

RADAR AND THERMAL DETECTION

MANTADIGITAL MULTIFUNCTION WORKSTATION INTEGRATES RADAR AND THERMAL IMAGING



The integration of radar and thermal imaging in MantaDigital provides the operator with the ultimate threat detection and situation awareness tool.

COMBINED RADAR AND FLIR TECHNOLOGY



The combination of thermal imaging and radar in a tightly integrated solution provides the operator with the ultimate situation awareness tool. Whether it be for navigation threat detection or security the combination of MantaDigital and FLIR provide an unbeaten solution. From a single multifunction workstation the operator can access radar, ECDIS and conning functions together with overlaid visual images from infra-red or low-light cameras. Slewing of the camera is directly controlled from the MantaDigital, allowing an operator to automatically track and visually identify contacts both in the day and most importantly at night. This control from the radar allows the camera to follow a tracked target, lock to the range and bearing marker, fix on a ground stationary item or be manually controlled by the operator.

Powerful, flexible, and built to last, the award-winning M-Series is FLIR's premium line of maritime thermal night vision systems. Available with a variety of sensors and resolutions the rugged, waterproof gimbal enclosure provides a continuous 360° pan and +/-90° tilt field of view for horizon-to-horizon visibility.

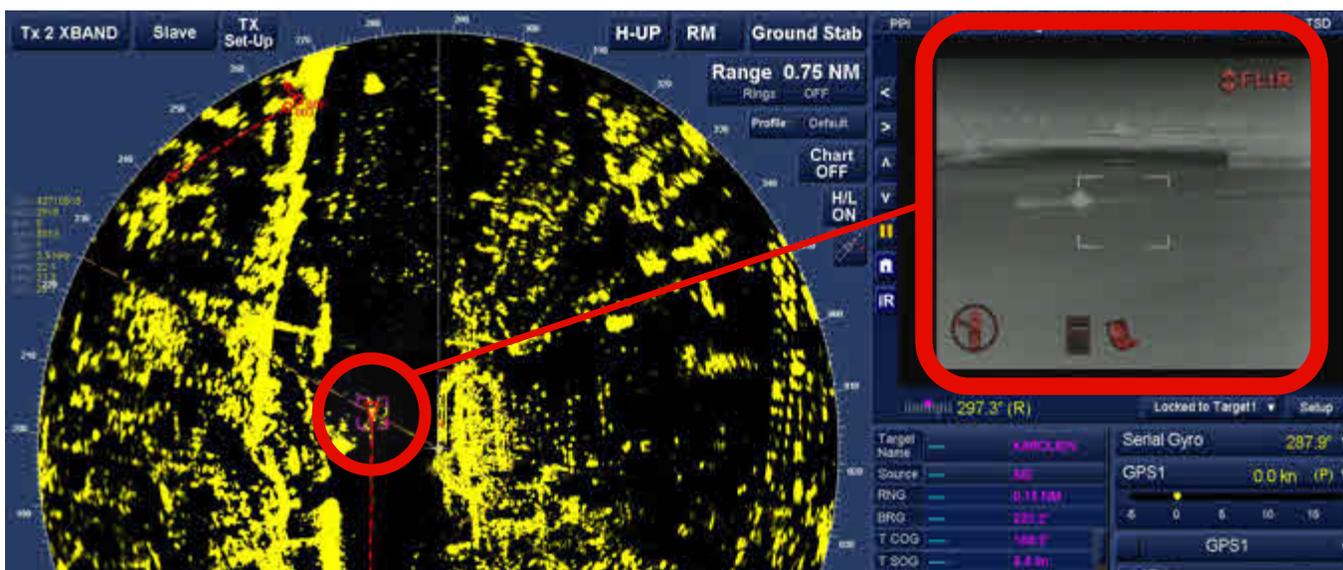
APPLICATIONS

- Ice navigation/spotting
- Oil spill detection
- Ship/cargo security,
- Piracy protection
- Man overboard detection

BENEFITS

- Aids night time navigation
- Increase safety and security on board
- Provides short range threat detection
- Enables radar contact identification
- Meets the ice navigation requirement

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MantaDigital Radar Display with camera locked to ARPA tracked target

CAMERA SPECIFICATIONS

M-Series cameras					
Part Number	M-612L	M-625L	M-625XP	M-324L	M-324XP
Sensor Type	640 × 480 VOx Microbolometer	640 × 480 VOx Microbolometer	640 × 480 VOx Microbolometer	320 × 240 Vox Microbolometer	320 × 240 VOx Microbolometer
Field of View (h x v)	12° x 10°	25° x 20°	25° x 20°	24° x 19°	24° x 19°
Zoom Ratio	2x & 4x	2x & 4x	2x & 4x	2x	2x
Detection Range (person)	1,240m	820m	820m	450m	450m
Detection Range (small boat)	3,200m	2,200m	2,200m	1,300m	1,300m
Weight	4 kg				
Power Supply	12-24 VDC, 25W nominal 50W max				
Temperature Range	Operating: -25°C to +55°C, storage: -40°C to +85°C				

Thermal night vision cameras make navigation safer with crystal-clear video that helps you to see natural and man-made hazards such as floating debris, buoys, rocks and other vessels in total darkness.

Because thermal imaging cameras rely on thermal contrast instead of visible contrast they do not need lighting to produce crisp images during night time. They provide a good overview of the situation giving a much better idea of the surroundings than the narrow beam of a searchlight can. Searchlights are also of limited use in snow and fog as the light beam does not penetrate well due to reflections, in these conditions thermal imaging cameras can help the ship's crew to see further.

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CMS-2001-2