FA Optical Remote Control System

BRC-G SERIES

## High Reliability And Resistance Against Disturbance Noise

● Handy transmitter and thin, compac t- sized receiver on the machine side will meet to various demands of remote control system with high reliable data transmission.
● Able to transmit signal to one specific receiver among others by corresponding code(F number code) between transmitter and receiver.
This makes it possible to use several receivers in one trans-mitter system.
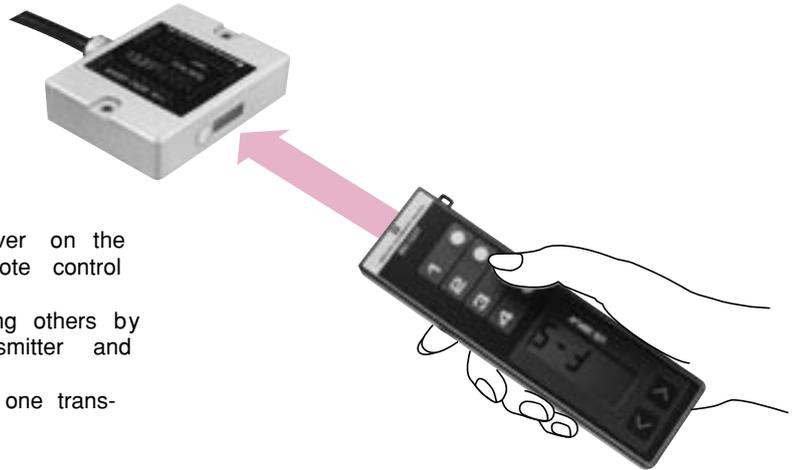
■ Applications

Remote control of OHT
It can make a manual operation when testing or system troubled
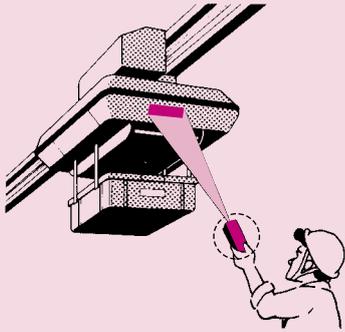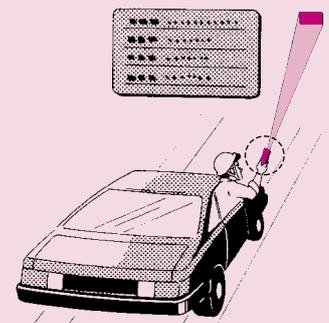
Notice of loading completion/transmission of desitination
It can instruct load completion or destination from driver on automated warehouse.

Transmission of inspecting result
It can transmit inspectingn result from driver on automobile inspecting line.

■ Specifications

Transmitter

Type	4 points, handy type		12 points, handy type	
Model No.	BRC-G24T	BRC-G44T	BRC-G2BT	BRC-G4BT
Power source	Alkaline cell(1.5V 4 pcs)			
Light source	Infrared LED			
Directional angle	30°(Full angle)			
Transmission distance	10m	20m	10m	20m
F number setting	Set by F number setting key			
F number setting range	F-1 to F-9(9 points) or F001 to F225(255 points) (changeable with Mode Select Switch)		01 to 85(85 points)	
Fixing of F number	Available by F number fixing switch		——————	
F number display	LCD		——————	
Transmission method	Transmitted by transmission key(1 to 4) Double pressing is also available		Transmitted by transmission key(1 to 12) Double pressing is also available	
Transmission check	Electronic buzzer(Ringing during transmitting)		LED display(Lights-up during transmitting)	
Battery life display	LCD display(LOBAT, is display when lower)		LED display(Lights-up when closer to life)	
Case	ABS resin(Handling part: Polyester film)			
Weight	Approx. 120g			

Receiver

Type	4 points, head-on type	4 points, front-on type	12 points, head-on type	12 points, front-on type
Model No.	BRC-G2AR	BRC-H2AR	BRC-G2BR	BRC-H2BR
Power source	24VDC(+20%, -10%, ripple 10% or less)			
Current consumption	50mA or less			
Reception element	Photo-diode			
Directional angle	±45° for right/left direction, 10° for upward, 40° for downward			
Reception method	FSK modulation, output is effective when reverse code corresponds			
F number registration	Set by transmitter			
Output	Data: 4 points, strobe: 1 point Photo-coupler isolation, open-collector		Data: 12 points, strobe: 1 point Photo-coupler isolation, open-collector	
Output holding time	100msec or more			
Display	Red LED: Data output, light-reception, F number write-in, power			
Connection	Cable with connector(2m long)			
Ambient illuminance	10,000lux or less(Fluorescent lamp, mercury lamp)			
Ambient temperature	-10 to +50℃			
Ambient humidity	45 to 85%RH			
Protective structure	IP66(IEC standard)			
Case	ABS resin(Display part: acrylic resin)			
Weight	Approx. 240g(including 2m cable)			

■ Output circuit
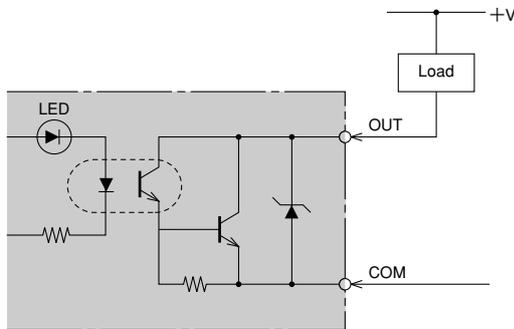
35VDC 50mA, Residual voltage 1.5V

■ Connection

Receiver with 4 points

Connector 15 pins (PHR-15)
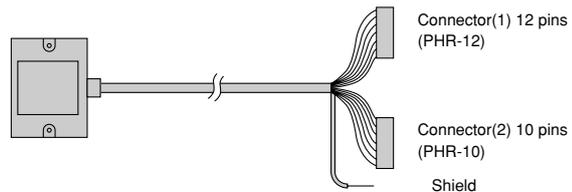
Shield

Colors	Pin No.	Functions
Black	1	Power 0V
Brown	2	Power +V
Red	3	OUT4
Orange	4	OUT3
White/Yellow	5	OUT2
Yellow	6	OUT1
White/Blue	7	———
Green	8	———
Blue	9	———
Purple	10	———
Gray	11	COM
White	12	Strobe
Yellow/Green	13	———
Yellow/Red	14	———
Yellow/Black	15	———
Shield		Shield

Note) Don't use attached connector as relay terminal.

Receiver with 12 points

Connector(1) 12 pins (PHR-12)

Connector(2) 10 pins (PHR-10)

Shield

Connetor(1)		
Colors	Pin No.	Functions
Pale blue	1	Power 0V
Pink	2	Power +V
White	3	OUT8
White/Black	4	OUT7
Brown	5	OUT6
Brown/Black	6	OUT5
Red	7	OUT4
Red/Black	8	OUT3
Orange	9	OUT2
Orange/Black	10	OUT1
Yellow	11	COM
Yellow/Black	12	Strobe*

Connector(2)		
Colors	Pin No.	Functions
Green	1	Strobe*
Green/Black	2	OUT12
Blue	3	OUT11
Blue/Black	4	OUT10
Purple	5	OUT9
Purple/Black	6	———
Gray	7	———
Gray/Black	8	———
Pink/Black	9	———
Pale blue/Black	10	———
Shield	Shield	

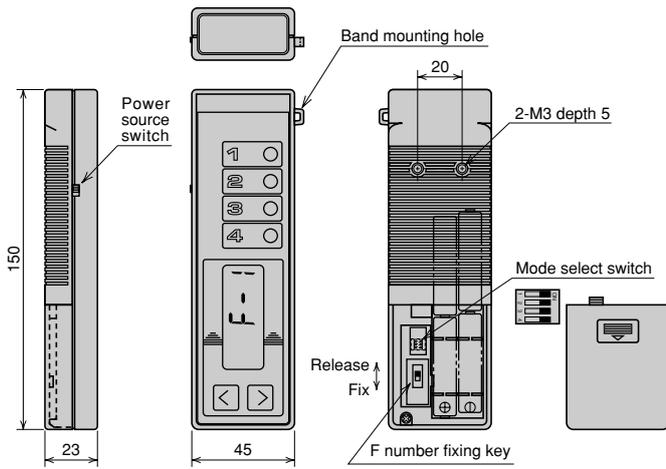*It is short-circuited inside. It is getting ON when data fixed.
Note) Don't use attached connector as relay terminal.

■ External dimensions

Transmitter

● **4 points type**

● **12 points type**
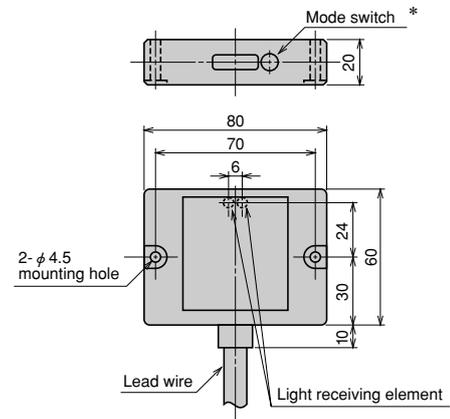
Band mounting hole

Power source switch

20

2-M3 depth 5

Mode select switch

150

Release
Fix

23

45

F number fixing key
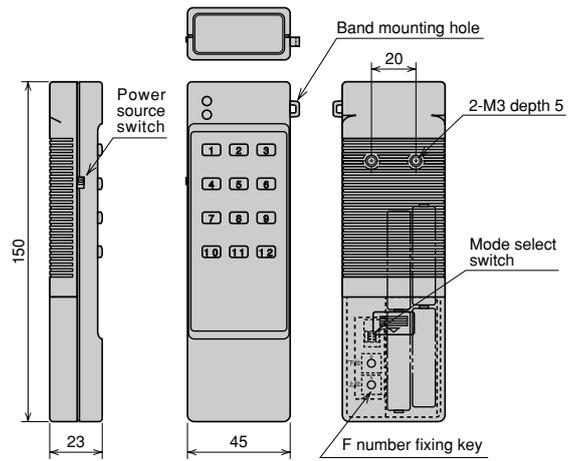
Receiver

● **Head-on type**

● **Front-on type**

2-φ4.5 mounting hole

Lead wire

Light receiving element

Mode switch *

10 30

60

80

70

6

20

Mode switch *

20

80

70

6

2-φ4.5 mounting hole

Lead wire

Light receiving element

24

60

30

10
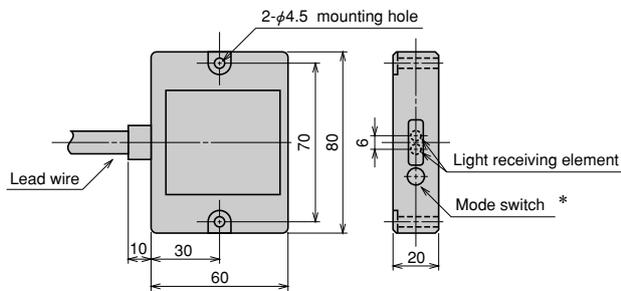
* Use it when registering F No.