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 Laser Devices, Inc.
 Part #1016
 December 2002



INSTRUCTIONS

MOLAD (Multi-Operational Laser Aiming Laser) for NATO 1913 Rails







Made in the U.S.A.
 U.S. Patent #5581898

Export Control

Purchaser agrees to abide by all laws and regulations relating to the sale of this device. Unless otherwise agreed, purchaser is responsible for obtaining all necessary export and import licenses that may be required for this product. A U.S. Department of State Export license is required prior to export of the MOLAD. Purchaser also agrees to abide by all rules and regulations in effect in the jurisdiction where the product will be used.

Optional Accessories

	Part #
 6 Volt Lithium Battery (1 x 123A)	30114
 6 Volt Universal Las/Tac Light Head with 6-Volt Lamp Assembly	2210140
 Daytime Shooting Glasses, High Efficiency	30204
Daytime Shooting Glasses, Standard Efficiency	30203
 Target "Accur-Aim Laser™" with 3 Strips	30102
Target Strips (35 Pieces)	30143

Warning Laser Light

The MOLAD laser when activated emits visible and invisible laser light that has been determined to pose a risk of eye injury. In order to avoid the possibility of eye injuries resulting from direct viewing, please adhere to the following warnings:

- * **Avoid looking directly into the laser beam.**
- * **Do not look directly at the laser light using scopes or binoculars.**
- * **Avoid shining the laser onto mirrored surfaces.**
- * **Do not direct the laser into the eyes or face of persons or animals.**
- * **Observe all safety precautions with the laser that you would observe with a loaded firearm.**



General Information

Please read these handling and safety instructions and the instructions for your pistol before attempting to use MOLAD. In addition, please observe all laws in your area relating to the use of firearms and laser aiming devices. Failure to comply with the installation instructions may result in damage to your weapon.

Safety First

Unload your pistol (remove the magazine and any cartridge in the chamber) prior to mounting the MOLAD unit on your weapon. Familiarize yourself with the location of the ON/OFF switch and the mode switch for the MOLAD unit. Make sure the system is switched OFF prior to attempting to mount the MOLAD on your weapon. Make sure the firearm is pointed in a safe direction at all times while attaching the MOLAD to the weapon.

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The Commandments of Firearms Safety

- ALWAYS keep the gun pointed in a safe direction.
- ALWAYS keep your finger off the trigger until ready to shoot.
- ALWAYS keep the gun unloaded until ready to use.
- ALWAYS be sure the gun is safe to operate and the barrel is clear of any obstruction.
- ALWAYS use the proper factory made ammunition for your particular gun.
- ALWAYS know your target and what is beyond it.
- ALWAYS wear eye and ear protection when shooting.
- ALWAYS store guns and ammunition in separate locked containers so they are secure and not accessible to children or unauthorized persons.
- ALWAYS treat every gun as if it were loaded.
- NEVER use alcohol or drugs while handling a gun.
- NEVER bring a loaded firearm into a building.
- NEVER transport a loaded firearm.

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Product Description

MOLAD allows a Special Operations Team to instantly move from the visible spectrum using a Super Power Point aiming laser, the 95 lumen tactical light or the combined visible laser with tactical light; to an IR aiming laser, IR LED illuminator or with both the IR laser and LED illuminator. The unit is fully waterproof to 20 meters. Batteries can be changed without removing the unit from the weapon. Other advanced features include a single optical path for both the IR and the Visible aiming lasers, ambidextrous activation switches, a remote cable port and activation and low battery indicator lights.

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Optional Accessories



Bianchi Cobra Military Style Holsters
 Holster Belt, Right Hand USP Compact
 41124
 41125
 41127
 41128
 Holster Belt, Left Hand USP Compact
 41117
 41118
 41121
 41122
 Tactical Thigh, Right Hand USP Compact
 Tactical Thigh, Left Hand USP Compact
 Tactical Thigh, Left Hand USP Full Size

Optional Accessories (cont'd)

- Remote Cable with right angle connector
 2210141
 plug and pressure pad switch
- Remote Cable with right angle connector
 2210143
 plug and button switch
- Pouch, Black Nylon for MOLAD
 L09151

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Spare Parts List

	Part No.
Front Cap Laser (laser aperture)	210053
Elevation and Windage Adjustment Screws	A03169
Flashlight Head Assembly with 6-Volt Lamp Assembly	221040
Lamp Assembly	85019
Batteries (two 3 volt lithium)	30170
Switch Cover Rubber Boot	FA3568
Windage and Elevation Tool (right side)	3613

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Service and Repair

MOLAD is manufactured to provide years of rugged and dependable use. In the event the MOLAD unit needs repairs, please contact Laser Devices, Inc. or its European Service Center for a return authorization number. Once you obtain a return authorization number, package the product securely and return it postage paid. In the event the product is not covered by the warranty, you will be notified of the nature and the cost of the necessary repair.

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MOLAD Belt Pouch



MOLAD is supplied with a Cordura™ nylon belt pouch. The belt pouch is configured to fit four spare batteries and the optional remote cable.

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MOLAD Technical Data

Laser Class	IIIb U.S. FDA. (Class I to 1m IEC-825-1)
Optical Output	< 5mW visible (635nm) and 0.5mW to 5mW IR (835nm)
Beam Diameter	0.58 cm ² at 25m
Range	450m in low light (approx. 30m in bright daylight)
Environment	Waterproof to 20 meters
Material	High impact polymer
Color	Flat black
Length	10.3 cm or 4.0 in.
Height	4.2 cm or 1.9 in.
Width	3.9 cm or 1.5 in.
Weight	215 grams or 7.2 oz (including battery, including mount)
Battery	Two 3 volt DL123A
Battery Life	48 hours continuous use for laser; 1.5 hours for tactical light
Diameter of Light	3.2 cm or 1.3 in
Lamp	High pressure Xenon rated at 95 lumens
IR LED Illuminator	20 lumens

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Location of Major Parts (cont'd)

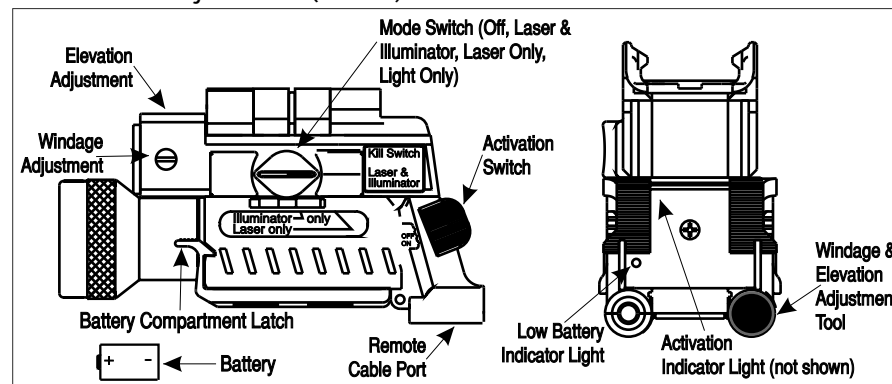


Figure 1B

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Installation of MOLAD (cont'd)

If necessary, pull down on the dual release levers to move the MOLAD into the proper position. See Figure 3.
 Step 5. Make sure one of the two latches engage the slot in the mounting rail.
 Step 6. Test the MOLAD to confirm proper operation (see Activation of MOLAD Page 10).
 Step 7. Adjust the aiming laser for windage and elevation (see Pages 14-18).



Figure 3

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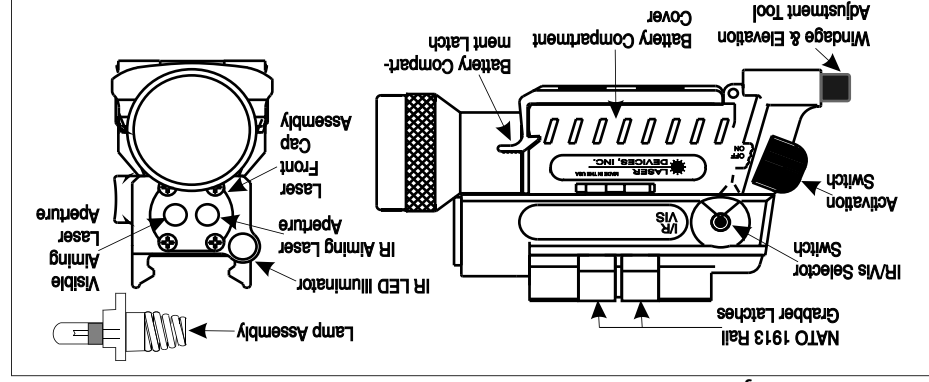


Figure 1A

Installation of MOLAD

Step 1. Confirm that your pistol is completely unloaded (check the chamber and the magazine).
 Step 2. Install the two 3 volt batteries.
 (See Page 24).
 Step 3. Slide the MOLAD onto the accessory rail in front of the trigger guard until the unit locks into place.
 See Figure 2.
 Step 4. Make sure the MOLAD is located as far back on the weapon rail as possible.



Figure 2

Activation of MOLAD

MOLAD uses a rotary mode switch on the left side of the unit to select between the tactical light and laser functions. See Figure 4. A toggle switch located on the right side of the unit is used to select between the visible and IR functions. See Figure 7, p. 12. The unit can be activated either by using the toggle switches located on each side of the trigger guard or by using an optional remote cable equipped with a pressure pad or button switch.
 Aiming Laser Only. Rotate the Mode Switch to the Laser Only position and activate using either the right or left-hand switch. See Figures 5 & 6.



Figure 4

Troubleshooting the MOLAD

- In the event the MOLAD unit fails to operate or appears to operate at low power, please check the following:
1. Fails to operate.
 A. Replace the batteries (see instructions, pp. 24-25).
 B. Use night vision goggles to confirm that the unit is not operating in the IR Mode.
 C. Check the battery installation to make sure the positive (+) terminal is facing toward the flashlight head. See Figure 18, p. 25.
 2. Laser or Tactical light is weak or dim.
 A. Check the front cap of the laser and tactical light to make sure that they are not covered with dirt or powder. See Figure 15, p. 22.
 B. Replace the batteries (see instructions, pp. 24-25).

Warranty

Laser Devices, Inc. (LDI) offers a one-year limited warranty (excluding batteries and light bulbs) from the date of the original purchase against failure due to defect in design, parts and workmanship. This warranty is void if the product serial number has been removed or in the event that the product has been misused, modified or abused. LDI will replace defective products at its discretion. To the maximum extent permitted by law, LDI disclaims all other warranties of merchantability and fitness for a particular purpose. In no event shall LDI or its suppliers, distributors, dealers or agents be liable for any damages whatsoever (including without limitation damages for personal injury, wrongful death or pecuniary loss) arising out of the use or the inability to use any LDI manufactured product. This limited warranty gives the purchaser specific legal rights, which may vary from state to state or jurisdiction to jurisdiction.



Figure 20



Figure 21

Installation of Optional Remote Cable

Install the optional remote cable:

Step 1. Plug the remote cable into the port located on the left side of the MOLAD unit. See Figure 19. Make sure the plug is fully seated in the port. Note: The port on the right side is used to stow the adjustment tool.

Step 2. Place the pressure pad switch on the front strap of the pistol or on the side of the grip. Run the wire along the bottom of the trigger guard. See Figures 20 & 21, p. 27.



Figure 19

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Activation of MOLAD (cont'd)



Figure 5



Figure 6

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Replacing the Batteries

The two 3 volt (123A) batteries provide 48 hours of laser or 90 minutes of tactical light use. When the red low power light stays on for more than one minute, change the batteries.

Step 1. Confirm that your pistol is completely unloaded (check the chamber and the magazine).

Step 2. Turn the unit off. Place your thumb in the center of the battery door. Using your forefinger and middle finger, pull down on the battery door latches. See Figure 17.



Figure 17

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Removing the Windage/Elevation Tool

Step 1. A built-in windage and elevation adjustment tool is located on the right side just below the trigger guard.

Step 2. Remove the tool by turning counter-clockwise. See Figure 8.

Step 3. Once you have finished adjusting the windage and elevation (see pp. 14-16), reinsert the tool into the housing and tighten by turning clockwise.



Figure 8

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User Maintenance (cont'd)

Clean the MOLAD unit by rinsing it with water. If it is necessary to clean the front cap (Part #210053) or flashlight lens, use glass cleaner or water. See Figure 15. Do not use gun oil or harsh chemicals to clean the laser front cap, as they may dissolve the silicone seal and damage the laser.

If the MOLAD unit is to be stored for an extended period, remove the batteries to prevent any possibility of corrosion.



Figure 15

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Adjusting the Windage/Elevation (cont'd)

Step 4. Danger: Confirm that your pistol is completely unloaded (check the chamber and the magazine).

Step 5. Adjust the windage or elevation by turning the windage or elevation screw by no more than one-quarter (1/4) turn.

Windage: Turning the windage screw clockwise will move the laser point to the right, and turning it counter-clockwise will move it to the left. See Figure 9, p. 16.

Elevation: Turning the elevation screw clockwise will move the laser point down, and turning it counter-clockwise will move it up. See Figures 11 & 12, p. 18.

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Activation of MOLAD (cont'd)

Aiming Laser and Tactical Light Combined. Set the Mode Switch to the Laser & Illuminator position and activate using the right or left-hand switch. See Figures 5 & 6, p. 11.

Tactical Light Only. Rotate the Mode Switch to Illuminator Only position and activate using either the right or left-hand switch. See Figures 5 & 6, p. 11.

Infrared Laser and IR Illuminator. Select Infrared using the IR/Vis Selector Switch on the right side. See Figure 7.

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Figure 7

Replacing the Batteries (cont'd)

Step 3. Reinstall the new batteries with the positive (+) terminal facing toward the tactical light module. See Figure 18.

Step 4. Shut the battery cover and press down firmly until the battery door latches engage both sides of the housing.

Step 5. Test the unit to confirm proper operation. See Activation of MOLAD on Page 10.

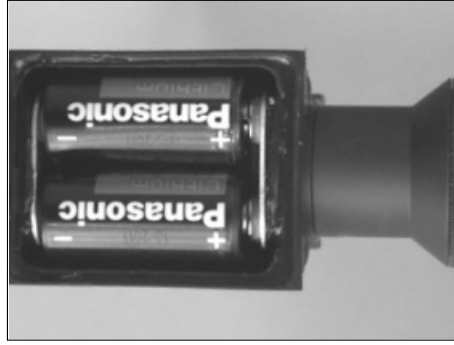


Figure 18

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MOLAD is pre-aligned by the manufacturer for use at 10 meters. The single optical path alignment system allows the user to easily change the alignment for use at other distances. Changing the alignment of the visible laser will automatically realign the IR aiming laser. Adjust the unit for windage and elevation as follows:

Step 1. Attach the MOLAD unit to your weapon (see instructions on Pages 8 & 9).

Step 2. Activate the laser and aim the weapon at the target using a sandbag or steady rest. Place the laser point on the center of the target and carefully fire three rounds from the weapon. Check the target for the impact point.

Step 3. If the bullet holes are clustered to one side or the other, then you will need to adjust the windage. If the bullet holes are grouped above or below the target, then you will need to adjust the elevation. See Figure 9, p. 16.

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Adjusting the Windage/Elevation (cont'd)

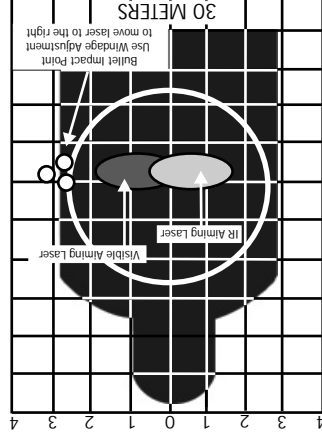
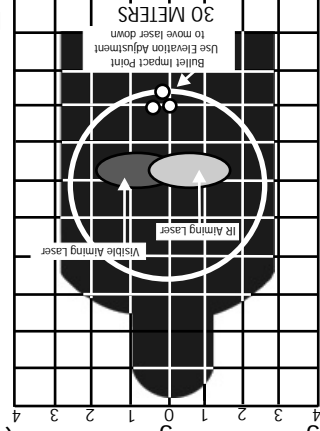


Figure 9

Adjusting the Windage/Elevation (cont'd)



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User Maintenance



Figure 14

MOLAD does not require special maintenance other than changing the tactical light lamp, changing batteries and cleaning. Prior to use, check the following:

A. Test the laser and tactical light (both visible and IR) to confirm proper function.

B. Make sure the unit is properly attached to the weapon.

C. Check the sight alignment by test firing the weapon, or by using LDI's laser borelight.

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Removing the MOLAD



Figure 16

Step 1. Confirm that your pistol is completely unloaded (check the chamber and the magazine).

Step 2. Pull down on the two NATO 1913 Rail Grabber latch assemblies located on each side of the MOLAD unit. Using your thumb and forefinger, pull forward on the housing. See Figure 16.

Note: If the MOLAD is going to be stored for an extended period, remove the battery to avoid any possibility of corrosion.

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Replacing the Flashlight Lamp

Step 1. Remove the tactical light module
See Figure 13.

Step 2. Carefully remove the lamp assembly and replace it with the new lamp. Do Not touch the glass bulb with your fingers. See Figure 14, p. 21. If necessary, clean the bulb with a clean, oil free cloth and glass cleaner.

Step 3. Reinstall the tactical light head. Do Not cross-thread the flashlight head on the MOLAD housing. See Figure 13.

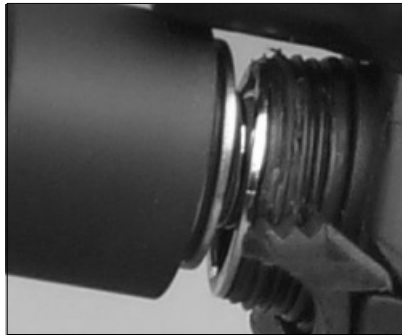


Figure 13

Adjusting the Windage/Elevation (cont'd)

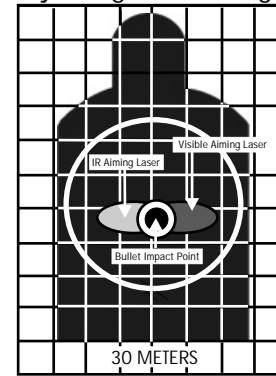


Figure 10

Step 6. Test fire the weapon to check the new alignment. If necessary, repeat the alignment process from Step 2, p. 14.

Once the visible aiming laser is aligned, the IR beam and the visible laser point will overlap. The impact point of the bullet should be directly between the two laser points. See Figure 10.

Adjusting the Windage/Elevation (cont'd)



Figure 11

18



Figure 12

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Operating Instructions

Once the MOLAD is mounted on the weapon and adjusted for windage and elevation, it is ready to use. Use the tactical light to illuminate the threat and the laser to confirm the point of impact of the bullet prior to firing the weapon. Use the IR selector switch to access the IR LED illuminator and the IR aiming laser. DANGER: Avoid prolonged activation of the aiming laser in mist, fog, smoke, dust, high humidity, snow or rain conditions, as the laser beam may reveal your position to the opposing forces. If the system is to be stored for an extended period, remove the batteries to avoid any possibility of corrosion.