

TRUPULSE® 200i & 360i QUICK REFERENCE FIELD GUIDE

LTI Part 0145003

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 **LASER TECH**

TruPulse® i Series



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LTI YouTube® Channel


[YouTube.com/lasertechpro](https://www.youtube.com/lasertechpro)

for TruPulse® Training Videos

*For detailed instructions on the TruPulse i Series operations, please refer to lasertech.com/professional-measurement-products and navigate to the TruPulse product's webpage.

TruPulse® i Series Display Icons

Measurement Modes • Display Icons

	Inclination		Battery Life Indicator
	Slope Distance		Laser Firing
	Horizontal Distance	F	Feet
	Vertical Distance	M	Meters
	Height	N	Azimuth
	Missing Line	%	Percent



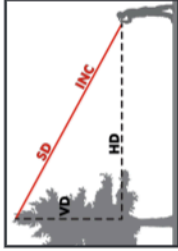
Target Modes •		Closest		Farthest		Continuous		Filter
		Bluetooth		Gate Indicators				

TruPulse® 200i Values & Key Code

Measured by TruPulse

Calculated by TruPulse

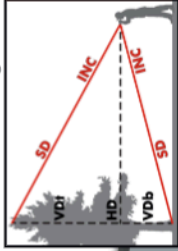
1-Shot Distance



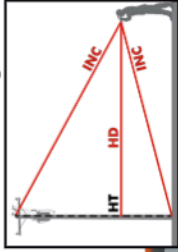
2D Missing Line



2-Shot Height



3-Shot Height



▲ = Horizontal Distance (**HD**)

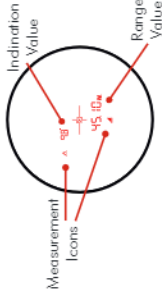
▲ = Slope Distance (**SD**)

▲ = Vertical Distance (**VD**)

▲ = Height (**HT**)

▲ = Inclination (**INC**)

▲ = Missing Line Routine (**ML**)

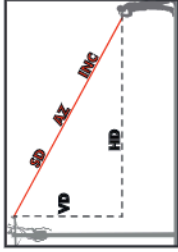


TruPulse® 360i Values & Key Code

Measured by TruPulse

Calculated by TruPulse

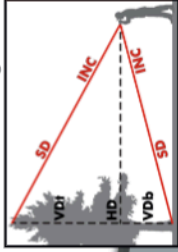
1-Shot Distance



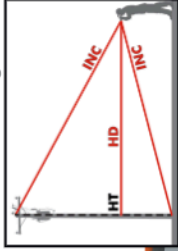
3D-Shot Missing Line



2-Shot Height



3-Shot Height



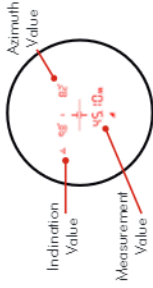
▲ = Horizontal Distance (HD)

▲ = Slope Distance (SD)




▲ = Vertical Distance (VD)

▲ = Azimuth (AZ)

▲ = Inclination (INC)





Change Units of Measurement (UoM)

- [1] Press Menu Button  to enter Setting menu, then press Menu button  to scroll to the UoM option screen is displayed. The last UoM options chosen will be displayed.
- [2] Press Navigation Buttons  to scroll through the UoM options. Meters/Degrees, Meters/Percent (%), Feet/Degrees, Feet Percent (%)

Select Targeting Mode

The TruPulse i Series has five Target Modes which allow you to select or eliminate targets and to take the most accurate measurements possible in various field conditions.

- [1] Press Menu Button  to enter Setting menu, then press Menu button  to scroll until the Targeting Mode option screen is displayed. The last Targeting option chosen will be displayed.
- [2] Press Navigation Buttons  to scroll through the Targeting Mode options. - Standard (Std) , Filter (FILt) , Closest (CLo) , Farthest (FAr) , Continuous (Cont)
- [3] Press Select button  to make the current Targeting Mode displayed the active mode.
- [4] Ready to take measurement with selected Targeting Mode option. The icon of selected mode will be displayed. Standard Mode does not have an icon displayed.
- [5] Repeat steps to change target mode option.

NOTE: Any option that chosen will be set when you return to the Measurement Mode. To save the option and be active when the unit powers off and on: Manually power off the unit.

Measure Distance

- In the Slope Distance Mode , the TruPulse i Series will automatically calculate  and .
- Measurements are from the 1/4-20 tripod mount (center) of the laser to the target.

[1] Press the Navigation buttons  until  screen is displayed.

[2] Aim at the target where you have a clear line of sight then press-and-hold the fire button .


[2.1] The laser indicator  will be displayed until measurement is acquired or fire button  is released.

[3] Press Navigation Buttons  to scroll through the other measurement values calculated.

Measure Distance Continued

[4] Press Fire button to clear measurements and repeat step 1 through 4

HELPFUL TIP

The Vertical Distance  solution can be used to measure height or clearance. In Fig. 1 & 2, just add the height of the laser at your eye level from the ground to the  measurement.

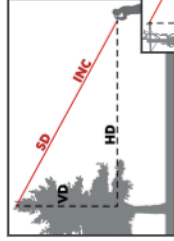


Fig. 1

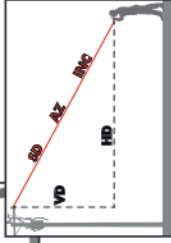













Fig. 2

Measure Height (3-pt Routine)

This routine is ideal for flat, vertical objects that do not lean. To shoot through brush, use the filter mode, foliage filter and a reflector.

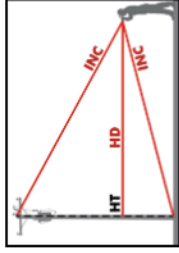
- [1] Press Navigation buttons  until  is displayed.
- [2] Aim where you have a clear line of sight to the target and press-and-hold fire button .
- [2.1] The laser indicator  will be displayed. The horizontal distance is acquired and displayed. 
- [3]  is displayed, aim to the bottom of the target, press-and-hold fire button  the inclination Angle_1 is measured and displayed. 
- [4]  is displayed, aim at the top of target, press-and-hold , the inclination angle_2 is measured and displayed. 

Measure Height (3-pt Routine) Continued #1

[5] Height measurement is calculated , display flashes then solid with calculated height value.







HELPFUL TIP

- The laser sensor does not measure when taking the two inclination angle measurements. You do not need a clear line of sight to the bottom or top of your target.
- The sequence of the two inclination angles shots does not matter: Bottom to Top OR Top to Bottom.
- Press the Select button during the Height routine to re-measure previous measurement (ANG__1 or ANG__2), ideal for taking multiple height measurements on the same target.




Measure Height in 2-Shots

This measurement routine is ideal for leaning objects and requires a clear line of sight for both shots.

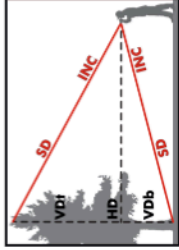
- [1] Press Navigation buttons  until  is displayed
- [2] Aim where you have a clear line of sight to the bottom of the target and press-and-hold fire button 
 - [2.1] The laser indicator  will be displayed. When the measurement is acquired  will be displayed. Note this value for the Vertical Distance (VDb) measurement.
- [3] Aim where you have a clear line of sight at the top of the target then press-and-hold the fire button .

Measure Height in 2-Shots Continued










[4] The laser indicator  will be displayed. When the measurement is acquired  will be displayed. Note this value for the Vertical Distance top (VDt) value.

[5] Subtract the two values to calculate the height, $VDt - VDb = \text{Height}$.






NOTE: when subtracting the values, pay attention to the sign of the VD.



Measure 2D Vertical Missing Line

- [1] Press Navigation Buttons  until  is displayed.
- [2] Aim where you have a clear line of sight at target, press-and-hold fire button 
 - [2.1] The laser indicator  will be displayed. When the measurement is acquired  Shot.1 results will be displayed.
 - [3]  is displayed, Aim where you have a clear line of sight at target, press-and-hold fire button. 
 - [3.1] The laser indicator  will be displayed. When the measurement is acquired  Shot.2 results will be displayed.

Measure 2D Vertical Missing Line Continued

[4] The HD  and INC  ML values will be calculated and displayed , press navigation buttons to scroll through the SD  and  VD ML values from shot 1 to shot 2.

[5] Press Check button  to scroll to  and re-measure the Shot.2,

[6] Continue to press Check button  to return to step 1.



[7] Press fire button  to return to step 1.

HELPFUL TIP

- Position yourself where shot 1 and 2 are made looking in the same direction with a clear line of sight to both targets.
- The VD solution will always be accurate no matter which direction shot 1 and 2 are taken.
 - If shot 1 is higher than shot 2, the VD value will be negative.

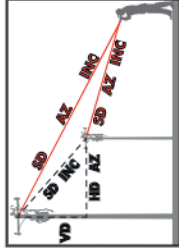


Measure 3D Missing Line (TruPulse 360i only)

- [1] Position yourself anywhere you have a clear line of site to your two targets.
- [2] Press Navigation Buttons  until  is displayed.
- [3] Follow the same steps 2-7 from the 2D Vertical Missing Line routine.
- [4] The TruPulse 360i calculate five variables between the two points: slope distance, inclination, azimuth, horizontal distance, and vertical distance as shown in Figure.







TIPS: IMPROVING THE ACCURACY RESULTS

- During the Missing Line Routine, it is important that the TruPulse stay positioned above one particular point on the ground.
- Mounting the TruPulse on a monopod or tripod will improve the accuracy of your results location of the TruPulse.
- If you are using the TruPulse handheld, be aware of your body having a swinging motion as you aim to second target.




User Field Calibration: Compass









To begin the routine, you should be holding the TruPulse and facing towards Magnetic North. Always perform outside and away from magnetic interference.

- [1] Press Menu button  to enter Setting menu.
- [2] Press Menu button  to scroll to the User Calibration option .
- [3] Press Navigation Buttons  to , then press select button .

HELPFUL TIP

- Always recalibrate your compass when Calibration icon  flashes.
- If calibration fails repeatedly, perform the tilt calibration then repeat steps.


User Field Calibration: Compass Cont'd


- [1] Face North ($\pm 10^\circ$), hold in position 1 (C1_Fd), press .
- [2] Hold in position 2 (C2_dn), press .
- [3] Hold in position 3 (C3_bc), press .
- [4] Hold in position 4 (C4_UP), press .
- [5] Hold in position 5 (C5_rF), press .
- [6] Hold in position 6 (C6_rd), press .
- [7] Hold in position 7 (C7_rb), press .
- [8] Hold in position 8 (C8_rU), press .
- [9] If FAIL message appears, press , re-enter the Compass Calibration menu and repeat steps 1-8.
- [10] If PASS message appears, press Select  to save and return to the measurement screen.




LASERTECH

Navigate to the correct
model and then Download
for the User Manual

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