

WARNING:

LTAD-RN IS A CLASSES II AND IIIA LASER PRODUCT
OUTPUT 0.05-10 MW, WAVELENGTH 635 NM
AND LTAD-GN IS A CLASS IIIA LASER PRODUCT
OUTPUT UP TO 3 MW, WAVELENGTH 532 NM

DANGER:

LASER RADIATION - AVOID DIRECT EYE EXPOSURE

LASER TARGET ACQUISITION DEVICES

LTAD-RN

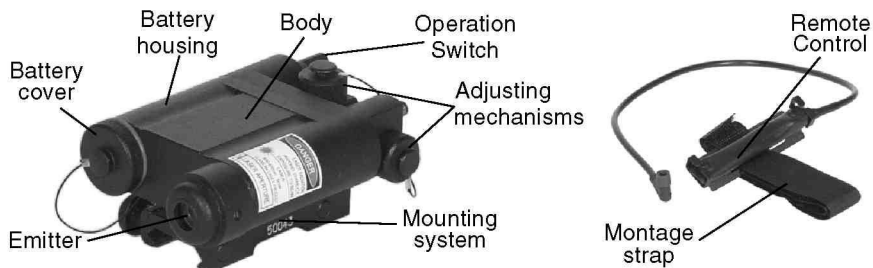
RED NEEDLE

LTAD-GN

GREEN NEEDLE



u s e r ` s g u i d e



SPECIFICATIONS

	LTAD-RN	LTAD-GN
Wavelength	635 nM	532 nM
Output Power	0,05 mW; 10 mW	Up to 3 mW
Range	Up to 1000 meters	
Boresight Retention	0,5 mrad	
Beam spot size	25 mm at 50 m; 50 mm at 100 m	
Total windage/elevation adjustment	± 20 mrad ($\pm 1^{\circ}7'$)	
Adjustment step	(0,50 \pm 0,05) mrad (50 mm at 100 m)	
Accuracy of adjustment after 1000 shoots	0,5 mrad	
Accuracy of adjustment after 100 mount operations	1 mrad	
Current consumption, max	up to 100mA	up to 300mA
Battery Type	CR 123, 3 V (AA configurations is also available per customer request)	
Battery Life, min	20 hours	10 hours
Weapon mount adaptor	"Picatinny rail" MIL STD 1913	
Temperature:		
- Operating	-40°C to +60°C	
- Storage	-50°C to +70°C	
Water Proof	20 m Submersion for 2 hours	
Size	94 x 65 x 42 mm	100 x 65 x 42 mm
Weight, up to	190 g	250 g

APPLICATION

LTAD-RN and LTAD-GN Laser Target Acquisition Devices are the weapon mountable systems that is intended for aiming a target.

The devices are the optic-mechanical laser devices, which forms a spot of visible (red or green) laser beam on a target. Devices can be used with night vision devices.

Source of radiation is the semi-conductor laser diode, which radiation is potentially dangerous to eyes. LTAD-RN is a class II, IIIa laser device by eye safe criteria of TB-MED 524, LTAD-GN is a class IIIa laser device by eye safe criteria of TB-MED 524.

The device has a mount for a weapon, equipped with a mounting system, such as "Picatinny rail" MIL STD 1913.

OPERATING

To turn the device on, rotate the Operation Switch from the OFF position to the desired operation mode.

Operation Switch has following positions/modes:

OFF - the device is off;

A - the device is on with output power - 0,5 mW(LTAD-RN); 3 mW(LTAD-GN);

B – ONLY LTAD-RN - the device is on with output power - 10 mW;

1 - the device can be used with the Remote Control in mode position with output power - 0,5 mW(LTAD-RN); 3 mW(LTAD-GN);

2 - ONLY LTAD-RN - the device can be used with the Remote Control in mode position with output power - 10 mW.

The Remote Control cable can be attached to connector on the body of device. The Remote Control can be assembled to a weapon with a montage strap (Velcro).

The device has the Windage and Elevation adjustment mechanisms for horizontal and vertical adjustment. The beam of laser moves upward and leftward on the aim if mechanisms rotate clockwise, and moves downward and rightward if mechanisms rotate anticlockwise. These mechanisms have the protective covers.



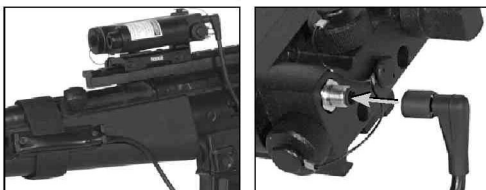
MOUNTING

Slightly loosen the fixing screws on the built in a mounting system of the device.

Place the device on the dovetail mount of a fire arm, making sure that the mount aligns with the receptor attachment of the screw grooves and tighten the fixing screws.

Remote Control:

Attach the Remote Control cable to connector on the body of device. Place the Remote Control on the weapon, suiting your shooting style best and grip. Fix the Remote Control in this position with a montage strap.



ADJUSTMENT (WINDAGE AND ELEVATION)

The device has Windage and Elevation adjustments for horizontal and vertical zeroing. The beam of laser moves upward and leftward on the aim if mechanisms rotate clockwise, and moves downward and rightward if mechanisms rotate anticlockwise. These mechanisms have protective covers.

If the device was never in use, it needs 10 shots minimum for stabilization of adjustment mechanisms. The adjustment of device should be performed after adjustment of the weapon in the same circumstance.

Fix up the weapon sight with device on ranging-fire stand and point the weapon to aim with its aiming mechanism. Turn the device on. Point the laser beam of device to the aim by rotating the adjustment mechanisms of the device.

Make a control shooting with device. Make a correction by rotating the adjustment mechanisms of device. Each step of rotation of adjustment mechanism moves the beam of device on the 5cm at 100m distance.



USING

Turn the device on.

Fix beam on desired target.

Make the allowances for wind and elevation, rotating the adjustment mechanism.

Turn the device off, when device is not in use.

MAINTENANCE

Do not disassemble the device.

Check the solidity of the mounting of devices. Tighten the fixing screws if needed.

Always turn the device off, when device is not in use.

Remove the battery before storage for a long time.

Clean the device with flannel serviette. Do not use solvents, petrol etc.