

Correcting Radio Connection Issues with the Focus 10 and Survey Pro

One of the most common radio connection problems with Survey Pro and Focus 10 Robot is the robot being set on a different Radio channel, Station address and Remote address compared to what is set in Survey Pro. To correct this problem follow the steps outlined below.



1. Setup the instrument with the battery pack as shown below.

2. Connect the data collector to the battery pack.





Note: The data collector cable must be attached to the same side of the battery pack as the power cable.

- 3. With all the cables connected to power the instrument and the cables connecting the instrument to the data collector start Survey Pro.
- 4. Create a Job in Survey Pro.
- 5. Survey Pro will turn the instrument on for you. You will hear one beep then two beeps. After the second set of beeps Survey Pro will show you the level bubble screen.



6. Use the electronic level to fine level the instrument. Align the instrument with 2 screws on the tribrach and level the trunnion. Use the third screw on the tribrach for leveling the sighting. Level the instrument to within acceptable survey tolerances.



- 7. Tap at the top right to initialize the compensators and return to the main menu in Survey Pro.
- 8. The instrument will turn and beep and then turn back to compensate itself. Once compensation has been completed you will return the main menu.



With a successful connection and compensation we can now put the Focus 10 instrument into Remote Mode to perform robotic total station surveys.

- 9. From the Main Menu tap on Job.
- 10. Tap on Settings.





- 11. Tap on the FOCUS Robot instrument profile to highlight.
- 12. Tap on Instrument Settings.

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<u>File Z</u> oom <u>T</u> ools <u>H</u> elp	
Instrument Setup	💡 🕑 😣
Name: FOCUS Robot	
Brand: Spectra Precisio	n 🔻
Model: FOCUS 10 Integ	rated 🔹
Instrument Settings	
Connection Status: Connected via serial.	Serial Port: COM 1 🔹
	Level Bubble
	<u>R</u> adio Settings

Verify that the Brand and Model are correct.

13. Tap on Radio Settings.

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<u>File Z</u> oom <u>T</u> ools <u>H</u> elp	
Settings - FOCUS 10 In	ntegrat 💡 🥑 😣
Remote	▼ Remote >
GeoRadio Settings: Channel: 2 Station Addr: 1	Go <u>R</u> emote <u>T</u> urn Gun Off
Remote Addr: 🛛 💌	Turn Gun <u>O</u> n
Connected via serial.	

14. Tap on Go Remote. This will put the Focus into Robotic mode and set the Channel, Station Addr and Remote Addr in the instrument.



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Press OK to put instrument in remote mode.	
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- 15. Tap on OK.
- 16. Survey Pro will put the Focus 10 instrument into Robotic mode.

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Press OK when you are connected to the radio.		
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- 17. Disconnect the cable from the battery pack.18. Setup your prism pole and connect to the radio.





Note: Attach the controller cable to the bottom port on the radio.

- 19. Tap OK on the screen in Survey Pro to start the communication process between radio and robot.
- 20. Once successful communication has been established you will see the level bubble screen in Survey Pro.



21. Tap 😢 at the top right to initialize the compensators and return to the Radio Setting screen in Survey Pro.



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Instrun	nent Setup		Ŷ	Ø	8
Name:	FOCUS Robot				
Brand:	Spectra Precisio	on			•
Model:	FOCUS 10 Integ	grated			•
Instrum	nent Settings				
Connectio Connect	on Status: ed via radio.	Serial Port: (сом	1	•
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22. Tap \checkmark at the top right to continue.

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Settings 🛛 💡 党 🔕) 😣
< General Instrument ▼ Units >				
Name	Port	Brand		Moc
FOCUS Robot	COM1	Spectra	Precision	FOC
Manual Mode				
▲ III ►				
Instrument	Create New Instrument		Delete	
Settings			Import.	
Activate	GeoLock		Export.	

23. Tap \bigcirc at the top right to continue.



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1 File	A Settings	
2 Job	B Edit Points	
з Survey	C Edit Polylines	
4 Stakeout	D Edit Alignments	
5 Inverse	E Auto Linework	

- 24. Use Remote Control to get the instrument to lock onto the RMT.25. Perform backsight setup in Survey Pro to start robotic survey.