## FA Optical

## Remote Control System

## 

## Easy-to-see display with small size/ low-profile and backlight!!

- Small size/low-profile/pocket-size.
- 15 points and 4 points type are lined-up.
- 999 kind of ID can be set and speed dial can be made.
- Durability is much improved because sheet switch is applied instead of mechanical switch.

Easy-to-see display
It makes the display more easy-to-see.


Application
Remote control of OHT
It can make a manual operation when testing or system troubles.


Doesn't output the other ID than setting ID
999 kind of ID can be set and this doesn't transmit unless ID corresponds.


Notice of loading completion/ transmission of destination It can instruct load completion or destination from driver on automated warehouse.


Pallet choice at tower parking
It can choose the specified pallet inside cars.


## Opening/closing of shutter

It can remde-control for garage/factory.


Kinds/model No.

| Kinds | Model No. | Distance | Remarks |
| :---: | :---: | :---: | :---: |
| Transmitter | BRS-G24T | 10m | 4 points type |
|  | BRS-G2CT |  | 15 points type |
| Receiver | BRS-G24R |  | Head-ON type |
|  | BRS-H24R |  | Front-ON type |
|  | BRS-G2CR |  | Head-ON type |
|  | BRS-H2CR |  | Front-ON type |



Specifications
Transmitter

| Model No. | BRS-G24T | BRS-G2CT |
| :---: | :---: | :---: |
| Power source | Alkaline cell (4 pcs) |  |
| Battery life | 16 hours under continuous use (when not using backlight) |  |
| Transmission distance | 10 m |  |
| Directional angle | Full angle $30^{\circ}$ |  |
| Display | LCD, 3 digits, battery, transmission (with backlight) |  |
| Key numbers | Numerical key:4 points, setting key:5 points,builtin electronic buzzer | Numerical key:15 points, setting key:3 points,builtin electronic buzzer |
| ID No.setting | Max. 999 kinds (it can be set as your option) |  |
| Setting functions | (1)ID No.setting(4) Buzzer sound (5) Dutomatic power-OFF time <br> (7) Reset (return to initial setting)  | (3)Backlight OFF time <br> (6ID No.speed dial registration |
| Element | Infrared LED (879nm) |  |
| Modulating system | Pulse-position modulation (455kHz) |  |
| Error detection | Twice coincident system |  |
| Ambient temperature | 0 to $+40^{\circ} \mathrm{C}$ |  |
| Ambient humidity | 45 to 85\%RH, not icing, not condensing |  |
| Insulation resistance | $10 \mathrm{M} \Omega 500 \mathrm{VDC}$ megger |  |
| Vibration resistance | Double amplitude $1.5 \mathrm{~mm}, 10$ to 55 Hz , each 2 hour in $\mathrm{X}, \mathrm{Y}$ and Z directions |  |
| Impact resistance | $490 \mathrm{~m} / \mathrm{s}^{2}$, each 6 time in $\mathrm{X}, \mathrm{Y}$ and Z directions |  |
| Protective structure | Keys surface: IP64 (IEC standard), the other: IP40 (IEC standard) |  |
| Case materials | Polycarbonate |  |
| Weight | Approx.110g (including battery) |  |

## Receiver

| Model No. | BRS-G24R | BRS-H24R | BRS-G2CR | BRS-H2CR |
| :--- | :--- | :--- | :--- | :--- |
| Direction | Head-ON | Front-ON | Head-ON | Front-ON |
| Power source | $24 \mathrm{VDC} \pm 10 \%$ |  |  |  |
| Current consumption | 50 mA or less |  |  |  |
| Directional angle | Right/left: full angle $90^{\circ}$, up/down: full angle $40^{\circ}$ |  |  |  |
| ID No. setting | 999 kinds, Turning counterclockwise: write-in mode (from transmitter), Turning clockwise: operation <br> mode |  |  |  |


| Output | Data output: 4 points, strobe 1 point | Data output:15 points,strobe 1 point |
| :---: | :---: | :---: |
|  | NPN open-collector output (30VDC, 50 mA or less, Residual voltage 1.8 V or less |  |
| Output holding time | 100 msec or more |  |
| Receiving system | Pulse position modulation (455KHz), Twice coincident system |  |
| Indication lamps | Output lamp:data output (OUT1~4) 4 points, strobe output (STB): 1 point | Output lamp:data output (OUT1~15) 15 points, strobe output (STB): 1 point |
|  | Receiving lamp (RCV): 1 point, write-in lamp (WRT): 1 point, power lamp (POW): 1 point |  |
| Connection | Cable (connector at the end) |  |
| Ambient illuminance* | 4,0001x (Fluorescent/mercury lamp) |  |
| Ambient temperature | -10 to $+50^{\circ} \mathrm{C}$ |  |
| Ambient humidity | 45 to 85\%RH, not icing, not condensing |  |
| Environment | No corrosive gas |  |
| Insulation resistance | $10 \mathrm{M} \Omega$ (500VDC megger) |  |
| Noise resistance | Conformity standard IEC (EN) 61000-4-2/-3/-4/-6/-8 |  |
| Vibration resistance | Double amplitude $1.5 \mathrm{~mm}, 10$ to 55 Hz , each 2 hour in $\mathrm{X}, \mathrm{Y}$ and Z directions |  |
| Impact resistance | $490 \mathrm{~m} / \mathrm{s}^{2}$, each 6 time in $X, Y$ and $Z$ directions |  |
| Protective structure | IP64 (IEC standard) |  |
| Case materials | Polycarbonate |  |
| Weight | Approx.240g |  |

* Output only when ID No.from transmitter would be coincident with ID set.

Output circuit

## Receiver with 4 points output



NPN open-collector output
$30 \mathrm{VDC}, 50 \mathrm{~mA}$ or less, residual voltage 1.8 V or less

## Receiver with 15 points output



NPN open-collector output
30VDC,50mA or less,residual voltage 1.8 V or less

## Connection



## Receiver with 15 points ouput

| Colors | Pin No. | Functions |
| :--- | :---: | :--- |
| Red | 1 | OUT1 |
| Yellow | 2 | OUT2 |
| Green | 3 | OUT3 |
| Black | 4 | OUT4 |
| White | 5 | STB* |
| Brown | 6 | +VIN |
| Blue | 7 | -VIN |
| Shield | Shield |  |

[^0]Note) Don't use the attached connector as relay terminal.


| Colors | Pin No. | Functions | Colors | Pin No. | Functions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Brown | CN1-5 | OUT9 | Orange/ black | CN1-10 | OUT3 |
| Red | CN1-7 | OUT10 | Yellow/ black | CN1-12 | OUT4 |
| Orange | CN1-9 | OUT11 | Green/ black | CN2-2 | OUT5 |
| Yellow | CN1-11 | OUT12 | Blue/black | CN2-4 | OUT6 |
| Green | CN2-1 | OUT13 | Purple/ black | CN2-6 | OUT7 |
| Blue | CN2-3 | OUT14 | Gray/ black | CN2-8 | OUT8 |
| Purple | CN2-5 | OUT15 | White/ black | CN1-4 | COM |
| Gray | CN2-7 | STB* | Pale blue | CN1-1 | -VIN |
| White | CN1-3 | , | Pink/black | CN2-9 | +VIN |
| Pink | CN1-2 |  | Pale blue/black | CN2-10 | -VIN |
| Brown/black | CN1-6 | OUT1 |  |  |  |
| Red/black | CN1-8 | OUT2 | Shield |  | Shield |



Receiver



[^0]:    * Tunr ON when data would be fixed.

