



Rugged, Sensitive, and Sophisticated



HARDWARE/SOFTWARE

- **Start and Stop Detectors** identify a small change in illumination when a projectile passes through the field of view, and translate this into an output pulse.
- **BNC Connector** provides a TTL output pulse, which may be used to trigger other equipment, such as a high-speed camera.
- **Light Alloy Plinths** on which the detectors are mounted allow for permanent range installation, or wall-mounting.
- **Automatic Gain Control System** compensates for ambient light changes.
- **Tracer Shield** can easily be fitted to enable velocity measurement on tracer rounds.
- **Fixed-Spacing Cradles** can be supplied for forensic applications.

OPTICAL DETECTOR TYPE 858

The Optical Detector Type 858 is an integral component of MS Instruments' Range Equipment, most commonly used as part of the Projectile Velocity Measurement System (PVMS).

This brand new design has been meticulously created to yield a rugged and sophisticated system that will operate successfully on both outdoor and indoor ranges, for all users.

METICULOUSLY CREATED

SPECIFICATION

HARDWARE	
Lens	50mm Focal Length Camera lens at full aperture
Field of View	36° x 0.17° for 50mm lens
Projected Slit Width at 1m	1.5mm for 50mm lens
Slit Position	Defined by two bosses brought out on plinth
Vertical Alignment	0.3mrad
Pre-Set Elevation Angle	0°, 15°, 30°, and 45°
Sensitivity	Will respond to <0.1% change in ambient light level
PROJECTILES	
Projectile Calibre	2mm to 155mm and above
Projectile Velocity	10m/s to >5000m/s
POWER/COMMS	
Power Supply	Remote Unit via multicore cable
Pulse Output	Fed by line driver to 818/817, BDAS or other
Monitor Outputs	Illumination level monitoring in terms of DC voltage at BNC
ENVIRONMENT	
Operating Temperature	0°C - 50°C (32°F - 122°F)
Operating Brightness	15cfm ² to >1500cfm ² at source colour temperature of 2780K
Humidity	Units are sealed against moisture
DIMENSIONS	
L x W x H	324mm x 280mm x 365mm (12.8in x 11.0in x 14.4in)
Weight	14kg [30.9lbs] each
ACCURACY of VELOCITY MEASUREMENT	
When used with MSI timer systems, velocity accuracy is up to 0.05%	

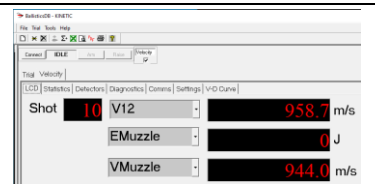
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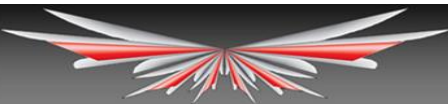
Mini Flight Follower Type 632



Four-Channel Remote Unit Type 818



Ballistics DB Control Software Type 950-571



MS INSTRUMENTS Range Consultancy

Precision, Expertise, Quality

- Professional Bespoke Range Designs
- State-of-the-Art Product Rendering
- Only the Latest Standards



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