
How-To: Use Carlson SurvCE with the Leica 1200 Robot

The Leica robotic total station requires the activation of the “Extended GeoCOM” license before it will allow the use of third party data collection software such as Carlson SurvCE

• **Activation Information:** The following information was provided by Leica in document Su11-05G.

TPS1200 Instruments (TCA, TCP, TCRA, TCRP) require a special key code to operate in Robotic mode when using a data collector running SurvCE

The following table lists the part number for the code:

Product	Part Number	Description
TPS1200	734754	GeoCOM Robotics License

• **Procedures for Checking Activation Status:** A simple way to know that the “Extended GeoCOM” option is not activated is to enter the Robotics dialog of SurvCE and attempt a power search. The instrument will communicate but the power search feature will fail. If you suspect this to be the case, on the newer firmware you can also check the status using the following steps:

- Power on the instrument.
- Select the “User” button on the keyboard.
- Select the F3 button for “STAT”.
- Select list item number 3 for “System Information”.
- Use the down arrow key to scroll to the bottom of the “Instrument” page.
- Verify that “Extended GeoCOM” is on.

• **Defining the Port:** The Leica 1200 needs to know that you intend to use the GeoCOM interface through the external port. The following steps will set the Leica to communicate with SurvCE:

- Power on the instrument.
- Select “Config”.
- Select menu item 4 for “Interfaces”.
- Arrow down to “GeoCOM Mode” and select F3 for “Edit”.
- Select F5 for “DEVCE”.
- Select “RS232 Geocom”
- Select F3 for “Edit” and verify the communication settings.
 - _ Baud Rate: 19,200
 - _ Parity: None
 - _ Data Bits: 8
 - _ Stop Bit: 1
- Select F1 for “STORE”.
- Select F1 for “CONT” and verify the following option on the GeoCOM

Mode page:

- Use Interface: Yes
- Port: Port 1
- Device: RS232 GeoCOM
- Protocol: RS232 GeoCOM
- Select F1 for “CONT”.
- Verify that the only device active is RS232 GeoCOM and select F1 for “CONT”.

• **SurvCE Settings:** Many settings are available for this instrument for it to perform in various modes, however, the following settings are mandatory along with matching the baud rate settings as outlined above:

- Equip _ Instrument _ Leica Robotic Total Station
- Equip _ Settings _ Instrument Series _ TPS1200