

# DeepView 4.x

2.1 Overview

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## Introduction

Thank you for choosing a high performance sonar system from DeepVision AB. If you have any comments or feedback on our products, we would appreciate hearing from you. It is very important for us to know what our customers think of our products, so that we can continue to improve them to suit your requirements.

This document provides an overview of the DeepView software. The first part includes descriptions of the different versions and features of DeepView 4.x. The features of each version are displayed in a table to provide an easy comparison so that you will be able to decide the version and modules you require.

The Document introduces the different Modules of DeepView. The modules are extensions of the DeepView Software and enables more features and extra functionality to the base version. They can be purchased individually from DeepVision.

Before you start using DeepView, make sure your system meets the minimum requirements and that the Software is correctly installed. You can read about this in the user guide *1 System Requirements and Installation*.

DeepView is a complete environment for recording, processing and handling sonar data. The picture below displays the DeepView environment.



Figure 1: The DeepView software environment.

# **Versions and features**

The DeepView software is available in four different versions. DeepView FV, DeepView LT, DeepView and Deepview Pro. Each of these versions are described below.

#### **DeepView FV**

Deepview FV is a free viewer of the side scan sonar files. This is free software that you can download from the DeepVision website. In free viewer you are only able to display and play side scan sonar files. The features of distance and height measuring are available in DeepView FV. The free viewer cannot be used to record sonar data.

A feature that is exclusive for the free viewer is to display and play two side scan sonar files at the same time. This is done by dragging a file to the right side of the window and dropping it there. You do this by pressing and holding the left mouse button on the file. This is useful when it is necessary to compare two or more side scan sonar images. For instance when you need to inspect an object that appears in two files from different angles.



*Figure 2:* A display of the DeepView FV. Here are two Side Scan Sonar files displayed at the same time.

#### **DeepView LT**

DeepView LT is a light version of DeepView which is less expensive than the full version. The software has limited features for recording and handling side scan sonar data. DeepView LT only includes an Object View which displays the side scan data in a waterfall view. The side scan sonar files created by recording using DeepView LT are in the same format as those created by the standard edition of DeepView. The side scan mosaic function is not available in DeepView LT.

This is a stand-alone software for which you are unable to add modules. To get more features you will need to use the standard or Pro edition of DeepView with the required modules applied.



Please contact DeepVision to purchase DeepView LT.

Figure 3: A display of a Side Scan file in DeepView LT.

#### **DeepView**

This is the standard edition of DeepView. The biggest difference from DeepView LT is that the standard version contains a new panel, the Map View. This gives you a lot of new possibilities such as placing markers, auto tracking GPS etc.

DeepView works as a chartplotter. You can purchase different modules to DeepView to add more functionality to the environment. DeepView can be seen as a base that you build on to make the software meet your needs. All modules are activated by applying a license that contains the modules needed. The available licenses are the side Scan and the Depth modules. These are required for recording and handling side scan sonar data and depth data. Both of the modules are lifelong licenses that will never need to be renewed.

For more about how to add a license, follow the instructions in *1 System Requirements* and *Installation*.

The difference between handling side scan sonar data in DeepView as compared to DeepView LT is that you can view the recorded data in the Map view. Side scan sonar data will be drawn as georeferenced mosaic in the Map View and the current position and heading will be displayed, given that there is a supported GPS unit connected.

If you have used DeepView LT, you will be able to handle all your files with DeepView. You will be able to generate a side scan sonar mosaic that can be shown in the Map View.

DeepView has support for different types of maps which can be shown in the Map view. It is recommended to use Navionics Nautical charts for the best DeepView experience. Charts are not included in the standard version of DeepView, but can be added at any time. The Map view will display a blue background when there are no charts added to the software. To purchase the Navionics Nautical charts, please contact DeepVision.

To apply the Navionics Nautical charts to your DeepView software, read the user guide 2.2 User Interface, Toolbars and Menus.

#### **DeepView Pro**

The Pro version of the DeepView software is mainly intended for professional users handling sonar data. It adds extra functionality to the activated modules of the base version of DeepView. You will therefore need the Side Scan or Depth module to use the Pro Module.

The Pro version mainly adds features concerning file management, e.g. exporting files, splitting files, creating reports etc. You can read more about these features in the Pro version user guides.

To activate DeepView Pro you need to purchase a license or upgrade an already existing license. The Pro license is an annual license which has to be renewed every 12 months.

#### **Table of features**

The features of the different versions are displayed in the table below. The Pro version only adds features to the Depth and Side Scan modules if they are activated. A Side Scan and/or Depth module licence is needed in order to use the Pro version of DeepView.

	DV LT	DV	DV Pro
DeepView Core			
Auto Search NMEA com ports	x	х	x
Auto Search Connected Sonar Devices	x	x	x
Multiples Threads	x	х	x
Project Navigator	x	х	x
Map Viewer			
Navionics Vector Charts		x	x
BSB Charts		х	x
Pan and Zoom		х	x
Google Earth Quick reports		х	x
Auto Track GPS		×	×
Distance Measure		x	x
Interactive Markers/Routes Editing		x	X
3D			
Display Depth in 3D		x	x
Display Side Scan mosaics on 3D Maps		x	x
Markers			
Markers Overview		x	x
Line/Polyline Makers		х	x
Polygon/Area Markers		x	x
Edit Marker Name, Position, Description and Classification		x	x
Edit Markers Appearance in the MapView		х	x
Markers Report			x

Map Objects			
KMZ Objects			x
KML Objects			х
Side Scan			
Project Files Overview	x	х	x
Side Scan Recording	x	x	x
Playback Files	x	x	x
Playback Map View		x	х
Recording Live View	х	х	x
Markers		х	х
Distance Measureing	x	x	x
Target Height Measure	x	x	x
Zoom	x	X	x
Display Modes( Overview, Fit Width, 1:1)	x	x	x
Received Signal Strength Graph	x	х	x
Pointer Position Tracking	x	х	x
Auto Color Mapping	x	x	х
Manual Color Mapping	x	x	x
Slant/Ground Range View	x	x	x
Map View Mosaic		х	х
Map View Trace / Covered Area		x	х
Position Filter		х	х
Noise Filter		Х	x
Ground/Slant Range Mode		x	х
Map View Center Tracking		x	х
XTF Import			х
XTF Export			X
Reports			х
Edit Bottom Line			х
Split Files (not for xtf)			х
Cut Range (not for xtf)			x

Depth		
Project Depth Files Overview	x	х
NMEA Depth Recording	x	х
Transducer Offset Control	x	x
Depth Map Creation Control	x	x
Auto Depth Scale	x	х
Manual Depth Scale	х	x
Map View Transparent Depth Maps	x	x
KMZ Reports		X
Import CSV Files		Х
Export CSV Files		Х

# Modules

Modules can be activated to extend the DeepView software and make it fulfill your requirements. A short description of each module is given below. To add your module, read the section *License* in the user guide *1. System requirements and installation*.

## Side scan



Figure 4: A Side Scan file in the Deep View software.

The Side Scan module gives you the opportunity to handle Side Scan data. In the picture above, you can see the DeepView environment with the Side Scan module activated. The Side Scan module adds new features and behaviours to the marked areas. In order to record Side Scan Sonar data you will also need a DeepVision Side Scan Sonar system. For more about the Side Scan modules environment, read the *3.1 Side Scan Introduction user guide*.

- 1. The Object View. A Side Scan file is shown in a waterfall view.
- 2. The received signal strength of the Side Scan Sonar data. This area displays the signal of the recorded Side Scan file.
- 3. The Map View. In this pane the Side Scan Sonar data is placed as mosaic on its coordinates in a map. To center the map at the Side Scan file, press the center map button in the Project Navigator toolbar. For more about toolbars, see user guide 2.2 User interface, toolbars and menus.
- 4. The Side Scan toolbar.
- 5. The Side Scan object group with its objects. This area is called the Project Navigator, and this is where your Side Scan files will be shown. For more information about the Project Navigator, read the user guide *2.2 User Interface, Toolbars and Menus.*

For more information about the Side Scan module, read the Side Scan module's user guides.

#### Depth



*Figure 5:* The DeepView environment with the Depth module attached.

The Depth module gives you the possibility to handle Depth Log data in your DeepView software. In the picture above, you can see the DeepView environment with the Depth module activated. The Depth module adds new features and behaviours to the marked areas. To record Depth you need the DeepVision Depth Logger. For more about recording Depth data, read the Depth modules user guides.

- 1. The Object View for a Depth Log file. The depth versus time is displayed.
- 2. The Map View for a Depth Log file. Here you see the depth of the recorded area, which is placed on its coordinates in a map. The color scale is displayed in the lower left corner of the area. For more about handling the Depth Log data in Map View, read the user guides about the Depth module.
- 3. The Depth Log object group and its files. This is a part of the Project Navigator, which you can read more about in *2.2 User Interface, Toolbars and Menus.*