# **Station Setup**

#### [Survey] [Station Setup]

The Station Setup wizard is used to set the occupy point and orient the optical instrument. You must complete station setup before you can measure and store points with your optical instrument. The station setup wizard will guide you through all the steps required to complete the station setup.

The first step in the station setup procedure will depend on your Survey Settings:

If you have **Prompt for PPM** enabled on the <u>Survey Settings</u> card, then you start your station setup on the <u>PPM</u> <u>Correction</u> screen.

After that, the procedure through the wizard will depend on your type of station setup:

#### Station Setup Type

After setting your instrument PPM (if enabled), the next screen of the station setup wizard prompts you to pick a station **Setup Type**:

- Choose <u>Known Point</u> to set the station on a known point in the job.
- Choose <u>Unknown Point/Resection</u> to set the station on an new point in the job, and solve the coordinate of the new point using measurements to 2 or more known points.
- Choose <u>Multiple Backsights</u> to set the station on a known point in the job and use multiple backsight points to set the orientation.
- Choose <u>Use Last Setup</u> to reset the station on the same point using the same backsight as the last used setup.

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## **Station Setup PPM Correction**

The following screens are used to setup PPM correction parameters for the station setup.

Apply PPM [**In Instrument**] : Use this option if you set the instrument to apply the PPM correction. In this case, the distances returned to Survey Pro by the instrument have already been corrected for PPM.

[Record PPM values to file ...]: Opens up the <u>PPM Booking</u> screen where you can record the temperature and pressure values entered into the instrument for book keeping purposes.

Apply PPM [In Survey Pro] : Use this option if you set the instrument to 0 PPM correction, and you want to have Survey Pro correct measured slope distances for PPM.

[Pressure]: Enter the atmospheric pressure and pressure units.

[Temperature]: Enter the temperature and temperature units.

**[PPM]**: Enter the parts per million correction factor for measured slope distances.

Certain instruments use the Survey Pro application to control PPM correction, if you are connected to an instrument of this type, the PPM correction page will show the following controls:

[PPM Off] : Use this option to disable PPM correction of measured slope distances.

[PPM On] : Use this option to enable PPM correction of measured slope distances.

[**Pressure**]: Enter the atmospheric pressure and pressure units.

[Get Pressure]: (if available) Gets the atmospheric pressure from the barometer built into the instrument.

[**Temperature**]: Enter the temperature and temperature units.

[Get Temperature]: (if available) Gets the temperature from the thermometer built into the instrument.

[Calculate]: Triggers the instrument to calculate the PPM correction factor from the input values.

**[PPM]**: Enter the parts per million correction factor for measured slope distances.

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## **PPM Booking**

The <u>PPM Booking</u> screen is used to record the temperature, pressure, and PPM values that were set on the instrument for the case where the instrument is applying the PPM correction.

[**Pressure**]: Enter the atmospheric pressure and pressure units.

[Temperature]: Enter the temperature and temperature units.

**[PPM]**: Enter the parts per million correction factor for measured slope distances.

**Note:** The PPM correction values entered on this page are for book keeping purposes only. When PPM is being applied in the instrument, the instrument will correct measured slope distances for PPM and the corrected distance is returned to Survey Pro.

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### **Station Setup Known Point**

The following screens are used when the **Setup Type** is set to **Known Point**.

+ Occupy Point: Select a point to setup on. You can enter a point name, select from a list or from the map. If you enter a new point name here, you will have to enter known coordinates for that point and store it before proceeding with the wizard.

**2D** Survey: Check this box to conduct a 2D survey. This option will allow you to select a 2D point for the occupy point, and will disable the height of instrument and rod controls in setup and measurement taking user interface.

Information: Shows the location (N, E, Elev) and description of the selected occupy point.

HI: Enter the height of instrument if you are doing a 3D survey.