

LIROD Mk2 is Thales lightweight track radar for gun fire control. Its stealth target detection capabilities support ship defense and operation in littoral environments. LIROD Mk2 provides short to medium range acquisition and tracking capabilities down to very low elevations thanks to K-band tracking and TV angular tracking. Its design is optimised to perform in all weather conditions, severe ECM conditions and low to high sea states.

- Ship defence against stealth targets in the littoral environment
- Situational awareness and target observation
- Low weight and small footprint
- High reliability supports long missions
- Qualified and proven system

LIROD Mk2

Lightweight Fire Control Radar/Optronic Director





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Main features

- High precision fire control for small to medium caliber guns and short range missile systems. Use of K band radar with its small beam width greatly reduces low elevation multipath errors.
- High ECCM resistance thanks to K-band radar and TV tracking.
- Shell spotting facilities for gun alignment
- Member of the Thales Track Radar family such as LIROD Mk1, STIR 1.2 EO Mk2 and STIR 2.4 HP. A family that has proven system performance.
- Small target detection in strong clutter. The stable and low noise front end with large dynamic range in combination with advanced coherent Doppler processing enable the detection of small targets in rough sea, adverse weather and land clutter environments.
- Radar surveillance mode for improved situational awareness and early threat detection.
- Observation, classification and tracking with multiple optical sensors.
- Effective target tracking for littoral operation.
- Fast target acquisition.
- Easy maintenance through Built-In Tests and repair by replacement.

Functional aspects

LIROD Mk2 performs the following main features:

- Automatic acquisition of air and surface targets by radar on remote 1D, 2D, or 3D designation.
- Automatic and generative target tracking of one air or one surface target by radar or optronics
- Sector search, with auto-target detection
- Optical surveillance
- Projectile position measurement during gunfire
- Engagement monitoring and kill assessment
- System status monitoring
- The accurate target tracking of LIROD Mk2 can be used for air and surface weapon control.

During target tracking the following functions are available:

- Multiple target report
- Missile launching report
- Kill assessment support
- Shell spotting

Technical characteristics

Sensors

- Radar : K-band
- EO : Black & White camera
IR camera (optional)

Radar system

- Antenna type : elliptical parabolic with monopulse cluster
- Antenna size : 1 m (H) x 0.4 m (W)
- Beamwidth : 0.55°(E) 1.5°(B)
- Frequency band : 35 GHz
- Transmitter type : TWT
- Average power : 100 W
- Instrumented
 - Range limit : 36 km
- Processing : fully coherent Doppler processing

Pedestal drives

- Training movement : unlimited
- Elevation movement : -30° to +85° (ref. ship's deck)
- Slewing speed and acceleration for training and elevation : 2 rad/s and 4,5 rad/s²



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