

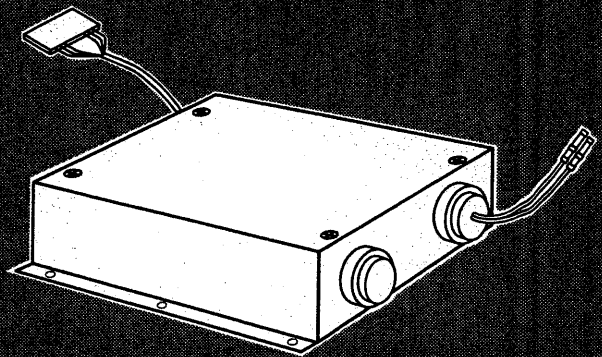
# INSTALLATION MANUAL

# TOSHIBA

## REMOTE LOCATION ON/OFF CONTROL BOX

**MODEL : TCB-IFCB-4E**

Thank you for purchasing the accessory parts.  
Please read this INSTALLATION MANUAL  
carefully before using your accessory parts.



# Safety Precautions

- Please read this section carefully before installation work to install the accessory parts in the prescribed manner. The precaution given here deal with serious safety issues. It is, therefore, of the utmost importance that they are observed in full.
- The meanings of safety-related symbol are as follows:

## WARNING

This symbol is used to identify action which, if carried out in an incorrect ignoring this indication, could lead to serious personal injury or even death.

## CAUTION

This symbol is used to identify action which, if carried out in an incorrect ignoring this indication, could lead to serious human injury or property damage.

- After installation work has been completed, perform a trial operation of the equipment in order to ensure that it is operating normally, and then hand over to the customer and ask to keep this Safety Precautions and Installation Instruction.

## WARNING

**Installation of this accessory parts should be performed either by personnel from this dealer where it was purchased or by specialist installation technicians.**

- Incorrect installation by unqualified personnel can result in electric shock, fire or abnormal operation.

**Reassembling, repair, or modification of this accessory parts is strictly forbidden.**

- Failure to follow these directions can result in inflammation, earth leakage or abnormal operation causing electric shock or injury.

**Be sure to connect earth wire. (Grounding work)**

- If earth is not connected, an electric shock may be caused in trouble or earth leakage.
- Connection of the earth should be performed either by personnel from the dealer where it was purchased or by specialist.

**Do not install a location where flammable gasses may be present.**

- Fire may break out should flammable gas leak into the vicinity of the parts.

**Repair of the accessory parts must also carried out by personnel from dealer where it was purchased.**

- Incorrect repair work by unqualified personnel can result in electric shock, fire or abnormal operation.

**Use the specified wires for wiring connect the terminals securely fix. To prevent external forces applied to the terminals from affecting the terminals.**

## CAUTION

**Avoid exposing the accessory parts to water.**

- It causes an electric shock or power leakage.

**Avoid to use the accessory parts in a dusty place.**

- It may causes a fire.

**Avoid subjecting the accessory parts to direct sunshine or high humidity.**

- Inside temperature rise and it may cause a fire.

**Away from TV and radio set.**

- Failure to follow these directions can result in turbulence of image or noise. Set TV or radio set 1m or more apart from the accessory parts.

# <Installation Manual>

■ **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**

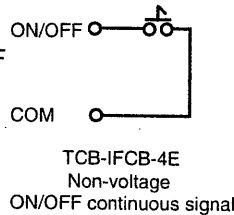
The following monitoring are corresponded to output by non-voltage contact.

- 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.



■ **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 240V0.5A or less
Model name	TCB-IFCB-4E	Cabinet material	Galvanized steel
Power supply	Single phase, 220-240V ~, 50Hz 240V~ , 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 connectors for CN06 and CN13 : 1.5m
Receive signal type of central ON/OFF command	Non-voltage ON/OFF continuous signal		

**NAME : Remote location ON/OFF Control box**

• **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.

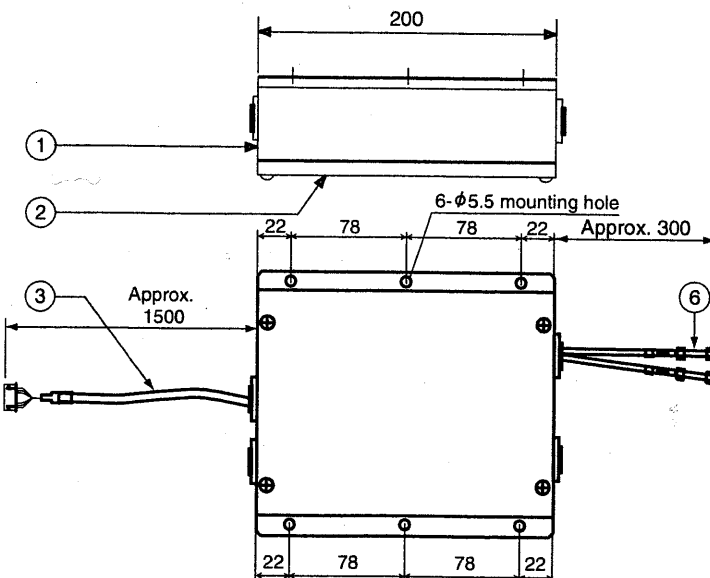
**Central priority mode :**

- 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.

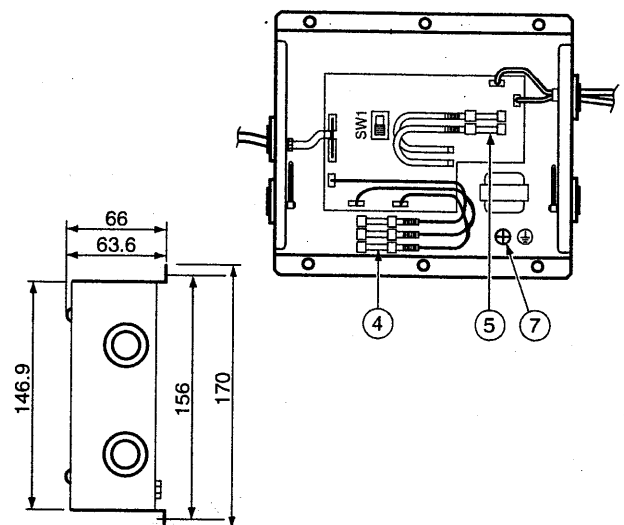
**Last-push priority mode :**

- 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)

■ **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

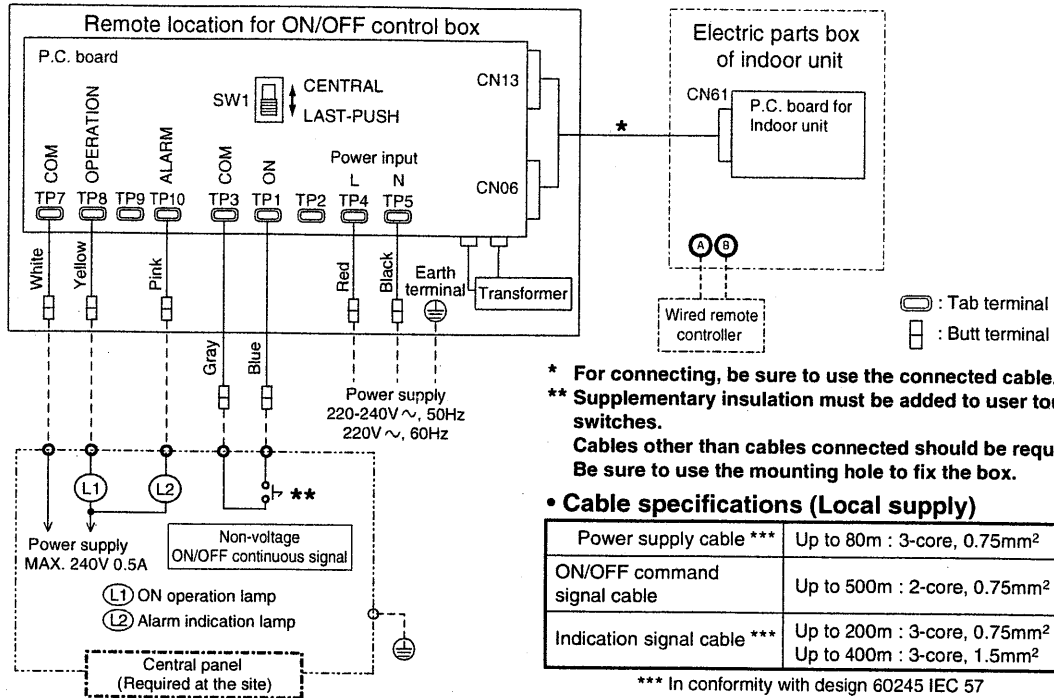
No.	Name	Specification
1	Case unit	Galvanized steel 0.8t
2	Case cover	Galvanized steel 0.8t
3	Harness to connect indoor unit P.C. board	CN61 connector
4	Harness for indication signal cable	UL1015 AWG18 tip-insulation type butt connector
5	Harness for power supply	UL1015 AWG18 tip-insulation type butt connector
6	Harness for ON/OFF command signal cable	UL1015 AWG18 tip-insulation type butt connector
7	Earth terminal	M4 screw

## ■ Accessories

- Accessory No.1 connecting cables is already connected.

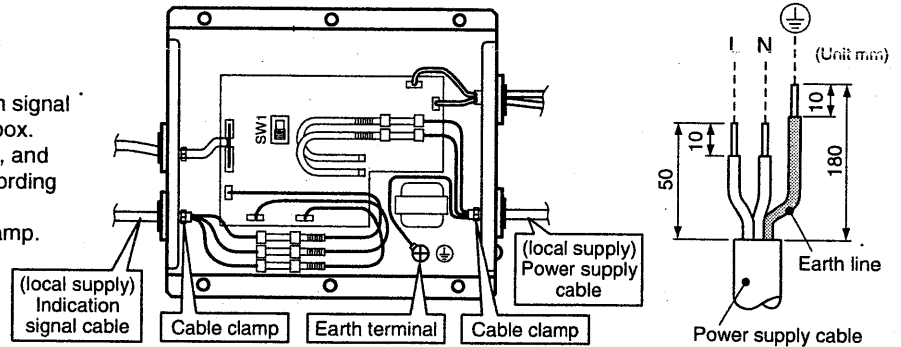
No.	Name	Q'ty	Remarks
1	Cable (For CN61 connector, with 6P connectors, L=1.5m)	1 pc.	Connected to connector CN61 on P.C. board of indoor unit
2	M4 tapping screw	4 pcs.	For installation of this control box

## ■ Wiring diagram



## • Wiring method

- (1) Power supply cable, earth, and indication signal cable must be connected in this control box. Detach the case cover 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.



## • 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.

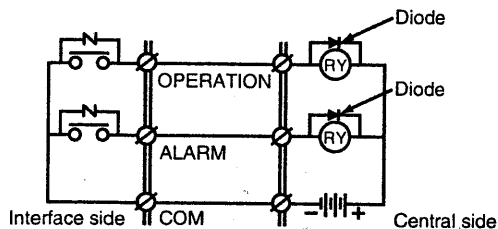
### (CAUTION)

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

## • Notes on connecting relays

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

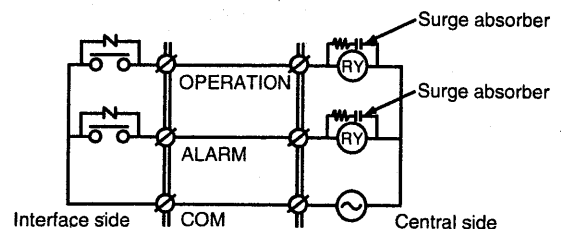
### a. To drive induction load with DC power



#### (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.