

U.S. Military Infrared Target Pointer/Illuminator/Aiming Laser, AN/PEO-2 & 2A

NSN: 5855-01-422-5253 & NSN: 5855-01-447-8992



The Infrared Target Pointer/Illuminator/Aiming Laser, (ITPIAL) incorporates lessons learned with Aiming Lights in Desert Storm, other combat operations, and extensive field evaluation, plus production experience with over 50,000 US Military standard aiming lights. The result is a dual beam multi-function laser, which combines the utility and operational effectiveness of aiming lights and illuminator/pointers in a singe device.

- Separate Aiming and Illuminator Beams. Both beams are adjustable in elevation and windage.
- Aim spot can be centered in illumination area.
- Illumination beam able to focus from a pinpoint spot to wide-angle flood.
- Pointer ranges can exceed 10 miles.
- Various diffusers available for customized light shaping.
- Compact, Durable, and Lightweight.
- Uses 2 AA batteries.
- Waterproof to 66 feet.
- Meets all military environmental requirements.

Operation

The ITPIAL features a unique switching capability for both gun mounted and hand held operation. A fully integrated low profile Mode Selector Switch is conveniently located for ambidextrous operation and is designed for ease of use even under zero light conditions. The switch allows the operator to select one of six modes:

 AN/PEO-2
 AN/PEO-2A (w/Safety Mode Switch)

 OFF
 OFF

 AIM-LOW
 AIM-LOW

 AIM-HI
 DUAL-LOW

 ILLUMINATOR
 AIM-HI

 DUAL-LOW
 DUAL-LOW/HIGH

 DUAL-HIGH
 DUAL-HIGH/HIGH

The AN/PEQ-2A model incorporates a safety block over the switch that prevents the user from switching the mode switch into High Power.

Low power is eye safe* and is useful for force on force training and to preclude blooming in close combat engagements, while high power enables engagements or training at extended range and in high light conditions. The Infrared Target Illuminator/Pointer/Aiming Laser beam can be adjusted from a 0.5 mrad beam for long range pointing to a 10° circular illumination beam. A variety of light shaping diffusers are available for creating wider illumination angles.

The ITPIAL is the only device of its kind to have two independently adjustable beams. That is the ITPIAL has two sets of Azimuth and Elevation adjusters that allow the operator independent adjustment of both laser beams. The ITPIAL is equipped with an integral push button FIRE switch, which provides convenient operation in the hand held mode. This single button switch enables the operator to activate the ITPIAL in either momentary or steady on modes.

When weapon mounted the ITPIAL can be activated using a variety of remote switches. Depending on the weapon and the preference of the user, Insight Technology can supply "push button" or membrane remotes of various lengths. All switches quickly attach to the weapon and provide for convenient fingertip operation of the system, and all switches withstand demanding military environments.

Performance

The ITPIAL is a highly durable, light weight device manufactured with advanced engineering polymers and composites for maximum utility and durability.

The ITPIAL incorporates an advanced electrooptical system comprised of two index guided laser diodes, diffraction limited micro-lens assemblies, and unique full logic microprocessor controlled electronic drivers.

Weapon Attachment

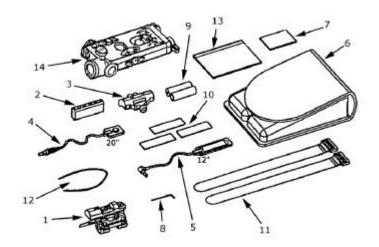
The ITPIAL is easily attached to all US Military Standard direct fire weapons and the AT4 Rocket Launcher with standard brackets. The ITPIAL attaches to the various brackets with a single thumbscrew. The ITPIAL can be removed and reinstalled on its bracket without loss of zero.

^{*}Meets Class I eye safe criteria of TB-MED 524. Users are warned not to look into the Laser Beam. Insight Technology Inc. does not consider any laser to be eye safe for direct viewing even if the output power meets established criteria for a Class I eye safe laser. In non-eye safe modes the AN/PEQ -2 & 2A is a class IIIb laser device.

SPECIFICATIONS

Aiming Light:	AN/PEQ-2 & 2A US Military Standard	Model 5000 Higher Power IR/IR	Model 7500 Combination Visible/IR
Divergence(FWHM)	0.3mrad	0.3mrad	0.3mrad
Laser Power	50mW	50mW	35mW
Output Power	25mW	25mW	15mW
Pointer/Illuminator:			
Divergence(FWHM)			
Spot	3.0 mrad	3.0 mrad	3.0 mrad
Flood	>10°	>10°	>10°
Laser Power	50mW	150mW	50mW
Output Power	30mW	90mW	30mW
Peak Wavelength:			
Aiming Light	830nm	830nm	635nm
Pointer/Illuminator	830nm	830nm	830nm
Boresight Retention:	<0.5mrad	<0.5mrad	<0.5mrad
Battery Type:	2 AA Alkaline	2 AA Alkaline	2 AA Alkaline
Reverse Polarity Protection:	Yes	Yes	Yes
Temperature:			
Storage	-57°C to +71°C	-57°C to +71°C	-57°C to +71°C
Operating	-32°C to $+51$ °C	-32°C to +51°C	-32°C to +51°C
Waterproof:	to 66 feet	to 66 feet	to 66 feet
Weight: (excluding batteries and bracket)	210grams	210grams	210grams
Environmental Shock and Vibration EMI/EMC:	Meets full MIL-SPECs	Meets full MIL-SPECs	Meets full MIL-SPECs

Item #	Description	
1	M4/M16 Bracket Assembly	
2	Foot Adapter, PVS-4 Bracket	
3	Rail Grabber Adapter Bracket	
4	Remote Cable: 20" Button Straight Plug	
5	Remote Cable: Membrane,12" Right Angle Plug	
6	Textile Carry Bag	
7	Lens Tissue	
8	Allen Wrench	
9	AA Battery 1.5 volt	
10	Velcro Tape Fastener	
11	Velcro Strap	
12	Neck Cord	
13	PEQ-2A Manual, Commercial	
14	TPIAL Assembly, Army	



Export of this product is regulated by the US Department of State in accordance with guidelines of International Traffic in Arms Regulations (ITAR) per Title 22, Code of Federal Regulations, Parts 121-128.

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