


12.4 Interface kit (SC-BIKN-E)

RKZ012A088 

Accessories included in package


Be sure to check all the accessories included in package.

| No. | Part name | Quantity |
|-----|---|----------|
| ① | Indoor unit's connection cable (cable length: 1.8m) | 1 |
| ② | Wood screws (for mounting the interface: $\phi 4 \times 25$) | 2 |
| ③ | Tapping screws (for the cable clamp and the interface mounting bracket) | 3 |
| ④ | Interface mounting bracket | 1 |
| ⑤ | Cable clamp (for the indoor unit's connection cable) | 1 |


Safety precautions

Before use, please read these Safety Precautions thoroughly before installation.

- All the cautionary items mentioned below are important safety related items to be taken into consideration, so be sure to observe them at all times.

 **Warning** Incorrect installation could lead to serious consequences such as death, major injury or environmental destruction.

- Symbols used in these precautions

 Always go along these instruction.

- After completed installation, carry out trial operation to confirm no anomaly, and ask the user to keep this installation manual in a good place for future reference.

Warnings



● Installation must be carried out by a qualified installer.

If you install it by yourself, it may cause an electric shock, fire and personal injury, as a result of a system malfunction.

● Install it in full accordance with the instruction manual.

Incorrect installation may cause an electric shock, fire and personal injury.

● Electrical work must be carried out by a qualified electrician in accordance with the technical standard for electrical equipment, the indoor wiring standard and this instruction manual.

Incorrect installation may cause an electric shock, fire and personal injury.

● Use the specific cables for wiring. And connect all the cables to terminals or connectors securely and clamp them with cable clamps in order for external forces not to be transmitted to the terminals directly.

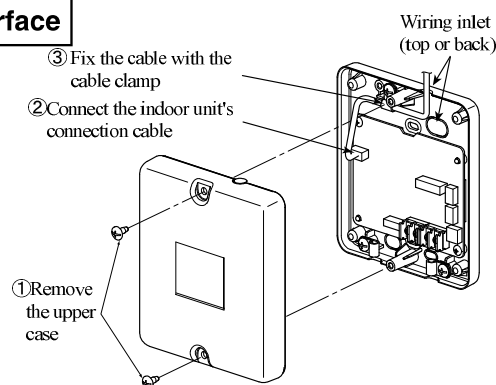
Incomplete connection may cause malfunction, and lead to heat generation and fire.

● Use the original accessories and specified components for installation.

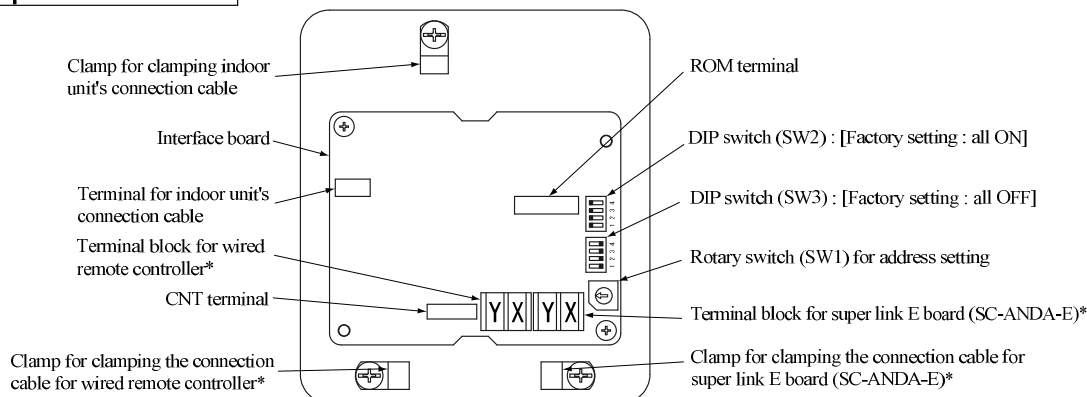
If the parts other than those prescribed by us are used, it may cause an electric shock, fire and personal injury.

Connecting the indoor unit's connection cable to the interface

- ① Remove the upper case of the interface.
 - Remove 2 screws from the interface casing before removal of upper casing.
- ② Connect the indoor unit's connection cable to the interface.
 - Connect the connector of the indoor unit connection cable to the connector on the interface's circuit board.
- ③ Fix the indoor unit's connection cable with the cable clamp.
 - Cable can be brought in from the top or from the back.
 - Cut out the punch-outs for the connection cables running into the casing with cutter.
- ④ Connect the indoor unit's connection cable to the indoor control PCB.
 - Connect the indoor unit's connection cable to the indoor control PCB securely.
 - Clamp the connection cable to the indoor control box securely with the cable clamp provided as an accessory.
 - Regarding the cable connection to the indoor unit, refer to the instruction manual for indoor unit.



Name of each part of the interface



*Either the connection cables of super link E board (SC-ANDA-E) or of wired remote controller is connectable.

| Switch | Setting | Function | Switch | Setting | Function |
|--------|---------|-----------------------------------|--------|---------|--|
| SW2-1 | ON** | CNT level input | SW2-3 | ON** | External input (CNT input) |
| | OFF | CNT Pulse input | | OFF | Operation permission/prohibition (CNT input) |
| SW2-2 | ON** | Wired remote controller : Valid | SW2-4 | ON** | Heat pump |
| | OFF | Wired remote controller : Invalid | | OFF | Cooling only |

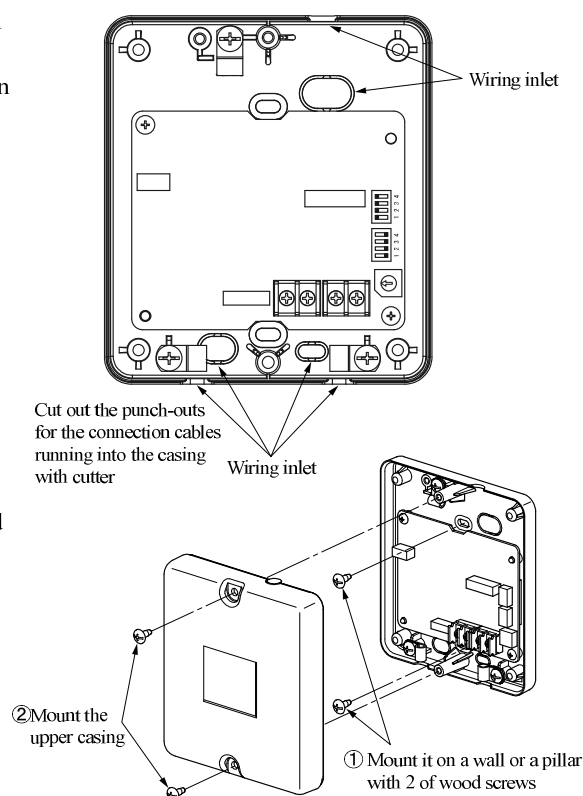
** Factory setting

Installation of the interface

- Install the interface within the range of the connection cable length (approximately 1.3m) from the indoor unit.
 - Be sure not to extend the connection cable on site. If the connection cable is extended, malfunction may occur.
 - Fix the interface on the wall, pillar or the like.
- DO NOT install the interface and wired remote controller at the following places.
- Places exposed to direct sunlight
 - Places near heating devices
 - High humidity places
 - Surfaces where are enough hot or cold to generate condensation
 - Places exposed to oil mist or steam directly
 - Uneven surface

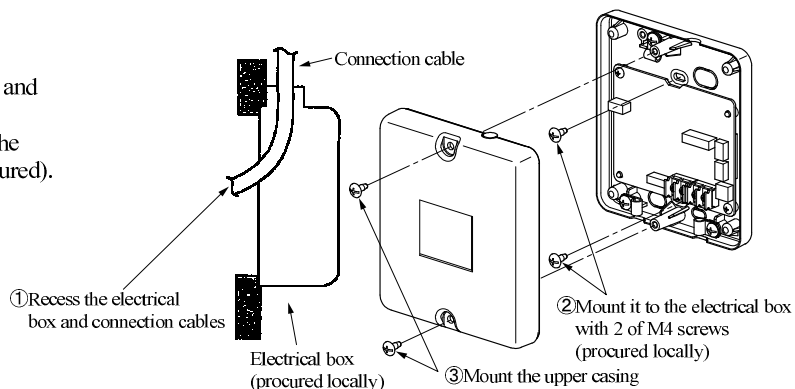
Mounting the interface directly on a wall

- ① Mount the lower casing of the interface on a flat surface with wood screws provided as standard accessory.
- ② Mount the upper casing.



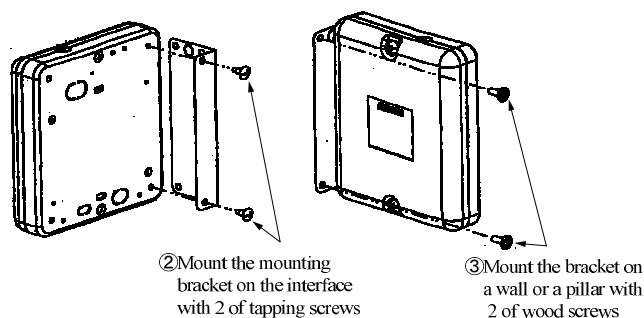
Recessing the interface in the wall

- ① Recess the electrical box (locally procured) and connection cables in the wall.
- ② Mount the lower casing of the interface to the electrical box with M4 screws (locally procured).
- ③ Mount the upper casing.



Mounting the interface with the mounting bracket

- ① Mount the mounting bracket to the interface with tapping screws provided as standard accessory.
- ② Mount the mounting bracket on wall or the like with wood screws provided as standard accessory.
- ③ Mount the mounting bracket to a wall surface, etc. using the wood screws provided.



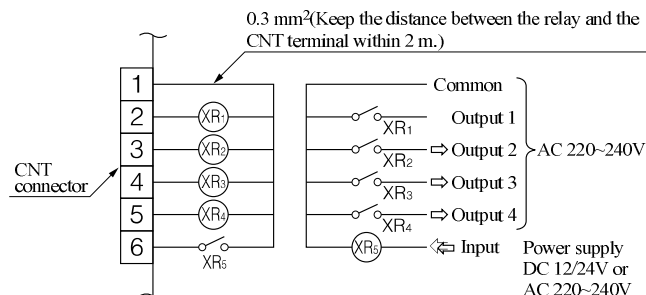
Installation check items

- Are the connection cables connected securely to the terminal blocks and connectors?
- Are the thickness and length of the connection cables conformed with the standard?

Functions of CNT connector

It is available to operate the air conditioning unit and to monitor the operation status with the external control unit (remote display) by sending the input/output signal through CNT connector on the indoor control PCB.

- ① Connect a external remote control unit (locally procured) to CNT terminal.
- ② In case of the pulse input, switch OFF the DIP switch SW2-1 on the interface PCB.
- ③ When setting operation permission/prohibition mode, switch OFF the DIP switch SW2-3 on the interface PCB.



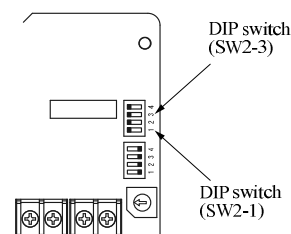
| Input/Output | Function | Output signal | | Content |
|--------------|-----------------------------|---------------|--------|----------------------------------|
| | | Relay | ON/OFF | |
| Output 1 | Operation output | XR1 | ON | During air-conditioner operation |
| Output 2 | Heating output | XR2 | ON | During heating operation |
| Output 3 | Compressor operation output | XR3 | ON | During compressor running |
| Output 4 | Malfunction output | XR4 | ON | During anomalous stop |

- XR1-4 are for the DC 12V relay
- XR5 is a DC 12/24V or AC 220~240V relay
- CNT connector (local) maker, model

| | | |
|-----------|-------|---------|
| Connector | Molex | 5264-06 |
| Terminals | Molex | 5263T |

| Input/Output | Function | SW2-1 | | SW2-3 | | Air-Conditioner | Operation by Remote Controller | | |
|--------------|------------------------|-------------|-------------|--------------|-------|-----------------------|--------------------------------|--------|-------------|
| | | Setting | | Input signal | | | | | |
| | | Level/Pulse | XR5 | Content | | | | | |
| Input | External control input | ON* | Level input | ON* | Level | OFF→ON | External input | ON | Allowed |
| | | | | ON→OFF | | Operation permission | OFF | | |
| | | OFF | Pulse input | ON* | Pulse | OFF→ON | External input | OFF→ON | Allowed |
| | | | | ON→OFF | | Operation prohibition | OFF | | |
| | | | | OFF→ON | Level | OFF→ON | Operation permission | ON | Not allowed |
| | | | | ON→OFF | | Operation prohibition | OFF | | |

* Factory setting



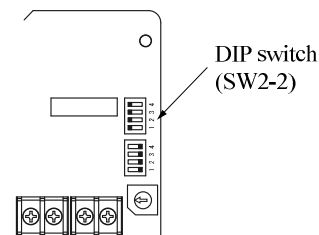
Connection of super link E board

Regarding the connection of super link E board, refer to the instruction manual of super link E board.

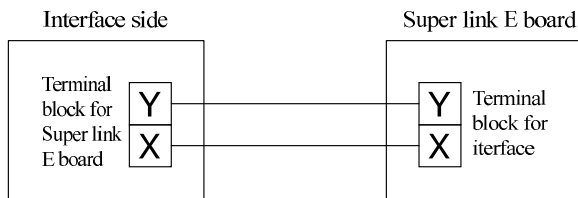
For electrical work, power supply for all of units in the super link system must be turned OFF.

- ① Switch ON the DIP switch SW2-2 (Factory setting: ON) on the interface PCB.

Caution: Wireless remote controller attached to the indoor unit can be used in parallel, after connecting the wired remote controller. However, some of functions other than the basic functions such as RUN/STOP, Temperature Setting, etc. may not work properly and may have a mismatch between the display and the actual behavior.



- ② Wiring connection between the interface and the super link E board.



| No. | Names of recommended signal wires |
|-----|---|
| 1 | Shielded wire |
| 2 | Vinyl cabtyre round cord |
| 3 | Vinyl cabtyre round cable |
| 4 | Vinyl insulated wire/vinyl sheathed cable for control |

Within 200 m 0.5 mm² × 2 cores
 Within 300 m 0.75 mm² × 2 cores
 Within 400 m 1.25 mm² × 2 cores
 Within 600 m 2.0 mm² × 2 cores

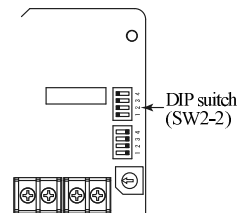
- ③ Clamp the connection cables with cable clamps.

Connection of wired remote controller

Regarding the connection of wired remote controller, refer to the instruction manual of wired remote controller.

① Switch ON the DIP switch SW2-2 (Factory setting : ON) on the interface PCB.

Caution: Wireless remote controller attached to the indoor unit can be used in parallel, after connecting the wired remote controller. However, some of functions other than the basic functions such as RUN/STOP, Temperature Setting, etc. may not work properly and may have a mismatch between the display and the actual behavior.



② Wiring connection between the interface and the wired remote controller.

Installation and wiring of wired remote controller

Ⓐ Install the wired remote controller with reference to the attached instruction manual of wired remote controller.

Ⓑ 0.3mm² × 2-core cable should be used for the wiring of wired remote controller.

Ⓒ Maximum length of wiring is 600m.

If the length of wiring exceeds 100m, change the size of cable as mentioned below.

100m-200m: 0.5mm² × 2-core, 300m or less: 0.75mm² × 2-core, 400m or less: 1.25mm² × 2-core, 600m or less: 2.0mm² × 2-core

However, cable size connecting to the terminal of wired remote controller should not exceed 0.5mm². Accordingly if the size of connection cable exceeds 0.5mm², be sure to downsize it to 0.5mm² at the nearest section of the wired remote controller and waterproof treatment should be done at the connecting section in order to avoid contact failure.

Ⓓ Don't use the multi-core cable to avoid malfunction.

Ⓔ Keep the wiring of wired remote controller away from grounding (Don't touch it to any metal frame of building, etc.).

Ⓕ Connect the connection cables to the terminal blocks of the wired remote controller and the interface securely (no polarity).

③ Clamp the connection cables with cable clamps.

Control of multiple units by a single wired remote controller

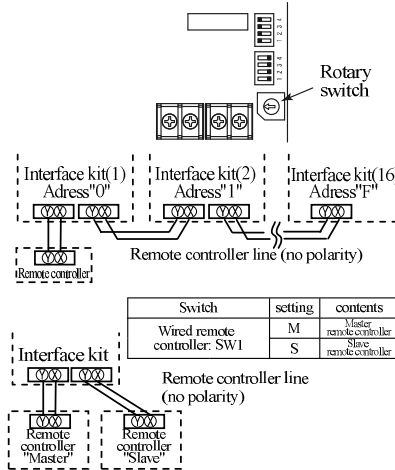
Multiple units (up to 16) can be controlled by a single wired remote controller. In this case, all units connected with a single wired remote controller will operate under the same mode and same setting temperature.

① Connect all the interface with 2-core cables of wired remote controller line.

② Set the address of indoor unit for remote controller communication from "0" to "F" with the rotary switch SW1 on the interface PCB.

③ After turning the power ON, the address of indoor unit can be displayed by pressing [AIR CON] button on the wired remote controller.

Make sure all indoor units connected are displayed in order by pressing or button.



Master/Slave setting wired when 2 of wired remote controller are used

Maximum two wired remote controller can be connected to one indoor unit (or one group of indoor units)

① Set the DIP switch SW1 on the wired remote controller to "Slave" for the slave remote controller. (Factory setting : Master)

○ Caution : Remote controller sensor is invalid.

● When using the wireless remote controller in parallel with the wired remote controller,

Temperature setting range should be changed with the wired remote controller (The set temperature may not be displayed correctly on the wireless remote controller, unless change of temperature setting range is done.)

Changing procedure of temperature setting range is as follows.

How to set upper and lower limit of temperature sting range

1. Stop the air-conditioner, and press (SET) and (MODE) button at the same time for 3 seconds or more.

The indication changes to "FUNCTION SET ▼"

2. Press button once, and change to the "TEMP RANGE ▲" indication.

3. Press (SET) button, and enter the temperature range setting mode.

4. Confirm that the "Upper limit ▼" is shown on the display.

5. Press (SET) button to fix.

6. ① Indication: " ▼ ▲ SET UP" → "UPPER 28°C ▼ ▲"

② Select the upper limit value 30°C with temperature setting button . "UPPER 30°C ▼" (blinking)

③ Press (SET) button to fix. "UPPER 30°C" (Displayed for two seconds)

After the fixed upper limit value displayed for two seconds, the indication will return to "UPPER LIMIT ▼".

7. Press button once, "LOWER LIMIT ▲" is selected, press (SET) button to fix.

① Indication: " ▼ ▲ SET UP" → "LOWER 20°C ▼ ▲"

② Select the lower limit value 18°C with temperature setting button . "LOWER 18°C ▲" (blinking)

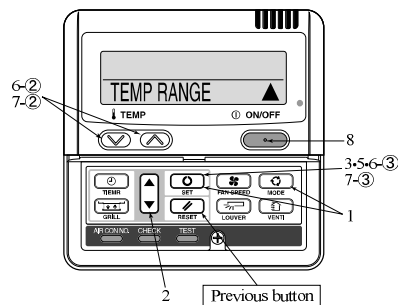
③ Press (SET) button to fix. "LOWER 18°C" (Displayed for two seconds)

After the fixed lower limit value displayed for two seconds, the indication will return to "LOWER LIMIT ▼"

8. Press (ON/OFF) button to finish.

Temperature setting range

| Mode | Temperature setting range | Upper limit | Lower limit |
|---|---------------------------|-------------|-------------|
| Heating | 16-30°C | 20-30°C | 16-26°C |
| Other than heating (Cooling, Fan, Dry, Auto) | 18-30°C | | |



- It is possible to quit in the middle by pressing (ON/OFF) button, but the change of setting is incomplete.
- During setting, if pressing (RESET) button, it returns to the previous screen.