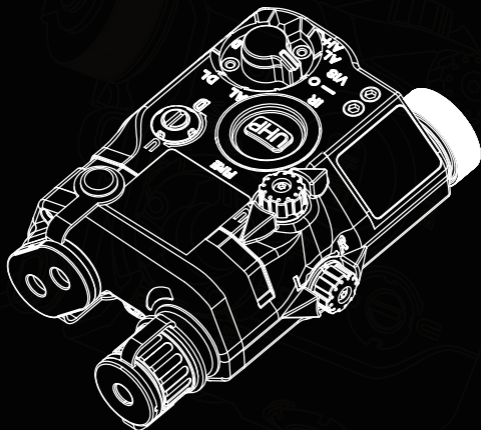




VISIBLE AND INVISIBLE LASER RADIATION  
AVOID EXPOSURE TO BEAM  
CLASS 3B LASER PRODUCT



**FMA**<sup>®</sup>

LAB-PEQ-LA5-C ATPIAL MANUAL

**LAB-PEQ-LA5-C**

**先进激光指示器说明书**

FMA 2023 [www.fma.hk](http://www.fma.hk) / TB1311

## PRODUCT DESCRIPTION



LA5-C is an ultra high power variant of the standard AN/PEQ-15 Advanced Target Pointer/Illuminator/Aiming Light (ATPIAL). It is a compact and independent laser aiming system with three functions: visible laser aiming, IR invisible laser aiming, and IR invisible illuminator. The proven LA5-C is a weapon installation system that can be easily connected to any M1913 Picatini rail through a standard rail buckle seat. The co aligned infrared and visible light aiming laser is easy to adjust; The LA5-C adopts the same basic size as the AN/PEQ-15 and is currently one of the most versatile, lightweight, and compact aiming lasers.

The excellence of this device lies in providing you with everything you want in a compact volume. Its design installs the equipment in a lower position on the guide rail and wraps it around the Picatini guide rail to achieve anti hanging and low height characteristics. This is achieved by using a recessed guide rail holder mounting base. The embedded switch is located at the top of the casing, making it easy to operate with gloves on site. The body shell is made of high-density/impact resistant polymer, which is very sturdy. This material reduces the weight of the device, which is evident when carrying weapons for extended periods of time. The LA5-C also features a rear facing battery compartment that allows users to remove the battery without removing the device. The battery cover is spring loaded, allowing the device to absorb more recoil from automatic weapons. There is a molded loop on the back. The wind deviation and elevation angle of the illuminator are controlled by an easy to operate knob, which can be quickly adjusted on-site without the need for tools. The adjustment of aiming laser needs to be completed through a small flat head screwdriver. This allows users to zero the illuminator for multiple different ranges on site. LA5-C is an ultra-high power aiming laser system that allows operators to easily indicate the farthest distance on the battlefield. Its laser output is powerful enough to easily communicate with other ground teams operating in the air and combat areas. For this reason, a 50 mW IR invisible laser can be focused into a narrow beam. High power visible aiming laser enables its use in direct sunlight. Despite the high infrared aiming laser power of LA5-C, the device can still be easily used at close range. It has a CQB mode that allows the operator to immediately reduce power to prevent the laser from becoming too bright on the target at a CQB distance.

## SAFETY WARNING

Using incorrect batteries can pose a risk of fire or explosion. Please note that the battery does have similar physical characteristics to the CR123A battery, but its voltage and/or polarity path is different. Ensure that only 3V lithium batteries with elevated positive (+) terminals or rechargeable batteries of the same type are installed in LA5-C.

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 produced by well-known battery manufacturers are installed in LA5-C. These batteries are specifically designed for high-performance, high drainage equipment and include built-in fault and thermal protection functions.

If using rechargeable batteries, please ensure to use genuine 3V and 3.7V batteries produced by well-known battery manufacturers. Do not use counterfeit or counterfeit batteries. Due to its unstable voltage, there is a risk of equipment damage and even fire.

The LA5-C Advanced Laser Aiming Target Indicator (ATPIAL) emits both visible and invisible laser radiation. Please operate safely and avoid prolonged exposure to the skin and eyes. Contact with ATPIAL's laser beam at a short distance can cause irreversible damage to the human eye

Don't stare at the laser beam

**Do not observe the laser beam through binoculars or telescope**

Do not point the laser beam towards a mirror like surface

Do not shine the laser beam onto the eyes of others

## PARAMETER INFORMATION

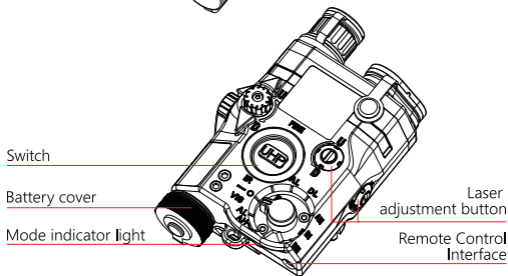
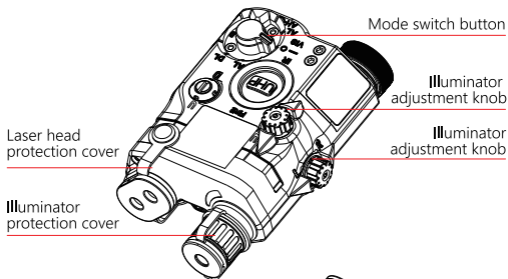
Size	116mm L x 71mm W x 40.6mm H	
Weight	213 grams with battery	
Battery type	(1 section) 3 volt CR123A lithium battery	Compatible with 3 and 3.7 volt rechargeable batteries
Battery life	>3 hrs. (Test environment 26 ° C)	Theoretical

Visible laser	Test environment room temperature 26 degrees	
Output power (low range)	2.57mW	
Output power (high-end)	9.0mW	
Beam divergence	0.5 (± 0.3/- 0.39) mrad	
Wavelength	635 (± 15) nm	

IR invisible laser aiming	Test environment room temperature 26 degrees	
Output power (low range)	0.64mW	
Output power (high-end)	32.4mW	
Beam divergence	0.5 (± 0.3/- 0.39) mrad	
Wavelength	835 (± 15) nm	

IR invisible illuminator	Test environment room temperature 26 degrees	
Output power (low range)	2.25mW	
Output power (high-end)	50mW	
Beam divergence	Adjustable from approximately 1mrad >105 mrad	
Wavelength	835 (± 15) nm	

# FEATURES AND CONTROLS



## INSTALLING REMOTE CONTROL

Laser adjustment button

Lighting adjustment knob

Invisible laser emission

Visible laser emission



Invisible laser illumination

Rail fixing button



## RAIL FIXING BUTTON

Pay attention to the orientation of the battery, and tighten the batterycover after correctly placing the battery





Cover with protective cover to reduce scattering. The protective cover can be replaced with an icon generator.



Remove protective cover



### ▲ Icon Generator

ATPIAL provides five different icon generators for commands and aiming. When installed on the aiming laser, they project a specific holographic pattern at the aiming point of the laser. If visible laser is used, the shape is visible to the naked eye, and if invisible laser is used, night vision equipment is visible. The pattern generator can only be used once and cannot be used with a protective cover. Please refer to the above figure for the pattern

## USAGE OF IR INVISIBLE ILLUMINATOR



## DESCRIPTION OF STATUS INDICATOR LIGHT



Function	Indication status	State
Green	Light	Always on after opening
Red	Light	Function not turned on or low battery
Orange	Three orange flashes	Switch Mode



## INSTALLATION METHOD

To prevent accidental contact or opening of high-power mode during transportation or training, the safety locking screw can lock some high-power functions and install them using an Allen screw when needed. On the left hole position

Safety locking screw

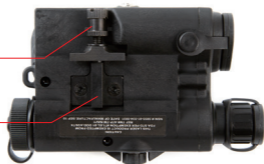
Safe locking screw hole position



## RAIL INSTALLATION METHOD:

Rail fixing button

Limited rod



ATPIAL IS EQUIPPED WITH AN INTEGRAL RAIL MOUNTING BRACKET DESIGNED SPECIFICALLY FOR DIRECT CONNECTION TO MIL-STD-1913 TYPE RAILS.

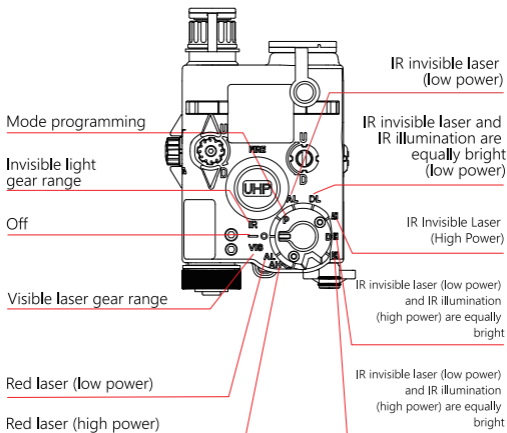
## RAIL INSTALLATION METHOD:

TPIAL can be installed on the top or side of the weapon rail.

## 300 SECOND AUTOMATIC PROTECTION DEVICE:

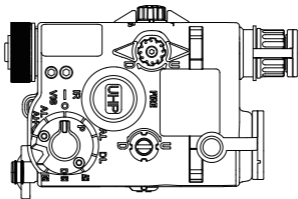
When the laser indicator is not operated for a long time, 300 seconds will trigger the automatic protection device to protect the circuit.

# INTRODUCTION TO GEAR FUNCTION



POSITION	FUNCTION	POWER
AH	Red laser (high power)	9.0mW
AL	Red laser (low power)	2.57mW
O	Off	
p	Mode programming	See programming table for details
AL	IR invisible laser (low power)	0.64mW
DL	IR invisible laser and IR illumination are equally bright (low power)	IR laser 0.64mW IR illumination 2.25mW
AH	IR Invisible Laser (High Power)	32.4mW
IH	IR invisible laser (low power) and IR illumination (high power) are equally bright	IR laser 1.71mW IR illumination 61mW
DH	IR invisible laser (low power) and IR illumination (high power) are equally bright	IR laser 32.4mW IR illumination 56mW

## PROGRAMMING TABLE



Switch LA5-C to P position, hold down the on/off key, rotate to DL position, IR illumination level 1 flashes (once per second)

LA5-C switches to P position, press and hold the on/off key, rotate to AH position, IR illumination level 2 flashes (2 times per second)

LA5-C switches to P position, press and hold the on/off key, rotate to IH position, IR illumination level 3 flashes (3 times per second)

Switch LA5-C to P position, press and hold the on/off key, rotate to DH position, IR illumination level 4 flashes (4 times per second)

Switch LA5-C to P position, press and hold the on/off key, rotate to AL position, and the IR lighting will return to normal light

## OPERATING INSTRUCTIONS:

Before each programming, it is necessary to shift the gear to P and then press the key once. To open programming mode. After each shift to the corresponding programming gear, the tail status indicator light flashes three times in orange to indicate successful programming.



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