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FLP EVO Laser Simulator

OPERATING INSTRUCTIONS



PREFACE

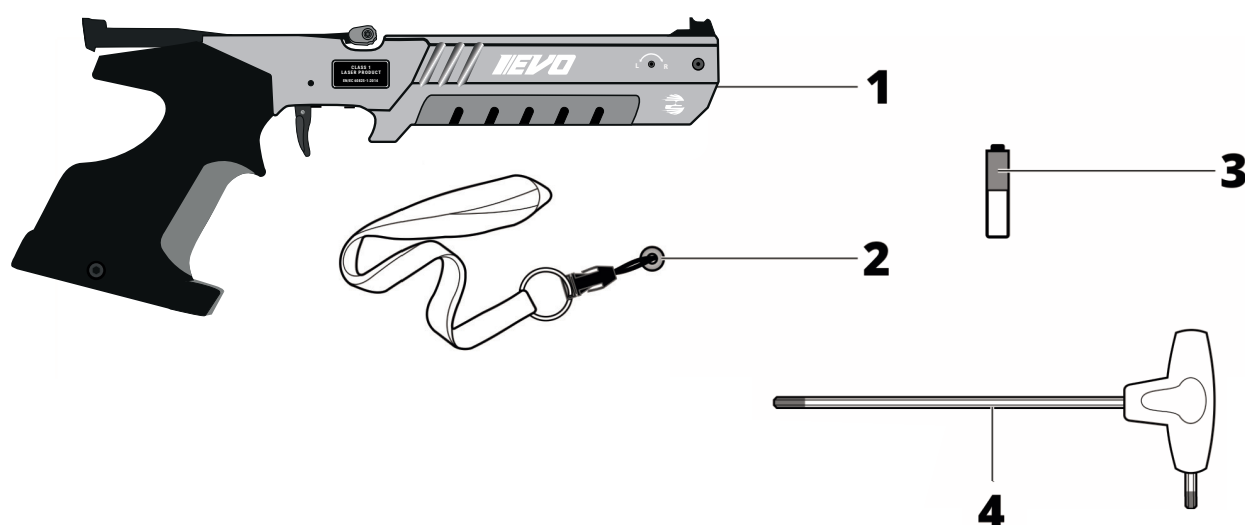
Before using the laser simulator, study the manual carefully. The manual must be considered an inseparable part of the product. For this reason, store it for future use.



The illustrations used in this manual may not correspond to the actual product. They are used solely to describe the main principles of the equipment and its settings. The texts, drawings, photographs and other elements are protected by copyright. Abusing them or copying them without authorization is subject to prosecution.

CONTENT OF SUPPLY AND UNPACKING

The laser simulator and its parts are supplied in an original case, containing the following:



- | | |
|---|-------------------|
| 1 | Laser simulator |
| 2 | Starting magnet |
| 3 | Battery AAA (1pc) |
| 4 | Hexagonal key |



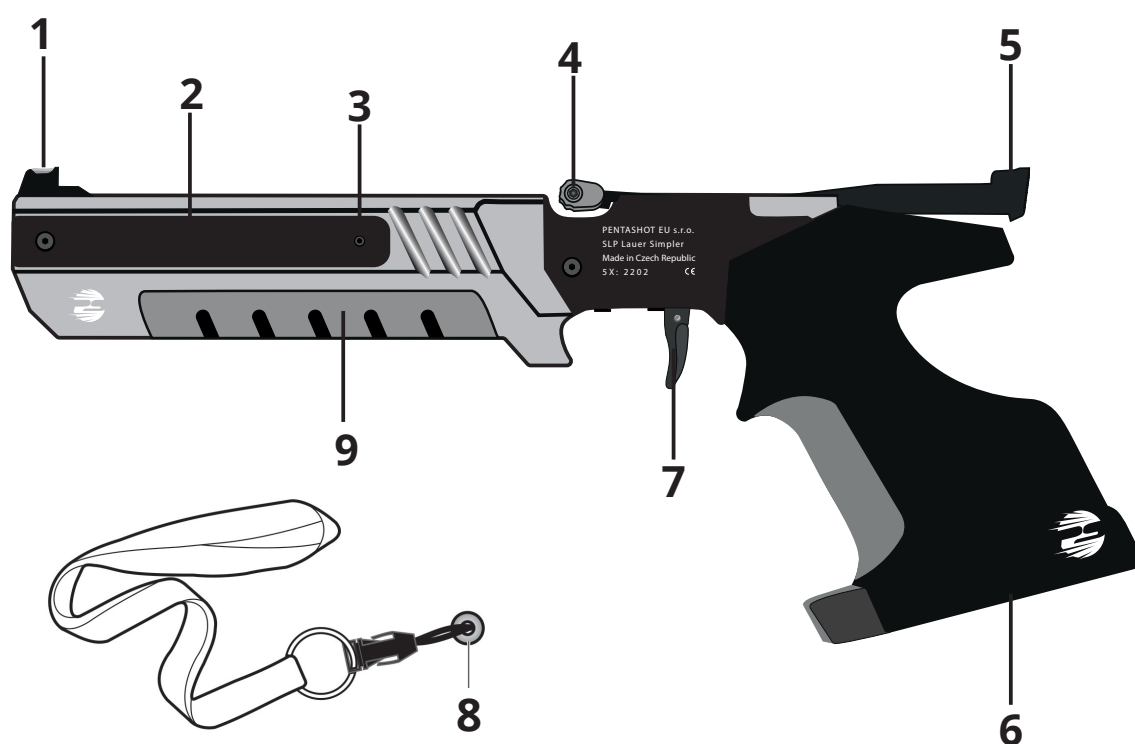
Upon delivery or purchase, immediately check whether the product is damaged and whether it is the type you ordered. If it is the wrong product or is damaged, contact your seller immediately. If the claim isn't filed on time, it cannot be honoured.

If the case has been packed, ensure proper disposal and recycling. Dispose of it according to the waste legislation applicable in the product user's country.

INTRODUCTION

The FLP EVO laser simulator is designed for use at instructional courses, trainings or modern pentathlon competitions. It is intended for laser beam shooting initiated by a trigger.

The FLP EVO laser simulator employs the FLP20 laser module with a 15.6 ms code as an emitter. The code is fully compatible with the International Modern Pentathlon Union (UIPM) standards.



1	Front sights
2	Battery cover/battery
3	LED diode
4	Loading lever
5	Rear sights
6	Anatomical grip
7	Trigger
8	Starting magnet
9	Weight area

TECHNICAL DATA

SIMULATOR

Simulator type	Single shot laser simulator
Dimensions	355 mm × 150 mm × 50 mm
Weight (with anatomical grip M size)	800 g (+- 5%)
Recommended shooting distance	up to 10 m

LASER

Laser module type	PENTASHOT FLP20
Laser class	I. (in accordance with EN 60825 - 1:2014 standard)
Wavelength	650 nm
Laser beam diameter	4 mm ±5% / 10 m
Laser coding	15,6 ms UIPM laser signal
Laser class certificate	No.: 1190743 (ELECTROTECHNICAL TESTING INSTITUTE, Prague, CZECH REPUBLIC)
Minimum laser peak value (empty battery)	2,5 mW
Maximum laser peak value (full battery)	3,2 mW

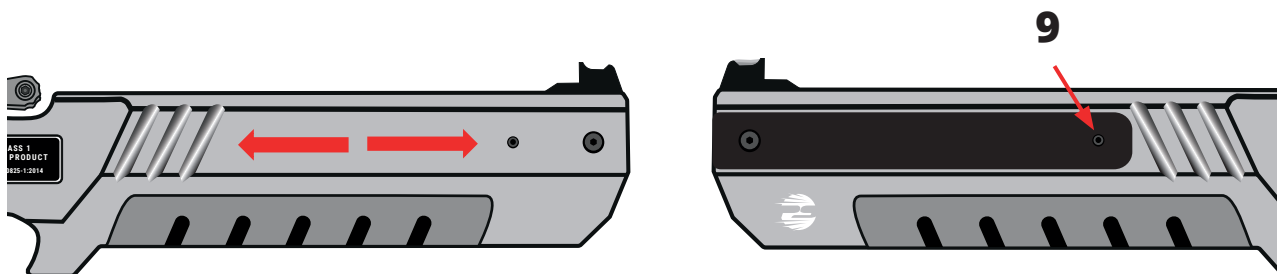
OPERATION

Operating conditions	+10° C to +50° C; IP 52
Emitter power supply	1,5V AAA Alkaline battery
Number of shots made with 1 pc AAA type min.	50 000 / at 20° C battery

SWITCHING ON/OFF

SWITCHING ON

Attach the chip (8) to the simulator body and move it from right to left. This will switch simulator ON and the LED (9) will flash. The number of flashes indicates the battery status:



- 5 flashes – the battery is 100% full
- 4 flashes – the battery is at 75% charge level
- 3 flashes – the battery is at 50% charge level
- 2 flashes – the battery is at 25% charge level
- 1 flash – the battery is discharged, replace it.

After the battery test, the LED light remains constantly blue to indicate the laser is on and ready for use.



The LED flashing continuously blue means the battery is discharged and it should be immediately replaced.

SWITCHING OFF

The laser container will switch off approximately 20 minutes after the last shot. In case you need to switch it off immediately, remove the battery from the simulator body.

SETTINGS

The user can only set or maintain the following:

- set the laser dot position (the laser dot)
- set the trigger position, weight and travel
- set the grip angle
- change the battery
- change the simulator stock

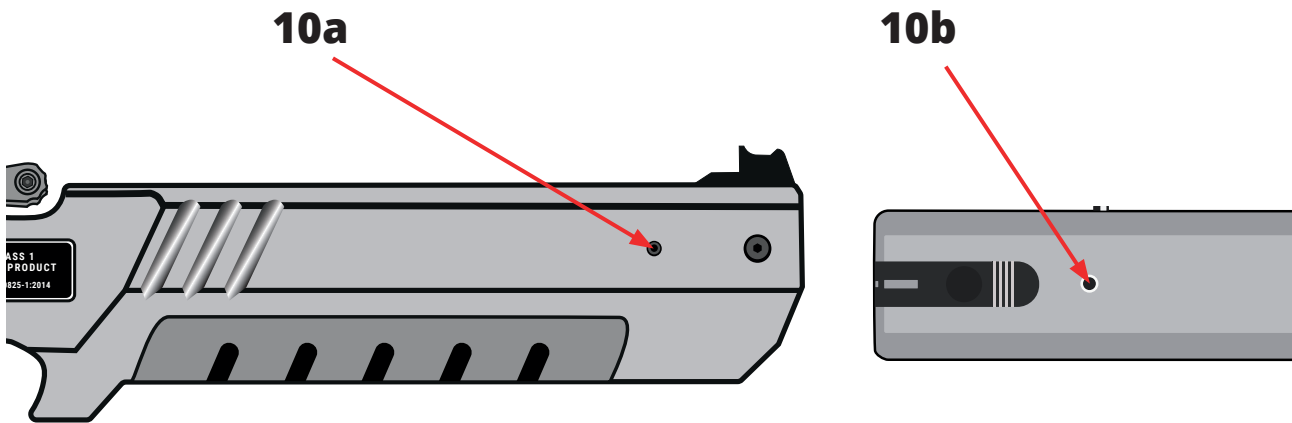


It is forbidden to open or modify the laser simulator, with the exception of changing the battery or grip. The Laser beam parameters can only be changed by the manufacturer or an authorized person. The simulator owner must confirm his consent to the change in writing. The manufacturer does not assume responsibility for any damage that would arise from the change.

SETTING THE LASER DOT POSITION

To adjust the simulator sights, aim at a white wall or a white object from a distance of 10 meters and check the alignment of the red laser dot and simulator sights. If necessary, use the adjusting screws to align the laser dot:

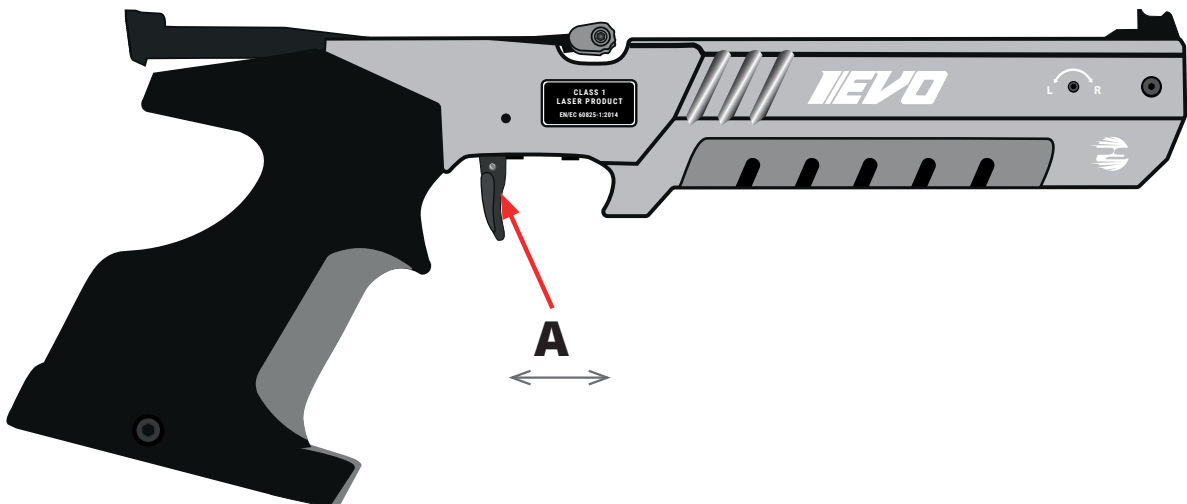
- Turning the screw (10a) **clockwise** – laser dot moves to the **right**
- Turning the screw (10a) **counterclockwise** – laser dot moves to the **left**
- Turning the screw (10b) **clockwise** – laser dot goes **upward**
- Turning the screw (10b) **counterclockwise** – laser dot goes **downward**



IMPORTANT: The movement of the adjusting screws must be very small.

SETTING THE TRIGGER POSITION

After loosening the screw (A) you can change the position of the trigger **forward** or **backward**.



SETTING THE SEAR ENGAGEMENT AND TRAVEL

Sear engagement setting

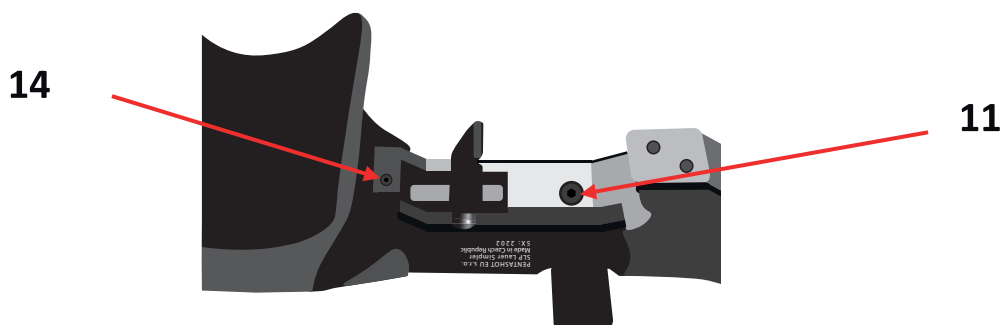
The sear engagement is already exactly adjusted by the manufacturer and it is not recommended to change it. In case you still need to change its setting, carry out the following:

- Turn the screw (11) counterclockwise by one turn.
- Load the simulator by means of the lever.
- Turn the screw (11) very slowly clockwise until simulator shoots by itself.
- Turn the screw (11) counterclockwise by one 1/4 turn.

By this, the sear engagement is set. Check the correct function by few shots.

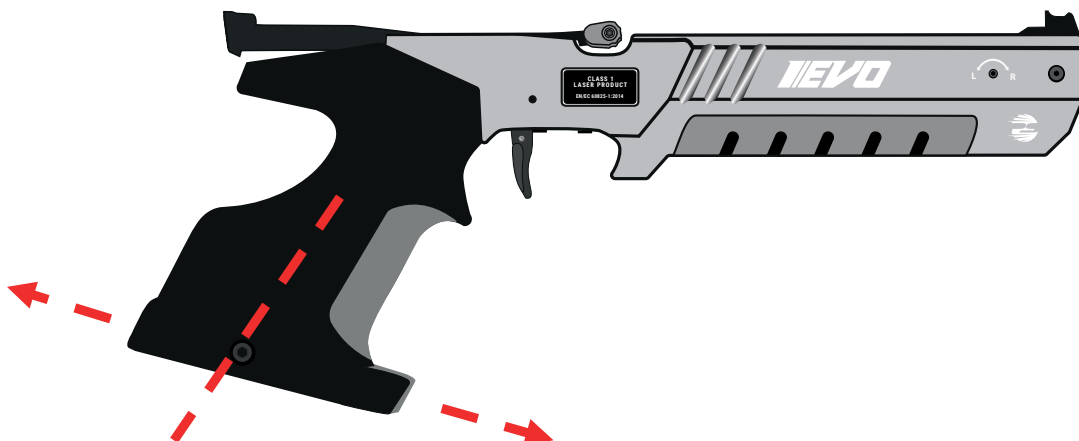
First stage travel

Turning the screw (14) clockwise reduce the first stage travel. Turning the screw counterclockwise (14) increases the first stage travel.



SETTING THE GRIP ANGLE

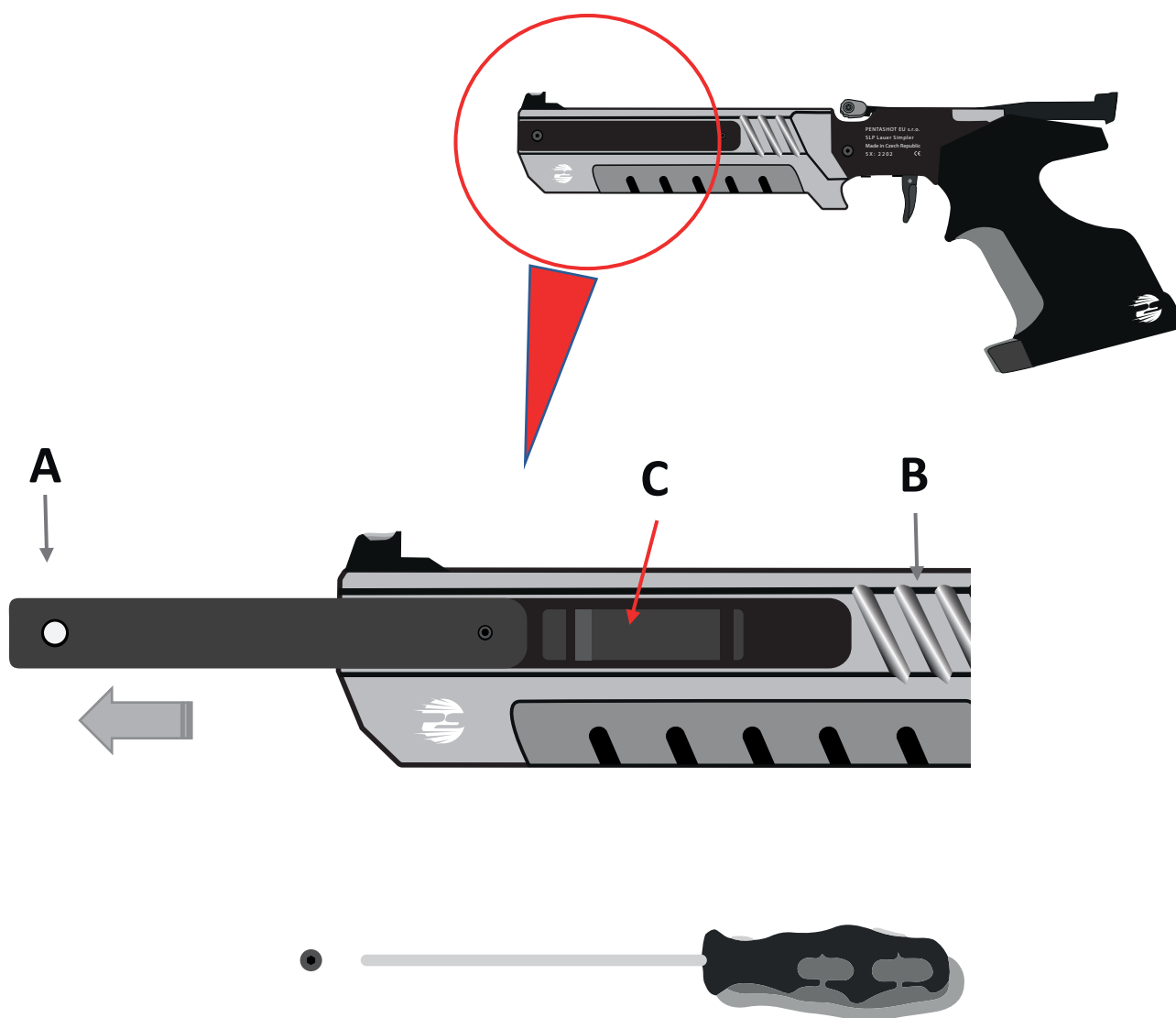
Use the supplied hexagonal key to loosen the small screw on the simulator grip bottom. Set a new position of the grip and fix it by tightening the small screw.



BATTERY REPLACEMENT

When the LED indicator flashes once or is constantly flashing, replace the battery.

- Remove the screw located on the front part of the battery cover and then slide it out.
- Remove the discharged battery using the ribbon (C) and insert a new one (AAA 1,5V). Pay attention to the correct polarity of battery!
- Reinstall the cover (A).

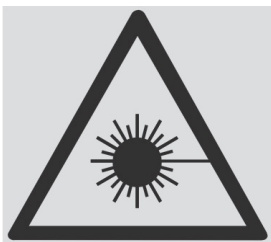


BEFORE USAGE

- The simulator must be used in accordance with these Instructions only. Never use the simulator for purposes other than those for which it is designed. Failure to follow these instructions may expose the user to dangerous laser radiation.
- Do not break the security stamp, otherwise you will lose the warranty on the product.
- Use alkaline AAA batteries only. However, never use rechargeable AAA batteries.
- When in public, carry the simulator in its original case or in a bag. Persons not familiar with this type of simulators may mistake it for a regular weapon and alarm the police.

DURING USAGE

- Never aim at people, animals or uncontrolled areas.
- While handling the simulator, observe the general rules for manipulation with a real weapon.
- Do not look into the laser beam directly or through any optical device.
- After use, store the simulator in its original case.
- Protect the simulator against direct sunlight and rain in accordance with the UIPM Rules.



LASER RADIATION
DO NOT LOOK DIRECTLY INTO THE LASER BEAM!
CLASS I. LASER DEVICE



WARNING!

Failure to follow the above stated instructions may expose the user to dangerous laser radiation.

AFTER USAGE

Keep the emitters clean by wiping the dust out of them with a dry cloth. Never use any cleaning agents, solvents or chemical preparations. Do not push the emissive hole optic with any object.

Regularly check the condition of the battery inside the simulator body to make sure it does not corrode or leak.

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

TROUBLESHOOTING

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

Replace the battery.

The detector (a scanning device) does not react to the shot.

Check the target's power supply or replace the battery.

The laser beam impact is evaluated anywhere else but not where the simulator aims.

Adjust the laser dot.
Check correct function of the target.

STORAGE

It is very important to store the laser simulator under the correct conditions to keep it in good, reliable condition. Always do the following:

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

SPARE PARTS

The following replacement parts are available for the simulator:

- front sights
- rear sights
- stock
- extra weight
- trigger

Order replacement parts by e-mail from **business@pentashot.eu** or from PENTASHOT partners and dealers.

A list of them can be found at **www.pentashot.eu**.



Only the manufacturer or an authorized individual has the right to replace the simulator's main parts (optics and electronics, including parts of the trigger mechanism).

A warranty repair shall apply exclusively to defects that have provably arisen during the effective warranty period, namely as a result of a material defect or a manufacturing defect. Defects arising in such a manner may be remedied only by the manufacturer or an authorized maintenance and service center. The buyer can make a claim under the warranty against the manufacturer or authorized dealer, as the case may be.

The warranty period shall become effective on the day of purchase or delivery of the Goods to the Buyer, and the warranty remains valid for 24 months.

In particular, the following cases are excluded from the warranty repair:

- The product has not been returned to the dealer/manufacturer with the proof of purchase.
- Wear and tear due to the use of the product or damage to the product (incl. damage caused by unskilled installation, improper commissioning, non-compliance with the procedures defined in the instructions for use, etc.).
- Damage to the product caused by contamination, an accidental or disaster event or occurring as a result of natural or external events such as a storm, fire, water, excessive heat or chill, ingress of a liquid, etc.
- Mechanical damage to the product (e.g. caused by fall, breaking, etc.) or damage arising during the transportation.
- Damage, unauthorized design modifications, improper modification of the product or any other interventions in the product conducted by unauthorized persons or maintenance and service centers.

DISPOSAL



Once the laser simulator ends its lifetime, do not dispose of it along with other household waste. Take it to a waste disposal site of raw materials or let it be disposed at a specialized company capable of recycling such a material.

The used battery must not be thrown into a standard dustbin. Collect all used the batteries and dispose them at specialized collection points.

NOTES

NOTES



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Address:	PENTASHOT EU s.r.o. Zámecká 2315/9 70200 Ostrava
E-mails:	jiri@pentashot.eu business@pentashot.eu info@pentashot.eu
Delivery address:	PENTASHOT EU s.r.o. Kosmova 1090/11 70200 Ostrava
Phone numbers:	+420 605 252 433 +420 773 002 110 +420 607 056 112