5. EXTERNAL INPUT & OUTPUT

5-1. OUTDOOR UNIT

Input	Output	Connector	Remarks
LOW NOISE MODE	—	CN19	See external input/output settings for details.
PEAK CUT MODE	—	CN19	
—	ERROR STATUS	CN18	
—	COMPRESSOR STATUS	CN18	

5-1-1. EXTERNAL INPUT

ON/OFF of the "Low noise mode" and "Peak cut mode" functions can be specified by external signal.

■ LOW NOISE MODE

• The following reduces the operating sound of the outdoor unit from the normal sound.
The air conditioner is set to the "Low noise mode" by applying the contact input of a commercial timer or ON/OFF switch to a connector on the outdoor control PC board.

* Performance may drop depending on the outside air temperature condition, etc.

● Circuit diagram example

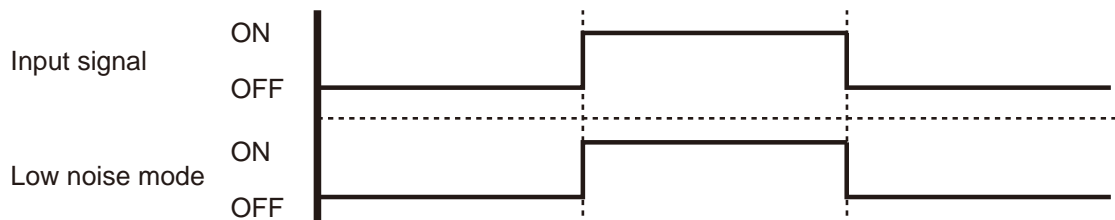• Use the following parts and construct a circuit like that shown above.
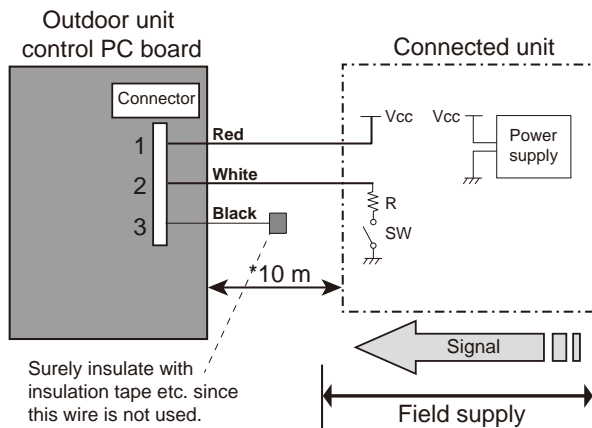
1) Power supply
  ● Voltage (Chart sign=Vcc) : DC 5V to 24V
  ● The current capacity : About 100mA
2) Switch (Chart sign=SW)
  ● Toggle switch or Rocker switch, etc : Switch which maintains the states.
  ● Prepare switches which are enough capable for DC 10mA current or more
3) Resistance (Chart sign=R)
  ● Adjust the resistance for current to about DC 10mA
(Example)
  ● In case of Vcc=DC 5V : Rated resistance value 470Ω 1/4W
  ● In case of Vcc=DC 12V : Rated resistance value 1kΩ 1/4W
  ● In case of Vcc=DC 24V : Rated resistance value 2.2kΩ 1/4W

* Make the distance from the PC board to the connected unit within 10 m.

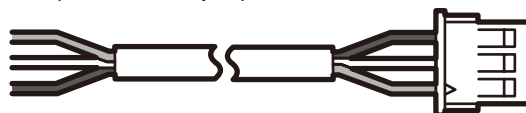• Input signal···ON : Low noise mode / OFF : Normal operation

* Set the "Low noise mode" type by "Push switch" on the outdoor control PC board.

● Parts (Optional)

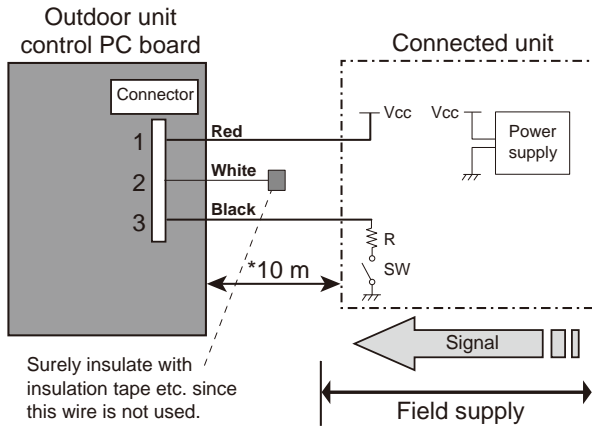| Parts name	Model name
External connect kit	UTY-XWZXZ2

Wire (External input) : Red / White / Black

■ PEAK CUT MODE

- Operation that suppressed the current value can be performed by means of the following on-site work. The air conditioner is set to the Peak cut mode by applying the contact input of a commercial ON/OFF switch to a connector on the outdoor control PC board.

● Circuit diagram example

Outdoor unit control PC board

Connector

1	Red
2	White
3	Black

*10 m

Surely insulate with insulation tape etc. since this wire is not used.

Connected unit

Vcc   Vcc   Power supply

R
SW

Signal

Field supply

1) Power supply
   ● Voltage (Chart sign=Vcc) : DC 5V to 24V
   ● The current capacity : About 100mA
2) Switch (Chart sign=SW)
   ● Toggle switch or Rocker switch, etc : Switch which maintains the states.
   ● Prepare switches which are enough capable for DC 10mA current or more
3) Resistance (Chart sign=R)
   ● Adjust the resistance for current to about DC 10mA
(Example)
   ● In case of Vcc=DC 5V : Rated resistance value 470Ω 1/4W
   ● In case of Vcc=DC 12V : Rated resistance value 1kΩ 1/4W
   ● In case of Vcc=DC 24V : Rated resistance value 2.2kΩ 1/4W

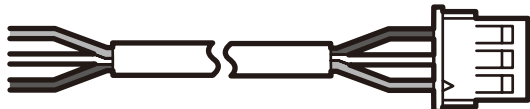* Make the distance from the PC board to the connected unit within 10 m.

- Use the following parts and construct a circuit like that shown above.

- Input signal···ON: Peak cut mode/OFF: Normal operation
  *Set the "Peak cut mode" type by "Push switch" on the outdoor control PC board.
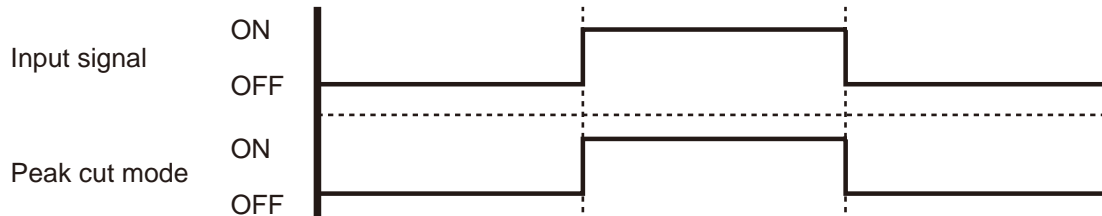
Input signal   ON / OFF

Peak cut mode   ON / OFF

● Parts (Optional)

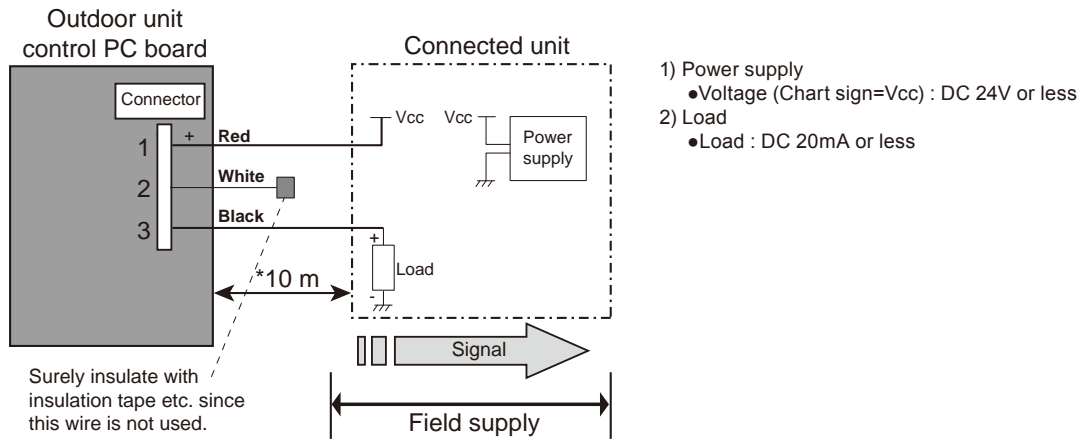| Parts name	Model name
External connect kit	UTY-XWZXZ2

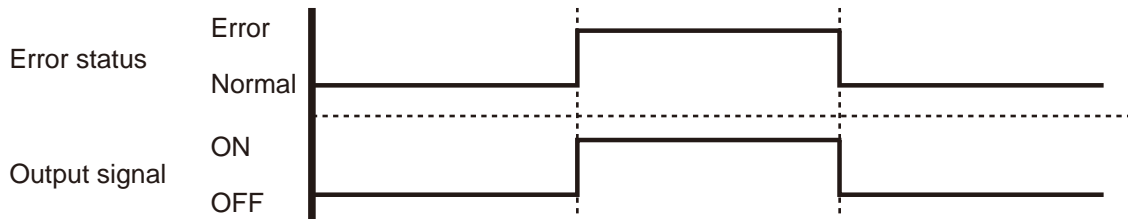Wire (External input) : Red / White / Black

5-1-2. EXTERNAL OUTPUT

■ ERROR STATUS OUTPUT

• An air conditioner error status signal can be output by means of the following on-site work.
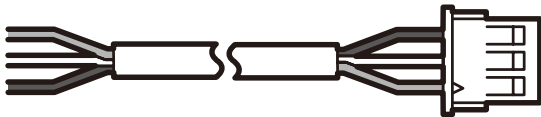
● Circuit diagram example

1) Power supply
   ● Voltage (Chart sign=Vcc) : DC 24V or less
2) Load
   ● Load : DC 20mA or less

Outdoor unit control PC board

Connector

1 + Red
2 White
3 Black

Vcc Vcc Power supply

*10 m

Load

Surely insulate with insulation tape etc. since this wire is not used.

Connected unit

Signal

Field supply

* Make the distance from the PC board to the connected unit within 10 m.

Error status — Error / Normal

Output signal — ON / OFF

● Parts (Optional)

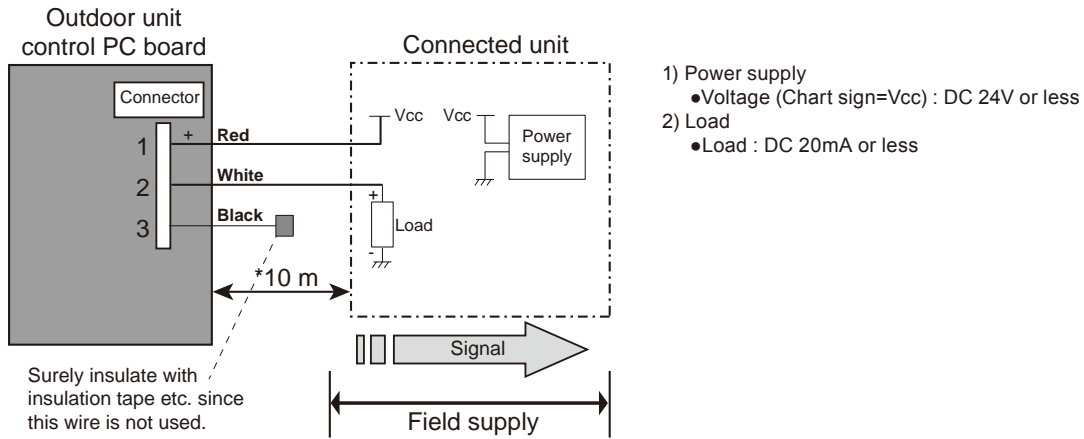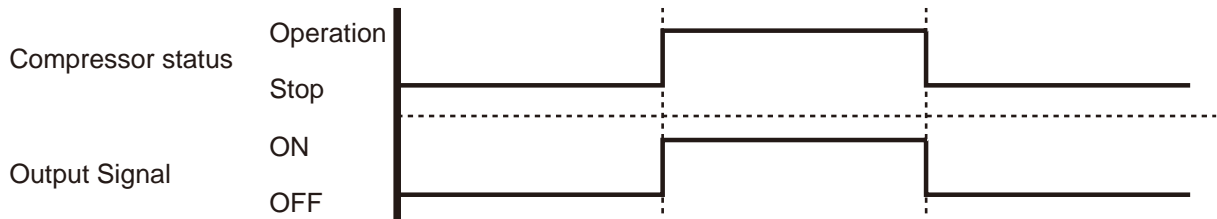| Parts name	Model name
External connect kit	UTY-XWZXZ2

Wire (External input) : Red / White / Black

■ COMPRESSOR STATUS OUTPUT

• Compressor operation status signal can be output by means of the following on-site work.

● Circuit diagram example

Outdoor unit
control PC board

Connected unit

Connector

1	+	**Red**
2		**White**
3		**Black**

Vcc   Vcc

Power
supply

Load

*10 m

Surely insulate with
insulation tape etc. since
this wire is not used.

Signal

Field supply

1) Power supply
  ● Voltage (Chart sign=Vcc) : DC 24V or less
2) Load
  ● Load : DC 20mA or less

* Make the distance from the PC board to the connected unit within 10 m.

Compressor status

Operation

Stop

Output Signal

ON

OFF

● Parts (Optional)

Parts name	Model name
External connect kit	UTY-XWZXZ2

Wire (External input) : Red / White / Black