

Pocket radio remote control system PRC2 series



The pocket radio remote control system is a wireless unit focused on compact and lightweight design. The transmitter is ergonomically designed to fit the hand, and protrusions are applied on switches for better operability. The casing is casted with resin and rubber, enhancing structural resistance against drops and other impacts.

Features

1. The transmitter has been slimly crafted into a pocket-sized unit with a built-in antenna and no protruding parts. In addition, by molding rubber materials into an integrated form, the structure is highly resistant to drops and other impacts.
2. No license is required according to the Japanese Radio Law, as the unit uses weak radio waves stipulated under the law.
3. Operating the system is easy and it is only while the switches on the transmitter are pressed that the receiver relays are activated, and even when two or more switches have been pressed, the relays that correspond to these switches are activated.
4. Although the system is highly resistant against radio interference and noise, the safety-oriented design ensures that all operations will be shut down whenever higher levels of noise, etc. have been received.
5. Even when the same frequencies of the same models are present within the same area, station codes (ID codes for each wireless unit) can be used to eliminate any concerns about operating errors caused by any radio signals.
6. A level of current (2A) which is capable of driving the solenoid valves can be output from receiver.
7. Either the 12V or 24V voltage from a regular car battery can be used as the power supply of the receiver. This means that the ON/OFF switches of the electromagnetic switches with the same voltage can be operated wirelessly, enabling the remote control of construction vehicles, utility vehicles, etc. and leading to other wide range applications.
8. To prevent unnecessary battery consumption, the transmission of the radio signals is automatically shut down after 4 seconds of non-operation period (Periodic Operation Function). Furthermore, the transmitter will automatically turn off after 3 or more minutes of non-operation period (Auto Power Off Function).

Model Code

● System (transmitter + receiver + accessories)

U-PRC2-240C-10

1 2 3 4 5

- 1 System designation: PRC2-200 series
- 2 No. of operation signals
4: 4 signals
6: 6 signals
- 3 Optional specifications of transmitter
0: Standard
1: No auto power-off function
2: No periodic operation function
- 4 Output specifications of receiver
C: Relay contact output
V: Supply voltage common output
- 5 Design no.

● Transmitter

PRC2-TX-240-10

1 2 3 4

- 1 System designation: PRC2-200 series
- 2 No. of function switches
4: 4 switches
6: 6 switches
- 3 Optional specifications of transmitter
0: Standard
1: No auto power-off function
2: No periodic operation function
- 4 Design no.

● Receiver

PRC2-RX-240C-10

1 2 3 4

- 1 System designation: PRC2-200 series
- 2 No. of outputs
40: 4 outputs
60: 6 outputs
- 3 Output specifications of receiver
C: Relay contact output
V: Supply voltage common output
- 4 Design no.

TOKYO KEIKI INC.

Specifications

Transmitter specifications

Transmit frequencies	317 to 319 MHz band (1 frequency fixed)
Modulation system	FSK-FM
Transmission output	Radio signals with the very faint strength stipulated in the enforcement regulation (Article 6) of the Radio Law
Control system	Digital code transmission system
Function switches	Momentary switches ON/OFF (common to each switch), 4 or 6 switches
Operable range	Approx. 30 m (under favorable ambient conditions; measured using the method employed by Tokyo Keiki)
Antenna	Built-in antenna
Power requirements	1.5 V "AAA" dry batteries x 3 (alkaline batteries recommended)
Continuous usage time	Approx. 30 hours (measured using the method employed by Tokyo Keiki)
Power display	Monitor lamps (green and red)
Water resistance	JIS D 0203-1994 R1
Working temperature range	-20 °C~+60 °C
Storage temperature range	-20 °C~+70 °C
Weight	Approx. 130 g (including batteries)

System configuration

Product	Qty
Transmitter	1
Receiver	1
Strap	1
Receiving antenna	1
Cable for receiving antenna (4 m)	1
Stand for receiving antenna	1
Connector housing and pin	1 set

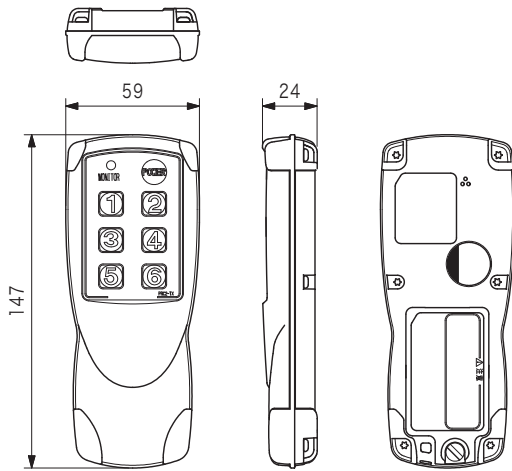
Note: The batteries are not provided with the system.

Receiver specifications

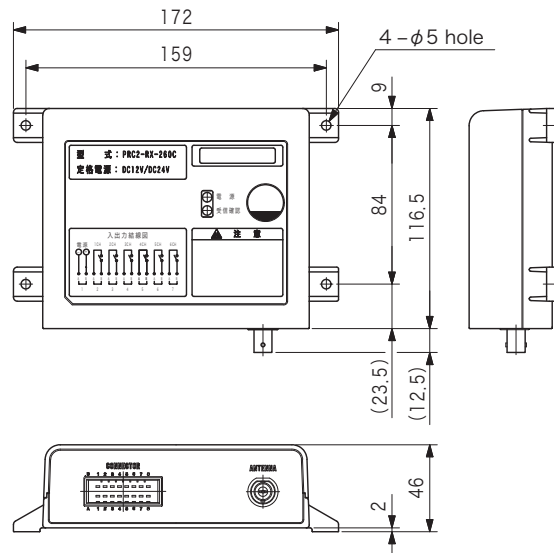
Receive frequencies	317 to 319 MHz band (1 frequency fixed)
Demodulation system	FM demodulation
Output specifications	Relay output Resistive load 5 A Inductive load 2 A (COS $\phi=0.4$) However, in the case of voltage outputs, the overall current of all output is less than 8 A.
Output circuit	Relay contact output circuit or supply voltage output circuit: 4 or 6 outputs
Operation response time	Approx. 0.2 sec. (after periodic operation function has been activated) Approx. 0.15 sec. (when a switch is operated again within 4 seconds after it was first operated) (As measured using the method employed by Tokyo Keiki)
Operational error prevention mechanism	Verification using 16-bit station code (ID code)
Antenna	1/4 λ whip antenna
Supply voltage	DC 9 V to 31 V
Power display	Monitor lamp (red)
Current consumption	Less than 0.8A (excluding load current)
Vibration resistance	JIS D 1601-1995 Class 3B Vibration frequency category 100 Vibration acceleration grade category 70
Dust-tightness	JIS D 0207 F2
Operating temperature range	-20 °C~+60 °C
Working temperature range	-20 °C~+70 °C
Weight	Approx. 370 g

Dimensions

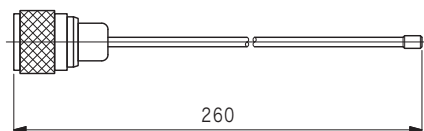
● Transmitter (PRC2-TX-260-10)



● Receiver (PRC2-RX-260C-10)



● Receiving antenna



● Cable for receiving antenna

