

Hydromagic Version 9 New Features - Improved Editing and Export, PPK GNSS Import, New Route Planner

ZOOM AND PAN KEYBOARD SHORTCUTS

- Avoid messing with the annoying laptop touchpad in the field, Page up / Dn and Arrow keys now operate zoom and pan

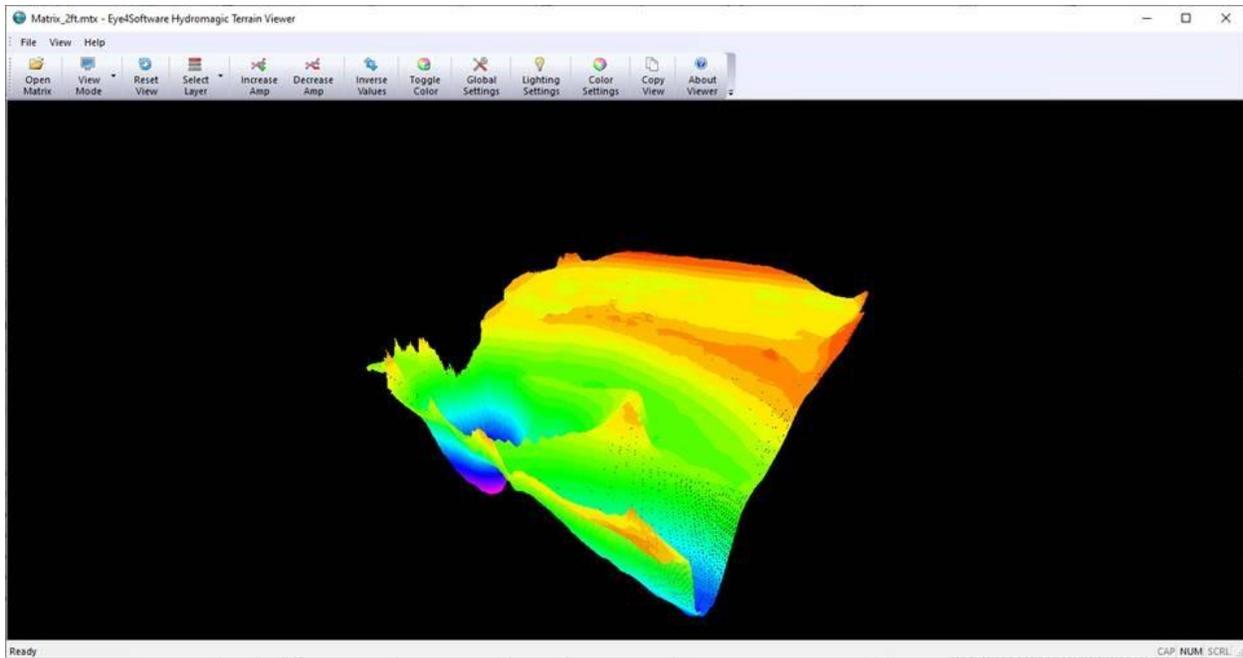
ENHANCED ROUTE PLANNER (for Robotic CEE-USV):

- Now multiple routes can be imported or saved on the Project Explorer, instead of only allowing a single route.
- Start of the route is identified by a user defined "blob".



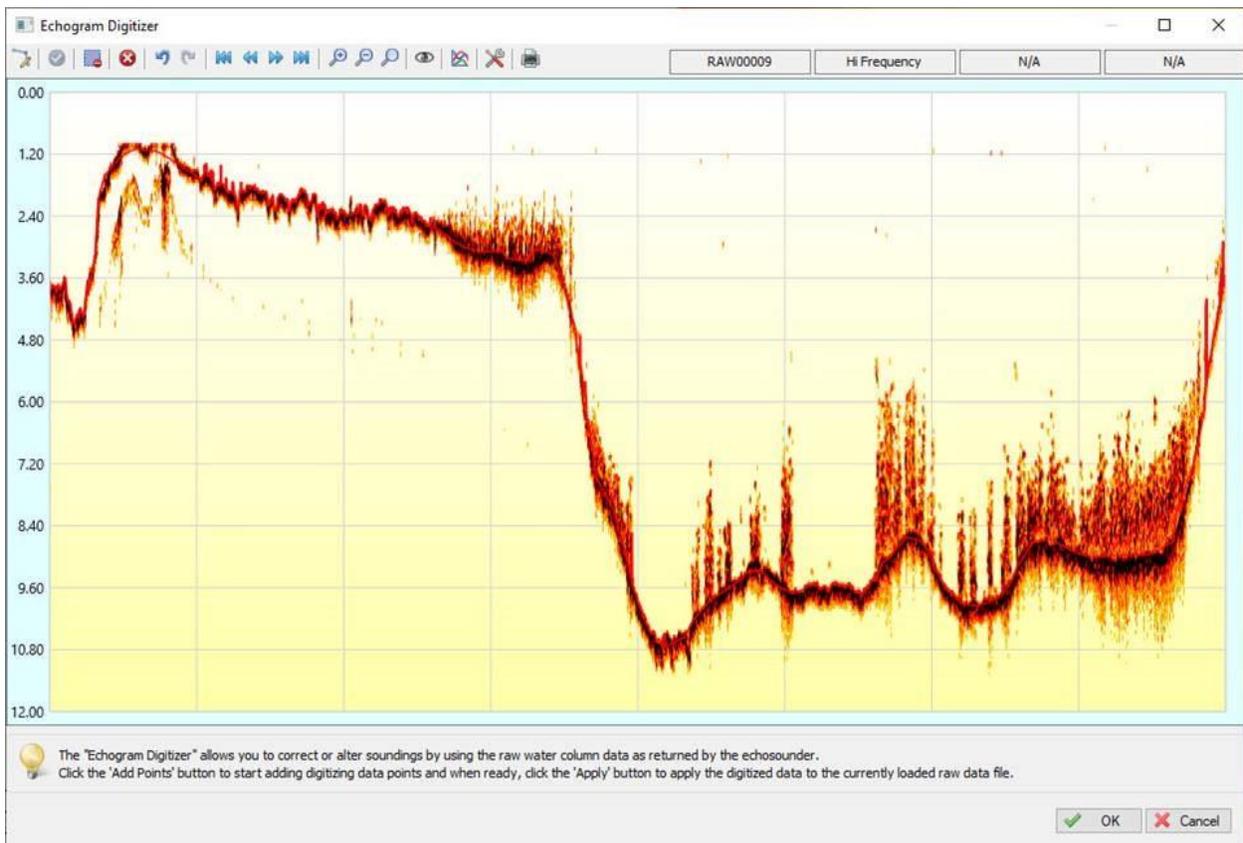
NEW 3D TERRAIN VIEWER:

- Greatly enhanced 3D view with infinite amplification
- Variable lighting intensity and viewing angle



DETAILED AND ENHANCED ECHOGRAM VIEW AND EDITOR:

- Full HD water column with several color modes.
- User digitizer to “re draw” soundings.



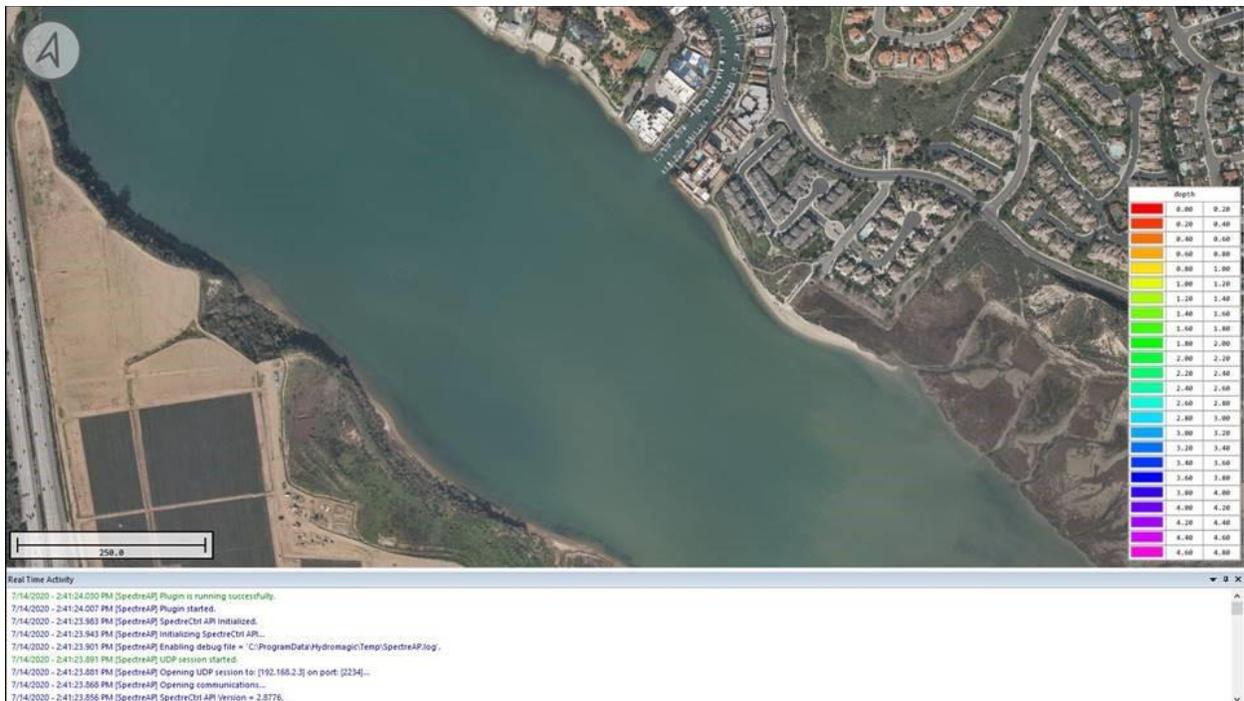
RAW FILE NUMBER DROP-DOWN DISPLAY WITH L/R ARROWS

- Makes it easier to navigate through editing soundings



NEW REAL TIME ACTIVITY VIEW WINDOW

- All running processes are identified, with errors shown.
- Greatly enhances awareness of issues or setup problems.
- Particularly useful for monitoring CEE-USV autopilot communications.



POST PROCESSED KINEMATIC GNSS DATA HANDLING

- Real time GNSS data may be corrected using a PPK base station data file

Raw Data Tools - Post Processing Kinematic

Select PPK Correction Data File

File Name:

Coordinate Options

Input file has easting and northing coordinates (projected)

Input file has longitude and latitude coordinates (geographic)

Coordinate Format:

Coordinate Reference System

If the coordinates stored in the file are not in WGS84 geographic coordinates, select the coordinate system used by clicking on the 'Select' button.

Currently selected: WGS84

Define PPK file format or select pre-defined format from list

Predefined File Type:

Date Format: (select correct order)

Time Format: (select correct order)

Comment Prefix:

Date Field #:

Time Field #:

X or Longitude Field #:

Y or Latitude Field #:

Geoid or Ellipsoid Field #:

Time Offset: minutes

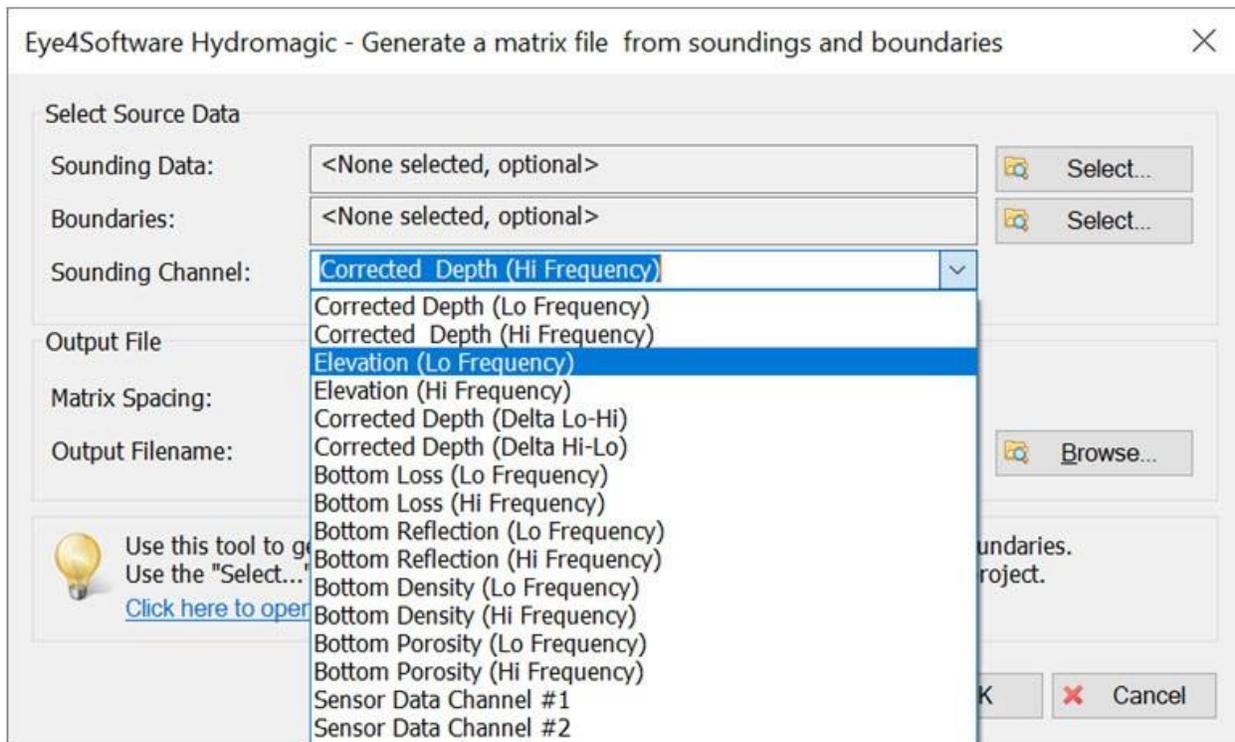
 The Post Processing Kinematic function can be used to correct position data using PPK correction files generated with for instance RTKLib.
[Click here for detailed documentation on how to use PPK in Hydromagic.](#)

ELEVATION MODE ELIMINATED AND EXPANDED MATRIX OUTPUT

- The software automatically shows soundings as elevations when tide / RTK is applied, with no need to switch modes. This was a source of confusion.

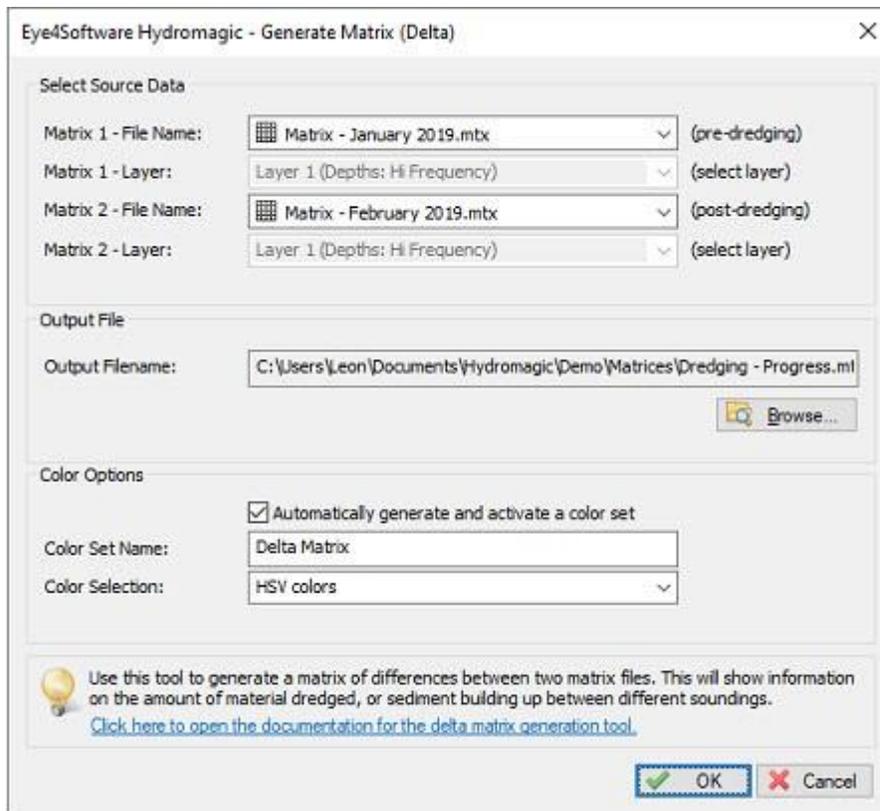
GREATLY ENHANCED MATRIX OUTPUT OPTIONS

- Simpler, faster and more powerful XYZ export options



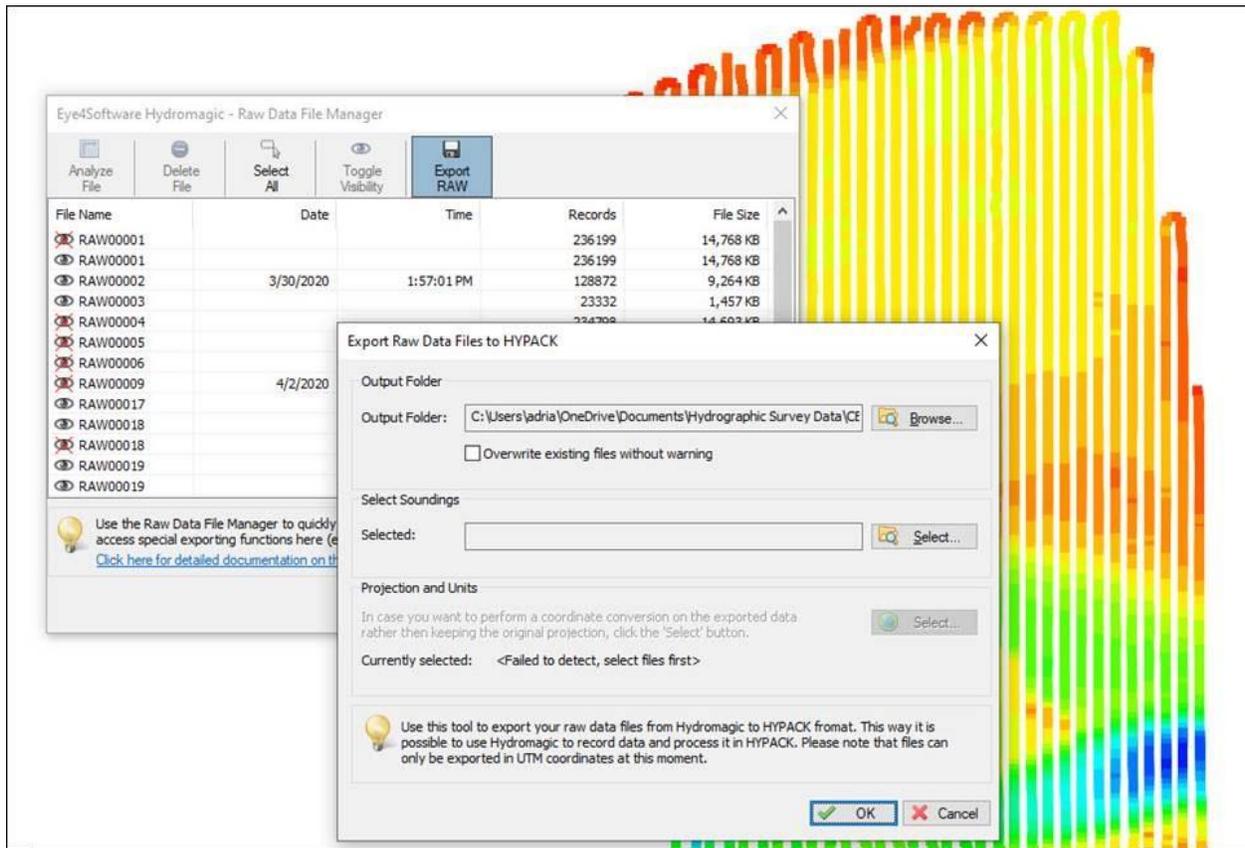
DELTA MATRIX COMPUTATION

- Compare matrices to calculate volume changes



HYPACK EXPORT

- Hydromagic RAW files may be exported in HYPACK RAW format for conversion to a HYPACK project.



SIDE SCAN VIEWER

- Side scan data files may be mosaicked and incorporated into Hydromagic projects

NEW NAVIGATION VIEW TOOLBAR:

- Easier font changes and readout display adjustments:

Position (Geographic)	
Longitude	E 000°00'00.0000"
Latitude	N 00°00'00.0000"
Position (Projected)	
Easting	000000.000
Northing	000000.000
Height (WGS84)	
Ellipsoidal	0.00 m
Depth	
Sounder Hi	0.00 m
Sounder Lo	0.00 m
Corrected Hi	0.00 m
Corrected Lo	0.00 m
Tide	
Level	0.00 m
Heading	
Heading	000.0
Speed	
Ground	0.00 kmh
GPS Information	
Sats	00
Fix	NO FIX
Diff Age	00
Beacon	0000
Motion	
Roll	+0.00
Pitch	+0.00
Heave	+0.00
Sound Velocity	
Velocity	1500.00 m/s
Dilution Of Precision	
PDOP	0.00
HDOP	0.00
VDOP	0.00
Navigation	
Target Bearing	0.0

Data View Options ✕

Display Items

- Position - Geographic
- Position - Projected
- Height
- Depth - Lo Frequency
- Depth - Hi Frequency
- Tide
- Course
- Speed
- GPS Information
- Dilution Of Precision
- Navigation
- Motion
- Sound Velocity
- Recording

Font Size

Select Font Size: pixels

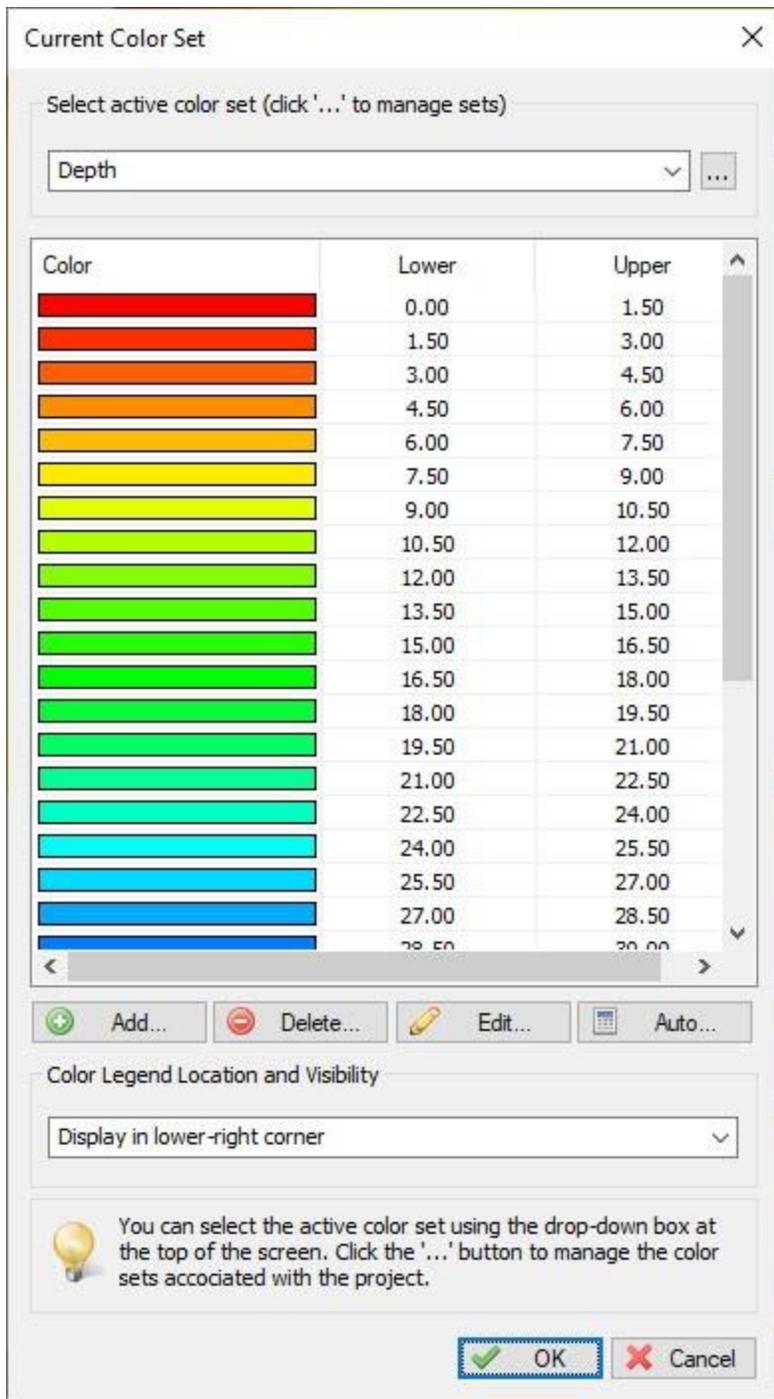
Refresh Interval

Select Interval: ms

You can decrease the size of the font in the dataview in case not all items fit in the view.

MULTIPLE DEPTH COLOR SCHEMES:

- Save different depth / elevation ranges to avoid the need to keep manually changing the color palette ranges



DOWNLOAD HYDROMAGIC HERE: <https://www.eye4software.com/download/>