

BATTERY OPERATED  
PHOTOELECTRIC DETECTOR  
**Smart Line™ series**  
**OPTION**

Power Converter Unit

## PCU-5

Voltage convertor unit used to enable wired operation of the detector.

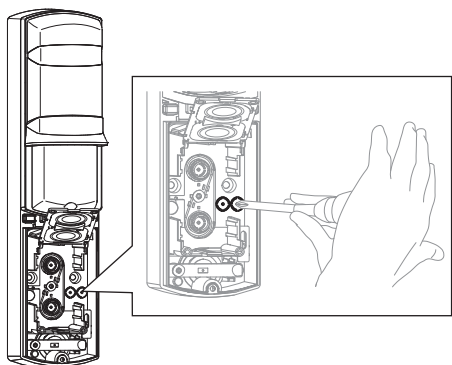
For **SL-100/200TNR** only

PARTS IDENTIFICATION

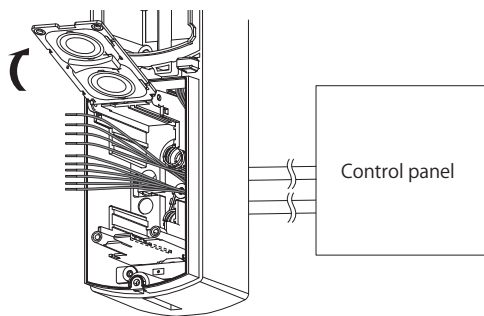
PCU-5 ×1, Putty ×2, Insulation Plate ×1

## INSTALLATIONS

- 1** Using a screwdriver or similar tool, break the knockout position in the back box as shown.

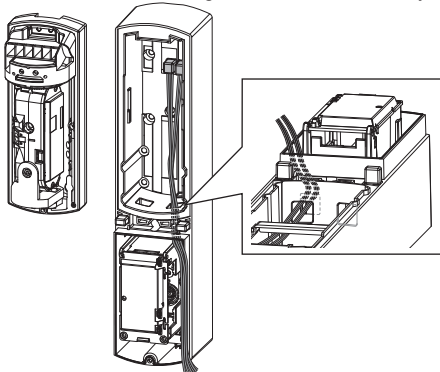


- 4** Open the battery plate and then route the control panel wires from the rear of the back box through the knockout holes.

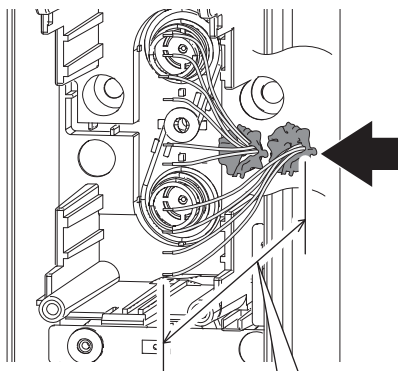


For the receiver, the step 2 & 3 are applied. For the transmitter, jump to the step 4.

- 2** Route connector cables (Alarm, Low battery and Tamper, included in SL-100/200TNR) in the back box through the hole to the battery box.

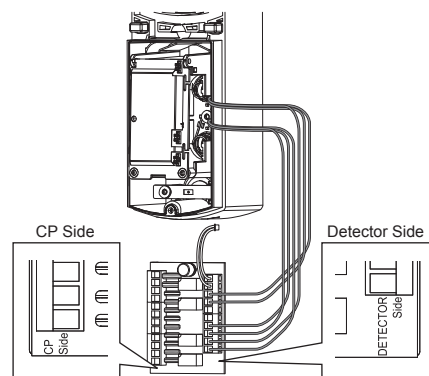


- 5** Adjust the wires so that they extend about 100 mm from the holes. Fill the holes with the wires using the supplied putty.

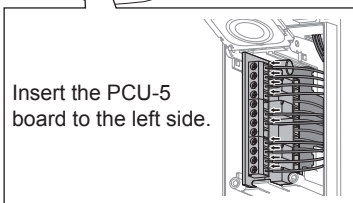
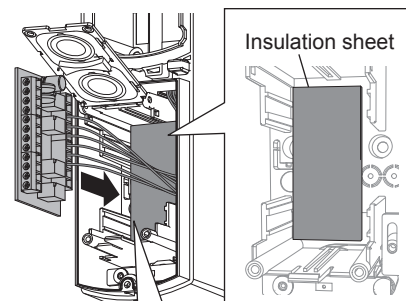


The length of the wire should be about 100 mm.

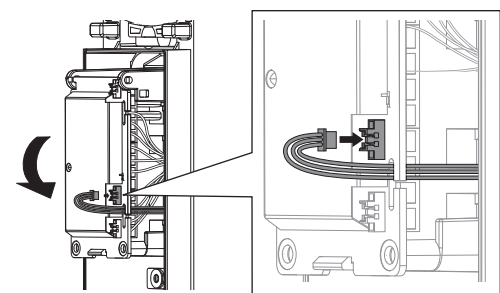
- 3** Connect the connector cable to the terminals of PCU-5.



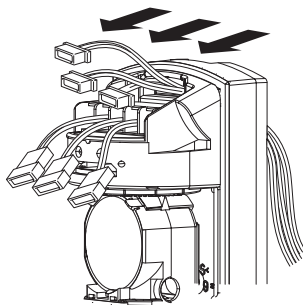
- 6** Insert the insulation plate and PCU-5 as illustrated. And then connect the wires to the PCU-5 terminals.



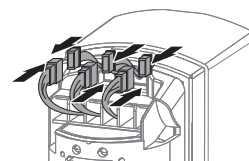
- 7** Close the battery plate and connect PCU-5 male connector to the female connector of the battery plate.



- 8** Route the three connectors of the back box through the slit on the upper part of the main unit of the receiver. For the transmitter, wire the two connectors in the same way.

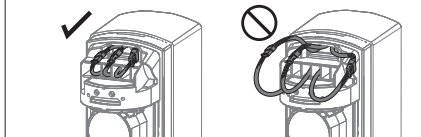


- 9** Attach the connectors.



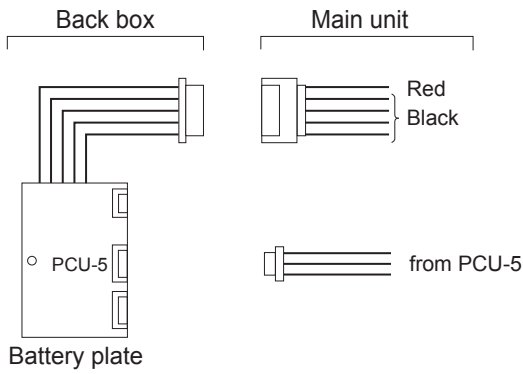
**Note>>**

Put the cables in order not to be caught between the main unit and cover.



# SYSTEM DIAGRAM

## Transmitter

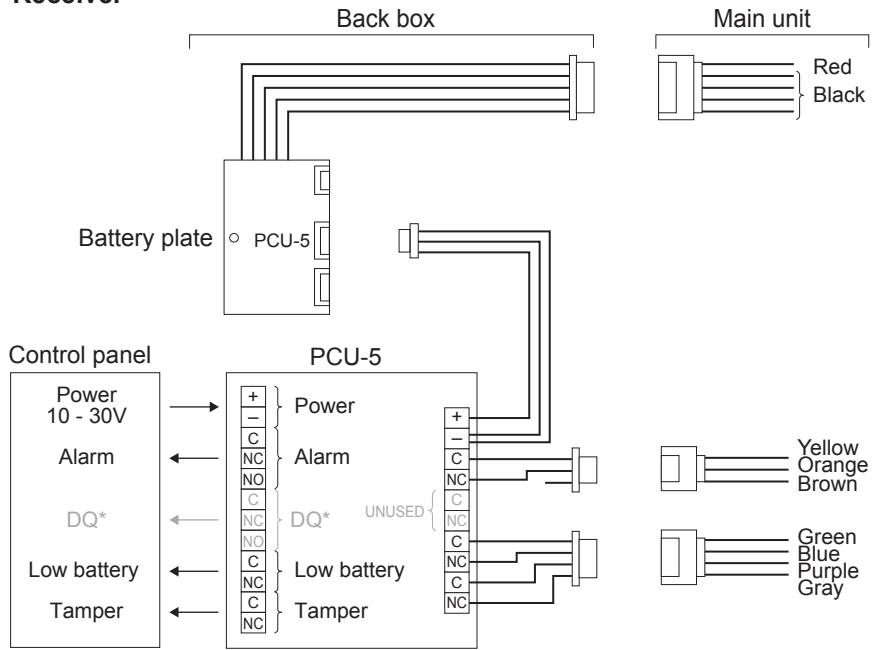


\* UNUSED  
The DQ function is not provided with the SL-TNR.



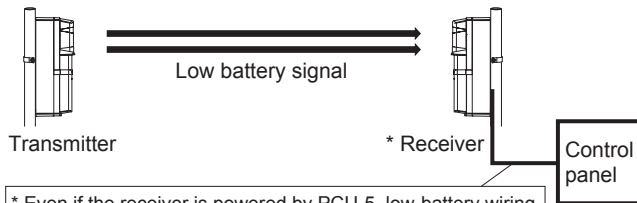
Do not insert batteries into the unit which is operated by PCU-5. Doing so may result in fire or explosion.

## Receiver



## FUNCTION TO TRANSMIT LOW-BATTERY SIGNAL

The low-battery signals are transmitted from the transmitter using IR beams. This function enables to eliminate the need to install a wireless transmitter in the transmitter.

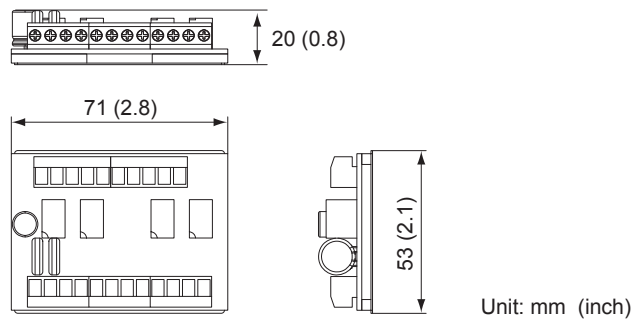


\* Even if the receiver is powered by PCU-5, low-battery wiring is required to report the low-battery status of the transmitter.

## WIRING DISTANCE BETWEEN POWER SUPPLY AND DETECTOR

Wire size	Power supply voltage	
	12VDC	24VDC
0.33mm <sup>2</sup> (AWG22)	180m (600ft.)	1,200m (4,000ft.)
0.52mm <sup>2</sup> (AWG20)	280m (900ft.)	1,800m (6,000ft.)
0.83mm <sup>2</sup> (AWG18)	450m (1,500ft.)	3,000m (10,000ft.)
1.31mm <sup>2</sup> (AWG16)	700m (2,300ft.)	4,500m (14,500ft.)

## DIMENSIONS



## SPECIFICATIONS

Power input	10.5 - 30 VDC
Current draw	80mA (max.)
Output voltage	Approx. 3.9 VDC
Output current	10mA (max.)
Alarm output	Form C relay ; 30VDC. 0.2A
D.Q. output	Unused (Form C relay ; 30 VDC 0.2 A)
Low battery output	N.C. relay ; 30VDC. 0.2A
Tamper output	N.C. relay ; 30VDC. 0.2A
Operating temperature	-20°C to 60°C (-4°F to 140°F)
Operating humidity	95% (max.)
Dimension	H×W×D mm (inch): 71 (2.8) × 53 (2.1) × 20 (0.8)

### ■ EU contact information

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