

ZERO A MINI INTEGRATED POINTER ILLUMINATOR
MODULE (MIPIM) TO A SERVICE RIFLE/INFANTRY
AUTOMATIC RIFLE

OVERVIEW

- Design of the laser aiming device
- Mounting the laser aiming device
- Zeroing the laser aiming device
- Weapons presentation

TERMINAL LEARNING OBJECTIVE

- (1) Given a service rifle/Infantry Automatic Rifle (IAR), sling, Mini-Integrated Pointer Illuminator Module (MIPIM), night vision device, individual field equipment, magazines, ammunition, a target, and a dark environment, zero a Mini Integrated Pointer Illuminator Module (MIPIM) to a service rifle/Infantry Automatic Rifle to achieve point of impact on point of aim at a specific range (0300-M16-1010)

ENABLING LEARNING OBJECTIVE

- (1) Given a service rifle, common combat sling, mini integrated pointer illuminator module, night vision device, individual field equipment, magazines, ammunition, a target, and a dark environment mount the MIPIM to the service rifle in order to achieve point of impact on point of aim at a specific range (0300-M16-1010a)

ENABLING LEARNING OBJECTIVE

- (2) Given a service rifle, common combat sling, mini integrated pointer illuminator module, night vision device, individual field equipment, magazines, ammunition, a target, and a dark environment, set the MIPIM laser adjusters to the zero preset position in order to achieve point of impact on point of aim at a specific range (0300-M16-1010b)

ENABLING LEARNING OBJECTIVE

- (3) Given a service rifle, common combat sling, mini integrated pointer illuminator module, night vision device, individual field equipment, magazines, ammunition, a target, and a dark environment, activate the MIPIM and direct the aiming laser on a target in order to achieve point of impact on point of aim at a specific range (0300-M16-1010c)

ENABLING LEARNING OBJECTIVE

- (4) Given a service rifle, common combat sling, mini integrated pointer illuminator module, night vision device, individual field equipment, magazines, ammunition, a target, and a dark environment, make zeroing adjustments off 5-round shot groups in order to achieve point of impact on point of aim at a specific range (0300-M16-1010d)

- Method/Media
- Evaluation
- Safety/Cease Training
- Administrative Notes

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graph TD; A[?] --- B[What I will Be Teaching???]; A --- C[How I will Be Teaching???]; A --- D[How You will Be Evaluated???];
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What I will
Be
Teaching???

How I will
Be
Teaching???

How You will
Be
Evaluated???

DESIGN OF THE LASER AIMING DEVICE

- The AN/PEQ-16 is a multifunction laser device that:
 - Emits visible or infrared light
 - Provides for target acquisition in low-light and close quarters combat situations
 - Provides for active, covert target acquisition
 - Can be handheld or weapon mounted
 - Also equipped with a white light

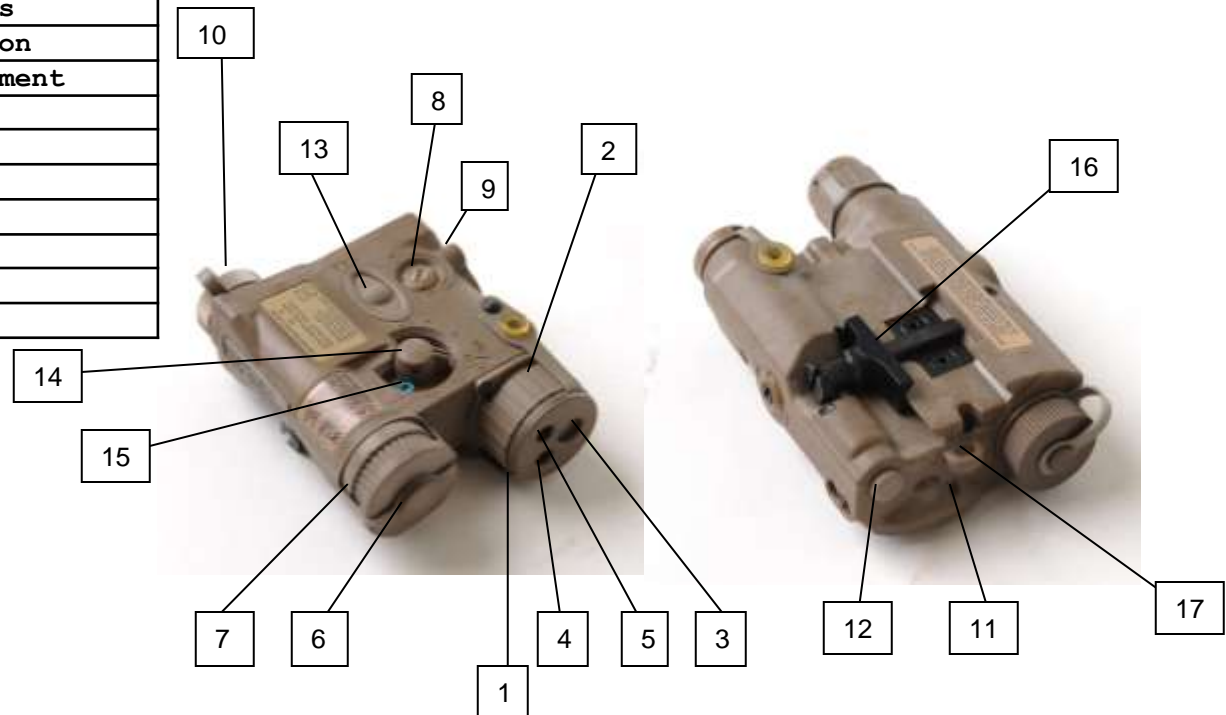
DESIGN OF THE LASER AIMING DEVICE

Specs	AN/PEQ-15	AN/PEQ-16
Weight w/ Batteries	7.5 oz	9.9 oz
Length	4.6 in	4.1 in
Width	2.8 in	3.2 in
Height	1.6 in	1.7 in
Power Source	(1) 3v DL123A	(2) 3v DL123A
Battery Life	6 hours dual high	4 hours normal operation, <1 hour white light
Water Proof	1 hour @ 6 meters	a. hour @ 6 meters

DESIGN OF THE LASER AIMING DEVICE

1	Tri-Function Lens Cap
2	IR Illuminator Focus Knob
3	Infrared Illuminator
4	Visible Aim Laser
5	Infrared Aim Laser
6	White Light Lens Cap
7	White Light Illuminator/Focus Knob
8	Illuminating Light Adjustors
9	Safety Screw Storage Location
10	Battery Cap/Battery Compartment
11	LED Status Indicator
12	Remote Jack/Jack Plug
13	Activation Button
14	Mode Selector
15	Safety Screw
16	Rail Grabber Bracket
17	Tie-down Attachment Point

AN/PEQ-16 Components



DESIGN OF THE LASER AIMING DEVICE

Mode Selector Position

VIS AL	Visible Aim Class 3a	Visible Aim Laser is selected.
O	Off	The Device will not operate.
P	Program	Programming Mode is selected to set the desired Infrared (IR) Illuminator pulse rate.
AL	Aim Low Class 1	IR Aim Laser is selected a low power.
DL	Dual Low Class 1/3a	IR Aim Laser and IR Illuminator are both selected at low power.
AH	Aim High Class 3b	IR Aim Laser is selected at high power.
IH	Illuminator High Class 3b	IR Illuminator is selected at high power.
DH	Dual High Class 3b	IR Aim Laser and IR Illuminator are both selected at high power.

DESIGN OF THE LASER AIMING DEVICE

- Modes of Activation
 - **Momentary Operation:** Press and hold the Activation Button to operate the device. When the button is released, the device turns off.
 - **Continuous Operation:** Press twice in rapid succession (double-tap) to turn the device on. It will remain on until the button is pressed again. It will automatically turn off after five continuous minutes.
 - **Remote Cable Switch:** When installed, the Remote Cable Switch may be used to provide the same functionality as the Activation Button.

MOUNTING THE LASER AIMING DEVICE

- The AN/PEQ-16 may be mounted on the top, left or right side of the rifle
- If mounted on the side of the service rifle, the AN/PEQ-16 should be mounted on the outboard side (i.e., right-side mount for right-handed shooter) so the sling or gear does not interfere with its operation
- Be aware, that if placed on the top, the device may be visible through the optic on the rifle

ZEROING THE LASER AIMING DEVICE

Adjustments

Mount	Adjuster	Rotation	Shot Group Movement
Top	Top Adjuster Elevation	CW CCW	Up Down
	Side Adjuster Windage	CW CCW	Left Right
Left Side	Side Adjuster Windage	CW CCW	Left Right
	Bottom Adjuster Elevation	CW CCW	Down Up
Right Side	Top Adjuster Elevation	CW CCW	Up Down
	Side Adjuster Windage	CW CCW	Right Left

Or... start turning the adjuster, if it's good, keep going. If not, go the other direction.

ZEROING THE LASER AIMING DEVICE

- Preset Zero: within 4 inches vertically and horizontally of the mechanical axis of the weapon's barrel at 25 meters. To pre-zero:
 - Rotate both adjusters to the full counter-clockwise end of travel
 - Rotate them back 2.5 turns to align the slotted head in a 12 o'clock / 6 o'clock orientation

ZEROING THE LASER AIMING DEVICE

- **Co-Witness:** used on a weapon with an established zero to get a quick and accurate zero at 100m
- In a low-light or dark environment, establish an aiming point (small target or chem-light)
- Aim at the target and adjust the visible laser to the 100m aiming point of the optic (i.e. tip of the RCO's chevron)
- This means that if the optic is zeroed to point of aim, point of impact at 100m, so now is the AN/PEQ-16.

WEAPON PRESENTATION

- Ideally, the laser should be activated during presentation of the weapon
- If the laser is activated prematurely or excessively, it will compromise the shooter's position

SUMMARY

- Design of the laser aiming device
- Mounting the laser aiming device
- Zeroing the laser aiming device
- Weapons presentation