

Air Conditioner

# Remote Sensor PAC-SE40TSA

Installation Manual

## 1 Safety precautions to be observed without fail

- Carefully read this item before installation.
- Be sure to observe the cautions described in this item as it gives important details concerning safety.

|                |  |
|----------------|--|
| <b>WARNING</b> | Incorrect handling can result in death, serious injury, etc.                       |
| <b>CAUTION</b> | Incorrect handling can result in injury or damage to the building or its contents. |

- After reading this manual, be sure to keep in a handy place. When the unit is to be moved and re-installed or repaired, give this manual to the service engineers. Also give this manual to any new user.

### WARNING

- Ask your dealer or technical representative to install. If incorrect installation is done by a customer, it may cause a malfunction, electric shock, fire, etc.
- Securely install in a place which can withstand the weight of the unit. If it is not sufficiently strong, the unit may drop and cause an injury.
- Securely connect the wiring using the specified cables and fix them so that stress from the cables is not applied to the terminal connection sections. If connection or fixing is not secure, it may cause heat to be generated, a fire, etc.
- Do not remodel or repair by yourself. If the unit is remodeled or a repair is not correct, it may cause an electric shock, fire, etc. Consult your dealer if repairs are necessary.

- Securely install the unit according to the installation manual. If installation is not correct, it may cause an electric shock, fire, etc.
- The electric work should be performed by authorized personnel according to "Technical standards concerning electrical equipment", "Internal wiring regulations" and the installation manual. If the capacity of electric circuit is insufficient low or the electric work is not done correctly, it may cause an electric shock, fire, etc.
- Do not move and re-install the unit by yourself. If installation is incorrect, it may cause an electric shock, fire, etc. Ask your dealer or technical representative.

### CAUTION

- Do not install the unit in a place where inflammable gas could leak. If gas leaks and collects around the unit, it may cause a fire or explosion.
- Do not use this unit in an abnormal environment. If the unit is used in a place where there is much oil (including machine oil), steam or sulfide gas, the performance of the unit may deteriorate or parts may be damaged.
- When this unit is to be installed in a hospital, communications office, etc., take sufficient measures against noise. An inverter device, private power generator, high frequency medical instruments or wireless communications equipment may interfere with this unit and cause mis-operation or a malfunction. This unit may interfere with medical instruments and communications equipment causing noise in broadcasting video signals, etc.
- Perform wiring so tension is not applied. If tension is applied, it may cause disconnection, heat generation or a fire.
- Be sure to seal wire inlets using putty. If it is not sealed completely, condensation, water, insects, etc. may enter and cause an electric shock or damage to parts.
- Do not wash this unit with water. It may cause an electric shock or malfunction.
- Do not install this unit in a place where the ambient temperature exceeds 40°C or drops below 0°C, also do not install in a place exposed to direct sunlight. It may cause a deformation or malfunction.
- Do not install this unit in a place where steam is generated such as bathroom, kitchen, etc. Avoid installation where water condenses on the walls. It may cause an electric shock or malfunction.
- Do not install this unit in a place where an acid or alkaline solution, special spray, etc. is used frequently. It may cause an electric shock or malfunction.
- Use specified wires corresponding to the current capacity for wiring. Otherwise it may cause power leakage, heat generation or fire.
- Do not touch the PCB with your hand or a tool. Also do not get dirt on the PCB. It may cause a fire or malfunction.

## 2 Confirmation of parts

Confirm that following parts are enclosed in the box in addition to this Installation Manual.

- (1) Remote sensor unit . . . . . 1
- (2) 2-core cable (12m) . . . . . 1
- (3) Wood screw 4.1×16 . . . . . 2
- (4) Connector with post for connection . . . . . 1

## 3 Installation method

- Determine the installation position of the remote sensor (switch box). The following items must be observed.
  - Select a place where the remote sensor will detect an average temperature of the room, and where the sensor will not be subject to direct sunlight, heat sources, or the blow-off from the air conditioner, etc.
  - Install the controller within the length of the cable provided (12m). (The cable cannot be extended. If extended, it may cause misoperation due to noise.)
  - The following parts must be procured at the site.
    - Cross-recessed pan head screw M4 . . . . . Two screws
    - Single switch box (JIS C8336)
    - Thin steel conduit (JIS C8305)
    - Lock nut, bushing (JIS C8330)
- Connect the wires.
  - Connect the 2-core cable to the terminal block in the lower case. Peel the sheath of the 2-core cable as shown in Fig. 1, and correctly wire it as shown in Fig. 2.

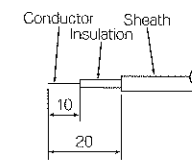


Fig.1

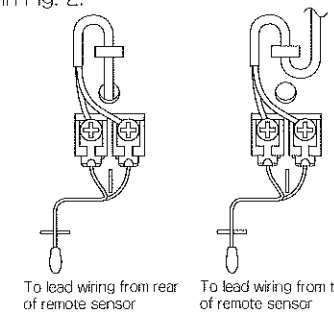


Fig.2

- The wiring connection of the indoor unit's electrical box and remote sensor is shown in Fig.3. There are three methods of connecting the 2-core cable to the electrical box.
  - When using the connector attached to the end of the 2-core cable as it is.
  - When cutting the connector attached to the end of the 2-core cable and connecting the cable to the terminal block in the I.B. (Indoor Board).
  - When using the enclosed connector with post for connection. The above three methods are used according to the indoor unit being used. If the 2-core cable is to be embedded in the wall, follow Fig.4.

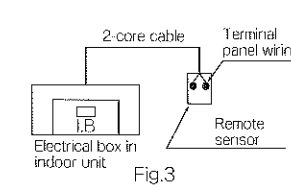


Fig.3

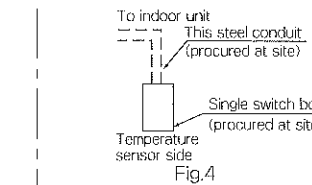
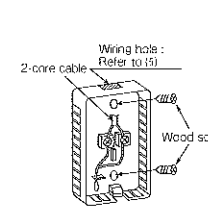


Fig.4

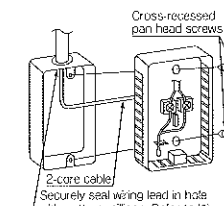
- Install the lower case on the wall or switch box.

**CAUTION** If the screws are tightened too hard, the case may break or deform.

**NOTE** The recommended tightening torque for installing the 2-core cable to the terminal block is 1.17N·m.



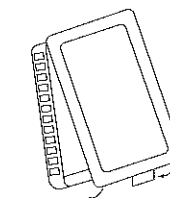
To install on wall



To install on switch box

**CAUTION** Install the sensor on a flat wall. If installed on a bumpy wall, the case may break or trouble may occur.

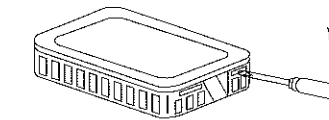
- Fit the upper case.



Catch the two upper claws first, and fit the case as shown on the left.

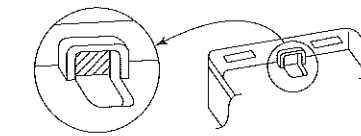
**CAUTION** Securely fit the case until a catching sound is heard. It may drop off if it is not fitted securely.

To remove the case, fit a flat flat-tip screwdriver into the claw section as shown below, and move the screwdriver in the direction of the arrow.

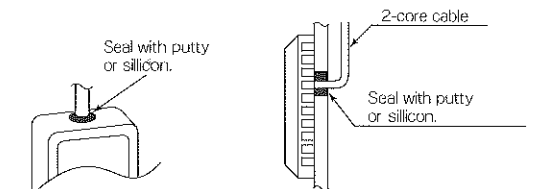


**CAUTION** Do not turn the screwdriver when it is fit into the claw section as the claws may be broken.

- Wiring hole for direction installation on wall, etc. Cut the thin section (shaded section) of the lower case with a knife or pair of nippers, etc. The 2-core cable connected to the terminal block is led out from here.

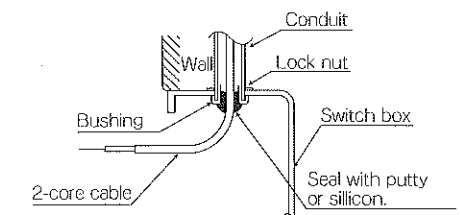


- Securely seal the wiring lead hold with putty or silicon to prevent dew, water drops, cockroaches and other insects from entering.
  - When installing directly on the wall, seal the section cut on the lower case with putty or silicon.
  - If the wiring is to be passed through a hole in the wall (when leading the wiring from the rear of the remote sensor), seal the hole in the same manner.
  - When installing on a switch box, seal the connection of the switch box and conduit with putty or silicon.



To lead wiring from top of remote sensor. To lead wiring from rear of remote sensor

To install directly on wall



To use switch box

## 4 Setting of the indoor unit

When the thermal sensor is connected to the indoor unit and room temperature detection position is changed, reset the setting of "Set temp. 4-dig. up" in the heating mode as shown below.

- K control models : DIP switch Nos 1-6 on the control PCB of the indoor unit.
- M-NET control models : DIP switch Nos 3-8 on the control PCB of the indoor unit.