

StructureMap™

HDS Gen 2 Addendum

StructureMap is a tool that allows you to overlay SideScan sonar returns on top of the chart, giving you a birds-eye view of underwater structure below and beside your boat. StructureMap makes it easier for you to visualize the underwater environment in relation to your position and aids the user in interpreting sidescan sonar images.

Refer to your HDS manual for basic information about HDS unit operation. Refer to your StructureScan manual for more information about StructureScan.



Viewing StructureMap data

You can view StructureMap data by turning on Structure overlay from the Chart menu, or by using the Overlay softkey (HDS-8/10). StructureMap data will start to appear on the Chart screen as soon as Structure overlay is enabled. The Structure Source setting determines whether the StructureMap information you want to view is live or previously recorded.

Turning on Structure overlay



Selecting Structure Source

StructureMap can be used in Live mode or Saved mode. Live mode allows you to view real-time StructureMap data on the screen. Saved mode is used to display StructureMap data previously saved to a SD card or the unit's internal memory.



Live mode

Displays the last few minutes of the Side Imaging history as a trail behind the vessel icon. The length of this trail will vary depending on the Side Imaging and Down Imaging range settings. The higher the range settings the longer



Structure

the history length that will show up behind the vessel icon. Typically it will display the last 4-5 minutes of recording. Live mode allows the user to quickly identify interesting areas of the lake and how they relate to vessel position. It also allows the user to scroll back and zoom in on a recently scanned areas of the lake to look at additional details of what was scanned. Live mode does not save any data. If the unit is turned off, all recent sonar history is lost. **You must have Structurescan installed on your boat to use Live mode.**

Saved mode

Displays StructureMap (.smf) files that have been created from structure sonar log (.sl2) files. Saved mode is used to view a map of the underwater environment that can be reviewed and examined either on or off of the



Navigating a StructureMap in saved mode

water. It can be used when revisiting an area that has already been scanned in order to assist the user in positioning the vessel or locating specific points of interest.

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NOTE: If there is more than one StructureMap of the same area on the same SD card, the maps will overlap on your screen. If you want to have more than one map of the same area, you should put the maps on separate SD cards.

Accessing StructureMap files on SD card

All StructureMap files on your SD card or in the unit's internal memory will automatically appear on the screen when Saved mode is selected.

Recording Structure data

To record structure data, steer your boat over an area and select *Log Sonar data* from the Structure Options menu. Refer to your operation manual for more information about sonar log options.

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NOTE: For best results, we recommend turning off Auto Range when recording a structure sonar log (.sl2).

Converting files

To create a StructureMap file you must convert a structure sonar log (.sl2) file to StructureMap format (.smf). This can be done automatically from the Sonar Log menu, or manually by converting logs from the Files menu. We recommend using an SD card for recording when possible, due to the



Manual conversion

NOTE: Keep the size of your sonar logs to 100MB or less to allow for faster file conversion. Current file size is occasionally flashed on the screen during the recording process. You will not be able to use any of the unit's other functions while a file is being converted.

limited size of the HDS internal memory. To have structure sonar log (.sl2) files automatically converted to StructureMap file format (.smf), turn on *Convert to map when complete* on the Sonar Log menu. The (.sl2) file will be converted to a (.smf) file when recording is stopped.

Sharing files

After structure sonar log (.sl2) files are converted to StructureMap (.smf) files, they can be saved to a SD card and used on other GPS capable HDS Gen 2 units without the need for the LSS-1 StructureScan module.

Scanning Fishing areas

With the Structure Source set to the default Live mode, steer the boat over the desired location to scan the area. When conducting a side-by-side scan of an area, you will get a cleaner scan if you do not overlap history trails and you turn off auto ranging on the sidescan.



Side-by-side scan

Scanning tips

- To get a picture of taller structure (a wreck, etc) don't drive over it. Steer the boat so the structure will be on the left or right side of your boat.
- Set your structure range to a significantly greater level (two-tothree times) than the water depth to ensure a complete scan and to maximize conversion accuracy.



NOTE: Optimal speed for viewing or logging StructureMap data is between 2-8 mph (3-12 kmh). Live mode is disabled for speeds greater than 10 mph.

Using StructureMaps with mapping cards

StructureMap allows you to maintain full chart capability and can be used with embedded cartography as well as Navionics, Insight and other third-party charting cards compatible with HDS units. To view StructureMap data with other mapping card data on an HDS-8 or HDS-10, place the mapping card in one card slot and the SD card with the StructureMap file in the other slot.

If you have an HDS-5 or HDS-7, copy the StructureMap (.smf) files to the units internal memory to view StructureMap data with data from another mapping card. We recommend only adding StructureMap (.smf) files of one lake at a time to the internal memory due to limited space. You should keep copies of StructureMap (.smf) files on an external SD card.

Copying StructureMap (.smf) files from SD to internal memory



Access files



Copy StructureMap (.smf) file from card



Place file into sonar logs

Refer to your operation manual for more information about copying files.

Show StructureMap (.smf) files

You can view StructureMap (.smf) files from the Files menu, which allows you to quickly see what area each StructureMap file covers.

Viewing StructureMap (.smf) files



Select StructureMap (.smf) file



Select Show



StructureMap appears on the screen

Accessing Structure Options



Structure options:

- **Range** Adjusts the width of the sidescan history trail. The greater the range setting, the wider the StructureMap history trail; Lower range settings reduce the width of the history trail.
- **Transparency** Increases/decreases the visibility of Structure overlay on top of the map. This is helpful when using marine mapping cards.



Minimum Transparency



Maximum Transparency

As you increase Structure overlay Transparency, you will be able to see more marine card map data through the Structure overlay.

- **Palette** Used to select a color scheme that allows the Structuremap detail to appear more clearly on the underlying chart.
- Contrast Adjusts the brightness ratio between light and dark areas on the screen, making it easier to distinguish suspended objects from the background.
- **Frequency** Controls the transducer frequency used by the unit. 800 kHz offers the best resolution, while 455 kHz has greater depth coverage.
- Noise Rejection Monitors the effects noise (boat pumps, water conditions, engine ignition systems, etc.) has on your display, and then filters out undesired signals.
- Source Selects StructureMap Source, Live mode or Saved mode

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