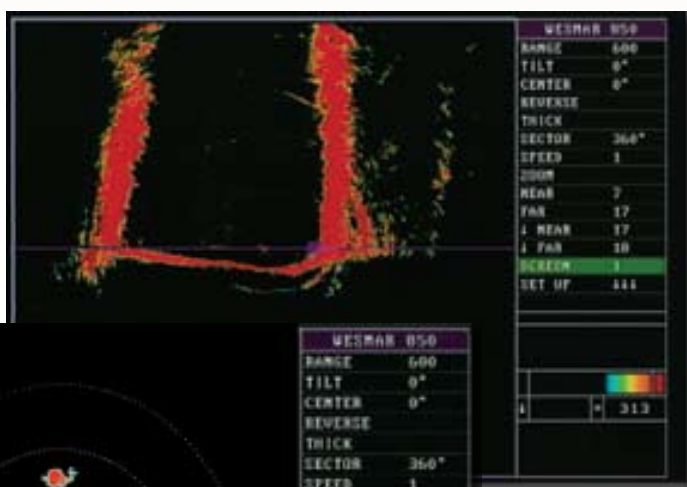




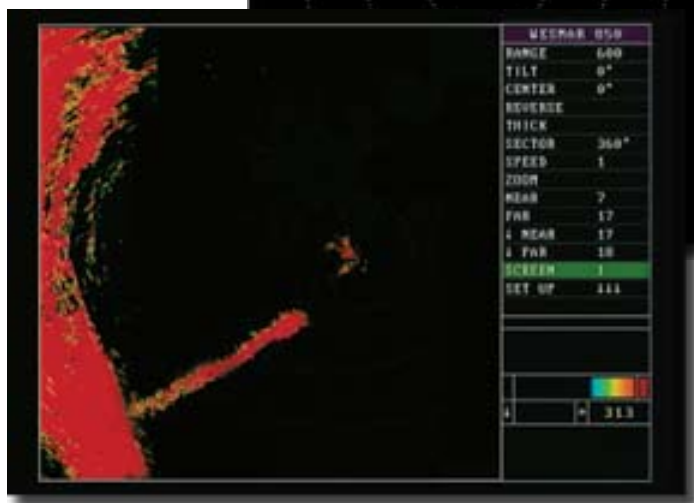
# MS3850 Series

## Integrated Underwater Sensing System for Surface Vessels and Submarines

WESMAR MS3850 Sonar scanning ahead 600 feet in a channel that profiles from zero to only 35 feet at the deepest. This amazing shallow water performance has never before been achieved with sonar.



*Simulated Mine Target*



*Diver Surveillance*

Amazing Shallow Water Performance for:

Inshore Military Missions, Navigation, Mine Avoidance, and Underwater Security





## WESMAR Searchlight Sonars Provide an Impressive Detection Capability for Navigation, Mine Avoidance and Underwater Threats.

The MS3850 is a new technology providing all digital navigation and security sonar, with a number of important new features.

### • **Controlled Stability**

New electronic gyro-controlled stability, capable of corrections for 34 degrees of roll, allows a long-range narrow searchlight beam to search 360 degrees around the vessel in all sea conditions.

### • **Power Booster Technology**

New technology “Power Booster” circuitry transmits an adjustable-length pulse for maximum power and long-range detection.

### • **Larger Transducer Arrays**

Transducer arrays up to 30 percent larger than earlier sonars provide extremely narrow beams and exceptional target resolution.

### • **Noise-Free Operation**

This all-digital design and digital interface between sonar room and bridge allows noise-free operation over long cable runs.



*Traditional Naval Omni Sonar is less effective in shallow water and tight passages due to frequency and beam width.*

*The low frequency (12kHz) UQN4 Depth Sounders typically installed on U.S. Naval vessels are less suitable in shallow inshore waters than the high frequency (60-200 kHz) sounders of the MS3850.*

## Model MS3850-110-11 Designed for Drop-In Installation Into the UQN4 Seachest



WESMAR MS3850  
Hoist and Soundome

- **Easy Replacement for UQN4**

Model MS3850-110-11 is designed to fit the UQN4 Depth Sounder Seachest common on many US Navy Vessels. This easy replacement will enhance these vessels with mine avoidance capability, extreme inshore navigation capability, underwater intruder detection, and vastly improve under the vessel depth capability.

- **Heavy Duty Hydraulic Hoist System**

Heavy duty hydraulic hoist system extends the dome from 0.8 to 1.5 meters below the hull for improved acoustic performance. The sonar dome can be retracted into the hull while under way.

- **Continual Under Vessel Depth Readings**

Integral Depth Sounder Transducer operating at either 200 or 60 kHz allows continual under vessel depth readings while sonar is in horizontal scan mode. Depth Sounder operates while dome is retracted into seachest as well.



- **Submarine Installations**

The MS3850 can be provided with a pressure-compensated submarine dome with the same high performance searchlight capacity.

# MS3850 Series

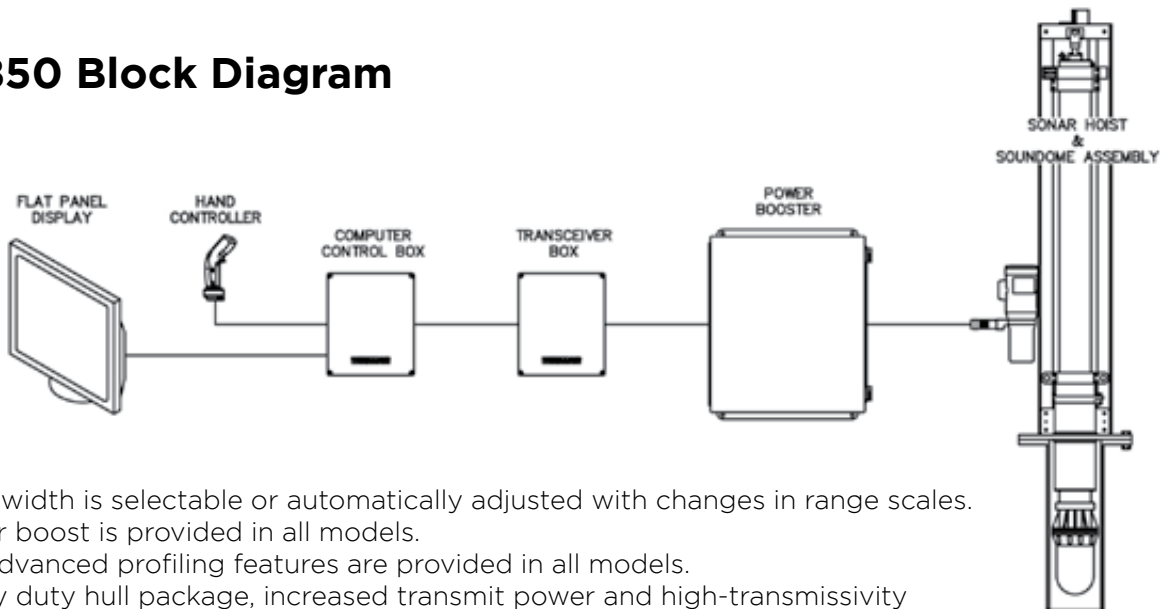
## Specifications

### Sonar Features

### Sounder

MS3850-110-8	Frequency kHz Soundbeam Maximum Range Scale	110 kHz 5.2°x 8.5°H 1000 m	200kHz 28°x 28°
MS3850-110-10	Frequency kHz Soundbeam Maximum Range Scale	110 kHz 4.2°x 5.4°H 2000 m	200kHz 28°x 28°
MS3850-110-11	Frequency kHz Soundbeam Maximum Range Scale	110 kHz 3.6°x 4.4°H 3000 m	200kHz beam 28°x28°

### MS3850 Block Diagram



#### Notes:

1. Pulse width is selectable or automatically adjusted with changes in range scales.
2. Power boost is provided in all models.
3. The advanced profiling features are provided in all models.
4. Heavy duty hull package, increased transmit power and high-transmissivity soundome are provided in all models.
5. For ease of installation, the MS3850-100-11 unit has been designed to fit the UQN4 Seachest installed on most U.S. Navy Vessels.



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#### PRODUCT WARRANTY

Commercial warranty and consumer limited warranty, disclaimer, and remedies. Seller warrants title, materials, and workmanship on equipment, except components manufactured by others for which seller assigns, as permitted, the original manufacturer's warranty. Seller's warranty period for all applicable express or implied warranties shall be ninety (90) days after installation or one (1) year after date of shipment to the original buyer, whichever time period expires first. Nonconforming equipment reported to seller during the applicable warranty period and returned to seller at buyer's expense and risk shall be repaired, or replaced at seller's option. If seller is unable or unwilling to repair or replace such reported and returned nonconforming equipment within a reasonable time, then buyer shall be entitled to a refund of the purchase price of the equipment as buyer's sole remedy. This paragraph sets forth buyer's exclusive remedies for nonconforming goods. This commercial warranty and consumer limited warranty is in lieu of all other warranties, express or implied, including design, course of dealing, merchantability, and fitness for a particular purpose.

**NOTE: LIMITATION OF SELLER'S COMMERCIAL AND CONSUMER LIABILITY.** Seller shall not be liable on any claim for loss of use, revenue, or profit, for injury, or for any other incidental or consequential damages, regardless of the basis for buyer's claim(s), including, but not limited to, the law of contract, warranty, or tort. In no case shall seller's liability on any claim(s) exceed the amount paid to seller for the purchased goods.