<table>
<thead>
<tr>
<th>Prepared by:</th>
<th>NAW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved by:</td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td>2018-11-13</td>
</tr>
<tr>
<td>Filename:</td>
<td>\hs\files\General\DBS\DBS11343\DBS11343-11\DBS11343-11.doc</td>
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<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Description</th>
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<tr>
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<td>2015-04-20</td>
<td>NAW</td>
<td>Original issue of document</td>
</tr>
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</tr>
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<td>12.6</td>
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1 Scope and purpose
This user guide describes all common tasks that the ship crew needs to perform on the Danelec S-VDR/VDR. The user interface of all Danelec S-VDR/VDR is explained, as well as the procedure to extract data from the S-VDR/VDR, and how to replay the extracted data.

1.1 References
User Manual for VDR Explorer - Document Number 9200294
Inspectors and Authorities Manual - Document Number 9200343
Manual for Network Attached Storage NAS 01-001- Document number DBS10903

1.2 Terms and Abbreviations
VDR  Voyage Data Recorder
S-VDR  Simplified Voyage Data Recorder
BCP  Bridge Control Panel
BAU  Bridge Alarm Unit
OPT  Operation Performance Test
NAS  Network Attached Storage
FRM  Final Recording Media
2 Danelec S-VDR/VDR types

The instructions given in this document covers all types of Danelec Marine S-VDR/VDR models. Most instructions are similar regardless of the S-VDR/VDR type. However, there are some differences. It is therefore necessary to determine what type of S-VDR/VDR is installed.

The following are the current and previous Danelec Marine S-VDR/VDR Models:

<table>
<thead>
<tr>
<th>S-VDR</th>
<th>VDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM100 S-VDR</td>
<td>DM100 VDR</td>
</tr>
<tr>
<td>DM200 S-VDR</td>
<td>DM400 VDR</td>
</tr>
<tr>
<td>DM300 S-VDR</td>
<td>DM500 VDR</td>
</tr>
</tbody>
</table>

2.1 How to determine the S-VDR/VDR type

To determine what type of S-VDR / VDR is installed, open the S-VDR/VDR door and look for the Type Approval label inside the cabinet. The label is located on the left-hand side of the cabinet.
3 User Interface for DM100 / DM200 / DM300 S-VDR and DM400 / 500 VDR

The user interface for the DM100/DM200/DM300 S-VDR and DM400/DM500 VDR is identical and is called the Bridge Alarm Unit (BAU).

The BAU serves two purposes:

- Alarm indicator and display
- Saving of incidents to backup disk

In normal mode, the display of the BAU will indicate how many incidents are available in the system. If alarms exist in the system, the display will indicate the alarm type.

3.1 Dimmer button

The Dimmer button can be used to adjust the backlight of the display and buttons. Press the dimmer button multiple times to move between the different backlight levels.

3.2 Alarms

During normal operation, the S-VDR/VDR should not have any alarms and no user operation is required.

If an alarm in the S-VDR/VDR occurs, the BAU will indicate the alarm in the following way:

- The BAU buzzer will sound an alarm tone
- The BAU display will indicate the alarm code (3 digit) and a short description
- The ERROR LED will light up RED
Alarm Example:

![Alarm Code Image]

**3.3 Acknowledging alarm**

If an Alarm is present in the S-VDR/VDR, the BAU will sound the alarm tone. To stop the alarm tone, press the ACK button.

After any alarm the system should be monitored to see whether the alarm has been automatically cleared or persists in the system. As long as the ERROR LED is lit, an alarm is present in the system.

An alarm in the system will be automatically cleared when the condition for the alarm disappears. When all alarms are cleared, the ERROR LED will turn off and the display text will return to show remaining incidents available.

**3.4 Purging the alarm list**

Pressing the PURGE LIST button will purge the alarm list of alarms where the alarm condition no longer exists. If the condition for the alarm reappears, the alarm will sound again.

**3.5 Incidents**

In case of an incident, the crew of the vessel is required to save data onto the S-VDR/VDR backup disk drive for later analysis.

The Danelec S-VDR/VDR contains a backup disk drive with data capacity for 3 incidents. When an incident is saved, the S-VDR/VDR automatically stores the last 12 hours of recorded data on a protected area of the backup disk drive while continuing to record new data.

When 3 incidents have been saved, the backup disk drive becomes full and no more incidents can be saved. It is therefore important, after an incident has been saved, to extract data from the incident onto another media (PC, CD, etc.) and delete the stored incident from the backup disk drive.

It is not recommended to use the save function as a form of backup for internal use. If backup of recording for internal use is needed, the data should be extracted through the S-VDR/VDR web interface as described in chapter 7.

**Note:**

*Saved incidents can only be deleted by a certified Danelec Marine technician. 30 days after the incident was saved the write protection will be removed and the incident can be overwritten.*
3.6 Back up drive

The Backup disk drive has been designed in accordance with IMO regulations to be easily removable from the S-VDR/VDR in case of an emergency where the crew has to abandon the vessel. The Backup disk drive should never be removed from the system under normal conditions.

Depending on the model, the backup disk drive is either a USB stick or a hard disk cassette.

<table>
<thead>
<tr>
<th>S-VDR / VDR Type</th>
<th>Back up disk type</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM100 S-VDR</td>
<td>USB disk</td>
</tr>
<tr>
<td>DM200 S-VDR</td>
<td>USB disk</td>
</tr>
<tr>
<td>DM300 S-VDR</td>
<td>Hard disk cassette</td>
</tr>
<tr>
<td>DM400 VDR</td>
<td>USB disk</td>
</tr>
<tr>
<td>DM500 VDR</td>
<td>Hard disk cassette</td>
</tr>
</tbody>
</table>

Note:

The USB disk is not standard formatted. If connected to a computer, the computer may ask to format it. **DO NOT FORMAT THE USB DISC**, all data will be lost and the S-VDR/VDR will not be able to record to it again. In case of a formatted USB disc, service is required.

3.7 How to save an incident

To save an incident, press the two save buttons on the BAU simultaneously. The display will indicate that the backup procedure (saving the incident) is in progress and the SAVE LED will blink. After saving the incident, press the ACK button to acknowledge and the display will return to the main display.
After each saving operation, the text in the display will change according to the table below.

<table>
<thead>
<tr>
<th>Incident saved</th>
<th>Display text</th>
<th>SAVE LED</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Incidents Left (3)</td>
<td>Green</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>1</td>
<td>Incidents Left (2)</td>
<td>Green</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>2</td>
<td>Incidents Left (1)</td>
<td>Yellow</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>3</td>
<td>No Incidents Left</td>
<td>Red</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
</tbody>
</table>
4 User Interface for DM100 VDR

The user interface of the Danelec DM100 VDR is called the Bridge Control Panel (BCP). The BCP provides information about alarms (cautions) in the system, initiates tests, and displays system information.

The BCP has 3 functions:

- Indication of alarms (cautions) in the VDR system
- Test interface for the VDR
- Provision of system information and network data status

Two function buttons F1 and F2, and navigation buttons are used to navigate through the different menus.

4.1 Dimmer button

The DIM button can be used to adjust the brightness of the display and buttons. Press the DIM button to enter the menu and use left and right navigation buttons to adjust the brightness. Pressing the F2 button while in the brightness menu will toggle between night or day mode.

4.2 Alerts

Unlike older S-VDR/VDR systems, the DM100 VDR does not provide any audible alarms. In accordance with regulations, only visual indication of alarms on the BCP is provided. In addition, alarms do not need to be acknowledged.
When no alarms are present in the VDR, the main display only indicates VDR version and time. The yellow caution LED will be off.

When an alarm is present, a yellow field will appear on the main display. The yellow field indicates how many alarms are present in the system. As long as any alarms are present, the yellow caution LED will be on.

Pressing the F1 button (alerts) will open the alerts screen. Here, a complete list of alarms currently present in the VDR can be displayed. Each alarm has a 3 digit alarm code and a short description:

When an alarm is no longer present in the VDR, the alarm is removed from the Alert list on the alert screen.

4.3 Menu

Pressing F2 button (Menu) opens the menu page where different tests can be initiated or system information viewed.

The menu list contains:

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio test</td>
<td>Starts a microphone test.</td>
</tr>
<tr>
<td>Communication audio test</td>
<td>Starts a test of the VHF to VDR connection</td>
</tr>
<tr>
<td>Operational performance test (OPT)</td>
<td>Starts a new OPT test</td>
</tr>
<tr>
<td>View available operational performance tests</td>
<td>Open previously performed OPT reports</td>
</tr>
<tr>
<td>Network data</td>
<td>Displays network data status</td>
</tr>
<tr>
<td>System info</td>
<td>Displays system information</td>
</tr>
<tr>
<td>Analysis of recorded audio</td>
<td>Analyses data disk usage</td>
</tr>
<tr>
<td>Download data to USB disk</td>
<td>Download extraction and dump for support to a USB disk</td>
</tr>
</tbody>
</table>
4.3.1 Audio test
The audio test will initiate a microphone test. All microphone inputs on the VDR will be tested using the built-in buzzer in the microphones. After the test, a report will be generated indicating if the connected microphones are working satisfactorily.

The report will indicate connected and configured microphones that are working correctly with a green colour. Microphones that are configured but not working correctly will be indicated with a yellow colour. Unused audio inputs will be shown as disabled.

4.3.2 Communication audio test
The communication audio test will test the VHF input to the VDR. After selecting communication audio test, the BCP will now prompt the activation of the VHF connected to the VDR. The system will detect when audio is present and make a short recording. If no audio is detected by the VDR, an error message will appear.

After the test, the recorded audio is presented as a waveform picture. Here, the quality of the recording can be evaluated.

4.3.3 Operational Performance Test
The OPT is a simplified VDR test that will verify the quality of all connected signals as well as checking the final recording media (FRM) of the VDR. An OPT should be conducted on a regularly scheduled basis to ensure that the VDR is working and recording correctly.

The OPT consist of the following test:

<table>
<thead>
<tr>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final recording media</td>
<td>Verifies that the recording media are working and have recorded continuously for the required period.</td>
</tr>
<tr>
<td>Audio test</td>
<td>Verifies all configured Microphones</td>
</tr>
<tr>
<td>Communication test</td>
<td>Verifies main and secondary VHF radio</td>
</tr>
<tr>
<td>Serial input test</td>
<td>Verifies all configured serial inputs</td>
</tr>
<tr>
<td>Analog input test</td>
<td>Verifies all configured analog signals</td>
</tr>
<tr>
<td>Digital test</td>
<td>Verifies all configured digital inputs</td>
</tr>
<tr>
<td>Image test</td>
<td>Verifies all configured image channels</td>
</tr>
</tbody>
</table>

The OPT is an automated process. After starting the OPT, the user will be prompted a few times in order to carry out the communication audio test. The OPT will take a couple of minutes to complete.

After the OPT has finished, an OPT report will be generated and displayed. The OPT report will indicate any problems found during the test by highlighting the affected input with a yellow colour. Some items such as communication audio and video are required to be verified by the user. In the report it is therefore possible to view pictures of the communication audio and grabbed images from the configured image sources.

Communication audio should be inspected for signs of constant noise. Images should be inspected for clarity and correct resolution. Incorrect resolution will usually be seen on radar images where the radar range rings are oval in shape.
4.3.4 Performing an OPT

1. Click on F1 Button (“Menu”) and then select “Start new operational performance test (OPT)”.

2. Select which media to perform the OPT from.

3. The Communication Audio test will start. Click on “OK” to start the test.

   It is possible to skip the communication Audio test.

   The BCP will now prompt the activation of the communication audio channel within 60 seconds. At this point, activate the VHF.

   When the system detects audio on the channel, it will start to record 15 seconds of audio.

   After recording 15 seconds of audio, the system will analyse the audio and if audio is present pass the test. Click “OK” to continue.

   If the test has failed (no audio present in the recording), it is possible to restart the test by clicking the F2 button (Retry).

   The same test is performed for the secondary VHF channel if connected to the VDR.
4. After the communication audio test, the OPT will then automatically analyse Audio (bridge microphones), serial, digital, analog and video data recorded by the VDR.

5. After Analysing the data, the OPT report will be generated and displayed. See next section for an explanation of the report.

4.3.5 OPT report

In “View available operational performance test” previously performed OPT reports can be viewed. Additionally the OPT report will automatically be displayed after an OPT has been performed.

An OPT report consist of 8 pages.

General information
Display the vessel specific data including the expiry date of the VDR backup batteries.

FRM Information
Display information about the final recording media (FRM).
- Green colour indicates that the media is working and has recorded for at least the period required by regulation
- Yellow colour indicates a problem
- No colour indicates that the media has not yet been recording for the required period.

Bridge Audio
Display the result of the audio (Microphone) test.
- Green colour indicates that the microphone test has passed.
- Yellow colour indicates an error.
- No colour indicates input is disabled (Unused).
Communication audio
Display the result of the communication audio test.

- Green colour indicates microphone test has passed.
- Yellow colour indicates an error.

It is possible to display the recorded audio by selecting the input and press the “OK” button. A picture will appear displaying the audio waveform. The picture can be used to evaluate if there is excessive noise etc. overlaying the audio.

Communication input
Display the result of the serial data input analysis. All serial data that are configured to be recorded will be displayed.

- Green colour indicates that the channel has received the correct data.
- Yellow colour indicates an error or that the data configured for this channel was not received e.g. transmitting device turned off.

Discrete Inputs
Display the result of the Digital input analysis. The last recorded value of all digital input will be shown.

- Green colour indicates channel is OK.
- Yellow colour indicates an error.
Analog inputs
Display the result of the analog input analysis. The last recorded value of all analog input will be shown.

- Green colour indicates channel is OK.
- Yellow colour indicates an error

Image inputs
Display the result of the Image input analysis.

- Green colour indicates that a picture was received
- Yellow colour indicates an error or that no picture was received e.g. transmitting device turned off.

It is possible to display the last recorded picture for each image channel by selecting the image channel and press the “OK” button. The picture can now be evaluated for quality. Pay special attention to resolution issues (picture looks stretched), picture sharpness and whether the picture has captured the whole Radar/ECDIS display.

### 4.3.6 Network Data
The network data menu provides information about network errors etc. related to the VDR system. It can be used to verify if a network problem exists.

### 4.3.7 System Info
This page provides information about the VDR model, Firmware version etc.

### 4.3.8 Analysis of recorded audio
This page provides an analysis of the last 15 seconds of recorded data. It is possible to see how much of the storage has been used for Audio, Image, Serial, Analog, Digital and Log files. This information may be helpful when troubleshooting storage issues.
4.3.9 Download data to USB disk

This page allows the user to download either a VDR data extraction or a Dump for Support file. See chapter 8 for a guide on how to extract data to a USB disk and chapter 11 for a guide of how to make a dump for support file to a USB disk.
5 Handling unresolved alarms

If an alarm persists in the S-VDR/VDR and is not cleared by itself or if the OPT report indicates problems (DM100 VDR only), it must be assessed whether the alarm is critical and requires support/service or whether it is due to an issue on board the vessel not related to the S-VDR/VDR, but affects the data recorded by the S-VDR/VDR.

For example, if the radar connected to image channel 1 on the S-VDR/VDR is switched off, alarm “080 VIDEO VD01 input” will appear. When the radar is switched on again, the alarm will automatically disappear. If the radar was not switched off and the same alarm appears, it indicates a connection or hardware problem. In this case, service is required.

Some alarms may take a while to disappear from the system, even though the condition that caused the alarm has been corrected. On all systems with a BAU, pressing the “Purge List” button will clear the alarms from the system immediately and the alarm will only reappear if the condition for the alarm still exists. On systems with a BCP, this possibility does not exist. This means that the system must be monitored if an alarm remains after the condition has been corrected.

In the event of an alarm that requires service, contact one of Danelec Marine’s agents. A list of agents can be found on the Danelec Marine web page:

http://www.danelec-marine.com

Support can be requested at support@danelec-marine.com.

Danelec Marine may in some cases request a dump for support file to be sent to Danelec for analysis. In this case, please see section 10 for instructions on how to perform a dump for support.
6 Connecting a PC to the S-VDR/VDR

6.1 PC setup

The PC is used to extract data from the S-VDR / VDR. Before connecting the PC to the S-VDR/VDR the network interface of the PC must be configured. The default IP address of the S-VDR/VDR is 10.0.0.100, Subnet mask 255.255.255.0. To connect to the S-VDR/VDR, the PC network adaptor must be set to an IP address in the same range.

The recommended IP address for the PC is, IP address: 10.0.0.10, Subnet mask 255.255.255.0.

Note:
If the IP address of the VDR has been changed to another value than the default, the PC network adaptor must be configured accordingly.

Note:
The IP address of the computer may not be the same as the IP address of the S-VDR/VDR.

Follow these steps to configure the PC:

1. Open the network and sharing menu in the control panel

   Click Start menu → Control Panel

2. In the control panel click on Network and Sharing center

3. In the Network and Sharing Center window click on Change adapter Settings
4. Double click on the network adaptor controlling the LAN port used to connect to the S-VDR / VDR

5. Click on Properties

6. Highlight Internet Protocol Version 4 (TCP/IPv4) and click on Properties
7. Set IP address and Subnet mask

Select “Use the following IP adress:”
Type in IP address: 10.0.0.1
Type in Subnet mask: 255.0.0.0

8. Click OK and exit the control panel

The PC LAN port is now setup to communicate with the S-VDR / VDR.
6.2 Connecting the PC to the S-VDR/VDR

Connect the PC to the S-VDR/VDR using a standard network cable. Plug the cable in the PC LAN port and in an available LAN port on the S-VDR/VDR.

LAN ports are different on the Danelec DM200-500 range S-VDR/VDR and Danelec DM100 S-VDR/VDR.

6.3.1 DM200/DM300 S-VDR and DM400/DM500 VDR connection

Connect a LAN cable to any of the 4 ETHERNET ports.

6.3.2 DM100 S-VDR and DM100 VDR connection

Connect a LAN cable to LAN 1 port if unused. If LAN 1 port is in use, connect to one of the other LAN ports (LAN 2 – LAN 7).

Note:
Do not connect the cable to the SIU port.
6.4 Log in to the S-VDR/VDR

After successfully configuring the PC and connecting the network cable between the PC and the S-VDR/VDR, use a web browser (Internet Explorer version 6 or higher is recommended) to log in and extract data.

Open the Web browser and type in the IP address of the S-VDR/VDR (10.0.0.100) in the address field.

A new window opens. Click on connect.

The VDR front page appears. Click on login.

Enter user and password information:

User: svdr
Password: password

Click Submit to log in to the S-VDR/VDR.
7 Extracting Data from the S-VDR/VDR using a PC

When logged in to the S-VDR or VDR (see chapter 6) the S-VDR/VDR menu is available. To extract data click on the “Web Extractor” submenu.

7.1 Data source: DM100/DM200/DM300 S-VDR and DM400/DM500 VDR

In the WEB Extractor menu, select which memory to extract data from. Options are:

- Capsule
- Incident (backup disc)

On the capsule, the last 12 hours of recording is available.

In “Incident” there are a total of 3 incidents available. The latest 12 hours of recording is available in the incident indicated with a “Recording since <date>”. If saved incidents exist they are labelled with “Saved at <date>” label.

Web Extractor menu - No stored incident
Data can be extracted from Capsule or the first incident (currently recording).
Web Extractor menu - One saved incident
Data can be extracted from Capsule, the saved incident or the second incident (currently recording).

7.2 Data source: DM100 VDR
In the DM100 VDR, there are 3 data sources available (Final Recording Media, FRM).

- Fixed capsule
- Float free capsule
- Long-term backup disc

The fixed and float free capsules contain data from the last 48 Hours.
The long-term backup disc contains data from the last 30 days.

Web Extractor menu of the DM100 VDR
7.3 Extracting data

1. Select the medium to extract data from and click “Select Capsule / Incident” or “Select FRM” (DM100 VDR).

   ![Image of select capsule/incident or select FRM]

2. A list of available tracks will now appear. There may be several tracks. A start and an end label indicates when each specific track was recorded.

   ![Image of track list]

3. Select the track to extract data from and click on “Select track”.

   ![Image of select track]
4. It is now possible to set a start and end point for the data extraction. The default value is from the start of the recording to the end (all data in the selected track). If only a portion of the data is needed, the start and end time can be adjusted. Set “Start time” and “End time” and click on “Extract”.

5. Data is now extracted and the browser will prompt to save the data. The extracted data file is a .VEE file type and the file name contains the IMO number of the vessel. The .VEE file can be opened using the VDR Explorer Replay Software. The VDR Explorer software can be downloaded directly from the S-VDR/VDR main menu and installed on the PC.
8 Extracting Data to an USB disk (DM100 VDR)

On the DM100 VDR it is possible to extract data directly to a USB disk using the build in USB connector and the Bridge Control Panel (BCP). Note that this feature is available from version 1.51 only.

To extract data to a USB disk follow these steps.

1. Insert a normal windows formatted (FAT32) USB disk into either of the two USB ports on the DM100 VDR DPU.

2. On the Bridge control panel select “Download data to USB disk” and press “OK”

3. Select “Download VDR data” and press “OK”

4. Select the duration of the extraction (from 5 minutes to 48 hours) and press “OK”
5. The system will now check if there is sufficient space available on the USB disk. If OK press “F2” button on the BCP to continue.

6. Data is downloaded to the USB disk

7. The USB drive can now be inserted in a PC and data replayed using the VDR Explorer.

Note:
Extraction filenames are set as: <IMO number><Date/Time>.vee

Note:
The end time of data extracted directly to a USB disk will always be the same time as the data extraction was initiated. If a specific start and end time is required extract the data using a PC.
9 Extracting data from a NAS disc

To extract data from a NAS disc, the NAS disc must be disconnected from the S-VDR/VDR.

The NAS Disc must be connected to a PC using a standard LAN cable, and the PC LAN port must be configured as described in chapter 6.

The VDR Explorer software must be installed on the PC.

The NAS disc must be powered using the standard NAS power supply.

9.1 NAS Setup

1. Open the VDR Explorer Software by clicking on the desktop Icon or selecting the program from the start menu.

Note that if the user account on the PC running the VDR explorer does not have administrator rights, Windows may prevent the VDR Explorer from starting. In this case start the program from the start menu selecting the option VDR Explorer – No admin rights.
2. In the VDR Explorer start screen (Connect dialog), select the option “VDR extraction” and click on browse.

Type in the IP address of the NAS disc in the file name field: `\10.0.0.200\vdr\data`

Click open

The VDR Explorer will prompt for a username and a password.

Username: vdrdata (lowercase)
Password: vdrdata (lowercase)
3. A list of available files in the NAS disc appears. Each file is 640MB in size and the file name indicates the start time of the recording.

Ex. DA201409110802_00000301047

Select a file and click open.

The VDR extraction file has now been selected and the VDR Explorer can connect to the data in the file.

It is possible to do a track analysis of the extraction data before connecting to the data. Click on Analyze. This will produce a list of tracks available in this data extraction. The list will appear in the Track Information window.

To connect to the data, click on connect.

Now data can be played in the VDR Explorer. Note that the data is still located on the NAS disc. See 9.3 to export data from the NAS disc to a file on a PC.
9.3 Exporting Data from NAS disc to file

When the VDR explorer has been connected to a NAS disc data file, it is possible to extract this data and export it into a separate file on a PC.

1. Select menu Tools → Extractor

2. In the extractor menu select:
   - Tracks to be included in the extraction
   - Start and end time of the extraction

3. Click on browse to select a location for the file and give the file a name, then click save
4. Click on “Extract”

Data is now saved as a .VEE file in the specified folder and can be stored on any media and replayed on any PC with the VDR Explorer software installed.
10 Make a Dump for Support using a PC

In some cases, a Dump for Support file is required by Danelec Marine to troubleshoot and support technical issues related to Danelec S-VDR/VDR installations.

A Dump for Support file contains numerous data and log files all compressed into a single file - small enough to send as an attachment to an email.

To perform a Dump for Support, a PC with the LAN port configured as described in 6 is needed.

Follow the below steps to perform the Dump for Support:

1. Connect the PC to S-VDR/VDR as described in 6.2
2. Log in to the S-VDR/VDR as described in 6.4
3. In the main menu select the “Tech. Support” sub menu.
4. In the Tech Support submenu select “Dump for Support”.

Note:
After clicking on Dump for Support it may take a couple of minutes before the Dump for Support file is ready. During this time do not click on anything else.
5. When the Dump for Support file is ready, the browser will prompt to save the file.

Click on “Save” to save the file to the PC.

The Dump for support file is approximately 3-7 MB in size depending on the S-VDR/VDR model. It is a compressed file in the .TGZ format.

The Dump for Support file can easily be attached to an email and sent to Danelec Marine support for analysis.

support@danelec-marine.com
11 Make a Dump for Support to USB drive (DM100 VDR)

On the DM100 VDR it is possible to download a “Dump for Support” file directly to a USB disk using the build in USB connector and the Bridge Control Panel. Note that this feature became available from version 1.51 only.

To make “Dump for Support” file to a USB disk follow these steps.

1. Insert a normal windows formatted (FAT32) USB disk into either of the two USB ports on the DM100 VDR DPU.

2. On the Bridge control panel select “Download data to USB disk” and press “OK”

3. Select “Save Dump for support” and press “OK”

4. The system will now check if there is sufficient space available on the USB disk. If OK press “F2” button on the BCP to continue.
5. The “Dump for Support” file will be downloaded to the USB disk.

Note
Dump for support files names are set as: <dump4supp--><Date/Time>.tgz
12 VDR Explorer
The VDR Explorer is the software used to replay data from the Danelec S-VDR/VDR. The latest version of the VDR explorer supports all Danelec S-VDR/VDR models.

The VDR explorer can be obtained by contacting Danelec or a Danelec agent. Alternatively, the VDR Explorer can always be downloaded directly from the S-VDR/VDR.

The VDR Explorer will play any Danelec S-VDR/VDR data extraction file with the file format .VEE (VDR Explorer Extraction format). A data extraction file can be extracted from the S-VDR / VDR or from a NAS disc. Information on how to connect to the S-VDR/VDR and extract data can be found in the section Error! Reference source not found..

12.1 Starting VDR Explorer
Open the VDR Explorer software by clicking on the desktop icon or selecting the program from the start menu. Notice that if the user account on the PC running the VDR Explorer does not have administrator rights, Windows may prevent the VDR explorer from starting. In this case start the program from the start menu selecting the option VDR Explorer – No admin rights.
12.2 Connecting to a data file

1. To play data from a file, the VDR Explorer must connect to the file. When the VDR Explorer has first started it will automatically display the “Connect” dialog. Alternatively the “Connect” dialog can be found under Menu: Tools→Connect

2. In the “Connect” dialog, select “VDR extraction” and click on “Browse”.

3. Browse to the location of the data extraction file. Highlight the desired file and click open.

The VDR explorer is now connected to the extraction file.
12.3 Play control

When the VDR Explorer has connected to a VDR extraction file, the data can be played.

Playback is controlled by the Play control tool bar

Clicking on the small arrow in the bottom left corner of the play control tool-bar shows a set of advanced play options. Clicking the arrow again hides these features.

Please consult the “User Manual for VDR Explorer” Doc. 9200294 for an in-depth description of the play control features.
12.4 Playing the data

Click on the play button to start playing the data. Click on the play button again to pause. Click on the stop button to stop data.

When the data is being played, data can be observed in the different tab pages of the VDR Explorer configuration. Layout of the VDR Explorer configuration will vary from each installation.

Clicking on the tabs at the top of the player configuration will change the tab page displayed.
12.5 Accessing the audio
To play back the audio of the recording, click on the speaker icon and the audio dialog opens.

It is possible to mute the different audio sources by clicking on the speaker symbols and turning up and down the overall volume on the volume slider.

12.6 Vessel information
When the VDR is connected to a VDR Explorer extraction, it is possible to view the Vessel information that is configured in the S-VDR/VDR.

In the Item list, select what information to display. Available information:

- Vessel name
- Authority approval
- Flag
- IMO number
- MMSI number
- VDR model
- VDR installation date
- VDR serial number
- VDR battery expiry date