



LAM 10M
LASER AIMING MODULE /
TARGET POINTER

IMPORTANT INFORMATION

Read prior to activation

You have just purchased a sophisticated electronic device. To operate it properly, please read this manual carefully. The unit belongs to Class IIIb laser products in accordance with IEC 60825-1. It is potentially hazardous for your vision. Here are some common precautions that must be observed.

Avoid any exposure of the eye to direct or closely reflected laser beam (less than 40 m). Naked skin exposure to laser beam is not recommended.

- **NEVER** subject the unit to excessive impacts
- **NEVER** transport the unit without the case
- **NEVER** disassemble the unit
- **NEVER** reverse polarity of the battery
- **ALWAYS** make sure that the device is fixed firmly on the weapon
- **ALWAYS** turn the device off when it is not in use
- **ALWAYS** remove battery when not in use for a long period
- **ALWAYS** store in a warm dry place when not in use
- **ALWAYS** clean output windows with soft cloth only
- **ALWAYS** check the O-ring when replacing the battery.

CONTENTS

1.	Brief description	2
2.	Device design	3
3.	DELIVERY SET	7
3.1.	Standard delivery set.....	7
3.2.	Optional parts.....	7
4.	Specifications.....	8
5.	OPERATION INSTRUCTIONS	9
5.1.	Installing the battery	9
5.2.	Mounting the UNIT on a weapon	9
5.3.	Connecting the remote control.....	10
5.4.	Adjusting the Unit on a weapon.....	10
5.5.	Operation order	12
6.	Care, storage and transportation	13
6.1.	General.....	13
6.2.	Long-term storage.....	14
6.3.	Transportation.....	15
7.	TROUBLESHOOTING	16
8.	WARRANTY	17
9.	CUSTOMER SUPPORT	19
10.	QUALITY CERTIFICATE.....	20

Carefully read all the instructions prior to use.

Failure to obey the instructions will void the warranty!

**INVISIBLE LASER RADIATION
CLASS I LASER PRODUCT 850–875 nm 0,1mW.
DON'T LOOK INTO THE BEAM!**

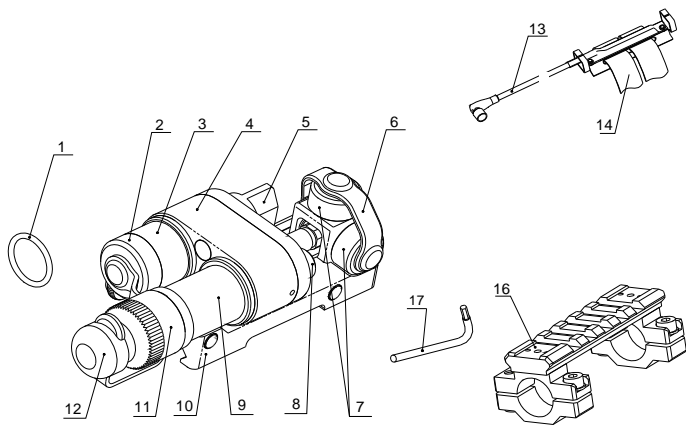
1. Brief description

LAM 10M laser aimer (the Unit) is designed for precise aiming at night time. The Unit forms an IR laser radiation spot on the target visible only through the night vision goggles. It can be attached to a weapon equipped with Picatinny rail MIL-STD-1913.

Laser beam, created by a semiconductor laser diode, is invisible by naked eye, while it is perfectly visible through night vision goggles, rifle sights or hand-held devices.

The Unit meets the Class 1 eye safety requirements. Nevertheless users are not advised to look into the laser beam as Newcon does not consider any laser device to be completely eye safe for direct viewing.

2. Device design



1 - O-ring; 2 – battery compartment cover; 3 - battery compartment; 4 - body; 5 - operating modes switch; 6 - fastener; 7 – windage and elevation adjustment knob covers; 8 - connector; 9 - emitter tube; 10 - bracket; 11 - cap; 12 – protective rubber cap; 13 - remote switch; 14 - Velcro tape; 16 – barrel mount (optional; design may vary); 17 – Allen key

Fig. 1 LAM 10M, front view

LAM 10M consists of an emitter (9, Fig.1), a battery compartment (3, Fig.1), windage and elevation adjustment mechanisms (under covers (7, Fig.1)), an operating modes switch (5, Fig.1), a remote switch (14, Fig.1), a bracket (10, Fig.1).

A battery is to be inserted into the battery compartment (3, Fig.1). Battery compartment cover is attached to the body with a rubber band. The battery compartment is sealed with rubber O-ring. A spare O-Ring is included in the delivery set. Emitter tube output window is closed with a cap 11 with an output aperture. When not in operation, the aperture is closed with a protective rubber cap (12, Fig.1).

UNIT is activated by means of the operating modes switch (5, Fig.1) and/or the remote switch (13, Fig.1).

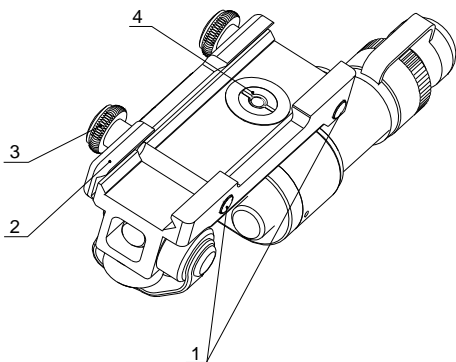
The switch (5, Fig.1) has the following positions:

	Mode	Radiation output power
OFF	Off	0
A	Continuous training mode	0,005 mW
B	Continuous live fire	0,1 mW
1	Remote activation training mode	0,005 mW
2	Remote activation; live fire	0,1 mW

The Unit automatically turns off after a certain period of time:

- in modes A and B — in 30 minutes after it has been activated,
- in modes 1 and 2 — in 10 minutes.

In order to activate the Unit after it has automatically turned off, turn it off and then on again.



1 — screws; 2 — clamp; 3 — nut; 4 — bush

Fig. 2 — LAM 10M, bottom view

The remote switch (13, Fig.1) can be attached to the Unit by a connector with a union nut. When not in operation the

connector (8, Fig. 1) is covered with a cap. The remote switch key is attached to weapon pivot or grip with Velcro tape (14, Fig.1).

The UNIT is mounted on the Picatinny rail. Mount (16, Fig.1) enables mounting the Unit on a weapon barrel.

Mount's fitting diameter is 15 mm. The mount is fixed on the barrel by Allen key (17, Fig.1).

3. DELIVERY SET

3.1. Standard delivery set

The UNIT is supplied in the following assembly:

	Quantity, pcs
LAM 10M	1
Remote switch	1
Velcro tape	2
O-Ring	1
Case	1
Allen key	1
Manual	1
Warranty card	1

3.2. Optional parts

The Unit can be supplied with a barrel mount.

4. Specifications

Laser wavelength	850 \pm 10 nm
Beam divergence	0.4 mrad
Spot size at 50 meters	25 mm
Windage and elevation adjustment range	\pm 20 mrad
Laser emitting power, min	0.1 mW
Illumination Distance	200 m
Voltage	3 V
Battery type	CR 123
Operating temperature range	-50°C ..+55°C
Storage conditions, temperature range relative humidity	-50°C .. +55°C up to 55% at 25°C
Storage temperature range	
Mount type	MIL-STD-1913 and proprietary barrel mount
Dimensions	113X45x32 mm
Weight	200 g

5. OPERATION INSTRUCTIONS

5.1. Installing the battery

The Unit is powered by a standard Lithium CR123 3V battery.

To install a battery:

- unscrew the battery compartment cover (2, Fig. 1),
- insert a battery observing the polarity as marked on the battery compartment,
- check the condition of the O-ring on the body; replace it if worn or torn,
- screw the battery compartment cover back on.

5.2. Mounting the UNIT on a weapon

The Unit is mounted on a Picatinny rail or, with the help of supplied barrel mount (16, Fig. 1), directly on the barrel.

Mounting on Picatinny rail:

- loosen nuts (3, Fig. 2),
- align the Unit on Picatinny rail,
- fasten the nuts (3, Fig. 2).

Mounting the UNIT on a weapon barrel:

- unscrew the four screws of the barrel mount (16, Fig. 1) using the Allen key (17, Fig. 1),
- attach the barrel mount to a barrel and tighten the screws; this will result in a new Picatinny rail attached to a barrel,
- mount the Unit on the rail as described above.

Note: The distance between the gas exit nozzles of the rifle and laser beam output window should be as long as possible so that the window would remain clean during shooting.

5.3. Connecting the remote control

To connect the remote control (13, Fig. 1):

- unscrew the connector cover and store it in a safe place,
- plug in the remote connector contact observing the key visible on the cable side,
- tighten the unit nut,
- attach the remote switch to the weapon pivot or grip with Velcro tape.

5.4. Adjusting the Unit on a weapon

Prior to adjusting the Unit, which has never been in

operation, carry out 10 shots to stabilize the Unit's adjustment mechanism.

To adjust the Unit:

- mount the Unit on the weapon,
- fix the weapon in the aiming rest and aim it with the help of an iron sight,
- take off the protective cap (12, Fig. 1),
- activate the Unit in A or B mode,
- unscrew the covers of the adjustment mechanisms,
- superpose the center of the radiation spot on the aiming mark by rotating adjustment knobs with a screwdriver,
- carry out test firing and eliminate deviation between the point of impact and the center of the radiation spot by rotating adjustment knobs. With each click of the adjustment mechanism radiation spot shifts by 5 cm at 100 m target. Rotating side (top) knob clockwise moves radiation spot left (up). Repeat until deviation is eliminated,
- put on the adjustment mechanisms covers and protective cap.

When adjusted Unit is remounted on the same Picatinny rail of the same weapon no re-adjustment is required.

Remounting of mount 16 on a weapon barrel requires the Unit re-adjustment.

5.5. Operation order

When firing at a distance of up to 200 m the laser beam spot is to be aimed on the target.

When firing on a longer distance elevation adjustment may be required.

6. Care, storage and transportation

6.1. General

The Unit is a sophisticated precise optical instrument equipped with electronics. Therefore, it should be handled with due care.

- Never disassemble the Unit.
- Keep away from direct sunlight, impacts, dust, moisture, and sharp changes of temperature.
- Do not keep the Unit at temperatures higher than 70°C (158°F). Keep away from heating appliances and central heating.
- Do not touch the optical surfaces with fingers. Doing so may damage the anti-reflection coating.
- Avoid shocks and sharp jolts.
- Clean optical surfaces only with professional camera lens cleaning supplies.
- Use soft clean cloth to wipe the exterior of the Unit.
- Remove battery when storing for long period of time.
- All repairs must be performed by an authorized service.

If the Unit was exposed to salt water it should be rinsed in fresh water and dried on air at no more than 55°C.

6.2. Long-term storage

When preparing for long-term storage, cover the external metal surfaces of the Unit with protective lubricant. Each 4 (four) years old layer of lubricant should be removed and new layer applied.

To remove old layer of lubricant:

- Swipe the Unit with clean dry cloth,
- Degrease the metal surfaces of the Unit with cloth moistened in benzene,
- Dry the Unit in the open air.

Do not touch Unit's metal surfaces with fingers after cleaning.

To apply new layer of lubricant:

- Within two hours from cleaning apply an even 0.2-0.5 mm thick layer of lubricant on metal surfaces with a brush.
- Do not cover plastic parts.

When preparing for a long-term storage the Unit just received from manufacturer or from workshop, ensure that actual set is the same as indicated in the Delivery Set section of this manual.

Cases with Units should be placed on stands, shelves or in cupboards at dry heated and ventilated premises in accordance with Storage conditions as described in

Specifications.

Units can be stored in transportation cases at temperatures up to 70°C for no more than 16 hours.

It is unacceptable to keep Units on the floor, near stoves or windows that let through direct sunrays.

Presence of acid and alkaline vapor, as well as of other aggressive admixtures in the air in the storage area may cause damage to the Unit.

After 4 years of storage, it is necessary to perform thorough inspection of Units' functionality.

6.3. Transportation

To prepare the Unit for transportation:

- Turn the Unit off by turning operating modes switch.
- Cover aimer with protective cap.
- Disconnect the remote switch from the weapon.
- Dismount the Unit from Picatinny rail.
- Pack the Unit and remote switch into the case.

When packed, the units can be transported by any covered means in accordance with Storage conditions as described in Specifications.

When in operation, the Unit is to be transported in its case or mounted on a weapon.

7. TROUBLESHOOTING

Spot shape or size has changed

Emitter objective lens is dirty. Flush emitter lens with fresh water and wipe it with soft cloth.

No radiation when activating the Unit with remote switch

Turn the mode switch (12) to OFF position and then turn the Unit ON again. If this doesn't help, replace the remote switch.

Radiation doesn't stop when remote switch is released

Replace the remote switch.

Moisture in the battery compartment.

Check the O-ring on the battery compartment cover and replace it if necessary.

Shift of zero line when firing

Tighten nuts on the Picatinny rail.

8. WARRANTY

NEWCON OPTIK warrants this product against defects in material and workmanship for one year from the date of the original date of consumer's purchase, but no more than 18 months from the date of manufacturing. Should your Newcon product prove defective during this period, please bring the product securely packaged in its original container or an equivalent, along with proof of the date of original purchase, to your Newcon Dealer. Newcon will repair (or at its option replace), the product or part thereof, which, on inspection by Newcon, is found to be defective in materials or workmanship.

What This Warranty Does Not Cover:

NEWCON is not responsible for warranty service should the product fail to be properly maintained or fail to function properly as a result of misuse, abuse, improper installation, neglect, damage caused by disasters such as fire, flood, lightning, improper electrical current, or service other than by a **NEWCON** Authorized Service. Postage, insurance, or shipping costs incurred in presenting your **NEWCON** product for

warranty service are your responsibility. Please include a check or money order made out to NEWCON OPTIK for the amount of \$15.00 to cover shipping and handling. This covers products shipped in USA or Canada only.

9. CUSTOMER SUPPORT

Should you experience any difficulties with your NEWCON OPTIK product, consult the enclosed manual. If the problem remains unresolved, contact our customer support department at (416) 663-6963 or toll free at 1-877-368-6666. Our operating hours are 9am-5pm, Monday - Friday, Eastern Standard Time.

At no time should equipment be sent back to Newcon without following the instructions of our technical support department.

NEWCON OPTIK accepts no responsibility for unauthorized returns.

To locate NEWCON Authorized Dealer call:

Tel: (416) 663-6963 Fax: (416) 663-9065

Email: newconsales@newcon-optik.com

Web: www.newcon-optik.com

Defective products should be shipped to:

From USA only:

2331 Superior Ave. Cleveland, OH 44114

From all other countries:

105 Sparks Ave., Toronto, ON
M2H 2S5, CANADA

10. QUALITY CERTIFICATE

Unit serial number: _____

complies with all technical specifications and has passed the inspection.

Date of production: _____

Quality Inspector: _____

Quality Assurance Seal

NEWCON OPTIK™ 2008

Printed in Canada