

TruPulse® 360i Compass Calibration

TruVector Compass Technology®: Combines 3D magnetic sensor with the 3D angle sensor to know its precise orientation in 3D space.

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

The compass is susceptible to magnetic interference and should be kept away from all ferro-magnetic materials and strong magnetic fields when performing the compass calibration. Do not perform the calibration inside a building, or in or near vehicles. The user calibration for the compass merely compensates for the magnetic changes of the unit itself.

Refer to Laser Tech's TruPulse 360i Magnetic Interference Guidelines pdf on the website.

Procedure:

1. Short Press Menu button to enter Settings menu.
2. Press Menu button to scroll to the User Calibration option.
3. Press the Select Button to enter the User Calibration options.
4. Press Navigation Buttons to "Yes 360 Calbrt" display. Press the Select button.
5. At each step, wait approximately 1 second before pressing the FIRE button.
 - a. Then wait another second before moving to the next position. It is important that the unit is held steady when the button is pressed.

Calibration Sequence:

1. Face North (+/- 10 degrees), hold in position 1, press FIRE button.
2. Hold in position 2, press FIRE button.
3. Hold in position 3, press FIRE button.
4. Hold in position 4, press FIRE button.
5. Hold in position 5, press FIRE button.
6. Hold in position 6, press FIRE button.
7. Hold in position 7, press FIRE button.
8. Hold in position 8, press FIRE button.
9. If Fail Message appears, repeat steps 1 through 8.
10. If Pass Message appears, press FIRE button return to the measurement screen.




Fail Messages

- FAiL1: Excessive motion during calibration Unit was not held steady.
- FAiL2: Magnetic saturation error. Local magnetic field too strong.
- FAiL3: Mathematical fit error.
- FAiL4: Calibration convergence error.
- FAiL6: Orientations were wrong during the calibration.

NOTE If the calibration fails, the previous calibration is restored.

Tips

- Always recalibrate your compass when the Calibration icon  flashes.
 - This will flash whenever large temperature changes occur, and/or the unit has been exposed to any magnetic fields which may subtly magnetize it and its batteries.
- A user calibration must be done when batteries are changed,
- If calibration fails repeatedly, perform the User Tilt Calibration then repeat the Compass Calibration steps.