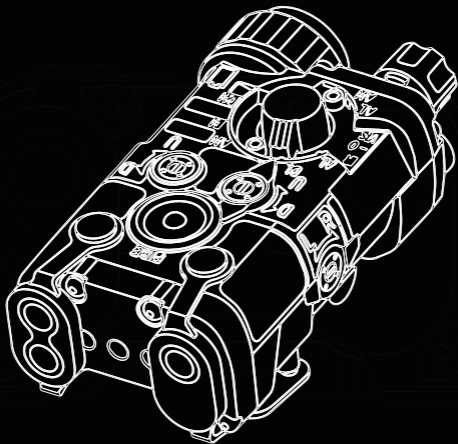




VISIBLE AND INVISIBLE LASER RADIATION
AVOID EXPOSURE TO BEAM
CLASS 3B LASER PRODUCT



FMA[®]

FMA LAB NGAL LA-23/PEQ LEGENDARY VERSION

NEXT GENERATION AIMING LASER

FMA 2023 / FMA.HK / TB1444

PRODUCT DESCRIPTION

LAB is the name given by FMA to their high-end products, and so far only LA5-C has used this name. This new generation NGAL is the second product to be named LAB, which represents the effort and dedication FMA has put into this product

NGAL is a rugged, compact, and lightweight product designed to be compatible with various generations of night vision devices. NGAL utilizes advanced structural design to achieve a more uniform laser beam, thereby enhancing situational awareness. The internal electronic components have been improved in terms of size, weight, and power consumption while maintaining high performance. Currently, this product has been selected as the standard weapon accessory by USSOCOM (United States Special Operations Command) WPNAC. It replaces the previous generation AN/PEQ-15 LA-5C ATPIAL and is named LA-23/PEQ.

The FMA LAB NGAL LA-23/PEQ LEGENDARY VERSION, launched by FMA, is a product that leverages FMA's years of experience in laser aiming devices, with optimized structure and materials. It aims to achieve almost a one-to-one functional effect within an acceptable price range for users. Firstly, the invisible laser illumination power has reached 77mW, and it can provide up to 2 hours of battery life when fully charged. This is a great challenge for the engineering department, as it also needs to meet waterproof and shockproof requirements within such a small size. In our multiple testing processes, the new generation NGAL has undergone rain, high and low temperature impact, and shock resistance tests. Each test is carried out with the dedication of FMA colleagues, aiming to meet the needs and expectations of users.

FMA LAB NGAL LA-23/PEQ is designed and manufactured to meet the requirements of real-life usage environments. It can satisfy users' needs in various usage environments and scenarios. With an IPX4 waterproof rating, it can be reliably used in light rain and heavy fog conditions. It can operate normally in temperatures as low as -20°C (battery not guaranteed) and in high-temperature environments up to 50°C. It has undergone multiple tests for shock resistance, vibration resistance, and real-life usage, proving its durability and reliability.

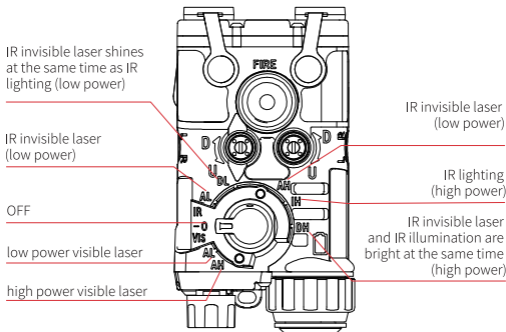
The second-generation remote control switch, which comes with accessories, has made adjustments to the color and number of switches. It also added a bottom magic tape. The switch has changed from one to two, with the additional switch being a visible high-power laser when pressed in any mode. The purpose of this operation is to reduce steps and allow for easy mode changes at any time. Additionally, the color of the switch has changed from the original DE color to KH color, in order to match different camouflage or allow users to spray their own colors. The added bottom magic tape enhances the convenience of use for users. The connector has also been changed from the original push-type to a three-segment gold-plated contact, and a waterproof rubber ring has been added to the interface, further improving the overall waterproof performance.

SAFETY WARNING



- Using incorrect batteries creates a risk of fire or explosion. As a note, make sure the battery does have similar physical characteristics to a CR123A battery, but has a different voltage and/or polarity path. Make sure that only 3V lithium batteries with raised positive (+) terminals or rechargeable batteries of the same type are installed in the NGAL.
- There is a risk of fire or explosion when using non-branded batteries. Ensure that only 3V disposable batteries or 3V and 3.7V rechargeable batteries are installed in the NGAL from reputable battery manufacturers. These batteries are specifically designed for use in high-performance, high-drainage equipment and contain built-in fault and thermal protection. Protective function.
- If you use rechargeable batteries, make sure to use genuine 3V and 3.7V batteries produced by well-known battery manufacturers. Do not use off-brand or counterfeit batteries. Due to its unstable voltage, it may cause equipment damage or even risk of fire.
- The Next Generation Laser Aiming System (NGAL) emits both visible and invisible laser radiation. Please operate safely and do not irradiate skin and eyes for a long time. Contact with NGAL's laser beam within a short distance will cause irreversible damage to human eyes.
- Don't stare into the laser beam
- Do not view laser beams through binoculars or telescopes
- Do not point the laser beam at mirror-like surfaces
- Do not shine the laser beam into other people's eyes

INTRODUCTION TO GEAR FUNCTION



Gear	Function	Power
AH(VIS)	High power visible laser	12mW
AL (VIS)	Low power visible laser	3.2mW
O	Off	
AL	IR invisible laser (low power)	0.5mW
DL	IR invisible laser shines at the same time as IR lighting (low power)	0.5mW+5.3mW
AH	IR invisible laser (high power)	18mW
IH	IR lighting (high power)	77mW
DH	IR invisible laser and IR illumination are bright at the same time (high power)	77mW+18mW

Note: It will enter sleep state 1 minute after shutting down and consume 0 power.

PARAMETER INFORMATION

Volume	90mm*50mm*30mm
Weight	137g(Batteries not included)
Use battery	(1 Section) 3V CR123A
Battery life	>2.5hrs (Room temperature 26°C)
Waterproof ability	IPX4
Visible laser	Test environment room temperature 26°C
Output power (low)	3.2mW
Output power (high)	12mW
Laser divergence	0.5 (+/- 0.3) mRad
Laser wavelength	635nm (+15/-15)
Invisible laser beam	Test environment room temperature 26°C
Low power	0.5mW
High power	18mW
Laser divergence	0.5 (+/- 0.3) mRad
Laser wavelength	835 (± 15) nm
Invisible laser lighting	Test environment room temperature 26°C
Low power	0.5mW
High power	77mW
Laser divergence	100mRad
Laser wavelength	835 (± 15) nm

KEY DESCRIPTION

Illuminator
Divergence knob

Remote Jack

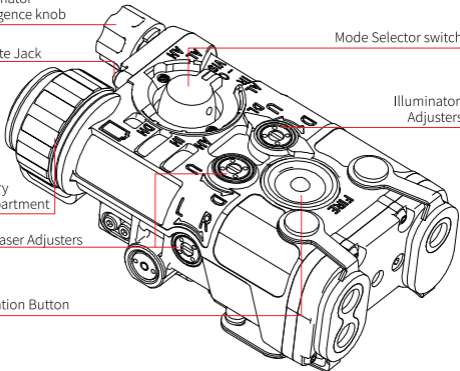
Mode Selector switch

Illuminator
Adjusters

Battery
Compartment

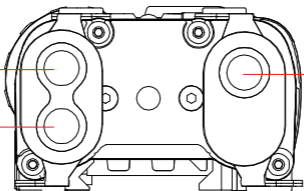
Aim Laser Adjusters

Activation Button

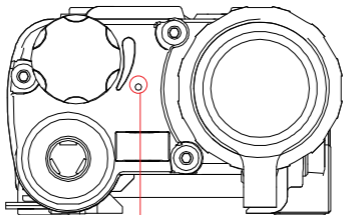


Co-Aligned
VIS & IR
Aiming
Lasers

Variable
Divergence IR
Illuminator



STATUS INDICATOR LIGHT DESCRIPTION



Tri-Color LED

■ MODE DESCRIPTION

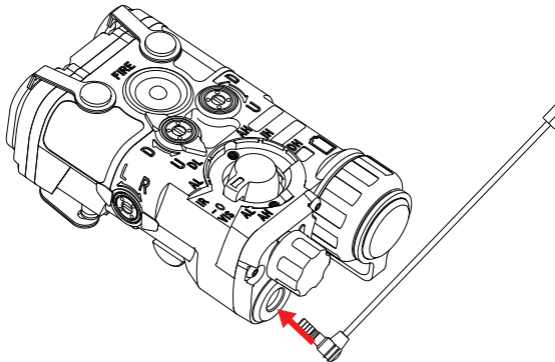
Function	Indicate status	State
Click switch	Green light on	Push switch
Double click switch	Green light always on	Always on
Low power	Red light always on	Need to replace battery

REMOTE CONTROL INSTALLATION

CAUTION

When the Remote Cable Switch is plugged into the remote jack, it automatically locks in place. TO remove it, pull back on the cable sleeve. Do not remove the Remote Cable Switch by pulling on the cable itself.

The NGAL comes with a jack plug installed in the remote jack that must be removed and stored, before installing the Remote Cable Switch.



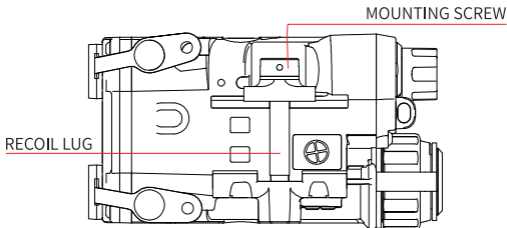
Install remote control switch method

INSTALLATION METHOD

MOUNTING PROCEDURES

Rail Grabber Bracket

The NGAL is equipped with an integral rail grabber bracket that is designed for direct attachment to weapons with a MIL-STD-1913 rail



RAIL FIXING BRACKET INSTALLATION

NGAL can be mounted on the top or side rails of the host machine

Installation Notes

WARNING

Failure to properly secure the NGAL to the rail may lead to boresight repeatability and zeroing issues. In extreme cases, the NGAL could fall off the rail, thereby exposing the operator or other personnel to the NGAL laser(s).



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