

Congratulations on your purchase of the new LASAM 3.0 System from BHLM Services, LLC.

This device uses a Class II laser. Caution should be used not to stare directly into the laser beam. The operator should be aware of the laser beam and avoid shining the laser at any aircraft or automobiles. **(Shining a laser at an aircraft or automobile can result in criminal charges.)**

This system can be used to measure distances in the shot put, discus, hammer throw, javelin, weight throw and long jump. It has been shown that using the LASAM System instead of a tape measure can produce more accurate results as there is no need to worry about a fiberglass tape measure stretching, twisting, breaking, or not being pulled appropriately straight. It can also greatly increase meet efficiency since there is no need for an official to enter the circle after each legal throw.

Your LASAM 3.0 System is a precision measurement device and should be treated with care. It is important for any operator to fully read these instructions and practice/be appropriately trained with the device before any competition begins.

Your device is capable of measuring in metric or imperial, and automatically subtracting the radius of any throwing circle. However, it is important to insure proper setup and that the system remains level during use.



Device Setup:

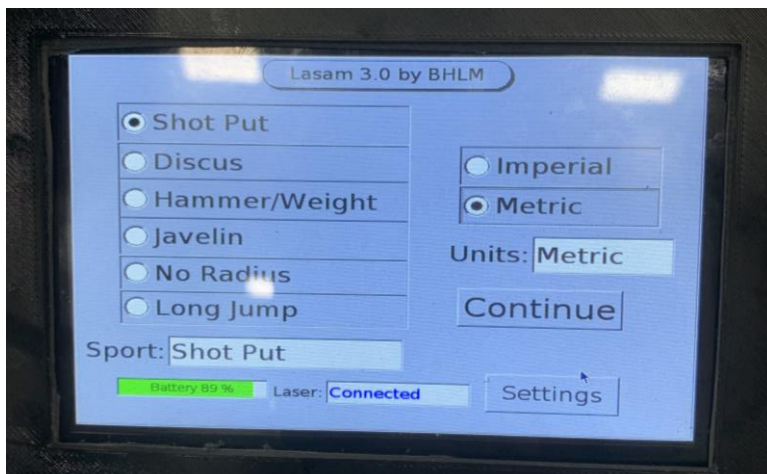
- 1. Identify a safe location near the throwing circle where the operator has a clear view of the entire landing area without interference from the cage or other obstacles that would block line-of-sight from operator's location and implement landing.**
- 2. Set up orange tripod. Use included torpedo level to ensure the top of tripod is as level as possible. Feet of tripod should be secure to ensure tripod stays level during use.**
- 3. Attach Tribraich to tripod using the attachment knob under tripod head.**
- 4. Level Tribraich using the 3 thumb knobs on the tribraich until integrated level is centered.**
- 5. Ensure Tribraich Locking Knob is open and ready to receive the locking pins at the bottom of the LASAM 3.0 unit.**
- 6. Align 3 locking pins on the bottom of LASAM 3.0 unit with Tribraich holes. Once properly seated, turn locking knob on Tribraich to lock unit in place.**
- 7. If the unit will be used longer than two hours, it is recommended to attach the Auxiliary Battery using the Aux Bat Port.**
- 8. If use of trigger button is desired, attach to the RJ-11 port.**
- 9. If use of sighting scope is desired, attach to mounting rail.**
- 10. If you have the optional scoreboard, it should be setup in a safe location where it will not be hit by an errant throw, while still being viewable by officials and spectators. Scoreboard should be plugged in/powerd on prior to turning on LASAM 3.0 unit to ensure signal connection.**



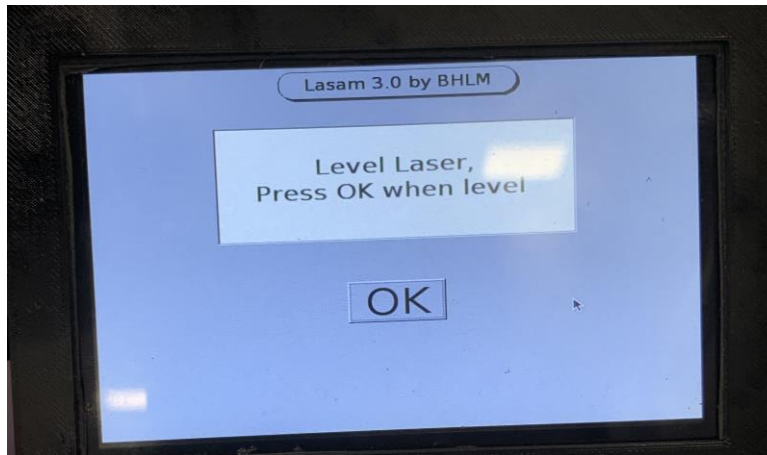
(Note, if using outdoors, LASAM 3.0 unit and scoreboard should be protected from precipitation or bright, intense sunlight with the use of a tent/canopy. Once system is set up, close the protective case to ensure the internal foam does not get wet.)

It is important to remember that after the system is set up, it must remain level. If the tripod is bumped or changes position, it should be checked/re-set to ensure the tripod/tribrach are level.

Once setup is complete the unit can be powered on using the rocker switch on the back of the unit. Please note that it will take approximately 60 seconds to fully boot up and load the home screen.

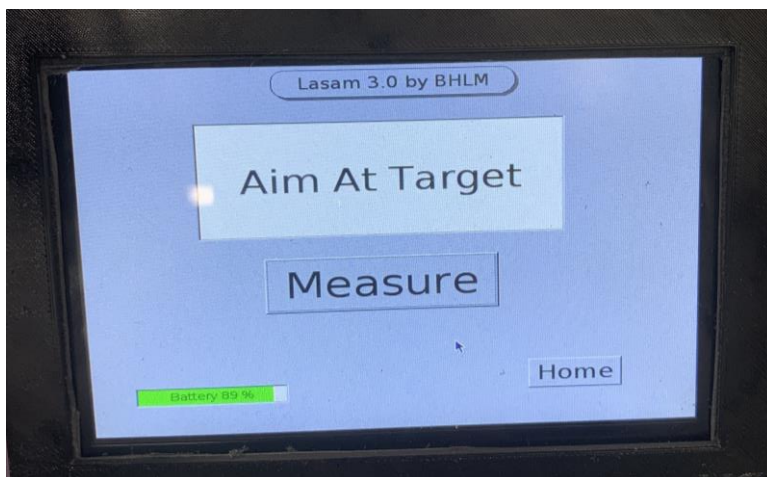


Once the home screen appears on the front touchscreen, select the appropriate event and measurement system using the touchscreen interface. Then press continue. Next, you will be prompted to level the laser.



Using the vertical adjustment knob to center the bubble level on the laser module. Once level, press OK. Now follow the prompts on the screen to aim at the center of the circle or the edge of the long jump board. The measuring stick can be used for this or the included stationary point can be placed in the center of the circle. (The center of the circle should be clearly marked with a black dot, or a drilled hole. Ensure it has been properly marked by checking with a tape measure.)

You are now prompted to aim at the target and measure.



After a measurement is made the operator can choose to re-measure, accept, or foul. Re-measure will allow the operator to re-measure the current mark or a new mark without the distance being displayed on the scoreboard. Accept will send the distance displayed on the touchscreen to the scoreboard. Foul will send FOUL to the scoreboard.

For longer throws that require use of the spotting scope, the trigger button may be preferred over the touchscreen when measuring, so that the operator can maintain visual contact with the red laser dot

on the measurement board while triggering the measurement. Either is acceptable based on user preference.

Note that anytime the home button is selected, the home screen will be displayed, at which point the setup procedure (level laser, shoot center of circle) will need to be repeated.

Shutdown:

When finished using the LASAM 3.0 system, the operator can simply turn off the unit using the rocker switch on the back panel. Then disassemble and return to the protective case.

Batteries:

Your LASAM 3.0 unit has an internal 6V unit along with an external auxiliary 6V battery. Battery life will vary based on usage and conditions. These are not interchangeable with the 12V battery of the scoreboard. The unit should be operated in a way that the laser should not be projecting the red spot for extended periods of time if idle between flights. This will help extend the battery life while practicing good laser etiquette/safety.

Charging:

Your LASAM 3.0 unit should only be charged using the included 6V charger. Use of other chargers could damage the unit. It should be noted that the charger screws onto the charging port and needs to be unscrewed when charging is complete. The charger should only plug into the appropriately labeled charging port on the underside of the back panel.

Scoreboard:

The scoreboard with your unit has been programmed and paired to your specific unit. It should be mounted to the included tripod and secured in a way that insures it will not be easily knocked over by getting bumped, blown over by wind, or sink into soft ground causing instability. It can be set up anywhere within 1000 meters of the LASAM 3.0 unit.

The scoreboard should be powered on prior to turning on the LASAM 3.0 unit to ensure proper pairing. To power on, simply connect the power cable to the scoreboard and clip the appropriate clips to the terminals of the 12V battery.

Brightness and color of the scoreboard display can be changed within the settings menu located on the Home screen.

Venue Setup:

Upon arrival at the competition venue, the official/operator should survey the site and establish a proper place to set up that ensures personal safety, while also providing an adequate vantage point. The device should be placed in an area where it will not be hit by errant implements or tripped over by athletes/officials moving around the venue. Note: Marking sticks should not be left in the field during warmup periods. They should be placed in an area out of the way where they will not be hit by errant implements or in the way of athletes moving around the venue.

After arrival and a quick survey of the site, the operator should measure/check the center of the circle and make sure that it is marked in a manner that will be visible throughout the entirety of the competition. This may be done by drilling a small hole in the center of the circle with a ¼" drill bit, or permanently marking with paint a center spot about the size of a dime. This will ensure proper placement of the center point of the tripod after each attempt.

Shot Put: -1.06m or -3'6"

Discus Throw: -1.25m or -4'1"1/4

Hammer Throw: -1.06m or -3'6"

Weight Throw: -1.06m or -3'6"

Javelin: -8.00m or 26'3"

Marking Officials:

The official(s) who are in the field marking the event should be instructed to always ensure personal safety at all times while also stressing the importance of safety to the athletes or any other personnel who may be entering the landing area.

After an athlete completes an attempt, the marking official should quickly get to landing point and place the distance marker at the nearest point of impact to the throwing circle/jumping board. The distance marker should be held in a still, level position until the head official either calls foul, or successfully reads the distance of the mark.

The marking plates are reversible, with a reflective and non-reflective side. Generally, it is recommended that the non-reflective side be used for measurements less than 30 meters. The reflective surface should be used for measurements greater than 30 meters. If an error is displayed while making a measurement, the marking official should be instructed to flip the marking plate to the opposite surface.

For service or replacement parts, please contact BHLM Services, LLC at BHLaserMeasuring.com.

