

Using the Satel EASyPro 35W Mobile Base Radio with the Carlson BRx5 GNSS Receiver

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OVERVIEW:

Carlson's BRx5 GNSS receiver configured as a base can be used with Satel's SATELLINE EASyPro 35 watt mobile base radio. This document describes a procedure for configuring the EASyPro radio to avoid damaging the BRx5's internal UHF radio or GSM radio using SurvCE version 4.03 or higher.

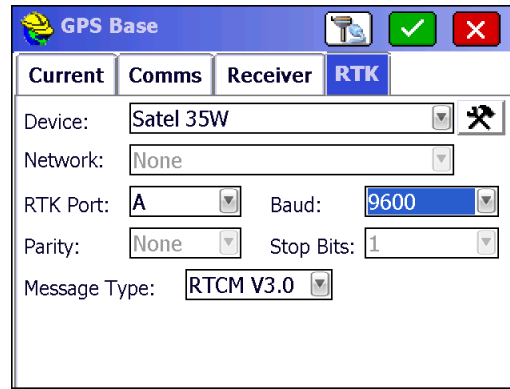
PROCEDURE:

1. Setup the BRx5 base and its tripod and the EASyPro radio antenna on its tripod. Connect the antenna cable from the EASyPro to the EasyPro antenna. Connect the communications cable (to the EASyPro (8 pin LEMO connector) and the BRx5 (9 pin D type male connector to the 9 pin connector on the BRx5). Plug the power cable into the EASyPro (2 pin Lemo connector) but do not connect the red and black clips to the battery powering the EASyPro (in other words, DON'T TURN ON THE EASyPro power).
2. Turn on the BRx5 GNSS base by holding down the power button. Run SurvCE on your data collector. Go to Equip/Base/Comms and connect to the BRx5 base using Bluetooth.
3. Select the RTK tab. Set device to "Satel 35W", set the RTK Port to "A" and the baud rate to "9600". This is the default value for the EASyPro radio, if you have changed the EASyPro's baud rate, you will need to set the baud rate in SurvCE to the same baud rate as the EasyPro.
4. Tap the green check. This will configure the BRx5 for the EASyPro radio. Tap the red X to skip setting the base position, this position will be set later in the configuration process.
5. Look at the control panel LEDs on the BRx5. The left-most LED should be off, indicating that the BRx5's internal UHF radio and GSM cell modem are both powered off. Press the select button the BRx5 and the LED display will be similar to this:



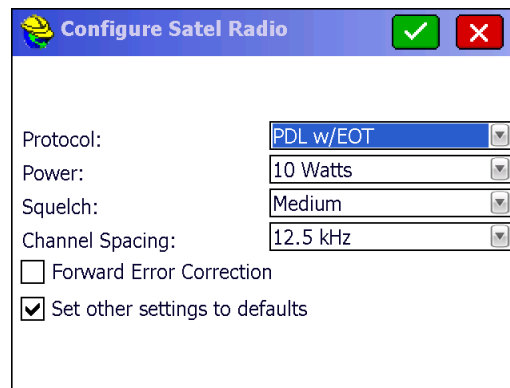
6. The most important LED is the left most LED. It should be OFF. If it is not powered off, repeat steps 2 and 3. DO NOT CONTINUE to step 7 if the left-most LED is ON, as you may damage the BRx5 internal UHF radio or GSM cell modem.

7. If the left-most LED on the BRx5 control panel is off, then apply power to the EASyPro 35W radio by connecting to the power clips to the battery. Select Equip / GPS Base in SurvCE on your data collector. Select the RTK tab and fill out the settings as shown below:



8. Tap the Tools icon to the right of the Device to configure the Satel Radio.

!!! Please Note: if you are unable to configure the Satel radio you may need to change to the "Baud:" in the GPS Base RTK tab to "19200" then try tapping the Tools icon again.



9. Set each of the desired menu options to properly configure the radio. The "Frequency" and "Channel Spacing" should be set to comply with your radio use license (obtained from the FCC in the United States). Tap the Green Check when the radio configuration parameters have been set then finish configuring the base by following the SurvCE prompts. The Rover will need to be configured to use the same frequency, channel spacing and protocol.

10. To use a Carlson BRx5 Rover with the Satel 35W base radio you will need to set Equip / GPS Rover / RTK tab to Device: Internal nL400 Microhard and Radio Mode: PC5 (FEC On).

Additional Notes:

If you have any questions, or problems, please contact the Carlson Technical Support Team: support@carlsonsw.com

Phone: (606) 564-5028

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