### Additional software for more functionality

#### ITI - Trawl and ROV in 3D



Olex interfaces to the Simrad ITI trawl positioning system. The true position of the trawl is shown in 2D and 3D, with distance, bearing, door spread and track. The software can also handle any number of ROV targets through the Simrad HPR and HiPAP systems.

#### **AIS - Identification system**



If an AIS receiver is connected to Olex, and the AIS additional software module is installed every vessel, with AIS, within radio range will appear on screen. The AIS targets will display as triangular ship symbols with vessel name or MMSI number.

#### HT - Bottom hardness mapping



Olex connects to Simrad ES60 and EQ60 echosounders for seabed hardness mapping. The system analyzes the bottom echo, taking into account parameters such as pulse length, beam width and transducer type. A naturalized bottom backscatter is calculated and added to the internal chart. The hardness is shown as adjustable colors from deep pink for soft bottom to bright yellow for hard. The actual echosounder data can also be shown, with present and historic data.

#### SB - Water current detection and mapping



SB make the Olex able to detect and map water currents. By analyzing five NMEA data types - position, speed over ground, course over ground, true heading, and speed through water - the vessel drift related to ground is calculated and shown as a variable-size arrow pointing away from the ship. This drift is assumed to be representative of the water current. Accuracy is very good and only limited by instrument resolution.



Ethernet ES60 EQ60 WASSP

AIS

ITI/HPR/HiPAP

Water speed sensor

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The Olex 3D system is sold by dealers of marine electronics. Contact your dealer for pricing and other information.



# **Olex 3D chart system**

Settings Past trips Layers 3D O Track Hardness Bottom Profile





for seafloor mapping, navigation and fishery 0 750 <--- Relief Boxes Print 22:04:10 (



## **Olex 3D chart system** - for mapping, navigation and fishery











The Olex system combines vector chart navigation and fishery plotting with seafloor mapping and visualization. Both old and new fishing grounds are charted by Olex, making for more economic and efficient fishing.

#### Innovative method for seafloor mapping

Olex constructs seafloor charts through realtime data from the echosounder and GPS. For every measured depth the chart gets more accurate. The seafloor calculation is a continuous and fully automatic process. There is no particular limit to the amount of seafloor data to be handled.

#### Shows how the bottom looks like

Olex has several visualization modes. Various 3D views gives a clear understanding of the topology. Several 2D modes such as relief, depth contour and bottom zoom, each highlights both flat and complex terrain. A special function shows 2D profiles along transects of choice. The system can even calculate the volume and area of surveyed water bodies.

#### **Powerful plotting functions**

It is easy to store marks, comments, lines and areas. Track lines of both radar targets and own vessel can be colored according to choice. The plotter data is organized into individually named plot layers, making it easy to distinguish between different types of data.

#### Superior solution for easy sailing

Olex ties vector chart data, seafloor data, plotter objects and radar targets together to a single easy to comprehend display. This means safer sailing and more efficient fishing. Besides, it is great fun to map the ocean!

Additional software packages is available for AIS-interface, bottom hardness, trawl visualization, water current mapping and multi beam data processing.









#### Navigational charts

Olex can use electronic vector charts in S63 and S57 format from official and commercial providers.



#### Bottom zoom

Olex has several tools for seafloor visualization. The bottom zoom helps the skipper to find the best spots to place the fishing gear.

- Effortless vector chart handling
- Fast and smooth zooming and chart rotation
- Easy route planning and editing
- Tracking and naming of radar targets
- Autopilot interface for computerized sailing
- Multiple languages available
- Depths and elevations in meters, fathoms or feet
- Automatic tide correction
- Animated lights and sectors
- Shows previous depth soundings for safer navigation
- All trips stored for future reuse
- Water temperature logging
- Connects to GPS, echosounder, gyro, radar, compass, temperature sensor, autopilot etc.

63°27.577 N 10°25.434 Ø 170

#### **Realistic seafloor view**

Olex users are encouraged to share their sea floor data. This data sharing is free of charge and are organized by Olex AS. After sending their own sea floor data to their dealer or to Olex AS the users will get access to a database with collected depths from other Olex users all over the world.

#### Free sharing of seafloor data Olex users can share their data. These pictures shows data from many Norwegian fishing vessels. The skippers send in their data on diskettes and gets the whole database back on CD.



#### Olex control unit M1

