

# **Industrial Remote Control**

Instruction Manual V2.20

Transmitter

RC-242T/RC-248T

**Small Transmitter** 

RCS-242T/RCS-244T RCS-246T/RCS-248T

**Contact Transmitter** 

TC-242TF/TC-248TF

Receiver

RC-242RF/RC-248RF

Please use this Instruction manual correctly on reading well.

Please keep it carefully to be able to read immediately, when required.

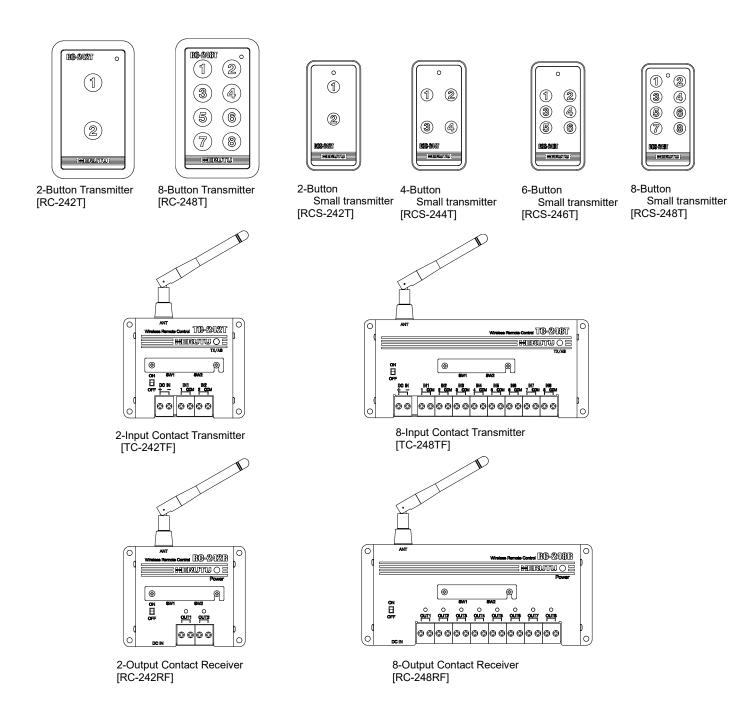
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# 1.General Outline

Industrial Remote Control series are the remote control switches of the 2 point type, 4 point type, 6 point type and 8 point type which uses 2.4GHz bandwidth radio. You have arranged abundantly variations, such as a push button transmitter and a contact input transmitter, and can use in various combination.



#### <Feature>

◆Reliable communication

The frequency (2.4GHz bandwidth) of 64ch is divided into 16 groups, and it communicates by setting up one arbitrary group.

4ch dispersed, respectively is assigned to one group, and it communicates by making channel selection automatically. (Frequency hopping function)

When using it in answer back mode, wireless transfer of the signal is certainly carried out by two-way communication.

(The check of communication OK/NG by LED of a transmitter is possible.)

- ◆Transmitter uses AAA type battery cell x2.(Alkaline dry cell)
- ◆Small transmitter uses coin battery (CR2032).
- ◆The power supply of a contact transmitter is DC12-24V.

  It can be used by AC100-240V by using onerous opition AC/DC adapter.
- ◆The protective cover for preventing breakage and dirt attaches to a transmitter. (These products are not drip-proof and water-proof specification.)
- ◆It can be installed a strap with a small transmitter.(Onerous option.)
- ◆The power supply of a receiver is DC24V.It can be used by AC 100-240V by using an attached AC/DC adaptor.
- ◆The communication distance is approx 20m(inside),50m(outside)

Communication distance changes with environment. Moreover, it changes with how to use this product. (Latch output / Through output, and with the answer back/ not)

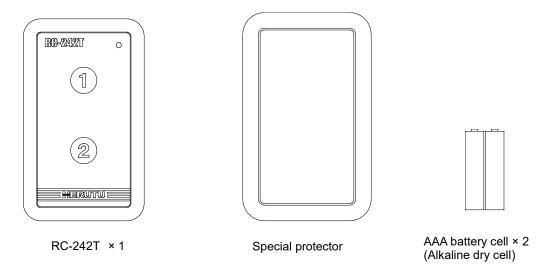
The above-mentioned numerical value is a standard and is not a guaranteed performance.

Since we are preparing the demo machine, we recommend you that you have a prior communication test etc.

# 2. Main part and accessories

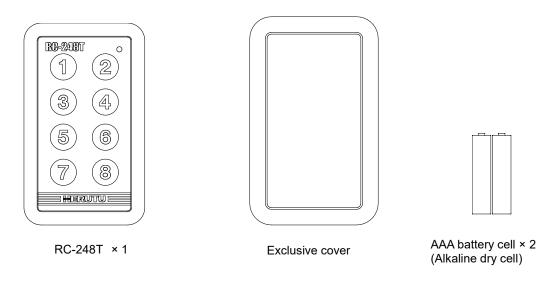
# 2-1.Transmitter

# 2-Button Transmitter [RC-242T]



\*Battery and cover are set to main part at the shipment.

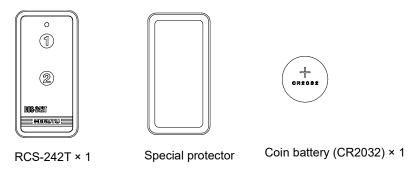
# 8-Button Transmitter [RC-248T]



\*Battery and cover are set to main part at the shipment.

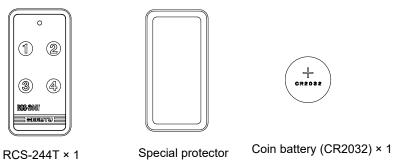
### 2-2.Small transmitter

# 2-Button Small Transmitter [RCS-242T]



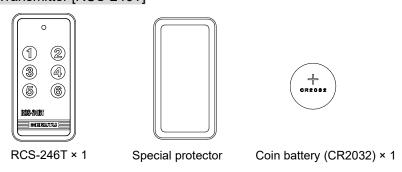
\*Battery and cover are set to main part at the shipment.

# 4-Button Small Transmitter [RCS-244T]



\*Battery and cover are set to main part at the shipment.

# 6-Button Small Transmitter [RCS-246T]



\*Battery and cover are set to main part at the shipment.

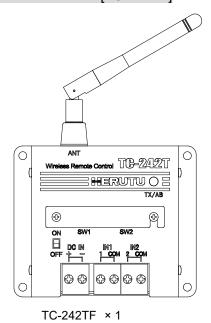
# 8-Button Small Transmitter [RCS-248T]



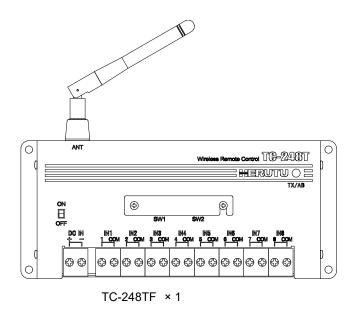
\*Battery and cover are set to main part at the shipment.

## 2-3.Contact transmitter

# 2-Input Contact Transmitter [TC-242TF]



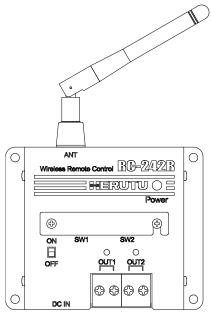
8-Input Contact Transmitter [TC-248TF]



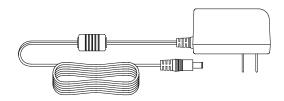
※AC adapter is not attached with contact transmitter.

### 2-4.Receiver

# 2-Output Contact Receiver [RC-242RF]

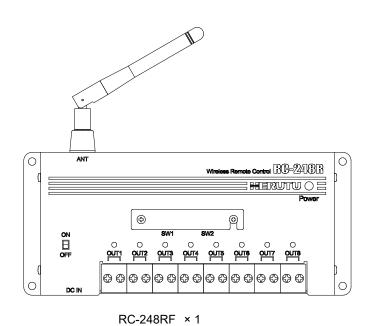


RC-242RF × 1



AC adapter [ADB24050] × 1

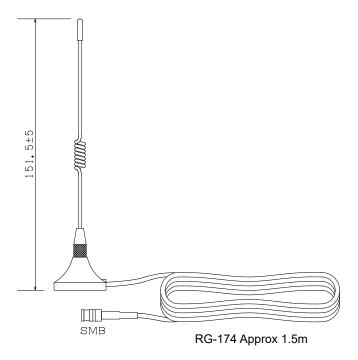
# 8-Output Contact Receiver [RC-248RF]



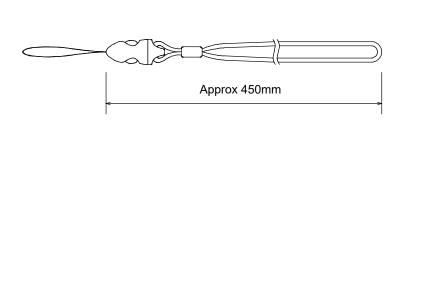
AC adapter [ADB24050] × 1

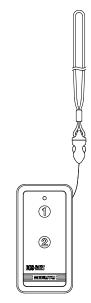
# 2-5.Onerous Option

External antenna MB-13F-1.5-SMB (With magnet base/Coxial cable 1.5m)



Strap(for only small transmitter) STPS-450L

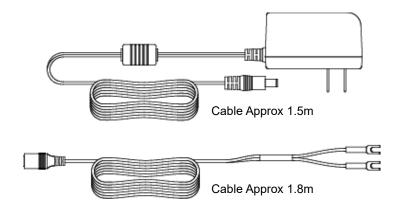




At the time of strap wearing. Image figure

- \*Thia strap can be installed to only small transmitter RCS-242T/RCS-244T/RCS-246T/RCS-248T.

  This strap can not installed to transmitter RC-242T/RC-248T.



# 3. Safety concerns

# Safety concerns (Be sure to read)

To prevent human injury of user or damage in property from occurring, be sure to observe the precautions shown below.

■ The degree in safety hazard and damage generated by the wrong usage while ignoring the descriptions is classified by the following displays.



Using in an improper way while ignoring this pictorial symbol might cause a death or serious human injury.



Using in an improper way while ignoring this pictorial symbol might cause a human injury or property damage.

■The type of descriptions you should observe is classified by the following pictorial symbols.



This pictorial symbol indicates a "Reminder" to attract an attention.



This pictorial symbol indicates a "Prohibition" to prohibit a certain action.



- For the usage to be commonly applied in all the models:
  - Avoid using in a place with a plenty of humidity or dust. Otherwise, absorbing a dust or water contents may cause machine trouble, fire or electrical shock.



- ■For handling this machine:
  - ●This is the electronic devise or wireless radios composed of the precision parts.

Do not overhaul/remodel. It may cause accident or machine trouble.





- For handling this machine:
  - Do not use this product for the application needing the high reliability related to human lives.



●Do not use this product in a place where it is uncertain about whether or not radio waves reach.





■For handling the power source:

Be sure to observe the following precautions to prevent the AC adapter and Power cord from being heated, damaged, or ignited.

| Tagou, or ignition.  |            |
|--|------------|
| ●Do not approximate the AC adapter and Power cord to a fire, or do not put them into a fire. The AC adapter and Power cord can be broken or ignited, resulting in an accident. |            |
| ●You can use the AC adapter and main body only with the specified power voltage to protect them from the damage and fire accident.   |            |
| ●Do not use the AC adapter and main body in a wettable atmosphere. It may cause accidents or troubles such as heating, igniting or electrical shock.                           |            |
| ●Do not touch the AC adapter, main body, Power cord and Plug outlet with wet hands. It may cause an accident such as electrical shock, etc.                                    |            |
| ●Do not damage the Power cord. A short-circuit or heating may cause a fire or electrical shock.  |            |
| ●Do not use the Power plug with dust being adhered.  |            |
| A short-circuit or heating may cause a fire or electrical shock.   |            |
| ●Do not give a strong impact onto the AC adapter. It may cause an accident or machine failure.   |            |
| ●If you find out deformed AC adapter, do not use it.   |            |
| It may cause an accident or machine failure.   |            |
| ●Do not charge this equipment in a place where flammable gas can be generated.It may cause a fire accident.  | $\bigcirc$ |
| Never overhaul the AC adapter.  It may cause an accident or machine failure.   |            |

# ■When trouble happens during use:

Since it may cause a fire or electrical shock, disconnect a power plug, and immediately ask outlet store or our company to repair.

| ●When smoke or abnormal odors are generated, stop using, immediately disconnect a power plug, | Λ        |
|---|----------|
| and ask outlet store or our company to repair.  | <u> </u> |
| ●Once the Power cord is damaged, do not use it.   |          |
| Using it as is may cause a fire or electrical shock.  |          |

### **■**Caution for wireless Law

| ORadio device in this product has been certified by the Radio Law. It does not needs a license of radio stations |
|--|
| according to using this product.   |
| ODo not use it close to a person with a cardiac pacemaker.   |
| Electromagnetic interference may affect it, putting his/her life at risk.  |
| ○Do not use it close to medical equipment.   |
| Electromagnetic interference may affect the cardiac pacemaker to cause loss of human life.                       |
| ○Do not use it close to an electric oven.  |
| Electromagnetic interference may affect the medical equipment to cause loss of human life.                       |
| ORadio device in this product has been certified by the Radio Law. Do not disassemble or modify this product.    |

# **■**Caution for Radio Interference with 2.4GHz Wireless communication

Take the following precautions for communication by 2.4GHz wireless communication.

Within this product's frequency range, industrial, scientific, and medical equipment, such as electric oven, as well as RFID premises radio stations (license required) and specified low power radio station and ham radio station (license not required) used in factory manufacturing lines are operated.

OBefore using this device, confirm that no RFID premises radio station, specified low power radio station, or ham radio station is operating close to it.

Olf this product caused radio interference with an RFID premises radio station, immediately change the product's frequency or stop radio emission, and contact representative for actions to take to prevent cross talk.

### ■FCC/IC Warning (HRF-2401)

Information about FCC Standard.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interface, and (2) This device must accept any interface received, including interface that may cause undesired operation:

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. Thai transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

#### Information about FCC Standard and IC standard.

This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux la partie 15des règles de la FCC et CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

### IMPORTANT NOTE: Radiation Exposure Statement

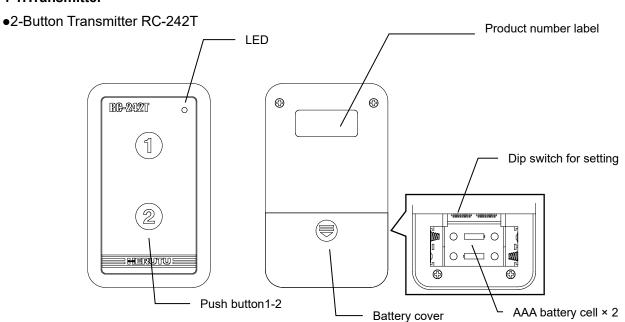
The available scientific evidence does not show that any health problems are associated with using low power wireless devices.

There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. This device (HRF-2401) has been tested and found to comply with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules.

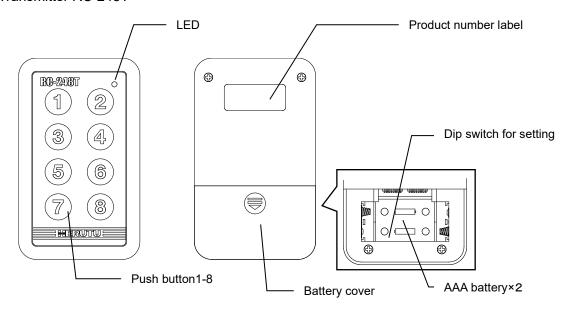
Les connaissances scientifiques dont nous disposons n'ont mis en évidence aucun problème de santé associé à l'usage des appareils sans fil à faible puissance. Nous ne sommes cependant pas en mesure de prouver que ces appareils sans fil à faible puissance sont entièrement sans danger. Les appareils sans fil à faible puissance émettent une énergie radioélectrique (RF) très faible dans le spectre des micro-ondes lorsqu'ils sont utilisés. Alors qu'une dose élevée de RF peut avoir des effets sur la santé (en chauffant les tissus), l'exposition à de faibles RF qui ne produisent pas de chaleur n'a pas de mauvais effets connus sur la santé. De nombreuses études ont été menées sur les expositions aux RF faibles et n'ont découvert aucun effet biologique. Certaines études ont suggéré qu'il pouvait y avoir certains effets biologiques, mais ces résultats n'ont pas été confirmés par des recherches supplémentaires. HRF-2401 a été testé et jugé conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (FR) RSS-102 de l'IC.

# 4. Name and function of each part

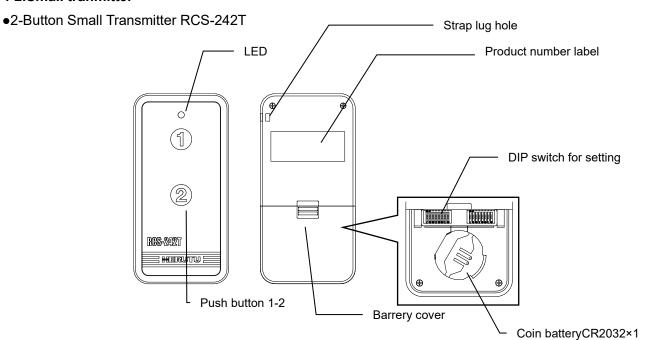
## 4-1.Transmitter



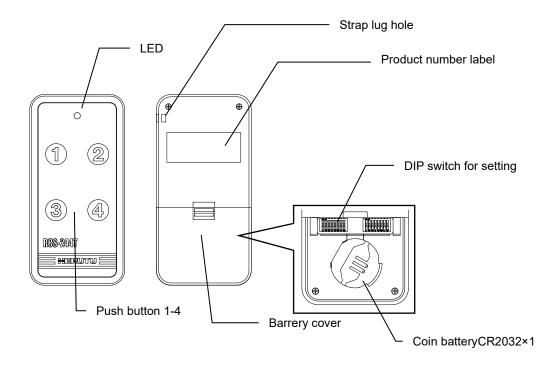
## •8-Button Transmitter RC-248T

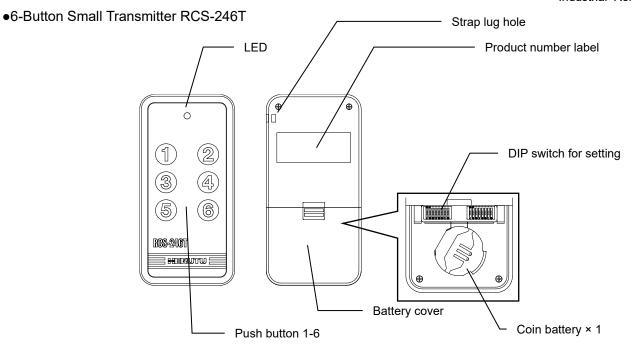


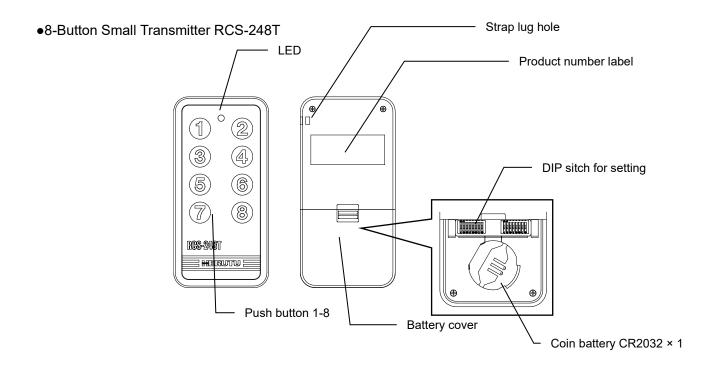
### 4-2.Small tranmitter



## •4-Button Small Transmitter RCS-244T

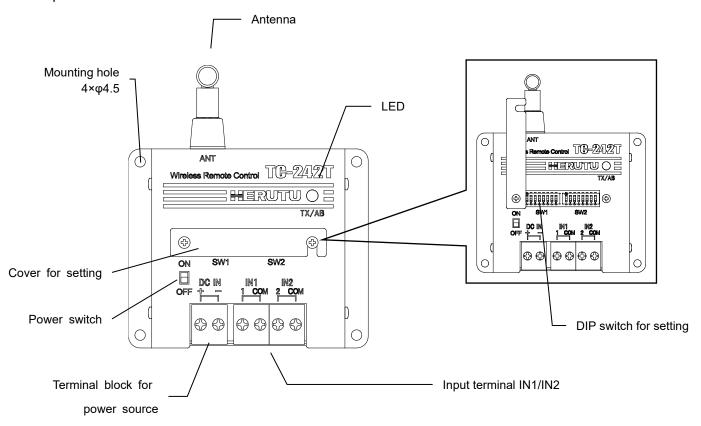




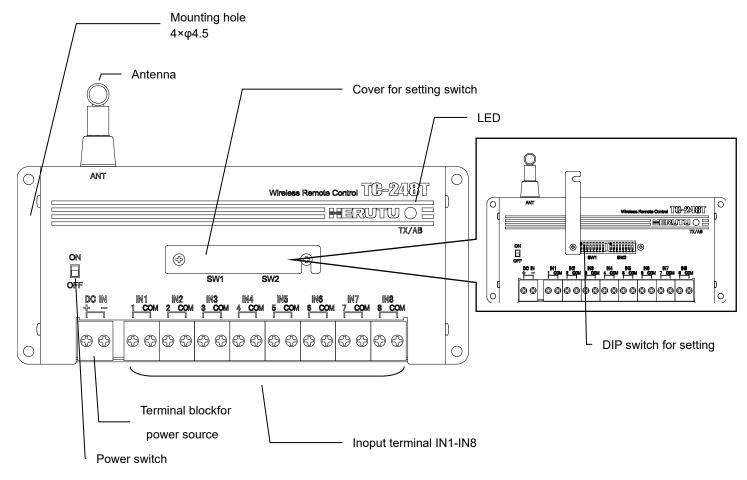


### 4-3. Contact transmitter

## •2-Input Contact Transmitter TC-242TF

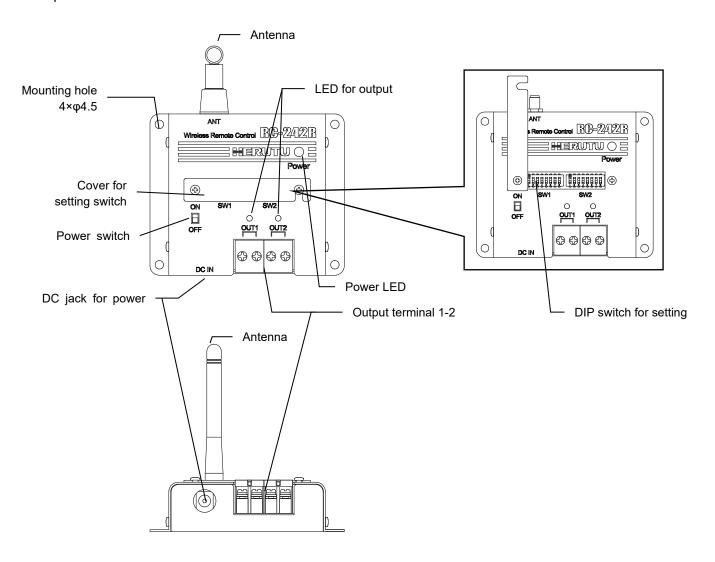


# •8-Input Contact Transmitter TC-248TF

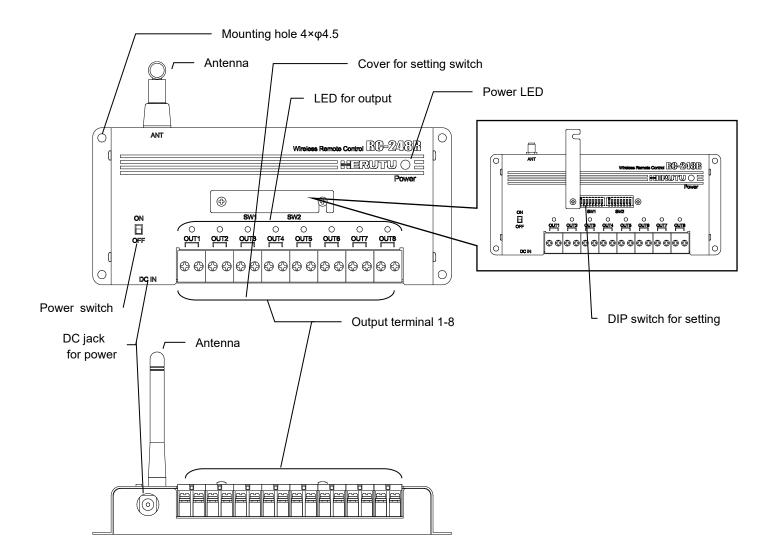


## 4-4.Receiver

# •2-Output Contact Receiver RC-242RF



# ●8-Output Contact Receiver RC-248RF



# 5. Changing a battery of transmitter

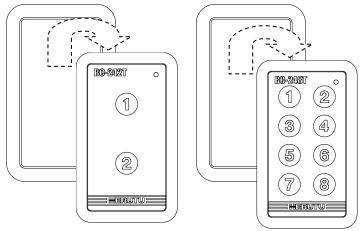
### 5-1.Transmitter

Transmitter(RC-242T and RC-248T) uses AAA type battery × 2pcs.

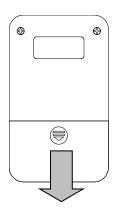
(Alkaline dry cell battery 2pcs is attached at the shipment)

When a push button is pushed if a battery becomes below fixed voltage, red LED will blink twice and a buzzer will also sound twice simultaneously, please exchange a new battery [ two ].

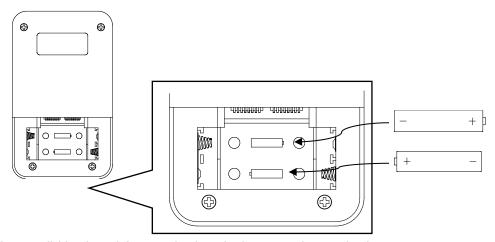
- Exchange way of a battery
- 1. A transmitter is removed from a cover and a battery lid on the back is removed.



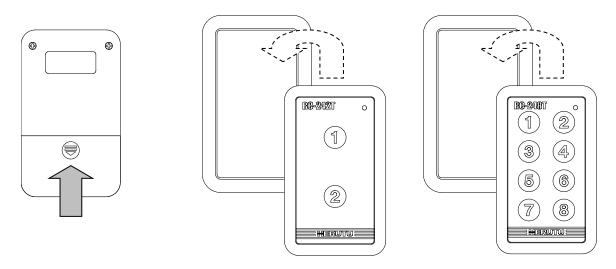
If it depresses downward, pushing mark partial ( ) of a battery lid lightly, a battery lid will separate.



2. A battery is put in to compensate for the polar display (-, +) of a battery case.



3. A battery lid is closed. An attached exclusive cover is attached.



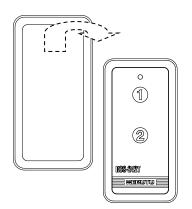
#### 5-2.Small transmitter

Small transmitter(RCS-242T/RCS-244T/RCS-246T/RCS-248T) use coin battery CR2032 × 1pc.

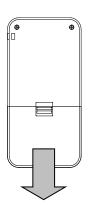
(Coin battery CR2032 is attached at the shipment)

When a push button is pushed if a battery becomes below fixed voltage, red LED will blink twice and a buzzer will also sound twice simultaneously, please exchange a new battery.

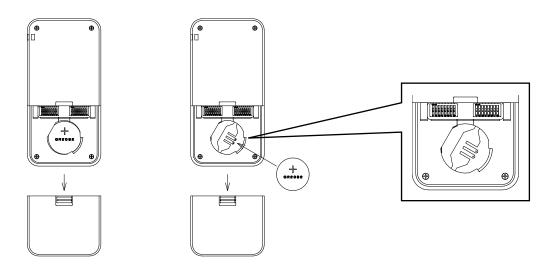
- Exchange way of a battery
- 1. A transmitter is removed from a cover and a battery lid on the back is removed.



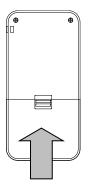
If it depresses downward, pushing a battery lid lightly, a battery lid will separate.

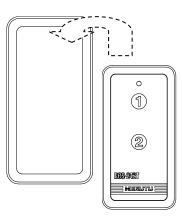


2. A battery is put in to compensate for the polar display (-, +) of a battery case.



3. A battery lid is closed. An attached exclusive cover is attached.





# 6. Installation the receiver

#### 6-1.Receiver

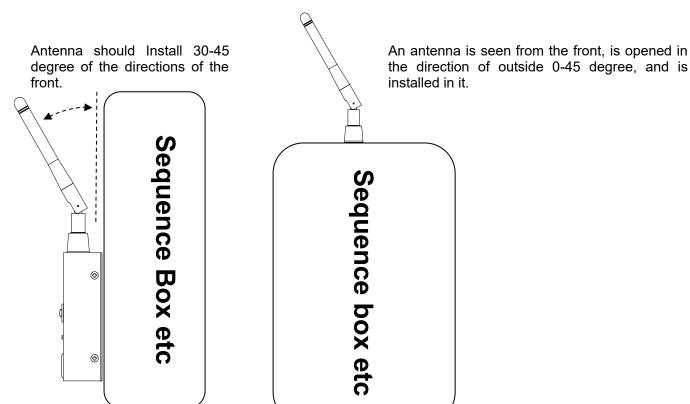
- ■Install this machine in the place where it can be easily viewed from the Transmitter and also an electric wave can be stably received.
- Set the antenna so that it is not parallel to the metal plates and keep away it from metal plates as far as possible.
- Feed the stable power supply (AC100V-240V) with less variation to AC adapter.
- ■Make a wiring for the output terminal block.

Output turns on with relay contact. Once output turns on, short-circuited condition is made between terminals.

Once the rated contact load is exceeded, inner circuit might be damaged. Use an extreme care.

Rated load voltage AC/DC30V per point
Rated load current 0.5A per point
Contact mechanism MOS-FET/1a
Terminal block:M3(2P/8P)

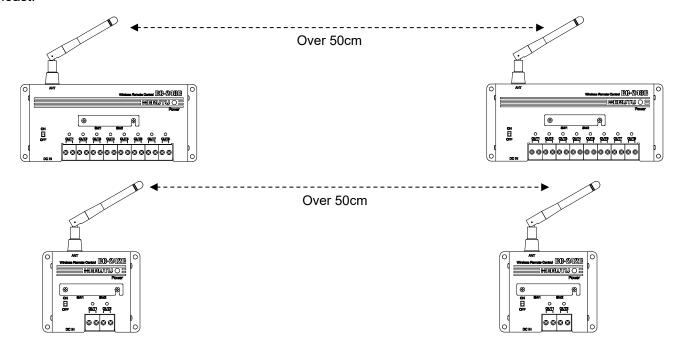
Antenna of a receiver should install that there is no obstacle in the circumference of an antenna.



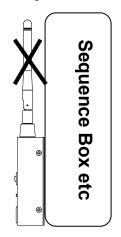
Please keep in mind that communication distance will become remarkably short if the antenna portion of a receiver is covered with a metal material. Also when you build a receiver in the case made of resin which does not contain a metal material, after checking that communication is possible, please have you install and make.

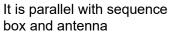
Moreover, building two or more sets in one operator control panel etc. should avoid.

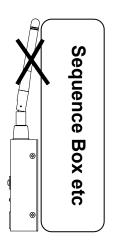
Also in case of setting installation 2 receivers for parallel, it should install separately over 50cm from each antenna at least.



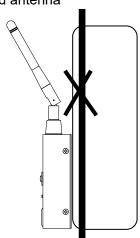
Please do not set the following installation.







It is touched antenna with sequence box.



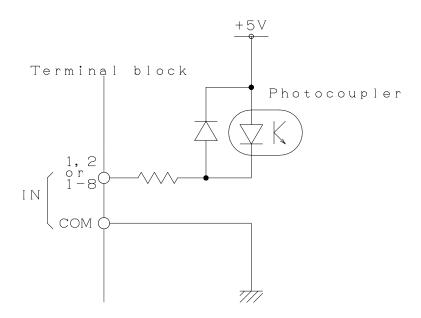
It is installed bear power line.

#### 6-2.Contact transmitter

- ■Install this machine in the place where it can be easily viewed from the Transmitter and also an electric wave can be stably received.
- ■Set the antenna so that it is not parallel to the metal plates and keep away it from metal plates as far as possible.
- Feed the stable power supply (DC12-24) with less variation to power input terminal block. (Terminal block M3, 2P).
- Make a wiring for the input terminal block. (Terminal block M3, 2P/8P)
- \*Please connect to an input terminal stand the non-voltage point of contact which "DC5V/20mA" can stabilize for which and turn on and off.

Please input the input signal as 50 ms or more. Moreover, the next signal input should end 200 ms or more, after the last signal is come by off.

## [Input circuit]



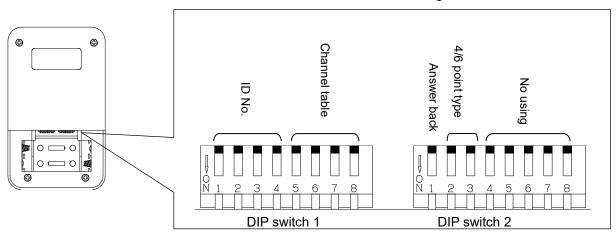
# 7.Setting

It needs to make some settings to a receiver and a transmitter before using. It is set by DIP switch of a receiver and a transmitter. When you change a setting, please turn off a power supply. A setup is not changed with the power supply ON.

## 7-1. Setting item of a transmitter

◆Transmitter RC-242T/RC-248T

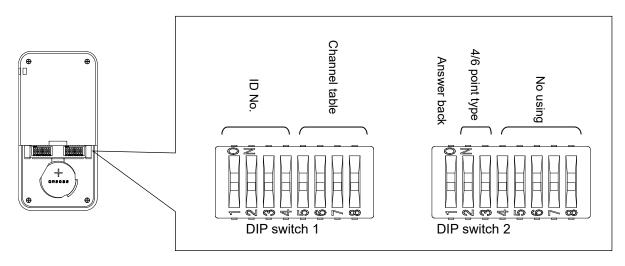
RC-242T/RC-248T DIP switch for setting



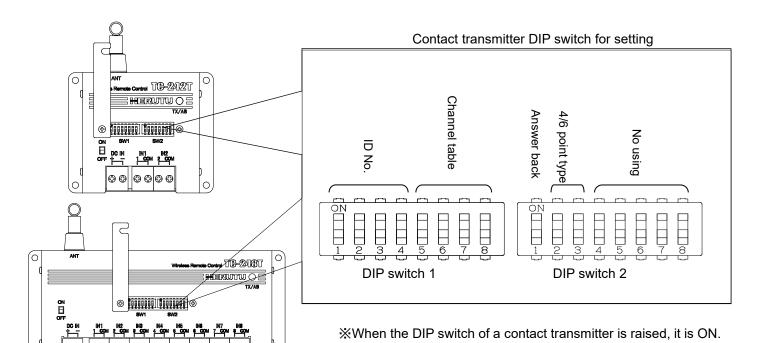
\*When the DIP switch of a transmitter is lowered, it is ON.

•Small transmitter RCS-242T/RCS-244T/RCS-246T/RCS-248T

RCS-242T/RCS-244T/RCS-246T/RCS-248T DIP switch for setting



\*When the DIP switch of a small transmitter is raised, it is ON.



#### ■ID Number

ID number can set either 1-16.

When you use with [1 transmitter pair 1 receiver] [1 transmitter pair N receivers], please set same ID number with receiver. When you use with [N transmitters pair N receivers], the output terminal number(out1-out8) is assingned by ID number.

### [Setting-transmitter]

| ID<br>Number | DIP switch 1<br>1-4 |     |     |     | ID<br>Number |     | DIP sv | vitch 1<br>-4 |     |
|--------------|---------------------|-----|-----|-----|--------------|-----|--------|---------------|-----|
| 1            | ON                  | OFF | OFF | OFF | 9            | ON  | OFF    | OFF           | ON  |
| 2            | OFF                 | ON  | OFF | OFF | 10           | OFF | ON     | OFF           | ON  |
| 3            | ON                  | ON  | OFF | OFF | 11           | ON  | ON     | OFF           | ON  |
| 4            | OFF                 | OFF | ON  | OFF | 12           | OFF | OFF    | ON            | ON  |
| 5            | ON                  | OFF | ON  | OFF | 13           | ON  | OFF    | ON            | ON  |
| 6            | OFF                 | ON  | ON  | OFF | 14           | OFF | ON     | ON            | ON  |
| 7            | ON                  | ON  | ON  | OFF | 15           | ON  | ON     | ON            | ON  |
| 8            | OFF                 | OFF | OFF | ON  | 16           | OFF | OFF    | OFF           | OFF |

### <Caution>

When you set up a DIP switch, please use the minus type of a precision driver, etc.

DIP switches are the parts which break easily because of a small type.

Please keep in mind that there is fear of breakage if it works by applying power by force.

### Factory setting

ID number is set as "1" in the case of no direction.

#### ■Channel table

Channel table can set either 1-16.

4 frequency is assigned to one channel table, respectively. A transmitter and a receiver communicate by making auto select at any time from 4 frequency in a channel table.

When you use with [1 transmitter pair 1 receiver] [N transmitters pair 1 receiver] [1 transmitter pair N receivers], please set same channel table with a transmitter and a receiver.

## [Setting-transmitter]

| ID<br>Number | DIP switch 1<br>5-8 |     |     |     | ID<br>Number |     | DIP sv<br>5- | vitch 1<br>-8 |     |
|--------------|---------------------|-----|-----|-----|--------------|-----|--------------|---------------|-----|
| 1            | ON                  |     |     |     |              | ON  | OFF          | OFF           | ON  |
| 2            | OFF                 | ON  | OFF | OFF | 10           | OFF | ON           | OFF           | ON  |
| 3            | ON                  | ON  | OFF | OFF | 11           | ON  | ON           | OFF           | ON  |
| 4            | OFF                 | OFF | ON  | OFF | 12           | OFF | OFF          | ON            | ON  |
| 5            | ON                  | OFF | ON  | OFF | 13           | ON  | OFF          | ON            | ON  |
| 6            | OFF                 | ON  | ON  | OFF | 14           | OFF | ON           | ON            | ON  |
| 7            | ON                  | ON  | ON  | OFF | 15           | ON  | ON           | ON            | ON  |
| 8            | OFF                 | OFF | OFF | ON  | 16           | OFF | OFF          | OFF           | OFF |

### Factory setting

Channel table is set as "1" in the case of no direction.

#### ■Answer Back

Communication either the two-way communication specification which can receive the answer back from a receiver or specification for one of the two which does not receive the answer back from a receiver can be set up. In the situation which cannot carry out the check of the operation of a receiver directly to operation of a transmitter, a communication check can be performed in the LED lighting situation of a transmitter by carrying out the answer back to "ON" setup.

## [Setting-transmitter]

| Answer back            | DIP switch 2 |
|------------------------|--------------|
| With<br>Answer back    | ON           |
| Without<br>answer back | OFF          |

### Factory setting

Answer back is set as "Without answer back" in the case of no direction.

# Caution

When you use [1 transmitter pair N receivers], please set as "Without answer back"

# ■4/6 point type setting

Since this setting is set up at the time of shipment, it does not have to make a setting change of a customer. When a setting is changed by mistake, please have a look as an object for a check.

# [Setting- transmitter]

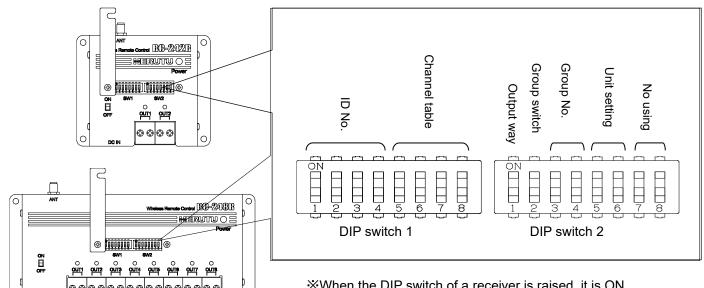
| 4 point/6 point type | DIP switch 2<br>2 | DIP switch 2<br>3 |
|----------------------|-------------------|-------------------|
| 4 point type         | ON                | OFF               |
| 6 point type         | OFF               | ON                |

# Factory setting

It is set up when shipping as 4 point type transmitter (RCS-244T) and 6 point type transmitter (RCS-246T). When shipping as 2 point type / 8 point type, it is set to OFF/OFF.

### 7-2. Setting item of a receiver

### Receiver DIP switch for setting



\*When the DIP switch of a receiver is raised, it is ON.

#### ■ID Number

ID number can set either 1-16.

When you use with [1 transmitter pair 1 receiver] [1 transmitter pair N receivers], please set same ID number with transmitter. When you use with [N transmitters pair N receivers], the output terminal number (out1-out8) is assingned by ID number.

### [Setting-transmitter]

| ID<br>Number | DIP switch 1<br>1-4 |     |     |     | ID<br>Number |     | DIP sv<br>1- | vitch 1<br>-4 |     |
|--------------|---------------------|-----|-----|-----|--------------|-----|--------------|---------------|-----|
| 1            | ON                  | OFF | OFF | OFF | 9            | ON  | OFF          | OFF           | ON  |
| 2            | OFF                 | ON  | OFF | OFF | 10           | OFF | ON           | OFF           | ON  |
| 3            | ON                  | ON  | OFF | OFF | 11           | ON  | ON           | OFF           | ON  |
| 4            | OFF                 | OFF | ON  | OFF | 12           | OFF | OFF          | ON            | ON  |
| 5            | ON                  | OFF | ON  | OFF | 13           | ON  | OFF          | ON            | ON  |
| 6            | OFF                 | ON  | ON  | OFF | 14           | OFF | ON           | ON            | ON  |
| 7            | ON                  | ON  | ON  | OFF | 15           | ON  | ON           | ON            | ON  |
| 8            | OFF                 | OFF | OFF | ON  | 16           | OFF | OFF          | OFF           | OFF |

# <Caution>

When you set up a DIP switch, please use the minus type of a precision driver, etc.

DIP switches are the parts which break easily because of a small type.

Please keep in mind that there is fear of breakage if it works by applying power by force.

### Factory setting

ID number is set as "1" in the case of no direction.

#### ■Channel table

Channel table can set either 1-16.

4 frequency is assigned to one channel table, respectively. A transmitter and a receiver communicate by making auto select at any time from 4 frequency in a channel table.

When you use with [1 transmitter pair 1 receiver] [N transmitters pair 1 receiver] [1 transmitter pair N receivers], please set same channel table with a transmitter and a receiver.

# [Setting-transmitter]

| ID<br>Number | DIP switch 1<br>5-8 |     |     |     | ID<br>Number |     | DIP sv<br>5- | vitch 1<br>-8 |     |
|--------------|---------------------|-----|-----|-----|--------------|-----|--------------|---------------|-----|
| 1            | ON                  |     |     |     |              | ON  | OFF          | OFF           | ON  |
| 2            | OFF                 | ON  | OFF | OFF | 10           | OFF | ON           | OFF           | ON  |
| 3            | ON                  | ON  | OFF | OFF | 11           | ON  | ON           | OFF           | ON  |
| 4            | OFF                 | OFF | ON  | OFF | 12           | OFF | OFF          | ON            | ON  |
| 5            | ON                  | OFF | ON  | OFF | 13           | ON  | OFF          | ON            | ON  |
| 6            | OFF                 | ON  | ON  | OFF | 14           | OFF | ON           | ON            | ON  |
| 7            | ON                  | ON  | ON  | OFF | 15           | ON  | ON           | ON            | ON  |
| 8            | OFF                 | OFF | OFF | ON  | 16           | OFF | OFF          | OFF           | OFF |

# Factory setting

Channel table is set as "1" in the case of no direction.

## ■Output way

Output way of a receiver can set either "Through" or "Latch".

Output way is set by DIP switch.

# [Setting-transmitter]

| Output way     | DIP switch 2 |
|----------------|--------------|
| Through output | ON           |
| Latch output   | OFF          |

# Factory setting

Output way is set as "Latch output" in the case of no direction.

### ■Group switch

When you use with [N transmitters pair 1 receiver], please set "ON" of this switch.

When you use with [1 transmitter pair 1 receiver] [1 transmitter pair N receivers], please set "OFF" of this switch.

## [Settinge - rceiver]

| Crown awitah     | DIP switch2 |  |
|------------------|-------------|--|
| Group switch     | 2           |  |
| Group switch ON  | ON          |  |
| Group switch OFF | OFF         |  |

# Factory setting

Group switch is set as "OFF" in the case of no direction.

## ■Group Number

When you use with [N transmitters pair 1 receiver], please set the group switch either 1-4

When you use with [1 transmitter pair 1 receiver] [1 transmitter pair N receivers], it doesn't need to set "Group number".

\*When you use "Group number" (in the case of N transmitters pair 1 receiver), please set "ON" for Group switch

## [Receiver - setting]

| Group No. | DIP switch 2<br>3 | DIP switch 2<br>4 |
|-----------|-------------------|-------------------|
| 1         | ON                | OFF               |
| 2         | OFF               | ON                |
| 3         | ON                | ON                |
| 4         | OFF               | OFF               |

¾\* In using output way with a latch output, a group number uses only "1" and "2.""3" and "4" is no using.

### Factory setting

Group number is invalid value, because Group switch is set as "OFF".

### ■Unit setting

When you use with [1 transmitter pair N receivers], please set the group switch either A-D By setting a unit setting, it is set up to which button (input) of a transmitter it corresponds.

Unit setting A: It corresponds to the buttons (input) 1 and 2 of a transmitter.

Unit setting B: It corresponds to the buttons (input) 3 and 4 of a transmitter.

Unit setting C: It corresponds to the buttons (input) 5 and 6 of a transmitter.

Unit setting D: It corresponds to the buttons (input) 7 and 8 of a transmitter.

\*When you use with [1 transmitter pair 1 receiver], please set "A" of Unit setting.

When you use "Unit setting" [1 transmitter pair N receivers], please set "OFF" of Group switch necessarily. If Group switch is "ON", Unit setting is invalid.

# [Setting - receiver]

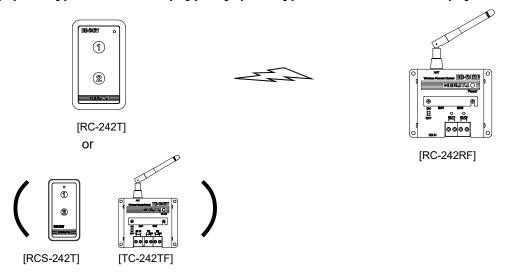
| Unit setting | DIP switch 2<br>5 | DIP switch 2<br>6 |
|--------------|-------------------|-------------------|
| А            | OFF               | OFF               |
| В            | ON                | OFF               |
| С            | OFF               | ON                |
| D            | ON                | ON                |

# Factory setting

Unit setting is set as "A" in the case of no direction.

# 7-3. Setting contents according to equipment configuration

# 7-3-1. [2 point type transmitter-1pc] pair [2 point type receiver RC-242RF-1pc]

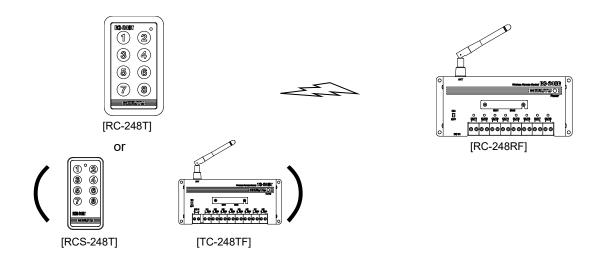


# Setting of transmitter

| DIP switch   |     | Setting Item         | 2 point type transmitter               |
|--------------|-----|----------------------|--|
|              | 4.4 | ID No.               | Setting either 1-16                    |
| DIP switch 1 | 1-4 |                      | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8 | Channel table        | Setting either 1-16                    |
|              | 3-6 |                      | Please set same setting as a receiver. |
| DIP switch 2 | 1   | Answer back          | ON:With Answer Back                    |
|              |     |                      | OFF: Without answer back               |
|              | 2-3 | 4 point/6 point type | ALL OFF                                |
|              | 4-8 | No using             | ALL OFF                                |

| DIP switch   |                 | Setting item  | Receiver RC-242RF                      |
|--------------|-----------------|---------------|--|
|              | 1-4             | ID No.        | Setting either 1-16                    |
| DIP switch 1 | 1 <del>-4</del> | ID No.        | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8             | Channel table | Setting either 1-16                    |
|              | 5-0             | Channel table | Please set same setting as a receiver. |
|              | 1               | Output way    | ON:Through output                      |
|              |                 |               | OFF: Latch output                      |
|              | 2               | Group switch  | OFF                                    |
| DIP switch 2 | 3               | O             | OFF                                    |
|              | 4               | Group number  | OFF                                    |
|              | 5-6             | Unit setting  | ALL OFF(A)                             |
|              | 7-8             | No using      | ALL OFF                                |

# 7-3-2. [8 point type transmitter -1pc] pair [8 point type receiver RC-248RF-1pc]

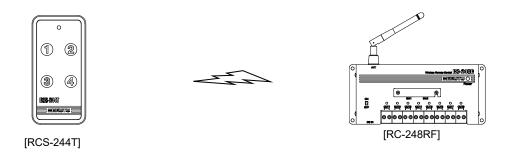


# Setting of transmitter

| DIP switch   |                   | Setting Item         | 8 point type transmitter               |
|--------------|-------------------|----------------------|--|
|              | 4 4               | ID No.               | Setting either 1-16                    |
| DIP switch 1 | 1-4               |                      | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8 Channel table | Setting either 1-16  |  |
|              |                   | Charmel table        | Please set same setting as a receiver. |
| DIP switch 2 | 1                 | Answer back          | ON:With Answer Back                    |
|              |                   |                      | OFF: Without answer back               |
|              | 2-3               | 4 point/6 point type | ALL OFF                                |
|              | 4-8               | No using             | ALL OFF                                |

| DIP switch   |     | Setting item      | Receiver RC-248RF                      |
|--------------|-----|-------------------|--|
|              | 1-4 | ID No.            | Setting either 1-16                    |
| DIP switch 1 | 1-4 | ID NO.            | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8 | Channel table     | Setting either 1-16                    |
|              | 5-0 | Channel table     | Please set same setting as a receiver. |
|              | 1   | Output way        | ON:Through output                      |
|              |     |                   | OFF: Latch output                      |
|              | 2   | Group switch      | OFF                                    |
| DIP switch 2 | 3   | Cuarra arranda au | OFF                                    |
|              | 4   | Group number      | OFF                                    |
|              | 5-6 | Unit setting      | ALL OFF(A)                             |
|              | 7-8 | No using          | ALL OFF                                |

# 7-3-3. [4 point type transmitter RCS-244T-1pc] pair [8 point type receiver RC-248RF-1pc]

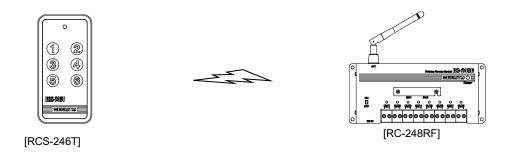


# Setting of transmitter

| DIP switch   |                 | Setting Item         | 4 point type transmitter               |
|--------------|-----------------|----------------------|--|
|              | 4 4             | ID No.               | Setting either 1-16                    |
| DIP switch 1 | 1-4             |                      | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8             | Channel table        | Setting either 1-16                    |
|              | 5-6             | Charmer table        | Please set same setting as a receiver. |
|              | 1               | Answer back          | ON:With Answer Back                    |
|              |                 |                      | OFF: Without answer back               |
| DIP switch 2 | 2-3 4 point/6 p | A maint/C maint town | Set the 4 point type(Factory setting)  |
|              |                 | 4 point/o point type | 2:ON/3:OFF                             |
|              | 4-8             | No using             | ALL OFF                                |

| DIP switch   |     | Setting item  | Receiver RC-248RF                      |
|--------------|-----|---------------|--|
|              | 4.4 | ID No.        | Setting either 1-16                    |
| DIP switch 1 | 1-4 | ID No.        | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8 | Channel table | Setting either 1-16                    |
|              | 5-6 | Channel table | Please set same setting as a receiver. |
|              | 1   | Output way    | ON:Through output                      |
|              |     |               | OFF: Latch output                      |
|              | 2   | Group switch  | OFF                                    |
| DIP switch 2 | 3   | Group number  | OFF                                    |
|              | 4   |               | OFF                                    |
|              | 5-6 | Unit setting  | ALL OFF(A)                             |
|              | 7-8 | No using      | ALL OFF                                |

# 7-3-4. [6 point type transmitter RCS-246T-1pc] pair [8 point type receiver RC-248RF-1pc]

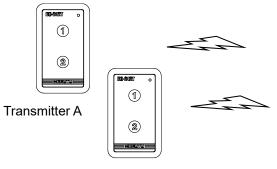


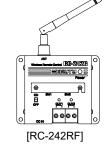
#### Setting of transmitter

| DIP switch   |     | Setting Item         | 6 point type transmitter               |
|--------------|-----|----------------------|--|
|              | 1-4 | ID No.               | Setting either 1-16                    |
| DIP switch 1 | 1-4 |                      | Please set same setting as a receiver. |
| DIF SWITCH 1 | 5-8 | Channel table        | Setting either 1-16                    |
|              | 5-6 | Charmer table        | Please set same setting as a receiver. |
|              | 1   | Answer back          | ON:With Answer Back                    |
|              |     |                      | OFF: Without answer back               |
| DIP switch 2 | 0.0 | 4 i +/0 i + +        | Set the 6 point type(Factory setting)  |
|              | 2-3 | 4 point/6 point type | 2:OFF/3:ON                             |
|              | 4-8 | No using             | ALL OFF                                |

| DIP switch   |     | Setting item       | Receiver RC-248RF                      |
|--------------|-----|--------------------|--|
|              | 4.4 | ID No.             | Setting either 1-16                    |
| DIP switch 1 | 1-4 | ID NO.             | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8 | Channel table      | Setting either 1-16                    |
|              | 5-0 | Channel table      | Please set same setting as a receiver. |
|              | 1   | Output way         | ON:Through output                      |
|              |     |                    | OFF: Latch output                      |
|              | 2   | Group switch       | OFF                                    |
| DIP switch 2 | 3   | Cravin revisals as | OFF                                    |
|              | 4   | Group number       | OFF                                    |
|              | 5-6 | Unit setting       | ALL OFF(A)                             |
|              | 7-8 | No using           | ALL OFF                                |

# 7-3-5. [2 point type transmitter -2pcs] pair [2 point type receiver RC-242RF-1pc] \*\*Only Latch

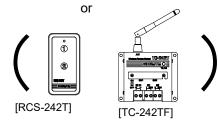




Transmitter A->Receiver OUT1 (Button1ON->Out1ON, Button2ON->Out1Off)

TransmitterB->Receiver OUT2 (Button1ON->Out2ON, Button2ON->Out2Off)

#### Transmitter B



#### Setting of transmitter

| DIP switch   |                   | Setting Item         | 2 point type transmitter                     |
|--------------|-------------------|----------------------|--|
|              | 4.4               | ID No.               | Please set corresponding to the group of the |
| DIP switch 1 | 1-4               |                      | receiver of an attached table.               |
| DIF SWILCH I | 5-8 Channel table | Setting either 1-16  |  |
|              |                   | Channel table        | Please set same setting as a receiver.       |
|              | 1                 | Answer back          | ON:With Answer Back                          |
| DIP switch 2 |                   |                      | OFF: Without answer back                     |
|              | 2-3               | 4 point/6 point type | ALL OFF                                      |
|              | 4-8               | No using             | ALL OFF                                      |

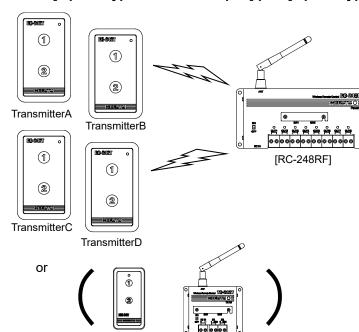
| DIP switch   |     | Setting item   | Receiver RC-242RF                          |
|--------------|-----|----------------|--|
|              | 1-4 | ID No.         | No using                                   |
| DIP switch 1 | 1-4 | ID NO.         | Setting contents is invalid                |
| DIF SWILCH I | 5-8 | Channel table  | Setting either 1-16                        |
|              | 5-0 | Chamilei table | Please set same setting as a receiver.     |
|              | 1   | Output way     | OFF: Latch output                          |
|              | 2   | Group switch   | ON   |
| DIP switch 2 | 3   |                | Please set "1" or "2"                      |
|              |     | Group number   | ※The ID number of a transmitter receivable |
|              | 4   |                | by a group number is determined.           |
|              | 5-6 | Unit setting   | ALL OFF(A)                                 |
|              | 7-8 | No using       | ALL OFF                                    |

Receiver-Group No.-Transmitter ID No.

| Group Number | Transmitter<br>ID number | Transmitter<br>Button | Receiver RC-242RF output |
|--------------|--------------------------|-----------------------|--------------------------|
| 1            | 1                        | 1                     | OUT1 ON                  |
| '            | ı                        | 2                     | OUT1 OFF                 |
| 1            | 2                        | 1                     | OUT2 ON                  |
| 1            | 2                        | 2                     | OUT2 OFF                 |
| 2            | 0                        | 1                     | OUT1 ON                  |
| 2            | 9                        | 2                     | OUT1 OFF                 |
| 2            | 10                       | 1                     | OUT2 ON                  |
|              |                          | 2                     | OUT2 OFF                 |

<sup>※</sup>In using output specification with a latch output, a group number uses only "1" and "2."
"3" and "4" is no using.

#### 7-3-6. [2 point type transmitter-4pcs] pair [8 point type receiver RC-248RF-1pc]



[TC-242TF]

■"Through setting"
TransmitterA->Receiver OUT1/OUT2
(Momentary output---Button1->OUT1/Button2->OUT2)
TransmitterB->Receiver OUT3/OUT4
(Momentary output---Button1->OUT3/Button2->OUT4)
TransmitterC->Receiver OUT5/OUT6
(Momentary output---Button1->OUT5/Button2->OUT6)
TransmitterD->Receiver OUT7/OUT8
(Momentary output---Button1->OUT7/Button2->OUT8)

※Please read next section about "Latch output"

#### Setting of transmitter

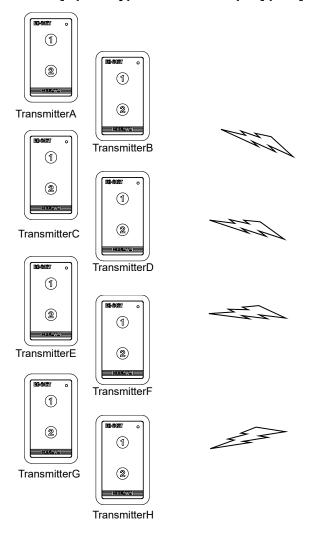
[RCS-242T]

| DIP switch   |                   | Setting Item         | 2 point type transmitter                     |
|--------------|-------------------|----------------------|--|
|              | 4.4               | ID No.               | Please set corresponding to the group of the |
| DIP switch 1 | 1-4               |                      | receiver of an attached table.               |
| DIF SWILCH I | 5-8 Channel table | Channal table        | Setting either 1-16                          |
|              |                   | Channel table        | Please set same setting as a receiver.       |
|              | 1                 | Answer back          | ON:With Answer Back                          |
| DIDitala 0   |                   |                      | OFF: Without answer back                     |
| DIP switch 2 | 2-3               | 4 point/6 point type | ALL OFF                                      |
|              | 4-8               | No using             | ALL OFF                                      |

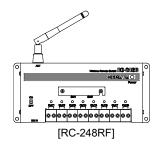
| DIP switch   |     | Setting item  | Receiver RC-248RF                           |
|--------------|-----|---------------|---|
|              | 4.4 | ID NI-        | No using                                    |
| DIP switch 1 | 1-4 | ID No.        | Setting contents is invalid                 |
| DIP SWILCH I | 5-8 | Channal table | Setting either 1-16                         |
|              | 5-0 | Channel table | Please set same setting as a receiver.      |
|              | 1   | Output way    | ON: Through output                          |
|              | 2   | Group switch  | ON  |
|              | 3   |               | Please set either 1-4                       |
| DIP switch 2 |     | Group number  | **The ID number of a transmitter receivable |
|              | 4   |               | by a group number is determined.            |
|              | 5-6 | Unit setting  | ALL OFF(A)                                  |
|              | 7-8 | No using      | ALL OFF                                     |

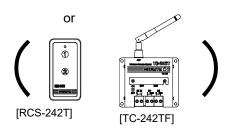
| Group Number | Transmitter | Transmitter | Receiver RC-248RF output |
|--------------|-------------|-------------|--------------------------|
| ·            | ID number   | Button      |                          |
| 1            | 1           | 1           | OUT1 ON                  |
| ·            | ·           | 2           | OUT2 ON                  |
| 1            | 2           | 1           | OUT3 ON                  |
| '            | 2           | 2           | OUT4 ON                  |
| 1            | 3           | 1           | OUT5 ON                  |
| 1            | 3           | 2           | OUT6 ON                  |
| 1            | 4           | 1           | OUT7 ON                  |
| 1            | 4           | 2           | OUT8 ON                  |
| 0            | -           | 1           | OUT1 ON                  |
| 2            | 5           | 2           | OUT2 ON                  |
|              |             | 1           | OUT3 ON                  |
| 2            | 6           | 2           | OUT4 ON                  |
|              | _           | 1           | OUT5 ON                  |
| 2            | 7           | 2           | OUT6 ON                  |
|              | 8           | 1           | OUT7 ON                  |
| 2            |             | 2           | OUT8 ON                  |
| 2            | 0           | 1           | OUT1 ON                  |
| 3            | 9           | 2           | OUT2 ON                  |
| 0            | 40          | 1           | OUT3 ON                  |
| 3            | 10          | 2           | OUT4 ON                  |
|              | 44          | 1           | OUT5 ON                  |
| 3            | 11          | 2           | OUT6 ON                  |
|              | 46          | 1           | OUT7 ON                  |
| 3            | 12          | 2           | OUT8 ON                  |
| 4            | 40          | 1           | OUT1 ON                  |
| 4            | 13          | 2           | OUT2 ON                  |
| 4            | 1.4         | 1           | OUT3 ON                  |
| 4            | 14          | 2           | OUT4 ON                  |
| 4            | 45          | 1           | OUT5 ON                  |
| 4            | 15          | 2           | OUT6 ON                  |
| 4            | 40          | 1           | OUT7 ON                  |
| 4            | 16          | 2           | OUT8 ON                  |

#### 7-3-7. [2 point type transmitter -8pcs] pair [8 point type receiver RC-248RF-1pc] ※Only Latch



■"Latch setting" TransmitterA->Receiver OUT1 (Button1ON->OUT1ON/Button2->OUT1OFF) TransmitterB->Receiver OUT2 (Button1ON->OUT2ON/Button2->OUT2OFF) TransmitterC->Receiver OUT3 (Button1ON->OUT3ON/Button2->OUT3OFF) TransmitterD->Receiver OUT4 (Button1ON->OUT4ON/Button2->OUT4OFF) TransmitterE->Receiver OUT5 (Button1ON->OUT5ON/Button2->OUT5OFF) TransmitterF->Receiver OUT6 (Button1ON->OUT6ON/Button2->OUT6OFF) TransmitterG->Receiver OUT7 (Button1ON->OUT7ON/Button2->OUT7OFF) TransmitterH->Receiver OUT8 (Button1ON->OUT8ON/Button2->OUT8OFF)





# Setting of transmitter

| DIP switch   |     | Setting Item         | 2 point type transmitter                     |  |                     |
|--------------|-----|----------------------|--|--|---------------------|
|              | 4.4 | ID No.               | Please set corresponding to the group of the |  |                     |
| DIP switch 1 | 1-4 |                      | receiver of an attached table.               |  |                     |
| DIP SWITCH 1 | 5-8 | 5-8 Channel table    | Channel table                                | Chammal table                          | Setting either 1-16 |
|              |     |                      |  | Please set same setting as a receiver. |                     |
|              | 1   | Answer back          | ON:With Answer Back                          |  |                     |
| DIP switch 2 | l   | Aliswei back         | OFF: Without answer back                     |  |                     |
| DIP SWITCH 2 | 2-3 | 4 point/6 point type | ALL OFF                                      |  |                     |
|              | 4-8 | No using             | ALL OFF                                      |  |                     |

| DIP switch   |     | Setting item  | Receiver RC-248RF                          |
|--------------|-----|---------------|--|
|              | 4.4 | ID Ma         | No using                                   |
| DIP switch 1 | 1-4 | ID No.        | Setting contents is invalid                |
| DIP SWITCH 1 | 5.0 | Channal table | Setting either 1-16                        |
|              | 5-8 | Channel table | Please set same setting as a receiver.     |
|              | 1   | Output way    | OFF: Latch output                          |
|              | 2   | Group switch  | ON   |
|              | 3   |               | Please set "1" or "2"                      |
| DIP switch 2 |     | Group number  | ※The ID number of a transmitter receivable |
|              | 4   |               | by a group number is determined.           |
|              | 5-6 | Unit setting  | ALL OFF(A)                                 |
|              | 7-8 | No using      | ALL OFF                                    |

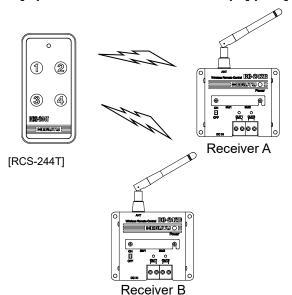
Receiver-Group No.-Transmitter ID No.

| Group Number | Transmitter<br>ID number | Transmitter<br>Button | Receiver RC-248RF output |
|--------------|--------------------------|-----------------------|--------------------------|
|              |                          | 1                     | OUT1 ON                  |
| 1            | 1                        | 2                     | OUT1 OFF                 |
|              |                          | 1                     | OUT2 ON                  |
| 1            | 2                        | 2                     | OUT2 OFF                 |
|              |                          | 1                     | OUT3 ON                  |
| 1            | 3                        | 2                     | OUT3 OFF                 |
|              |                          | 1                     | OUT4 ON                  |
| 1            | 4                        | 2                     | OUT4 OFF                 |
|              | _                        | 1                     | OUT5 ON                  |
| 1            | 5                        | 2                     | OUT5 OFF                 |
|              | _                        | 1                     | OUT6 ON                  |
| 1            | 6                        | 2                     | OUT6 OFF                 |
|              | _                        | 1                     | OUT7 ON                  |
| 1            | 7                        | 2                     | OUT7 OFF                 |
|              | 8 -                      | 1                     | OUT8 ON                  |
| 1            |                          | 2                     | OUT8 OFF                 |
|              |                          | 1                     | OUT1 ON                  |
| 2            | 9                        | 2                     | OUT1 OFF                 |
| 0            | 40                       | 1                     | OUT2 ON                  |
| 2            | 10                       | 2                     | OUT2 OFF                 |
| 0            | 44                       | 1                     | OUT3 ON                  |
| 2            | 11                       | 2                     | OUT3 OFF                 |
| 0            | 40                       | 1                     | OUT4 ON                  |
| 2            | 12                       | 2                     | OUT4 OFF                 |
| 0            | 40                       | 1                     | OUT5 ON                  |
| 2            | 13                       | 2                     | OUT5 OFF                 |
| 0            | 1.4                      | 1                     | OUT6 ON                  |
| 2            | 14                       | 2                     | OUT6 OFF                 |
| 2            | 45                       | 1)                    | OUT7 ON                  |
| 2            | 15                       | 2                     | OUT7 OFF                 |
| 0            | 16                       | 1)                    | OUT8 ON                  |
| 2            | 16                       | 2                     | OUT8 OFF                 |

XIn using output specification with a latch output, a group number uses only "1" and "2." and "2." xi and "2." xi and "2." xi and xi a

<sup>&</sup>quot;3" and "4" is no using.

#### 7-3-8.[4 point transmitter RCS-244T-1pc] pair [2 point receiver RC-242RF-2pcs]



#### ■Latch output

Button ①② of transmitter->Receiver A
(Button①->Out1/Out2 ON, Button②->Out1/Out2 OFF)
Button ③④ of transmitter->Receiver B
(Button③->Out1/Out2 ON, Button④->Out1/Out2 OFF)

#### ■Through output

Button ①② of transmitter->Receiver A
(Button①->Out1 ON,Button②->Out2 ON-Momentary)
Button ③④ of transmitter->Receiver B
(Button③->Out1 ON,Button④->Out2 ON-Momentary)

#### Setting of transmitter

| DIP switch   |                                       | Setting Item         | 2 point type transmitter               |
|--------------|---------------------------------------|----------------------|--|
|              | 1-4                                   |                      | Setting either 1-16                    |
| DIP switch 1 | 1-4                                   |                      | Please set same setting as a receiver. |
| DIP SWILCH I | 5-8                                   |                      | Setting either 1-16                    |
|              | 5-6 Charmer table                     |                      | Please set same setting as a receiver. |
|              | 1                                     | Answer back          | OFF: Without answer back               |
| DID quitab 2 | DIP switch 2 2-3 4 point/6 point type | 1 point/6 point type | Set 4 point type(Factory setting)      |
| DIP SWITCH 2 |                                       | 2:ON / 3:OFF         |  |
|              | 4-8                                   | No using             | ALL OFF                                |

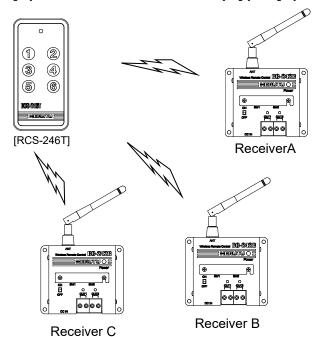
#### Setting of receiver

| DIP switch   |     | Setting item    | Receiver RC-242RF                      |
|--------------|-----|-----------------|--|
|              | 1-4 | ID No.          | Setting either 1-16                    |
| DIP switch 1 | 1-4 | ID NO.          | Please set same setting as a receiver. |
| DIF SWILCH I | 5-8 | Channel table   | Setting either 1-16                    |
|              | 5-0 | Charmer table   | Please set same setting as a receiver. |
|              | 1   | Output way      | ON: Through output                     |
|              | ı   | Output way      | OFF: Latch output                      |
|              | 2   | Group switch    | OFF                                    |
| DIP switch 2 | 3   | OFF             |  |
| DIF SWITCH 2 | 4   | Group number    | OFF                                    |
|              | 5-6 | -6 Unit setting | Receiver A -> Unit setting A           |
|              |     |                 | Receiver B -> Unit setting B           |
|              | 7-8 | No using        | ALL OFF                                |

#### Caution

When you use [1 transmitter pair N receivers], please set as "Without answer back"

#### 7-3-9.[6 point transmitter RCS-246T-1pc] pair [2 point receiver RC-242RF-3pcs]



#### ■Latch output

Button ①② of transmitter->Receiver A

(Button①->Out1/Out2 ON, Button②->Out1/Out2 OFF)

Button 34 of transmitter->Receiver B

(Button③->Out1/Out2 ON, Button④->Out1/Out2 OFF)

Button 56 of transmitter->Receiver C

(Button 5->Out1/Out2 ON, Button 6->Out1/Out2 OFF)

#### ■Through output

Button ①② of transmitter->Receiver A

(Button①->Out1 ON,Button②->Out2 ON-Momentary)

Button 34 of transmitter->Receiver B

(Button③->Out1 ON,Button④->Out2 ON-Momentary)

Button 56 of transmitter->Receiver C

(Button⑤->Out1 ON,Button⑥->Out2 ON-Momentary)

#### Setting of transmitter

| DIP switch    |     | Setting Item   | 2 point type transmitter               |  |     |                          |                      |                                   |
|---------------|-----|--|--|--|-----|--------------------------|----------------------|-----------------------------------|
|               | 1 1 | <ul><li>1-4 ID No.</li><li>5-8 Channel table</li></ul> | Setting either 1-16                    |  |     |                          |                      |                                   |
| DID quitab 1  | 1-4 |  | Please set same setting as a receiver. |  |     |                          |                      |                                   |
| DIP switch 1  | F 0 |  | Setting either 1-16                    |  |     |                          |                      |                                   |
|               | 5-0 |  | 5-8 Channel table                      | Please set same setting as a receiver. |     |                          |                      |                                   |
|               | 1   | Answer back  | OFF: Without answer back               |  |     |                          |                      |                                   |
| DID avvitab 0 | 0.0 | 2.2  | 2.2                                    | 2.2                                    | 2.2 | 2.2 4 point/6 point type | A maint/C maint toma | Set 6 point type(Factory setting) |
| DIP switch 2  | 2-3 | 2-3 4 point/6 point type                               | 2:OFF / 3:ON                           |  |     |                          |                      |                                   |
|               | 4-8 | No using   | ALL OFF                                |  |     |                          |                      |                                   |

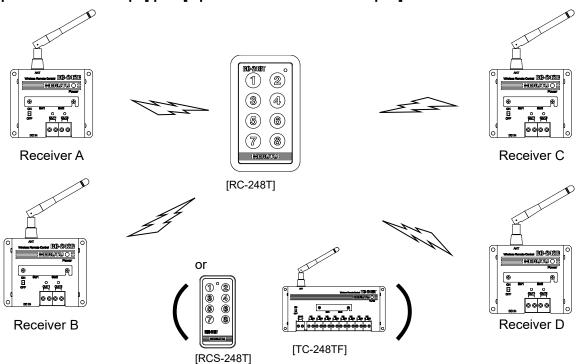
#### Setting of receiver

| DIP switch     |             | Setting item  | Receiver RC-242RF                      |
|----------------|-------------|---------------|--|
|                | 1-4         | ID No.        | Setting either 1-16                    |
| DID avvitate 4 | 1-4         | וטווטו.       | Please set same setting as a receiver. |
| DIP switch 1   | 5-8         | Channel table | Setting either 1-16                    |
|                | <b>3-</b> 0 | Channel table | Please set same setting as a receiver. |
|                | 4           | Output way    | ON: Through output                     |
|                | 1           | Output way    | OFF: Latch output                      |
|                | 2           | Group switch  | OFF                                    |
|                | 3           | Group number  | OFF                                    |
| DIP switch 2   | IP switch 2 |               | OFF                                    |
|                |             |               | Receiver A -> Unit setting A           |
|                | 5-6         | Unit setting  | Receiver B -> Unit setting B           |
|                |             |               | Receiver C -> Unit setting C           |
|                | 7-8         | No using      | ALL OFF                                |

#### Caution

When you use [1 transmitter pair N receivers], please set as "Without answer back"

#### 7-3-10.[8 point transmitter -1pc] pair [2 point receiver RC-242RF-4pcs]



#### ■Latch output

Button 12 of transmitter->Receiver A

(Button1)->Out1/Out2 ON, Button2)->Out1/Out2 OFF)

Button 34 of transmitter->Receiver B

(Button3->Out1/Out2 ON, Button4->Out1/Out2 OFF)

Button 56 of transmitter->Receiver C

(Button5->Out1/Out2 ON, Button6->Out1/Out2 OFF)

Button 78 of transmitter->Receiver D

(Button 7->Out1/Out2 ON, Button 8->Out1/Out2 OFF)

#### ■Through output

Button 12 of transmitter->Receiver A

(Button(1)->Out1 ON,Button(2)->Out2 ON-Momentary)

Button 34 of transmitter->Receiver B

(Button③->Out1 ON,Button④->Out2 ON-Momentary)

Button 56 of transmitter->Receiver C

(Button⑤->Out1 ON,Button⑥->Out2 ON-Momentary)

Button 78 of transmitter->Receiver D

(Button⑦->Out1 ON,Button®->Out2 ON-Momentary)

# Setting of transmitter

| DIP switch                   |     | Setting Item         | 8 point type transmitter               |
|------------------------------|-----|----------------------|--|
|                              | 4.4 | ID No. Channel table | Setting either 1-16                    |
| DID avsitals 4               | 1-4 |                      | Please set same setting as a receiver. |
| DIP switch 1                 | F 0 |                      | Setting either 1-16                    |
|                              | 5-8 |                      | Please set same setting as a receiver. |
|                              | 1   | Answer back          | OFF: Without answer back               |
| DIP switch 2 2-3 4 point/6 p |     | 4 point/6 point type | ALL OFF                                |
|                              | 4-8 | No using             | ALL OFF                                |

# Setting of receiver

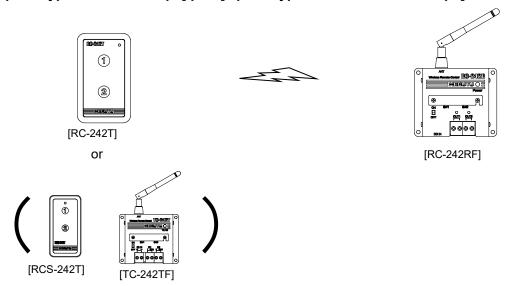
| DIP switch     |            | Setting item    | Receiver RC-242RF                      |
|----------------|------------|-----------------|--|
|                | 4.4        | ID N -          | Setting either 1-16                    |
| DID avvitate 4 | 1-4        | ID No.          | Please set same setting as a receiver. |
| DIP switch 1   | <i>-</i> 0 | Channal table   | Setting either 1-16                    |
|                | 5-8        | Channel table   | Please set same setting as a receiver. |
|                | 4          | Ott             | ON: Through output                     |
|                | 1          | Output way      | OFF: Latch output                      |
|                | 2          | Group switch    | OFF                                    |
| DIP switch 2   | 3          |                 | OFF                                    |
|                | 4          | Group number    | OFF                                    |
|                | 5-6 l      |                 | Receiver A -> Unit setting A           |
|                |            | l luit a attimu | Receiver B -> Unit setting B           |
|                |            | Unit setting    | Receiver C -> Unit setting C           |
|                |            |                 | Receiver D -> Unit setting D           |
|                | 7-8        | No using        | ALL OFF                                |

# **Caution**

When you use [1 transmitter pair N receivers], please set as "Without answer back"

# 8. Operation

# 8-1. [2 point type transmitter -1pc] pair [2 point type receiver RC-242RF-1pc]



# Operation of transmitter (Push button)

| Operation           | Transmitter operation  |                    |  |
|---------------------|--|--------------------|--|
| Operation           | Transmitter LED  | Transmitter Buzzer |  |
| Push the            | Red LED lights on 1 time at pushing button   | "D:"/4 4i          |  |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |  |

# Operation of transmitter (Contact input)

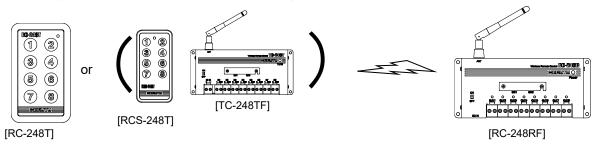
| Operation           | Transmitter operation  |
|---------------------|--|
| Operation           | Transmitter LED  |
| Push the            | Red LED lights on 1 time at input the signal   |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while input the signal after lighting on the above red led. |

# Operation of receiver "Latch output way"

| Operation                | Receiver operation  |                                 |
|--------------------------|---------------------|---------------------------------|
| Operation                | Relay output        | LED                             |
| Push ①button(Contact①ON) | OUT1/OUT2 ON(Latch) | OUT1/OUT2 LED(Red) lighting     |
| Push ②button(Contact②ON) | OUT1/OUT2 OFF       | OUT1/OUT2 LED(Red) lighting off |

| Operation                | Receiver operation                |                        |
|--------------------------|-----------------------------------|------------------------|
| Operation                | Relay output                      | LED                    |
| Push ①button(Contact①ON) | OUT1 ON(while pushing the button) | OUT1 LED(Red) lighting |
| Push ②button(Contact②ON) | OUT2 ON(while pushing the button) | OUT2 LED(Red) lighting |

# 8-2. [8 point type transmitter -1pc] pair [8 point type receiver RC-248RF-1pc]



# Operation of transmitter (Push button)

| Onevation                 | Transmitter operation  |                    |
|---------------------------|--|--------------------|
| Operation Transmitter LED |  | Transmitter Buzzer |
| Push the                  | Red LED lights on 1 time at pushing button   | "D:"/4 4i          |
| arbitrary<br>button       | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |

#### Operation of transmitter (Contact input)

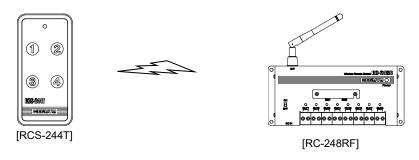
| Operation           | Transmitter operation  |  |
|---------------------|--|--|
| Operation           | Transmitter LED  |  |
| Push the            | Red LED lights on 1 time at input the signal   |  |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while input the signal after lighting on the above red led. |  |

#### Operation of receiver "Latch output way"

| Operation                | Receiver operation  |                                 |
|--------------------------|---------------------|---------------------------------|
| Operation                | Relay output        | LED                             |
| Push ①button(Contact①ON) | OUT1/OUT2 ON(Latch) | OUT1/OUT2 LED(Red) lighting     |
| Push ②button(Contact②ON) | OUT1/OUT2 OFF       | OUT1/OUT2 LED(Red) lighting off |
| Push ③button(Contact③ON) | OUT3/OUT4 ON(Latch) | OUT3/OUT4 LED(Red) lighting     |
| Push 4button(Contact4ON) | OUT3/OUT4 OFF       | OUT3/OUT4 LED(Red) lighting off |
| Push ⑤button(Contact⑤ON) | OUT5/OUT6 ON(Latch) | OUT5/OUT6 LED(Red) lighting     |
| Push 6button(Contact6ON) | OUT5/OUT6 OFF       | OUT5/OUT6 LED(Red) lighting off |
| Push ⑦button(Contact⑦ON) | OUT7/OUT8 ON(Latch) | OUT7/OUT8 LED(Red) lighting     |
| Push ®button(Contact®ON) | OUT7/OUT8 OFF       | OUT7/OUT8 LED(Red) lighting off |

|                          | . ,                               |                        |
|--------------------------|-----------------------------------|------------------------|
| Operation                | Receiver operation                |                        |
| Operation                | Relay output                      | LED                    |
| Push ①button(Contact①ON) | OUT1 ON(while pushing the button) | OUT1 LED(Red) lighting |
| Push ②button(Contact②ON) | OUT2 ON(while pushing the button) | OUT2 LED(Red) lighting |
| Push ③button(Contact③ON) | OUT3 ON(while pushing the button) | OUT3 LED(Red) lighting |
| Push 4button(Contact4ON) | OUT4 ON(while pushing the button) | OUT4 LED(Red) lighting |
| Push ⑤button(Contact⑤ON) | OUT5 ON(while pushing the button) | OUT5 LED(Red) lighting |
| Push 6button(Contact6ON) | OUT6 ON(while pushing the button) | OUT6 LED(Red) lighting |
| Push ⑦button(Contact⑦ON) | OUT7 ON(while pushing the button) | OUT7 LED(Red) lighting |
| Push ®button(Contact®ON) | OUT8 ON(while pushing the button) | OUT8 LED(Red) lighting |

# 8-3. [4 point type transmitter RCS-244T-1pc] pair [8 point type receiver RC-248RF-1pc]



# Operation of transmitter (Push button)

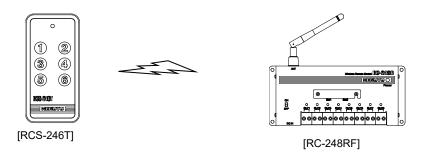
| Oneration                 | Transmitter operation  |                    |
|---------------------------|--|--------------------|
| Operation Transmitter LED |  | Transmitter Buzzer |
| Push the                  | Red LED lights on 1 time at pushing button   | "D:"/4 4i)         |
| arbitrary<br>button       | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |

# Operation of receiver "Latch output way"

| Operation                | Receiver operation  |                                 |
|--------------------------|---------------------|---------------------------------|
| Operation                | Relay output        | LED                             |
| Push ①button(Contact①ON) | OUT1/OUT2 ON(Latch) | OUT1/OUT2 LED(Red) lighting     |
| Push ②button(Contact②ON) | OUT1/OUT2 OFF       | OUT1/OUT2 LED(Red) lighting off |
| Push ③button(Contact③ON) | OUT3/OUT4 ON(Latch) | OUT3/OUT4 LED(Red) lighting     |
| Push 4button(Contact4ON) | OUT3/OUT4 OFF       | OUT3/OUT4 LED(Red) lighting off |

| Onomation                | Receiver operation                |                        |
|--------------------------|-----------------------------------|------------------------|
| Operation                | Relay output                      | LED                    |
| Push ①button(Contact①ON) | OUT1 ON(while pushing the button) | OUT1 LED(Red) lighting |
| Push ②button(Contact②ON) | OUT2 ON(while pushing the button) | OUT2 LED(Red) lighting |
| Push ③button(Contact③ON) | OUT3 ON(while pushing the button) | OUT3 LED(Red) lighting |
| Push 4button(Contact4ON) | OUT4 ON(while pushing the button) | OUT4 LED(Red) lighting |

# 8-4. [6 point type transmitter RCS-246T-1pc] pair [8 point type receiver RC-248RF-1pc]



# Operation of transmitter (Push button)

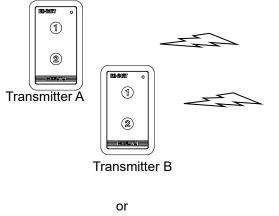
| Oneration                 | Transmitter operation  |                    |
|---------------------------|--|--------------------|
| Operation Transmitter LED |  | Transmitter Buzzer |
| Push the                  | Red LED lights on 1 time at pushing button   | "D:"/4 4i          |
| arbitrary<br>button       | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |

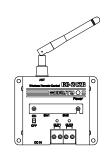
# Operation of receiver "Latch output way"

| Operation    | Receiver operation  |                                 |
|--------------|---------------------|---------------------------------|
| Operation    | Relay output        | LED                             |
| Push ①button | OUT1/OUT2 ON(Latch) | OUT1/OUT2 LED(Red) lighting     |
| Push ②button | OUT1/OUT2 OFF       | OUT1/OUT2 LED(Red) lighting off |
| Push ③button | OUT3/OUT4 ON(Latch) | OUT3/OUT4 LED(Red) lighting     |
| Push 4button | OUT3/OUT4 OFF       | OUT3/OUT4 LED(Red) lighting off |
| Push ⑤button | OUT5/OUT6 ON(Latch) | OUT5/OUT6 LED(Red) lighting     |
| Push ⑥button | OUT5/OUT6 OFF       | OUT5/OUT6 LED(Red) lighting off |

| On anation    | Receiver operation                |                     |
|---------------|-----------------------------------|---------------------|
| Operation     | Relay output                      | LED                 |
| Push ①button  | OUT1 ON(while pushing the button) | OUT1 (Red) lighting |
| Push ②button  | OUT2 ON(while pushing the button) | OUT2 (Red) lighting |
| Push ③button  | OUT3 ON(while pushing the button) | OUT3 (Red) lighting |
| Push 4 button | OUT4 ON(while pushing the button) | OUT4 (Red) lighting |
| Push ⑤button  | OUT5 ON(while pushing the button) | OUT5 (Red) lighting |
| Push ⑥button  | OUT6 ON(while pushing the button) | OUT6 (Red) lighting |

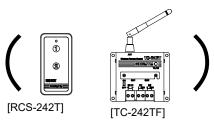
#### 8-5. [2 point type transmitter -2pc] pair [2 point type receiver RC-242RF-1pc] ※Only Latch





Transmitter A->Receiver OUT1 (Button1ON->Out1ON, Button2ON->Out1Off)

Transmitter B->Receiver OUT2 (Button1ON->Out2ON, Button2ON->Out2Off)



#### Operation of transmitter (Push button)

| Operation           | Transmitter operation  |                    |
|---------------------|--|--------------------|
| Operation           | Transmitter LED  | Transmitter Buzzer |
| Push the            | Red LED lights on 1 time at pushing button   | 2D:2/4 Aires       |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |

#### Operation of transmitter (Contact input)

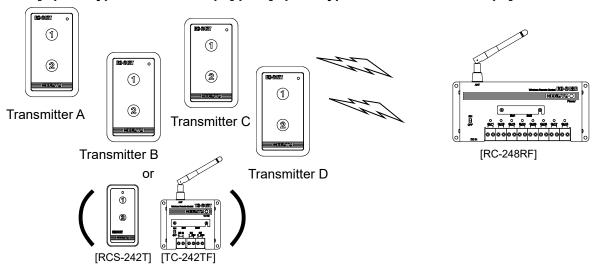
| Operation           | Transmitter operation  |
|---------------------|--|
| Operation           | Transmitter LED  |
| Push the            | Red LED lights on 1 time at input the signal   |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while input the signal after lighting on the above red led. |

#### Operation of receiver "Latch output way"

| Operation                              | Receiver operation |                            |
|--|--------------------|----------------------------|
| Operation                              | Relay output       | LED                        |
| Transmitter A Push ①button(Contact①ON) | OUT1 ON(Latch)     | OUT1 LED(Red) lighting     |
| Transmitter A Push ②button(Contact②ON) | OUT1 OFF           | OUT1 LED(Red) lighting off |
| Transmitter B Push ①button(Contact①ON) | OUT2 ON(Latch)     | OUT2 LED(Red) lighting     |
| Transmitter B Push ②button(Contact②ON) | OUT2 OFF           | OUT2 LED(Red) lighting off |

\*When you use [N transmitters pair 1 receiver], If the button of two or more transmitters is pushed simultaneously, the receiver will not operate normally for interference. Please do not operate two or more transmitters simultaneously.

#### 8-6. [2 point type transmitter -4pc] pair [8 point type receiver RC-248RF-1pc]



#### Operation of transmitter (Push button)

| Operation           | Transmitter operation  |                    |
|---------------------|--|--------------------|
| Operation           | Transmitter LED  | Transmitter Buzzer |
| Push the            | Red LED lights on 1 time at pushing button   | "D"/4 (')          |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |

#### Operation of transmitter (Contact input)

| Operation           | Transmitter operation  |
|---------------------|--|
| Operation           | Transmitter LED  |
| Push the            | Red LED lights on 1 time at input the signal   |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while input the signal after lighting on the above red led. |

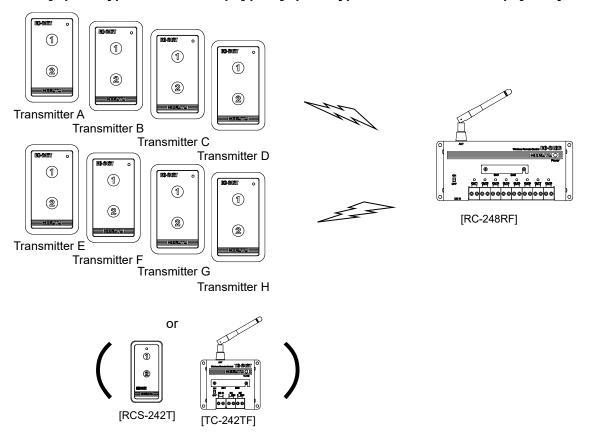
#### Operation of receiver "Latch output way"

| Operation                              | Receiver operation                |                        |
|--|-----------------------------------|------------------------|
| Operation                              | Relay output                      | LED                    |
| Transmitter A Push ①button(Contact①ON) | OUT1 ON(while pushing the button) | OUT1 LED(Red) lighting |
| Transmitter A Push ②button(Contact②ON) | OUT2 ON(while pushing the button) | OUT2 LED(Red) lighting |
| Transmitter B Push ①button(Contact①ON) | OUT3 ON(while pushing the button) | OUT3 LED(Red) lighting |
| Transmitter B Push ②button(Contact②ON) | OUT4 ON(while pushing the button) | OUT4 LED(Red) lighting |
| Transmitter C Push ①button(Contact①ON) | OUT5 ON(while pushing the button) | OUT5 LED(Red) lighting |
| Transmitter C Push ②button(Contact②ON) | OUT6 ON(while pushing the button) | OUT6 LED(Red) lighting |
| Transmitter D Push ①button(Contact①ON) | OUT7 ON(while pushing the button) | OUT7 LED(Red) lighting |
| Transmitter D Push ②button(Contact②ON) | OUT8 ON(while pushing the button) | OUT8 LED(Red) lighting |

<sup>※</sup>Please read next section about "Latch output"

\*When you use [N transmitters pair 1 receiver], If the button of two or more transmitters is pushed simultaneously, the receiver will not operate normally for interference. Please do not operate two or more transmitters simultaneously.

# 8-7. [2 point type transmitter -8pc] pair [8 point type receiver RC-248RF-1pc] Only Latch



#### Operation of transmitter (Push button)

| Onevetien           | Transmitter operation  |                    |
|---------------------|--|--------------------|
| Operation           | Transmitter LED  | Transmitter Buzzer |
| Push the            | Red LED lights on 1 time at pushing button   | "D:"/4 4i          |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |

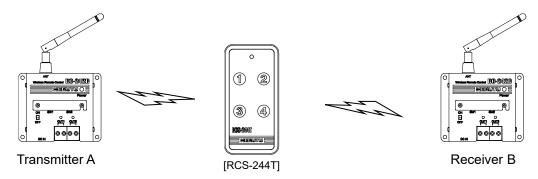
# Operation of transmitter (Contact input)

| Onevetien           | Transmitter operation  |
|---------------------|--|
| Operation           | Transmitter LED  |
| Push the            | Red LED lights on 1 time at input the signal   |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while input the signal after lighting on the above red led. |

| Operation                              | Receiver operation |                            |
|--|--------------------|----------------------------|
| Operation                              | Relay output       | LED                        |
| Transmitter A Push ①button(Contact①ON) | OUT1 ON(Latch)     | OUT1 LED(Red) lighting     |
| Transmitter A Push ②button(Contact②ON) | OUT1 OFF           | OUT1 LED(Red) lighting off |
| Transmitter B Push ①button(Contact①ON) | OUT2 ON(Latch)     | OUT2 LED(Red) lighting     |
| Transmitter B Push ②button(Contact②ON) | OUT2 OFF           | OUT2 LED(Red) lighting off |
| Transmitter C Push ①button(Contact①ON) | OUT3 ON(Latch)     | OUT3 LED(Red) lighting     |
| Transmitter C Push ②button(Contact②ON) | OUT3 OFF           | OUT3 LED(Red) lighting off |
| Transmitter D Push ①button(Contact①ON) | OUT4 ON(Latch)     | OUT4 LED(Red) lighting     |
| Transmitter D Push ②button(Contact②ON) | OUT4 OFF           | OUT4 LED(Red) lighting off |
| Transmitter E Push ①button(Contact①ON) | OUT5 ON(Latch)     | OUT5 LED(Red) lighting     |
| Transmitter E Push ②button(Contact②ON) | OUT5 OFF           | OUT5 LED(Red) lighting off |
| Transmitter F Push ①button(Contact①ON) | OUT6 ON(Latch)     | OUT6 LED(Red) lighting     |
| Transmitter F Push ②button(Contact②ON) | OUT6 OFF           | OUT6 LED(Red) lighting off |
| Transmitter G Push ①button(Contact①ON) | OUT7 ON(Latch)     | OUT7 LED(Red) lighting     |
| Transmitter G Push ②button(Contact②ON) | OUT7 OFF           | OUT7 LED(Red) lighting off |
| Transmitter H Push ①button(Contact①ON) | OUT8 ON(Latch)     | OUT8 LED(Red) lighting     |
| Transmitter H Push ②button(Contact②ON) | OUT8 OFF           | OUT8 LED(Red) lighting off |

<sup>\*</sup>When you use [N transmitters pair 1 receiver], If the button of two or more transmitters is pushed simultaneously, the receiver will not operate normally for interference. Please do not operate two or more transmitters simultaneously.

# 8-8. [4 point type transmitter RCS-244T-1pc] pair [2 point type receiver RC-242RF-2pc]



#### Operation of transmitter

| Onevation           | Transmitter operation  |                    |
|---------------------|--|--------------------|
| Operation           | Transmitter LED  | Transmitter Buzzer |
| Push the            | Red LED lights on 1 time at pushing button   | "D:"/4 4i          |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |

#### Operation of receiver "Latch output way"

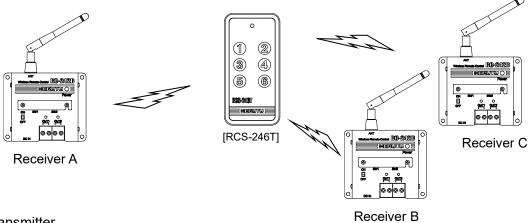
| Onevation    | Receiver operation             |  |
|--------------|--------------------------------|--|
| Operation    | Relay output                   | LED  |
| Push ①button | Receiver A OUT1/OUT2 ON(Latch) | Receiver A OUT1/OUT2 LED(Red) lighting     |
| Push ②button | Receiver A OUT1/OUT2 OFF       | Receiver A OUT1/OUT2 LED(Red) lighting off |
| Push ③button | Receiver B OUT1/OUT2 ON(Latch) | Receiver B OUT1/OUT2 LED(Red) lighting     |
| Push ④button | Receiver B OUT1/OUT2 OFF       | Receiver B OUT1/OUT2 LED(Red) lighting off |

# Operation of receiver "Through output way"

| 0            | Receiver operation                           |                                |  |
|--------------|--|--------------------------------|--|
| Operation    | Relay output                                 | LED                            |  |
| Push ①button | Receiver A OUT1 ON(while pushing the button) | Receiver A OUT1 (Red) lighting |  |
| Push ②button | Receiver A OUT2 ON(while pushing the button) | Receiver A OUT2 (Red) lighting |  |
| Push ③button | Receiver B OUT1 ON(while pushing the button) | Receiver B OUT1 (Red) lighting |  |
| Push ④button | Receiver B OUT2 ON(while pushing the button) | Receiver B OUT2 (Red) lighting |  |

When you use [1 transmitter pair N receivers], it can not be used "Answer back" because of setting "OFF" for answer back setting.

# 8-9. [6 point type transmitter RCS-246T-1pc] pair [2 point type receiver RC-242RF-3pc]



#### Operation of transmitter

| Operation           | Transmitter operation  |                    |  |
|---------------------|--|--------------------|--|
| Operation           | Transmitter LED  | Transmitter Buzzer |  |
| Push the            | Red LED lights on 1 time at pushing button   | "D:"/4 4: )        |  |
| arbitrary<br>button | When "Answer back" set ON, if communication is OK, Green LED lights on while pushing the button after lighting on the above red led. | "Pi"(1 time)       |  |

#### Operation of receiver "Latch output way"

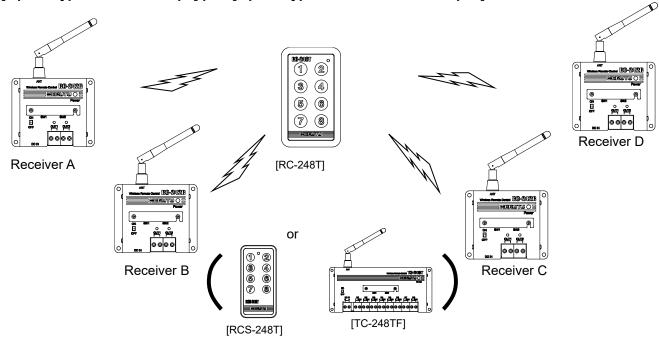
| Operation    | Receiver operation             |  |  |
|--------------|--------------------------------|--|--|
| Operation    | Relay output                   | LED  |  |
| Push ①button | Receiver A OUT1/OUT2 ON(Latch) | Receiver A OUT1/OUT2 LED(Red) lighting     |  |
| Push ②button | Receiver A OUT1/OUT2 OFF       | Receiver A OUT1/OUT2 LED(Red) lighting off |  |
| Push ③button | Receiver B OUT1/OUT2 ON(Latch) | Receiver B OUT1/OUT2 LED(Red) lighting     |  |
| Push ④button | Receiver B OUT1/OUT2 OFF       | Receiver B OUT1/OUT2 LED(Red) lighting off |  |
| Push ⑤button | Receiver C OUT1/OUT2 ON(Latch) | Receiver C OUT1/OUT2 LED(Red) lighting     |  |
| Push ⑥button | Receiver C OUT1/OUT2 OFF       | Receiver C OUT1/OUT2 LED(Red) lighting off |  |

# Operation of receiver "Through output way"

| Out and the se | Receiver operation                           |                                   |  |
|----------------|--|-----------------------------------|--|
| Operation      | Relay output                                 | LED                               |  |
| Push ①button   | Receiver A OUT1 ON(while pushing the button) | Receiver A<br>OUT1 (Red) lighting |  |
| Push ②button   | Receiver A OUT2 ON(while pushing the button) | Receiver A<br>OUT2 (Red) lighting |  |
| Push ③button   | Receiver B OUT1 ON(while pushing the button) | Receiver B OUT1 (Red) lighting    |  |
| Push ④button   | Receiver B OUT2 ON(while pushing the button) | Receiver B<br>OUT2 (Red) lighting |  |
| Push ⑤button   | Receiver C OUT1 ON(while pushing the button) | Receiver C<br>OUT1 (Red) lighting |  |
| Push ⑥button   | Receiver C OUT2 ON(while pushing the button) | Receiver C<br>OUT2 (Red) lighting |  |

When you use [1 transmitter pair N receivers], it can not be used "Answer back" because of setting "OFF" for answer back setting.

# 8-10. [8 point type transmitter -1pc] pair [2 point type receiver RC-242RF-4pcs]



### Operation of transmitter (Push button)

| Operation                 | Transmitter operation                      |                    |
|---------------------------|--|--------------------|
| Operation                 | Transmitter LED                            | Transmitter Buzzer |
| Push the arbitrary button | Red LED lights on 1 time at pushing button | "Pi"(1 time)       |

# Operation of transmitter (Contact input)

| Oneration           | Transmitter operation                        |  |
|---------------------|--|--|
| Operation           | Transmitter LED                              |  |
| Push the            | Pad LED lights on 1 time at input the signal |  |
| arbitrary<br>button | Red LED lights on 1 time at input the signal |  |

# Operation of receiver "Latch output way"

| Operation    | Receiver operation   |  |  |
|--------------|--|--|--|
| Operation    | Relay output   | LED  |  |
| Push ①button | Receiver A Receiver A OUT1/OUT2 ON(Latch) OUT1/OUT2 LED(Red) light |  |  |
| Push ②button | Receiver A OUT1/OUT2 OFF   | Receiver A OUT1/OUT2 LED(Red) lighting off |  |
| Push ③button | Receiver B OUT1/OUT2 ON(Latch)                                     | Receiver B OUT1/OUT2 LED(Red) lighting     |  |
| Push ④button | Receiver B OUT1/OUT2 OFF   | Receiver B OUT1/OUT2 LED(Red) lighting off |  |
| Push ⑤button | Receiver C OUT1/OUT2 ON(Latch)                                     | Receiver C OUT1/OUT2 LED(Red) lighting     |  |
| Push ⑥button | Receiver C<br>OUT1/OUT2 OFF  | Receiver C OUT1/OUT2 LED(Red) lighting off |  |
| Push ⑦button | Receiver D OUT1/OUT2 ON(Latch)                                     | Receiver D OUT1/OUT2 LED(Red) lighting     |  |
| Push ®button | Receiver D OUT1/OUT2 OFF   | Receiver D OUT1/OUT2 LED(Red) lighting off |  |

# Operation of receiver "Through output way"

| Operation    | Receiver operation                           |                                   |  |
|--------------|--|-----------------------------------|--|
| Operation    | Relay output                                 | LED                               |  |
| Push ①button | Receiver A OUT1 ON(while pushing the button) | Receiver A<br>OUT1 (Red) lighting |  |
| Push ②button | Receiver A OUT2 ON(while pushing the button) | Receiver A OUT2 (Red) lighting    |  |
| Push ③button | Receiver B OUT1 ON(while pushing the button) | Receiver B OUT1 (Red) lighting    |  |
| Push ④button | Receiver B OUT2 ON(while pushing the button) | Receiver B<br>OUT2 (Red) lighting |  |
| Push ⑤button | Receiver C OUT1 ON(while pushing the button) | Receiver C<br>OUT1 (Red) lighting |  |
| Push ⑥button | Receiver C OUT2 ON(while pushing the button) | Receiver C<br>OUT2 (Red) lighting |  |
| Push ⑦button | Receiver D OUT1 ON(while pushing the button) | Receiver D<br>OUT1 (Red) lighting |  |
| Push ®button | Receiver D OUT2 ON(while pushing the button) | Receiver D<br>OUT2 (Red) lighting |  |

When you use [1 transmitter pair N receivers], it can not be used "Answer back" because of setting "OFF" for answer back setting.

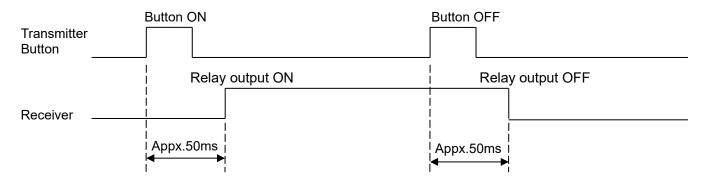
# 9. The cautions on use

#### **◆**Communication response

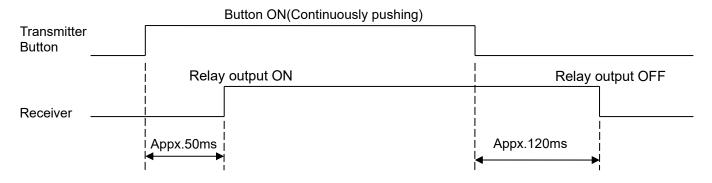
After the button of a transmitter is pushed, although the relay output of a receiver turns on and off, the following delay time occurs also at the place where communication environment is good.

Moreover, since it generates not only in the following delay time at the place that communication environment is bad and a communication fault occurs frequently, please use after comprehension.

#### (Latch output)



#### (Through output)



- ◆When you do not use it for a long period of time, please remove and keep a dry cell from a transmitter.
- ♦When you use two or more these products in the same area, please detach receivers, transmitters or a transmitter, and the receiver at least 50 cm or more, and install them.

#### ◆Communication distance

Although standard communication distance is indoor about 20 m/outdoor about 50m, since communication distance changes with setting methods, please use the communication distance of this product after an understanding.

When you use by "Through", the output from a receiver may turn off momentarily according to communication environment or communication distance. Moreover, if two or more sets are used simultaneously in the same area, even when the channel table is being made a different setup, the output from a receiver may be turned off momentarily. You understand the characteristic of this product, please cope with that I have you hold by the connection apparatus side etc., and use.

# 10.Specification

# **Common specification**

| Item                 | Specification   |  |
|----------------------|---|--|
|                      | 2.4GHz Small electric power data communication system |  |
| Standard             | FCC Part 15C(U.S.A.)                                  |  |
|                      | IC RSS 247(Canada)                                    |  |
| Emission designation | F1D   |  |
| Frequency band       | 2,403MHz-2,476MHz                                     |  |
| Channel              | 64CH  |  |
| Modulation way       | GFSK  |  |
| Communication way    | Simplex   |  |
| Power of antenna     | 2.1mW   |  |

#### **Transmitter**

| Item                          | Specification                               |                               |  |
|-------------------------------|---|-------------------------------|--|
| Туре                          | RC-242T RC-248T                             |                               |  |
| Input                         | Push button × 2 Push button × 8             |                               |  |
| Output                        | Buzzer (Confirmation for                    | the operation of push button) |  |
| Switch                        | 8 DIP                                       | switch × 2                    |  |
| Display                       | LED × 1                                     | (Red/Green)                   |  |
| Power source                  | AAA alkaline batteries × 2                  |                               |  |
| Operating temperature range   | Temperature 0-50 degree Humidity 35-80%     |                               |  |
| Dimension                     | 69W × 115D × 20Hmm                          |                               |  |
| Weight                        | Approx 120g ( Not included cover )          |                               |  |
| Antenna                       | Built in antenna                            |                               |  |
|                               | At setting "Without Answer back"            |                               |  |
|                               | Button continuous pushingApprox80hours      |                               |  |
| Battery life time             | (1push within 1 secondsApprox 280,000times) |                               |  |
| (At using alkaline batteries) | At setting "With Answer back"               |                               |  |
|                               | Button continuous pushingApprox40hours      |                               |  |
|                               | (1push within 1 secondsApprox 140,000times) |                               |  |

#### **Transmitter**

| Item                          | Specification                              |                      |                      |                 |
|-------------------------------|--|----------------------|----------------------|-----------------|
| Туре                          | RCS-242T                                   | RCS-244T             | RCS-246T             | RCS-248T        |
| Input                         | Push button × 2                            | Push button × 4      | Push button × 6      | Push button × 8 |
| Output                        | Buzze                                      | er (Confirmation for | the operation of pus | h button)       |
| Switch                        |  | 8 DIP                | switch × 2           |                 |
| Display                       |  | LED × 1              | 1(Red/Green)         |                 |
| Power source                  | Coin battery CR2032 x 1                    |                      |                      |                 |
| Operating temperature range   | Temperature 0-50 degree Humidity 35-80%    |                      |                      |                 |
| Dimension                     | 45W × 90D × 12Hmm                          |                      |                      |                 |
| Weight                        | Approx 40g ( Not included cover )          |                      |                      |                 |
| Antenna                       | Built in antenna                           |                      |                      |                 |
|                               | At setting "Without Answer back"           |                      |                      |                 |
|                               | Button continuous pushingApprox10hours     |                      |                      |                 |
| Battery life time             | (1push within 1 secondsApprox 36,000times) |                      |                      |                 |
| (At using alkaline batteries) | At setting "With Answer back"              |                      |                      |                 |
|                               | Button continuous pushingApprox 5hours     |                      |                      |                 |
|                               | (1push within 1 secondsApprox 18,000times) |                      |                      |                 |

#### **Contact transmitter**

| Items                       | Specification   |                            |  |
|-----------------------------|---|----------------------------|--|
| Туре                        | TC-242TF TC-248TF   |                            |  |
| lam.it                      | Contact input × 2   | Contact input × 8          |  |
| Input                       | Contact capacity DC5V/20mA  | Contact capacity DC5V/20mA |  |
| Switch                      | Power s   | witch × 1                  |  |
| SWILCH                      | 8 DIP switch  | for setting × 2            |  |
| Display                     | LED(Red) × 1 (Red/Green)  |                            |  |
| _                           | DC12-24V±10%  |                            |  |
| Power source                | it can use in AC100 - 240V input by using AC/DC adaptor.(Onerous option) in its can use in AC100 - 240V input by using AC/DC adaptor. |                            |  |
| Consumption current         | Under 20mA(DC24V) Under 35mA(DC24V)   |                            |  |
| Operation temperature range | Temperature 0-50 degree Humidity 35-80%   |                            |  |
| Dimension                   | 103W × 85H × 26Dmm  | 195W × 85H × 26Dmm         |  |
| Dimension                   | (Except projection)   | (Except projection)        |  |
| Weight                      | Approx 250g   | Approx 480g                |  |
| Weight                      | (Included anenna) (Included antenna)  |                            |  |
| Antenna                     | Dipole antenna × 1  |                            |  |

<sup>※</sup>Antenna type is [GRF1696-SMB]

<sup>※</sup>Product type of AC adapter is [ADB24050-C]

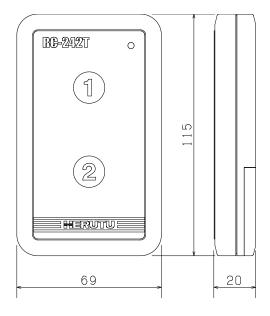
#### Receiver

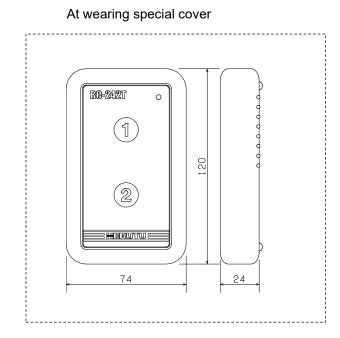
| Items                 | Specification  |                                       |  |  |
|-----------------------|--|---------------------------------------|--|--|
| Туре                  | RC-242RF   | RC-248RF                              |  |  |
|                       | Contact output × 2(Terminal block M3)                              | Contact output × 8(Terminal block M3) |  |  |
|                       | Contact mechanism MOS-FET/1a                                       | Contact mechanism MOS-FET/1a          |  |  |
| Output                | Rated load voltage AC/DC30V per point                              | Rated load voltage AC/DC30V per poin  |  |  |
|                       | Rated load current 0.5A per point                                  | Rated load current 0.5A per point     |  |  |
|                       | Contact capacity DC5V/20mA   | Contact capacity DC5V/20mA            |  |  |
| Switch                | Power switch × 1   |                                       |  |  |
|                       | 8 DIP switch for setting × 2                                       |                                       |  |  |
| Display               | LED(Red) for relay output × 2                                      |                                       |  |  |
|                       | LED(Red) for power source × 1                                      |                                       |  |  |
| Power source          | DC24V±20%(DC19-28V)  |                                       |  |  |
|                       | ※It can use in AC100 - 240V input by using attached AC/DC adaptor. |                                       |  |  |
| Consumption current   | Under 50mA(DC24V)  | Under 100mA(DC24V)                    |  |  |
| Operation temperature | Temperature 0.50 degr  | - Lluraidity 25 000/                  |  |  |
| range                 | Temperature 0-50 degre   | ee Humidity 35-80%                    |  |  |
| Dimension             | 103W × 85H × 26Dmm   | 195W × 85H × 26Dmm                    |  |  |
|                       | (Except projection)  | (Except projection)                   |  |  |
| Weight                | Approx 250g  | Approx 450g                           |  |  |
|                       | (Not included AC adapter)  | (Not included AC adapter)             |  |  |
| Antenna               | Dipole an  | ntenna × 1                            |  |  |

<sup>※</sup>Antenna type is [GRF1696-SMB]

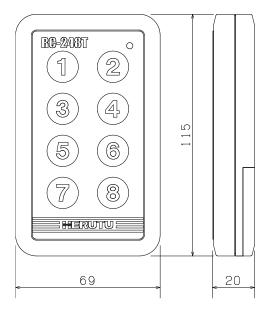
# 11.Drawing

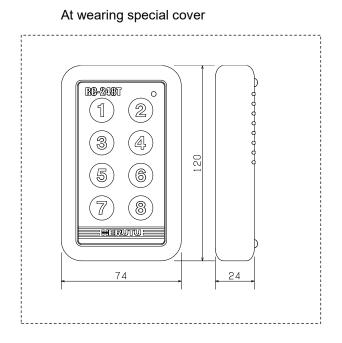
#### •2-Button Transmitter RC-242T





#### •8-Button Transmitter RC-248T

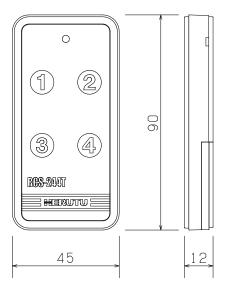




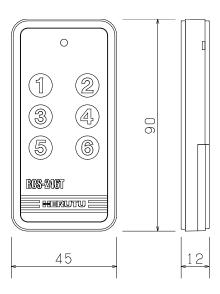
#### •2-Button Small Transmitter RCS-242T



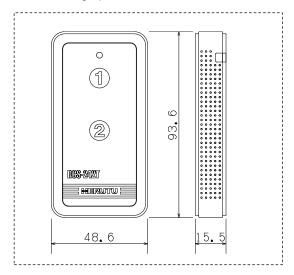
#### •4-Button Small Transmitter RCS-244T



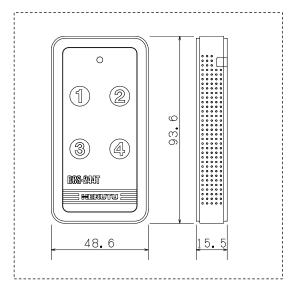
#### •6-Button Small Transmitter RCS-246T



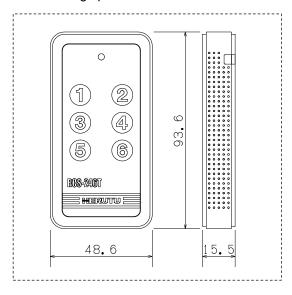
#### At wearing special cover



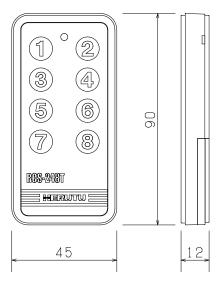
#### At wearing special cover



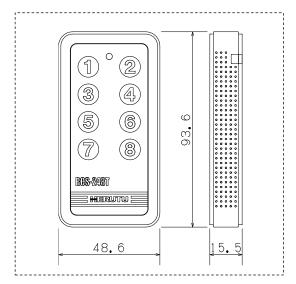
#### At wearing special cover



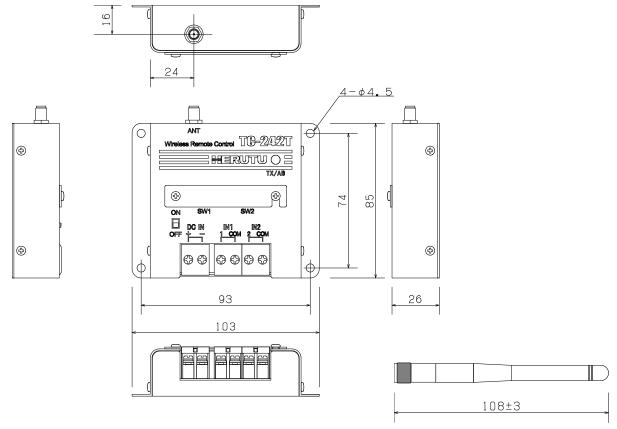
#### ●8-Button Small Transmitter RCS-248T



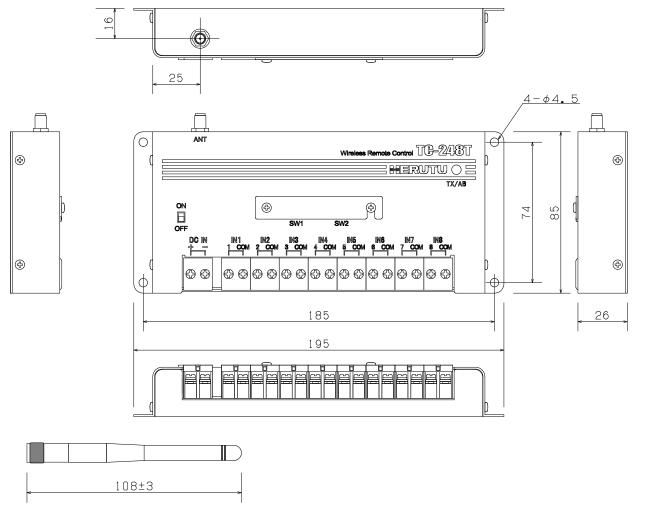
#### At wearing special cover



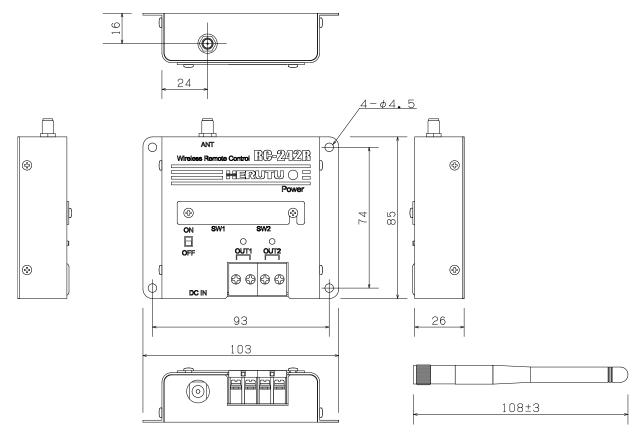
#### •2-Input Contact Transmitter TC-242TF



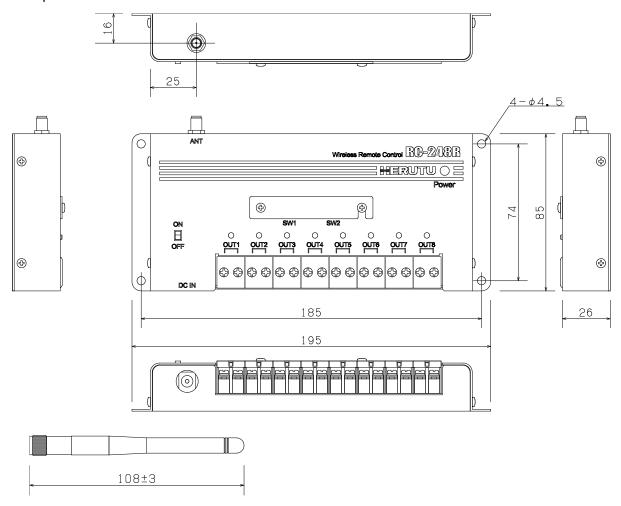
# •8-Input Contact Transmitter TC-248TF



#### •2-Output Contact Receiver RC-242RF



#### •8-Output Contact Receiver RC-248RF



# 12.Before thinking failure

| Phenomenon   | A cause and measure  |  |  |
|--|--|--|--|
| No transmitting                                    | Battery level is low.  |  |  |
| No transmitting (Not lighting LED Red or Green)    | →Please change a new battery.In the case of an alkaline        |  |  |
| (Not lighting LED Ited of Green)                   | battery, please exchange two.                                  |  |  |
| Floching PED LED 2 times every transmitting        | Battery level is low.  |  |  |
| Flashing RED LED 2 times every transmitting timing | →Please change a new battery. In the case of an alkaline       |  |  |
| ummg   | battery, please exchange two.                                  |  |  |
|  | Receiver power is off.   |  |  |
|  | →Please check that receiver power is ON.                       |  |  |
|  | Communication distance is too far.                             |  |  |
|  | →It is over the distance of this machine which can be          |  |  |
|  | communicated.  |  |  |
|  | The installation situation of receiver's antenna is not good.  |  |  |
| Even if it pushes the push button of a             | →Please check that the antenna situation of receiver will be   |  |  |
| transmitter, a receiver does not operate.          | good. Depending on the situation, please consider to use the   |  |  |
|  | external antenna. Ref [6.Installation the receiver]            |  |  |
|  | It is impossible to communicate by outside cause.              |  |  |
|  | →Please check that there are productions uses 2.4GHz radio     |  |  |
|  | wave. Please inform us with detail situations.                 |  |  |
|  | Setting contents doesn't match between a transmitter and a     |  |  |
|  | receiver.  |  |  |
|  | →Please confirm [7.Setting]                                    |  |  |
| Power LED of receiver doesn't light.               | Receiver power is off.   |  |  |
| Tower ZZB or receiver decemenging                  | →Please check that receiver power is ON.                       |  |  |
|  | Setting contents doesn't match between a transmitter and a     |  |  |
| OUT LED of receiver doesn't light.                 | receiver.  |  |  |
|  | →Please confirm [7.Setting]                                    |  |  |
|  | The apparatus besides the rating of a receiver relay output is |  |  |
| Although OUT LED of a receiver is turned on,       | connected.   |  |  |
| connected apparatus does not operate.              | →Please confirm the receiver output specification of [10.      |  |  |
|  | Specification].  |  |  |

# 13.After service and Warranty

If something is wrong. If you should find anything wrong with the machine when using it under normal conditions, check the warranty and repair regulations and contact the outlet store through which you purchased the product or our Sales Office. The latest warranty and repair regulations can be found on our website.

#### (Warranty Regulation)

This regulation (hereinafter referred to as the "Regulation") is for post-shipment warranty provided by HERUTU ELECTRONICS CORPORATION (hereinafter referred to as the "Company") so that you can use the Company's product you have purchased with confidence. The Regulation does not apply to special order products (custom products). In addition, purchased products shall be subject to the relevant manufacturer's warranty regulations, and the Regulation shall not apply.

Please note that in the event that the product you purchased comes with an instruction manual that describes the Company's old repair regulation, the latest Regulation will still apply.

#### 1. Warranty period

Unless otherwise specified, the warranty period shall be "up to thirteen months from the date of shipment of the product by the Company". During the warranty period, the Company will replace the product with a new one or repair it free of charge in accordance with the provisions of the Regulation.

In addition, if a failure occurs during the warranty period due to the Company's responsibility and the product with the failure (hereinafter referred to as the "Product") is replaced with a new one or repaired free of charge, the warranty period of the Product will be "thirteen months from the date of initial shipment of the Product, or six months from the date of shipment of the Product that has been replaced or repaired, whichever comes later".

The warranty period for paid repairs shall be in accordance with the provisions of the Company's repair regulation.

#### 2. Warranty scope

If a failure occurs during the warranty period due to the Company's responsibility, the Company will replace the product with a new one or repair it free of charge.

Even within the warranty period, the warranty does not apply in the following cases:

- A) In the event of failure or damage caused by improper handling by the customer, such as dropping or impact during transportation or movement by the customer
- B) In case of failure due to disassembly or modification of the main unit by the customer
- C) In case of natural disasters such as fires, earthquakes, floods, and in case of failure or damage due to abnormal voltage
- D) In case of failure caused by failure of equipment other than the Company's designated equipment connected to the Product
- E) In case of failure of the Product's accessories (AC adapter, antenna, connection cable, etc.)
- F) If damage is caused by the failure of consumables or limited-life parts included in the Product:
  - Consumables: Batteries (rechargeable, batteries, dry batteries, button batteries, etc.), recording media (SD cards, etc.)
  - 2. Limited-life parts: Various switches (limit switches, push button switches, etc.) and various sensors

- Other items that are worn out or have a service life due to use
   If consumables or limited-life parts fail, we will replace or repair the parts for a fee.
- G) In case of failure caused by handling contrary to the usage and precautions described in the instruction manual of the Product
- H) If repaired, adjusted, or improved by elsewhere other than the Company
- I) If the Company is unable to reproduce the failure

#### 3. About repair of the Product

Please note that repairing the Product requires equipment such as measuring instruments and tools, so the Company will handle it as a pick-up repair service at the Company.

#### 4. About the shipping cost for replacement or repair of the Product

Shipping charges for sending the Product to the Company or a distributor, as well as shipping charges for sending the Product that has been replaced or repaired by the Company or the distributor to the customer, will be borne by the Company or the distributor.

#### 5. Disclaimer

The Company is not responsible for any direct or indirect damages or monetary loss caused by failure of the Product or its use.

#### 6. Additional notes

Please note in advance that the information of the Product described on the Company's website and in the catalogs, instruction manuals, technical materials, and other materials provided by the Company are subject to change without notice to customers.

#### (Repair Regulation)

This regulation (hereinafter referred to as the "Regulation") shall be applied to paid repair service (hereinafter referred to as the "Service") provided by HERUTU ELECTRONICS CORPORATION (hereinafter referred to as the "Company"). The Regulation does not apply to special order products (custom products). In addition, purchased products shall be subject to relevant manufacturer's repair regulations, and the Regulation shall not apply.

Please note that in the event that the product you purchased comes with an instruction manual that describes the Company's old repair regulation, the latest Regulation will still apply.

#### 1. Subject of the Regulation

The Service is provided for the Company's products that are "beyond the scope of the warranty specified in the warranty regulation" and "from the sales start date to the end date of the repair period (seven years from the production end date)". However, please note that the end date of the repair implementation period may be earlier depending on the availability and procurement status of repair parts.

#### 2. Establishment of contract

The contract shall be established when the customer approves the quotation presented by the Company and

issues an order form before the end of the repair implementation period.

#### 3. Purpose of the Service

The Company will provide the Service for the purpose of repairing the function and performance of the Company's product used by the customer if it fails beyond the scope of the warranty specified in the warranty regulation. Please note that the Service requires equipment such as measuring instruments and tools, so the Company will handle it as a pick-up repair service at the Company.

#### 4. Usage fee for the Service

The usage fee for the Service shall be the total of the following fees:

#### A) Repair service fee

The repair service fee is the total amount of technical fees, parts costs, other expenses incurred, and applicable taxes associated with repairing the Company's product (hereinafter referred to as the "Product for repair") that the customer wishes to repair.

B) Shipping fee (including the cost of packaging boxes)

The Company kindly asks that customers bear the shipping costs for sending the Product for repair to the Company and for returning it from the Company. However, in the event that the Product for repair is sent by payment on delivery by the customer, the shipping cost will be included in the Service charge.

#### 5. Warranty period and scope of the Product for repair

The warranty period for the Product for repair is "up to six months from the date of repair completion". However, please note that failures other than the repaired parts (repaired places or replaced parts) are not covered by the warranty of the Product for repair. In addition, if a failure occurs due to the Company's responsibility within the warranty period, the Company will again repair the product free of charge.

#### 6. Handling of repair parts

- A) In order to provide the Service stably for a long time and to promote environmental protection, etc., the Company may use recycled parts or alternative parts at the time of repair at its discretion.
- B) The Company may, at its own discretion, collect the removed parts for the purpose of recycling or analysis at the time of parts replacement through the regulation of the Service. Please note that the collected parts are the property of the Company and will be recycled, used or discarded at its discretion.

#### 7. Estimate for the Service

The estimate for the Service is basically free of charge. However, if the Company is unable to reproduce the failure, it will not be able to carry out repairs and will not provide an estimate. If a technical investigation is required to reproduce the failure, the Company will estimate the cost of reproducing the failure.

#### 8. Return of unrepaired product

If the Company does not estimate the cost of the Service due to reasons such as being unable to reproduce the failure, it will return the Product for repair to the customer.

In addition, if the customer does not place an order within three months from the date of creation of the quotation, or if the customer does not accept the quotation and the customer expresses an intention not to carry

out the repair, the Company will assume that the customer has canceled the request for the Service, and the Company will return the Product for repair to the customer without carrying out the repair.

In addition, if a shipping fee is incurred for returning the product, it will be borne by the customer.

#### 9. Handling of personal information

The Company will properly handle personal information such as names and addresses being provided in accordance with the privacy policy posted on the Company's website.

#### 10. Compensation for damages

- A) The responsibility of the Company for providing the Service shall be limited to the matters and contents specified in the repair regulation, and shall not include any damages incurred by the customer due to special circumstances (including loss of profits of the customer and damages based on claims for compensation made by third parties against the customer) and damages caused by the customer being unable to use the product due to a failure or defect of the Product for repair. However, this does not apply if the damage was caused by the Company's willful misconduct or gross negligence.
- B) Even if the Company is liable to the customer for damages in connection with the regulation of the Service, the Company's liability shall not exceed the amount equivalent to the value of the Product for repair, except in cases of willful misconduct or gross negligence on the part of the Company. The value of the Product for repair shall be calculated based on the residual value after depreciation or the price of products with equivalent performance sold in the market at the time of damage.

#### 11. Additional notes

- A) The Company cannot restore stickers, LCD protective sheets, and coloring applied to the outer casing parts that you have attached yourself. In addition, if advertisement stickers were affixed at the time of sale, they cannot be newly prepared as repair parts when replacing the outer casing parts. After replacing the outer casing parts, the advertisement stickers will be returned without being affixed.
- B) Please note in advance that the information of the Product on the Company's website and in the catalogs, instruction manuals, technical materials, and other materials provided by the Company are subject to change without notice to customers.



#### **HERUTU ELECTRONICS CORPORATION**

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