Required Tools

▸ Anti-static wrist strap
▸ Small slotted screwdriver
▸ Small Phillips head screwdriver
▸ Wire stripper and wire cutter

▸ Adjustable wrench
▸ Voltmeter
▸ Wire to connect power supply to a voltage supply

▸ Wire nuts
▸ Windows® Laptop PC
▸ USB Mini-b cable
▸ Bullhorn® Tools (see back)

Installing the Equipment

The following procedures are general steps for a typical installation. For specific instructions, including safety warnings and safety icon descriptions, see *RM4000 Series User Guide* (part no. 122173-000) available from the **Documents** page of the Bullhorn Web **Help** site (**www.support.aiworldwide.com**).

WARNING: To prevent electrostatic discharge (ESD) damage when handling electronic equipment, always wear an anti static wrist strap attached to an unpainted, grounded metal object. Ensure the wrist strap has maximum contact with bare skin.

WARNING: Before beginning any wiring to the RM4015, ensure that power has been turned off at the rectifier.

NOTE: For additional safety precautions for wiring power supply and unit inputs, see *RM4000 Series User Guide*.

1 Place or mount RM4015

1 Place **RM4015** inside rectifier, either to the front (shown) or rear of case, so that the unit covers a minimal amount of the air vent.
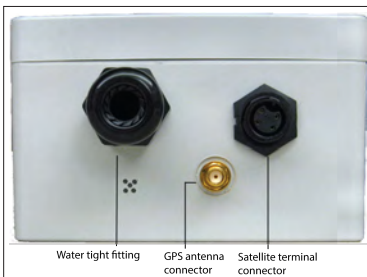
OR

2 Mount **RM4015** by attaching the included mounting brackets (4) to the back of the unit enclosure, as shown. **Be sure to use ½" conduit to cover input wires if mounting unit outside of the rectifier.**
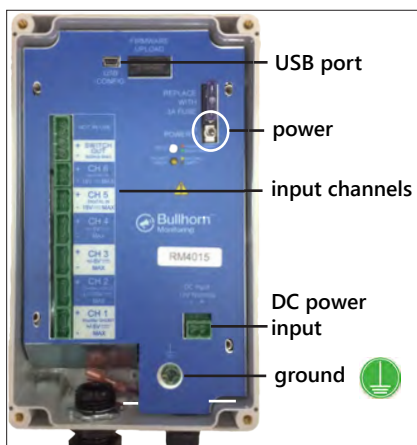

RM4015 Placement Inside Rectifier

RM4015 with Mounting Brackets

2 Attach GPS antenna & install power supply

Enclosure Connectors

Water tight fitting   GPS antenna connector   Satellite terminal connector

1 Remove cover on **RM4015**.

2 Attach **GPS antenna** to enclosure connector.

3 Route power supply wire through water-tight fitting. Connect **AC/DC** or **DC/DC power supply** to connection on **RM4015** faceplate.

a If using an **AC/DC** power supply, connect AC input cable of power supply to a 100-240 V AC supply/outlet or to a breaker.

b If using a **DC/DC** power supply, connect DC input cable of power supply to a 9-36 V DC supply/outlet or to a breaker.

4 Attach ground wire to **ground** connection on **RM4015**. Route wire through water-tight fitting; attach to rectifier frame using spade connectors or an I-beam ground clamp.

— USB port

— power

— input channels

— DC power input

— ground

RM4015 Inputs and Connectors

RM4015 Ground Connection to Recifier Ground

RM4015 Ground Connection to I-beam Ground Clamp

WARNING: If wires are to be buried or covered, use conduit to protect the wires.

(Continued on back.)

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Installing the Equipment, cont.

3   Install satellite terminal

Satellite Terminal

1 Mount **satellite terminal** on angle bracket. Mount to pole or other structure.

2 Angle bracket to 90°, with the terminal lying flat (as shown in photo).

3 Connect **satellite terminal** to connector on bottom of unit enclosure.

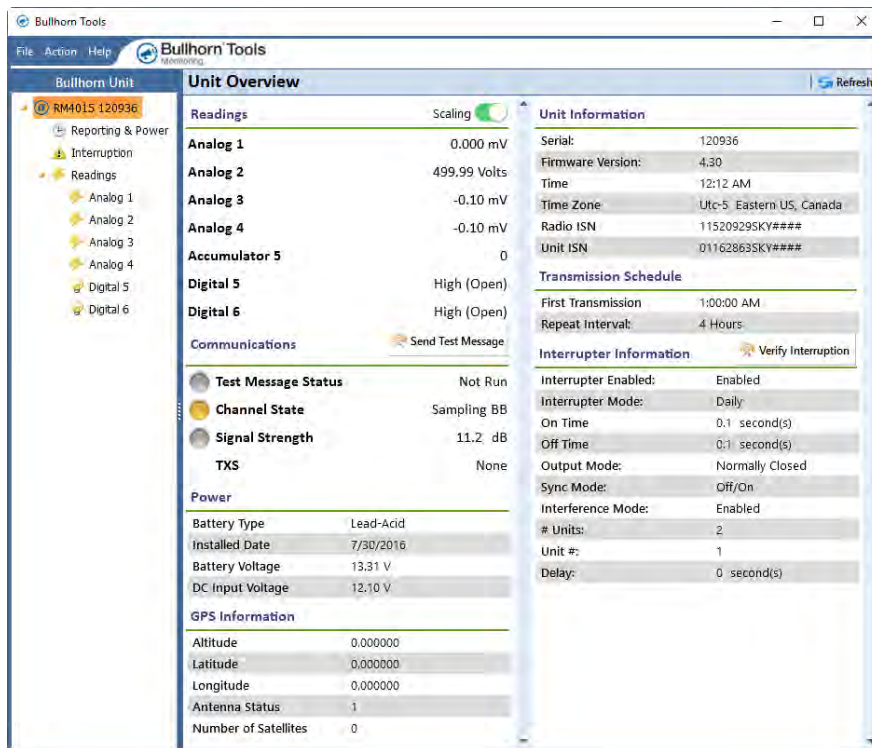4 Use **Bullhorn Tools** to verify satellite signal strength (see below).

4   Connect inputs, relay, and rectifier

1 Route input wires through ½" fitting into **RM4015** enclosure.

2 Connect input device and relay (for interruption only) to input channels using the following information:

- ▸ **SWITCH OUT**: relay
- ▸ **CH 1** *Rectifier SHUNT*: analog (±5 V DC)
- ▸ **CH 2** *Rectifier VOLTS*: analog (±100 V DC)
- ▸ **CH 3 & CH 4**: analog (±5 V DC)
- ▸ **CH 5**: digital (0 - 15 V DC). Can also be set as an accumulator.
- ▸ **CH 6**: digital (0 - 15 V DC)

3 Connect input wires from **RM4015** to output terminals of rectifier.

4 Turn **ON** rectifier. Wait at least 2 minutes before continuing with configuration.

Configuring the RM4015 for Service

The following procedure provides general steps for configuring the **RM4015** for service using Bullhorn Tools. Before beginning the configuration steps, ensure that Bullhorn Tools is installed on your laptop. The software can be downloaded from the **Downloads** page on Bullhorn Web Help (**www.support.aiworldwide.com**).

1 Ensure that the configuration cable is connected to the **RM4015** and your laptops and the unit is powered on.

2 Open Bullhorn Tools. After the scan has completed, click 🖳**Connect** to open the *Unit Overview* window.

3 Click ♻ **Refresh** to update unit settings.

4 Click 🌡**Send Test Message** to verify communications.

5 Load or import a saved template, if available (**File > Load Template**).

6 Click 🕒 **Reporting & Power** to adjust unit clock, create a transmission schedule, check battery information, and set AC outage delay alarm times.

7 *For interruption only* - click ⚠**Interruption** and configure interruption and (optional) interference settings. Click 🌡**Verify Interruption** button (on *Unit Overview* window) to verify process is working correctly.

8 Configure **Readings**, including Analog and Digital. **Digital 5** can be configured as an accumulator.

9 Exit Bullhorn Tools and disconnect configuration cable.

10 Close and secure enclosure door.