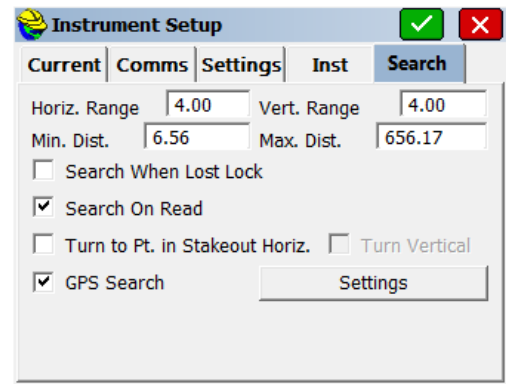


GPS Search

In SurvCE 2.62 or higher you can use “GPS Search” to combine a NMEA GPS receiver with your Motorized instrument. In the “Robotics” tab you can tap “GPS Search” for a quicker search routine to find your prism.

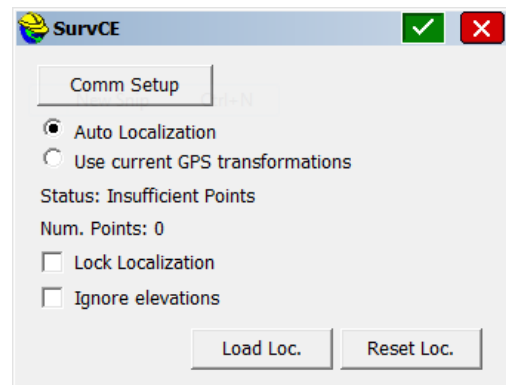
- 1) To activate this feature for your motorized Total Station tap the Equip tab then tap “Total Station”
- 2) Tap the Search tab in the top right
- 3) Check the box for “GPS Search” then tap the “Settings” button to the right
- 4) In the Settings dialogue tap “Comm Setup”



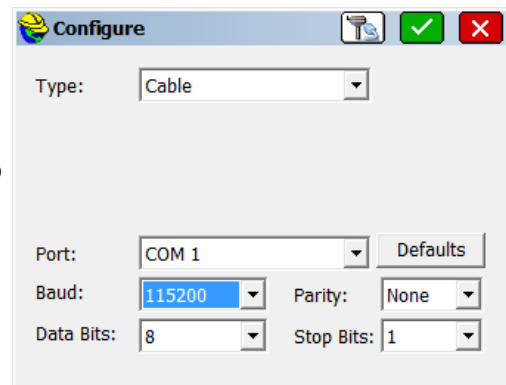
- 5) The “Comm Setup” screen is where you configure how your NMEA GPS will be connected. You can connect by Cable or Bluetooth.

The connect icon in the top right corner allows you to check whether your communication setup is correct before moving on.

- 6) Press the green check to return to the settings page.



- 7) Tap the Green Check to save your GPS Search settings



- 8) Tap Green Check again to initialize your Motorized Instrument then go into Survey / Store Points
- 9) Fill out your Instrument setup tab and perform a Backsight with your GPS turned on
- 10) Store 3 to 4 Robotic shots at different points of the compass. For example 1 point to the North, another point to the East and a third point to the South or West. This calibrates your Local Robot coordinates to your raw GPS positions
- 11) Exit Store Points and go back into Equip / Total Station / Search tab and tap the “Settings” button to check the “Status:” to see if it shows Good or Bad along with the “Num. of Points”. If you are working with Mapping Grade NMEA GPS make sure to check the box for “Ignore Elevation”

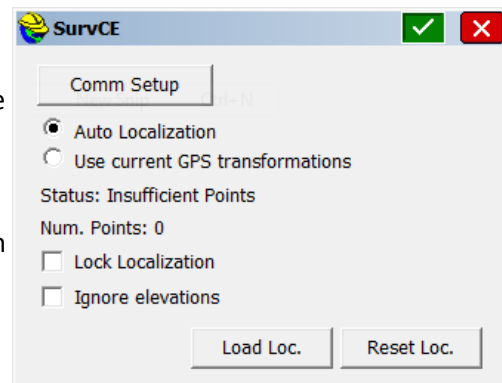
To test the GPS Search you can break line of sight to the prism so the robot isn't tracking you then go into Survey / Store Points and tap the “Robotics Tab” then tap “GPS Search” and it should use your GPS position to motorize the instrument to your Prism so you can do a standard “Search” window to find the prism.

*****Please Note:** the “GPS Search” icon will be grayed out until a sufficient localization is available

In GPS Search Settings the following options are available:

Auto Localization: Choosing this radio button will cause SurvCE to automatically form a GPS localization using the first readings taken with the GPS. Most users find this to be the most convenient option.

Use Current GPS Transformations: If you are already using an RTK GPS, and are working in grid coordinates, this option allows you to use your currently configured localization, instead of doing the auto-localization.



Status: This tells you the current quality of your GPS localization which is performed with each Point you store in Survey / Store Points

Num Points: This tells you the number of points currently being used to create your GPS localization.

Lock Localization: SurvCE will continuously try to improve your GPS localization as you work. Once the search is working well, some users enable “lock localization” to freeze the current localization for future use.

Ignore Elevations: If elevations on the NMEA GPS are inaccurate, you can enable “Ignore Elevations” to use only the Lat/Lon in the GPS Search.

Reset Localization: Wipe out current auto-localization and start over.

Load Localization: Load up an auto-localization from a previous job. This may save time in relocalizing