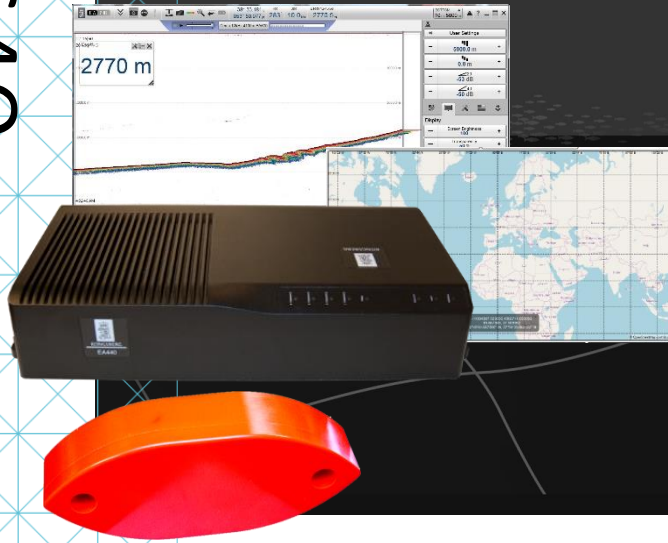


EA640



KONGSBERG

EA640

- Applications from extreme shallow to full ocean depths
- High performance hydrographic depths from 12 kHz to 500 kHz
- Available with high power output from 10 kHz to 50 kHz
- Extensive range of transducer interfaces, both Kongsberg transducers and third-party transducers
- CW and FM pulse forms
- True raw data logging
- World class bottom detection
- Bottom slope information
- Sound velocity compensation from profile
- Bottom gain to enhance the sub-bottom information
- Spectrum information for noise measurements
- New map display to track your coverage
- Windows 10

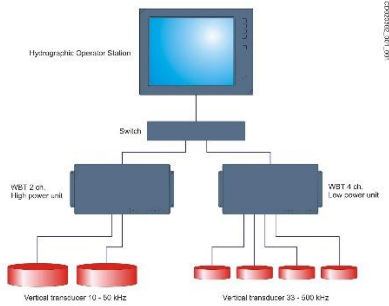
Wideband hydrographic echo sounder for full ocean depths

EA640 is a high-precision deep-water hydrographic single beam echo sounder for use in all water depths, from very shallow to full ocean depths. Using the WBT wideband transceiver unit it simultaneously operates with several different transducers ranging from 12 kHz for the deepest waters up to 500 kHz for very shallow depths. For low frequency transducers below 50 kHz the WBT is available as a high-power system, ensuring enough transmitted power to reach the deepest spots of the ocean.

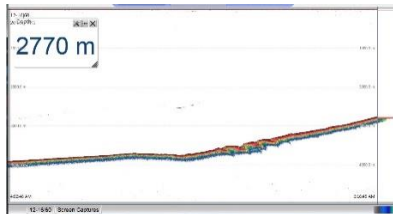
World class bottom detection algorithms ensures reliable high-precision depth determination. Bottom slope information is also provided.

The EA640 Wide Band Transceiver - WBT

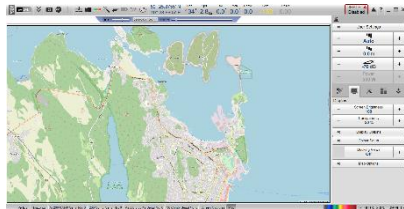
- The 4-channel standard WBT transmit and receives data simultaneously on 4 channels, ranging from 10 kHz to 500 kHz. The channels can be configured in a variety of ways, allowing for different applications and/or redundancy. Transmit power for the standard WBT is 500W for each of the 4 channels
- The high-power WBT provides 2 channels, ranging from 10 to 50 kHz, each allowing for up to 2000W transmit power.
- The WBT communicates with a standard Windows 10 computer running the EA640 software via an ethernet link. Several WBTs, standard or high-power, 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.



EA640 system setup option



EA640 echogram operating the 12 kHz 12/16-60 transducer



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



EA640 Wideband transceiver (WBT), available as standard 4-channels @500W or as high-power with 2 channels @2000W



Extensive range of transducer interfaces, both from Kongsberg as well as 3rd party transducers

The EA640 software

The EA640 software is an intuitive and user-friendly software that runs on the Hydrographic Operation Station (HOS) or any Windows 10 compatible PC. You can set up the display to suit your special needs. You can choose different presentations on the screen for echograms, the map view, digital depth and other features. Save user settings for different operations and you can use these at your ease.

EA640 offers internal storage of all raw sample data. This includes all external input sensor data for replay purposes.

The EA map display

The EA640 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 reference for you track and coverage.

TECHNICAL SPECIFICATIONS

Performance	Pulse length and precision: <ul style="list-style-type: none"> - 500 kHz: CW 32 to 512 μs, 0.3 cm - 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 pings per second
Range	<ul style="list-style-type: none"> - Display range: 1 to 12.500 m - Transducer range: 30 to 500 kHz - High power range: 12 to 50 kHz
Sound speed	<ul style="list-style-type: none"> - Manual (1400 to 1700 m/s) - Calculated from temperature and salinity - From sound velocity probe
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	Operating system: Microsoft® Windows® 10 Main control: Mouse, trackball or touch screen on a comprehensive menu system Menu languages: English, Norwegian, Korean, Spanish, French, Icelandic, Italian, Danish, Russian, Japanese, Traditional Chinese, Simplified Chinese, Polish, Greek, Turkish, Vietnamese, Swedish, Bangla
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	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

