

## Feature Matrix - SonarTRX /-SI /-LSS/-GVU Sidescan sonar processing software (Version 20.1 - February 2020)

SonarTRX product version and general information:	SI	LSS	GVU	Pro
Availability of 32 bit and 64 bit versions (x86/x64):	x86 only	x86 only	x86 only	x86/x64
Available for sale via online store	No	No	No	Yes
<b>Import-features and supported sidescan sonar file formats</b>				
Humminbird Side-Imaging (SI) sonar recordings (*.dat, w/associated *.son)	Yes	-	-	Yes
Lowrance StructureScan recordings (*.sl2, *.sl3 and *.slg)	-	Yes	-	Yes
Garmin SideVu, DownVu/ClearVu recordings (*.rsd)	-	-	Yes	Yes
Extended Triton Format (*.xtf) w/coordinates in Geodetic or UTM	-	-	-	Yes
Imagenex SportScan (*.81s) and YellowFin (*.872) recordings	-	-	-	Yes
DeepVision DeepEye (*.dvs and *.dvi)	-	-	-	Yes
EdgeTech sonar recordings (*.jsf) See Note 8	-	-	-	Yes
Import portions of a file, by time or named "clips". See Note 1	Yes	Yes	Yes	Yes
Import select sonar channels (speeds up import for some sonar files)	Yes	Yes	Yes	Yes
Correction of sonar data on import (Individual, or all channels)	Yes	Yes	Yes	Yes
<b>Viewing, editing and correction functionality</b>				
View individual sonar channels in horizontal or vertical waterfall mode	Yes	Yes	Yes	Yes
Corrections of trackline - load alternate positions, altitudes etc. - See Note 10	PlusPack A	PlusPack A	PlusPack A	PlusPack A
Birds eye view of navigation track and tools to define "clips" and "targets"	Yes	Yes	Yes	Yes
Define time-intervals, or regions ("Clips") within recording.	Yes	Yes	Yes	Yes
Define points of interest ("Targets") representing a specific feature	Yes	Yes	Yes	Yes
Calculation of first echo return from sonar data w/tool to digitize bottom	Yes	Yes	Yes	Yes
Slant range correction of sidescan channels, including beam angle correction	Yes	Yes	Yes	Yes
Brightness and contrast adjustment for individual channels w/histograms	Yes	Yes	Yes	Yes
Tool for display of the height of a feature, based on the acoustic shadow	Yes	Yes	Yes	Yes
<b>Export of Bathymetric data and raw sonar ping data</b>				
Export depth, as estimated by sonar, at 2 second interval - See Note 9	Yes	Yes	Yes	Yes
Export detailed depth-along-track, for specific channel & interval - See Note 10	PlusPack A	PlusPack A	PlusPack A	PlusPack A
Export of ping data to CSV (Limited to 1000 soundings) - See Note 11	PlusPack B	PlusPack B	PlusPack B	PlusPack B
<b>Output of sonar images and associated KML document</b>				
Creation of KML document compatible with Google Earth Pro for desktop	Yes	Yes	Yes	Yes
- Sidescan / Downscan image-tiles and Master Image (all-in-one image)				
- Sonar trackline and coverage areas with detailed list of ping attributes				
- Annotation folder with SonarTRX Targets				
Generation of image-tiles along track. See Note 2	Yes	Yes	Yes	Yes
- Generate image-tiles for portions of the data loaded (Page Filter)	Yes	Yes	Yes	Yes
- Option to adjust number of pings per image-tile	Yes	Yes	Yes	Yes
- Skip generating image-tiles with large turn-rate or slow speed	Yes	Yes	Yes	Yes
Generation of a Master Image along with image-tiles (See Note 2)	Yes	Yes	Yes	Yes
Image-tile and Master Image file formats	*.png, *.tiff	*.png, *.tiff	*.png, *.tiff	*.png, *.tiff
Resolution factor - pixels per unit distance as % of raw data. See Note 4	10 - 100%	10 - 100%	10 - 100%	10 - 100%
Crop the starboard or port images at a certain range	Yes	Yes	Yes	Yes
Ability to use and configure custom image color schemes. See Note 5	Yes	Yes	Yes	Yes
Relocate mosaic to other locations and headings - See Note 7	Yes	Yes	Yes	Yes
Relocate and correct mosaic images to account for layback, cross track offset and transducer angle	Yes	Yes	Yes	Yes
Geo-referencing files (world file, prj file, Manifold GIS, aux.xml, Fugawi ENC)	Yes	Yes	Yes	Yes
Mosaic image watermarks	See Note 3	See Note 3	See Note 3	See Note 3
Mosaic images with no bending (for each tile) - See Note 6 and 11	PlusPack B	PlusPack B	PlusPack B	PlusPack B
Generate raw and speed corrected images for each image tile. See Note 11	PlusPack B	PlusPack B	PlusPack B	PlusPack B
<b>Batch export functionality</b>				
Scan files and extract basic meta data (CSV and XML file with info.)	Yes	Yes	Yes	Yes
Tracklines, as single KML file, with a KML Path for each recording	Yes	Yes	Yes	Yes
Targets associated with each recording (CSV file with Target information)	Yes	Yes	Yes	Yes
Depth-along-track XYZ data from multiple files (CSV file, points at 2 sec.interval)	PlusPack B	PlusPack B	PlusPack B	PlusPack B
<b>Publishing Options</b>				
Auto-prepare KML file for use of online mosaic images (ready for publishing)	Yes	Yes	Yes	Yes
Export KML features to GPX file for display on navigation system or fishfinder	Yes	Yes	Yes	Yes

**Notes**

- 1 The ability to import portions of a file can be used to process the data region-by-region. The Clip mechanism can be used to define named regions.
- 2 SonarTRX images can be imported and/or processed into image pyramids using 3rd party GIS & Mapping programs (Manifold GIS, ESRI, GlobalMapper, etc.)
- 3 When SonarTRX run in trial-mode, the images includes a watermark. These are not shown when program runs in licensed mode.
- 4 The resolution is in % of the lateral sonar ping resolution. (Example: 1000 lateral intensity values x 30% = 300 intensity values)
- 5 The Color Scheme maps ping intensity values to color values used by SonarTRX when rendering the images.
- 6 Option to generate straight, Geo-referenced images for each tile is useful for uncovering bottom targets in regions of sharp turns.
- 7 The "Relocation" feature is a convenient way to hide the location of your sonar recording, or plot recordings as strip-charts.
- 8 Import of EdgeTech sonar recordings is supported for select sonar types.
- 9 Basic export of depth-along-track to CSV file can be done from Mosaic creation dialog, by all editions of SonarTRX. Positions are Geodetic (WGS84)
- 10 PlusPack v2 A features are included in the core PlusPack 2 product, and enables additional functionality within SonarTRX itself.
- 11 PlusPack v2 B features can be added to the core PlusPack 2 product, and enables additional functionality within SonarTRX itself.