
Leica Laser Trackers

Leica AT500



Prerequisites

Tracker Pilot

Track Pilot is used for the primary tracker configuration. It is also necessary in order to run manufacturer checks and calibrations. If you don't have it, it can be downloaded from the instrument by opening a web browser and typing the Tracker IP.

While Tracker Pilot does not have to be installed in order to connect to the tracker with SA, they are intended to be used in conjunction and it is strongly recommended that the current tracker pilot is installed.

Network Configuration

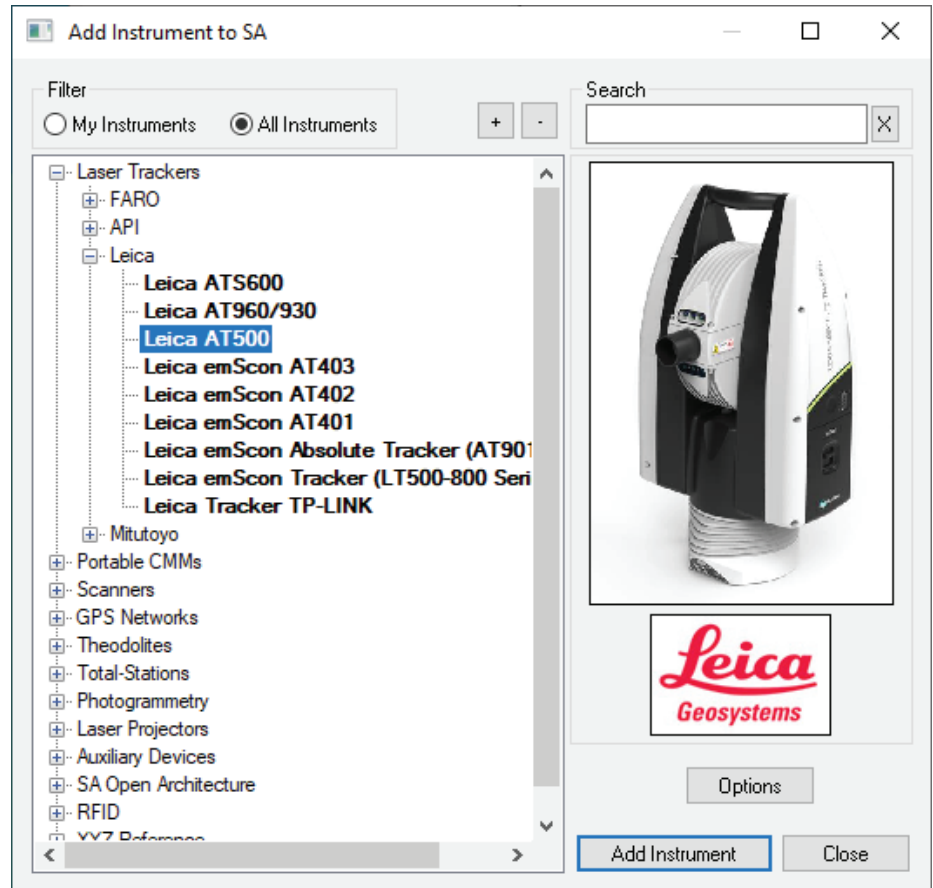
The Leica AT500 connects via a wired Ethernet connection or a wireless connection.

The default wired Leica IP address is 192.168.0.1. This IP address can be changed within Tracker Pilot and Wifi can also be enabled there as well. The computer must be set to the same network with a unique IP address.

Starting the Interface

1. Select **Instrument>Add** and choose the Leica emScon AT500 from the Instrument List (Figure 3-72). This will add a tracker model to the job file to define an instrument plant.

Figure 3-72. Adding an AT500 tracker station to SA.




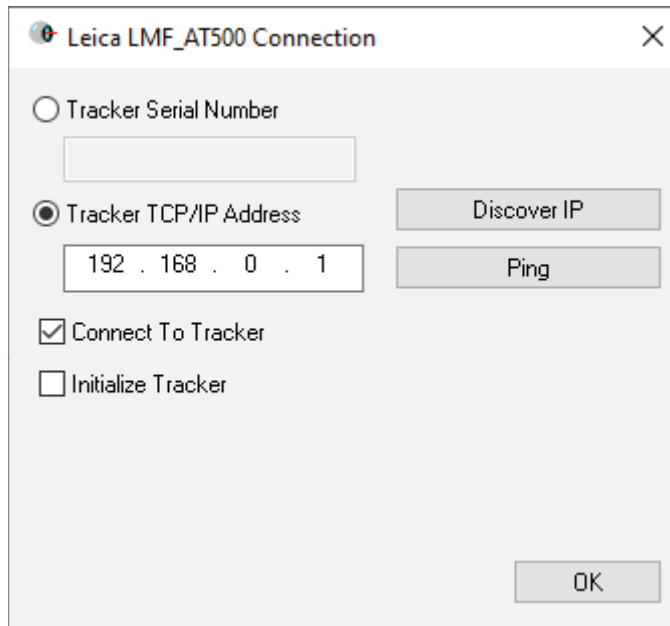
2. Press **Connect** the *Instrument* tab of the ribbon to connect the interface to the tracker. You can also use the drop down and choose *Laser Trackers>Leica AT500*.
3. In the Connect to SpatialAnalyzer dialog, select the SA instrument model from the network list and press **OK** to continue.
4. Enter the tracker's IP address and use the **Ping** button to test the connection if needed (Figure 3-73). Once satisfied, click **OK**. The next time the interface is started, you can simply click the Run Interface and Connect  icon. This will use the last saved settings and automatically connect the instrument. The AT500 now also offers an IP detect button which will automatically detect the IP of available trackers.

Figure 3-73. The Leica AT500 Connection dialog.



The interface should now be connected and be ready for use. Please refer to the “[Laser Tracker Interface](#)” on page 10 for details on the laser tracker interface.

The Instrument Toolbar offers a subset of these capabilities, is available as a second docking mode, and will provide all the functions needed for general use([Figure 3-74](#)):



Figure 3-74. Instrument Control Toolbar is a simplified tracker interface to expand graphic space.

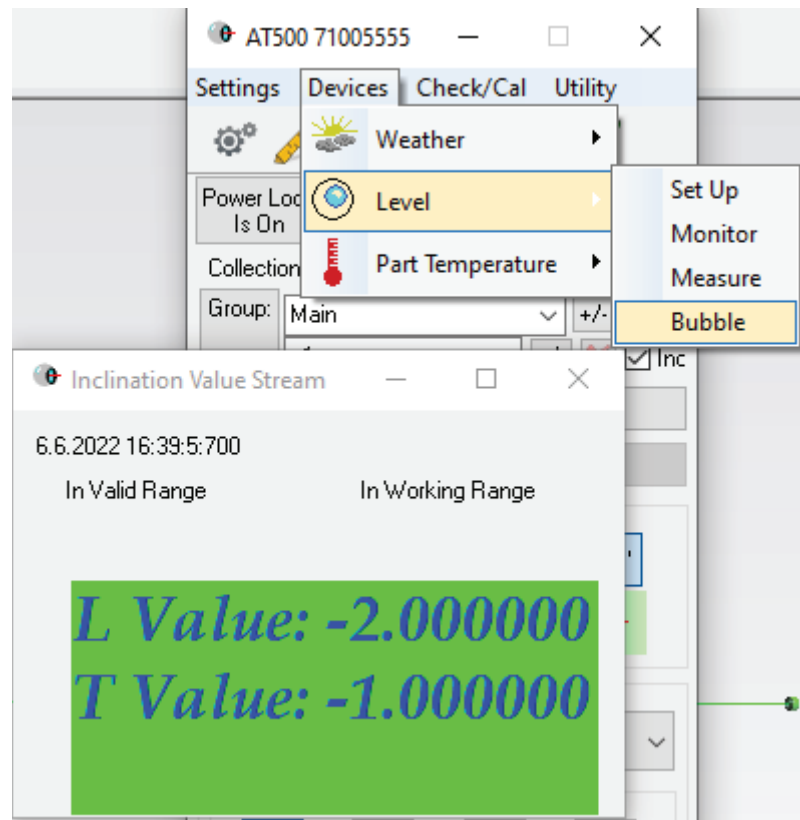
Most basic settings control are available directly within the interface, including tooling settings, measurement profiles, etc. The alarm clock icon provides direct access to current environmental and level settings and provides the ability to set alarms in order to receive notification when conditions change.

Measuring Level

The AT500 does not have an active compensator like Total Stations or the AT4x0 series trackers but rather offers the ability to directly measure level like the AT9x0 series trackers.

In order to measure level you need to first level the tracker within range. To do so the AT500 offers an options *Devices>Level>Bubble*([Figure 3-75](#)).

Figure 3-75. Bubble level display which is used to help get the tracker leveled within range in order to perform precise level measurements.



Battery and Indicator Lights

The AT500 has a battery compartment within the head and has a battery indicator display on the side. From within the interface you can double click on the beam status light to get the current battery status for the unit (Figure 3-76). There are also indicator lights regarding the WIFI status.

Figure 3-76. Battery compartment and indicator lights



B-Probe Plus Configuration and Use

The B-probe must be setup and calibrated within Tracker Pilot. Once defined on the controller a new target with the B-probe serial number will become available within the Reflectors and Targets database. To measure with the B-probe in SA. Add a target from the manufacturer definition section and set it as the active target in SA (Figure 3-77).

Figure 3-77. Adding a B-Probe Target to SA

