Leica Laser Trackers

Leica AT40x

Prerequisites

Tracker Pilot

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. Track Pilot is used for the primary tracker configuration. It is also necessary in order to run manufacturer checks and calibrations.

Compensation

The Leica AT40x compensation is performed in the Leica Tracker Pilot application. This is supplied by Leica and should be performed before running the instrument in SA.

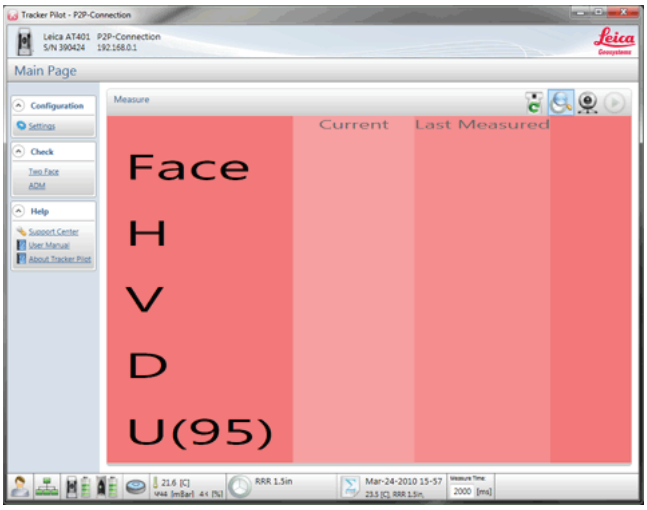

Figure 14-64. Running a compensation routine in TrackerPilot.

Network Configuration

The Leica AT40x connects via a wired Ethernet connection or a wireless connection. In either case, the IP configuration must be correct before the PC and instrument can communicate. The default wired Leica IP address is 192.168.0.1. The default IP address can be changed within Tracker Pilot. 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 AT40x from the Instrument List (Figure 14-65).

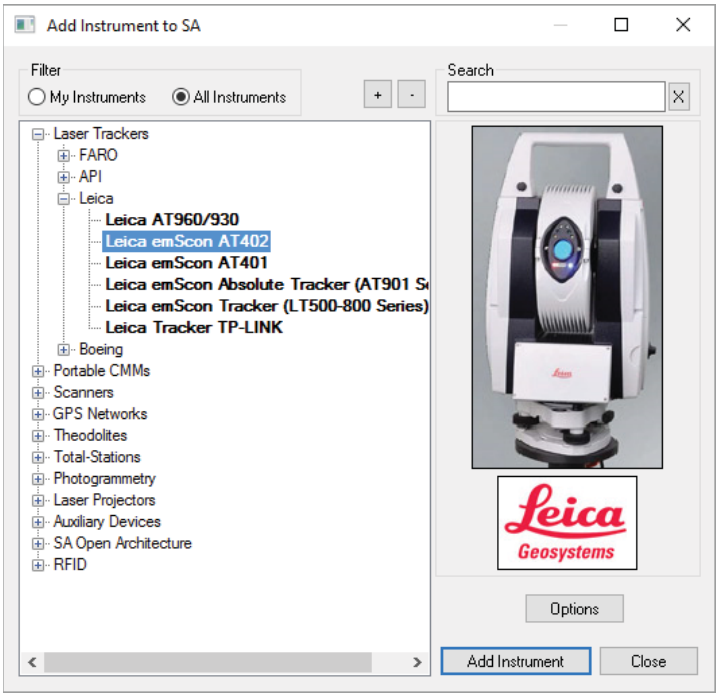

Figure 14-65. Adding an AT401 tracker.

2. Now run the instrument interface module under **Instrument > Run Interface Module** and choose Laser Trackers.

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 14-66). 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 At402 now also offers an IP detect button which will autmatically detect the IP of available trackers.

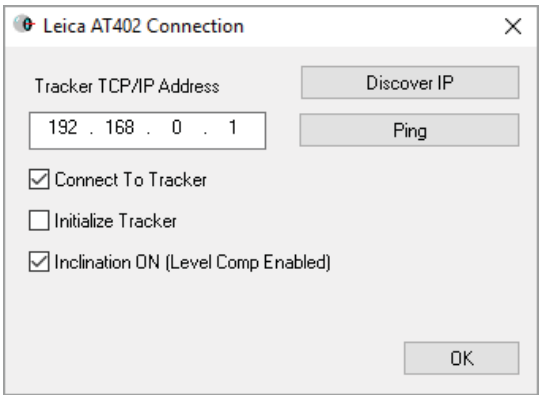

Figure 14-66. The Leica AT40x Connection dialog.

The interface should now connected and be ready for use. Please refer to the "Laser Tracker Interface" on page 308 for details on the laser tracker interface. For most applications the Instrument Toolbar will provide all the functions needed for general use:

Figure 14-67. Instrument Toolbar. a simplified tracker interface

AT40x Settings

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

To access the AT40x's specific settings, from the full interface use **Settings > Tracker > General Settings** or press the button. Then press the Tracker Specific button at the bottom. This will expose the AT40x's specific options (Figure 14-68).

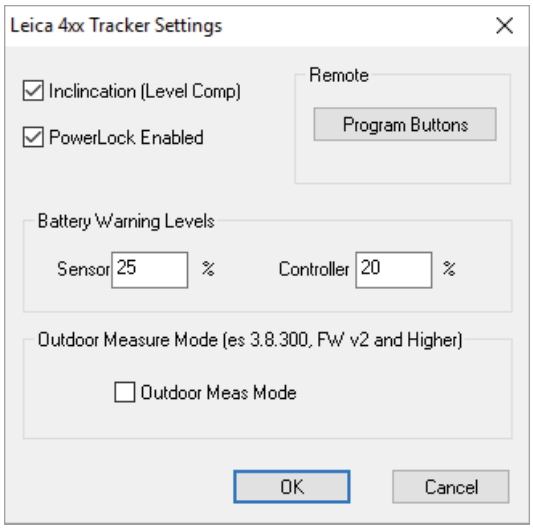

Figure 14-68. The Leica AT40x tracker settings.

The AT40x utilizes a programmable remote (Figure 14-69). The function of the specific buttons can be customized here.

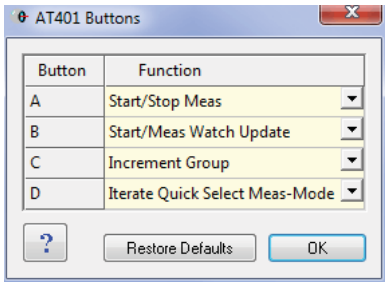

Figure 14-69. Setting the programmable buttons for the AT401.

B-Probe 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.

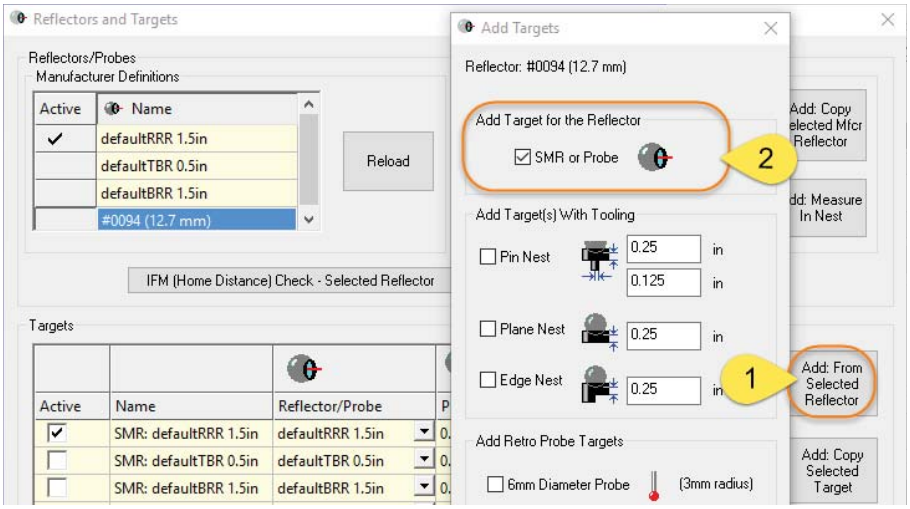

Figure 14-70. Adding a B-Probe Target to SA