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60-647-95-16Z

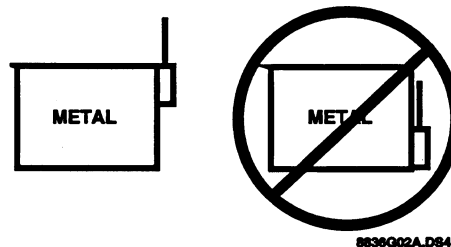


Figure 1. Mounting on Metal Surfaces

About This Document

This document describes how to install, program, wire, and test the D208RF and D216RF Point Expanders.

Introduction

The RF Point Expander allows you to use up to 8 (D208RF) or 16 (D216RF) ITI® Learn Mode™ wireless devices with the Radionics D2212 panel.

Installation Guidelines

Observe the following guidelines when installing the Expander:

- Leave 10" above the Expander for the antennas.
- Avoid areas that are likely to expose the Expander to moisture.
- Avoid areas with excessive metal or electrical wiring, including furnace and utility rooms.

or-- If unavoidable, mount on metal with the antenna extending above the metallic surface (see Figure 1).

Installing the Expander

CAUTION: You must be free of static electricity before handling circuit boards. Touch a bare metal surface or wear a grounding strap to discharge yourself.



To Install the Expander:

1. Remove the Expander cover by pressing down on the top center of the cover (see Figure 2).

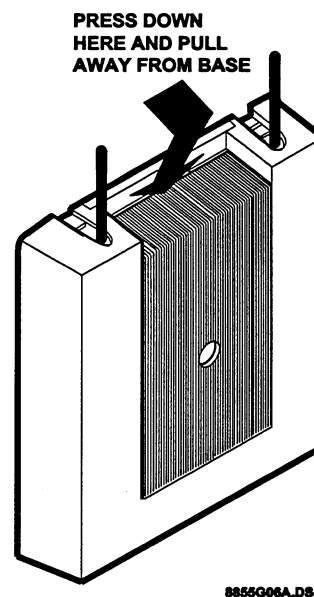


Figure 2. Removing the Expander's Cover

2. Press down on the lower-right corner of the base until the latch releases the circuit board (see Figure 3). Gently lift the circuit board by the terminal block to remove it from the base. Place the circuit board in the cover while you mount the base.
3. Hold the base against the mounting surface and mark the three mounting holes (see Figure 4). Remember to leave at least 10" above the base for the antenna.
4. Remove the base and install the provided anchors. Then place the base on the wall and secure it using the provided screws.
- or--* If a stud is located behind one or more mounting holes, do not use anchors. Secure the base using only the provided screws.
5. Place the base on the wall and secure it using the provided screws.

CAUTION: When installing the Expander, only use screws that match the specifications of the provided screws (Type AB, #6 x 1" tapping screws).

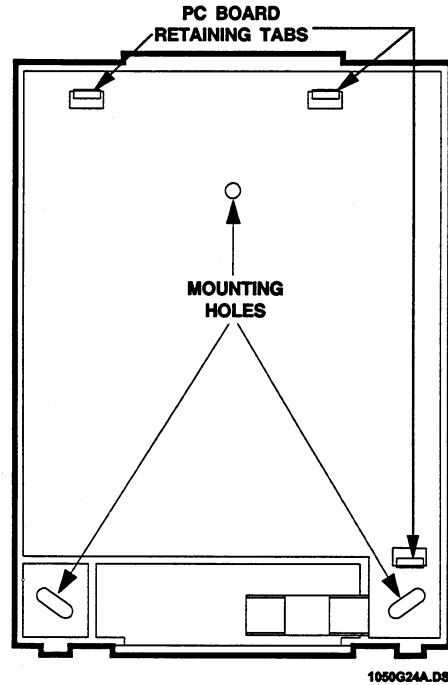


Figure 4. Mounting with Circuit Board Removed

Connecting the Antennas to the Expander

To Connect Antennas to the Expander:

1. Loosen the **inside** terminals of the left and right antenna terminal blocks (see Figure 5).
2. Insert an antenna into each **inside** terminal.
3. Tighten the terminal screws.
4. Replace the Expander cover.

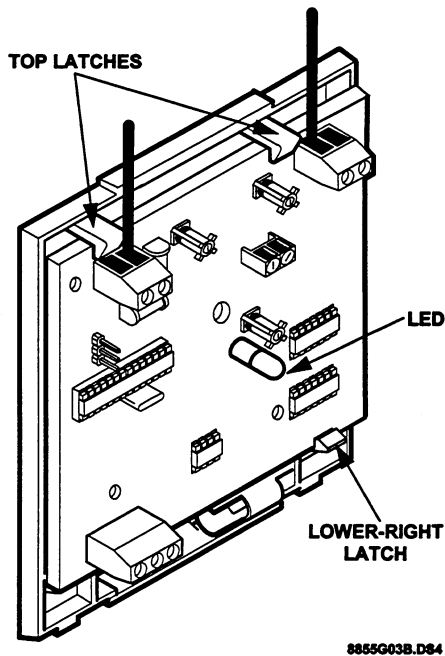


Figure 3. Removing the Circuit Board

6. Remount the circuit board on the base.

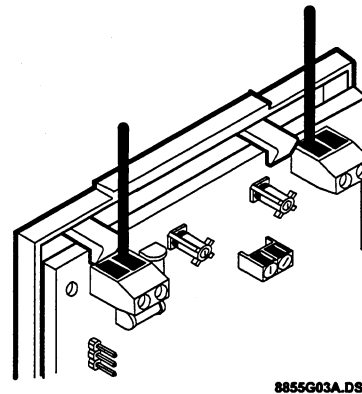


Figure 5. Connecting Expander Antennas

Wiring Connections

To Wire the Expander:

1. Make sure the panel is powered down.
2. Connect panel terminals 10, 9, and 8 to Expander terminals -, +, and D, respectively (see Figure 6).

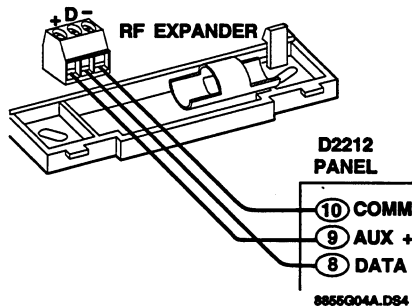


Figure 6. Connecting the Expander to the D2212

Testing

After wiring the Expander to the panel, you can determine the Expander's status by observing the LED.

To Determine the Expander's Status:

1. Check the panel and Expander connections.
2. Power up the panel.
3. The Expander's LED shows status (see Table 1).

Table 1. RF Point Expander's Status LED

| LED | Indicates |
|------------------------|--|
| Remains steadily lit | Expander is functioning normally. |
| Remains off | Expander is not properly wired. |
| Blinks continuously | Expander failed the power-up test. |
| Blinks off momentarily | Expander acknowledged receiving an RF message. |

Programming

CAUTION: You must be free of static electricity before handling circuit boards. Touch a bare metal surface or wear a grounding strap to discharge yourself.



To Program the Panel For the Expander:

1. Select an address (7 or 8) by setting the Address Jumper to 7 or 8 (see Figure 7).

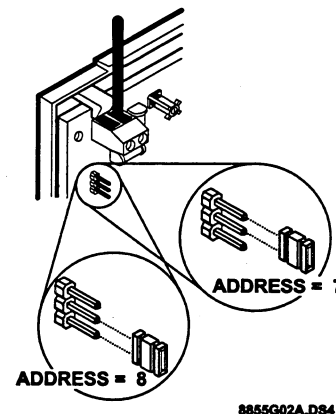


Figure 7. Setting the Address

2. Follow the programming procedure described in the Radionics documentation for adding an RF Point Expander to the D2212 panel. Make sure you make the correct selection at the Address 7 or Address 8 prompt in the address configuration group (see the *D2212 Program Entry Guide*).

Learning RF Points

See the *D2212 Keypad Diagnostics Manual* for instructions on learning RF points.

Central Station Reports

The D2212 panel sends Modem II receiver reports for D208RF/D216RF receiver tamper and receiver trouble conditions.

Using the Expander with the ITI Learn Mode Repeater

The D208RF (version 8.0 and later) and D216RF (version 8.0 and later) are fully compatible with the ITI Quik Bridge™ Learn Mode Repeater.

The Quik Bridge Learn Mode Repeater receives signals from Learn Mode sensors and retransmits them, nearly doubling the distance a sensor can be mounted from the control panel.

A few notes make the *Learn Mode Repeater Installation Instructions* easier to use with the RF Point Expanders.

- **Dealer Sensor Test.** The Installation Instructions refer to a Dealer Sensor Test. This is the same as the RF Point Test. See the *D2212 Keypad Diagnostics* manual for details about how to perform an RF Point Test.
- **Use of the Term "Control Panel."** Throughout the Installation Instructions, it is assumed that the control panel and RF Receiver are one unit. Therefore, there are places where the Installation Instructions will talk about a repeater transmitting directly to the panel.
- **Programming the Repeater into the Panel.** Refer to the *D2212 Keypad Diagnostics* manual for the procedure to learn RF points. This same procedure is used to learn RF Repeaters. The recommended point code for a Learn Mode Repeater is 412##.

RF Point Expander Specifications

Compatibility:

Radionics D2212 panel

External Power:

7.5 - 14.0 VDC (provided by panel)

Current Draw:

50 mA maximum

Operating Temperature Range:

10° to 120°F

Dimensions:

4-1/16" x 5-1/4" x 1" (L x W x H)

FCC Notice

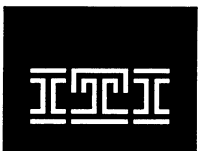
This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Interactive Technologies, Inc. can void the user's authority to operate the equipment.

UL985 Household Fire

UL1023 Household Burglary



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