

Pairing Instructions for the SeekTech SR-24 Locator and the Trimble GeoExplorer 6000 Series

These Instructions are specific to the Trimble GeoXH running Windows Mobile 6.5 using the Terra Sync v5.30 GIS data collection software. The below must be completed sequentially to enable Bluetooth pairing, streaming, and data logging between devices.

Trimble Bluetooth Settings and COM Port Configuration.

1. Using the Trimble GeoXH, begin by navigating to *Start > Settings > Bluetooth* and tapping *Add new device...* (At this point you should, you should have your SR-24 Locator turned on so that it can be discovered by the Trimble.) See Figure 1.
2. Your SR-24 will be identified by its S/N on the list of available Bluetooth Devices. Select it and tap *Next*.
3. Enter the Passcode. This can be found in the SR-24's *Menu > BT Settings > Passcode*. See Figure 2. (The passcode is usually 1234).
4. After you enter the passcode, tap *Next*. When the Trimble unit displays the *Device Added* message, tap *Advanced*.
Note: Here, a BT icon will flash briefly on the SR-24 but will go away. This is expected being that pairing and streaming occurs automatically at the point of data logging using the TerraSync GIS software.
5. Check the box for *Serial Port* for your SR-24 and tap *Save*.
6. While still in the *Bluetooth* menu page, tap the header tab for *Com Ports*, and select *New Outgoing Port*. Select your SR-24 and click *Next*. Finally, select an available COM port from the *Port:* dropdown (eg. COM5) and tap *Finish*. See Figure 3.
Note: Connection security can be specified by the user.
7. Exit the *Bluetooth* menu by tapping *OK*.



Figure 1 – Add a New Device



Figure 2 - Set Pin

Part B: Streaming SR-24 data and viewing with TerraSync Software in Real Time.

8. Launch the TerraSync GIS data logging application on your Trimble handheld.
9. Navigate to *Setup > External Sensors*, and tap the *Properties* selection for either Sensor 1 or Sensor 2. See Figure 4.
Note: Do not use Laser sensor for configuring your SR-24 Locator as an external sensor.
10. In the *Sensor Properties* menu, configure the following:



Figure 3 - New Outgoing Port

- a. Name: eg. "SR-24"
- b. Port: eg. "COM5: SR-24 (00000)"
- c. Baud Rate: 115200
- d. Data Bits: 8
- e. Stop Bits: 1
- f. Parity: None
- g. Prefix String: "DEPCM,"

Note: include all text within the quotations including the comma. Similarly for suffix string, use only the comma.

- h. Suffix String: ", "

The Trimble will grab what is between the Prefix String and the Suffix String in the SR-24's serial stream – in this case, depth in centimeters.

Time Out: default "01.0s"

- i. Receive mode: "Unsolicited"
- j. Max bytes: leave blank
- k. Logging intervals: <user specified>
- l. Data Destination: Uninterrupted

The live data being streamed by the SR-24 can be viewed by the Trimble GeoXH but is not stored to a file. This requires advanced setup with a custom Data Dictionary with data being sent to uniquely specific attributes vs being sent as unsolicited. For more information on Data Dictionaries please contact your specific software application's provider.

11. Tap *Done* and on the next page check the box for your specified sensor. Tap *Done* on that page to return to the TerraSync *Setup* menu page.

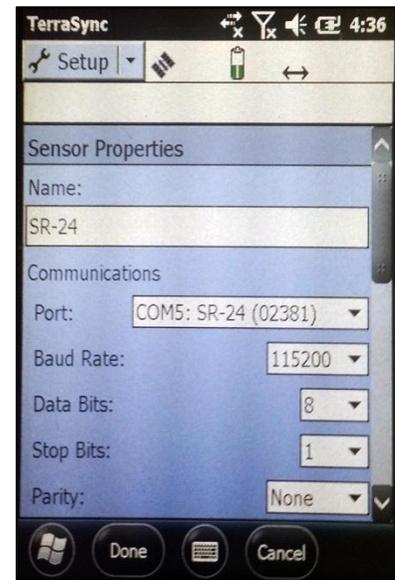


Figure 4 - Sensor Properties

Note: *At this point the SR-24 Locator is now setup as an external sensor on the Trimble handheld and can be used to add data to the collect in the form of attributes. The Bluetooth icon will appear on the SR-24 only once a new logging session has begun by creating a new data file in TerraSync.*

Part C: Verify the data Stream.

12. After creating a data file in TerraSync, you should see the Bluetooth Icon appear on your SR-24 locator. This indicates that the instruments are successfully paired.
13. Obtain GNSS satellite lock with your handheld
14. Navigate to Setup > Status and choose "Sensor" from the dropdown on that page making sure that the sensor selected is "SR-24"
15. View the live data stream of the SR-24's depth reading in centimeters being displayed on your Trimble handheld.