

## PRECISION REAL-TIME TRACKING MOBILE AUTOMATIC TRACKING SYSTEM (MATS)

E-O Imaging has developed an affordable automatic video tracking system derived from 30 years of video tracking experience. This system meets the need for a low-cost, high-performance tracking system for range and surveillance applications.

### Features

- Compact
- Lightweight
- Manual or Automatic Operation
- Accurate and Reliable
- Self-Contained
- Easy to Setup and Use
- Single/Multiple Sensors Configurations
- Slave and Designate Modes
- Programmable Scan Modes
- Data Logging

### Performance Specifications\*

- |                         |            |                                |
|-------------------------|------------|--------------------------------|
| • Payloads              | (MATS-L):  | 75 lbs. (max.) balanced        |
|                         | (MATS-H):  | 200 lbs. (max.) balanced       |
| • Velocity              | Maximum:   | 60° per second                 |
|                         | Minimum:   | 0.01° per second               |
| • Acceleration          | Azimuth:   | 60° per second <sup>2</sup>    |
|                         | Elevation: | 60° per second <sup>2</sup>    |
| • Encoder Resolution    | (MATS-L):  | 16 bits                        |
|                         | (MATS-H):  | 17 bits                        |
| • Tracking Accuracy     |            | 0.1 degrees                    |
| • Repeatability         |            | 36 arc sec                     |
| • Azimuth Travel        |            | ±180°                          |
| • Elevation Travel      |            | +85° - 30° (payload dependent) |
| • Power                 |            | 120/240 Vac, 50/60 Hz, 3 amps  |
| • Operation Temperature |            | -20°C to +60°C                 |

### Applications

- Surveillance
- Manual and Automatic Video Tracking
- Scientific Investigation
- Test and Evaluation
- Simulation and Training
- Time Space and Position Information

### Options

- Laser Rangefinder
- Remote Operation
- Sensor Packages
- Zoom/Fixed Optics
- VME or PCI Intel Based Computer
- IR Camera
- GPS and IRIG B Time
- Alternate Pedestal Configurations (Post or Yoke)
- Velocity >100°/sec.
- Acceleration >100°/sec<sup>2</sup>.

### Basic System Configuration

- Tripod
- Pan and Tilt Assembly
- Controller
- Joystick (2 axis)
- E-O Imaging Series 6000 Automatic Video Tracker\*
- RS-422 Interface with 50 feet of Cable
- System Software and Graphical User Interface (GUI)
- CCD Tracking Camera with 14-385mm Zoom Lens
- Power Supply
- Operator's Manual
- Control Computer

\* Consult factory for latest specifications and options.

## Engineering High Performance Tracking Solutions

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## System Level Products

### Series 3000 Automatic Tracking System (ATS)

The Series 3000 ATS is designed to meet the need for a low cost, high performance turnkey tracking system for use in a broad range of applications and environments. The system design uses proven off-the-shelf hardware for enhanced reliability and maintainability. The system is easily adapted for shipboard, airborne, vehicle-mounted, surveillance and tracking applications. The payload can be configured to handle a broad range of sensors, including TV, FLIR, MMW Radar, Laser Rangefinder, LIDAR and RF Systems.

The system is available in various configurations, including man-portable, fixed site and transportable systems.

### Features and Options

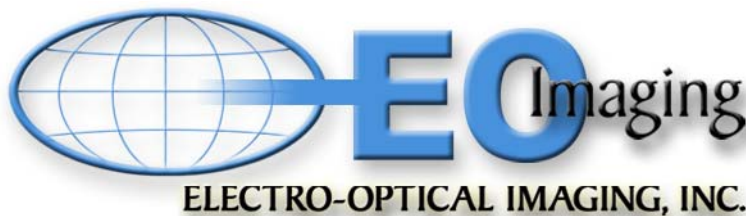
- Local/Remote Control
- Microprocessor Control
- Payload Mounting Structure
- Direct Drive DC Motors for Precision
- Single Station TSPI Solution
- Integration of Customer Furnished Equipment (CFM)
- Payload Instruments (Video/FLIR/MMW Radar/LIDAR/LRF) (option)
- Gyro Stabilization (option)
- Optical Encoder Packages (option)
- Velocity >100 Degrees/Sec (option)
- Acceleration >100 Degrees/Sec<sup>2</sup> (option)
- Operator's Console (option)
  - Video Monitors
  - Video Tracker
  - Video Annotator
  - Video Recorder

### Services and Capabilities

- **Depot Level Repair** - E-O Imaging provides depot level repair for the following DBA Systems/Titan Corporation Video Tracker Products:
  - Model 606-3, 606-3A, 606-3M/C, 606-3M/4 Trackers
  - Model 606-4M/C, 606-4M/R, 607-4M/C, 607-4M/R Trackers
  - Series 6000 VME Trackers
- **Equipment Lease** - for customers with short term needs or limited budgets, E-O Imaging has Video Trackers and Tracking Systems available for lease. Consult the factory for details and availability.
- **Refurbished Equipment** - E-O Imaging has a number of reconditioned trackers and card sets. Contact the factory for available models and price.
- **Capabilities** - E-O Imaging offers its customers a broad array of technical capabilities including:
  - Embedded DSP Hardware/Software Development
  - System Engineering
  - Mechanical Design and Packaging
  - Custom Systems and Products
  - Servo Control
  - Custom FPGA Design
  - Unix® and Windows® Software Development
  - Engineering Support and Training

### Retrofit Kits

E-O Imaging has available Retrofit Kits for the Model 606-3/3A and 606-4M/C that allow the user to incorporate the latest tracker technology in their existing rack mount trackers. Retrofit Kits can be structured around E-O Imaging's PCI or VME-based trackers.\*



4300 Fortune Place, Suite C  
West Melbourne, FL 32904

phone: 321-435-8722 • fax: 321-435-8723

email: sales@eoimaging.com • website: www.eoimaging.com

\* Consult factory for latest specifications and options.