

MULTI-RAY800

40 mm Fire Control Unit & Airburst Programmer



The Rheinmetall Multi-Ray800 is a highly integrated system for 40 mm low and high velocity grenade launchers. It can be mounted on any stand-alone, underslung or multiple grenade launcher via MIL-STD-1913/STANAG 4694 Picatinny rail. The integrated ballistic computer stores the ballistics of 32 different ammunition and calculates a ballistically corrected aim point.

- Precise range measurement
- Exact elevation angle
- First round hits
- On target – every time
- Reduced collateral damage

Fits most rifles, grenade launchers, machine guns, and shoulder fired anti-tank/bunker weapons such as the Carl Gustav or SMAW.

CHARACTERISTICS/FEATURES

- Laser Range Finder (LRF) – undetectable with NVGs
- Inclinometer – measures shooter/target elevation delta
- Thermometer and barometer to measure air temperature and pressure

- Ballistic Computer – calculates the correct elevation angle, stores the ballistics for 32 ammunition types – only desired types shown
- Focusable infrared (IR) illuminator
- Invisible infrared (IR) target marker
- Visible red light target marker
- Weapon cant indicator
- Compact servomotor – moves the FCU to the corrected aim point
- Time-of-flight calculator
- Integral ABM programming unit – programs air-burst rounds in first few meters of flight
- Integrated Dismounted Soldier Identification (DSID) interrogator
- Direct aiming buttons for 50/100m (LV) or 100/200m (MV) for quick reaction or back-up
- Iron sights for immediate reaction for 50m/100m (LV) or 100m/200m (MV) or back-up
- Picatinny rail mounts for left/right side or top application
- Two training and two combat modes – from laser class 1 (eye-safe) to laser class 3B

OPERATION: LASE, AIM, FIRE

- Initiate LRF – target range is displayed on screen
- The Multi-Ray800 moves to the correct elevation angle
- Aim at the target
- Fire

BENEFITS

- First round on target
- Fast and accurate target engagement
- Reduced collateral damage
- Lightweight and compact
- Day/night operation
- Easy zeroing
- Sight, target markers and laser range finder are always on target
- Rapid target shift – no zeroing when changing targets

DEVICE DATA

General		Wavelength	
Length x width x height	152 x 73 x 110 ¹ mm		850 nm
Extension from rail	67 mm	Beam divergence	10 mrad to 100 mrad
Range finder			
Weight incl. batteries, rail mount and reflex sight	700 grams	Measurement range	1,500 m
Battery	2 x DL123	Power output	5 W pulse
Battery life	7 h (Dual IR 30/80 mW) or 500 target acquisitions	Wavelength	1,550 nm
Waterproof	10 m for 2 h	Beam divergence	0.5 mrad
Operating temperature	-32°C to +71°C	Ballistic computer	
Visible aiming laser		Type	RSE Algorithm
Max. power output available	30 mW	Max. storage capacity	32 ammunitions types
Wavelength	Red: 635 nm	Elevation mechanism	Electric motor
Beam divergence	0.5 mrad	Tilt/Elevation range	0° to 30°
IR aiming laser		Atmospheric sensors	Pressure, temperature, humidity
Max. power output available	30 mW	Canting assistance	In display, blinking red dot sight
Wavelength	850 nm	Airburst programmer (integrated)	
Beam divergence	0.5 mrad	Power output	5 W pulse
IR illuminator with electronic focus		Wavelength	905 nm
Max. power output available	80 mW/150 mW	DSID laser (optional)	
		Power output	5 W pulse
		Wavelength	905 nm

¹ Height is including Docter sight.

Laser power output is listed at max. capacity. All lasers are user-dimmable.

Laser power output can be limited by color-coded remote cables for training purposes (eye-safety).

All laser powers are +0%/-20% and all wavelengths are within ±10 nm over temperature range and battery life.

PRECISE. EFFICIENT. AIR-BURST CAPABLE.



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