



Important Laser Notices: Oct 11th, 2011

Military Field Reports - Green Lasers, Hand Held, Class IIIa / 3R

Jan 2011: 2011 Shipments to Afghanistan & Iraq

Green Laser use modified and approved by Theater Commanders in 2011, removing theater restrictions imposed from Nov 2009 to Nov 2010 on Tactical Green Lasers & Dazzlers.
(See Page 2)

Jan 2011: Z-Bolt Green Lasers Reclassified as FDA Class IIIa / 3R Laser; not Dazzlers

Aug 2010 - US Army Public Health Command tests and reclassifies Z-Bolt Tactical Green Lasers as FDA Class IIIa / IEC 3R Lasers.
(See Page 3)

Jan 2011: Field Reports - Entering 6th Year of Deployment Downrange

These reports demonstrate a common thread and prove a general theme. The use of Z-Bolt Tactical Green Lasers for Precise, Visual, & Non-Verbal Communication, Command, & Control.
(See page 4)

Dec 2010: Communication, Command, & Control: Visual, Non Verbal & Precise

Z-Bolt Hand Held Tactical Green Lasers have evolved from target marking to wide spread use improving communication, command, & control through precise visual and non-verbal signaling.
(See Page 5)

Dec 2010: EOD Techs Provide Positive Reviews

The Z-Bolt C-TRIP Laser Line Generator (Trip Wire Illuminator) is a new, effective, and improved tool to aid in the detection and defeat of Trip Wires.
(See page 6)

Dec 2010: Training Improved and More Efficient with Green Laser as Visual Aid

Trainers & Instructors using Z-Bolt Tactical Lasers agree – the laser beam and/or dot clarifies instructions; aids in trainee focus to subject matter; speeds course work and trainee subject retention.
(See Page 7)



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AFGHANISTAN

2011 Shipments to Afghanistan & Iraq.

IRAQ

Aug 2010

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Dec 2010

Green Laser use modified and approved by Theater Commanders in 2011, removing theater restrictions imposed from Nov 2009 to Nov 2010 on Tactical Green Lasers & Dazzlers.

Dec 2010

Directorate of Defense Trade Controls (DDTC) approves the "Permanent Export" (48 months) of Z-Bolt Tactical Green Lasers to the Afghan Theater.

Feb 2011

2,000 pcs Z-Bolt Tactical Green Lasers shipped to Iraq and Afghanistan Theaters, both Weapons Mounted and Hand Held.

1,600 pcs BTMK-10 Tactical Green Lasers with M4 Mounts shipped to Bagram for immediate deployment to US Army units throughout Afghanistan.

Other recent shipments - 1-506th, 4BCT, 101st ABN DIV (Afghanistan) - 300 pcs BTG-10G Tactical Green Lasers (Hand Held)

4th BSTB, 4BCT, 1 CAV (Iraq) - 60 pcs BTMK-10 Green Laser System (M4 Weapons Mount)

From 4th BSTB, 4BCT, 1 CAV (Mosul, Iraq)

"Z-Bolt Green Lasers provide an effective and non-lethal way to stop, signal or temporarily blind vehicles or personnel that do not obey initial instruction at TCP or Cordons. During times of low visibility the lasers are a readily visible substitute to hand and arm signals."

"Z-Bolt Lasers can also aid in the identification of fire sectors and targets during Cordon and TCP employment. The lasers will ensure the safety of US Personnel by providing a visible and non-verbal command and control tool and ensure the safety of Iraqi Forces and civilians by providing a non-verbal means of communication during EOF, RCP, and TCP operations."



BTG-10G Facts:

- Green, Red or Infrared
- Hand held simple tactical laser
- Lowest cost of all military lasers; < \$150
- Multi-discipline deployment as communication command control device.
- Durable all weather environment protection
- Lightweight, compact, and versatile.





Z-Bolt Green Lasers Reclassified as FDA Class IIIa / 3R Laser

NOT DAZZLERS

Aug 2010 - US Army Public Health Command tests and reclassifies Z-Bolt Tactical Green Lasers as FDA Class IIIa / IEC 3R Lasers.

Military Green Lasers are a fairly recent addition to the modern day battlefield. Green lasers were not previously fielded due to the laser's extreme brightness – magnifying the laser's visibility (40 times brighter than red lasers) to the unaided human eye. Not a great attribute if concerned about unseen movement and stealth. However, the recent conflicts in Iraq and Afghanistan have required US Personnel to operate in close quarters with civilians and non-combatants. The insurgents readily move in and out of urban areas by blending in and using the civilian population to disguise their true identity and intentions. Infantry training and doctrine was developed to deal with these battlefield problems. We now know this doctrine as EOF – Escalation of Force. US Forces must separate the good from the bad; innocent civilians from enemy combatants. US Forces now train and are familiar with the employment of green lasers in uses and applications ranging from Convoy Protection to Base Security; from Traffic Control Points (TCP) to Entry Control Points (ECP).

Dazzlers - Definition

The first green laser systems fielded for Military use were dubbed "dazzlers". The green laser uses the intense brightness of a high power laser but spreads or diverges the beam for the purpose of warning and visual disruption, not precise pointing or visual communication. Designed and employed to visually disrupt and temporarily impair a person's vision – but not cause permanent damage. These systems use extremely bright, high powered lasers, require user training, and are generally very expensive to purchase and field. At 100 meters, the "spot size" of a dazzler is approx. 4 feet, the spot size for a non-divergent Tactical Green Laser is approx. the size of a quarter.

Z-Bolt Tactical Green Lasers

BOLT began shipping Z-Bolt Tactical Green Lasers to Iraq in 2006. 40,000 pcs Z-Bolt Tactical Green Lasers have shipped to Iraq and Afghanistan 2006-2010. Field reports demonstrate a wide variety of uses.

Unlike dazzlers, Z-Bolt Lasers provide precise, visual and non-verbal communication, command & control. Trip wire illumination; target marking; IED marking from safe distance for Robot or K-9 inspection; guard house signaling & fence line incursions; guard & perimeter patrol; directing team & resources for TCP and Cordon, Route Clearance Patrols (RCP); general force protection, staff briefings, etc.

Force Multiplier – Deploy down to Platoon Level

Tactical Green Lasers	vs	Dazzlers
<ul style="list-style-type: none"> • Less Than \$150 ea • < 5mW, FDA Class IIIa, IEC 3R • No Special Training Required 		<ul style="list-style-type: none"> • More than \$5,000 ea • > 125mW, FDA Class IIIb, IEC 4 • Special Training Required, Written Tests, Etc.



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FIELD REPORTS

Entering 6th Year of Deployment Downrange

These reports demonstrate a common thread and prove a general theme. The use of Z-Bolt Tactical Green Lasers for Precise, Visual, & Non-Verbal Communication, Command, & Control.

Sgt - Aviation Operations Specialist, HHT 3 HBCT, 1st CAV (Afghanistan – 2010)

"During my tour in Afghanistan, I worked as the night shift brigade aviation NCOIC. Before our FOB (Forward Operating Base) received an ATC complement, I used my [Z-Bolt – BTG-10G] green laser to mark the LZ for aircraft new to the AO (Area of Operations). In addition our FO,s (Forward Observers) used them to mark areas while conducting operations in and around the battle space. In addition, I plan on using the BTG-10G to mark Non-Standard LZ's on my next deployment."

SSG - Infantry, 86th IBCT (Afghanistan – 2010)

"I am enclosing a photo of me inspecting an IED site on MSR Nevada in Parwan province . . . In this scenario, we would use the [Z-Bolt Green Laser] as a pointer to point out areas where people should walk or not walk & primarily gather evidence in a professional manner. While doing operations in villages, the laser is typically used as a non-lethal alternative to back people up, point danger areas & dazzle vehicles to stop. At night, gunners point them to warn vehicles as well. I have also used the [Z-Bolt Green Laser] to scare dogs & divert goats & sheep off the road. It is an invaluable tool along with a good weapon mounted flashlight. I always preferred my M-4 as light as possible so I would shed a PEC or large optics. I would never give up the laser. There is too much it can do."

Non-Lethal Force Protection Counter Measure, 1-5 Cav, 2BCT, 1 CAV (Iraq - 2007)

"As a non-lethal force protection counter measure, the Z-Bolt Green Lasers proved invaluable in drawing the attention of Iraqi nationals who inadvertently placed themselves in situations that might have proven harmful were it not for the use of the Z-Bolt Green Laser. The intensely bright, precisely focused beam served as an effective deterrent and drastically limited the need for escalation of force to more lethal levels . . . This simple, handy tool is a proven combat multiplier and should be standard issue to every small unit leader in Iraq today."

Base Security – HHC/4BSTB (Base Defense Reactionary Force – Iraq 2010)

"The BDRF conducts perimeter patrols on a daily basis outside of COS Marez. Due to the nature of our mission, we are in constant contact with the local civilians. The threat of attack is present and continuous. The Z-Bolt BTMK-10 will aid our EOF efforts should we need to use them."

Military Police – 214th MP CO (Iraq - 2010)

"214th MP CO conducts tactical patrols and provides security for Task Force Shield (STT) personnel who advise, train, and assist their Iraqi counterparts at different locations in/around ----- Iraq. The lasers will ensure the safety of US Personnel by providing a visible and non-verbal command and control tool and ensure the safety of Iraqi Forces and civilians by providing a non-verbal means of communication during EOF, RCP, and TCP operations."

NSWG-4, SBT-22 (Stennis Space Center, MS - 2011)

"The Z-Bolt BTG-10G Tactical Green Laser was evaluated during RT-2 training phase at Special Boat Team Twenty Two, Stennis Space Center, Mississippi. Conducting various operations on the Pearl River and during land navigation operations. The Z-Bolt BTG-10G Tactical Green Laser function was outstanding."





Communication, Command & Control

VISUAL, NON VERBAL, PRECISE

Z-Bolt Hand Held Tactical Green Lasers have evolved from target marking to wide spread use improving communication, command, & control through precise visual and non-verbal signaling. Z-Bolt Green Lasers simplify tactical operations and provide an indispensable tool for cross cultural, multi-language communication with Allied and Indigenous Government Forces.

Infantry & Force Protection

- Visual Comm to EOD Tech, Illuminate Suspected IED
- Base Security Visual Comm - Guard & Perimeter Patrol
- Point to Threat - Share Concern - Hail & Warn Individuals
- Force Multiplier - Visible Beam and Bright Dot Dusk to Dawn.
- Direct Team & Resources: Dispersed Team - Confirm Verbal Instructions

EOD & IED Marking

- Illuminate Danger - Visual Comm to Squad
- Mark Target from Safe Distance for Robot or K-9 Inspection
- Building, Structure Entry – Trip Wire Detection and Illumination
- Direct Resources & Team - Visual Guidance, Establish Blast Perimeters

Base Security – Checkpoints - Convoys

- Cordons and Route Clearance Patrols (RCP)
- Guard House Signaling - Fence Line Incursions
- Allow / Deny Access to Entry Control Points (ECP)
- EOF - Checkpoint - Vehicle Illumination Driver Attention
- Allow / Deny Access to Traffic Control Points (TCP) and Cordons
- Visible and Non-Verbal Command & Control Tool for EOF and TCP

Air Resources – Marking, Visual Comm

- Ground to Pilot: Illuminate Building, Object, Vehicle, LZ Hazards
- Mark Non-Standard LZ – Mark LZ for aircraft new to AO (Area of Operations)
- Pilot Visual Comm to: Ground Support, Onboard Crew Member (Logistics / Weapons)

Trainers & Instructors

- Precision Beam & Dot Adds Clarity
- Precise Visual Aid - Eliminate Confusion
- Visual Command & Control / Instruction Enhancement / Confirmation



Knurled Tube Option Shown Above



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EOD

EOD Techs Provide Positive Reviews

Z-Bolt BTG-10G Green Lasers (standard dot) have long been employed by EOD teams for IED marking and trip wire illumination. The Z-Bolt C-TRIP Laser Line Generator (Trip Wire Illuminator) is a new, effective, and improved tool to aid in the detection and defeat of Trip Wires. Z-Bolt C-TRIP, developed in late 2010, adds capability to the EOD Kit list. Both laser configurations (dot or line) available in Green (532nm), Red (635nm), or Infrared (830nm).

Navy EOD Tech, EOD Group Two (Naval Amphibious Base Little Creek, VA - 2011)

"I have been evaluating the C-TRIP (Green Laser Trip Wire Illuminator) extensively with various Navy EOD teams. The unit has been put to good use for trip wire searches in a high speed assault atmosphere. Navy EOD doesn't have all day to clear areas during assaults because of the fast pace. This tool allows quick scanning of the area in a fraction of the time spent using a green dot laser. It has done well with all trip wire types ie, copper wire, metal wire, fishing line, and regular thin rope type material. We also use it in mine strike scenarios when Navy EOD and SEAL teams are "roping in" a rescue helo for a downed man. The tool is also good to highlight the path of command wire quickly. The guys really like it."

Captain, 61st CST/WMD (Arkansas – Dec 2010)

"The C-TRIP worked well for checking entry building points and hallways for trip wires. It worked well while wearing Level A suits behind 2 layers of plastic and a face mask. I would recommend this product in my field. We loved your lasers. They worked well in our operational environment. Being able to quickly screen for lines, trip wires, and hazards in Level A suits made us much more effective. This will definitely become part of our arsenal. The initial impression is that the team really likes the C-TRIP variant, while I like the BTG-10G DOT version for tactical communication."

GySgt – MWSS-373 EOD (Mojave Viper – Oct 2010)

"I have tested both items (BTG-10G & C-TRIP Green Laser Units) at enhanced Mojave Viper for a month and a half. I have to admit I had my doubts about the C-TRIP but, when I was faced with actual trip wires, the laser worked as promised (even during daylight hours)."

SSG – Australian Army, Counter Improvised Explosive Device Training Team, CIED-TT (Iraq – 2008)

"I am currently deployed in Iraq serving in a Counter Improvised Explosive Device Training Team . . . We had personnel on our courses using the Z-Bolt BTMK-10 and the product has been used in target marking of the explosive devices with great success. I think the product is an outstanding bit of kit with many applications for the troops in the field."





Instruction More Effective with Green Laser Visual Aid

TRAINING IMPROVED

Trainers & Instructors using Z-Bolt Tactical Lasers agree – the laser beam and/or dot clarifies instructions; aids in trainee focus to subject matter; speeds course work and trainee subject retention - Z-Bolt Lasers deliver positive results. BTG-10 Dot Laser available in Green (BTG-10G, 532nm), Red (BTG-10R, 635nm), or Infrared (BTG-10ir, 830nm) laser light spectrums.

GySgt, Mobile Training Company - Combat Hunter Program (Camp Pendleton - Dec 2010)

“The Z-Bolt Tactical Green Laser is an essential tool for our training team. The laser makes for quick, precise commands – students respond immediately and without confusion – the laser saves us time. We are building a Combat Hunter Suite that will serve as a training kit/module for other Marine Corps battalions and your green laser will definitely be included.”

Protective Services Training Instructor – Military Police School (Fort Leonard Wood - Nov 2010)

“I utilized your BTG-10G mainly for target marking, target range instruction, and occasional briefings. It has proved to be a superbly constructed and reliable tool. The battery life is very good as I still have the original still in it. It’s design is rugged and weather durable. Very good product that I will highly recommend.”

Senior Instructor, Homeland Security – Firearms Training Division (Alexandria, VA - Sept 2010)

“Our training unit has used the Z-Bolt BTG-10G for multiple missions; standard marksmanship training which includes everything from identifying shot placement areas for students to target identification in live-fire field training. We have also used your products as classroom pointers, as well as identifying potential hazards during force on force training. In all respects the green laser [BTG-10G] was bright enough to be seen by all students at all of the distances we needed them to see... even outdoors in the day-time.”

Recent Shipments:

8th PYSOPS BN - Fort Bragg, NC
27th SOSS / SERE - Cannon AFB, NM
FBI Bomb Squad/WMDC - Chicago, IL
EOD Group Two - NAB Little Creek, VA

DEVGRU - Dam Neck, VA
705th EOD CO - FOB Shank, Afghanistan
NYPD Counter Sniper Team - New York, NY
XVIII Airborne Corps - USF-I, Baghdad, Iraq

INIWIC

Interservice Non-Lethal Individual
Weapons Instructor Course
Marine Corps Detachment

DHS HQ – Consolidated Training Facility

Firearms & Training Division
Federal Protective Service
Alexandria, VA.



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Communication Command Control

Application Matrix Hand Held

Category	Application	IEC Class 3R. < 5mW			
		Precise	Laser Dot	Laser Line Generator	
		BTG-10G Green	(NVG) BTG-10ir Infrared	C-TRIP Green	(NVG) C-TRIP-ir Infrared
EOD & IED Marking	Illuminate Danger - Visual Comm to Squad	X	X		
	Mark Target from Safe Distance for Robot or K-9 Inspection	X	X		
	Building, Structure Entry – Trip Wire Detection and Illumination	X	X	X	X
	Direct Resources & Team - Visual Guidance, Establish Blast Perimeters	X	X	X	X
	Command Wire Marking / Detection	X	X	X	X
EOF, Infantry & Force Protection	Route Clearance	X			
	Convoy Protection	X			
	Visual Comm to EOD Tech, Illuminate Suspected IED	X	X		
	Base Security Visual Comm - Guard & Perimeter Patrol	X	X		
	Point to Threat - Share Concern - Hail & Warn Individuals	X			
	Force Multiplier - Visible Beam and Bright Dot Dusk to Dawn.	X			
	Direct Team & Resources: Dispersed Team - Confirm Verbal Instructions	X	X		
Base / Port Security – Checkpoints - Convoys	Cordons and Route Clearance Patrols (RCP)	X			
	Guard House Signaling - Fence Line Incursions	X			
	Allow / Deny Access to Entry Control Points (ECP)	X			
	EOF - Checkpoint - Vehicle Illumination Driver Attention	X			
	Allow / Deny Access to Traffic Control Points (TCP) and Cordons	X			
	Visible and Non-Verbal Command & Control Tool for EOF and TCP	X			
Air Resources – Marking, Visual Comm	Mark Non-Standard LZ – Mark LZ for aircraft new to AO (Area of Operations)	X	X		
	Ground to Pilot: Illuminate Building, Object, Vehicle, LZ Hazards	X	X		
	Pilot Visual Comm to: Ground Support, Onboard Crew Member (Logistics / Weapons)	X	X		
Trainers & Instructors	Precision Beam & Dot Adds Clarity	X	X		
	Precise Visual Aid - Eliminate Confusion	X	X		
	Visual Command & Control / Instruction Enhancement / Confirmation	X	X		
Maritime Operations	Visit Board Searches	X	X		
	Counter-Drug / Piracy Operations	X	X		
	Underway Replenishments	X			
	Anchored / Moored Security Watches / Patrols	X	X		
	Patrol Boats Defending Fleet Vessels	X	X		
	Landing Craft Operations	X	X		

All Versions Mountable with LMA-10 Mount Kit to M4/M16 1913 Rail

