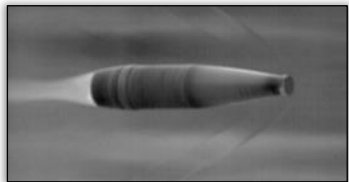


Revolutionary Projectile Imaging



MINI FLIGHT-FOLLOWER TYPE 632

The Mini Flight-Follower has been developed to meet the high-speed-imaging needs of modern ammunition designers, extending MSI's range of unique, specialised imaging solutions. The system is a complete Turn Key system that consists of a computer controlled triggered rotating mirror positioned in front of a High Speed Video camera. The mirror is programmed to rotate at the correct speed, such that the

camera will "follow" the projectile.

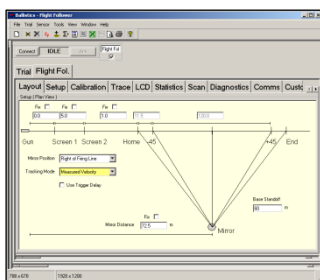
Typically, the system will track the trajectory for 100m or more as the mirror scans a 90° arc, providing high quality images of the projectile in flight.

This new, compact design is a complete package that gives high performance along with its convenience. The combined functionality of the hardware and software greatly simplifies system operation without limiting flexibility.

HIGH QUALITY IMAGING

Simple and Versatile Equipment:

- Simplified range surveying
- Accommodates a variety of cameras
- High mechanical stability



Efficient and Optimised System:

- Software wizards
- In-built instrumentation
- Real-time mirror position control

Time and Effort Saving:

- Easy, quick set up
- Remote operation
- Automatic adjustment to data entries



HARDWARE


- **Velocity profile modes** (*Predicted or Measured*) with single or dual trigger inputs and built-in trigger delay.
- **Integrated high speed camera.**
- **Mirror Halt function** stops the mirror in mid-flight for impact analysis.
- **Trackable projectiles** include practically anything that is travelling too fast to observe.

SOFTWARE

- **Remote Operation via dedicated MS Windows software** (with set-up wizards) ensures optimised set-up.
- **Optional Xcitex software** provides the user with an assortment of post analysis measurements and calculations to track and study the phenomena.
- **Low cost integrated Turn Key System.**

SPECIFICATION

CONFIGURATIONS	
Operation Modes	<ul style="list-style-type: none"> • Predicted or Measured velocity modes • Flash detector (standard) or 2 x Skyscreen (optional) • 1 x Multi-trigger (up to 256 inputs)
Power	100 – 240V, 50 – 60Hz
Trigger Output	<ul style="list-style-type: none"> • 1 x +5V TTL in synchronism with the start of the mirror scan
Communication	GigE/Wireless LAN (optional)
Camera	
Resolution	1024 x 1024 (pixels)
Frames Per Second	Up to 6400 frames per second at full resolution
Memory	8GB (up to 16GB optional)
MIRROR	
Scan Ratio	0.1 - 100

Tracking Angle	100° total, 90° tracking
Angular Tracking Accuracy	Better than 0.1°
Flatness	¼ Wave
<i>*Scan Ratio = Projectile Velocity ÷ Stand-off Distance</i>	
ENVIRONMENT	
Operating Temperature	0°C - 40°C [32F - 104 F]
DIMENSIONS	
L x W x H (mirror)	135mm x 100mm
L x W x H (housing)	745mm x 335mm x 300mm [29.5in x13.5 in x12in]
Weight	26kg [57lbs]
SOFTWARE	
Standard	Ballistics DB
Option	Post analysis 

USED WITH



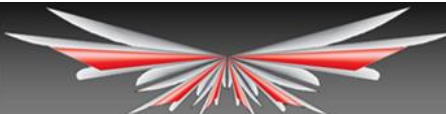
Multiple Trigger System Type 630-320



Flash Detector Type 768






Optical Detector Type 858



MS INSTRUMENTS Range Consultancy

Precision, Expertise, Quality

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

MS Instruments Ltd.

Unit 4, Ravensquay Business Centre, Cray Avenue
Orpington, Kent, BR5 4BQ, United Kingdom
Tel: +44 (0)1689 883 020
Fax: +44 (0)1689 871 392
contact@msinstruments.co.uk
www.msinstruments.co.uk

ISO 9001 SCS cert. No. 980010
632-miniflight-follower - Jul-17

The information in this document is correct at the stated time. MS Instruments Ltd has a policy of continuing development and reserves the right to make design changes/improvements to the products.