

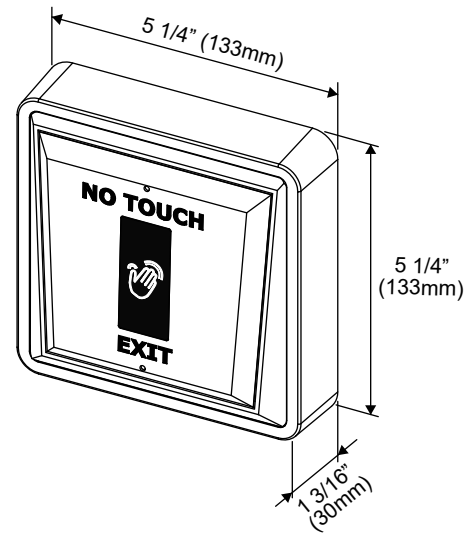
# RTS Series Wave Sense Infrared Exit Devices

## RTS-970/RTS-970WT

### Installation Instructions

#### General Descriptions

GEM's NEW line of jumbo wave sense infrared exit devices are designed to provide maximum visibility in any lighting. The RTS-970 features field selectable LED Red/Green illuminations to show door locked/unlocked status. The full-featured RTS-970WT offers a hopping code RF wireless transmitter for wired/wireless retrofit applications and also comes with a wireless controller for up to 15 units.



#### Specifications

##### Model: RTS-970

- Operating Voltage: 12~24VDC
- Current Draw:  
Pull in: 160mA/12VDC | Holding: 100mA/12VDC  
Pull in: 200mA/24VDC | Holding: 130mA/24VDC
- Relay Rating: 1A/30VDC
- Operating Temperature: 32° to +120.2°F ( 0° to +49°C )
- Ambient Humidity: 0 to 85% Non-condensing
- Sensor Range: 3~15 cm (±10%)
- Output/Trigger Time: 1~60 seconds

##### Model: RTS-970WT

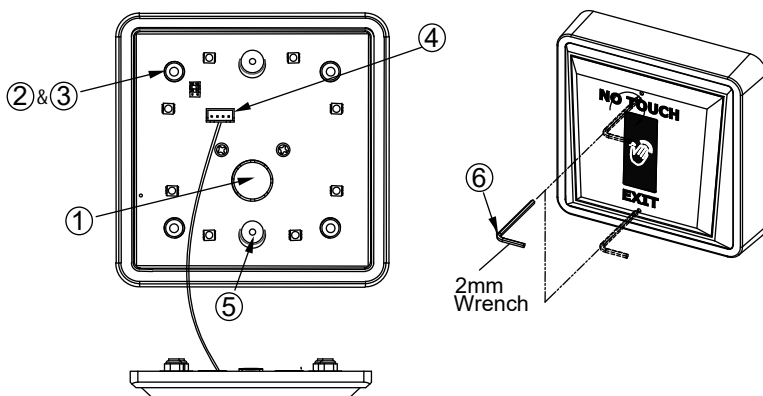
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- Ambient Humidity: 0 to 85% Non-condensing
- Sensor Range: 3~15 cm (±10%)
- Output/Trigger Time: 1~60 seconds
- RF Transmitter Encryption: Hopping Codes
- Transmitting Distance: 50~60 meters
- Transmitter Frequency: 433 KHz

#### Features

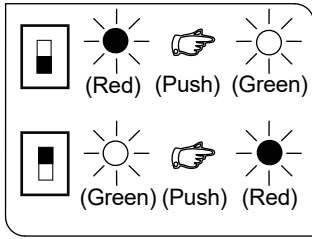
- Stainless and impact resistant illuminated surface mount box
- Super-bright, high efficiency LED technology
- LED Red/Green illuminations to show door locked/unlocked status
- HOPPING CODE RF wireless transmitter remote control function available for RTS-970WT

#### Installation Steps

- ① Determine the wire access location and drill a hole of sufficient size, or use center knock-out plug.
- ② Drill the 4 required 1/8" (3.2mm) mounting holes. There are 4 indents that are 3" (76.2mm) apart for your convenience.
- ③ Pull wiring through the access hole (marked ① in the diagram to the left) and mount the box to the wall using 4 screws (4x25 screws).
- ④ Connect the wires to the terminal block.
- ⑤ Connect the power supply to bench test.
- ⑥ Secure two M3x18 screws by turning clockwise into the threaded center inserts of the mount base to around halfway. Attach the front cover to the base by aligning the screw holes. Use the 2mm Allen key provided to tighten the screws to complete installation.

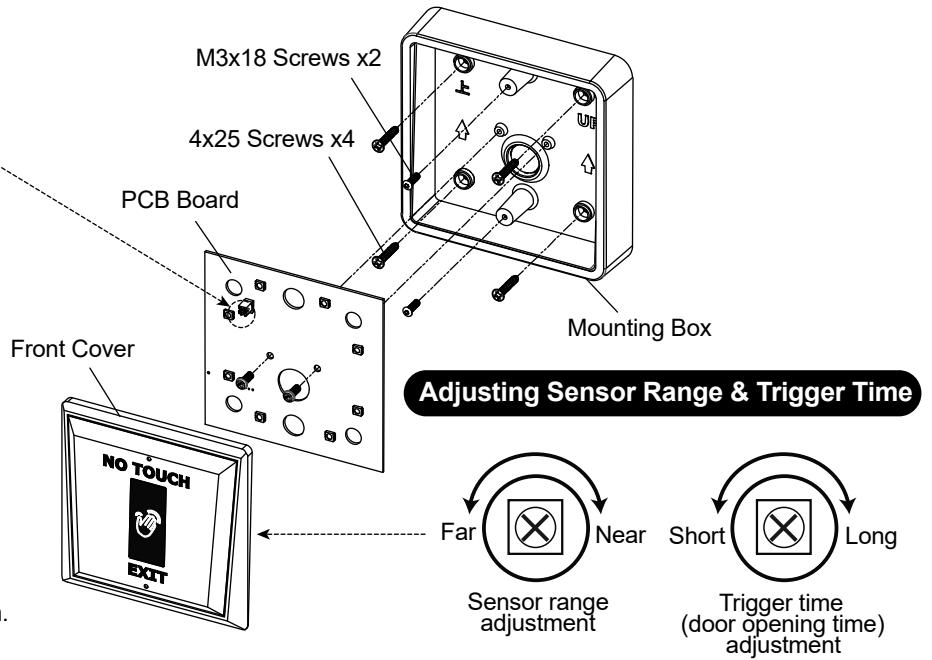


## Dip switch Settings for LED Illuminations



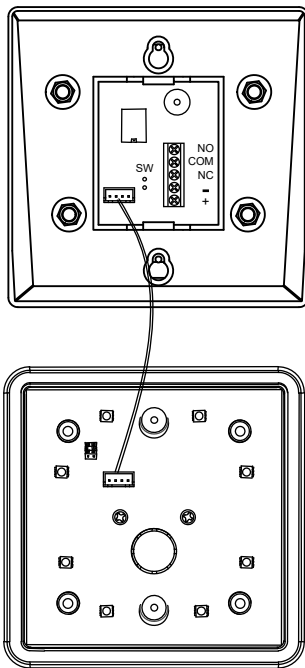
Position	Descriptions
	<b>Dip switch down position</b> The LED switches from Red to Green after you push the exit button.
	<b>Dip switch up position</b> The LED switches from Green to Red after you push the exit button.

\* Factory default setting: **Dip switch down position.**

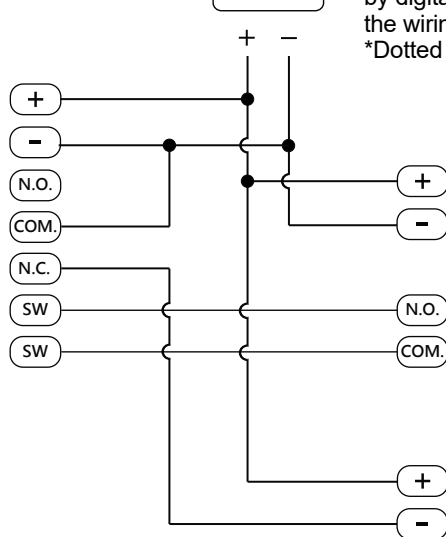


## Wiring Diagrams

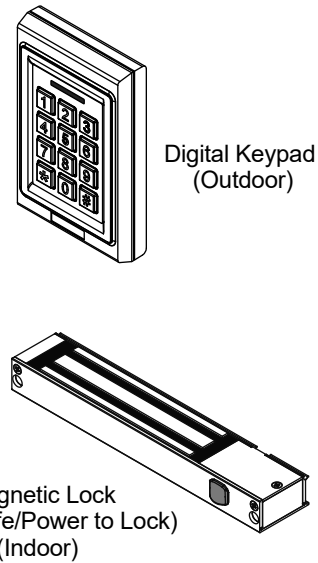
Wave Sense Infrared Exit Device (Indoor)



12VDC POWER SUPPLY

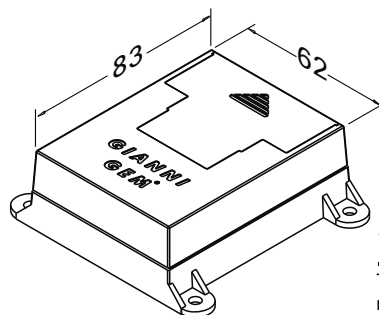


The RTS-970 includes one set of SW input contacts (e.g. REX or Keypads) and can be directly controlled by digital keypads or proximity readers. Please refer to the wiring instructions below.  
\*Dotted lines show factory default wiring.



## RTS-970WT Wireless Controller (Receiver) Specifications

- Operating Voltage: 12~24 VAC/DC
- Current Draw:  
Pull in: 50mA/12 VDC ,Holding: 20mA/12 VDC  
Pull in: 70mA/24 VDC, Holding: 40mA/24 VDC
- Output: 1 relay (N.O./COM/N.C.)
- Contact Rating: 3A/12VDC
- Relock Time Setting: 1, 3, 5, 10 seconds
- Quantities of remote transmitter devices: Up to 15 pcs
- Dimensions: 83(L)X 62(W) X 30(D) mm
- Buzzer: The buzzer starts beeping when the transmitter sends the signal and stops when the battery is exhausted
- LED Indicator: Green indicates power status | Red indicates input and output status



### Warranty

The product is warranted against defects in material and workmanship while used in normal service for a period of 1-year from the date of sale to the original client. The GEM policy is one of continual development and improvement; therefore GEM reserves the right to change specifications without notice.