

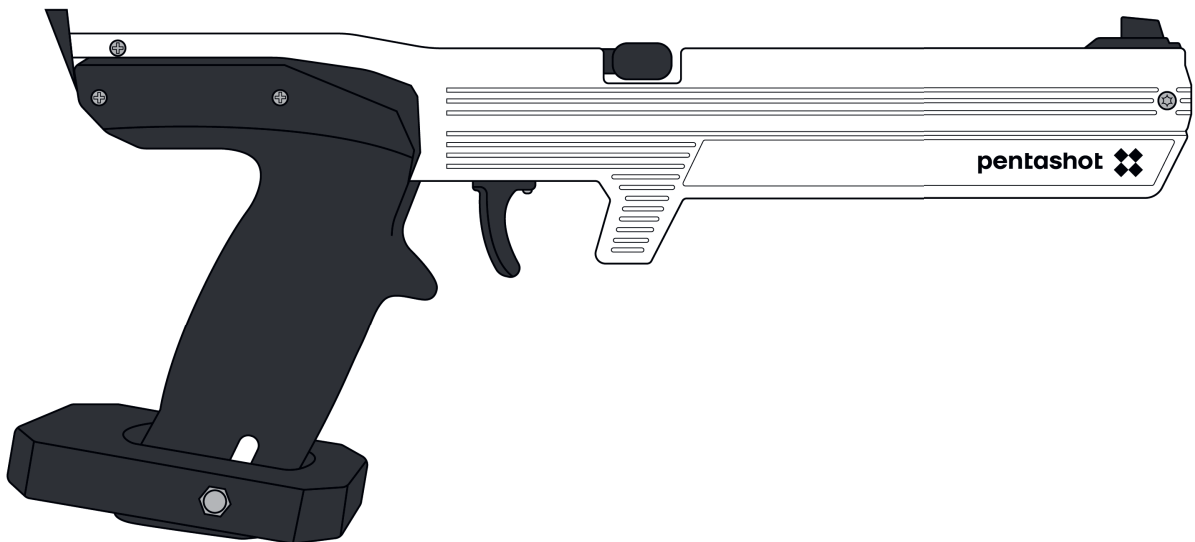
# pentashot



[www.pentashot.eu](http://www.pentashot.eu)

## GLS e.Start laser simulator

OPERATING MANUAL



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## SAFETY NOTES AND IMPORTANT INFORMATION



*After delivery or purchase, immediately check whether the product is damaged and whether you have received the version you ordered. If it is the wrong product or the product is damaged, contact your seller immediately. If the claim is not made on time, it cannot be honoured.*

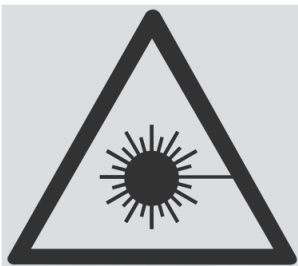
Keep the emitter clean; wipe off dust with a dry cloth. Never use cleaning agents, solvents or chemicals. Never press any object onto the optics hole.

Regularly check the battery inside the simulator body for corrosion or leaks.

If you will not be using the simulator for more than a week, you must remove the battery. Also remove the battery before plane travel.

### BEFORE USE

- The simulator must be used only according to these instructions. Never use the simulator for purposes for which it was not intended. Failure to follow these instructions can expose the user to dangerous laser radiation.
- Never break the safety sticker — this will void the product warranty.
- In public, carry the simulator in its original case or bag. People who don't know this type of simulator may mistake it for an ordinary weapon and alert the police.



**LASER RADIATION**  
**NEVER LOOK DIRECTLY INTO THE LASER BEAM!**  
**CLASS I LASER EQUIPMENT**

### DURING USE

- Never aim at people, animals or uncontrolled locations.
- When handling the simulator, follow the general rules for handling real weapons.



#### **WARNING!**

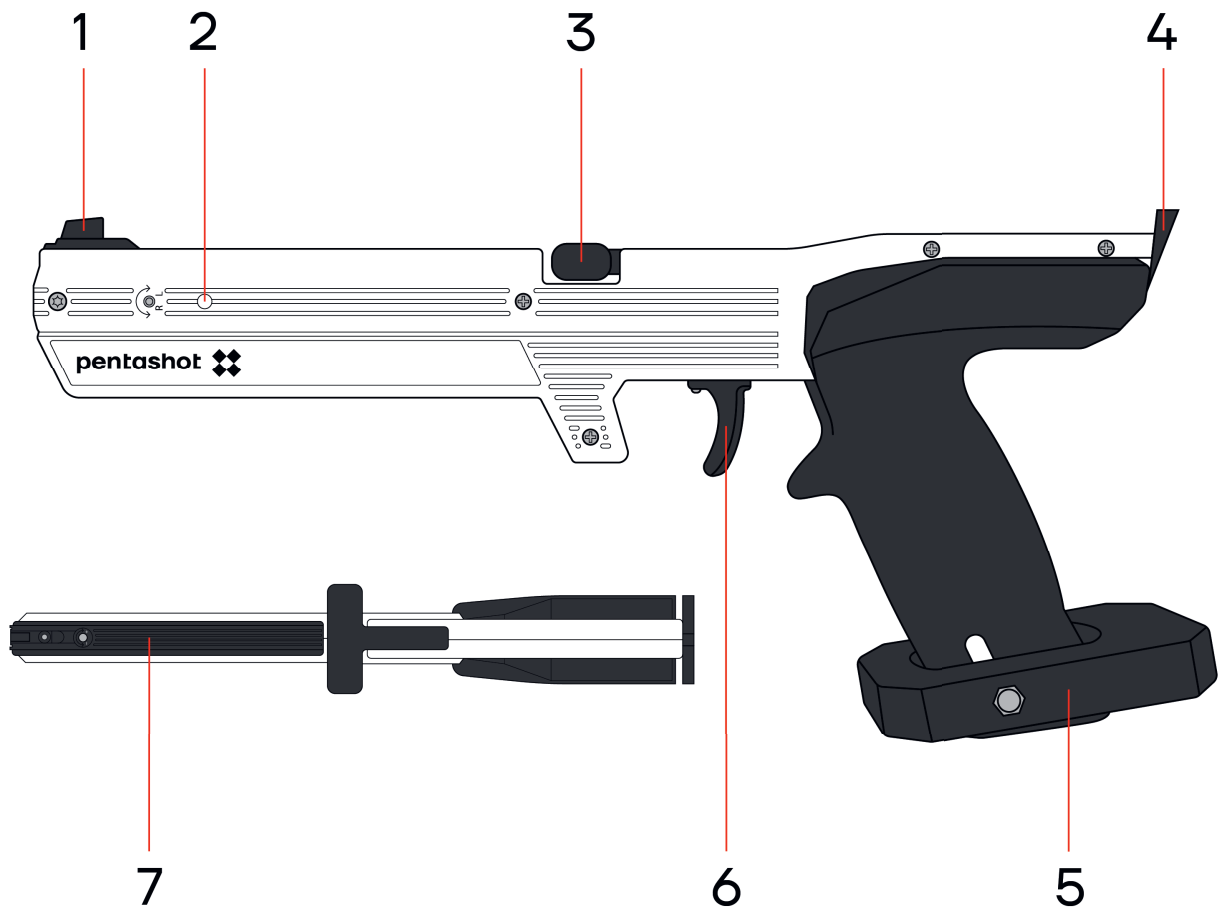
*Failure to follow the instructions above can expose the user to dangerous laser radiation.*

### AFTER USE

- After use, store the simulator in its original case.
- Protect the simulator from direct sunlight and rain in keeping with the UIPM rules.

# DESCRIPTION

## LASER SIMULATOR WITH AMBIDEXTROUS GRIP



- 1 Bead (front sights) integrated into the battery cover
- 2 Battery status LED
- 3 Pull lever
- 4 Rear sights
- 5 Ämbidextrous grip
- 6 Trigger
- 7 Battery cover with integrated bead

# PURPOSE

The GLS e.Start laser simulator is for use in instructional courses, training or competition in modern pentathlon. It is designed to shoot a laser beam activated by a trigger.

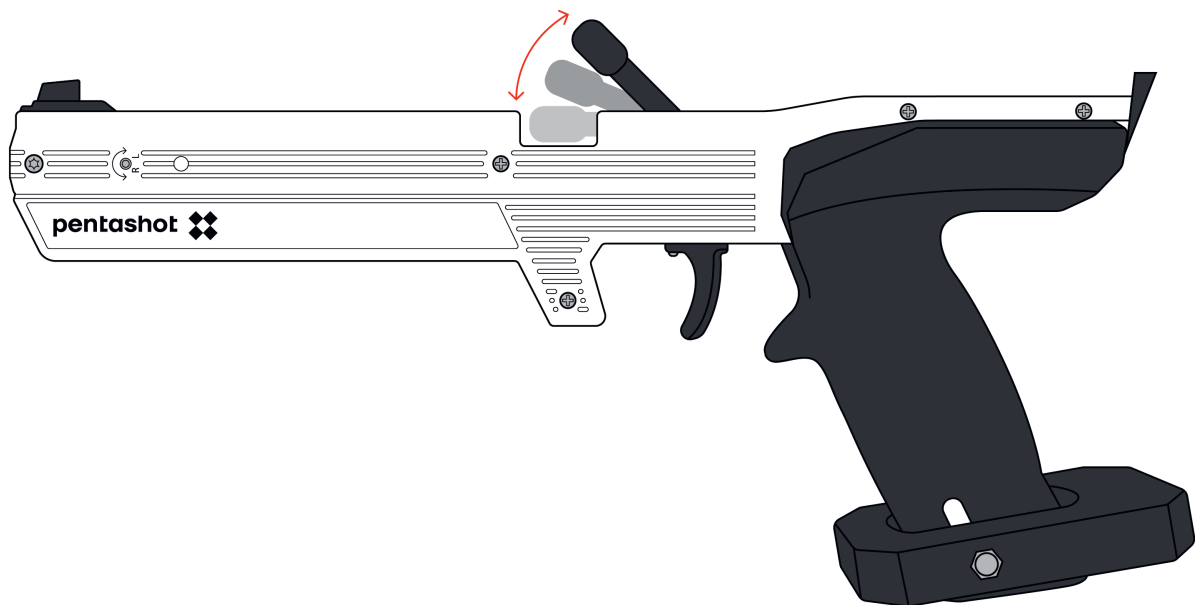
The GLS e.Start laser simulator is used like an FLP20-e laser module emitter with a 15.6 ms code. This code is completely compatible with the standards of the International Modern Pentathlon Union (UIPM).

## PREPARING THE LASER SIMULATOR FOR USE

### TURNING THE SIMULATOR ON

Pull the charging lever (3) to the maximum (about 35 degrees). This turns the laser simulator on while charging it for the first shot. After start, the LED (2) on the left side of the simulator body will start to flash. The number of flashes indicates the battery status.

- 5 flashes – 100% battery charge
- 4 flashes – 75% battery charge
- 3 flashes – 50% battery charge
- 2 flashes – 25% battery charge
- 1 flash – battery is dead and needs replacement.



After the battery test is finished, the LED signal light will glow solid blue to indicate that the laser is on and ready to use.



*If the LED continuously flashes blue, the battery is dead and must be replaced immediately.*

### TURNING THE SIMULATOR OFF

The laser module shuts off about 30 minutes after the last light shot. If you need to turn it off right away, remove the battery from the simulator body.

The user is allowed to perform only the following maintenance and adjustments:

- adjusting the simulator sights (laser dots)
- adjusting the trigger position
- adjusting the grip angle
- replacing the battery
- replacing the simulator grip

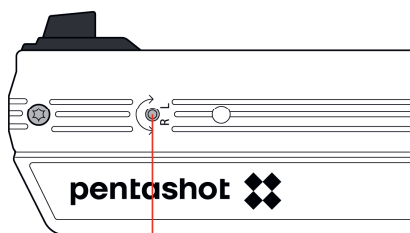
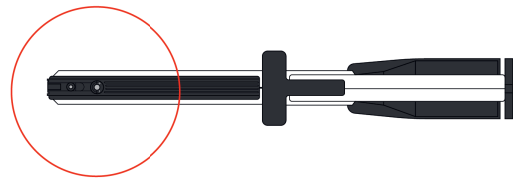
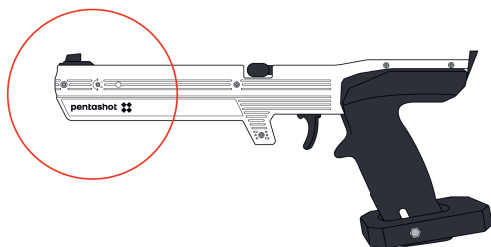


*It is forbidden to open or modify the laser simulator, other than to change the battery or grip. Only the manufacturer or an authorized person is to change the laser beam parameters. The owner of the simulator must confirm his consent to the change in writing. The manufacturer will accept no liability for damages resulting from such a change.*

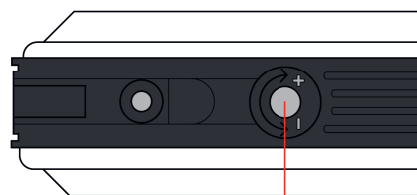
### ADJUSTING THE SIMULATOR SIGHTS (LASER DOT ALIGNMENT)

To adjust the sights of the simulator, aim at a white wall or white object 10 metres away and check the alignment of the red laser dots and sights. If necessary, use the adjustment screws to align the laser dots:

- Turning screw (8a) **clockwise** – moves the laser dot **to the left**
- Turning screw (8a) **counter-clockwise** – moves the laser dot **to the right**
- Turning screw (8b) **clockwise** – moves the laser dot **up**
- Turning screw (8b) **counter-clockwise** – moves the laser dot **down**



8a



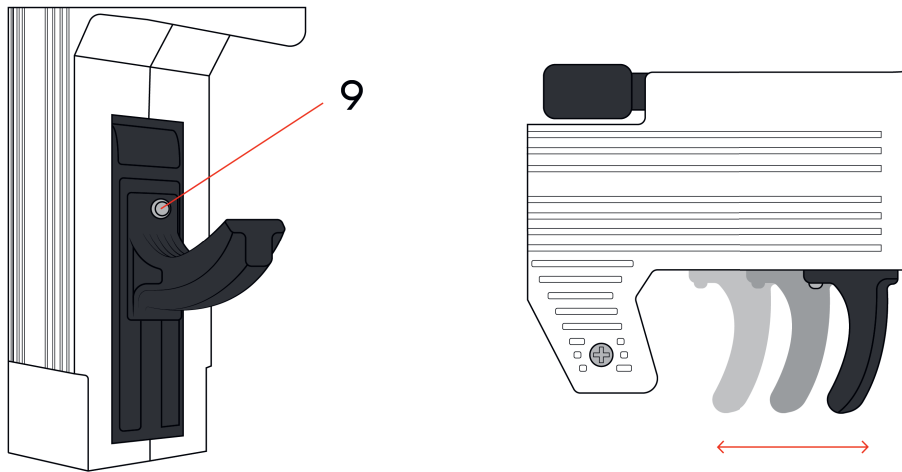
8b



*IMPORTANT: The adjustment screw movements must be very small. One turn of an adjustment screw moves the laser dot about 20 cm at a distance of 10 m.*

## TRIGGER POSITION SETTING

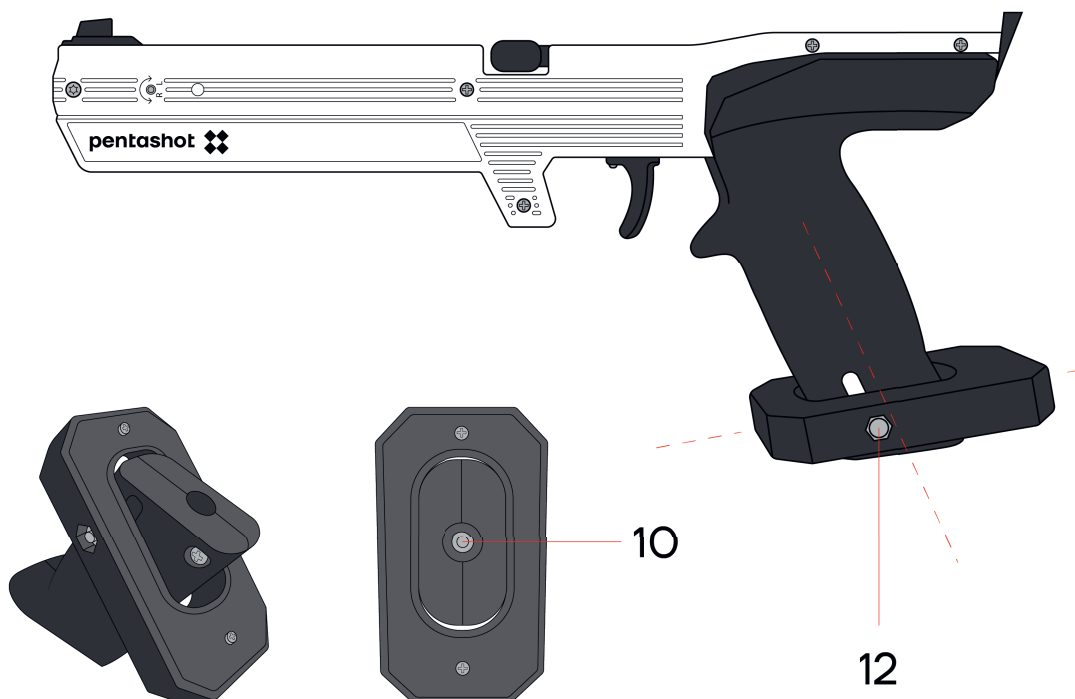
After loosening the screw (9), you can move the trigger position forward or back.



## GRIP ADJUSTMENT

Use the included hex wrench to loosen the small screw at the bottom (10) of the simulator grip. Set the new grip position and secure it using the small screw.

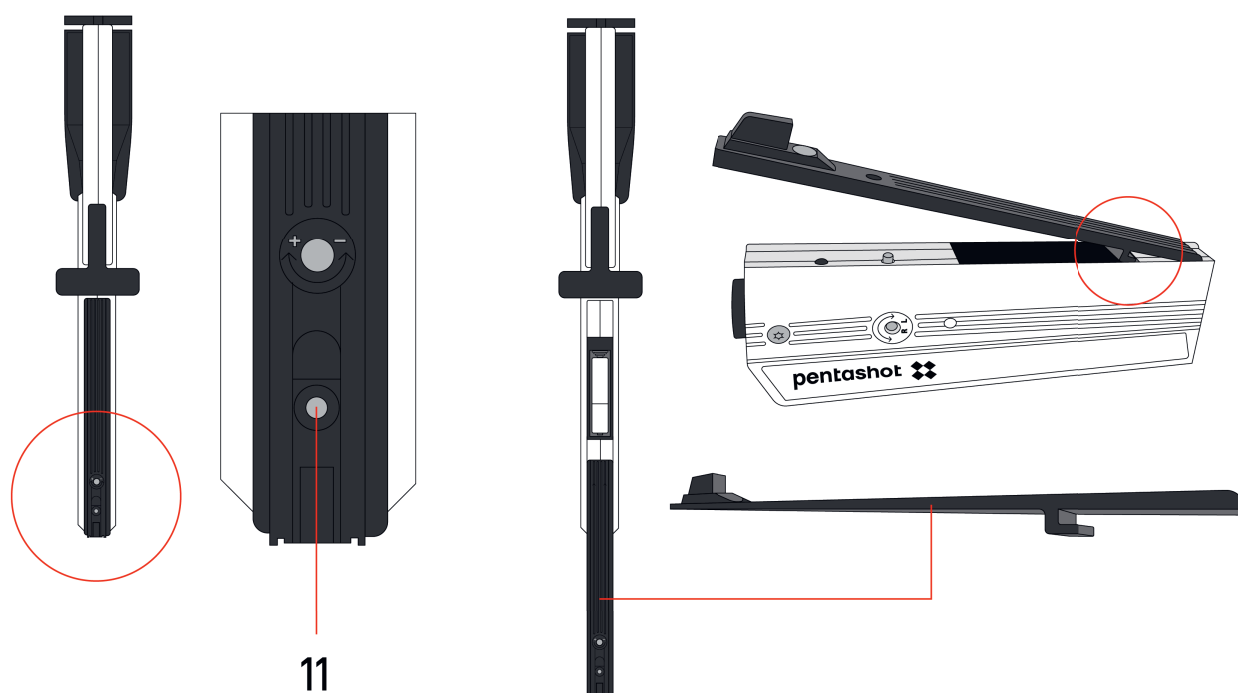
Use the included hex wrench to loosen the screw (12) in the grip boot. Then you can change the tilt of the boot. After adjusting the tilt of the boot, tighten the screw (12) again.



**REPLACING THE BATTERY**

If the LED signal light flashes once or constantly, replace the battery.

- Take out the screw (11) that also serves as the fastener for the battery cover (7) with integrated bead (1).
- Carefully remove the battery cover (7) completely.
- Remove the dead battery using the ribbon and insert a new battery (1.5 V type AAA).
- After replacing the battery, carefully put the battery cover back on and fasten it with the screw (11).





## UPDATE FUNCTION

Only the manufacturer has access to the laser simulator software.

## TECHNICAL DATA

Dimensions	355 mm x 150 mm x 50 mm
Simulator type	Single-acting, laser
Weight	670 g
Shooting distance	From 3 m to 10 m
Additional standard weight	NO
Option to buy additional weight	NO
External handle for weight	NO
Optical sight purchase option	YES
Laser class	I. (per EN 60825-1:2014)
Laser class certification	No. 1140735 (Electrotechnical Testing Institute, Czech Republic)
Laser module	FLPM20
Laser signal	Laser signal UIPM 15.6 s
Wavelength	650 nm
Diameter of laser beam	4 mm $\pm$ 5% / 10 m
Minimum laser power with low battery	2.5 mW
Minimum laser power with new battery	3.2 mW
Emitter power supply	1.5V AAA alkaline battery
Number of illuminations per one AAA battery	50,000 at 20°C
Operating temperature	From 10°C to 50°C
Update function	Software at manufacturer

## TROUBLESHOOTING

**The laser beam's trace is barely visible or not visible at all.**

Replace the battery.

**The detector (scanning device) does not react to a hit.**

Check the target's charging source or replace the battery.

**The laser beam's hit is detected anywhere but where the simulator is aimed.**

Adjust the laser dot.

Make sure the target is working correctly.

## WARRANTY

The warranty applies only to defects in materials and workmanship that can be shown to have appeared during the warranty period. Such defects can be repaired only by the manufacturer or an authorized service representative. The purchaser can make warranty claims to the manufacturer or authorized service representative, depending on the circumstances.

The warranty period begins on the day of purchase or delivery to the purchaser and remains valid for 24 months.

The following cases are expressly excluded from warranty repair:

- The product was not presented to the seller or manufacturer with proof of purchase.
- Wear as a result of product use or damage to the product (including damage caused by unqualified installation, incorrect start-up, failure to observe the procedures specified in the user manual, etc.).
- Damage to the product due to contamination, accidental or catastrophic events, or due to natural or outdoor events, such as storm, fire, water, excessive heat or cold, penetration by liquids, etc.
- Physical damage to the product (caused by falling breakage, etc.) or damage caused during transport.
- Damage, unauthorized design changes, incorrect modifications to the product or other interventions into the product made by unauthorized people or service centres.

## STORAGE

It is very important that the laser simulator be stored under the right conditions, so that it will stay reliable and in good condition. Always do the following:

- Before storing the simulator for an extended time, always remove the batteries. This prevents damage to the inside of the simulator if the batteries leak.
- Store the simulator in the original package (case) in a dry, dark location out of the reach of children.
- Do not place any heavy objects on the case, or objects that may leak fluids.
- Protect the simulator from weather, including frost and humidity. The optimal storage temperature is +5°C to 30°C. The air humidity at the storage location must not exceed 60%. Do not store the simulator in a damp environment where there is a high risk of corrosion.

## REPLACEMENT PARTS

The following replacement parts are available for the simulator:

- front sights
- grip
- weight
- trigger

You can order replacement parts by e-mailing to **business@pentashot.eu** or from PENTASHOT partners and sellers. You can find a list of them at **www.pentashot.eu**.



*Only the manufacturer or an authorized person is allowed to replace the main parts of the simulator (optics and electronics, including parts of the trigger mechanism).*

## DISPOSAL



After the laser simulator's useful life is over, it is not to be discarded with other household waste. Take it to a collection facility or have it disposed of by a specialized company authorized for the purpose.

Used batteries must not be thrown out with standard household waste. Take all used batteries to specialized collection locations.

# pentashot



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