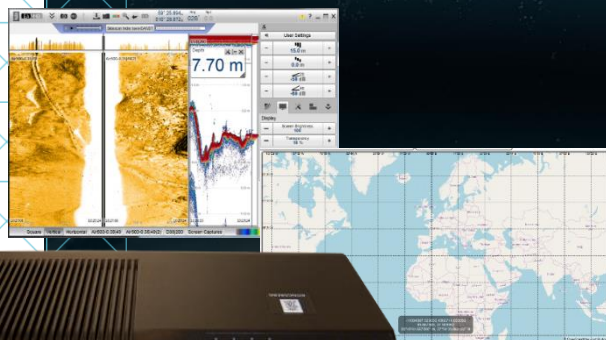




KONGSBERG

EA440



FOR SHALLOW AND MEDIUM WATER DEPTHS

EA440

- Applications from 0.2 m to 3000 m water depths
- High performance hydrographic depths observations from 30 kHz to 500 kHz
- Sidescan sonar application from 100 kHz to 500 kHz
- Sub-bottom profiler application from 10 kHz to 30 kHz
- Available with high power output from 30 kHz to 50 kHz
- Extensive range of transducer interfaces, both Kongsberg transducers and third-party transducers
- Splash proof all-in-one hardware setup available

- CW and FM pulse forms
- True raw data logging
- World class bottom detection

- New map display to track your coverage

EA440 hydrographic echo sounder

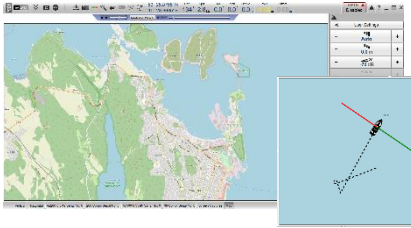
EA440 is a high performance hydrographic wide band single beam echo sounder. The echo sounder is developed for hydrographic use in shallow to medium depth waters. It supports portable and hull mounted sidescan and sub-bottom light for shallow waters.

The EA440 Wide Band Transceiver - WBT

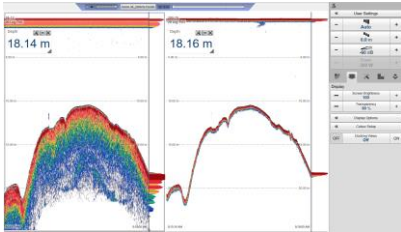
- The 4-channel standard WBT transmits and receives data simultaneously on 4 channels, ranging from 10 kHz to 500 kHz. The channels can be configured in a variety of ways, allowing for different applications and/or redundancy.
- The WBT communicates with a standard Windows 10 computer running the EA440 software via an ethernet link. Several WBTs with different configurations can be used.
- The WBT is opened for applicable transducers using license management. Licenses can be added by the user by a license code provided by Kongsberg Maritime Support.
- The WBT is powered by a 12-15 VDC power supply.
- Wide band frequency sweep (FM) in combination with advanced signal processing gives an exceptionally good signal to noise ratio and range resolution.

The EA440 software

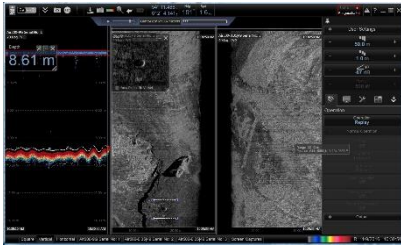
The EA440 software is an intuitive and user-friendly software. You can set up the display to suit your special needs. You can choose different presentations on the screen for echograms, **map view**, digital depth and other features. Save user settings for different operations and you can use these at your ease.



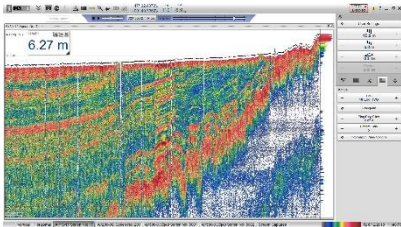
Introducing map display for tracking of your coverage (for WBT users only)



EA440 echogram view at 38 kHz and 200 kHz



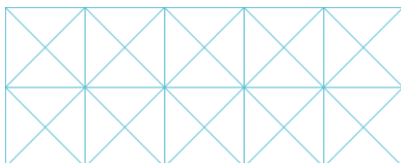
EA440 sidescan sonar and hydrographic depth view



EA440 15 kHz sub-bottom data



EA440 Wideband transceiver (WBT)



EA440 offers internal storage of all raw sample data. This includes all external input sensor data for replay purposes.

The EA map display

The EA440 map view provides a geographical display of the vessel, the vessel tracks and sidescan coverage if applicable. The map is supplied by the user based on WMS or GeoTIFF services. If no map is available, you will get the graticule lines displayed for you track and coverage for reference for you track and coverage

TECHNICAL SPECIFICATIONS

Performance	Pulse length and precision: <ul style="list-style-type: none"> - 500 kHz: CW 32 to 512μs, 0.3cm - 200 kHz: CW 64 to 1024 μs, 0.6 cm - 38 kHz: CW 256 to 4096 μs, 2.4 cm - 15 kHz: CW 512 to 8192 μs, 4.9 cm - 10 kHz: CW 1 to 16 ms, 9.8 cm Ping rate: max 40 per second
Range	<ul style="list-style-type: none"> - Display range: 1 to 12.500 m - Transducer range: 30 to 500 kHz - Sub-bottom range: 10 to 30 kHz
Sound speed	<ul style="list-style-type: none"> - Manual (1400 to 1700 m/s) - Calculated from temperature and salinity - From sound velocity probe
External interfaces	Transceiver: Ethernet communication Ethernet to ship's network Sensors: GPS, gyro, motion, speed, temperature, and sound speed Remote control: Remote stop/start logging available on serial line or network
User interfaces	Main control: Mouse, trackball or touch screen on a comprehensive menu system Menu languages: English, Norwegian, and a variety of other languages
Supported output	NMEA (DBS, DBP, DPT) Simrad, Atlas and Hymas
Export file formats	Raw data, XTF, SEG-Y, XYZ, Echogram, EA400, Marker and Parameters
WBT weight and dimensions	<ul style="list-style-type: none"> - Depth: 213 mm - Width: 438 mm - Height: 84 mm - Weight: 5 kg
Power specifications:	Voltage requirement: 12 to 15 VDC, 5A A suitable power supply for 220/110 VAC operation is provided with the delivery
Environmental specifications	Operational temperature: 0 to 50°C Storage temperature: -40 to 70°C Relative humidity: 5 to 95% relative non-condensing WBT IP Class: IP42