

Trimble 5600 Robotic Connection

Confirm Settings

Firmware Versions

To check your firmware version, press Menu 5, 4, 1.

Note: These are the firmware numbers of the instrument we used during testing:

Trimble 5600 DR200+ (Station Mode) – Firmware version 696-03.08
Radio Version: 626-08.00 “2.4 GHz”

Communication Parameters

1. Select Menu, ENT, 4 (Data com), 1 (Select device), 2 (Serial) and at the prompt “Serial ON?”, select ENT.
2. Now confirm that the com settings = 1.8.0.9600 and press ENT to continue.
3. When prompted for “Table No.=”, select ENT.
4. When prompted for “Reg key?”, select ENT.

Checking Radio Settings

1. Select Menu, 1 (Set), ENT, (Radio)
2. Make sure FieldGenius is set to the channel value that is displayed. Press ENT to continue.
3. Make sure FieldGenius is set to the station address value that is displayed. Press ENT to continue.
4. Make sure FieldGenius is set to the remote address value that is displayed. Press ENT to continue.
5. Your total station will now be programmed with these settings.

Checking Settings in FieldGenius

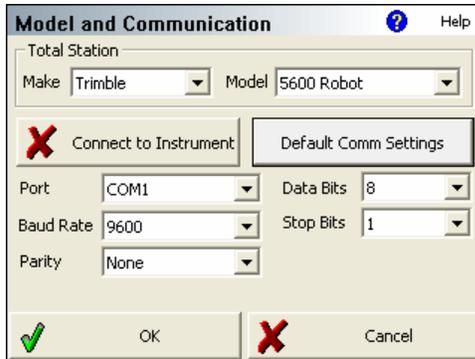
Please ensure you have FieldGenius 2005 Version 1.2 installed.

Go to the Main Menu → Settings → Instrument Settings → Total Station



Model and Communication

Make certain you set FieldGenius to equal the following:

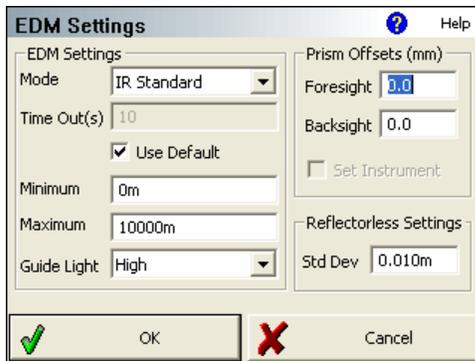


The screenshot shows the 'Model and Communication' dialog box. It is titled 'Total Station' and contains the following settings:

- Make: Trimble
- Model: 5600 Robot
- Connect to Instrument: (indicated by a red X icon)
- Default Comm Settings:
- Port: COM1
- Data Bits: 8
- Baud Rate: 9600
- Stop Bits: 1
- Parity: None
- Buttons: OK (with a green checkmark icon) and Cancel (with a red X icon)

EDM Settings

Make certain you set FieldGenius to equal the following:



The screenshot shows the 'EDM Settings' dialog box. It is titled 'EDM Settings' and contains the following settings:

- Mode: IR Standard
- Time Out(s): 10
- Use Default:
- Minimum: 0m
- Maximum: 10000m
- Guide Light: High
- Prism Offsets (mm):
 - Foresight: 0.0
 - Backsight: 0.0
- Set Instrument:
- Reflectorless Settings:
 - Std Dev: 0.010m
- Buttons: OK (with a green checkmark icon) and Cancel (with a red X icon)

Tolerance Settings

These are tolerances used during multisets, please confirm that the values meet your desired specifications.

Search Settings

To begin with, set this to Relative Window. Please refer to your FieldGenius manual for more information about the search settings options.

Search Settings ? Help

Search Mode: Relative Window

Search Window Range

Horizontal: Measure

Vertical: Measure

Search Window Center

Horizontal: Measure

Vertical: Measure

✓ OK ✗ Cancel

Radio Configuration

Make sure you select Radio, and confirm that the radio settings match what is set for your instrument.

Radio Configuration ? Help

Connection

Direct RC-2

Radio

Settings

Channel:

Station Address:

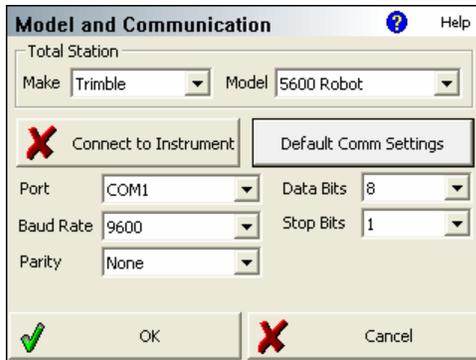
Remote Address:

✓ OK ✗ Cancel

Connecting FieldGenius to your Trimble

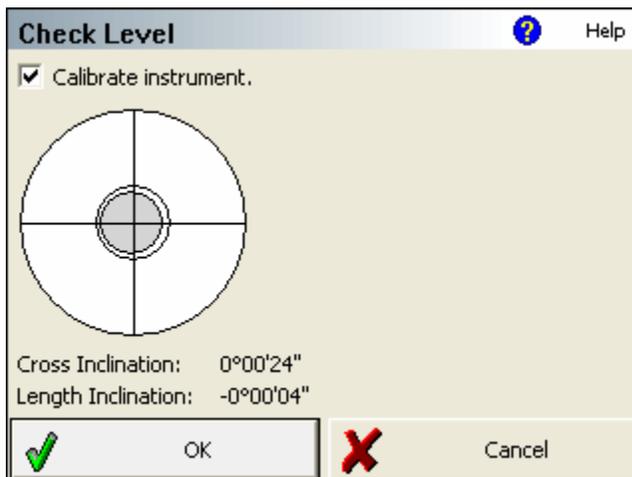
Once you've confirmed all your settings, and gone through the startup process on your instrument, you can do the following to begin robotic control with FieldGenius.

1. Select the RPU button on the instrument.
2. Select 3 (Remote)
3. Select 1 (OK)
4. When prompted to "Define window?" select No.
5. When prompted to "Measure Ref obj?", select No.
6. You will then see a message to press any key, and then remove the keyboard.
7. Make sure you have FieldGenius connected to your radio.
8. From the Model and Communication screen, select the Connect to Instrument button.



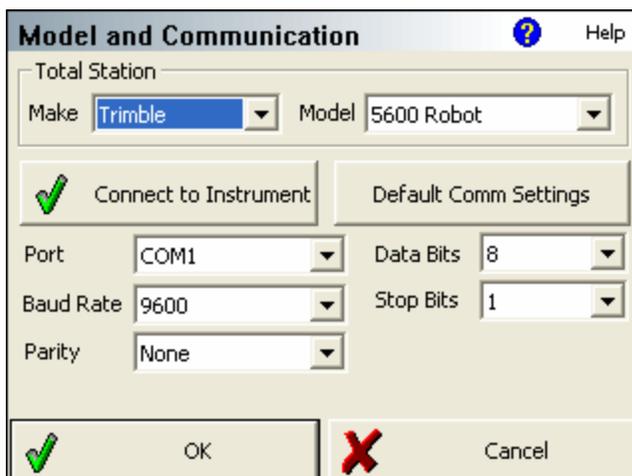
After you press the continue button you will see some reminders of things to check before you move on, press Continue when ready.

You should hear your instrument beep and if a successful connection is made you will see the Check Level screen.



You can calibrate the instrument if you desire by selecting the corresponding checkbox.

Press OK to continue.



You will now see a green check mark on the Connect to Instrument button.

Press Ok to continue. You are now connected and ready to start surveying.