RF3401E

Security Systems

EN | Installation Instructions

Wireless (RF) Point Transmitter

BOSCH

1.0 Overview

The RF3401E Point Transmitter is a magnetic and dry contact wireless transmitter used for monitoring doors, windows, or other dry contact devices.

This device is equipped with an internal reed contact for use with an external magnet assembly and a cover/wall tamper switch. The point transmitter can accept a dual EOL resistor supervised dry contact input from an external device.

Supervision is provided by transmitting a signal to the receiver every 13 min. if there is no other activity. All transmissions from the RF3401E send battery status information.

2.0 Specifications

Table 1: Specifications

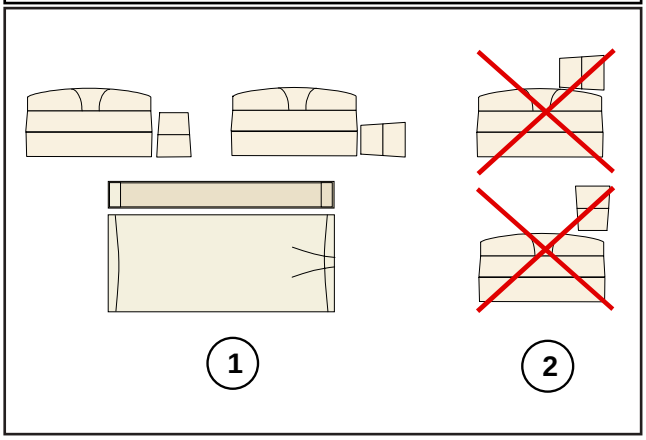
Dimensions (H x W x D)	Transmitter: 76.5 mm x 35 mm x 19 mm (3 in. x 1.38 in. x 0.75 in.) Mounting Plate: 76.5 mm x 35 mm x 3.2 mm (3 in. x 1.38 in. x 0.13 in.) Magnet: 80 mm x 14 mm x 12 mm (3.15 in. x 0.55 in. x 0.47 in.)
Operating Temperature	-30°C to +65°C (-22°F to +149°F)
Frequency Band	433.42 MHz
Maximum RF Power	< 10 mW
Operating Voltage	Supplied by a 3 VDC lithium battery
Battery Life	Minimum of five years under normal operating conditions with the recommended battery types.
Recommended Battery Types	Duracell DL 123A, Energizer EL 123AP, or Panasonic CR 123A
Compatible Receivers	RF3212E or RF3222E
Compliance	CE 0165. This point transmitter complies with EN 300683, EN 300220, and 89/336/EEC.

3.0 Mounting

3.1 Mounting Considerations

- The maximum range of the point transmitter, in open air, is approximately 300 m (984 feet). In normal residential or commercial applications, it is recommended the point transmitter be kept within 100 m (328 in.) of the receiver to which it is assigned.
- Mounting the point transmitter on metal surfaces can reduce its RF range. Mounting the point transmitter on ferrous metal (iron or steel) surfaces can affect the operation of the internal magnetic contact.
- It is recommended the point transmitter be mounted on the door/window frame and the magnet assembly be mounted on the moving portion. Note that the magnet assembly **must** be mounted within 15 mm (0.59 in.) of the point transmitter and in an acceptable orientation as shown in *Figure 1*.

Figure 1: Mounting Considerations (shown without mounting plate or spacer)



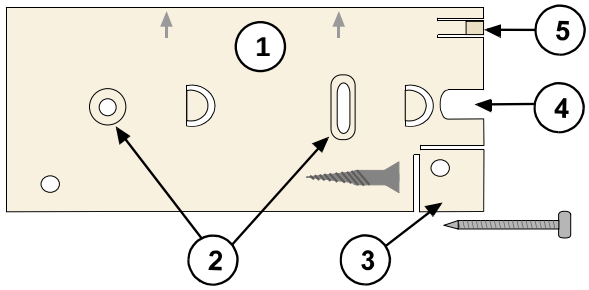
1 - Acceptable

2 - Not acceptable

3.2 Mounting the Transmitter

1. Position the mounting plate over the desired location. If connecting an external device, position the mounting plate so the wiring passes through the wire entrance (see *Figure 2*).
2. Attach the mounting plate using two flathead screws (see *Figure 2*).

Figure 2: Mounting Plate



1 - Magnet

2 - Mounting holes (use two flathead screws)

3 - Wall tamper breakaway (use panhead screw)

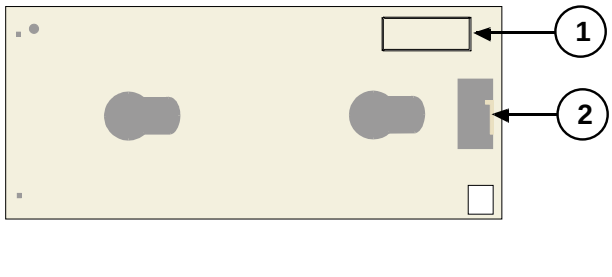
4 - Wire entrance

5 - Release tab

When mounting the base, be sure to note the location of the magnet.

3. If using the wall tamper feature, use a panhead screw in the wall tamper breakaway (see *Figure 2*).
4. From the point transmitter bottom (see *Figure 3*), remove the wall tamper breakout with a small tool.

Figure 3: Point Transmitter



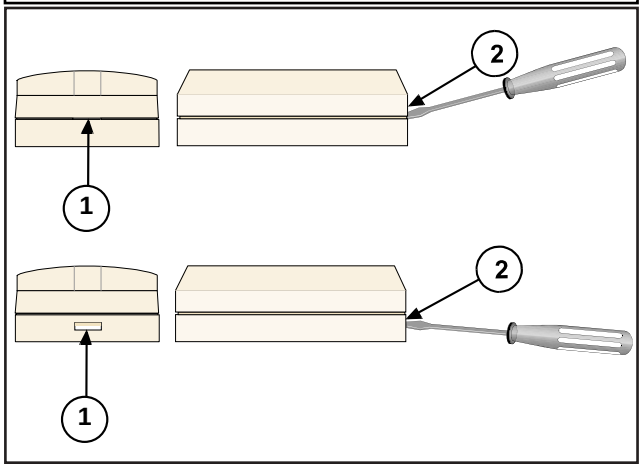
The ID label removed to show detail.

1 - Wall tamper breakout area

2 - Wire entrance

5. Tear off the loose portion of the ID label to use in panel programming (see *Section 5.0 Panel Programming*).
6. Depending on which case your transmitter comes with (see *Figure 4*), open the transmitter cover by inserting a small flat-blade screwdriver into the slot at the end of the transmitter. Then push in with the screwdriver until the latch opens.

Figure 4: Open the Point Transmitter

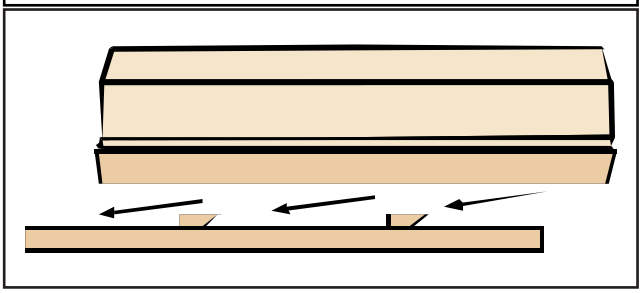


1 - Insert screwdriver and push here.

2 - Push in.

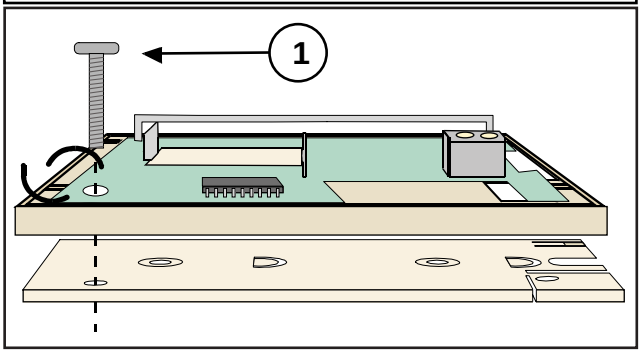
7. Slide the point transmitter over the mounting plate to lock it into place (see *Figure 5*). If connecting an external device, make sure its wiring is pulled through the wire entrance of the point transmitter as the point transmitter slides onto the mounting plate.

Figure 5: Slide the Point Transmitter onto the Mounting Plate



8. Make the wiring connections for any external device. Refer to *Section 4.0 Setting Up Magnetic or External Contacts.*
9. If the installation requires additional security, use an additional panhead screw to mount the point transmitter (see *Figure 6*).

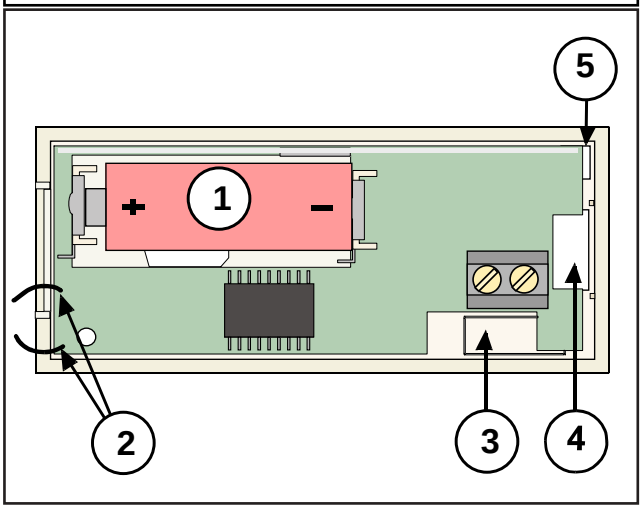
Figure 6: Mount for Extra Security



1 - Security screw

10. Install a recommended battery (see *Section 2.0 Specifications*). Be sure to observe the proper polarity (see *Figure 7*).

Figure 7: Correctly Installed Battery



Cover removed to show detail.

1 - Battery

2 - Tamper switch wires

3 - Wall tamper breakout area

4 - Wire entrance

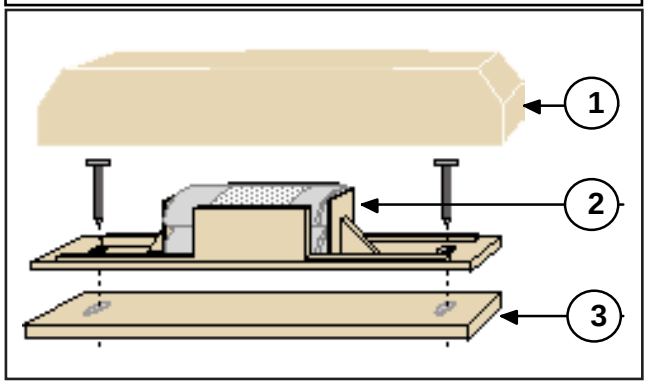
5 - Release tab

11. Close the cover.
12. Release the point transmitter from the base by disconnecting any external wiring and removing the security screw (if used). Then press the release tab (see *Figure 7*) with a small tool and slide the point transmitter off the mounting plate.

3.3 Mounting the Magnet Assembly

1. Mount the magnet base using two panhead screws (see *Figure 8*).
2. Snap on the magnet cover.

Figure 8: Magnet Assembly



1 - Cover
2 - Base
3 - Spacer

The spacer is optional and should be used for alignment as needed.

4.0 Setting Up Magnetic or External Contacts

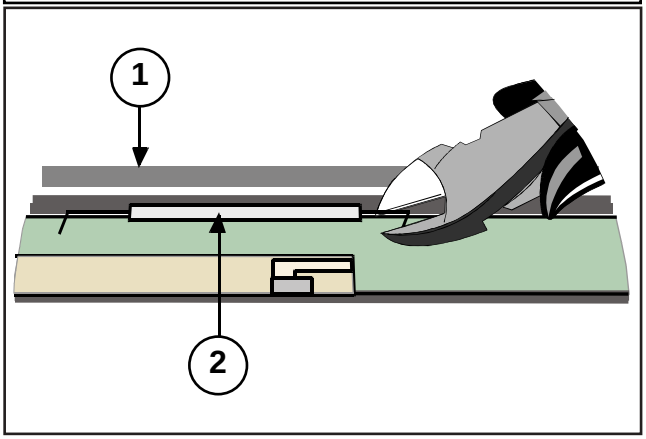
The RF3401E can monitor its internal reed contact or an external dry contact.

If using the RF3222E Receiver, the RF3401E cannot monitor both magnetic and external contacts simultaneously.

If using the magnet, do **not** use an external device.

If using an external device, remove the reed switch (see *Figure 9*).

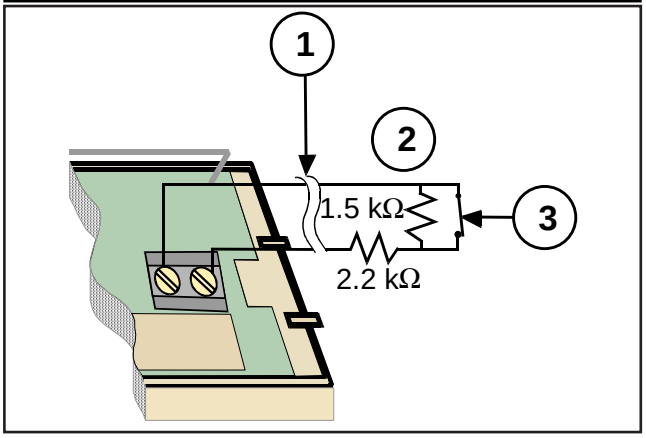
Figure 9: Remove the Reed Switch



1 - Antenna
2 - Reed switch

One set of external normally closed (NC) contacts (see *Figure 10*) can be monitored. Be sure your panel supports the intended loop condition.

Figure 10: Typical NC Wiring



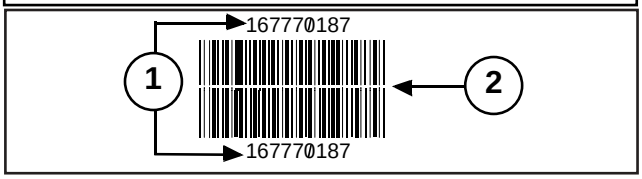
1 - Up to 6 m (19 ft.)
2 - Non-polarized
3 - Normally closed (NC) contact

The contact input is supervised using dual 1.5 kΩ and 2.2 kΩ End-of-Line (EOL) resistors. This lets the panel identify wire tamper conditions (opens or shorts). The total cable length for the external wiring should not exceed 6 m (19 feet).

5.0 Panel Programming

A two-part ID sticker (see *Figure 11*) is located on the housing of the RF3401E. The number on this sticker is required to program the point transmitter into the control panel. Refer to your panel's *Programming Guide* for programming information on wireless type devices.

Figure 11: ID Number



1 - ID number

2 - Bar code

Notes:

Bosch Security Systems
130 Perinton Parkway
Fairport, NY 14450-9199 USA
www.boschsecurity.us
Customer Service: (800) 289-0096
Technical Support: (888) 886-6189

42597E

BOSCH