

9780 SW Freeman Dr.
Wilsonville, OR 97070 USA
Tel: 800-442-2406

crimsontrace.com



# MVF-515

MODULAR VERTICAL FOREGRIP

INTEGRATED LASER/LIGHT

USER'S MANUAL FOR RED & GREEN MVF



FEEL FREE TO CONTACT US AT 1.800.442.2406 WITH ANY QUESTIONS YOU MAY HAVE REGARDING YOUR MVF. WE ALSO ENCOURAGE YOU TO VISIT US ONLINE AT CRIMSONTRACE.COM. HERE YOU CAN REGISTER YOUR PRODUCT, FIND VALUABLE INFORMATION ON TRAINING AND TACTICS OR JOIN FELLOW CRIMSON TRACE USERS ON OUR ONLINE FORUMS.

## CONTENTS

MVF-515 DETAIL INFORMATION	04
LASER SAFETY INFORMATION	06
PRODUCT FEATURES	07
BATTERY INSTALLATION	08
ATTACHING TO PICATINNY RAIL	12
WINDAGE AND ELEVATION ADJUSTMENTS	14
OPERATING INSTRUCTIONS	16
MAINTENANCE	18
WARRANTY	19

# PLEASE READ THE ENTIRE MANUAL.

Failure to follow these instructions and procedures may result in injury or death.

- Always follow firearm safety rules as outlined by the firearms manufacturer.
- Do not point the laser beam at eyes. Permanent eye damage can result.
- > Keep this and all firearm related products locked and secured from children or other unauthorized users.



FAILURE TO FOLLOW ANY OF THE FOLLOWING WARNINGS MAY RESULT IN SEVERE INJURY OR DEATH TO YOU OR OTHERS.

Prior to installing Crimson Trace products, ensure that the firearm is unloaded, the magazine is removed, safety on and finger(s) off the trigger.

DO NOT install or use Crimson Trace product if the installation of the product in any way affects the safe function of the firearm. If, while installing Crimson Trace products, you have any trouble with the fit or functionality of the firearm, STOP IMMEDIATELY and call Crimson Trace Customer Service for assistance at 1-800-442-2406.

#### ALWAYS FOLLOW THE 4 RULES OF FIREARM SAFETY:

- 1. Handle all firearms as if they are loaded.
- 2. Never let the muzzle cover anything that you are not willing to destroy.
- 3. Keep your finger off the trigger until your sights are on the target and you are ready to fire.
- 4. Be sure of your target and what is beyond.

Remember, the user is ALWAYS responsible for the safe use of a firearm.

Crimson Trace recommends that every gun owner take a gun safety course from a certified NRA Instructor before handling or firing your firearm.

# **THE MVF-515**

- 1. Light Master On/Off Switch
- 2. Light Activation
- 3. Laser Activation
- 4. Butt Cap
- 5. Laser Aperture
- 6. Replaceable LED Light

### **PACKAGE CONTENTS**

- > CR123 Lithium Batteries (2)
- > Adjustment Wrenches (2)
- > Cleaning Swabs (2)
- > Safety Stickers (2)
- > Instruction Manual
- > Warranty Registration Card





# LASER SAFETY INFORMATION

Labels could not be affixed to the product but are supplied and must be installed as indicated below:

- A. Attach the "Danger" warning label to the outside of the firearm.
- B. Attach the "Aperture" warning label with the arrow pointing to the laser diode lens.

Important: Laser products must only be operated with the safety label applied to the firearm.



CAUTION: USE CAUTION WHEN ACTIVATING THE LASER TO AVOID DIRECT EYE EXPOSURE. WHICH CAN RESULT IN PERMANENT EYE DAMAGE, FOLLOW ALL PRECAUTIONS AS OUTLINED BY THE FIREARMS MANUFACTURER. KEEP THIS AND ALL FIREARM RELATED PRODUCTS LOCKED AND SECURED FROM CHILDREN OR OTHER UNAUTHORIZED USERS.

# PRODUCT FEATURES

- > Polymer Grip Panels With Overmolded Activation Pads
- > Ambidextrous Dual-Side Activation Switches
- > Master On/Off Switch On Each Panel
- Independent Momentary, Strobe And Constant-On Programmability For Laser & Light Components
- > Two CR123 Lithium Batteries
  - Over 4 Hours Light Illumination
  - Minimum 48 Hours Of Laser Illumination for Red Laser
  - Minimum 6 Hours Of Laser Illumination for Green Laser
- > Full-Length 6061-T6 Aircraft Aluminum, Hard-Anodized Tang

- > Custom, Two-Screw Rail Mount
- > Replaceable, 150/200 Lumen LED Light Module
- > Rotating Light Bezel Selects 150/200 Lumen Light Output
- > Pin-Locked, Channel-Fitted Butt-Cap Attachment
- > Rugged, Proprietary Grip Texture
- Weight: 10.2 Ounces
- > Parkerized Steel Recoil Lugs And Hardware
- Infrared Laser Available To Qualified Agencies

Fits Picatinny 1913 or similar accessory rails measuring at least 4" in length.

## PRODUCT SPECIFICATIONS

LASER TYPE: Class 3R visible laser diode

PEAK POWER: 5mW

WAVE LENGTH: 620-670 nm (Red); 515-532 nm (Green)

BEAM SIZE: Approx. 0.5 inches at 50 feet

LIGHT: 150/200 Lumen LED

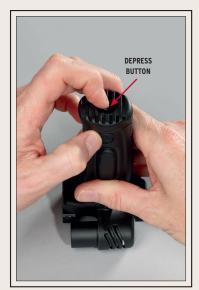
# BATTERY GUIDELINES/REPLACEMENT AND SPECIFICATIONS

If the laser becomes dim or fades, replace batteries. Keep battery compartment free of dirt or other contaminants. Debris inside battery compartment may affect laser operation.

Quality CR123 Lithium batteries are recommended for optimum performance.

WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

# **BATTERY INSTALLATION**



 Release button under butt cap while sliding cap forward.



2. Slide butt cap off of unit.



3. Hold each side of the unit while pulling apart at an angle.



4. Separate halves slightly to remove from tang. DO NOT FORCE!

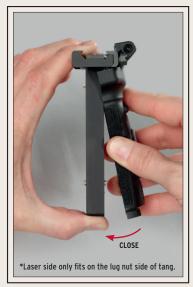


5. Slide one side off at angle to remove and release from tang.

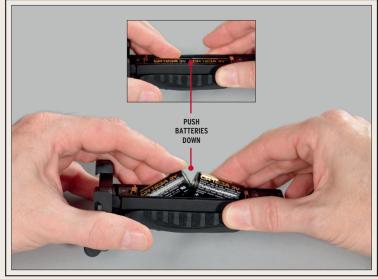


6. Repeat with other side so both halves are removed from tang.

# BATTERY INSTALLATION [CONTINUED]



7. Attach laser side at angle from tang and move into place until the side is secure against tang.\*



 Install batteries by holding at an angle. The plus (+) side of both batteries should face top of unit. Locate bottom edge of upper battery alongside positive terminal of lower battery.



9. Hold light side at angle against tang then press upward into place.



10. Slide butt cap back on. Cap will slide on from only one direction.



11. Butt cap will click into place.
Battery installation is complete.

# ATTACHING TO PICATINNY RAIL



 Hold light side at angle lining up lugs to fit into slots in picatinny rail.



13. Bring perpendicular by rotating lugs into rail slots.



 Tighten foregrip onto rail by turning nuts. Use screwdriver or nut driver to tighten. (50-55 inch/lbs.)



## WINDAGE & ELEVATION ADJUSTMENTS

A good starting point is to establish your normal sight picture and line up the laser dot with the iron sights or optics reticle on a target at least 25 yards away — this may be all the adjustment needed. Your MVF comes factory-sighted to approximate point of impact at 25 yards. Unlike most other laser sights, you can adjust them if needed by turning the 0.050" windage (side) and elevation (top) screws with the hex wrenches provided with your MVF. For further tuning on the range, fire enough rounds to establish a consistent group on the target. After the location of the bullet grouping is established, move the laser in the direction of the group. For example, if the laser is pointing at the center of the target, but the bullets are impacting low and right, move the laser down and to the right.

WINDAGE			
LEFT	CLOCKWISE		
RIGHT	COUNTER CLOCKWISE		

ELEVATION		
DOWN	COUNTER CLOCKWISE	
UP	CLOCKWISE	

### **TROUBLESHOOTING**

Occasionally one of the laser adjustment screws may not adjust enough to line up with your sight picture, or will not move the laser at all. This is usually caused by over adjustment of the other screw. To fix, back out both the elevation, and windage adjustment screws until you have 1 or 2 threads protruding from the diode housing on each screw. (Do not remove adjustment screws totally out of the diode housing.) Tap on diode housing with a blunt, soft object such as the plastic butt end of a screw driver to reset the diode back into place inside the housing. Now begin turning the adjustment screws back down into the housing a quarter turn at a time, alternating between adjustment screws.



WINDAGE ADJUSTMENT: Located on the side of the laser diode housing. Moves the laser left and right.



ELEVATION ADJUSTMENT: Located on top of the diode housing. Moves the laser up and down.

## DO NOT OVERTURN ADJUSTMENT SCREWS.

A little adjustment goes a long way. Rarely is more than one complete turn required.

\*Note — when kept in the same position on a securely attached picatinny rail, your MVF will hold zero. If the foregrip is removed and placed further up or back on the picatinny rail you will need to sight in your MVF again.

# OPERATING INSTRUCTIONS

#### PLEASE READ ALL INSTRUCTIONS BEFORE OPERATING.

In order to set a desired mode for the light or laser, hold down the master on/off switch for the function you wish to set and release when desired mode is reached. The light or laser (depending on what function you are setting) will cycle through the following modes — the light and laser can be programmed independently of each other:

- 1. The first mode you will cycle into is: ON = MOMENTARY ON/OFF.
- 2. The second mode you will cycle into is: STROBE = MOMENTARY STROBE.
- 3. The third mode you will cycle into is: ON = CONSTANT ON/OFF.
- 4. Modes can only be changed when unit is in the "on" mode.
- 5. Mode cannot be changed when unit is activated.

THIS CYCLE WILL CONTINUE THROUGH ALL MODES UNTIL THE MASTER ON/OFF SWITCH IS

RELEASED ON THE DESIRED MODE. EACH MODE SELECTION WILL LAST FOR 3 SECONDS.

- > The light and laser are programmed independently of each other by using the master on/off switches
- > Note there are two master on/off switches. One for the laser and one for the light, see above.
- > In order to turn unit off, press master on/off switch for less than two seconds and release. To turn back on hold the master on/off switch down for less than two seconds and the mode your unit was previously set in will remain selected.

#### **HOW EACH MODE OPERATES:**

MOMENTARY ON OR OFF: When the activation button(s) are pressed, the light/laser will be activated, when the activation button(s) are not pressed, the light/laser is in the off mode.

MOMENTARY STROBE: When the activation button(s) are pressed the light/laser is in strobe mode, if the activation buttons are not pressed the light/laser is in the off mode.

CONSTANT ON OR OFF: When the activation button(s) are pressed and released the light/laser will turn on and remain on until the activation button(s) are pressed again. There is no need to keep the activation buttons engaged in this mode to activate the device.





# **MAINTENANCE**

Your MVF requires minimal attention and is designed to resist most common firearms chemicals and lubricants. However, excessive exposure to these chemicals can be detrimental. To ensure the safe and effective operation of your MVF:

- > Remove MVF before cleaning gun.
- > Do not use pressurized or compressed air on the MVF.
- > Do not immerse MVF in cleaning fluid or lubricate firearm excessively. A firearm that has too much oil will foul the lens of the laser and create an unfocused beam. This can be easily cleaned and causes no permanent damage.
- > Do not allow cleaning solution to enter lens area.
- > Do not allow solvents to contact your MVF that contain: VOCs or TCE such as: carb/brake cleaner, acetone, MEK, gasoline. Grip damage will result.

AFTER EXTENSIVE SHOOTING, YOU MAY NOTICE A DEGRADATION OF BEAM QUALITY OR "BEAM SPREAD." THIS IS THE RESULT OF FOULING ON THE LENS SURFACE. THIS IS NORMAL AND CAN BE EASILY CLEANED WITH THE INCLUDED CLEANING SWABS OR A SMALL COTTON SWAB DIPPED IN ISOPROPYL ALCOHOL OR WINDOW CLEANER. DRY THE LENS WITH A CLEAN SWAB. WHEN CLEANING THE LENS DO NOT TOUCH LENS WITH ANY SHARP OBJECTS.

# WARRANTY

CRIMSON TRACE® warrants that this product will be free from defects in materials and workmanship for a period of three years from date of original retail purchase. CTC will repair or replace with an item of equivalent value, at its option, any product or part which is found to be defective under normal use and service, without charge during the warranty period. CTC's obligation to repair or replace shall be the purchaser's sole and exclusive remedy under this warranty. This warranty does not cover normal maintenance and service and does not apply to any products or parts which have been subject to modification, misuse, carelessness, accident, improper maintenance or repair other than by CTC. Warranty does not cover batteries or problems arising from faulty batteries.

This limited warranty is in lieu of any and all other warranties, either expressed or implied, including but not limited to, merchantability and fitness for particular purpose. CTC shall not be liable for indirect, incidental, consequential or special damages arising out of, or in connection with, product use and performance, even if it has been informed of the possibility of such damages. For warranty service, call Customer Service for an RMA number.

For warranty service, carefully package the unit along with dated proof of purchase and an explanation of the problem, and mail it to:

Crimson Trace, Attn: Customer Service

9780 SW Freeman Drive, Wilsonville, OR 97070

Phone: (800) 442-2406

Customer Service E-mail: customer@crimsontrace.com

crimsontrace.com

Crimson Trace holds several patents and may have other patents pending that cover its innovations. Please review individual products for patent numbers to determine the specific patent coverage.