LTI Interface to

Trimble

Access Software

Version 2019.01
Quick Reference Guide

LASER TECHNOLOGY inc

Overview

Trimble Access is a Windows data collection software suite, primarily serving the Surveying/Engineering industry. In addition to supporting Trimble products, it also has an interface to LTI's laser products.

Compatible Trimble Products
- All RTK GNSS
- SX10
- VX & S Series

Compatible LTI Products
- TruPulse 200/360/R
- TruPulse 200X
- TruPulse+TruAngle (in AZ mode)

Basic Steps

- Install & License Access on a Windows device (not covered)

- Connect Laser to Windows device

- Configure Survey Style

- Measure Laser Points
  - Bearing & Distance
  - Dist - Dist

LASER TECHNOLOGY INC

Connect Laser to Windows Device

Most of the Access apps will allow Bluetooth connection to the LTI laser. This is done through the standard Windows device manager routine (Windows 10 for PC is shown), which is also accessible from within the Access software.

1. Navigate to **Settings / Devices** and select the ***Bluetooth & other devices*** option (Figure 1)
2. Turn Bluetooth ON and tap the ***Add Bluetooth +*** button (Figure 2)
3. Tap ***Bluetooth*** to begin the search. Make sure your Laser BT is ON and when it's discovered, select it from the list. Key in the PIN and tap ***Connect*** (Figure 3)
4. Confirm the laser is present and shown as *Paired* in the Other devices list (Figure 4)
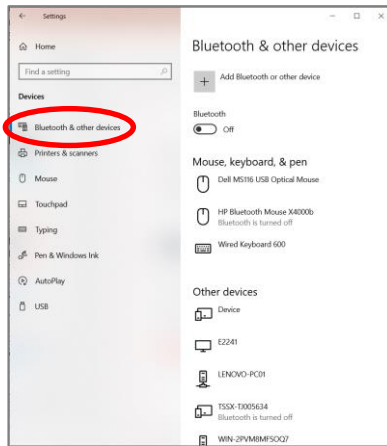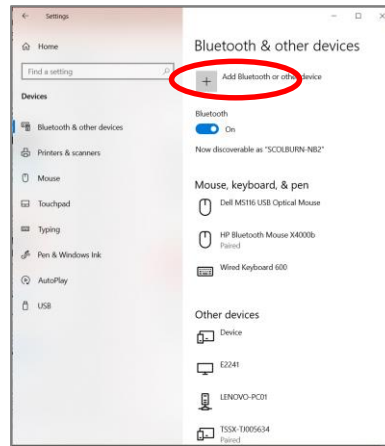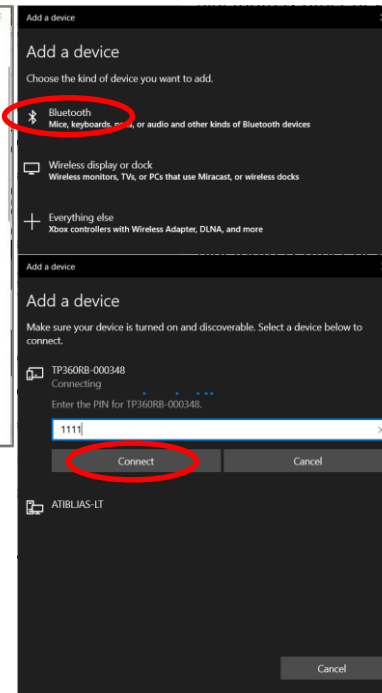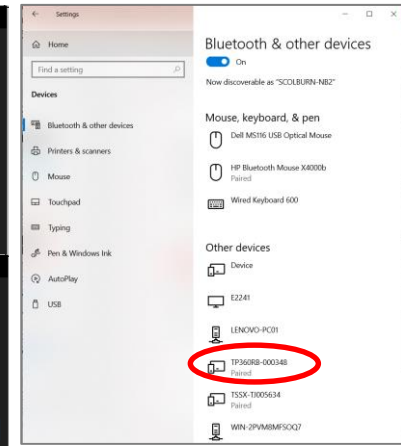

Figure 1

Figure 2

Figure 3

Figure 4

LASER TECHNOLOGY INC
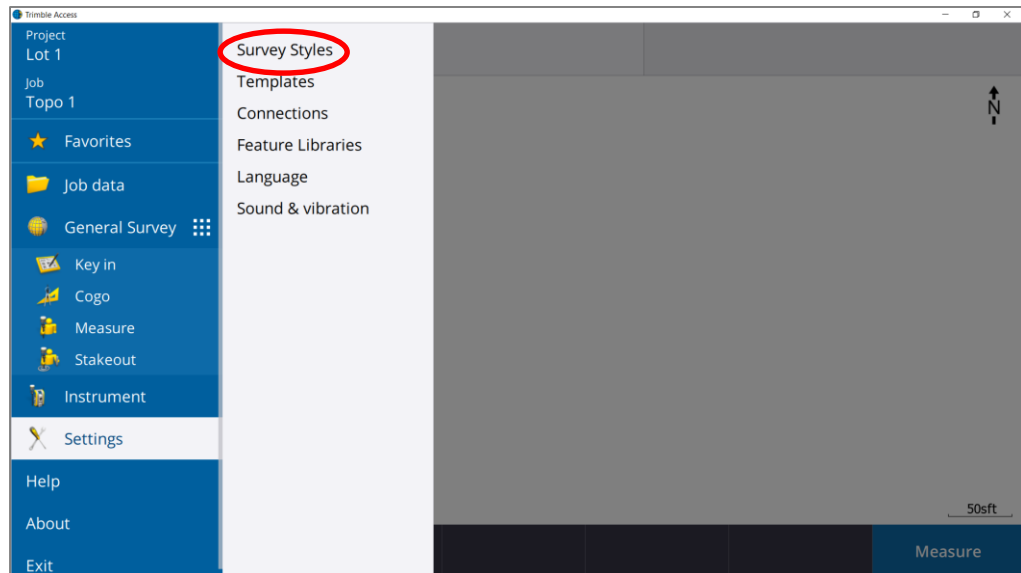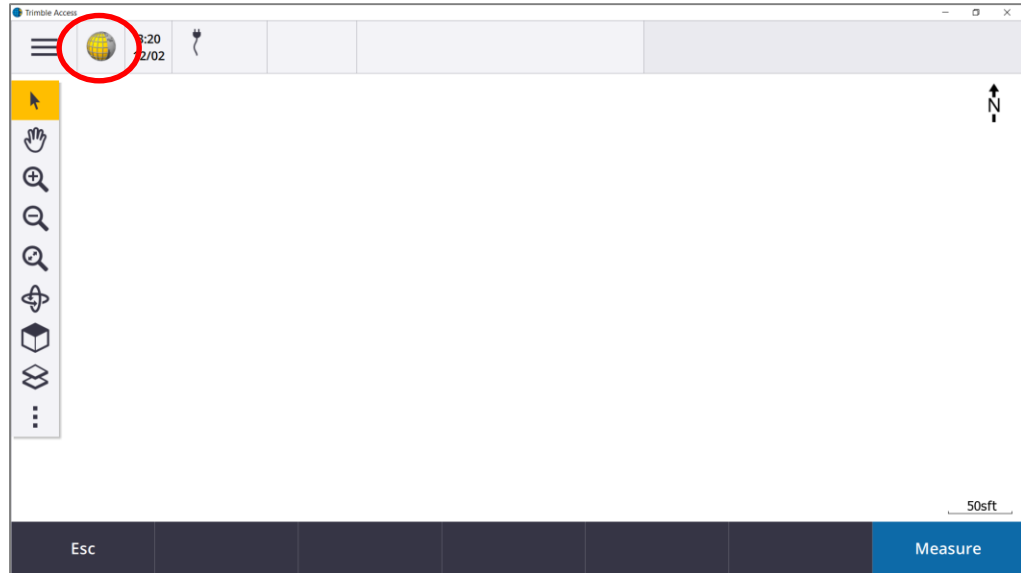
Configure the Survey Style

5. Start the Trimble Access software, begin a **Project**, open a **Job** and select one of the apps to use. In this example, the *General Survey* icon is displayed
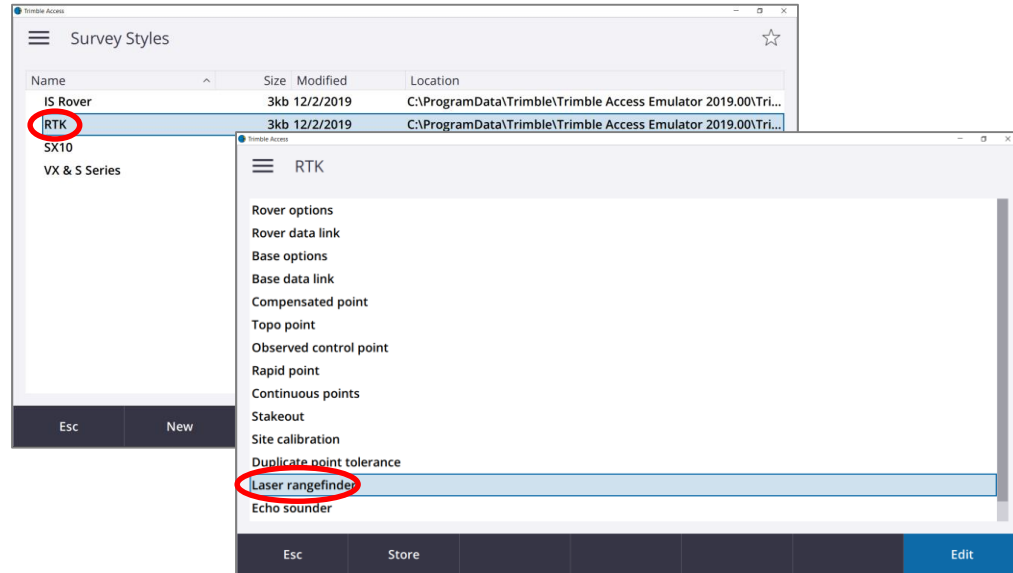
Note: make sure the laser Units are set to Feet or Meters to match the Job

6. Select *Menu*
Choose *Settings* and then *Survey Styles*
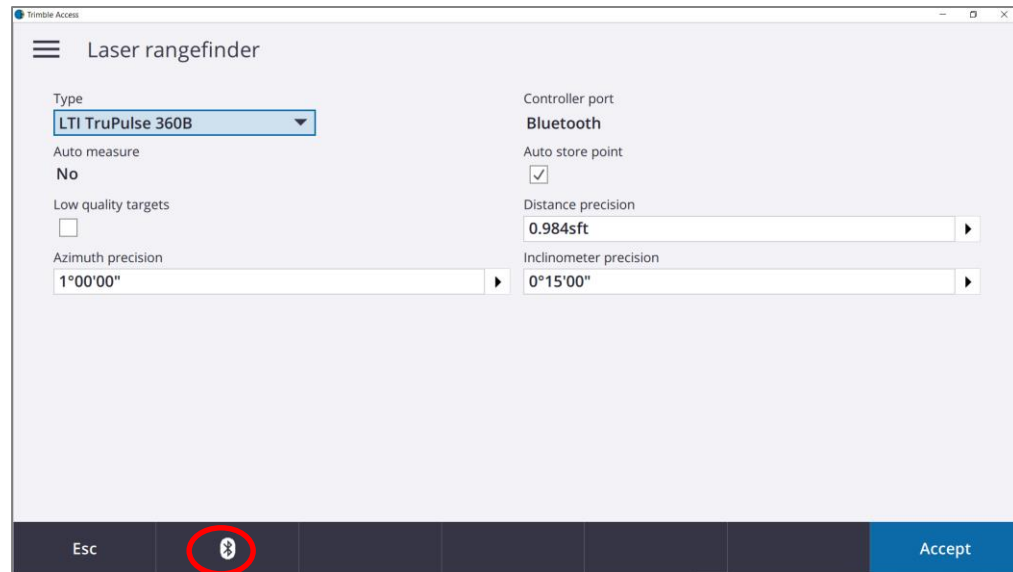
Configure the Survey Style

7. Tap on the **Survey Style** you wish to use and then tap on the *Laser rangefinder* option

8. Choose your TruPulse model from the pull-down list and make the other selections shown. Tap the *BT icon*

NOTE: When choosing the 360 models, remember that magnetic declination must be applied. See step # 16 for how to enter it in the app
*Also:* choose the 360 model when using the TruAngle in AZ mode, where a True or Grid Azimuth will be used

Configure the Survey Style

9. Under the **Connect to laser** pull-down list, select your TruPulse. If you don't see it, tap *Config* to connect, otherwise tap *Accept*. Then tap *Store* to save the Laser rangefinder configuration in this **Survey Style**
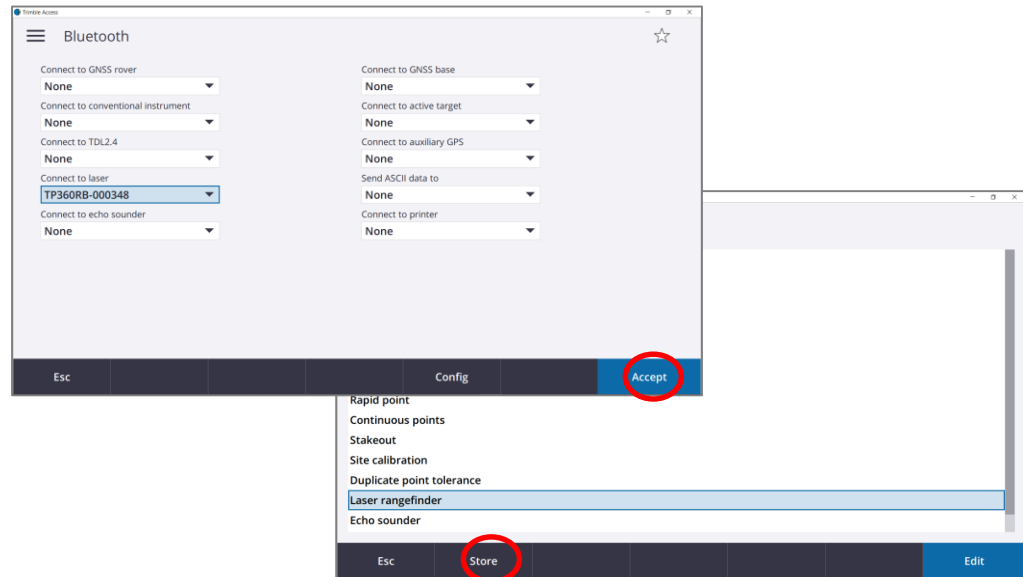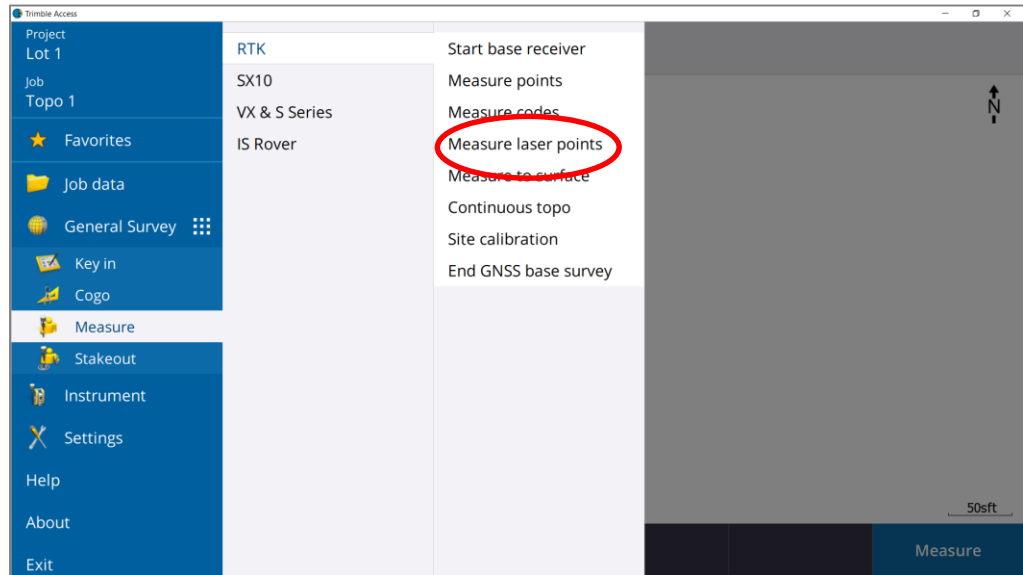

10. Using these same steps, you may configure any of your **Survey Styles** to be connected to the TruPulse. When done, tap *Esc* to return to the map view
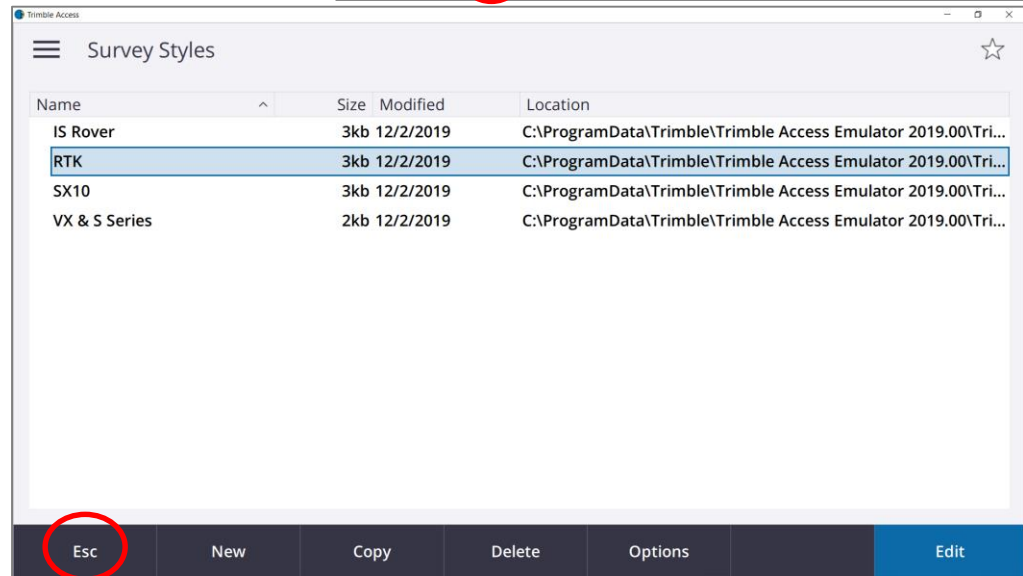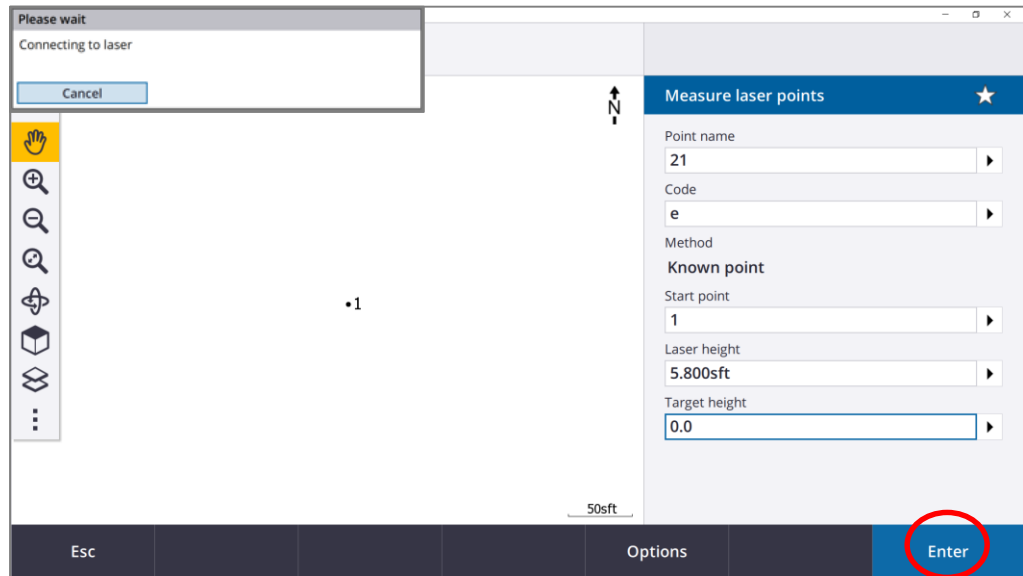
Measure Laser Points (Bearing & Dist)

11. When ready to use the TruPulse, select Menu, ☰ Measure, your Survey Style and then Measure Laser Points

12. A message will display briefly while the app connects to the laser and then the **Measure Laser Points** window will appear on the right. Fill in all the fields and tap *Enter*.

*Note:* the "Known point" can be one that already exists on your map or your current GPS location

Measure Laser Points (Bearing & Dist)

13. Tap **Measure** and a message will display prompting for the shot. Aim at the target and fire the TruPulse

Note: disregard the prompt to "press Enter on the laser keypad", the shot will automatically download

14. The data will come through and populate the SD, AZ & INC fields in the form. If everything is correct, tap **Store** to record the laser point
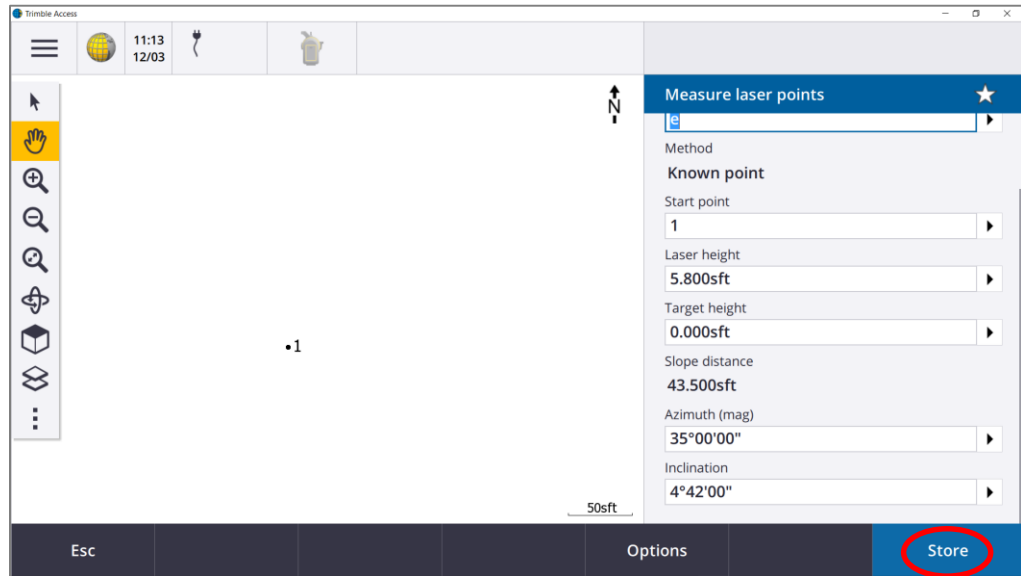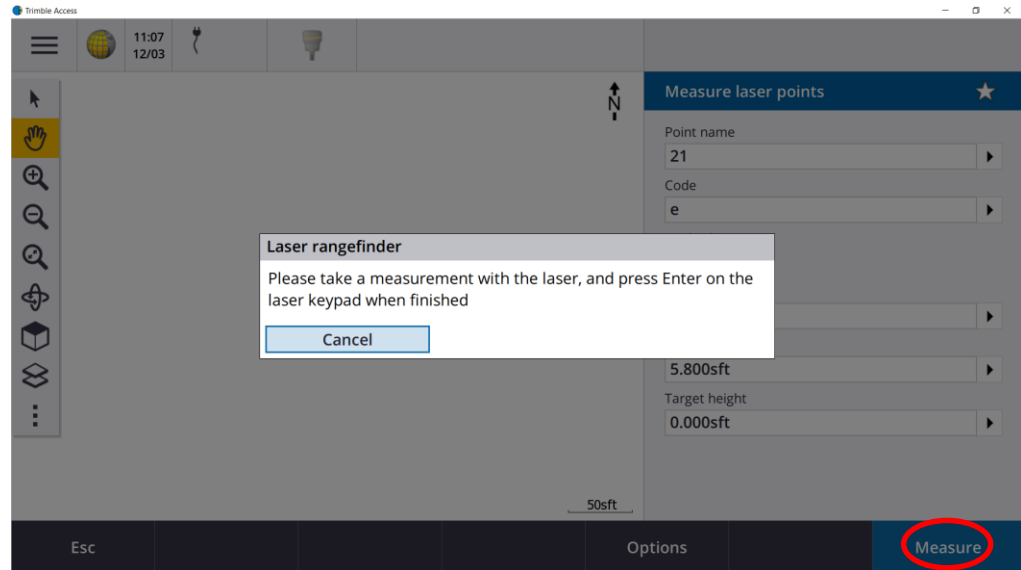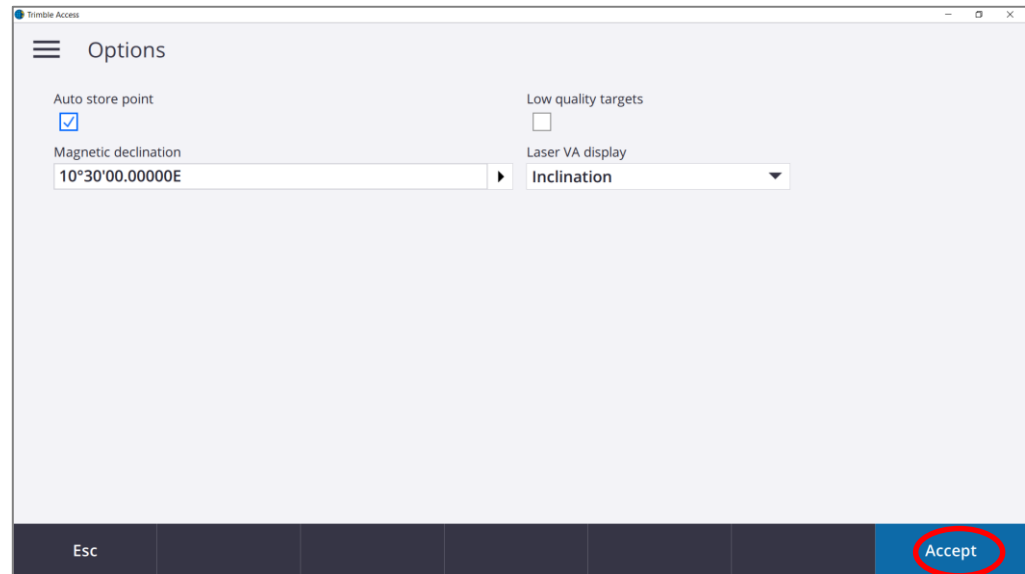
Measure Laser Points (Bearing & Dist)

15. The new point will appear on the map. This sequence is repeated for as many laser points as are needed. Tap the **Options** button for additional important features
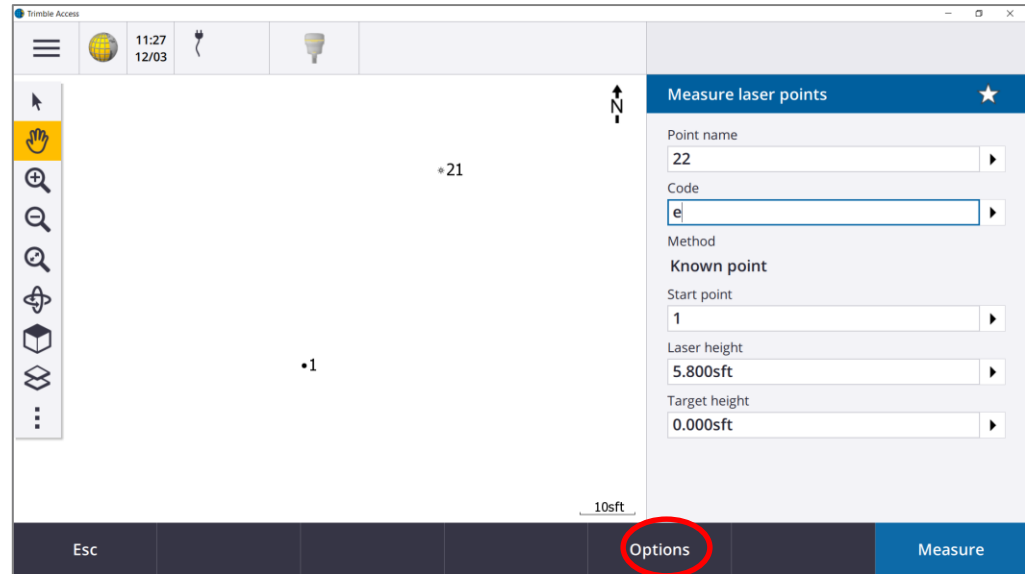
16. Here you can enter a **Magnetic Declination** to be applied to the TruPulse measurements. Make sure you don't apply it twice! You can also select **Auto store point** to bypass the screen where raw data is accepted. Tap **Accept** to save the changes
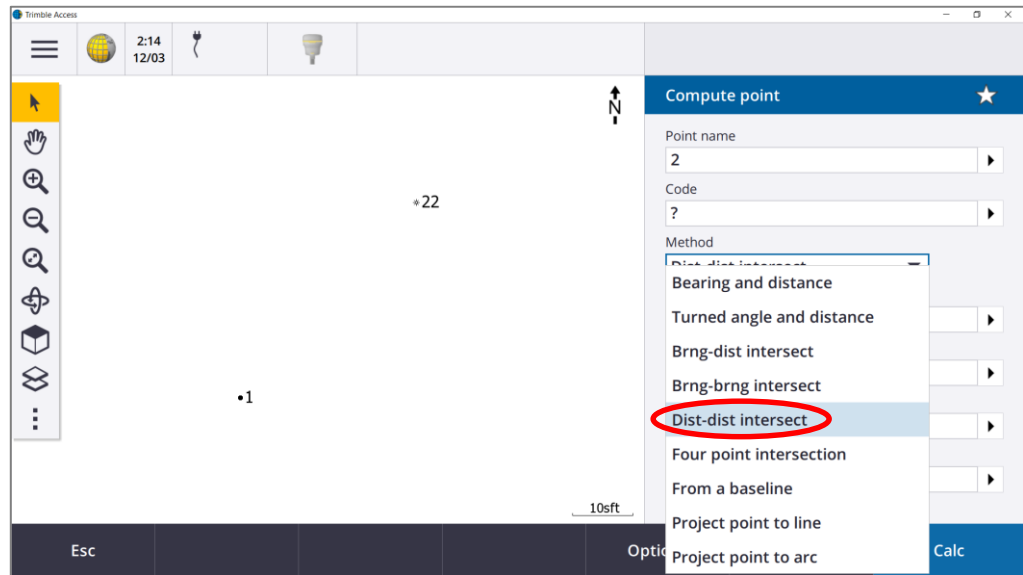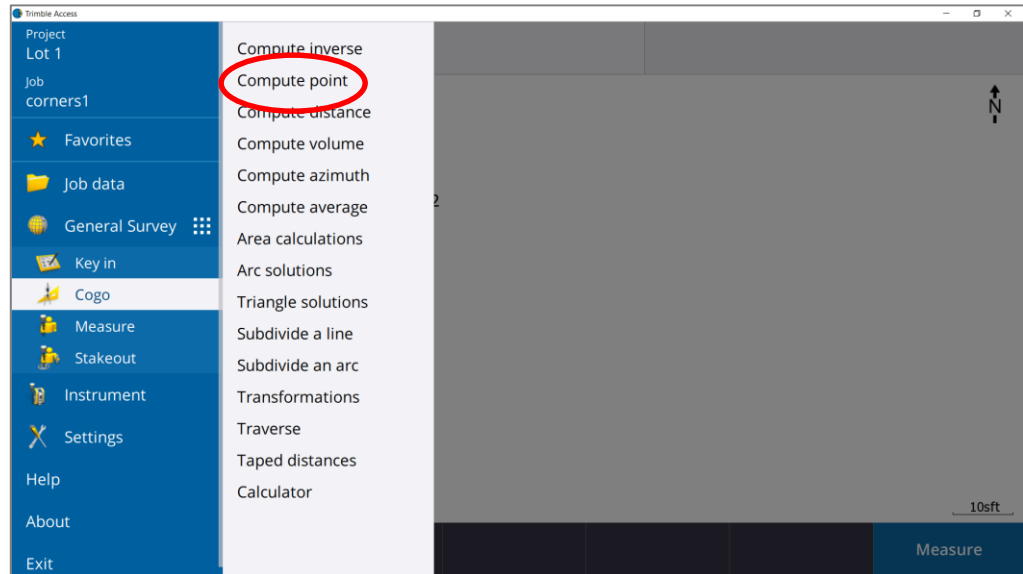
Measure Laser Points (Dist-Dist)

17. The previous screens have been based on measuring a new point with distance and azimuth. Note that a TruPulse 200 model may be used but the azimuth must be keyed in.
If you'd like to use a 200 model in a Distance-Distance method, you will need a file with at least two existing points to use. Tap on **Menu**, **Gogo** and then select *Compute point*
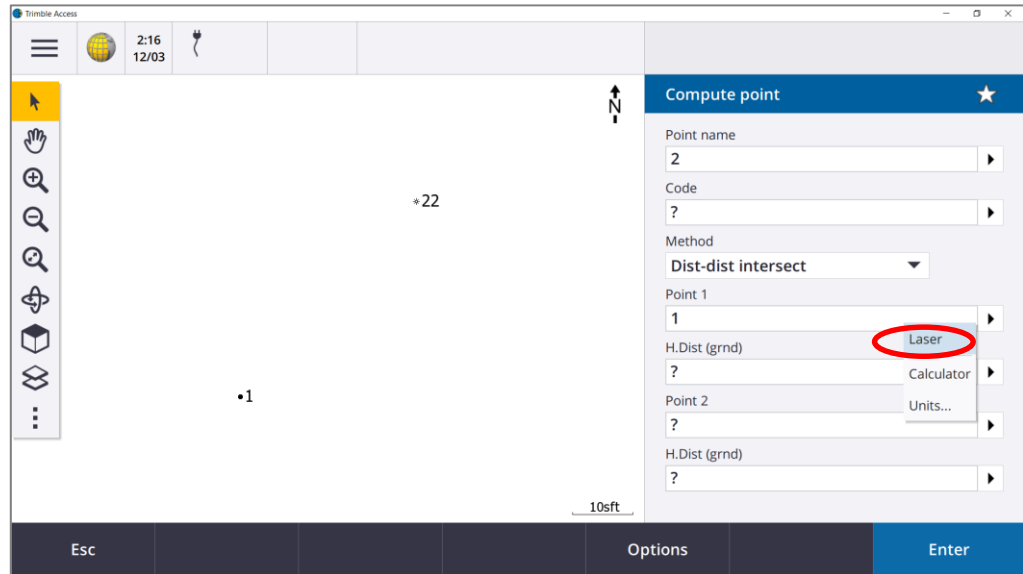
18. Specify a Point name and then choose *Dist-dist intersect* from the **Method** pull-down list

Note: many of the methods listed here to compute a point can make use of data from the TruPulse
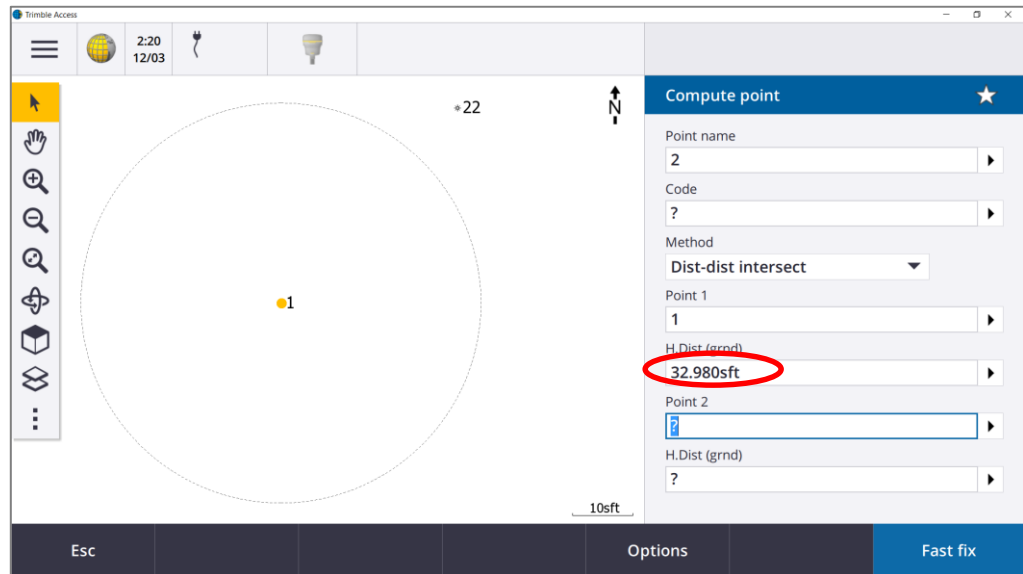
Measure Laser Points (Dist-Dist)

19. Designate which data point will be used for **Point 1** and enter it there. Tap on the arrow to the right of the **H.Dist** field and select *Laser*


20. You will see messages about connecting to the laser and taking a measurement. Do this and the data will be accepted in the **H.Dist** field. It is also displayed as a dashed circle around Point 1
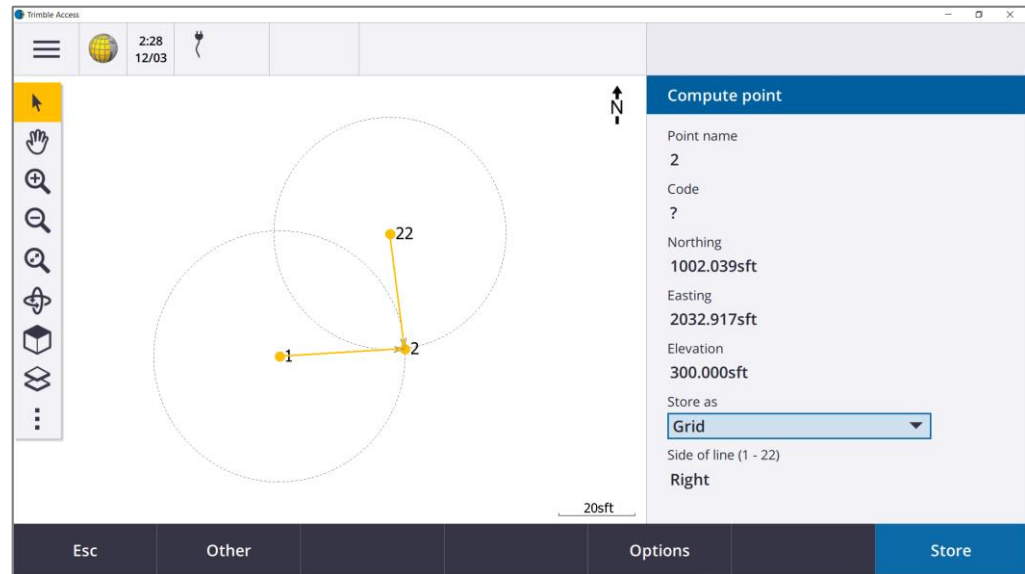

LASER TECHNOLOGY inc

Measure Laser Points (Dist-Dist)

21. Designate which data point will be used for **Point 2** and shoot the laser data into the **H.Dist** field as before. If the measurements look good, tap *Calc*
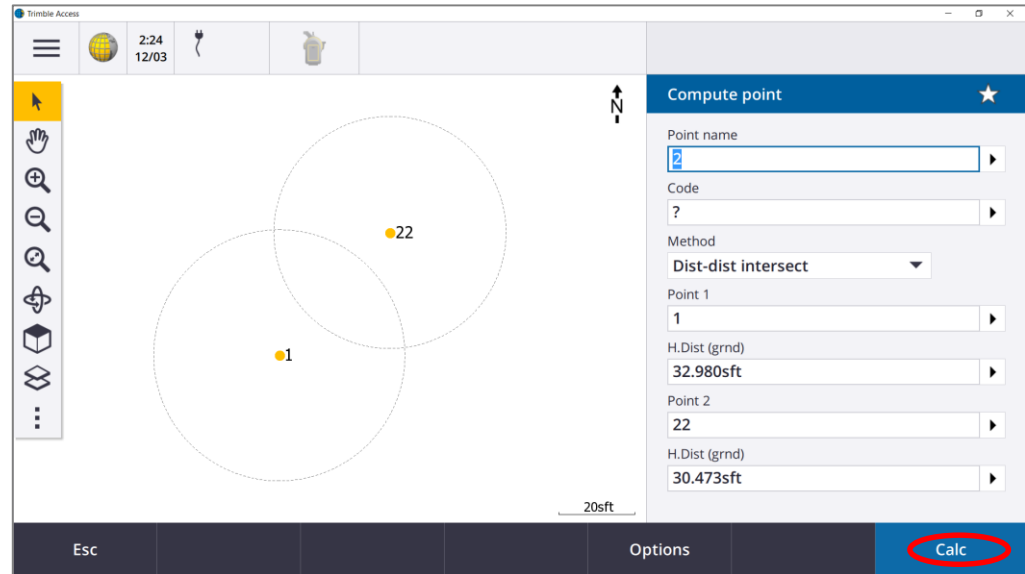
22. You are presented with the solution on the **Right** side of the line between control points. If this is correct, tap *Store* to save the point. If it's on the **Left**, tap *Other* to view that solution and click *Store* to save

Product Resources

https://www.lasertech.com/TruPulse-Laser-Rangefinder.aspx

http://www.lasertech.com/MapSmart-Software.aspx

https://geospatial.trimble.com/products-and-solutions/trimble-access

https://geospatial.trimble.com/products-and-solutions/gnss-systems

Stay informed! Find out about
Laser Technology products, updates,
and training resources by keeping
track of us on FaceBook (/LaserTechnologyInc),
Twitter (@LaserTechPro) and YouTube (/user/LaserTechPro)

LASER TECHNOLOGYINC

Contact Laser Technology, Inc.

Questions regarding the interface of our laser products to Trimble Access?

Please contact us at:

1.800.280.6113 or
1.303.649.1000

info@lasertech.com

Laser Technology, Inc.
6912 S. Quentin St.
Centennial, CO 80112

www.lasertech.com