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The Carlson BRx6 GPS requires SurvCE or SurvPC Version 5.08 or higher.

The Knowledge Base article below has the steps to check your firmware and verify if it is up to date: <u>http://www.carlsonsw.com/support/knowledge-base/?action=display\_topic&topic\_id=1067</u>

## Here are the instructions for connecting a BRx6 base and rover using a Satel 35 watt base radio:

1) Power on your BRx6 base and then run SurvCE 5.08 or higher and tap Equip / GPS Base and set it for Manufacturer: Carlson and Model: BRx6

2) Tap the "Comms" tab and set it for "Type: Bluetooth" and "BT Type: Windows Mobile" and tap the "wrenches" icon to the right. Tap "Find Device" and follow the prompts to select the serial number of your BRx6 base then tap the Bluetooth plug icon in the top middle

3) Then tap the Receiver tab and tap next to "**Slant**" and measure up to the line where the top Blue cap meets the bottom Grey housing as shown in the image to the right with the Arrow symbol to use for your GPS Base Antenna height

4) Tap the RTK tab and set it for "Device: Cable or Generic Device" and "Baud: 19200" and "Message Type: RTCM V3.0"

5) Tap the Green Check and use one of the options in the "From New Position" or the "From Known position" to start the GPS base

6) Connect the cable from the BRx6 to the Satel 35 watt radio

7) On the Satel 35 watt keypad of the radio itself you can go use these keystrokes for checking the baud rate on Port 1:

7a. Setup / Port 1 / On / 19200 (If it is set to a different baud = change it to 19200)

7b. Setup / down arrow / Radio settings to set it for Compatibility = Satel 3AS

7c. Setup / Radio Frequency / **TX freq** / Set to set the TX transmit frequency to your FCC licensed frequency (if you are unsure of what frequency to use you can type in 461.0000)

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Current	Comms	Receiver	RTK
Antenna 1	Type: [HE	MS321	TIE
Antenna H	leight: 5.8	87 ft	Abs. 131.9mm
Elevation	Mask:	10	0
Position F	Rate:	1 Hz	z
Use I	MU		
Audio Mo	de:	On	
		Advanced	



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8) Move your BRx6 Rover at a distance of 20 feet or more from the Satel 35watt base radio then power on your BRx6 rover. Also - make sure the UHF antenna is screwed in to the left side (the port labeled UHF)

9) Tap Equip / GPS Rover and set it for Manufacturer: Carlson and Model: BRx6 then tap the "Comms" tab and set it to "Type: Bluetooth" then repeat Step #2 above to connect to the Rover by Bluetooth

10) In the Receiver tab = type in the Antenna height of 6.5617 feet and make sure its set to "Vert" for vertical if you are using the 2 meter pole that comes with it

Current Comms	Receiver	RTK	
Antenna Type: [[HE	MS321		<u>Vert</u> Slant
Antenna Height: 6.5	617 <b>ft</b>	Abs. 131.9m	m
Elevation Mask:	10		•
Position Rate:	1 -	lz	•
Use IMU			
Audio Mode:	On		•
	Advance	d	

GPS Rover

Device:

Network:

Current Comms Receiver

Nonfigure Internal UHF Radio

None RTK Port: Internal \*

Message Type: Auto Base ID (0-1023):

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\* - \*

-115200

V

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✓ Use Any Base ID

RTK

Baud:

11) Tap the RTK tab and set it for "Device: Internal UHF" and make sure to check the box next to "Use any Base ID"

12) Tap the "wrenches" next to "Device: Internal UHF" and fill it out using the settings below then tap the Green Check to save your changes: Protocol: Satel

Radio FW Version: V07.27.2.0.6.3(403-473) Protocol: Satel Power: 1 Watt Modulation 1: 461 MHz Channel: New Channel Frequency (ig 0.00000 To use a default channel ignore "New Channel Frequency: 0.0000" Channel Spacing: 12.5 kHz Forward Error Correction Off

\*\*\* If you used a custom frequency for the base you will need to change it to "Channel: 9: 0MHz" then in the "New Channel Frequency" box type in the frequency you entered into your Satel 35watt base radio

13) Now you can tap the Green Check to initialize the Rover and go into Equip / Monitor Skyplot and check to see if you are getting a FIXED solution

Power: 1 watt

Channel: 1:461 Mhz

Channel Spacing: 12.5 kHz

Forward Error Correction: Off

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