Metronor Solo and Duo Systems

This Quick-Start guide can be used for initial configuration, connection and basic operation of the Metronor Solo and Duo Photogrammetry system within SA. For more details on instrument operation and configuration contact Metronor directly.

Prerequisites

Set up the Metronor system following the Manufacturer's directions. This will depend on the camera configuration and system type. Ensure you have the appropriate camera mounts, tripods, and cabling to power the unit.

SA does not interface with the cameras directly but rather with the host application Metronor Server. Therefore, Metronor must be installed, calibrated, and running on the local machine prior to any attempt to connect to SA.

- Please contact Metronor directly to obtain the correct version of the Metronor Server for your camera system and install it following the manufacturer recommendations.

  (http://www.metronor.com/)

- You can verify SA's current version compatibility by looking in the SA readme file available under the Help menu within SA.

Duo system alignment, and light-pen tip calibration must be performed within the Metronor Server. Target recognition and interpretation is also performed within Metronor. Once correctly configured SA can acquire any of 3 data types from Metronor these include:

- Point measurements from targets and probes
- A constellation of points from LEDs
- 6D Frames measurements

Starting the Interface

1. Start Metronor Server (Figure 17-31).

2. Run Metronor Server and perform setup and field checks per OEM guidelines.

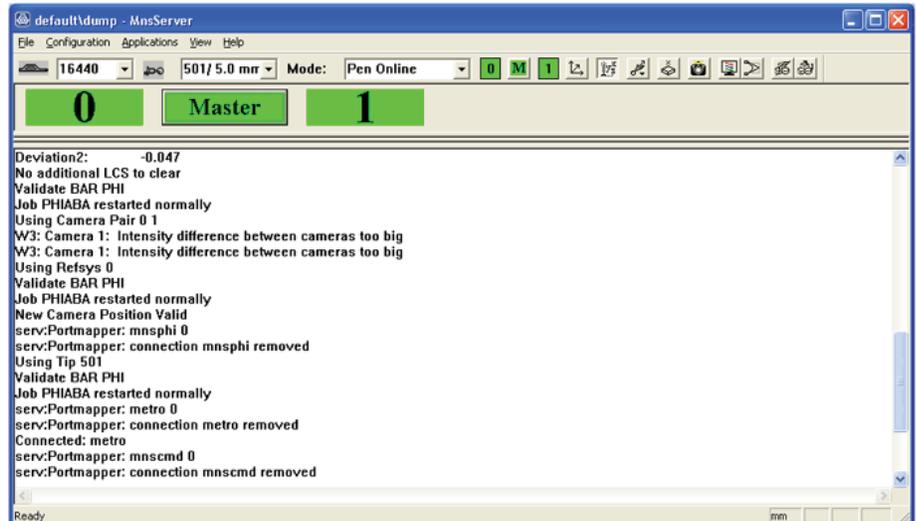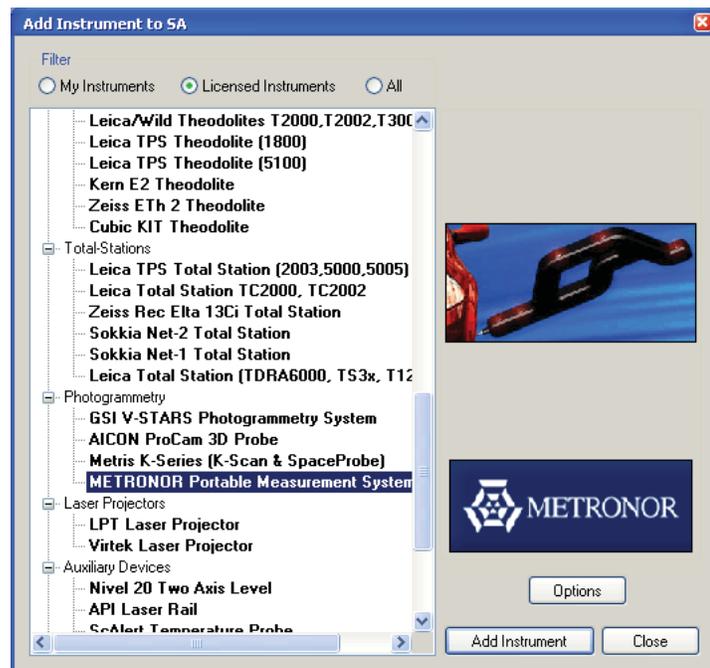**Figure 17-31.** The startup process.

Figure 17-32. Adding the Metronor to SA.

3. Select **Instrument > Add** and choose the Metronor Portable Measurement System from the Instrument List (Figure 17-32).

4. Run the Metronor interface from the **Start > Programs > SpatialAnalyzer 20##.##.## > Interfaces** menu.

5. The Spatial Analyzer Metronor Logon dialog box will open and will ask what device you want to connect to (Figure 17-33). Select the instrument and type the server name (which will be either the computer name or the computer's IP ad-
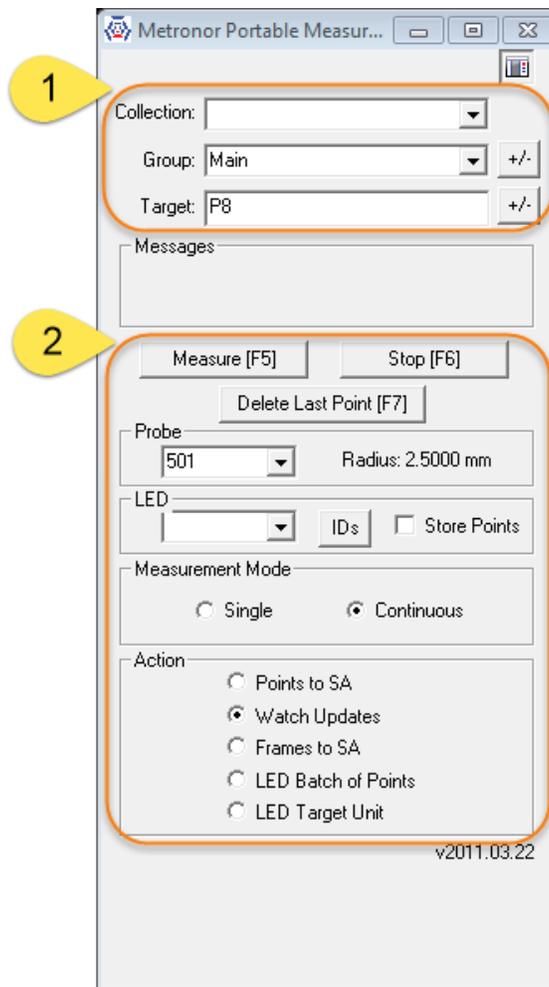
dress). Accept the default Server Port.

Figure 17-33. The logon dialog.
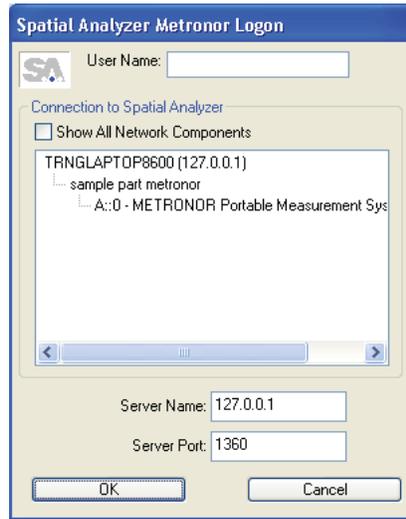
6.   This will start the Metronor Interface.

Figure 17-34. Metronor Interface

The Primary Metronor Interface Controls:

Target Naming Control (section 1):

The Upper section of the Metronor Interface provides full control over Collection, Group, and Target designations for all points acquired by the system.

- Single point measurements will use the full designation
- When measuring frames the Group Name will be used

Measurement process Control (section 2):

Metronor will recognize the Probe, Adapter, or Panel within the field of view and utilize it during the measurement process:

- **Probe.** Selection is based upon probe name. The properties of the probe and its calibrated position and probe radius will be utilized based upon the name selected in this dropdown dialog.

- **LED.** Section can be used for selective filtering of LED point measurements

- **IDs.** Opening the IDs dialog and specifying target names provides a means to only record the specified targets.

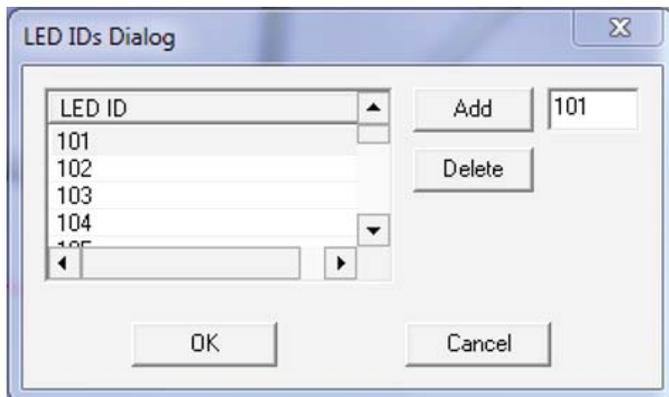- **Store Points.** check box allows you to either send points to SA or just send updates.

Figure 17-35. IDs Dialog

Measurement Mode selection presets the target type SA is looking to receive

- **Single.** designation only recognizes a single event at a time.

- **Continuous.** is used to send updates to SA for moving targets and to stream measurements.

Action settings are used to determine the format of the measurements the Instrument Interface records and sends to SA (points, frames, or updates)

- **Points to SA.** Sends triggered probe points over to SA.

- **Watch Updates.** Send updates to SA which can be used for

monitoring or watch windows. No points or frame positions are save within SA when this option is checked.

- **Frames.** Sends received 6DoF measurements over to SA. These 6D measurements are recorded as frames within the specified collection.

- **LED Batch of Points.** Sends points for each measured LED

- **LED Target Unit.** Sends a single target by name.

Measurement Plan Control

The Metronor will respond to basic instrument MP commands such as the following:

- Start Instrument Interface
- Set Instrument Group and Target
- Instrument Operational Check

Metronor Portable Measurement System	
Set MeasureMode Single	Set the measurement mode to discrete point measurement.
Set MeasureMode Continuous	Set the measurement mode to continuous point measurement.
Set Action Points	Sets the measurement action to send points to SA.
Set Action Updates	Sets the measurement action to send updates to SA.
Set Action Frames	Sets the measurement action to send frames to SA.
Set Action Batch	Sets the measurement action to send an LED batch of points to SA.
Set Action Unit	Sets the measurement action to send an LED target unit to SA.
Set Tip []	Sets the probe tip to [], where [] must match one of the names in the probe dropdown ID list.