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.

Verify that the Brand and Model are correct.

13. Tap on Radio Settings.

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.
15. Tap on OK.
16. Survey Pro will put the Focus 10 instrument into Robotic mode.

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.
22. Tap ✓ at the top right to continue.

23. Tap ✓ at the top right to continue.
24. Use Remote Control to get the instrument to lock onto the RMT.
25. Perform backsight setup in Survey Pro to start robotic survey.