# **PUBLICATION NW4000-60**

Issue 1.4

# **VOYAGE DATA RECORDER**

# AUTHORITY ACCESS INSTRUCTION MANUAL



# NW4000-series VDR & (S)VDR

#### CONFORMITY STATEMENT

This equipment has been designed to comply with IMO regulations and the relevant IEC Performance Standards.

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### **Amendment Record**

When an amendment is incorporated into this publication, the details should be recorded below. Where the equipment has been modified, the modification number shown on the Amendment Instruction Sheet is also to be recorded.

Amendement Nbr	Date	Updated by

### **Important Notices**

### HEALTH AND SAFETY

All personnel are required to study these notices and familiarise themselves with all applicable safety precautions and bring them to the attention of others in the vicinity.

### **HIGH VOLTAGE WARNING**

LETHAL HIGH VOLTAGES ARE PRESENT IN THE VOYAGE DATA RECORDER

A current of 100 mA passing through the human body for one second can kill. This can occur at voltages as low as 35V AC or 50V DC. Some equipment in the system uses electrical power that can be lethal. Whenever practical, before carrying out installation, maintenance or repair, personnel involved must:

- (1) Isolate the equipment from the electrical supply.
- (2) Make tests to verify that the isolation is complete.
- (3) Ensure that power cannot be accidentally reconnected.

### DO NOT OPEN ANY OF THE UNITS WHEN THE VOYAGE DATA RECORDER IS OPERATIONAL UNLESS FULLY QUALIFIED TO DO SO.

If it is essential to work on the equipment with power connected, work must only be undertaken by qualified personnel who are fully aware of the danger involved and who have taken adequate safety precautions to avoid contact with dangerous voltages.

### **HEALTH HAZARD**

- This equipment contains materials which produce toxic fumes when ignited.
- The inhalation of dust and fumes or any contact with lubricants when cleaning the equipment may be temporarily harmful to health, depending on individual allergic reactions. Components which are broken or overheated may release toxic fumes or dust and must be treated with caution. Do not inhale the fumes and ensure that the dust and debris do not enter open cuts or abrasions. It is prudent to regard all damaged components as being potentially toxic, requiring careful handling and appropriate disposal.

### PERSONAL PROTECTION

Personal protection must be used whenever the possibility of an uncontrolled hazard exists. For example, a suitable face visor, gloves and a body apron should be worn when handling cathode ray tubes, as a precaution against injury in the event of breakage.

# OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

CAUTION : Handling of Electrostatic-Sensitive Semiconductor Devices

Certain semiconductor devices used in the equipment are liable to damage due to static voltage. Observe the following precautions when handling these devices in their unterminated state, or sub-units containing these devices:

- Persons removing sub-units from any equipment using these devices must be earthed by a wrist strap and a resistor at the point provided on the equipment.
- Soldering irons used during the repair operations must be low voltage types with earthed tips and isolated from the mains voltage by a double insulated transformer.
- Outer clothing worn must be unable to generate static charges.
- Printed Circuit Boards (PCBs) fitted with these devices must be stored and transported in anti-static bags.

## **List Of Abbreviations**

API	Application Program Interface
ARPA	Automatic Radar Plotting Aid
BCU	Bridge Control Unit
CCTV	Closed Circuit Television
CD ROM	Compact Disk Read Only Memory
COG	Course Over Ground
EBL	Electronic Bearing Line
ECDIS	Electronic Chart Display Information System
EPFS	Electronic Position Fixing System
EPIRB	Emergency Position Indicating Radio Beacon
FSP	Field Service Program
GPS	Global Positioning System
HSS	Hardened Storage Server
IEC	International Electro technical Commission
IMO	International Maritime Organization
INS	Integrated Navigation System
IP	Internet Protocol
LCD	Liquid Crystal Display
LED	Light Emitting Diode
NMEA	National Marine Electronic Association
PC	Personal Computer
PMC	Protective Memory Capsule
PRF	Pulse Repetition Frequency
PSU	Power Supply & Switch Unit
RIP	Radar Interlay Processor
ROM	Read Only Memory
ROV	Remotely Operated Vehicle
SINAD	Signal to Noise And Distortion
SNTP	Standard Time Network Protocol
SOG	Speed Over Ground
SOLAS	Safety Of Life At Sea
STW	Speed Through Water
TFTP	Text File Transfer Protocol
ULB	Underwater Locator Beacon
UPS	Uninterruptible Power Supply
USB	Universal Serial Bus
UTC	Universal Time Constant
VCR	Video Cassette Recorder
VDR	Voyage Data Recorder
VESA	Video Electronics Standards Association
VHF	Very High Frequency
VRM	Variable Range Marker
WAM	WaveNet Adaptor Module
WIM	WaveNet Interface Module

### **List Of Specifications**

IEC 61996:1999 Shipborne Voyage Data Recorder - Performance requirements – methods of testing and required test results.

IEC PAS 61996-2 Part 2: (2005-07) Simplified voyage data recorder (S-VDR) – Performance requirements – Methods of testing and required test results

IMO A.658(16): Use and fitting of retro-reflective materials on life-saving appliances

IMO A.662(16): Performance standards for float-free release and activation arrangements for emergency radio equipment

IMO A.694(17): General requirements for shipborne radio equipment forming part of the Global Maritime Distress and Safety System (GMDSS) and for electronic navigational aids

IMO A.810(19): Performance standards for float-free satellite emergency positionindicating radio beacons (EPIRBs) operating on 406 MHz

IMO A.830(19):1995, Code on alarms and indicators

IMO A.861(20): Performance standards for shipborne voyage data recorders (VDRs)

IMO MSC.81(70): Testing of life-saving appliances

IMO MSC.163(78): Performance standards for shipborne simplified voyage data recorders(S-VDR).

Eurocae: ED56A – Minimum operational performance specification (MOPS) for cockpit voice recorder system

VESA:1996, Video electronics standards association – Discrete monitor timings standard 1.0, Revision 0.7 (DMTS)

SAE AS8045:1988, Engineering society for advancing mobility land, sea, air, and space – Minimum performance standard for underwater locating devices – Acoustic-self-powered

IEC 60068-2-27:1987, Environmental testing – Part 2: Tests – Test Ea and guidance: Shock

IEC 60268:1998, Sound system equipment – Part 16: Objective rating of speech intelligibility by speech transmission index

IEC 60936-1:1999, Maritime navigation and radiocommunication equipment and systems – Radar – Part 1: Shipborne radar – Performance requirements – Methods of testing and required test results

IEC 60936-3: Maritime navigation and radiocommunication equipment and systems – Radar – Part 3: Shipborne radar with chart facilities – Methods of testing and required test results

IEC 60945:2002, Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results

IEC 61097-2: 2002, Global maritime distress and safety system (GMDSS) – Part 2: COSPAS SARSAT EPIRB – Satellite emergency position-indicating radio beacon operating on 406 MHz – Operational and performance requirements, methods of testing and required test results

IEC 61097-7:1996, Global maritime distress and safety system (GMDSS) – Part 7: Shipborne VHF radiotelephone transmitter and receiver – Operational and performance requirements, methods of testing and required test results

IEC 61162 (all parts), Maritime navigation and radiocommunication equipment and systems – Digital interfaces

IEC 61260:Electroacoustics - Octave-band and fractional-octave-band filters

IEC 61672 (all parts), Electroacoustics - Sound level meters

IEC 61993-2, Maritime navigation and radiocommunication equipment and systems – Automatic identification systems (AIS) – Part 2: Class A shipborne equipment of the universal automatic identification systems (AIS) – Operational and performance requirements, methods of test and required test results

VESA: 1996 Video electronics standards association - Discrete monitor timings standard 1.0, Revision 0.7 (DMTS)

## **1.0 Introduction**

The Voyage Data Recorder (furthermore referred to as VDR), records the outputs from sensors (connected external equipment) and ultimately passes the data to a protective capsule for storage.

This data is stored for a rolling 12 hour minimum period so that in the event of an accident the capsule can be recovered and an analysis of the events leading up to the incident may be conducted.

All available data is recorded until ship's power to the VDR fails, and from then only selected data (bridge audio) is recorded for a further two hours after which recording stops automatically.

The following data is recorded when the system is deployed as an S-VDR;

- Date and time from a source external to the ship, e.g. GPS
- Ship's position from a designated electronic positioning system, e.g. GPS
- Speed through the water and/or over the ground longitudinal and transverse from the Log
- Heading from the ship's designated compass
- Bridge audio via the VDR microphones.
- Communications audio from a designated VHF.
- Displayed video image from a single designated X or S band radar display, or alternatively an AIS in the event a radar interface possibility is not feasible.
- Depth under keel from the echo sounder.

<u>Additionally</u> recording of the following data is required when the system is deployed as a VDR:

- Mandatory main alarms.
- Rudder order and response.
- Engine order and response.
- Status of watertight doors as mandated by the IMO.
- Wind speed and direction, relative or absolute.
- Hull stress monitoring data, where such a system is fitted.

This manual provides information on how to have access to the recorded data.

## 2.0 Access to the VDR via the Bridge Control Unit



### 2. 1 Obtaining network connection with the VDR

The BCU is a console mountable display & control unit and is the primary userinteraction device. The BCU also serves to monitor the status of the VDR and functions as the primary alarm unit.

An alphanumeric display, together with pushbuttons and LED indication is provided on the front of the BCU to allow easy access and control of specific user-functions.

Additionally the BCU provides an RJ-45 user-access Ethernet port to be connected to a (laptop/notebook) PC for VDR system access (service and maintenance) as well as data retrieval of recorded data.

The PSU also has an independent data-switch incorporated, reason for which a laptop computer may also be connected to the network ports provided.

By means of the Ethernet cable (with two male RJ-45 jacks), connect a Laptop Computer or PC to the Ethernet port in the BCU by opening the round access hole with a coin.

Alternatively; by means of the Ethernet cable (with two male RJ-45 jacks), connect a Laptop Computer or PC to the Ethernet NET8 port in the PSU.

### 2.2 Network cabling

The VDR's Ethernet ports are auto-sensing and you should not have to change your Ethernet cable, however, if you encounter problems obtaining access to the VDR server, check the following:

- a. the Ethernet cable between the PC(Laptop, notebook computer) and the BCU or PSU should be a standard, ready made patch-type cable to overcome potential straight-thru vs. crossover Ethernet cabling issues. Change the cable if required.
- A straight-thru cable has identical ends.
- A crossover cable has different ends.
- A straight-thru is used as a patch cord in Ethernet connections.
- A crossover is used to connect two Ethernet devices without a hub or for connecting two hubs.
- A crossover has one end with the Orange set of wires switched with the Green set.
- Odd numbered pins are always striped, even numbered pins are always solid coloured.
- Looking at the RJ-45 with the clip facing away from you, Brown is always on the right, and pin 1 is on the left.
- No more than 1/2" of the Ethernet cable should be untwisted otherwise it will be susceptible to crosstalk.



- b. if connected to the BCU (Ethernet), check that the BCU is connected to the PSU and that the BCU is functioning properly when the VDR is powered up by the BCU showing the acquisition of an IP-adress in the range 192.2.168.xx and the BCU screen showing functional messages .
- c. if the BCU is not connected properly or dysfunctional, connect to the Ethernet port [NET8] provided at the PSU, this port's functionality is similar to the port provided on the BCU until the problem is resolved.
- d. Check and correct your computer's LAN settings to be supporting the TCP/IP protocol (as normally used for Internet access)

e. Make sure the pc/laptop does not have a fixed IP-adress by checking the properties in the TCP/IP settings. (please refer to section 9.1 of the NW-4000 Ships and Operator Manual to change IP settings in your PC/laptop)

### 2.3 Obtaining access to the VDR

### General

The VDR contains a unique IP-address thru which it may be contacted.

Internet Protocol (IP) Addresses are numerical codes that are used to identify the unique address of each host (device, in this case the VDR) that's attached to the Internet or, in some cases like with the VDR, a local area network (LAN) that support the Internet Protocol. In some cases, IP addresses are assigned on a dynamic basis (each time a computer connects to the network, it is assigned a new address).

At the PC, open the browser utility (Internet Explorer, Mozilla Firefox, etc.) and in the address-bar of the browser, enter the IP-address of the NetWave VDR system and press "Enter.

### 192.168.2.50



You will arrive at Form 0.0, the 'HOME-page" of the VDR

Home Status Channels Devices	Configuration Control	VDR-Menu 0.1	Recording 28 Ch. of 28
NetWave North			THE DATE OF THE O
Vessel Download			Home
Vessel Name IMO ID Number VDR-Type Approval Authority Approval Reference Date and Time of Last Amendment:	Oceania 1234567890 NW-4000 BSH BSH-XXXXXX-YYYY 30 October 2006		VDR Form: 0.1
S Version	ystemdate: 30 Octobe 1.0.15 Copyright 200	r 2006 21:50:11 h )6 NetWave System	s B.V.

## 3. 0 Downloading WavePlay replay software

Refer to the Page Home>Download



Choose to "Download NetWave VDR Replay software"

Execute the file, the software will install automatically on the connected PC/laptop.

## 4.0 Downloading data from the VDR

Before you can do any Replay activities, you need to transfer the data from the VDR onto the PC/laptop.

To download recorded data from the VDR, you need to use an installable program called "WinSCP" which is also to be downloaded from the HOME>DOWNLOAD page.

Home Status Channels Device	s Configuration Control VDR-Menu 0.2 Recording 1 Ch. of 0
NetWave	
Yessel Download	Download ALARM
	VDR Form: 0.2
WIN SCP	Download WIN SCP
WavePlay	Download NetWave VDR Replay Software
VDR System Configuration and Logs	<u>Download VDR System Configuration and System Log</u> file

Download and execute this program by choosing "Download WIN SCP" from the HOME>DOWNLOAD page.

Run the program and you will arrive at the login screen (as shown below)

WinSCP Login		? 🗙
<ul> <li>Session</li> <li>Stored sessions</li> <li>Environment</li> <li>Directories</li> <li>SSH</li> <li>Preferences</li> </ul>	192.168.2.50	<u>N</u> ew Load Delete <u>R</u> ename Set de <u>f</u> aults Shell jcon
About	<u>Save</u> Login	<u>I</u> ools Help

If you use this program for the first time, Select "New"" and you will arrive on the following screen:

WinSCP Login				? 🛛
<ul> <li>Session</li> <li>Stored sessions</li> <li>Environment</li> <li>Directories</li> <li>SSH</li> <li>Preferences</li> </ul>	Session <u>H</u> ost name 192.168.2.50 <u>U</u> ser name root Private <u>k</u> ey file Protocol O SF <u>T</u> P	e SFTP (al	Password •••••••	Po <u>r</u> t number 22
Advanced options				Select c <u>o</u> lor
About Language	s	<u>S</u> ave	. Login	Help

In the field "Host name", enter the (VDR) IP address: 192.168.2.50 and provide the

User name: root Password: nwstorage Select "SFTP (allow SCP fallback)" as Protocol and press "Login"

You will arrive in the VDR data storage directories, which are visible on the following screen;

PC-side					VDR-9	side			
🥦 vdr. data - 192.168.2.50 - WinSCP									
Local Mark Files Commands Session Optic	ns Remote	Help	t - 🍯						
		1 00 20			🖂 udu data		- A D		
							<u>a</u> m 🖻 🧖 🖻		
C:\Documents and Settings\Hob Post\Mijn docun	ner en				/mnt/usb2/vdr_da	ta			
Name – Ext	Size	Туре	Changed		Name - Ext		Size	Changed	Rights 🛆
<b>b</b>	•	Parent directory	11-8-2006 12:42	:40				10-8-2006 11:35:31	rwxr-xr->
🚔 Mijn afbeeldingen		Bestandsmap	26-3-2006 5:28:	27	alarm_history_	data.txt	26.820	11-8-2006 13:56:47	rw-rr
🛗 Mijn muziek		Bestandsmap	16-3-2006 11:00	:11	📔 alarm_logfile.k	99	41.703	11-8-2006 13:56:47	rw-rr
C Mijn notitieblok		Bestandsmap	17-3-2006 1:31:0	07	BCU_channel_	1_1.1	49	11-8-2006 13:16:55	rwxrwxrv
🕮 Mijn video's		Bestandsmap	12-6-2006 19:26	:20	BCU_channel_	1_1.20060810123127	46.494	10-8-2006 15:32:16	rw-rr
My Pictmotions		Bestandsmap	25-3-2006 7:52:0	08	BCU_channel_	1_1.20060810123409	1.842	10-8-2006 15:34:14	rw-rr
🛗 My Shapes		Bestandsmap	27-4-2006 22:02	:22	BCU_channel_	1_1.20060810123444	1.944.656	10-8-2006 16:05:10	rw-rr
My Skype Content		Bestandsmap	22-3-2006 12:55	:27	BCU_channel_	1_1.20060810130511	2.404.888	10-8-2006 16:28:56	rw-rr
My Skype Pictures		Bestandsmap	28-6-2006 18:59	:18	BCU_channel_	1_1.20060810192050	19.892.448	10-8-2006 23:50:34	rw-rr
Studio 2005		Bestandsmap	26-3-2006 5:22:2	26	BCU_channel_	1_1.20060811005330	13.263.069	11-8-2006 4:53:30	rw-rr
🔄 ais fout bij 5msec interval.doc	79.872	Microsoft Word Document	10-8-2006 13:34	:17	BCU_channel_	1_1.20060811015330	13.266.432	11-8-2006 5:53:30	rw-rr
🧐 desktop.ini	82	Configuratie-instellingen	16-3-2006 11:00	:11	BCU_channel_	1_1.20060811025330	13.268.992	11-8-2006 6:53:30	rw-rr
🚰 TOSHIBA Gebruikershandleiding.Ink	1.578	Snelkoppeling	22-9-2005 12:54	:14	BCU_channel_	1_1.20060811035331	13.482.747	11-8-2006 7:54:30	rw-rr
🧾 vdr_general_data.txt	13.078	Tekstdocument	11-8-2006 13:40	:27	BCU_channel_	1_1.20060811045430	13.269.248	11-8-2006 8:54:30	rw-rr
NIM2_video_image_file.bmp	1.924.230	Bitmapafbeelding	10-8-2006 14:46	:27	BCU_channel_	1_1.20060811055430	13.268.992	11-8-2006 9:54:30	rw-rr
					BCU_channel_	1_1.20060811065430	11.114.387	11-8-2006 10:46:14	rw-rr
					BCU_channel_	1_1.20060811074614	6.225.354	11-8-2006 11:18:31	rw-rr
					BCU_channel_	1_1.20060811082550	5.376	11-8-2006 11:27:39	rw-rr
					BCU_channel_	1_1.20060811082739	12.983.184	11-8-2006 12:27:42	rw-rr
					BCU_channel_	1_1.20060811092742	10.854.144	11-8-2006 13:16:51	rw-rr
					BCU_channel_	1_1.20060811101655	11.664.746	11-8-2006 14:11:20	rw-rr
					BCU_channel_	1_1_time.1	54	11-8-2006 13:16:55	rwxrwxrv
					BCU_channel_	1_1_time.20060810123127	1.310	10-8-2006 15:32:16	rw-rr
					BCU_channel_	1_1_time.20060810123409	153	10-8-2006 15:34:43	rw-rr
					BCU_channel_	1_1_time.20060810123444	50.539	10-8-2006 16:05:10	rw-rr
					BCU_channel_	1_1_time.20060810130511	36.530	10-8-2006 16:28:56	rw-rr
					BCU_channel_	1_1_time.20060810192050	159.066	10-8-2006 23:50:34	rw-rr
					BCU_channel_	1_1_time.20060811005330	105.036	11-8-2006 4:53:30	rw-rr
					BCU_channel_	1_1_time.20060811015330	105.038	11-8-2006 5:53:30	rw-rr
					BCU_channel_	1_1_time.20060811025330	105.040	11-8-2006 6:53:30	rw-rr
					BCU_channel_	1_1_time.20060811035331	106.807	11-8-2006 7:54:30	rw-rr
					BCU_channel_	1_1_time.20060811045430	105.040	11-8-2006 8:54:30	rw-rr 💌
<				>	<				>
0 B of 1.971 KB in 0 of 14					0 B of 692 MB in 0	of 1.075			
📝 F2 Rename 📝 F4 Edit 📫 F5 Copy 🗳 F	=6 Move 📺 I	F7 Create Directory 🗙 F8 D	elete 💣 F9 Properties	👖 F10 Quit					
3.308 KB 137 KB 🧕	🥦 🔒 aes	sFTP (v3)	1:43:48						
A start Subtled Mercroft Dr	E.	nhuno Winned	PURITCATION NWAR	Will Incl	wurking 100904	VDD - Administrator	Sec. 102 162 2		A A A A A A A A A A A A A A A A A A A

The left hand side of the screen represents your local (PC)directory, the right hand side shows the data and directory structure on the VDR.

Select the left hand side (where you see your PC's subdirectories) by mouse-clicking anywhere into this area, and prepare a dedicated subdirectory where you will store the recorded VDR files by pressing (function-key) F7.

An example name could be "PC\_VDRDATA\_01"

Create folder				? 🗙
New <u>f</u> older name:				
PC_VDRDATA_01				
	OK	) <b>C</b> a	ancel	<u>H</u> elp

On your PC, you should now be able to see these directories.

😼 / - root@192.168.2.50 - WinSCP								
Local Mark Files Commands Session Optic	ins Remote	Help						
🔶 🔟 📲 🕄 🗠 🔛 🌌 🖓	<u>s II </u>	V Ø Ø Default	•   🐼 •					
🛛 🥪 C: Lokaal station 🔽 🛛 💠 🚽 🔂	🔯 🚮 🖗	) 🔄 🗞		🔁 / <roob td="" 🖌="" 🖌<="" 🗸=""><td>🚮 🖗 😂 🐂 👘</td><td></td><td></td><td></td></roob>	🚮 🖗 😂 🐂 👘			
C:\Documents and Settings\Rob Post\Mijn docum	enten			7				
Name Ext A	Size	Туре	Changed	Name 🔶 Ext	2	ize Changed	Rights	T
<b>1</b>		Parent directory	25-10-2006 8:16:40	<b>(b</b> )		1-1-1970 1:00:00	rwxr-xr-x	-
📇 Mijn afbeeldingen		Bestandsmap	26-3-2006 4:28:27	bin		5-9-2006 13:11:27	rwxr-xr-x	,
📸 Mijn muziek		Bestandsmap	16-3-2006 10:00:11	boot		1-1-1970 1:18:52	rwxr-xr-x	1
🛅 Mijn notitieblok		Bestandsmap	17-3-2006 0:31:07	🛅 dev		31-3-2005 16:59:00	rwxr-xr-x	1
🛅 Mijn video's		Bestandsmap	12-6-2006 18:26:20	Centre		30-10-2006 22:13:04	rwxr-xr-x	t
CM My Google Gadgets		Bestandsmap	17-8-2006 18:41:13	bome		17-7-2006 13:01:14	rwxr-xr-x	1
My Pictmotions		Bestandsmap	25-3-2006 6:52:08	initrd 🔁		31-3-2005 17:02:50	rwxr-xr-x	r
📇 My Shapes		Bestandsmap	27-4-2006 21:02:22	ib 🔁		1-8-2005 14:56:25	rwxr-xr-x	r
🛅 My Skype Content 🧹		Bestandsmap	22-3-2006 11:55:27	mnt		30-10-2006 22:13:00	rwxr-xr-x	1
CM My Skype Pictures		Bestandsmap	28-6-2006 17:59:18	C opt		1-1-1970 2:40:07	rwxr-xr-x	ł
Cisual Studio 2005		Bestandsmap	26-3-2006 4:22:26	C proc		1-1-1970 1:00:00	r-xr-xr-x	- t
WIM1_channel_1_8.20060817121332	251.763	20060817121332-bestand	17-8-2006 14:48:36	Coroot		28-8-2006 1:56:51	rwx	1
S WIM2_video_image_file.bmp	1.924.230	Bitmapafbeelding	10-8-2006 13:46:27	🚞 sbin		6-10-2006 2:43:51	rwxr-xr-x	1
ais fout bij 5msec interval.doc	79.872	Microsoft Word Document	10-8-2006 12:34:17	C sys		1-1-1970 1:00:00	rwxr-xr-x	r
Herewith we confirm that the NetWave V	24.576	Microsoft Word Document	25-10-2006 8:16:38	i tftpboot		30-10-2006 16:49:00	rwxr-xr-x	r
📴 desktop.ini	82	Configuratie-instellingen	16-3-2006 10:00:11	🔂 tmp		2-8-2005 12:32:02	rwxrwxrwx	1
🗩 TOSHIBA Gebruikershandleiding.lnk	1.578	Snelkoppeling	22-9-2005 11:54:14	🚞 usr		6-10-2006 2:43:57	rwxr-xr-x	1
🗐 vdr_general_data.txt	13.078	Tekstdocument	11-8-2006 12:40:27	🗀 var		6-10-2006 2:43:58	rwxr-xr-x	1

On the (right hand) VDR screen, now select the primairy data volume which is stored in the subdirectory: <u>/root/mnt/vdrm1/vdr\_data</u> by double-clicking with the mouse on the directory structure.

🔁 / <root> 🕑 🔄 🕶 🗢 🗸</root>
1
Name 🔻 Ext
🖻
Cin var
🚞 usr
🔂 tmp
C tftpboot
i sys
🚞 sbin
Coroot
Diproc
Doot

🗀 mnt 🔸 🔽 🖙 + 🔿 - 📧 ն 🔂 😰 😂 🤤	
/mnt	
Name 🔶 Ext	Size Changed
<b>()</b>	1-1-1970 1:00:00
🗀 compactflash	23-10-2006 21:02:19
🔂 hss1	30-10-2006 21:17:25
🔂 hss2	30-10-2006 21:17:25
🔁 vdrm1 🚽	1-1-1970 2:51:00
Ci vdrm2	24-10-2006 19:47:27

NB. You will repeat this process on the secondary data volume called <u>/root/mnt/vdrm2/vdr\_data</u> later.

Once you arrive into in the subdirectory <u>mnt/vdrm1/vdr data</u>, select **all** files at the right hand side of the screen and drag them to the left hand portion of the screen, into the new subdirectory you have created, to copy them to your local PC.

You may select all files from the Menu Bar by choosing Mark and Select Files

🔓 vdr_data - 192.168.2.50 - WinSCP							
Local Mark Files Commands Session Options Remote	Help						
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				/mnt/usb1/vdr data			
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C audio	Bestandsmap	10-8-2006 14:54:53		<b>A</b>		1-1-1970 2:08:37	rwxr-xr->
Bakie	Bestandsmap	27-7-2006 15:01:04		directory2.txt	12.379	25-7-2006 11:49:12	rw-rr
BCULOG	Bestandsmap	4-8-2006 15:28:56		WIM1 channel 1 1.20060813225750	284.078	14-8-2006 2:58:36	rw-rr
BRANDEN	Bestandsmap	23-7-2006 13:08:27		WIM1 channel 1 1.20060813235836	187.248	14-8-2006 3:58:42	rw-rr
BSH reort voor Pierre100806	Bestandsmap	10-8-2006 12:00:43		WIM1 channel 1 1.20060814015941	187.242	14-8-2006 5:59:41	rw-rr
Documents and Settings	Bestandsmap	16-3-2006 10:58:08		WIM1 channel 1 1.20060814042728	93.017	14-8-2006 7:57:48	rw-rr
Download Frisian	Bestandsmap	1-8-2006 23:59:11		WIM1 channel 1 1.20060814045822	284.809	14-8-2006 8:59:18	rw-rr
frysian lady	Bestandsmap	24-7-2006 15:01:45		WIM1 channel 1 1.20060814065920	187.258	14-8-2006 10:59:22	rw-rr
E Fun	Bestandsmap	16-5-2006 13:53:34		WIM1 channel 1 1.20060814085923	190.369	14-8-2006 13:00:20	rw-rr
1386	Bestandsmap	22-9-2005 10:08:53		WIM1 channel 1 1.20060814100020	6.035	14-8-2006 13:02:16	rw-rr
Installation	Bestandsmap	1-5-2006 16:29:42		WIM1 channel 1 1 time.20060813225750	150.877	14-8-2006 2:58:36	rw-rr
Instructies Pierre	Bestandsmap	11-8-2006 13:59:46		WIM1 channel 1 1 time.20060813235836	98,909	14-8-2006 3:58:42	rw-rr
Therfacing	Bestandsmap	27-4-2006 17:40:25		WIM1 channel 1 1 time.20060814015941	98,796	14-8-2006 5:59:41	rw-rr
Klanten	Bestandsman	27-4-2006 17:44:26		WIM1_channel_1_1_time.20060814042728	48.114	14-8-2006 7:57:48	rw-rr
Marketing	Bestandsman	27-4-2006 22:03:31		WIM1_channel_1_1_time.20060814045822	151,273	14-8-2006 8:59:18	rw-rr
MSOCarbe	Bestandsman	22-9-2005 13:16:48		WIM1_channel_1_1_time.20060814065920	98,796	14-8-2006 10:59:22	rw-rr
netwaye player	Bestandsmap	3-7-2006 17:19:54		WIM1 channel 1 1 time.20060814085923	100.450	14-8-2006 13:00:20	rw-rr
Program Files	Bestandsmap	14-8-2006 3:42:44		WIM1 channel 1 1 time.20060814100020		14-8-2006 13:02:16	rw-rr
mrec3107 2	Bestandsmap	31-7-2006 19:58:43		WIM1 channel 1 2.20060813225750	158,430	14-8-2006 2:58:36	rw-rr
Bec310706	Bestandsman	31-7-2006 17:12:21		WIM1_chappel_1_2.20060813235836	104.426	14-8-2006 3:58:42	rw-rr
RECYCLER	Bestandsmap	17-3-2006 1:33:44		WIM1 channel 1 2.20060814015940	104,434	14-8-2006 5:59:40	rw-rr
SeaBot	Bestandsmap	30-5-2006 23:13:41		WIM1_channel_1_2.20060814042728	51.874	14-8-2006 7:57:48	rw-rr
SUPPORT	Bestandsman	22-9-2005 11:53:39		WIM1_channel_1_2.20060814045823	158,870	14-8-2006 8:59:18	rw-rr
Systeem	Bestandsman	11-8-2006 5:35:00		WIM1_channel_1_2.20060814065920	104,433	14-8-2006 10:59:22	rw-rr
System Volume Information	Bestandsman	16-3-2006 11:32:42		WIM1_chappel_1_2.20060814085922	104.422	14-8-2006 12:59:22	rw-rr
Technical Training	Bestandsman	28-6-2006 18:59:27		WIM1_chappel_1_2.20060814095922	5,135	14-8-2006 13:02:17	rw-rr
Temp	Bestandsman	25-4-2006 15:45:53		WIM1_chappel_1_2_time.20060813225750	189.224	14-8-2006 2:58:36	rw-rr
TOOI SCD	Bestandsman	28-6-2006 18:59:27		WIM1_chappel_1_2_time.20060813235836	147,802	14-8-2006 3:58:42	rw-rr
	Bestandsman	28-6-2006 18:59:26		WIM1_chappel_1_2_time.20060814015940	155,850	14-8-2006 5:59:40	rw-rr
C VDR	Bestandsmap	28-6-2006 11:08:33		WIM1_channel_1_2_time_20060814042728	91,486	14-8-2006 7:57:48	rw-rr
WDR Pricelists	Bestandsmap	27-4-2006 21:31:21		WIM1_channel_1_2_time_20060814045823	210.837	14-8-2006 8:59:18	rm-rr
WIM OPNAMEN 270706	Bestandsmap	26-7-2006 17:25:32		WIM1_channel_1_2_time_20060814065920	160.796	14-8-2006 10:59:22	rim-rr 🗙
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103 KB 604 B 🧾 🥦 🔒 ae:	s SFTP (v3) (	0:14:45					

Drag all selected files (now in blue color) into the subdirectory you have created to store the VDR Data on your PC. The following screen will open, and you must select Copy to start this process.

Сору		? 🛛
Copy 928 files to local directory		
C:\PC_VDRDATA_01\*.*		Browse
Transfer mode	Filename modification	Attributes
◯ <u>T</u> ext (plain text, html, scripts,)	⊙ <u>N</u> o change	✓ Preserve timestamp
O Binary (archives, doc,)	O <u>U</u> pper case	Preserve read-only
⊙ <u>A</u> utomatic	◯ Lo <u>w</u> er case	
Transfer following files in text mode	O <u>F</u> irst upper case	
*.*html; *.htm; *.txt; *.php*; *.cgi; * 👽	✓ Replace "\:*?'	
Other		
Exclude 🕶 mas <u>k</u>		
Clear source file 'Archive' attribute mask hints		
New and updated file(s) only		
Use same settings next time Do not show this dialog box again		
Transfer on background (add to transfer gueue)		
Presets << Less Copy Cancel Help		

Once the copying process, which may take up to 60 minutes, depending upon the data volume (number and characteristics of channels recorded) within the capsule is finished, you will continue by repeating these steps with the secondary volume called /root/mnt/vdrm2/vdr data.

Copy this volume into the same subdirectory on the PC. (the example: PC\_VDRDATA\_01)

Once you have finished both the primairy (<u>/root/mnt/vdrm1vdr data</u>) and secondairy data volume (<u>/root/mnt/vdrm2/vdr data</u>) from the capsule onto the PC you may start to review the data with the WavePlay replay software.

Refer to the Manual NW-4000-50 "WavePlay - VDR replay software User Manual"