

# TOSHIBA INSTALLATION MANUAL

## External master ON/OFF control board MODEL:TCB-PCMO2E

### 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 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.

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

**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.**

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

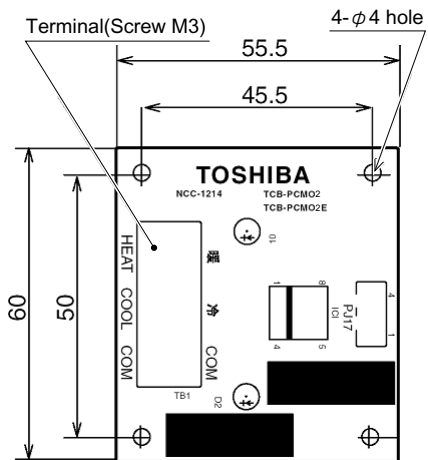
**Feature** "TCB-PCMO2E" is used for the following external master controls

- Night operation control
- Snowfall fan control
- Operation mode selection control
- External master ON/OFF control

Refer to the "Function/Electric wiring diagram" for feature of the each controls, and connecting way is different according to the control.

### Dimension

Size(mm):H18 x L55.5 x W60  
Weight(g): 20



### Accessory parts

No.	Parts name	Q'ty
1	Connection cable	1
2	Support to fix the board	4
3	Earth screw	2
4	Banding band	1

### Wiring

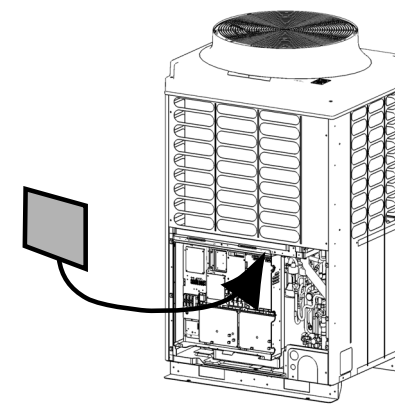
	Length	Size	Type
Wiring	Up to 500m	2-core or 3-core, 0.75mm <sup>2</sup>	Shield wire

- Refer to the "Electric wiring diagram" when wiring.
- Be sure to use the shield wire to prevent noise trouble, and perform the grounding at both sides of shield wires.

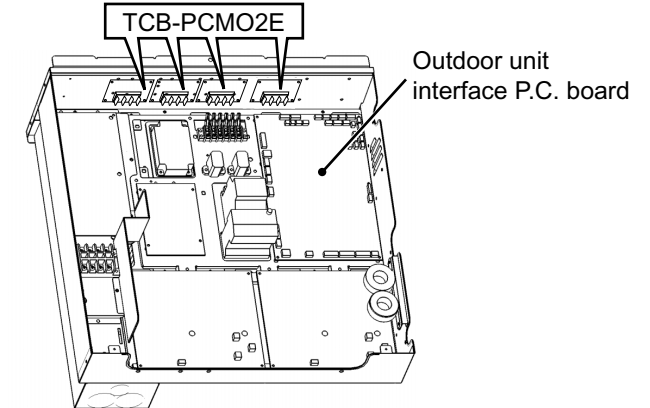
### Placing position

Install this P.C. board to the upper side of the electric component box on outdoor unit.  
Up to 4"TCB-PCMO2E" can be installed simultaneously in one electric component box.

[ Outdoor unit ]

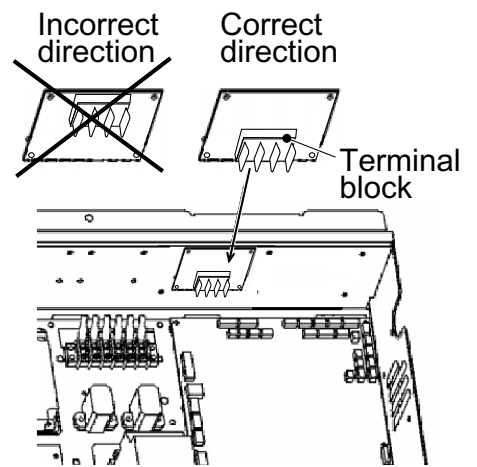


[ Electric component box ]

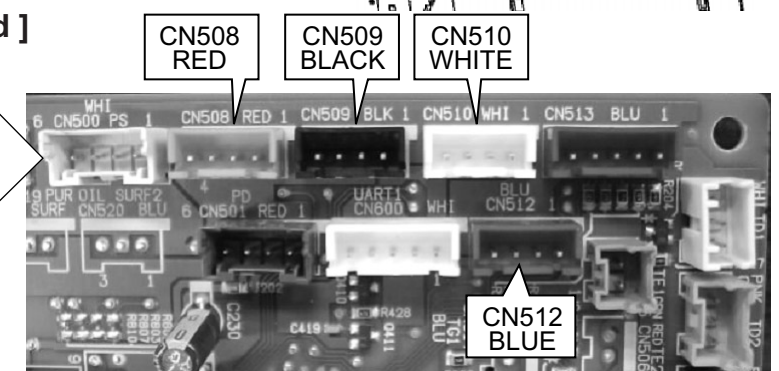
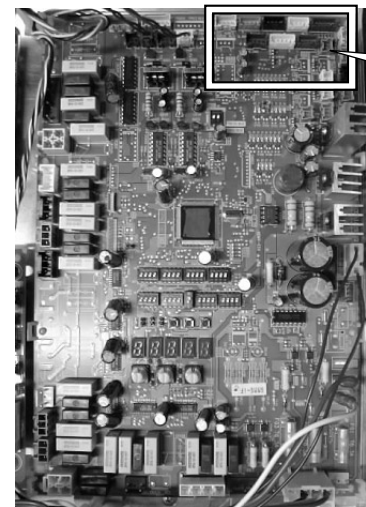


### How to install

- Be sure to turn off the power switch before installing.
- Place this P.C. board by using 4 pcs the support to fix the board.  
There are four installation holes to place the support on the upper side of the electric component box.
- Install the P.C.board to the supports.  
Be careful the terminal block direction as the interior side.
- Connect the P.C.board (TCB-PCMO2E) PJ17 and outdoor unit interface CN508 to CN512 with connection cable.  
Connector on interface P.C. board is different according to the purpose.
- Bind the remaining connection cable with the attached banding band.



[ Outdoor unit interface PC board ]



CN508	Night operation control
CN509	Snowfall fan control
CN510	Operation mode selection control
CN512	External master ON/OFF control

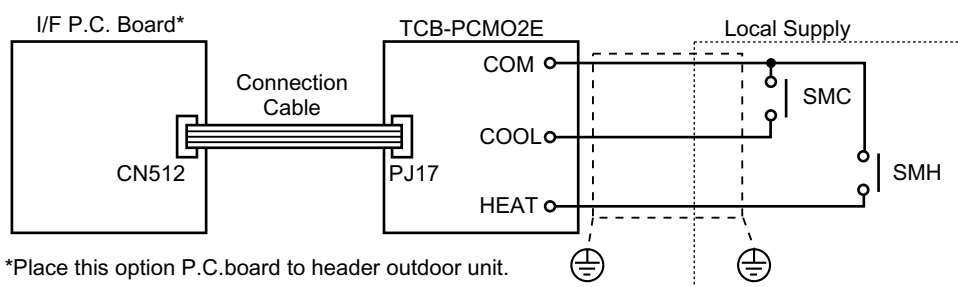
### Function / Electric wiring diagram

#### External master ON/OFF control

##### ● Feature

The outdoor unit starts or stops the system.

##### ● Function



SMC : Input signal for start  
SMH : Input signal for stop

Terminal	Input signal	Operation
COOL (SMC)	ON	All indoor units are started on previous operating.
	OFF	
HEAT (SMH)	ON	Stops all indoor units.
	OFF	

#### ⚠ CAUTION)

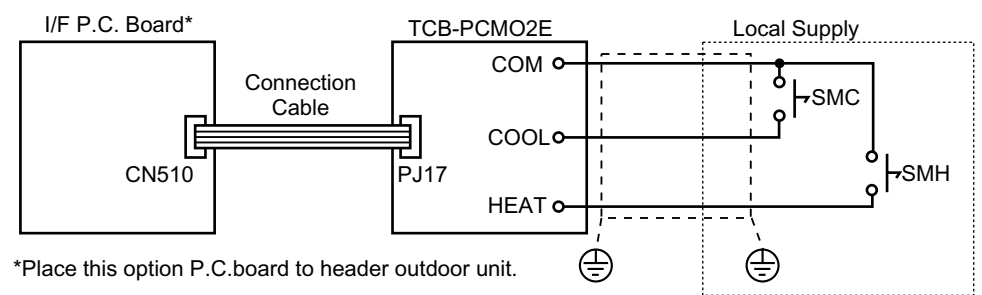
- Be sure to prepare non voltage pulse point of contact for each terminal.
- This control is conducted when input signal stand up or fall down.  
(Standing and falling status should be held for 100 msec. or more.)
- Supplementary Insulation must be added to user touchable part of switches.

#### Operation mode selection control

##### ● Feature

This control can be operated with the operation mode which is permitted by SMC or SMH.

##### ● Function



SMC : Cooling mode designated input switch  
SMH : Heating mode designated input switch

Terminal	Input signal	Selected operation mode	Note
COOL (SMC)	ON	Only cooling mode permitted	*1
	OFF		
HEAT (SMH)	ON	Only heating mode permitted	*1
	OFF		
COOL (SMC)	HEAT (SMH)	Normal operation	

#### Note

- \*1 When the operation select button of remote controller is pushed, " (mode select control) " mark is indicated on the remote controller display.

#### ⚠ CAUTION)

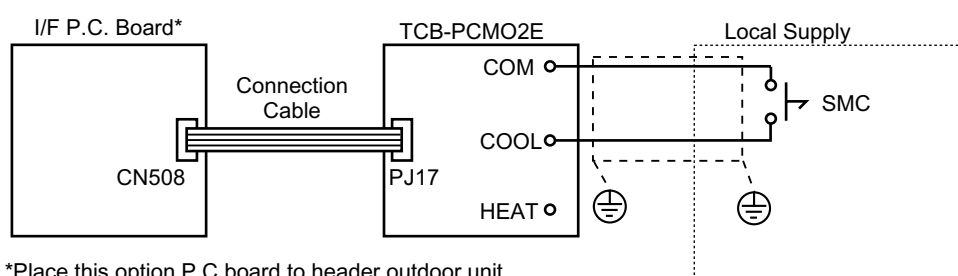
- Be sure to prepare non voltage continuous point of contact for each terminal.
- Supplementary Insulation must be added to user touchable part of switches.

#### Night operation (Sound reduction) control

##### ● Feature

Sound level can be reduced with connecting outdoor interface P.C.Board by restricting compressor and fan speed.

##### ● Function



SMC : Input signal for night operation

Terminal	Input signal	Operation
COOL (SMC)	ON	Night operation control
	OFF	
COOL (SMC)	ON	Normal operation
	OFF	

#### ⚠ CAUTION)

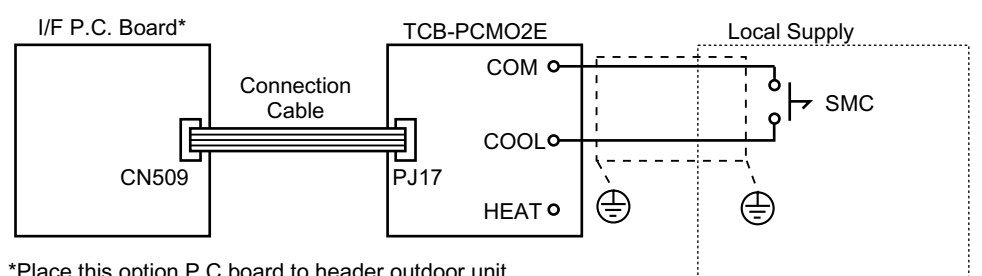
- Be sure to prepare non voltage continuous point of contact for each terminal.
- Supplementary Insulation must be added to user touchable part of switches.

#### Snowfall fan control

##### ● Feature

Outdoor fan is operated with the snowfall signal from outside.

##### ● Function



SMC : Snowfall detection switch

Terminal	Input signal	Operation
COOL (SMC)	ON	Snowfall fan control (Operates outdoor fan.)
	OFF	
COOL (SMC)	ON	Normal operation
	OFF	

#### ⚠ CAUTION)

- Be sure to prepare non voltage continuous point of contact for each terminal.
- Supplementary Insulation must be added to user touchable part of switches.