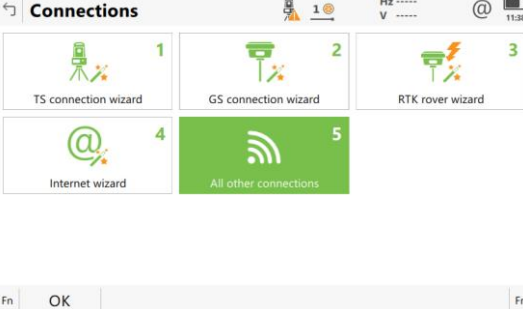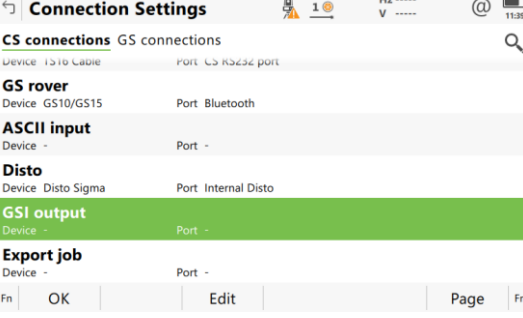# Leica Captivate: TS16 Positioning Data to Stream C
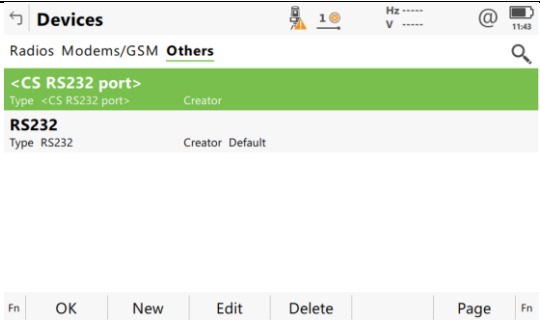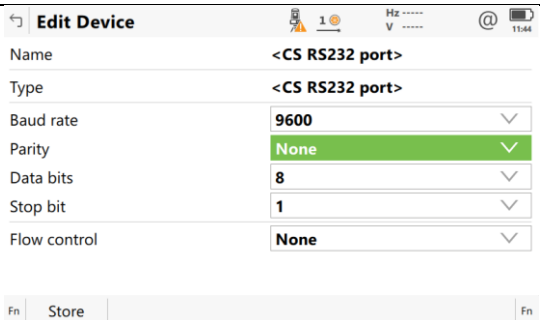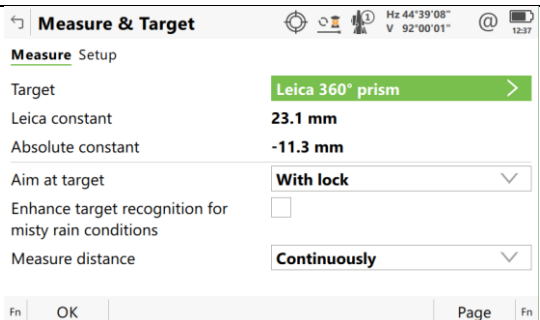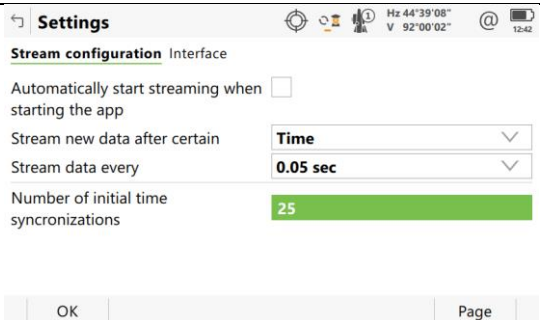
1	Meas & Stream	This guide will go through streaming data via cable from a TS16/CS20 to the Stream C with One Vision software. Firstly, you require a **GEV269** cable to go from the CS20 to the Stream C controller USB port Second you need the **Measure & Stream** application on the CS20 **N.B. this is a purchasable license and does not come as standard with Captivate**
2		Now we need to create the cable connection from the CS to the Stream On the bottom row of the carousel select **Settings\Connections\All Other Connections**
3		In the **CS Connections** tab, select **GSI Output** and press **F3(Edit)**
4		Tick **Output GSI data to device** and make sure settings are set as shown When done press **F5(Device)**
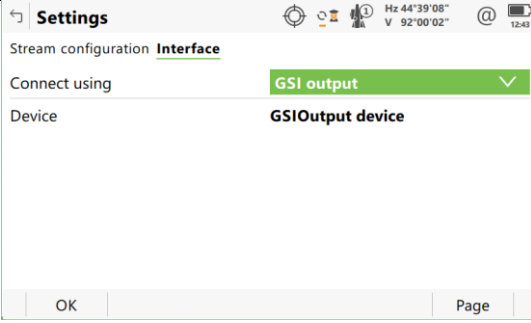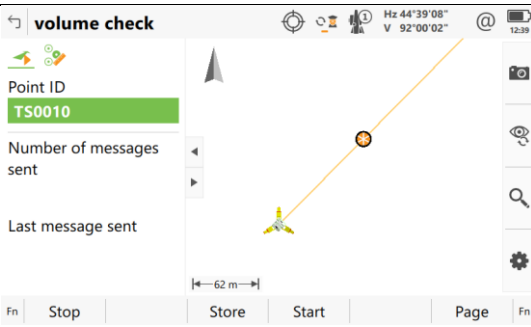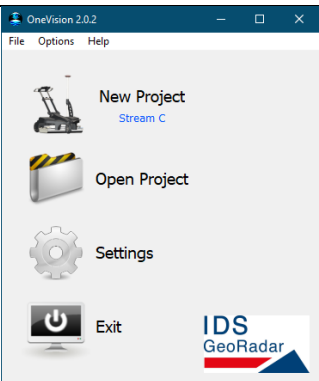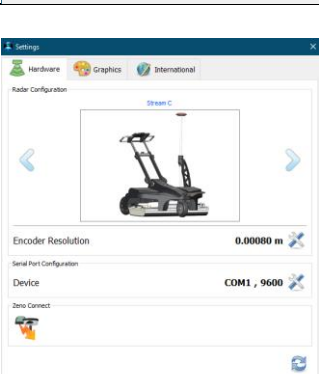
5	**Devices** 〈 Hz ----- V ----- @ 11:43 Radios Modems/GSM **Others** 🔍 **〈CS RS232 port〉** Type 〈CS RS232 port〉 Creator **RS232** Type RS232 Creator Default Fn OK New Edit Delete Page Fn	Highlight **CS RS232 Port** and press **F3(Edit)**
6	**Edit Device** 〈 Hz ----- V ----- @ 11:44 Name 〈CS RS232 port〉 Type 〈CS RS232 port〉 Baud rate 9600 ⌄ Parity **None** ⌄ Data bits 8 ⌄ Stop bit 1 ⌄ Flow control None ⌄ Fn Store Fn	Make sure settings match those shown here and press **F1(Store)** Press **F1** on each screen until you are back to the carousel menu
7	**Measure & Target** Hz 44°39'08" V 92°00'01" @ 12:37 **Measure** Setup Target Leica 360° prism › Leica constant 23.1 mm Absolute constant -11.3 mm Aim at target With lock ⌄ Enhance target recognition for misty rain conditions ☐ Measure distance Continuously ⌄ Fn OK Page Fn	Do your site setup with the TS as normal and navigate to the **Measure & Target** settings page Ensure settings are as shown (if you normally use as a one-man kit this should already be set)
8	**Settings** Hz 44°39'08" V 92°00'02" @ 12:42 **Stream configuration** Interface Automatically start streaming when starting the app ☐ Stream new data after certain Time ⌄ Stream data every 0.05 sec ⌄ Number of initial time syncronizations 25 OK Page	**N.B. It is best to turn off the TS before this step as the stream may automatically start which can take some time** Open the **Measure & Stream** application and press **F1(Settings)** Make sure settings are as shown Press **F6(Page)** or tap **Interface**
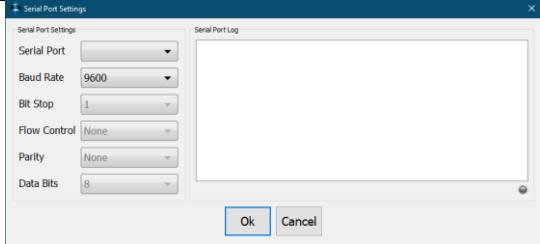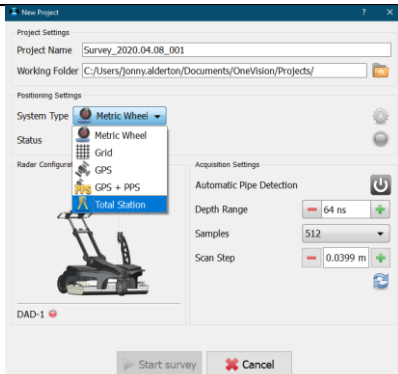
9		Make sure this option is set to **GSI Output** Press **F1(OK)** to return to the application
10		Lock the TS to the prism then press **F2(Distance)** to start measuring and then **F4(Start)** The application will then do a time sync for the streamed measurements which can take some time Data should now be streaming and you now need to configure the **Stream C** to receive the data
11		On the table, open **One Vision** and click **Settings**
12		Click the in the **Serial Port Configuration** section

13		The **Baud Rate** should be set to 9600 (which is also how we configured the stream from the CS20) Click the **Serial Port** dropdown and try each one until you get data coming through to the log The data should start with **$GNGGA** and be followed by coordinates When you have this click **Ok**
14		Back on the main menu, click **New Project** Under **System Type** select **Total Station** then **Start Survey** You should now be ready to carry out your survey with TPS data streaming