

- *Basic usage of Leica Disto e7500i- range 200m/660ft
~distance, area, volume, angles/tilt, pythagoras, etc
- *Pythagoras theory for distance calculation, creates triangle for accurate distance from elevated position with tripod
- *Accuracy: 1mm, 1/32 inch
- *Red laser, class 2, less than 1 milliwatt output, visible light only...SAFE
- *Camera, 1x, 2x, 4x zoom
- *Target: recommended grey/white for up to 30m,
~red/maroon/brown for over 30m. Red at NB for white sand, very hard to see white target with white sand background
- *Events- sp, weight, hammer, disc, jav, lj, tj, been told some guys use it to measure the bottom of the pv bar
- *The longer the distance, the greater advantage the laser is.
~Think jav, weedy or unmown grass, the tape gets stuck, or the wind prevents a straight tape pull..HS jav or disc when there is a wide range of distances thrown, spend half the time pulling in/letting out tape
- *Laser set to back of the console to line up with tripod center, can be adjusted to front or center

*Distance offset depends on event and set up

*Tripod set up- center post is critical for consistent and accurate measurements

*Circle- offset:

sp, weight, hammer: 3'6" (1.0675m);

discus: 4'1- $\frac{1}{4}$ " (1.25m)

~always measure actual diam and find actual radius, some rings, especially outdoor are not exact, concrete/steel.

Center post placed directly on top of center point of circle (where the tape measure would be pulled). Target is placed at point of contact from implement, just as if an officials helper is used

*Javelin runway- if "paved", the arc point will be 8m, 26'3" from foul line.

~Always place center post of tripod on this spot. If grass, there should be a painted arc, but always measure and check foul line from it, adjust if needed and create new arc point

*Long/triple jump- draw a chalk line at some distance (10-20m) from the foul board and set this distance as the offset. Chalk line is set parallel to foul board and at 90 degrees from runway lines. Chalk line is extended to width of sand pit for accuracy. Multiple chalk lines for mult triple jump boards to maintain same offset

*Once laser is set up for specific event, a benchmark must be set to check calibration during the day, typically before and after each flight. Target gets placed on that benchmark spot and distance is shot, recalibrate as needed.

*Recap to measure: find/create point/line, place center tripod post on that point/line, 1st touch of button wakes up tool, 2nd touch activates laser, 3rd touch takes measurement and screenshot (if using camera)

Prices as of Jan 2024:

Disto e7500i: Leica website- \$665, Amazon- \$429

Target plate (double sided): Leica-\$44, Amazon-\$60

Tripods: Leica- \$100-200, shop around, there's lots of good camera/video tripods on the market, but need center post adaptability

For further questions or training:

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