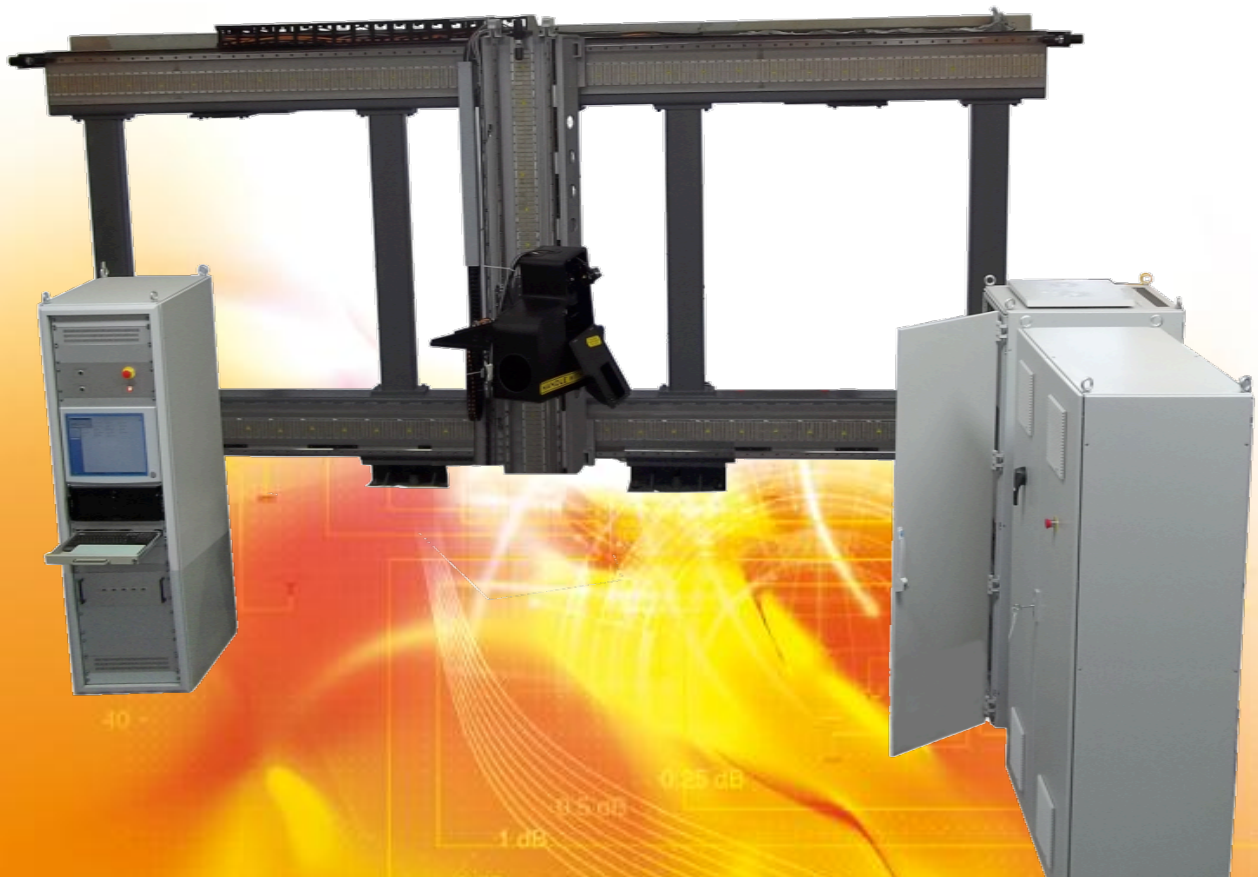


Full range of Motion Simulators that evolve with your needs

**iXMotion 4-Axis Target Motion Simulators TMS Series**  
**2-Axis X-Y linear Axis**  
**2-Axis Swiveling Platform with embedded collimator**



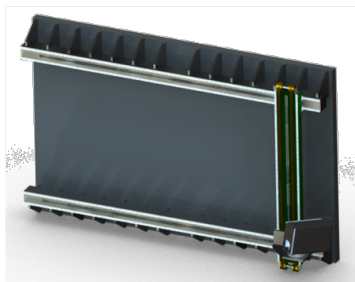
TMS Series

**iXMotion** multi-axis motion simulators **TMS Series** are dedicated to perform evaluation of different electro-optical tracking/surveillance systems. It has been designed to insure coupled motion in direction of customer UUT located in the TMS room.

The **iXMotion** TMS-040 system is a four axis dynamic Target Motion Simulator with two linear and two rotational axes.

All **iXMotion** multi-axis motion simulators **TMS Series** use the unrivalled **iXMotion Multi-Axis ProAxe\*** Controller and are managed by the user-friendly **iXMotion Multi-Axis ProAxe Software**.

All **iXMotion** multi-axis motion simulators **TMS Series** work in local mode, in remote control mode and in real time (Hardware-In-the-Loop HWIL capabilities with servo loop up to 500  $\mu$ s).



TARGET MOTION SIMULATOR



COMMAND & CONTROL CABINETS



COMMAND & CONTROL CONSOLE

TMS Series

### 4-Axis Target Motion Simulator TMS-40 Series 2-linear Axis X-Y & 2-Axis Swiveling Platform

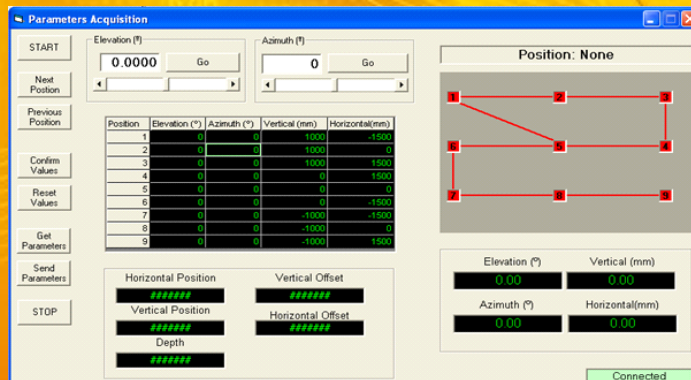
- Wall available: width of 7.3 m, height of 3.2 m and depth of 1.4 m
- Axis 1 swiveling platform elevation maximum range from -6 deg to +8.5 deg
- Axis 2 swiveling platform maximum range from -34 deg to +27,5 deg
- Axis 3 Y vertical translation of  $\pm 1000$  mm
- Axis 4 X horizontal translation of  $\pm 3000$  mm
- Position accuracy X,Y of 1.5 mm
- Position repeatability X,Y of 0.25 mm
- Maximum velocity in X,Y direction of  $\pm 1$  m/sec
- Minimum velocity in X,Y direction of  $\pm 1$  mm/sec
- Peak acceleration in X,Y direction of  $\pm 10$  m/sec<sup>2</sup>
- Angular accuracy for swiveling platform < 0.05 deg

### iXMotion embedded collimator

- Collimator with focal length of 1000 mm, diameter of 255 mm and aperture of 230 mm
- Motorized wheel and iris with its control electronics
- Set of diaphragms from 0.25 to 20 mrad
- Visible source with motorized control of the luminance & infrared source with motorized control of temperature
- Total weight of collimator with sources of 45 kg
- Following settings are managed through ProAxe Software in local and remote modes:
  - ✓ Size of the target
  - ✓ Target parameters settings
  - ✓ Blackbody temperature
  - ✓ Power ON/OFF procedure & maintenance position
  - ✓ Detection of visible or IR source
  - ✓ Light control of the visible source

- Real-Time operation / HWIL with servo loop up to 500  $\mu$ s
- ProAxe\* Multi-Axis Controller and Software
- Control and command of embedded mounted system through ProAxe\* Multi-Axis Controller and Software

- Target Motion Simulator **TMS Series** can be used with Flight Motion Simulator **FMS Series**
- **iXMotion** controlled collimators are proposed depending on customer specifications
- **System Integration-Bench** is provided as a turnkey solution with validation of both mechanical & optical performances



Adjusting pivot point through iXMotion Multi-Axis ProAxe Software



\* Patent pending