

<Installation Manual>

NAME :Remote location ON/OFF Control box

■ Model Name : TCB-IFCB-4E

■ Usage/Function/Characteristics

Start and Stop of the air conditioner is possible by the external signal, and also indication of operation/alarm to outside is possible.

• Monitoring

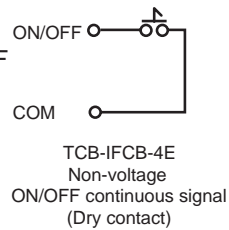
The following monitoring are corresponded to output by non-voltage contact.

- 1) ON/OFF status (for indoor unit)
- 2) Alarm status (System & indoor unit stop)

• ON/OFF command

Air conditioner can be turned ON/OFF by the external signals.

The external ON/OFF signals are output for the signals on the right.



• Central priority mode and Last-push priority modes

A select switch to select central priority mode (CENTRAL) or last-push priority mode (LAST-PUSH) is provided to this interface. Select one according to the purpose.

Central priority mode :

- Air conditioner starts operation when the external signal is ON, and then ON/OFF of air conditioner by local remote controller are possible.
- Air conditioner stops operation when the external signal is OFF, and then ON/OFF of air conditioner by local remote controller are not possible.

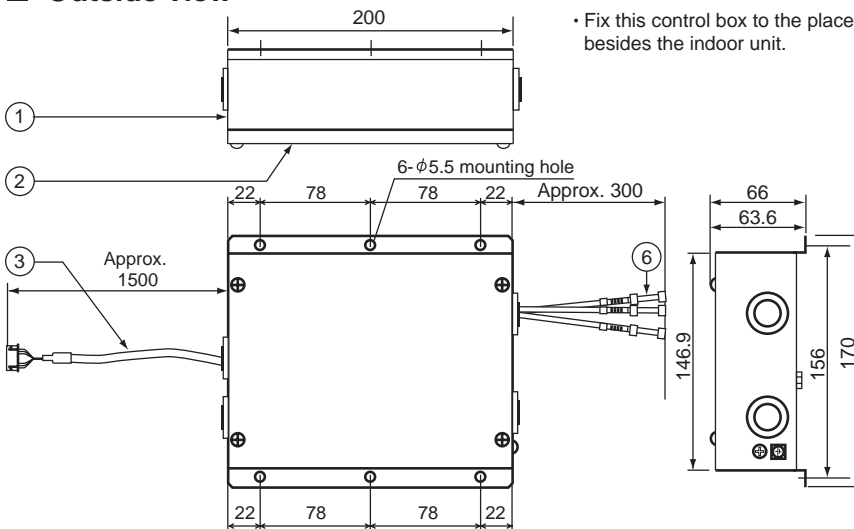
Last-push priority mode :

- ON/OFF of the air conditioner are possible by the external signals or the latest command from the local remote controller. (Mode enabled to turn on/off the air conditioner by the local remote controller even if the external signal is OFF)

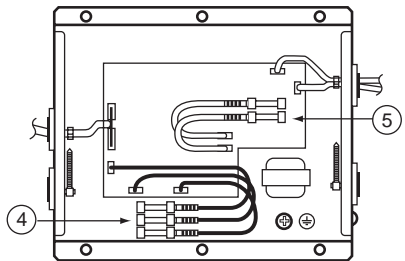
■ Specifications

Name	Remote location ON/OFF control box	Status output signal	Non-voltage contact (For indication of ON/OFF status, and alarm) Contact capacity : Max. AC 240V 0.5A or less
Model name	TCB-IFCB-4E	Cabinet material	Galvanized steel
Power supply	Single phase, 220-240V, 50 Hz 220V, 60Hz	Size/Weight	66 (height) x 170 (width) x 200 (depth) (mm)/1050g
No. of connected indoor units	1 to 16 units for 1 interface (Group connection for 2 or more connected units)	Installation method	Exposed installation on specified position of indoor unit, appropriate position on wall surface or ceiling
Ambient temperature/humidity	0°C to 40°C DB, 30% to 90% RH	Accessory	Shield wire cable with both-end connectors for CN06 and CN13 connector : 1.5m x 2
Receive signal type of central ON/OFF command	Non-voltage ON/OFF continuous signal		

■ Outside view



■ Inside view



(NOTE) Do not install the accessory parts at the following locations.

1. Location where combustible gas may leak
2. Location where direct sunlight shines
3. Location with much humidity such as bathroom, kitchen, etc.
4. Location with much dust
5. Location where rain or dew drops such as outdoors or under the eaves
6. Location in 1m-range of TV or radio

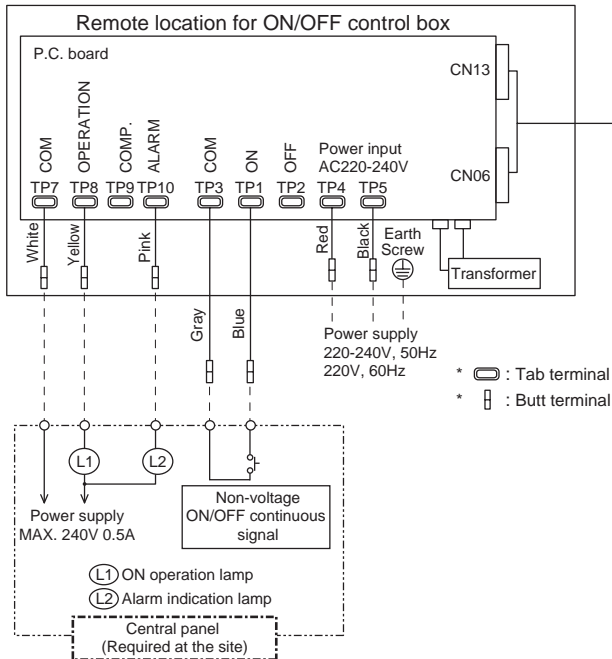
No.	Name	Specification
1	Case unit	Galvanized steel 0.8t
2	Case cover	Galvanized steel 0.8t
3	Harness to connect indoor unit P.C. board	CN61 connector
4	Harness for indication cable	UL1015 AWG18 tip-insulation type butt connector
5	Harness for power supply	3-core, 0.75mm ²
6	Harness for ON/OFF command	UL1015 AWG18 tip-insulation type butt connector

■ Accessory parts

- Accessory No.1 connecting cables are already built in.

No.	Name	Q'ty	Remarks
1	Cable (For CN61 connector, with 6P connectors to both ends, L=1.5m)	1 pcs.	Connected to connector CN61 on P.C. board of indoor unit
2	M4 tapping screw	4 pcs.	For installation of this control box

■ Performance/Electric cabling diagram



(Note)

- * For connecting, be sure to use the attached cables.
- * Cables other than connecting cables should be required at the site.
- * Fix the cables surely by using the holes for fixation.

Cable specifications (Local supply)

Power supply cable *1	Up to 80m : 3-core, 0.75mm ²
ON/OFF command signal cable	Up to 500m : 2-core or 3-core, 0.75mm ²
Indication signal cable *1	Up to 200m : 3-core, 0.75mm ² Up to 400m : 3-core, 1.5mm ²

*1) In conformity with design 60245 IEC 57

• Selecting of Central priority/Last-push priority

The select switch has been previously set to **LAST-PUSH** side on shipment from the factory.

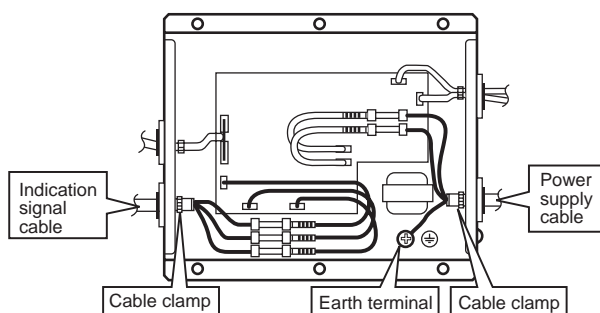
When using the air conditioner with central priority, remove the cover of interface adapter, and select "CENTRAL" side of the select switch (SW 1) at near the center of P.C. board.

(CAUTION)

Be sure to turn off the power supply of interface adapter before selecting one side on the select switch.

• Wiring method

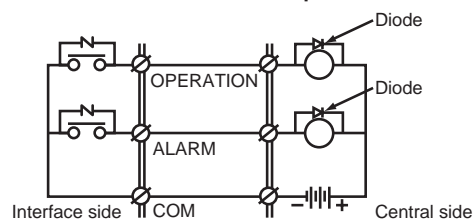
- (1) Power supply cable, earth, and indication signal cable must be connected in this control box.
Detach the lid of the control box, and connect the cables with the terminal according to the purpose.
- (2) Be sure to fix the cable with the cable clamp.



• Notes on connecting relays

(Relays are used for central indication in order to prevent malfunction by surge absorber.)

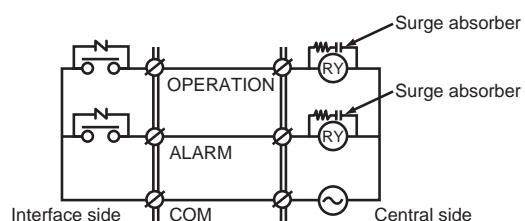
a. To drive induction load with DC power



(Note)

Mount diodes to the both ends of the relay coil.
Select a diode of which back voltage tightness is 10 times or more of the use voltage, and forward current is more than the load current.

b. To drive induction load with AC power



(Note)

Mount surge absorbers to both ends of the relay coil.
Use a surge absorber of which voltage tightness is 350V AC/500V DC or more.