

Prowave Air-wave RX

SINGLE RELAY RECEIVER (RG-10U)

Air-wave RX INSTALLATION INSTRUCTIONS

Please read this manual carefully before installation.

FEATURES

- Identifies zone (location) by 3 LED lights (3 zones + 1 continuous zone).
- Able to learn 12 transmission codes (Each zone can learn 3 transmitters maximum).
- Automatic "Learning" function facilitates to preset transmission codes to Air-wave RX.
- Over 8 million codes possible, eliminates interference from neighbors.
- Latches into alarm with "Continuous mode" function.
- Adjustable duration for terminal output.
- Low battery indicator to recognize transmission units' battery status.

① CAUTION AND WARNING

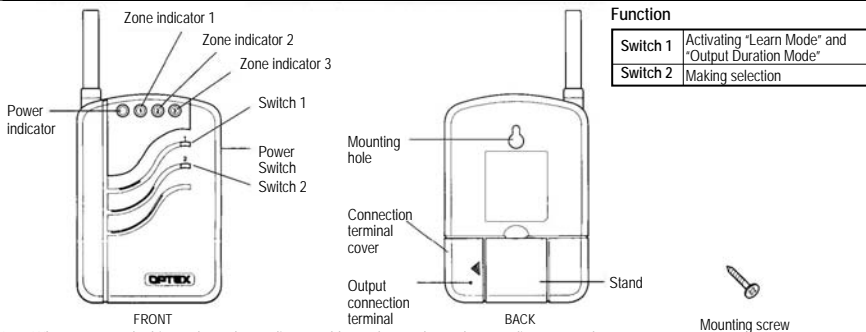
WARNING

- 1. Harsh environments**
Using the Air-wave outdoors in severe conditions such as extreme temperatures, rapid temperature change, high humidity, steam or fog may cause malfunction.
- 2. Tampering**
Any changes or modifications not expressly approved by OPTEX could void the user's authority to operate the equipment (see FCC note in section 13 COMPLIANCE of this manual).

CAUTION

- 1. Impact/Shock**
Impact or Shock can cause severe damage or break the Air-wave RX.
- 2. Electric Devices**
Use Air-wave RX at least 3ft (1m) away from electronic devices such as TVs, Radios, PCs, Microwave ovens. This may cause the unit to malfunction.
- 3. Transmission range**
Transmission range may decrease under the following conditions:
 - Either transmission units or Air-wave RX installed on a metal surface.
 - Presence of a steel door, reinforced concrete or other metal obstructions between transmission units and Air-wave RX.
 - Places near strong radio sources such as broadcast stations or substation.
- 4. Cleaning**
Harsh cleaners such as paint removers or benzene may ruin the surface. Use a soft wet cloth and mild soap to clean.

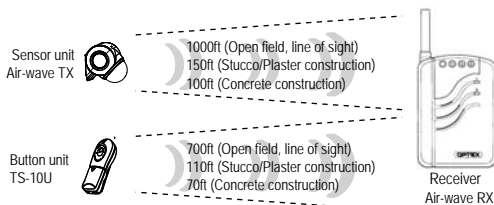
② PARTS IDENTIFICATION



Note: When you recycle this product, please disassemble product and recycle according to state law.

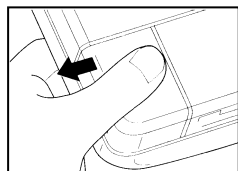
③ TRANSMISSION RANGE (REFERENCE)

Transmission range must be changed according to environment. Please check if system works properly for the site.

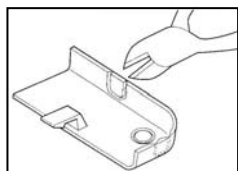


④ INSTALLATION

How to connect the Terminal



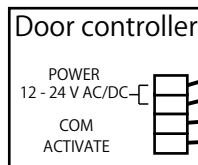
Remove the connection terminal cover



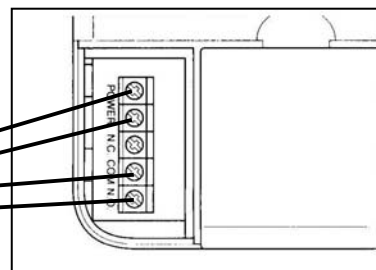
Remove knockouts according to wiring needs.

Wiring

Use a power source within the following range; 12-24V AC/DC



When using for door controller, connect NO and COM to activate input. Usually the activate input is NO.



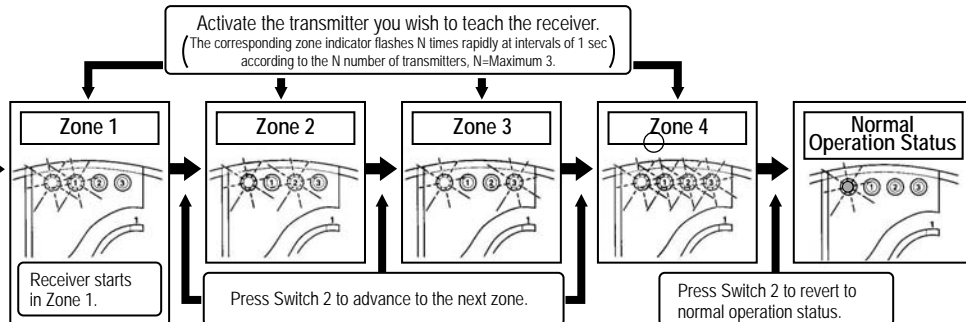
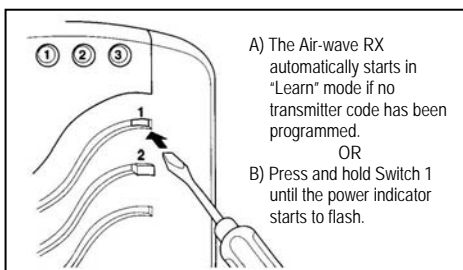
⑤ TEACH TRANSMITTER CODES TO Air-wave RX "LEARN MODE"

Each transmitter has a unique transmission code, which can be automatically "learned" by the Air-wave RX. The Air-wave RX's zones must be taught to respond to the appropriate transmitter. The zone characteristics can be programmed as shown below.

Zone 1:	Timed utility output
Zone 2:	Timed utility output
Zone 3:	Timed utility output
Zone 4:	Continuous terminal output (latches until Switch 2 is pressed to deactivate)

Teach the transmitter code to the receiver

Activate "LEARN" Mode



Note:

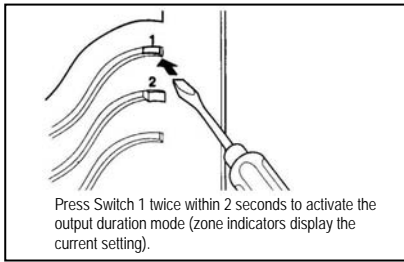
- Revert to normal operation status before use.
- Verify that each transmitter has been learned by the receiver by triggering them.
- Each zone can accept a maximum of 3 transmitters, and the zone indicator shows the activated transmitter based on the number of flashes. (e.g. If transmitter 2 in zone 1 is activated, the zone 1 indicator flashes twice)
- A single transmitter cannot be learned by multiple zones.
- Turning off the devices, or losing power will not affect the transmitter or the Air-wave RX's code memory.

Erasing Codes from the Air-wave RX's Memory

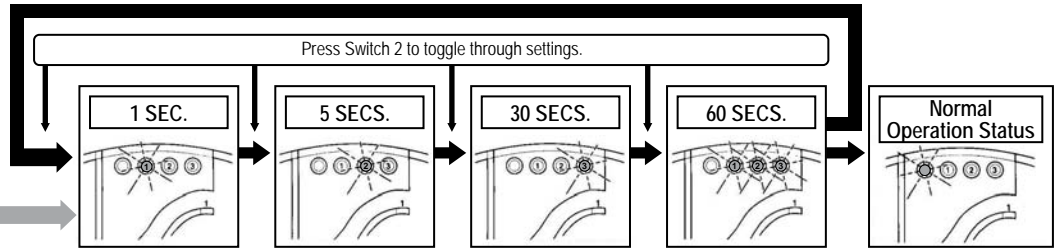
- 1) Hold down switch 1 until the power indicator starts to flash.
- 2) Press Switch 2 until the appropriate zone indicator is lit.
- 3) Press Switch 1 to erase. The zone indicator will start to flash. (Note: All programming in that particular zone will be erased.)
- 4) Press Switch 2 a few times until the power indicator stops flashing and remains lit. (Note: To erase all programming and revert to the factory default setting, turn on the power while pressing and holding Switch 1.)

⑥ ADJUSTING THE TERMINAL OUTPUT DURATION

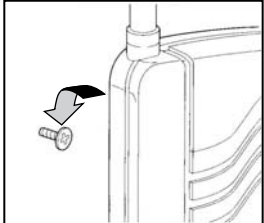
- The terminal output duration can be set for zones 1-3 only as a group. Zone 4 always latches until it is reset by pressing Switch 2.
- The factory setting is 1 sec.



After 5 seconds, the Air-wave RX will automatically revert to normal operational status (the zone indicators will go off and the power indicator will remain lit).

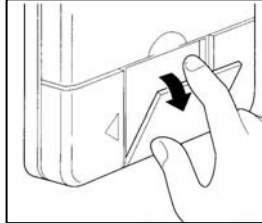


⑦ INSTALLATION



Mounting On A Wall

Use the mounting screw on a wall. Leave some length of the screw out for the mounting hole of the Air-wave RX.



Desktop

Pull out the stand on the back of the Air-wave RX and place it on any flat surface.

⑨ TROUBLESHOOTING

1. The system is not operating

Check the transmitter.

Does the status indicator light up when you trigger the transmitter?	→	Check to see whether the battery is inserted correctly. If the battery is old, replace it with a new one.
Is the status indicator of the transmitter flashing?	→	The battery is old. Replace the battery.

Check the receiver.

Is the power indicator of the Air-wave RX lit ?	→	Is the receiver on? Check the wiring and connection.
Have all the transmitter codes have been taught correctly?	→	Teach the transmitter codes correctly. The system will not operate without this process.
Are there other high power appliances using the same electrical power outlet?	→	Please connect the Air-wave RX to a different electrical outlet.
The zone indicator of the Air-wave RX is on, but nothing happens.	→	Check to see whether the terminal is properly connected to other devices.
Is there anything blocking the transmission?	→	Relocate the receiver and/or the Air-wave RX. Metal objects can shorten the effective transmission range.
Are the zone indicators flashing slowly?	→	Follow directions in ⑧ LOW BATTERY INDICATION.

2. The system is not operating correctly.

The Air-wave RX does not learn the transmitter codes.	→	Check whether the transmitter codes have already been learned in a different zone. If so, erase the memory and teach again.
The Air-wave RX gets reception in the wrong zone.	→	Erase memory in the zone in which the Air-wave RX responds and teach using the correct zone.
The Air-wave RX does not respond to some of the transmitters.	→	You may have taught multiple transmitter codes in the same zone. Teach the transmitter codes for which no response is received using an empty zone.
A certain zone seem to malfunction.	→	This is probably the transmitter's problem. Check the transmitter that corresponds to that zone.
Before contacting the supplier!	→	Go through the setups again after turning on the power while holding down switch 1.

- If the above solutions do not work, please contact your supplier for services.

⑫ COMPLIANCE

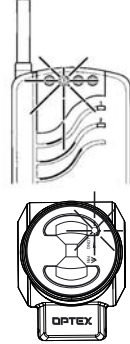
FCC ID : DC9RG-10U

The changes or modifications not expressly approved by the OPTEX could void the user's authority to operate the equipment. To comply with the FCC RF exposure compliance requirements, this device and its antenna 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 instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a 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: (1) Reorient or relocate the receiving antenna. (2) Increase the separation between the equipment and receiver. (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. (4) Consult the dealer or an experienced radio/TV technician for help.

IC : CAN4012104524A

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. 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 permitted for successful communication.

⑧ LOW BATTERY INDICATION



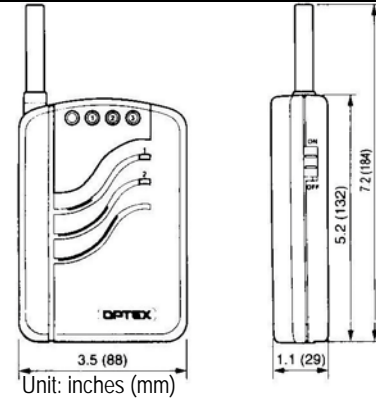
Zone indicator on Air-wave RX and TX start slow flashing whenever the corresponding transmitters have low battery. Any operation cannot be done until one of operations below are conducted.

- 1) Replace transmitter's batteries.
- 2) Press switch 2.

Air-wave RX will not need to relearn transmitter after replacing the batteries.

Note: Check low battery status at the corresponding transmitter in case several units are learned in 1 channel.

⑩ DIMENSIONS



⑪ SPECIFICATION

Product Series	Prowave Air-wave RX
Product Name	Single Relay Receiver
Model Number	RG-10U
Power Source	12-24V AC/DC Standby: 30mA Operating: 80mA
Relay Output	Form "C" MAX 1A/50VAC DC24VAC
Output Timer	Selectable: 1/5/30/60sec
Status Indicator	Power Indicator: Green Zone Indicator: Red × 3
Frequency	418MHz
Operating Temperature	-10°C ~ +40°C
Installation Location	Indoors
Weight	120g
Accessories	Mounting Screw × 1

Specifications may change without notice

⑬ WARRANTY

1. This product is warranted under normal use for 2 years from the Lot. number. The Lot. number is printed on the sticker on back side of sensor. The first 2 digits stands for year and the second 2 digits are week of manufacturing. If you have questions, call to your sales representative.
2. The warranty is not applicable when below circumstances will be found:
 - Mechanical or electrical modification(s) are made to the product or it is otherwise altered manually.
 - The product is already been serviced at place(s) other than the manufacturer.
 - It is determined that the product malfunction has resulted from improper use or from an accident. Physical damage will not be covered.
 - No copy of the dated sales receipt has been submitted together with the product to be serviced.



OPTEX Co.,LTD.

5-8-12 Ogoto Otsu 520-0101, Japan
TEL.: +81(0)77 579 8700
FAX.: +81(0)77 579 7030
WEBSITE: www.optex.co.jp

OPTEX Technologies Inc.

Corporate Headquarters
3882 Del Amo Blvd., Suite 604
Torrance, CA 90503 U.S.A.
TOLL-FREE: 800 877 6656
FAX.: +1 310 214 8655
WEBSITE: www.optextechnologies.com

East Coast Office
8510 McAlpines Park Drive, Suite 108
Charlotte, NC 28211 U.S.A.
TOLL-FREE: 800 877 6656
FAX.: +1 704 365 0818
WEBSITE: www.optextechnologies.com