

General	
Supported Systems	Single beam echo sounder, Side scan sonar, Sub bottom profiler
Year of initial release	2009
Supported languages:	English

Hardware and Software Requirements	
CPU (recommended)	Intel i5 or i7 or similar
RAM	4 Gigabyte
Hard disk (recommend)	SSD
GPU supported	Yes
Supported operating systems	Windows 7 SP1 or newer
Supported connections	Serial port (RS232), Bluetooth, Ethernet or Wi-Fi

Supported Hardware	
Positioning	GNSS (RTK) receiver or total station with NMEA0183 output
Motion	IMU, motion sensor, tilt sensor
Depth	Single beam single or dual frequency sounder*
Tide	RTK receiver or tide gauge
Heading	GNSS (RTK), magnetic or gyro compass
Speed	GNSS (RTK)

* See <https://www.eye4software.com/hydromagic/documentation/supported-hardware/> for full list.

Supported Map Formats	
Vector Data Sets	AutoCAD DXF Drawing (DXF) ESRI Shape files (SHP) Keyhole Markup Language files (KML) Microstation ISFF DGN Design (DGN) IHO S57 Electronic Nautical Chart IHO S63 Electronic Nautical Chart Arc/Info E00 Coverage Arc/Info Generate Atlas BNA Boundary GeoJSON map data Idrisi vector format (VCT) MapInfo TAB Openstreetmap XML GPS Exchange Format (GPX)
Raster Data Sets	GeoTIFF / TIFF Graphical Interchange Format (GIF) JPEG Image Microsoft Windows Bitmap (BMP) Portable Network Graphics (PNG) XYZ gridded elevation data (ASCII or binary) Arc/Info ASCII Grid BSB nautical map (KAP)
Satellite imagery download	yes
Street map download	yes
ENC download	yes (United States only)

Supported hydrographic formats	
Single beam data	ASCII Extended Triton Format (XTF) Generic Sensor Format (GSF) Reason 7K Format SEG-Y seismic data format CEE HydroSystems recordings (CSC) ODEC Format Odom raw data files (DSO) HYPACK raw data files (RAW) Knudsen binary data (KEB) kongsberg simrad binary data (RAW) Innomar SES-2000 Humminbird recorded data (DAT) Lowrance recorded data (SL2)
Side scan data	Extended Triton Format (XTF) Humminbird recorded data (DAT) Lowrance recorded data (SL2) Imagenex SportScan 81S Format Imagenex YellowFin 872 Format

Supported matrix / grid formats	
Matrix formats (Import)	Hydromagic MTX User defined ASCII
Matrix formats (Export)	User defined ASCII LAS point cloud (Lidar) PTS point cloud (Lidar) HYPACK matrix ArcInfo ASCII DEM

Data Processing	
Tide correction	Tide File, Tide Guage, RTK, manual and NOAA VDatum
Sound velocity correction	Time method
Interpolation methods	TIN, Nearest Neighbor and Bilinear
Cleaning algorithms	Manual, mean, median, clip below, clip above, range
Volume calculation	Matrix, cross sections, delta and staging volumes
Contour generation	Raster to vector
Motion correction	Heave, pitch and roll
Cross section generation	Manual, auto or import DXF

Geodesy	
Supported projections	Universal Transverse Mercator, State Plane Coordinate System, Transverse Mercator, Lambert Conformal Conic, Oblique Sterographic, Polar Stereographic, Albers Equal Area, Bonne, Cassini Soldner, Krovak, Mercator, Polyconic, Oblique Mercator.
Horizontal corrections	NTv2, NADCON/HARN and HTDP, Helmert and Molodensky.
Vertical corrections	Geoid and NOAA VDatum
Predefined coordinate systems	UTM, EPSG, ESRI and SPCS (State Plane Coordinate System)