

TRUPULSE® 200i & 360i QUICK REFERENCE FIELD GUIDE

LTI Part 0145003

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TruPulse® i Series



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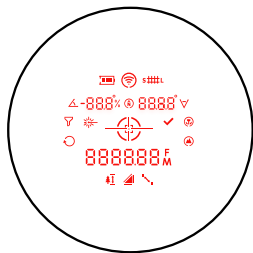
LTI YouTube® Channel

[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



Feet



Vertical
Distance



Meters



Height



Azimuth



Missing Line



Percent

Target Modes •



Closest



Farthest



Continuous



Filter



Bluetooth



Gate Indicators

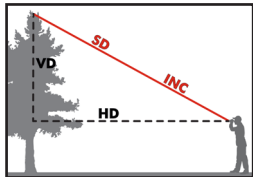
TruPulse® 200i

Values & Key Code

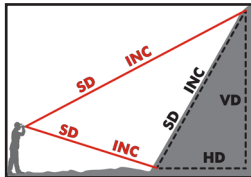
Measured by TruPulse

Calculated by TruPulse

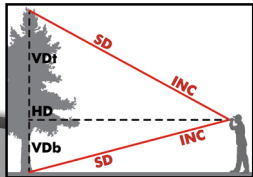
1-Shot Distance



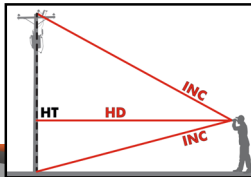
2D Missing Line



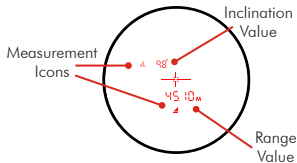
2-Shot Height



3-Shot Height



- = Horizontal Distance (HD)
- = Slope Distance (SD)
- = Vertical Distance (VD)
- = Height (HT)
- = Inclination (INC)
- = Missing Line Routine (ML)



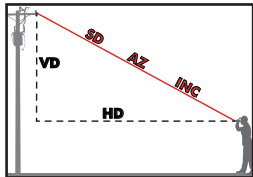
TruPulse® 360i

Values & Key Code

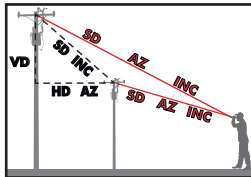
Measured by TruPulse

Calculated by TruPulse

1-Shot Distance



3D-Shot Missing Line



▲ = Horizontal Distance (HD)

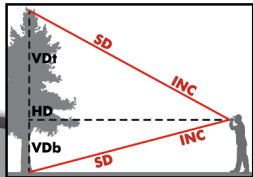
▲ = Slope Distance (SD)

▲ = Vertical Distance (VD)

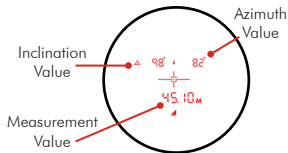
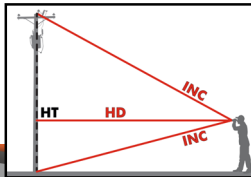
▲ = Azimuth (AZ)

▲ = Inclination (INC)

2-Shot Height



3-Shot Height



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.

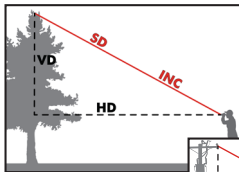


Fig. 1

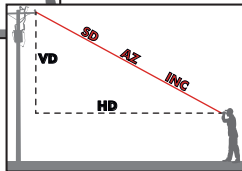


Fig. 2

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. 

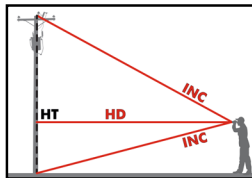
[4]  is displayed, aim at the top of target, press-and-hold , the inclination angle_2 is measured and displayed. 

Measure Height (3-pt Routine) Continued

[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 (VD_b) measurement.

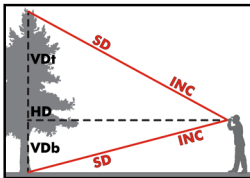
[3] Aim where you have a clear line of sight at the top of the target then press-and-hold the fire button .

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, $VDt - VD_b = \text{Height}$.

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.

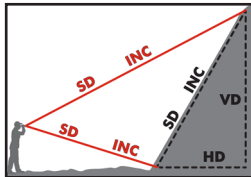
[5] Press Check button  to scroll to  and re-measure the Shot.2,

[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.

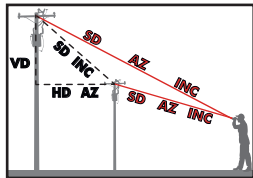
[2] Press Navigation Buttons  until  is displayed.

[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.





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



lasertech.com



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