# Installation Instructions for the RF3222 RF Receiver

## **1.0 General Information**

The RF3222 RF Receiver allows the use of wireless devices when using the DS7400Xi Control Panel.

## 2.0 Specifications

• Dimensions (H x W x D):	4.25 in. x 6.0 in. x 1.2 in. (10.8 cm x 15.2 cm x 3.1 cm)
Operating Temperature:	+32°F to + 150°F (0°C to 65°C) For UL Listed requirements, the temperature range is +32°F to +120°F (0°C to +49°C).
Frequency:	304.00 MHz
<ul> <li>Power Requirements:</li> </ul>	12 VDC, 30 mA, nominal

- Compatible Control Panels: DS7400Xi revision 4.03 or higher
- **Compliance:** This device complies with Part 15 of the FCC Rules and the RSS-210 of Industry and Science Canada. Operation is subject to the following two conditions:
  - (1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undersirable operation.

Changes or modifications not expressly approved by Bosch Security Systems can void the user's authority to operate the equipment.

### 3.0 Mounting

#### 3.1 Mounting Considerations

- The Receiver should be mounted in a central location in regard to all wireless sensors, whenever possible.
- The Receiver should be mounted on a vertical surface with at least 10 in. (25 cm) clearance for the antennas.
- Avoid mounting the Receiver in areas with significant metal or electrical wiring, such as furnace rooms and utility rooms. If this is unavoidable, mount the Receiver with the antennas extending above any metal surface.
- Avoid mounting the Receiver in areas where it may be exposed to moisture.
- Reception distances are generally improved with higher mounting locations and with no metal objects near the Antennas.

# 3.2 Wall Tamper Setup (Optional)

To enable the Wall Tamper Switch, follow the procedure below. If the use of the Wall Tamper is not desired proceed to Section 3.3.

• Remove the Outer Cover of the Receiver (see Figure 1) and set it aside.

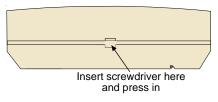


Figure 1 - Removing the Outer Cover

• Remove the Inner Cover (see Figure 2) by pressing the Latch.

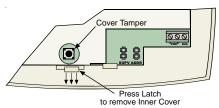
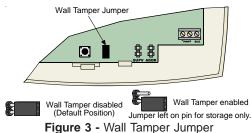
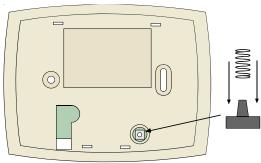


Figure 2- Removing the Inner Cover

• Move the Wall Tamper Jumper as shown in Figure 3.



- Replace the Inner Cover.
- Place the Spring from the hardware packet over the shaft of the Tamper Switch located on the back of the Receiver (see Figure 4).



Rear of receiver

Figure 4 - Installing the Tamper Spring

**NOTE:** Gently press the Spring onto the tapered shaft. Do **not** force it down onto the shaft.

# 3.3 Mounting the Receiver

- Determine the mounting location of the Receiver.
- If not already done, remove the Outer Cover from the Receiver (see Figure 1) and set it aside.
- Place the Receiver base on the wall at the desired mounting location and mark the two Mounting Holes (see Figure 5).
   Antenna Connectors

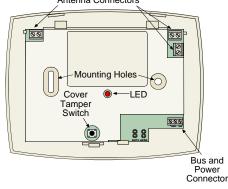
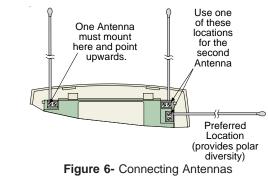


Figure 5- Receiver with Outer Cover Removed



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- Drill holes and install anchors (supplied) if necessary.
- · Secure the receiver base to the wall with screws (supplied).
- Insert an Antenna into the outside terminal on two of the Antenna Connectors as shown in Figure 6. Tighten screws to secure the Antennas.



NOTE: The remaining Antenna Connector and the remaining holes in the used Antenna Connectors are **not** used.

### 3.4 Setting Receiver Options

Changing these settings will require that the power to the receiver be removed and then reapplied for the changes to take affect. For more detailed information, refer to the Wireless reference Guide for the DS7400Xi Control/ Communicator

• Set the Transmitter Supervision Option as appropriate:

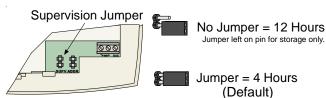


Figure 7 - Supervision

• Set the Receiver Address Option as required:

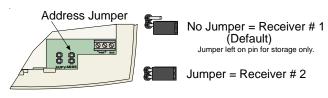


Figure 8 - Address

# 4.0 Wiring and Power Up

#### 4.1 Wiring the Receiver to the Control Panel

- **NOTE:** A DS7430 or a DS7436 Multiplex Module is required to connect an RF3222 Receiver to a DS7400Xi Control Panel.
- Disconnect power from the Control Panel.
- Connect the DS7430 or DS7436 Multiplex Module terminals to the RF3222 Receiver's terminals as shown in Figure 9, using a minimum diameter of 22 AWG (0.7 mm) solid wire or 18 AWG (1.0 mm) stranded wire. Wire length between the receiver and the Control Panel should not exceed 1000 ft. (300 m). Adding additional devices to the bus may reduce the maximum distance. Shielded cable is not required. Do not use twisted pair wire.

- **NOTE:** Fire systems installed under NFPA 72 or UL Listed Fire Systems require the use of #18 AWG or larger wire.
- If using a DS7436 Multiplex Module, either bus block may be used. If using two receivers and the DS7436 Multiplex Module, either or both bus blocks may be used.

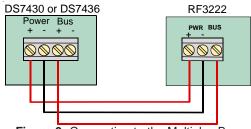


Figure 9- Connecting to the Multiplex Bus

- Replace the Outer Cover.
- Apply power to the Control Panel. The red LED at the center of the Receiver should light.

### 4.2 LED Status

The following table (Table 1) describes the status of the Receiver based on the LED condition.

LED Condition	Meaning
On	The receiver is functioning normally.
Off	A power failure has occurred or the receiver is not wired correctly.
Turns off momentarily	The receiver acknowledged receiving a message from a compatible transmitter.
Flashes rapidly for less than 1 minute	The receiver is being programmed with zone and transmitter IDs from the DS7400Xi Control Panel. This condition will occur upon initialization (power up) of the system or when new zone information has been programmed into the system.
Flashes rapidly for more than 1 minute	The receiver has failed power up self tests. Replace receiver.

Table 1 - LED Status

# 5.0 Panel Programming

For programming information, refer to the Wireless Reference Guide for the DS7400Xi Control/Communicator.