

## Full Laser Pistol ALP160 (MMLP&ALE160)

### User Manual

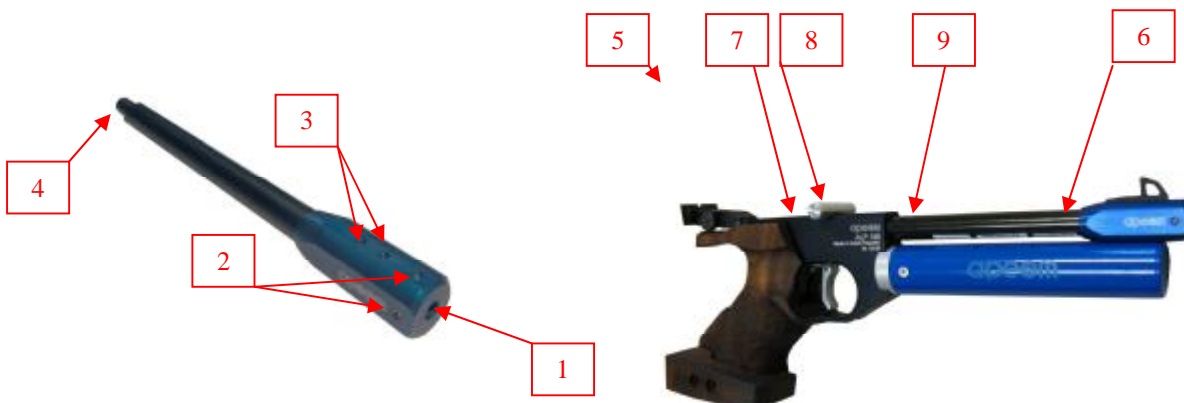
#### Safety Precautions

- Read this User Manual carefully before first use of the equipment.
- Use the equipment only as described in this manual.
- Do not use the equipment for other purposes than for which it is intended.
- Do not aim at people or animals or to an uncontrolled area.
- The emitter is an optoelectronic device; its disassembly is forbidden.
- Observe general rules for weapon handling while operating the weapon.
- Use the equipment only in dedicated areas bounded for shooting.
- Observe general rules for behaviour and handling a weapon on a shooting-range.
- After finishing shooting check if the weapon was not left cocked.
- Do not look into the emitting opening of the emitter.
- It is forbidden to remove from the body emitter laser diode and electronics.

#### Purpose

- Laser Emitter is designed for performing sport and training shooting at electronic targets.
- Laser Emitter is designed for imitation of a bullet by emitting an optical ray during the shot.
- Laser Emitter is designed for mounting to a body - frame of a gun.

#### Description



- 1) emitting aperture – opening
- 2) adjusting screw
- 3) openings for bolting of a foresight
- 4) work arbor

- 5) Laser pistol
- 6) Laser emitter
- 7) cocking lever
- 8) cocking lever handle

## Preparation for Operation



Unscrew the screws emitters / 9 / and you pull the emitter. Inside is space for two 1.5V AAA batteries / 10 /. The batteries insert into the emitter. Put the emitter on the work arbor and screw the screws / 9 /. When inserting the batteries, you must observe polarity.

## Rules of Operation

Moving the cocking lever up will charge the weapon. After pressing the trigger to release the striking mechanism that triggers sending a laser beam.

Into a container located under the emitter can insert weights for balancing weapons.

Never aim at persons, animals or to an uncontrolled area – it is necessary to observe general rules for weapon handling and general rules for behaviour on a shooting-range while using the equipment. Emitter has a protected class of IP52. When using the device, the user is obliged to observe the rules of UIPM, in particular the section 5.9.4 vi.

In case that Laser Emitter will not be used for a long time (more than 1 month), remove batteries. Always insert new batteries to the emitter. Only use alkaline batteries of the following types: 1.5V AAA.

## Batteries

Do not charge the batteries. This would pose a risk of leaking electrolyte or explosion.

Use the batteries only in intended electronic devices. In case of using an unsuitable battery, the equipment may be damaged or destroyed.

Keep the batteries out of humid environment; this would pose a risk of leaking electrolyte due to corrosion of the case. The electrolyte is a strong caustic that causes alkali burn in contact with skin.

Do not use damaged batteries.

Be careful when handling the button cells due to their small dimensions.

Keep the batteries out of children.

Observe correct polarity (+ -) of the batteries, do not short-circuit.

Do not throw batteries into fire, do not solder, do not disassemble.

Do not mix batteries of different type or age, the batteries discharge faster.

Store the batteries in a dry place under temperatures between 5 - 30 °C.

Take the batteries to a collection centre for hazardous waste or collection points.

## Maintenance

Keep the emitter clean by wiping dust with a dry cloth. Do not use any cleaning agents, solvents and chemicals. Do not push against the emitting opening optics with any objects. Store the emitter so that clogging of the emitting opening is prevented.

Treat the adapter by wiping with a cloth gently moistened with oil. Use water-repellent oil such as WD40.

After every shooting and before every shooting visually check intactness of the emitter and adapter, check batteries for corrosion. Remove the batteries if there are marks of corrosion on them. Let the emitter dry up before storing the emitter to a weapon case. Also let the emitter to dry up in case that you used it in humid or rainy conditions.

In case that Laser Emitter will not be used for a long time (more than 1 month), remove batteries.

## Potential Defects and Troubleshooting

The emitter does not send the laser ray while shooting.

Check whether the batteries are inserted, or replace the batteries, or check if the emitting opening is not clogged, or tighten the screws of the weapon frame that hold the adapter, or tighten the fixing screw.

The emitter cannot be switched to the adjusting mode.

Replace the batteries.

**CAUTION** – Using different checks, settings or operating procedures than the ones mentioned above may lead to dangerous radiation exposure.

## Environment Protection

Do not throw the batteries to a waste bin. Take the batteries to collection points.

## Specifications

<i>Name of parameter</i>	<i>Value</i>
- Laser type	semi-conductor
- Laser class	CLASS 1 LASER PRODUKT
- Wavelength ( $\lambda$ )	635nm - 650nm +/- 5%
- Diameter laser dot	4mm +/-0,5 mm at 10m distance
- Time between trigger release and the laser starts emitting the radiation	6ms
- Lens output aperture diameter (according to the manufacturer)	3mm
- Output (P)	$\leq 3,4\text{mW}$
- UIPM code	2015 – 15.6
- Emission duration	15.6ms
- Carrier frequency	40kHz
- Pulse ration	1:1
- Numbers and lengths of pulses	1 * 2.4 + 6 * 1.2 + 2 * 0.6ms
Laser Emitter ALE160	
- Operating temperature	+10°C to +42°C
- Number of shots per set batteries	min. 500 000 / at 20°C
- Weight – Emitter with batteries	0.186kg
- Dimensions	200x20x18mm
- Emitter power supply	3VDC (2x1.5V AAA)
Laser Pistol	
- Operating temperature	+10°C to +42°C
- Weight – with emitter	0,988kg
- Dimensions with emitter	400x140x50mm

## Special Provisions

The emitter is equipped with a warning-information plate, serial number plate and sealing stickers. Warranty for the equipment is void in case of damage to the plate or sealing stickers.

## Plate

The warning-information plate is located on the bottom side of the emitter body.

