

Summary If you have a Pacific Crest radio with model number RFM96W that you want to use with a Series 4000 receiver/Survey Controller, you may need instructions for connecting them and configuring the system correctly. This TIP includes a series of steps to help you troubleshoot any problems you may be having in connecting your Pacific Crest radio to your Series 4000 receiver and configuring the system correctly.

To connect your Pacific Crest radio to your Series 4000 receiver and configure the system correctly, check the following:

- a. **Caution:** Before powering up the unit, make sure the rover and base radios are connected to the radio antenna.
- b. Make sure the *Config* menu of the Survey Controller (SC) is set to *Custom*, and the receiver port, baud rate, parity, etc. are set correctly. The following are the default settings of Pacific Crest radios sold by Trimble:
 - Baud Rate: 9600
 - Data Bits: 8
 - Parity: odd
 - Stop Bits: 1

Verify your configuration by using the configuration program that comes with your radio system.

- c. Make sure the reference position of the base station is realistic, i.e., close to the autonomous position displayed by pressing the [Status] / [Position] keys. Make sure the *Long* (longitude) is negative if you are in the Western hemisphere.
- d. Make sure the rover receiver is tracking L1 or L1/L2, depending on the receiver configuration, to enable initialization.
- e. Make sure the cable is connected between I/O 2 on the 4000 receiver and the 5 pin IO port on the Pacific Crest base station radio. Make sure a camcorder battery is in-line on the above cable and that it's charged.
- f. Make sure the 2 pin cable is connected between the 12 volt deep-cycle marine battery and the base station radio amplifier.
- g. Make sure the ports labeled ANTENNA LOW PWR OUT and RADIO on earlier versions of the Pacific Crest Radio are connected by the short black U-shaped cable. In addition, make sure a cable is going from the output connector (located on the top-right part of the base radio assembly) to the radio antenna. For later versions, a toggle switch replaces the U-shaped cable; use this switch to toggle between low or high power output.
- h. Make sure the 5 pin port on the rover radio is connected to IO port 2 on the 4000 receiver. In order to power the rover radio, make sure the in-line camcorder connector, if provided, is connected to the camcorder battery.

Note: the new base units supply their own power.

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