

MW415

Remote Receiver

SPECIFICATIONS & INSTRUCTIONS

APPLICATION

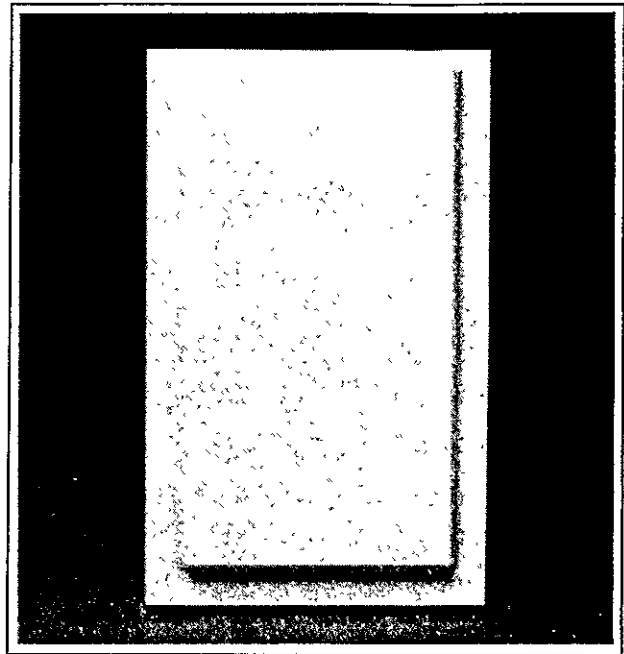
The MW415 Remote Receiver is designed for use with the Impact 300 Wireless Security System for installations in which RF reception at the control panel is minimal or unacceptable and an Aritech MW540 Dipole Antenna has already been eliminated as a possible solution to the reception problem. Remote receivers should be used sparingly and only for distant wireless points that cannot reach the Impact main control.

FEATURES

- ☐ Fully functional receiver.
- ☐ Self-contained antenna.
- ☐ Attractive styling.
- ☐ Easy installation.
- ☐ Four wire connection.
- ☐ 12 Volt operation.

SPECIFICATIONS

- ☐ Color: Off white.
- ☐ Dimensions: 9.44" x 5.90" x 1.22".
- ☐ Operating voltage: 10.8 to 13.2 VDC.
- ☐ Current consumption (at 12 VDC): 50mA typical, 80mA maximum.
- ☐ Local oscillator stability: tolerance @ 25°C: ± 5 PPM. Temperature stability (0° to 50°C): ± 15 PPM.
- ☐ System sensitivity (AM 89% modulation): 25dB μ V/m.
- ☐ Dynamic range (AM 89% modulation): 90 dB μ V.
- ☐ System selectivity:
 - 18 dB bandwidth: 318.6 MHz ± 50 KHz.
 - 30 dB bandwidth: 318.6 MHz ± 350 KHz.
- ☐ Spurious response: Image rejection: 35dB min. Rejection (1 MHz to 1 GHz): 40 dB min.
- ☐ RF emission: Complies with F.C.C. Rules Part 15, F.C.C. ID. No. HHV26PECA220195N. Complies with DOC Rules TRC-51, Issue 2 and GL 17 Rev. 3, Certification No. 623 K1399.
- ☐ RF carrier used: 318.6 MHz.
- ☐ RF oscillation: Crystal controlled.
- ☐ Operating temperature: 32°F to 122°F (0°C to 50°C).
- ☐ Storage temperature: -4°F to +140°F (-20°C to +60°C).
- ☐ Data lines S0 and S1 output type: Open collector.
- ☐ Data lines S0 and S1 drive: Sink 1 mA min.
- ☐ Maximum Wire Distance from the control panel (four-conductor, 14-22 AWG): 300 ft. per MW415.
- ☐ No more than two MW415 Remote Receivers should be utilized per control panel.



PRIOR TO INSTALLATION

In order to determine that all transmitters can communicate with the control receiver, check the received signal strength from each transmitter in the system with the Aritech MW550 Signal Strength Tester (SST). These point tests may be performed before the RF devices are programmed into the control panel.

To perform the tests, activate all transmitters while measuring the signal strength at the control receiver location. If the coverage is unacceptable, the installation of one or more MW415 Remote Receivers may be required. Use the Signal Strength Tester to determine the best location for installation of the remote receivers.

The remote receiver is compatible only with Impact 300 Revision E (or higher) printed circuit boards. The printed circuit card revision is located in the upper left corner of the control board next to the part number 60821400.

MOUNTING CONSIDERATIONS

Refer to the control panel installation manual for choosing a location for mounting the control. Use it as a guide also for choosing a mounting location for the remote receiver.

INSTALLATION AND TESTING

1. Remove the cover by unscrewing the small phillips head screw on the bottom of the unit (see Figure 1). Gently pull the cover away from the base by rotating the cover up.
2. Mount the base of the unit in the desired location using the four mounting holes (see Figure 2).
3. Attach the four control wires (+12V, NEG, S1 and S0) to the terminals as shown in Figure 3. Use 22 AWG or larger solid or stranded wire. Stranded wire offers lower resistance and additional protection against breakage. Do not exceed a wiring distance from the remote receiver to the control panel of 300 feet.
4. Disconnect the whip antenna from the control panel and disconnect any previously installed remote receivers. If the LED on the remote receiver is flickering on and off, the unit may be too close to a potential noise source which is interfering with signal reception. Move the remote receiver to a location where the LED is extinguished.
5. Select the POINT TEST option from the TESTS Menu on the control station. Then, while in POINT TEST, activate a transmitter that has already been programmed into the control panel. Verify that the LED inside the remote receiver activates on the transmission and also verify the control station's annunciation and identification of the device being activated.
6. Once communication has been established between all remote receivers and the control panel, re-connect the control panel's whip antenna and ensure that all remote receivers are fully connected.

7. Perform a POINT TEST again and verify that all transmitters are being received at the control panel.
8. Replace the cover by aligning the tabs on top of the unit. Rotate the cover into place and secure with the screw removed in Step 1.

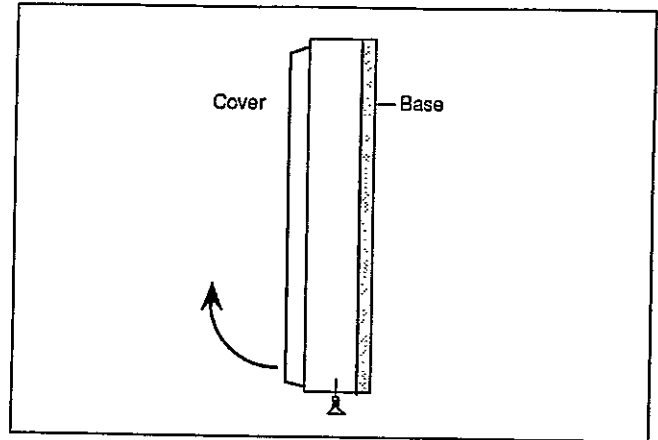


Figure 1 - Side View

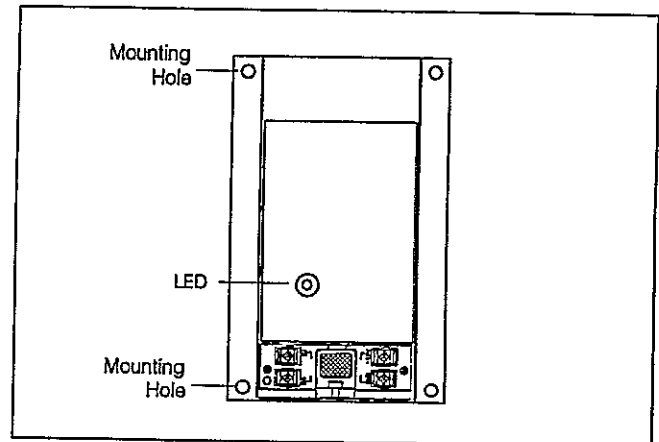


Figure 2 - Base and Mounting Holes

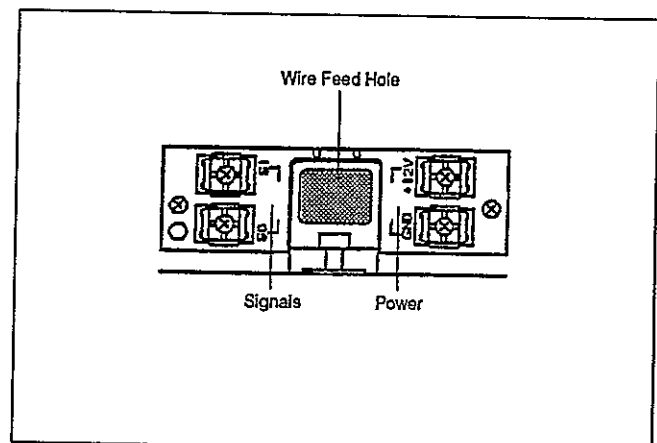


Figure 3 - Terminal Connections

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