which is required to monitor and control the indoor unit from the Home Automation System manufactured by the other companies. It can stop the indoor unit operation, monitor and control the operation mode, preset temperature, airflow rate and direction via Modbus communication.

It can also carry out emergency supervisory, monitor and reset the filter sign.
Note
- The total wiring length of the HS-485 communication wire must be within 500m.
- Maximum number of units which can be connected is 16 units for the indoor unit and 2 units for the outdoor unit.

2 Accessories

The following items are packed.

<table>
<thead>
<tr>
<th>Name</th>
<th>① U-NET/Modbus Communication adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td></td>
</tr>
</tbody>
</table>

| No. of pcs. | 1 |

<table>
<thead>
<tr>
<th>Name</th>
<th>Accessories bag (Type A)</th>
<th>Accessories bag (Type B)</th>
<th>Installation Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of pcs.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Accessories bags use either Type A or Type B. This is determined by the outdoor unit series.

Contents of Accessories bag

- **Type A**
  - **Application model of outdoor unit**
    
    | Series | Model name |
    |--------|------------|
    | VRVIII | RXYYQ-PVE, RXYYQ-PVAA, RXYYQ-PVAT, RXYYQ-PVAT1 |

<table>
<thead>
<tr>
<th>Name</th>
<th>① Wire of power supply (White/Black)</th>
<th>② Wire of U-NET Communication (Orange/Yellow)</th>
<th>③ Clamp material</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of pcs.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

- **Type B**
  - **Application model of outdoor unit**
    
    | Series | Model name |
    |--------|------------|
    | VVRD1 | RXYYQ-PY1 |

<table>
<thead>
<tr>
<th>Name</th>
<th>① Wire of power supply (White/Black)</th>
<th>② Wire of U-NET Communication (Orange/Yellow)</th>
<th>③ PCB support</th>
<th>④ Clamp material</th>
<th>⑤ Wire clip</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of pcs.</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>
### 3 Parts Name and Function

#### DIP Switch (DS1/DS2)
This is the operation setting switch for DE-NET/Modbus communication adaptor.

#### LED (HIP~HPY: ORANGE)
This lamp displays the status of the communication.

#### Service Monitor LED (HAP: GREEN)
This lamp flashes while the CPU is operating normally.

#### Power Supply Connector (X1A)
Connector to supply DC16V from PCB ASSY in the outdoor unit.

#### DE-NET communication connector (X7A)
Connector to connect the DE-NET communication wire.

#### Terminal block for Modbus communication (X2M)
Terminal block to connect the Modbus communication wire.

#### Terminating Resistance (SS1/SS2/SS3)
Sets the terminating resistance for Modbus Communication wire.

### 4 Mounting Method

- **Types**: (XWY: PVE, XWYG-PVE)
  - Adaptor in the Electric component box of outdoor unit.
  - (Mount size of 100 × 100mm in the lower right)

**Outdoor unit**

**Electric component box**

- **Fixing screw**
- **Fix panel**

Fix the wire of DE-NET Communication and wire of Power Supply on fixing plate with supplied clamp material.

Clamp with other external wiring at specified point on outdoor unit installation manual.

To the Power Automation System
Installation

**Electric Wiring**

- **Type A**
  - Wire of Power Supply (DC16V) (White/Black)
  - Wire of DB-NET Communication (Orange/Yellow)

- **Type B**
  - Wire of Power Supply (DC16V) (White/Black)
  - Wire of DB-NET Communication (Orange/Yellow)

Fix the wire of DB-NET Communication, RS-485 Communication wire to other wirings with clamp material.

Attatched supply Wire clip and fix the wire of DB-NET Communication, RS-485 Communication wire and wire of power supply.

Outdoor unit

To the Home Automation System

Clamp with other external wiring at specified point on outdoor unit installation manual.

Adaptor DTA116AS1

Installation 11

EDMT721419

2

1P351713-1A
(1) Power Supply wiring (Type A/Type B connector)
Connect between the adaptor connector (X1A) and outdoor unit circuit board connector (X2A) with the power supply.

(2) DI-NET Communication wiring (DB-9 pin)
Connect with the cable or the terminal of the DI-NET Communication. Connects the wires to the terminal of the DI-NET Communication.

(3) Modbus Communication wiring (Modbus-RS-485)
Connect between the adaptor Modbus Communication terminal (X3M) and home automation system terminal. Connect between the Modbus connector and the home automation system terminal connector.

In case of using shielded wire, do not earth with outdoor unit. Please earth with the connecting device.

See the wiring method to know the wiring route.

**Note**
- Wire specification of Modbus transmitting
  - Wire thickness 0.75mm² or 1.0mm².
  - Maximum wire length between the adaptor and home automation system is 500m. Longer length of wire causes transmission errors.
  - Make sure the length of wire is correct.
  - Modbus transmission wiring has polarity. Be sure to connect after checking the polarity of wire.

Field Configuration

(1) DIP Switch (DS1/DS2)

- DS1: Modbus communication setting
  - Watch with your home automation system, setup in accordance with the table below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>OFF</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unused (Note1)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Communication speed</td>
<td>9600bps</td>
<td>19200bps</td>
</tr>
<tr>
<td>3</td>
<td>Stop Bit</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Parity Check</td>
<td>Even</td>
<td>Odd</td>
</tr>
</tbody>
</table>

(Note1) DS1-1 is not used. Please do not change.

- DS2: Address setting
  - Set the address of this adaptor in accordance with the Fig. on the right.

At Address: 0 setting, monitoring and control cannot be carried out from the home automation system since Modbus communication cannot be performed.

(2) Terminating Resistance (SS1/SS2/SS3)

Setup the terminating resistance in accordance with the Fig. on the right.

(Note2) SS1 is not used. Please do not change.

(3) Group Address setting

**Note**
- All indoor units are powered on before setting the DI-NET address.
- The DI-NET address needs to be unique between every indoor unit.

To use this adaptor, set the DI-NET address on each indoor unit. Operation changes with the remote controllers to be used.

After all electrical wiring works, and all indoor/outdoor unit are powered on, set the DI-NET address.
• Case of Navigation Remote Controller

1. Press and hold the Cancel button (E) for 4 seconds or more, the "Filed setting" menu is displayed.

2. Using the Up button (B) and Down button (F), select "Group No. setting" and press the Menu/Enter button (C). The "Group No. setting" menu is displayed.

3. Using the Up button (B) and Down button (F), select "Group No. setting(Group)", and press the Menu/Enter button (C). The current address setting is displayed.

4. Press the Menu/Enter button (C) to release the current address setting. The mode indication changes from "Setting to Release". You are now ready to change the NET address.

5. Using the Up button (B) and Down button (F), select the address you want to set.

6. Press the Menu/Enter button (C). The NET address has been set.

7. Press the Cancel button (E) three times. You are now brought back to normal mode.

• Case of Wired Remote Controller

1. Press and hold the Inspection/Test Operation button (F) for 4 seconds or more, "SETTING" appears in the center of remote controller display (B).

2. Using the Temperature Setting buttons (D), change the value shown in the parameter number display area (B) to "00". In the address display area (A), the current address setting is displayed. (This area will show "1" if no address is set.)

3. Press the Timer ON/OFF button (E) to make the "GROUP" indicator blink. You are now ready to change the NET address.

4. Using the Programming time buttons (C), select the address you want to set.

5. Press the Timer ON/OFF button (E) to make the "GROUP" indicator stay lit. The NET address has been set.

6. Press the Inspection/Test Operation button (F). You are now brought back to normal mode.

TRADEMARK

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