

## Required Tools

- ▶ Screwdrivers
- ▶ Wire stripper and wire cutter
- ▶ Crimper
- ▶ Adjustable wrench
- ▶ Voltmeter
- ▶ Drill and assorted bits
- ▶ Zip ties

## Safety Warnings & Requirements



**WARNING:** Turn off rectifier input power prior to installation. Use a digital voltmeter to confirm that rectifier output voltage is less than 5 V DC.

For a complete list of safety requirements, see the RM5 Series User Guide available at <https://support.aiworldwide.com/products/bh2/content/topics/index.htm>

## 1 Install the RM5 Power Supply and REL2510 Relay

**IMPORTANT:** Only RM5 power supplies should be used with RM510C units. DO NOT connect the RM5 power supply directly to AC power mains.

- 1 Use a digital voltmeter to identify a 10-30 V AC power source across the rectifier's secondary taps (separate from the taps bridged by the bus bar to deliver rectifier output voltage).
- 2 Connect the Input cables from the RM5 power supply and the optional REL2510 relay to the 10-30 V AC power source identified in step 1. Secure connections with the provided nuts.
- 3 Refer to the installation diagram on page 2 for details on installing the RM5 power supply and optional REL2510 relay. **IMPORTANT:** The output cables of the REL2510 relay replace the bus bar.

## 2 Install the RM5 I/O4 Module

**IMPORTANT:** The RM5 I/O4 module must be installed inside an enclosure (such as the rectifier cabinet).

- 1 Secure the RM5 I/O4 module to any ferrous metal surface using the magnetic mounts, or mount it in the desired location using the included screws.
- 2 Refer to the installation diagram on page 2 for details on installing the RM5 I/O4 module. **IMPORTANT:** On the Bullhorn website, channels 1 and 2 are preconfigured to read rectifier amps and volts, respectively.
- 3 See the RM5 I/O4 module label for maximum channel input ratings. Ensure all system connections make solid contact and are protected from moisture and dirt to prevent shorting or corrosion.

## 3 Install the RM510C Dome

**IMPORTANT:** The RM510C dome must be mounted outside of the rectifier cabinet with a clear view to the sky.

- 1 Secure the RM510C dome to any ferrous metal surface using the magnetic mounts, or mount it in the desired location using the included screws. Use the provided mounting bracket if necessary.
- 2 Feed the included M8 cable through a 1/2 inch hole drilled through the bottom of the rectifier cabinet and secure it with the included grommet. **IMPORTANT:** To avoid damaging the M8 cable, hand tighten connections at the RM510C dome and RM5 I/O4 module.
- 3 Refer to the installation diagram on page 2 for details on installing the RM510C dome.

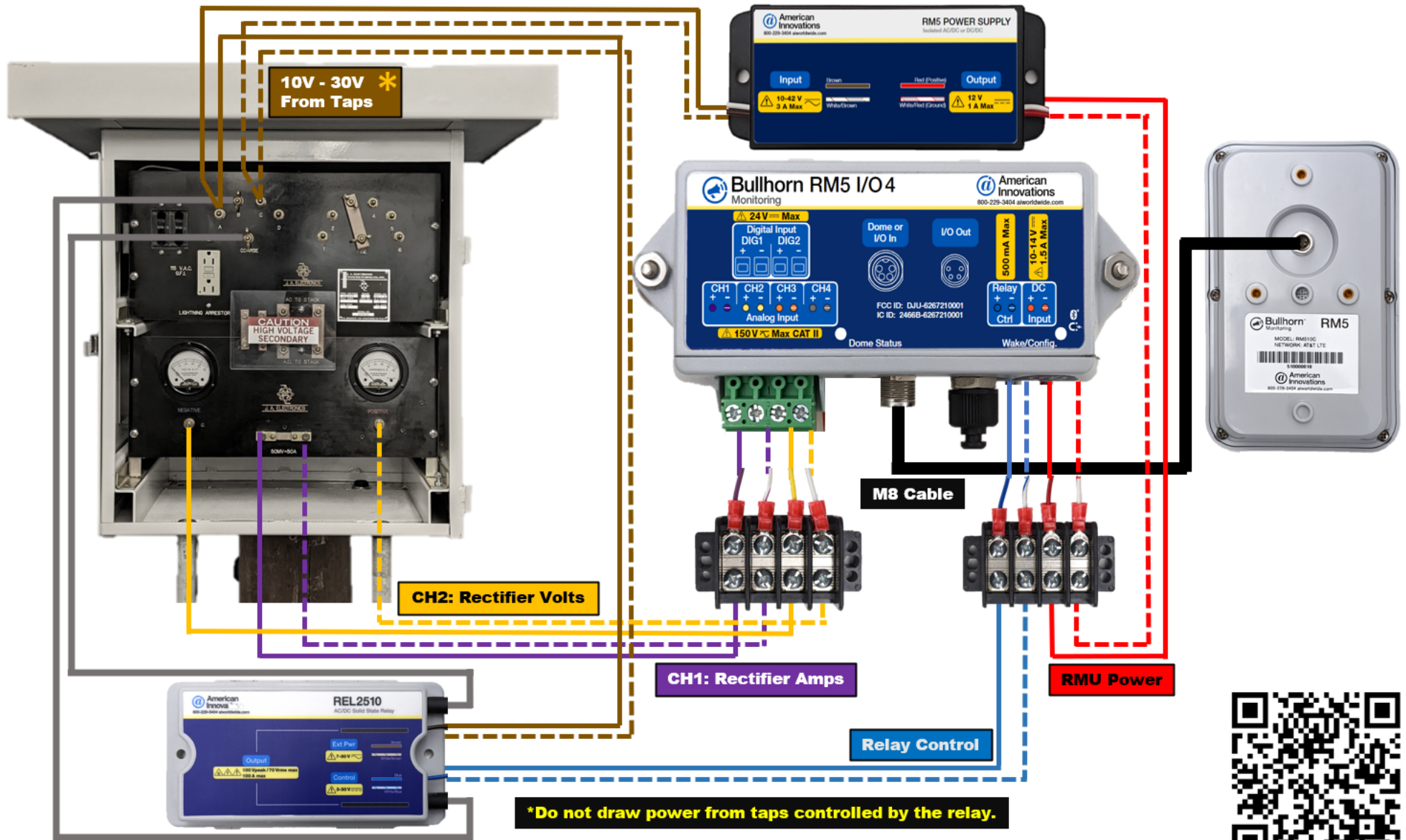
## 4 Testing and Configuration

**IMPORTANT:** Restore input power to the rectifier. Using a digital voltmeter, take test measurements to confirm the rectifier is functioning normally.

- 1 Confirm that the Dome Status LED located on the RM5 I/O4 module is illuminated green.
- 2 To configure the RM510C, navigate to [www.bullhornsys.com](http://www.bullhornsys.com) and log into your Bullhorn Web account.
- 3 For complete configuration instructions, see the RM5 Series User Guide available at <https://support.aiworldwide.com/products/bh2/content/topics/index>

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# RM510C Installation Diagram



Scan for RM5 Installation Video

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