

# INSTALLATION MANUAL FOR A-Control Sub Interface Unit



PAC-SK74SI-E

This manual is written only for the models  
PU(H)-P1.6~3VGA and PU(H)-P3~6YGA.

MODELS
PU(H)-P1.6~3VGA
PU(H)-P3~6YGA

## SAFETY PRECAUTIONS

- Before starting installation, read the "Safety Precautions" described below.
- The following precautions must be observed as it describes the serious matters for safety.
- The safety precautions are described with the degree of danger.

 <b>WARNING</b>	Incorrect handling, it can lead to death or serious injury.
 <b>CAUTION</b>	Incorrect handling, it can lead to injury or damage to building and furniture.

- After installation, make a test operation and confirm that it works properly, and explain the safety precautions, operation method, and maintenance to your customers.  
Tell your customers to keep this installation manual together with the operation manual with them, and when they give or sell this machine to other person put this installation manual and operation manual with it.

### **WARNING**

<b>The installation must be done by dealer or qualified person.</b> <ul style="list-style-type: none"><li>● If the customer does the installation by themselves and it is not perfectly installed it can cause water leak, electric shock, or fire.</li></ul>	<b>The wiring must be securely done by using proper cable. The wires should be connected to the terminals so as not to exert external force on the cable.</b> <ul style="list-style-type: none"><li>● Unperfect connections can cause heat or fire.</li></ul>
<b>The installation must be done in accordance with this manual.</b> <ul style="list-style-type: none"><li>● If the installation is not perfectly done, it can cause water leak, electric shock, or fire.</li></ul>	<b>The terminal cover (panel) of the unit must be installed securely.</b> <ul style="list-style-type: none"><li>● Unperfect installation can cause fire or electric shock by dust or water.</li></ul>
<b>Never try any modification.</b> <ul style="list-style-type: none"><li>● For repair, ask your dealer. If the machine is modified or repaired unperfectly, it can cause water leak, electric shock, or fire.</li></ul>	<b>The electric installation must be done by a qualified person in accordance with this installation manual. Use the separate circuit only for this machine and use the rated voltage and a circuit breaker.</b> <ul style="list-style-type: none"><li>● If the electric circuit power is not sufficient or the wiring is not properly done, it can cause electric shock or fire.</li></ul>
<b>Never move or reinstall the machine by the customers.</b> <ul style="list-style-type: none"><li>● If the installation is not perfectly done, it can cause water leak, electric shock, or fire. Ask your dealer or qualified person.</li></ul>	

### Before electric wiring

#### **CAUTION**

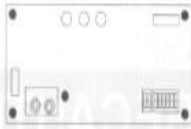

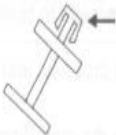
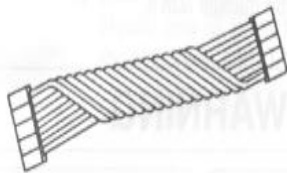
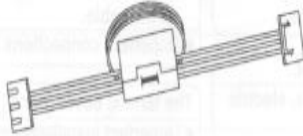

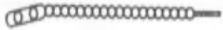
<b>Install a circuit breaker depending upon the location.</b> <ul style="list-style-type: none"><li>● Without a circuit breaker, it can cause electric shock.</li></ul>	<b>Ground wire location</b> <ul style="list-style-type: none"><li>● Never ground to gas pipe, water pipe, lightning conductor, or telephone ground wire. Unperfect ground can cause short-circuit.</li></ul>
<b>Use standard wires which meet current capacity.</b> <ul style="list-style-type: none"><li>● Otherwise, it can cause short-circuit, heat, or fire.</li></ul>	<b>Use proper fuses</b> <ul style="list-style-type: none"><li>● If you use larger size fuses or needle wire, it can cause failure or fire.</li></ul>
<b>Wires must not have tension.</b> <ul style="list-style-type: none"><li>● It can cause snipping, heat, or fire.</li></ul>	

### Before test operation

#### **CAUTION**

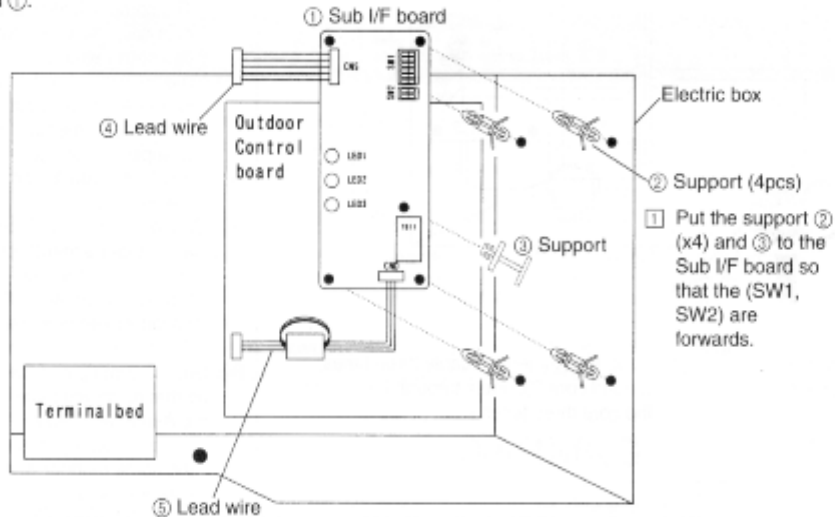
<b>Turn the power on 12 hours or more before operation.</b> <ul style="list-style-type: none"><li>● If you start operation as soon as the power is on, it can cause failure. Never turn the power off during the season.</li></ul>	<b>Never operate the switches with wet hands.</b> <ul style="list-style-type: none"><li>● It can cause electric shock.</li></ul>
<b>Never operate the machine with the panel or guard off.</b> <ul style="list-style-type: none"><li>● It can cause serious injury being caught by a rotating part or burns or electric shock by high voltage part.</li></ul>	<b>Never touch refrigerant pipes while the machine is running.</b> <ul style="list-style-type: none"><li>● The refrigerant pipes become high and low temperature while the machine is running. If you touch the pipes by hand, it can cause chilblain or burns.</li></ul>
<b>Never operate the machine with the air filter off.</b> <ul style="list-style-type: none"><li>● It can cause failure by dust.</li></ul>	<b>Never turn the power off as soon as the machine stops.</b> <ul style="list-style-type: none"><li>● Wait for 5 minutes or more. It can cause water leaks or failure.</li></ul>

# 1. Parts List

No.	Description	Figure	Q'ty	Note
①	Sub I/F board		1	Take measures for static when handling the board. Otherwise, the part can be broken.
②	Support		4	Insert it into electric box from the arrow side.
③	Support		1	Insert it into Sub I/F board from the arrow side.
④	Lead wire (5 wires)		1	
⑤	Lead wire (3 wires)		1	
⑥	Core		2	
⑦	Pull tight		2	

## 2. Installation procedure

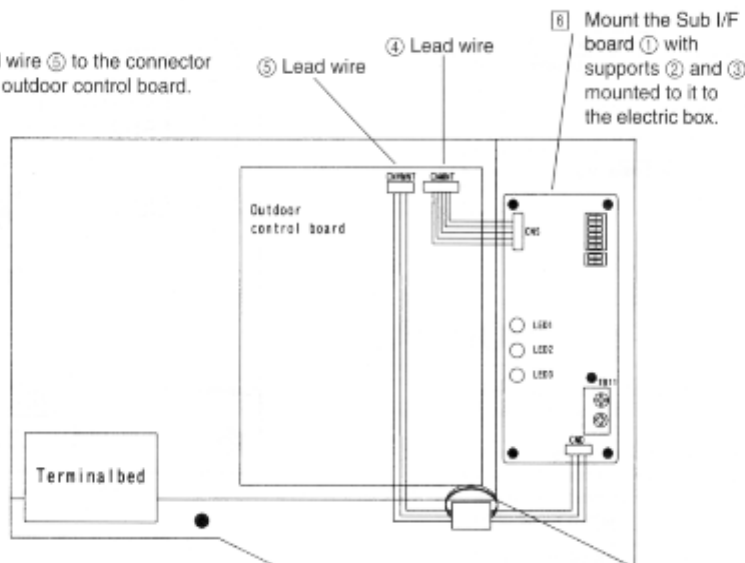
- ② Connect the lead wire ④ to the connector CN5 on the Sub I/F board ①.



- ③ Connect the lead wire ⑤ to the connector CND on the Sub I/F board ①.

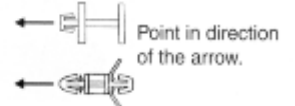
- ④ Connect the lead wire ④ to the connector CNMNT on the Outdoor control board.

- ⑤ Connect the lead wire ⑤ to the connector CNVMNT on the outdoor control board.



- ① Put the support ② (x4) and ③ to the Sub I/F board ① so that the (SW1, SW2) are forwards.

\* Put it securely until it clicks.



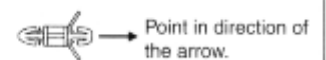
- ② Connect the lead wire ④ to the connector CN5 on the Sub I/F board ①.

- ③ Connect the lead wire ⑤ to the connector CND on the Sub I/F board ①.

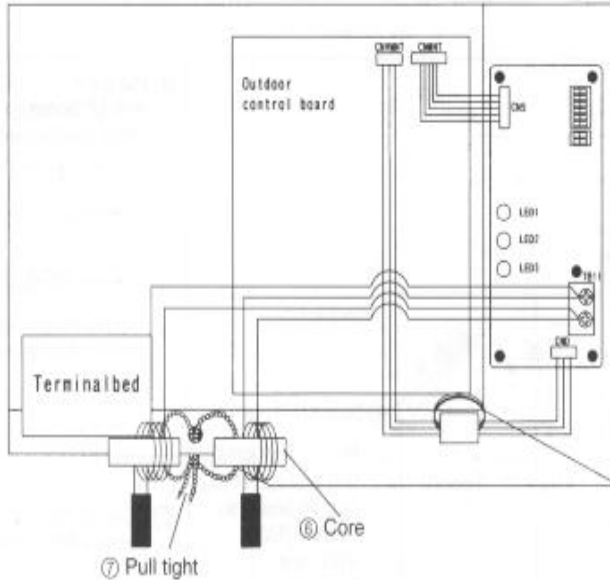
- ④ Connect the lead wire ④ to the connector CNMNT on the Outdoor control board.

- ⑤ Connect the lead wire ⑤ to the connector CNVMNT on the Outdoor control board.

- ⑥ Mount the Sub I/F board ① with supports ② and ③ mounted to it to the electric box.



- ⑥ Connect the A-interface cable that was wrapped around core ⑥ in Step ⑦ to TB11 on the Sub I/F board.



- ⑧ Secure core ⑥ and the electric box so that no strong force is applied to the A-interface cable.  
\* Pass the tie-wrap (pull-tight) ⑦ through both the core ⑦ and the hole in the electric box.

- ⑦ Wrap the A-interface cable three times around core ⑥. (Pass through the center of the core three times.)

- ⑦ Wrap the A-interface cable three times around core ⑥. (Pass through the center of the core three times.)

\* A-Interface cable (transmission cable)

Non-polar, 2-wire

Use a 0.3 mm<sup>2</sup> to 1.25 mm<sup>2</sup> cable. Never use transmit wires of different system with a cable which contains multi wires.

The communication of transmit signals will not work properly and it can cause wrong operation.

\* The maximum insulated wire length for the A-interface cable is 500 m.

\* When the A-interface cable is not wrapped around core ⑥ three times, insulate the cable with a sheath.

- ⑧ Connect the A-interface cable that was wrapped around core ⑥ in Step ⑦ to TB11 on the Sub I/F board.

\* Connect securely so that there is no looseness of the screw for TB11.

- ⑨ Secure core ⑥ and the electric box so that no strong force is applied to the A-interface cable.

\* Perform steps ⑦ through ⑧ in the same manner when installing a jumper wire.

### 3. LED display functions

- LEDs 1 to 3 can be used for performing simple checks of the Sub I/F board.
- The display function LEDs 1 and 2 can be changed by the on/off setting of SW2.

- ① When SW2 is set to off.  
Displays communication status between the Main I/F and Sub I/F.
- LED1 flashes when the Sub I/F is sending.
  - LED2 flashes when the Sub I/F is receiving.
- ② When SW2 is set to on.  
Displays communication status between the outdoor unit and Sub I/F.
- LED1 flashes when the Sub I/F is sending.
  - LED2 flashes when the Sub I/F is receiving.

