

**1** Set up the tripod to chin level.

*Pro tip:* Ensure you have space to stand between two of the legs the tripod - this will make it easier to move around when measuring

**2** Move the tripod about 10m away so you are able to see the landing area without obstruction from the cage or from the athletes. Push the tripod legs into the ground (for Outdoor Meets) and make sure the tripod is level using a levelling tool.



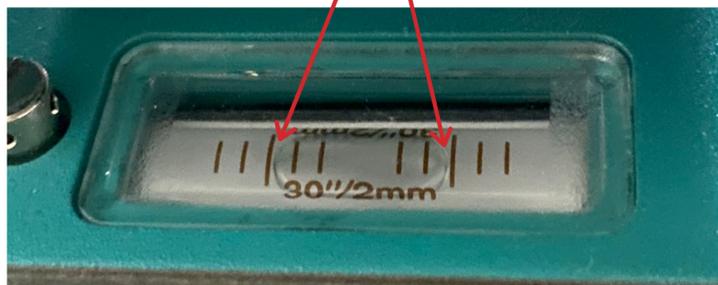
**3** Attach EDM unit (total station) on top of the tripod. Be sure to secure it by screwing it in

**4** Adjust each of the three legs on the bottom of the EDM unit (total station) **IMPORTANT:** You must adjust all of the EDM legs in order until levelled (work either in a clockwise or counterclockwise direction).

In order to adjust the EDM legs make sure the total unit is facing you while you're levelling in between two legs at a time. It is levelled once the **bubble** is in between the two long lines.



EDM legs



Level EDM

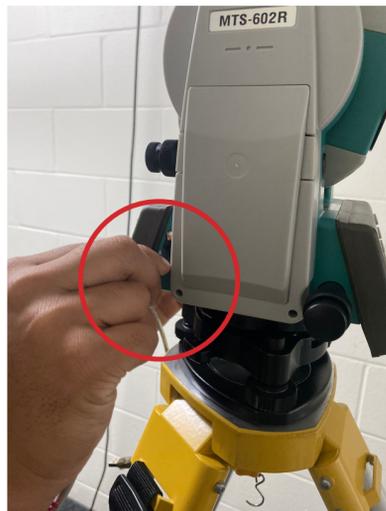


Birds Eye View of EDM

*Pro tip:* A level EDM will have the bubble in the bullseye (as seen in the picture above)

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Attach serial port connection to EDM device located under the **black cap**.



Location of serial port

**Pro tip:** To remove it safely, slightly pull the outer ring and the connection will easily disconnect



Serial port connection close up

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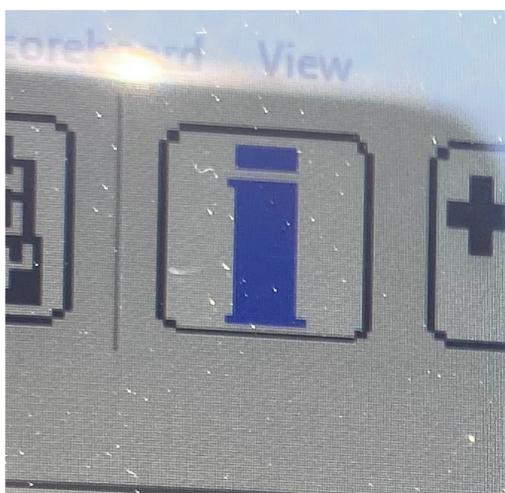
Plug the other side of the serial port connection into the USB converter and then plug into the tablet.



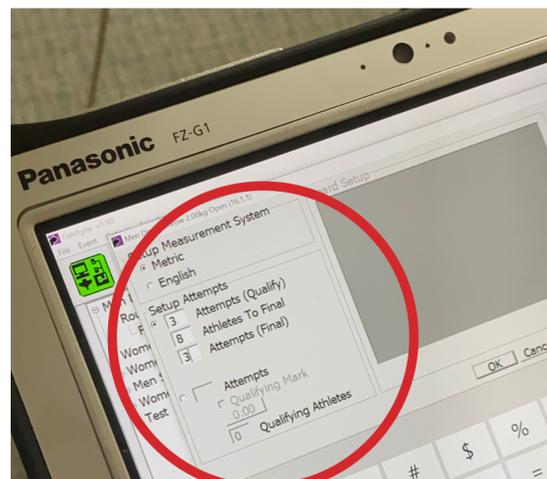
USB converter

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- A) Turn on the tablet and EDM device, to turn on the EDM press the **red power button**.
- B) Once the tablet is on, open the application *field lynx*.
- C) Select the event (under circle radius), click the +/- button on the left of the event to have the rounds dropdown.
- D) Select a flight, then a pop-up will come up with all the athletes listed in the event.
- E) Set settings for the event by clicking on the **blue i button**. The setup generally will be: 3- attempts (qualify), 8-athletes, 3- attempts (final) events *please adjust these accordingly to each championship*



Blue i button



General set up

**Pro tip:** Some competitions will allow athletes 6 throws, be sure to select attempts and input 6 when appropriate

Before the event can begin, three measuring tests have to be done to ensure the EDM is accurately measuring the distance from the throwing circle to the prism. The tests are...

- 1) Checking the radius of the throwing circle to ensure it is within regulation.
- 2) Completing two test measurements, ensuring markers are left in the ground so these test measurements can be re-tested after the event is complete.

**8** To begin testing click the *set controls* button and a pop-up will come up (click on the [blue i button](#) if you accidentally exited to see the event set up).

*Pro tip:* Make sure the lens cap is off on the EDM

**9** Have someone set up the prism in the measurement location (for testing remember to check radius first, then two test measurements). Ensure prism is upright and facing the EDM.



An example of a proper prism set up

**10** To begin measurements start by looking at the small scope on either the top of the EDM. This scope will have a small cross-hair when you look through.



Small scope on top of EDM

**11** A) Focus on one axis at a time (x or y)  
 B) Starting with the x-axis (horizontal plane) move the EDM until you see the bright yellow pole or the orange part of the prism through the small scope. Then turn the x-axis adjusting knob to keep the EDM in place (do not over tighten the knob)  
 C) Do the same as above for the y-axis (vertical plane). Ensure you turn the y-axis adjusting knob.

*Pro tip:* Look ovetop the small scope to roughly align it with the prism (this will make measurements faster)



Y-axis (Vertical plane) adjusting knob



X-axis (Horizontal plane) adjusting knob

*Pro tip:* The small scope doesn't need to be perfectly aligned, this is the rough alignment.

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A) Now start adjusting the **big scope**.

There will be crosshairs that need to be lined up to the reflective part of the prism

B) Move the EDM on the x-axis and y-axis using the knobs to tighten as mentioned in the previous step. If you didn't fully tighten the knobs there should be minimal movement allowed from the EDM.

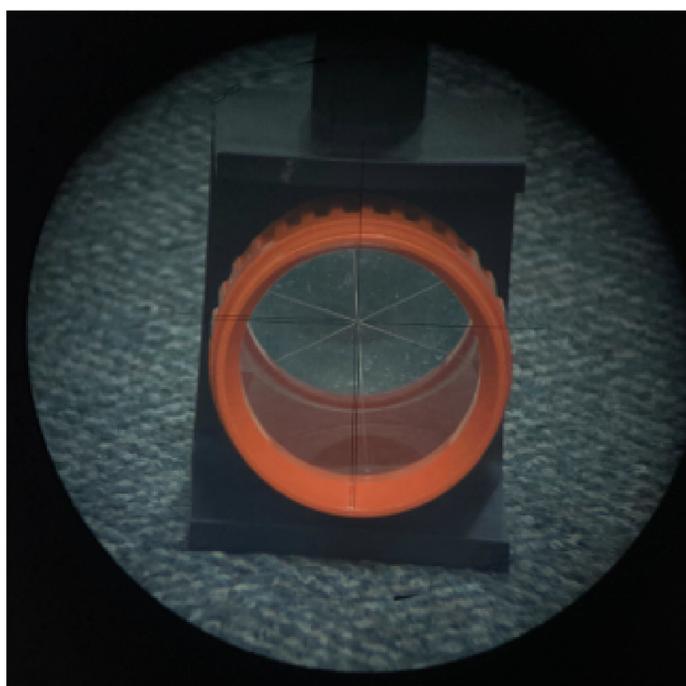
C) *optional step* The big scope has a knob surrounding it that is similar to a camera that allows you to focus the EDM so you can see more clearly.



**Pro tip:** The big scope cross hairs do not have to be perfectly centred on the prism

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Once lined up press the test measurement button on the tablet and a reading should pop up.



View through the EDM after all steps have been completed

**Pro tip:** The EDM will beep twice after measurement is taken.

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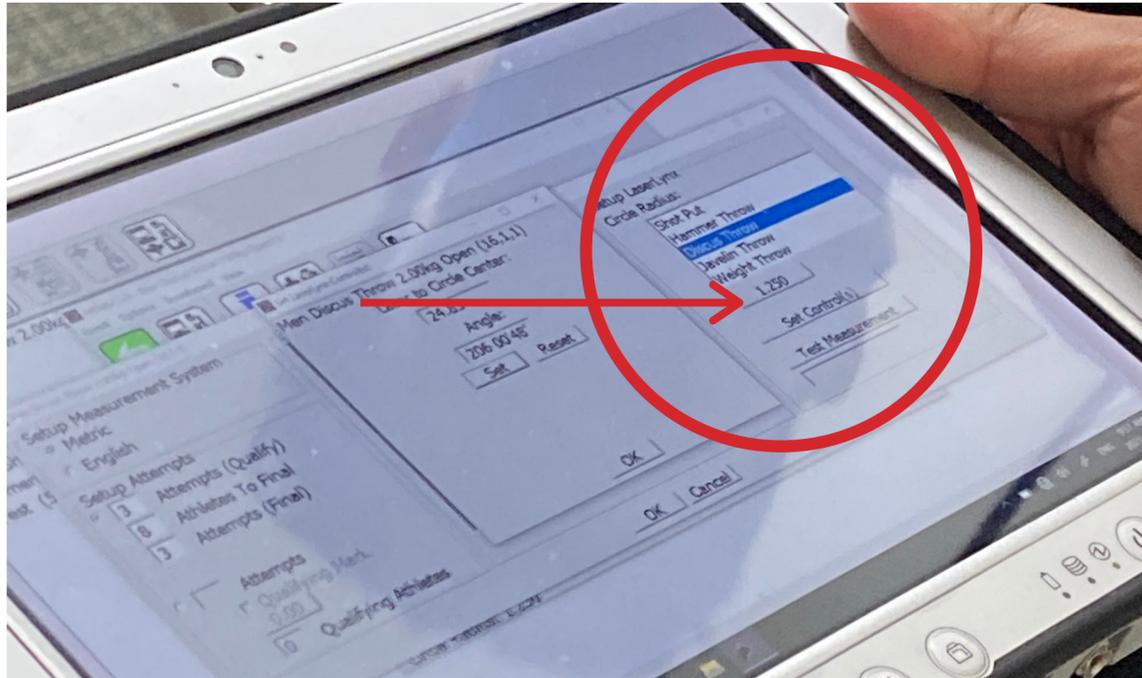
Repeat this for all necessary test measurements (radius of throwing circle, and two test measurements).

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Once test measurements are done, the event can begin. More info on next page.

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Select detailed event. For this manual, we will use discus as an example.  
Select discus throw on the right side to determine the radius of the circle. Press Ok.



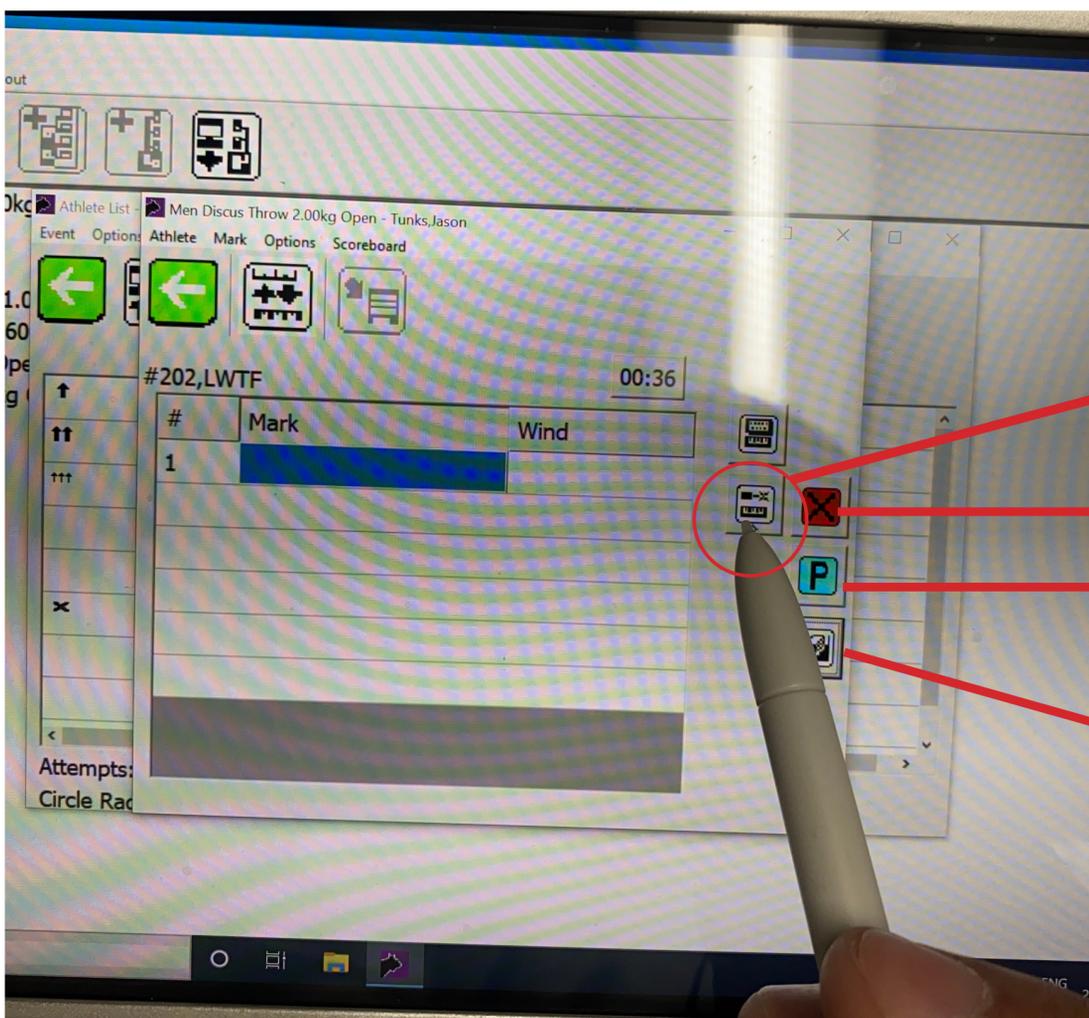
Screen view of step 17

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Check with officials that all athletes showed up - click X on the athlete to check in the athlete.  
If an athlete is injured, click X to "no show"

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Once an athlete throws another official will bring the prism to where the object landed (if there is no foul). Then align the EDM (refer to steps 10-13) and measure the distance. See corresponding buttons to click depending on an athletes throw outcome.



Press this button after athlete throws and distance will record.

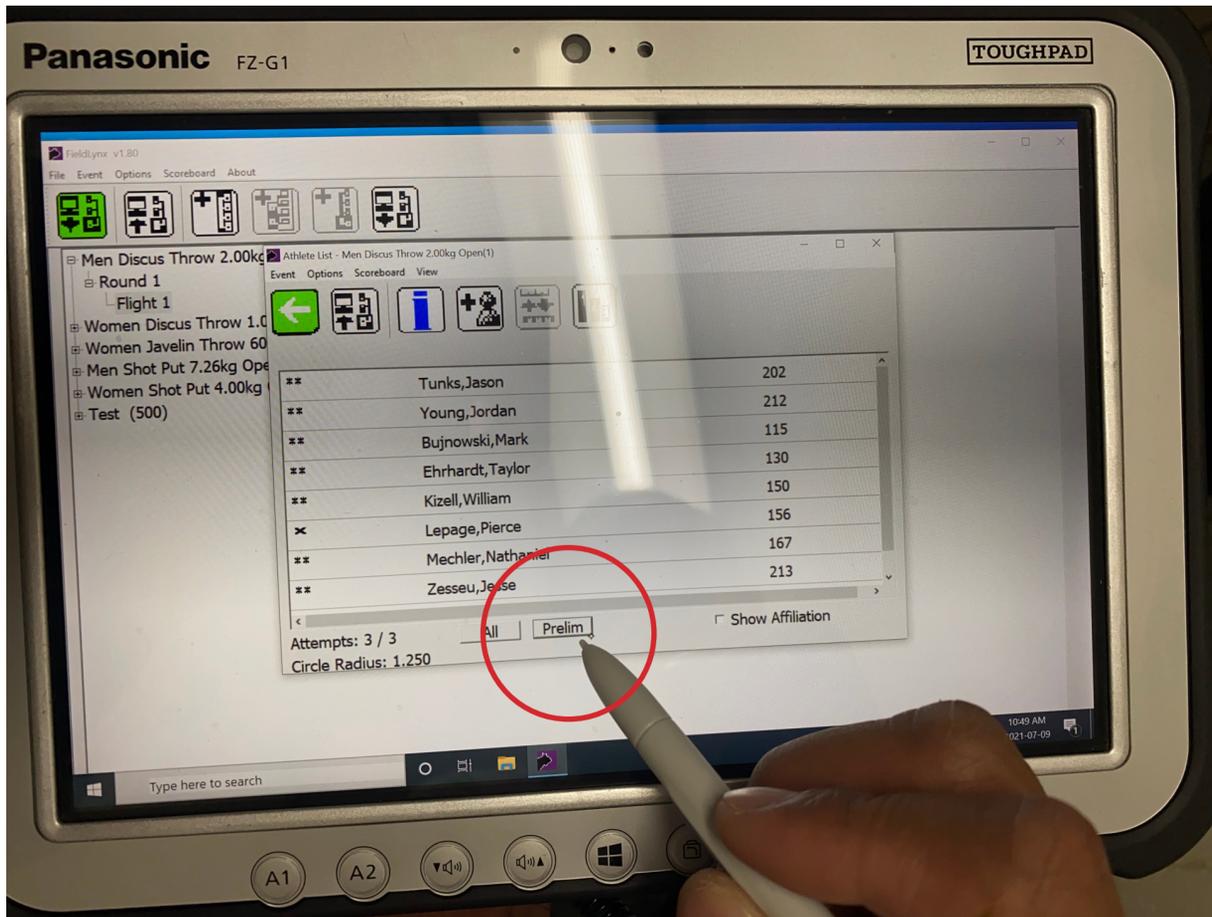
Red button if athlete fouls.

Blue button if athlete passes turn.

Eraser button.

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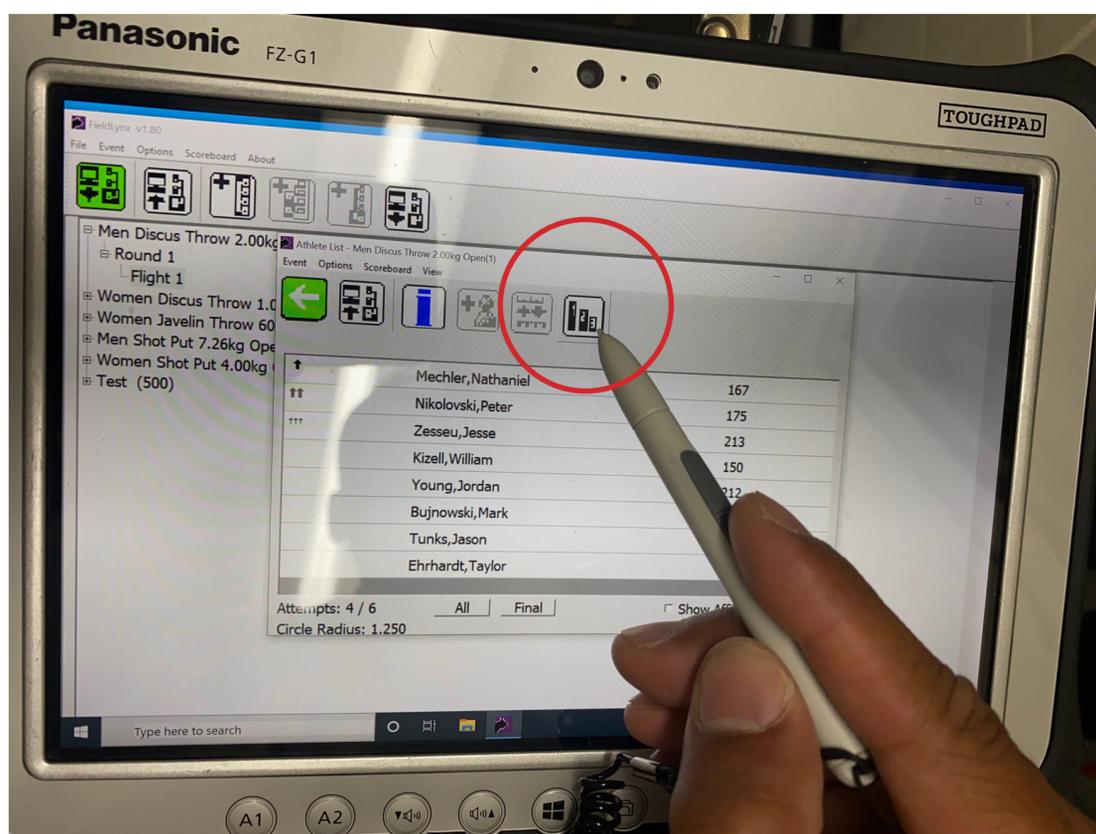
Once all athletes are finished and all 3 attempts are entered, select *Prelim* button and change to *final*.



Step 20 screen view

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Once the round is complete, confirm with officials that everything matches. Go back and do some test measurements to confirm. Exit and pop up will come up - select yes or press this button to send results.



Step 21 screen view

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Put everything away properly by...

A) Unplugging the tablet, and turn the tablet and EDM off.

B) Remove the serial port connection from EDM device (remember the pro tip to pull the outer layer to remove the wire)



Outer layer of serial port connection

C) Put lens cap back on EDM

D) Unscrew EDM from the tripod and put back into the case

E) Remove tripod from the ground, shrink leg size and lock up with the clip.

F) Put wire and level back into the case.



What everything should look like at the end

Thanks for using this manual!