



## DN-300 HDV / DV Hard Disk Recorder



### Instruction Manual

## Table of contents

Warnings and Precautions .....	3
Warranty .....	4
Disposal .....	4
Packing List .....	5
Introduction .....	5
Features .....	5
Connections & Controls .....	6
DN-300 Front Panel .....	6
DN-300 Rear Panel .....	7
Powering On .....	8
Menu Options - Overview.....	8
HDD Mode Menu.....	9
Record Formats Menu.....	10
Input Video Standard Menu .....	11
NTSC Level Setup Menu .....	11
Video Input Source Menu.....	12
GPI Mode & Function Menus .....	13
Set Date & Time Menu .....	14
Set Full Syt Menu .....	14
Format Hard Disk Menu.....	15
Erase Track Menu .....	15
Convert DV to AVI Menu .....	16
Set Output Channel Menu.....	16
Operation with a DV Camcorder / Deck / Vision Mixer .....	17
Recording a Track .....	17
Playing a DV Track .....	18
Operation with a HDV Camcorder / Deck .....	19
Recording a Track .....	19
Playing a M2T Track .....	20
Operation with an analogue video source.....	20
Recording a Track .....	20
Playing a Track .....	21
Connecting to a Computer .....	21

Connecting to a PC-----	22
Connecting to a MAC-----	23
Specification-----	25
Service and Support-----	26



## Warnings and Precautions

1. Read all of these warnings and save them for later reference.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord's rating.
10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
  - a. When the power cord is damaged or frayed;
  - b. When liquid has spilled into the unit;
  - c. When the product has been exposed to rain or water;
  - d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
  - e. When the product has been dropped or the cabinet has been damaged;
  - f. When the product exhibits a distinct change in performance, indicating a need for service.

## Warranty

Datavideo warrants that the equipment it manufactures shall be free from defects in material and workmanship for a period of 12 months from the date of product purchased. If equipment fails due to such defects, Datavideo will, at its option, repair or provide a replacement for the defective part or product. Equipment that fails after the warranty period, has been operated or installed in a manner other than that specified by Datavideo, or has been subjected to abuse or modification, will be repaired for time and material charges at the Buyer's expense.

This warranty does not affect your statutory rights within the Country of purchase.

## Disposal

For EU Customers only - WEEE Marking.



This symbol on the product indicates that it will not be treated as household waste. It must be handed over to the applicable take-back scheme for the recycling of electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

## Packing List:

The following items should be included in the box. If any items are missing please contact your supplier.

1	x	DN-300 HDV / DV Hard Disk Recorder
1	x	6 Pin to 6 Pin DV Cable 2m
1	x	6 Pin to 4 Pin DV Cable 2m
1	x	YUV Component I/O Cable Sub D 15 Pin Socket to 7 x BNC Socket 25cm
2	x	BNC to BNC Cable 1.2m
1	x	2 Phono Plug to 2 Phono Plug Audio Cable 1.2m
1	x	S-Video Plug to Plug Cable 1.2m
1	x	AC Cord
1	x	DN-300 DV conversion software (CD)
1	x	Power Supply (12V 4.2A)
1	x	Instruction Manual

## Introduction

The Datavideo DN-300 is a HDV / DV Hard Drive Recorder. It can record HDV via the IEEE-1394 (iLink, FireWire) output from HDV Camcorders (.m2t), or DV from DV or Analogue video sources (.dv). The DN-300 can be as an external firewire drive from which files can be dragged and dropped to a PC or MAC. The DN-300 also has a built in utility to convert .dv files to .avi files.

## Features

Stand Alone DV / HDV Hard Drive Recorder / Player.

Records DV from Digital or Analogue Video Inputs (DV via IEEE-1394 (iLink FireWire) or Component (YPbPr) / S-Video (Y/C) / Composite (CVBS) analogue video inputs).

Records HDV (.m2t) from HDV input (HDV via IEEE-1394 (iLink, FireWire)).

Full VTR playback functionality, including loop playback.

RS-422 control

GPI input

Drag and Drop file transfer to PC or MAC via IEEE-1394.

***N.B. The DN-300 cannot be operated as a DV Device from a PC - The AVC Command set is not supported.***

## Connections & Controls

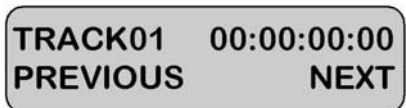
### Front Panel



Power On / Off Button. This is a soft power on / off button which powers the unit on from a state of standby; the main power on / off switch is on the rear panel



Menu Button. This calls up the menu display which is navigated using the Fwd / Rew Buttons and Previous / Next Buttons



Display Panel. Displays the status of the DN-300. The display will show Track Number, Timecode, or if the Menu Button is pressed the Menu Display



Fwd / Rew Buttons. In playback mode these buttons will operate as Fast Forward and Rewind Buttons. If the Menu Button is pressed these buttons will navigate backwards and forwards between the various menu options



Stop Button. Stops playback or record.



Play / Pause Button. Starts playback of a track, or pauses playback of a track- status will be displayed on the Display Panel. Also Starts / Pauses a recording when unit is in Record mode



Analog Input Button. Switches the DN-300 to Analog Input (Component YUV / S-Video Y/C / Composite CVBS) - Analog Inputs can only be recorded in DV formats.



Record Button. Puts the DN-300 into Record Mode. To start recording press the Record Button and Play Button simultaneously. **Unit will not record if no video signal is present.**

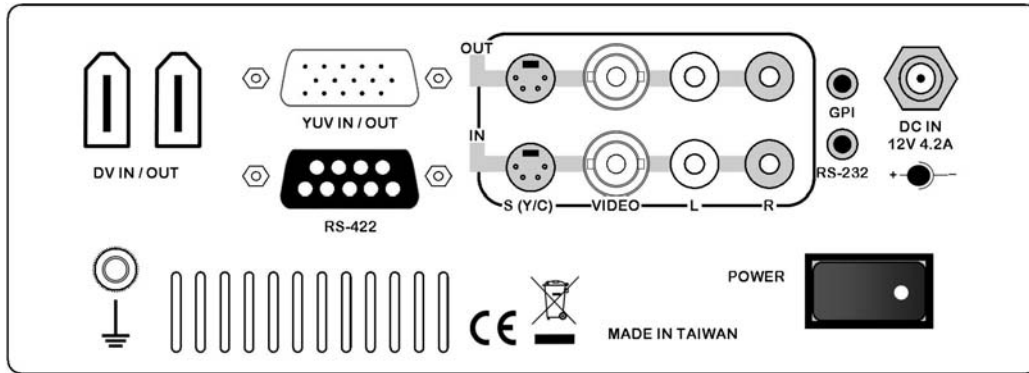


Previous / Next Buttons. These buttons navigate up and down between recorded tracks and menu options.

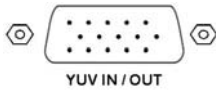


4 DV In/Out Port. This is a convenient front mounted DV / IEEE-1394 Port for connection to a DV / HDV camcorder, or to a PC for file transfer.

## Rear Panel

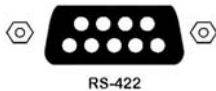


6 Pin DV In/Out Ports. Ports for connecting to a DV / HDV camcorder, or to a PC for file transfer.

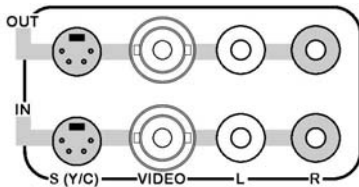


YUV In/Out Port. If you intend to run a YUV Component signal in or out of the DN-300 connect the special YUV breakout cable to this port. **See Video Input Source Menu for more details.**

**N.B. YUV In/Out is only suitable for RAW DV (DV) operation - It is not possible to record or playback M2T (HDV) files via the YUV In/Out**



RS-422 Port. The DN-300 can be controlled via RS-422 from external devices. The DN-300 uses standard Sony protocol. Connect the RS-422 control cable to this port.



S-Video / Composite Video and Stereo Audio In / Out. These are the standard connections for analogue video and audio signals. You can connect standard analogue video signals to the inputs and record them in DV format. A standard analogue video monitor could be connected to the output for simple record / playback monitoring of DV recordings.

**See Video Input Source Menu for more details.**

**N.B. Analogue Inputs & Outputs are only suitable for RAW DV (DV) operation - It is not possible to record or playback M2T (HDV) files via the Analogue Inputs / Outputs**



The GPI socket can be used for simple external control. The DN-300 can accept pulse or level trigger inputs, which can trigger record or playback and pause commands **See GPI Mode & Function Menus for more details.**



RS-232 Socket. May be used for some firmware updates, or other future uses.



DC In Socket. Connect the supplied 12V 4.2A PSU to this socket. The connection can be secured by screwing the outer fastening ring of the DC In plug to the socket



Power On/Off Switch. Switches the power On / Off



Grounding Terminal. When connecting this unit to any other component, make sure that it is properly grounded by connecting this terminal to an appropriate point. When connecting, use the socket and be sure to use wire with a cross-sectional area of at least 1.0 mm<sup>2</sup>.

## Powering On

Connect the DN-300 power supply to the DC In socket. Ensure the power cable is connected to a suitable mains socket.

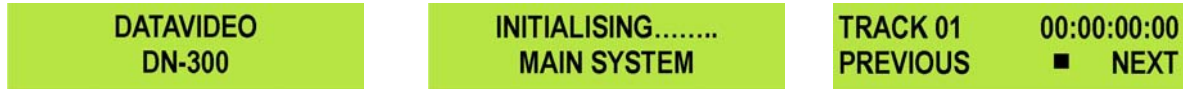


Switch the power On/Off switch to the ON position



Press the Power Button until it lights up

The LCD display panel should show DN-300 and after a few seconds the track display should appear and the DN-300 is ready to go



## Menu Options

The DN-300 is a menu driven unit; there are 18 menus which are used to initially set up the unit. The menu settings are non-volatile (they are stored even when the unit is switched off), so many of the settings, such as date and time, you will only need to set once. We will look at each individual menu in more detail, but here is a quick overview of them. **N.B. *Not all menus appear when the Analog Input Button is illuminated.***

The 17 Menus are:

HDD MODE  
CANCEL ENTER

**HDD MODE** - This sets the DN-300 to HDD mode for drag and drop file transfers to a PC or MAC. ***See HDD Mode Menu for more details.***

SETUP LOOP PLAY  
CANCEL ENTER

**SETUP LOOP PLAY** - Sets the DN-300 to loop play a track, the track will continuously loop until stopped.

RECORD FORMATS  
CANCEL ENTER

**RECORD FORMATS** - Sets the DN-300 record format to .dv for DV recordings or .m2t for HDV recording. ***See Record Formats Menu for more details.***

FREE SPACE  
CANCEL ENTER

**FREE SPACE** - Displays how much HDD space is available on the DN-300.

TOTAL SPACE  
CANCEL ENTER

**TOTAL SPACE** - Displays the total available HDD storage on the DN-300.

INPUT VIDEO STANDARD  
CANCEL ENTER

**INPUT VIDEO STANDARD** - Sets the DN-300 video input to NTSC or PAL. ***See Input Video Standard Menu for more details.***

NTSC SETUP LEVEL  
CANCEL ENTER

**NTSC SETUP LEVEL** - Sets the ire to 0 or 7.5 for NTSC. 7.5 ire is most commonly used in the U.S.A. and Canada and 0 ire in far eastern countries such as Japan. ***See NTSC Setup Level Menu for more details.***

VIDEO INPUT SOURCE  
CANCEL ENTER

**VIDEO INPUT SOURCE** - The DN-300 has three types of Analogue Input - select between CVBS (Composite), Component (YPbPr) or S-Video (Y/C). ***See Video Input Source Menu for more details.***

SET GPI TRIGGER MODE  
CANCEL ENTER

**SET GPI TRIGGER MODE** - The DN-300 has two GPI trigger modes, Pulse or Level trigger can be set. ***See GPI Mode & Function Menus for more details.***

SELECT GPI FUNCTION  
CANCEL ENTER

**SELECT GPI FUNCTION** - The GPI function can be set to either Play / Play Pause or Record / Record Pause. ***See GPI Mode & Function Menus for more details.***

SET DATE & TIME  
CANCEL ENTER

**SET DATE & TIME** - Sets the date and time on the DN-300; the setting is non-volatile so it is stored when the unit is powered off. **See Set Date & Time Menu for more details.**

SET FULL SYT  
CANCEL ENTER

**SET FULL SYT** - Occasionally DV devices can suffer from conflicts. In the event of the DN-300 conflicting with another device Set Full Syt is enabled to overcome the conflict.

FORMAT HARD DISK  
CANCEL ENTER

**FORMAT HARD DISK** - Formats the HDD and removes all files and tracks from the DN-300. **See Format Hard Disk Menu for more details.**

ERASE TRACK  
CANCEL ENTER

**ERASE TRACK** - Erases individual tracks from the DN-300. **See Erase Track Menu for more details.**

CONVERT DV TO AVI  
CANCEL ENTER

**CONVERT DV TO AVI** - Converts DV files to .AVI files for greater NLE compatibility. **See Convert DV to AVI Menu for more details.**

SET OUTPUT CHANNEL  
CANCEL ENTER

**SET OUTPUT CHANNEL** - Allows the output channel of the DN-300 to be switched to a different I.D. number. This is important if there are any conflicts between DV Devices. **See Set Output Channel Menu for more details.**

FIRMWARE VERSION  
CANCEL ENTER

**FIRMWARE VERSION** - Display the Rev No. and Firmware Version of the DN-300

#### HDD Mode Menu

The HDD Mode Menu will set the DN-300 up as an external IEEE-1394 (Firewire) drive, for direct drag and drop file transfer to a PC or MAC.

The files appear in the root directory of the DN-300 hard disk, and are numbered with the track number that appears in the LCD display when you are recording or playing back the track.

The DN-300 uses a FAT32 file structure, so large tracks are broken down into 2 GB files which are sequentially named:

For example if Track 02 is 1 hour in duration it will appear as follows:

dv02.dv (2 GB) - dv02 is the file name for Track 02  
dv02\_01.dv (2 GB) - Each 2 GB section is given a sequential \_xx numeric extension  
dv02\_02.dv (2 GB)  
dv02\_03.dv (2 GB)  
dv02\_04.dv (2 GB)  
dv02\_05.dv (2 GB)  
dv02\_06.dv (77 MB) - The last file in the sequence is likely to be smaller than 2GB.

#### Connecting to a PC / MAC

**NB: Although your PC / MAC may see the DN-300 as an AVC compliant DV Device it is not intended to be operated as such.**

Connect the DN-300 IEEE-1394 output to a PC or MAC.

To set the DN-300 into HDD Mode firstly press the Menu button so that it is illuminated.

You will see the display change to the HDD Mode Menu



HDD MODE  
CANCEL ENTER

Press the Next (▲) Button to select ENTER and the display will show the HDD Enable Confirmation Screen



Press the Next (▲) Button again to confirm, after a few seconds HDD Mode will be enabled



The PC / MAC should recognise that an external IEEE-1394 (Firewire)HDD has been connected. The DN-300 can then be used just like any external drive. **See *Connecting to a PC / Connecting to a MAC for more details.***

To return the DN-300 to Deck Mode either use “Safely Remove Hardware” with a PC, or with a MAC use “Eject” or Drag the DN-300 Drive to “Trash”. Once un-mounted the DN-300 display will return to Track Display.

### Record Formats Menu

The Record Formats Menu sets the recording format of the DN-300, you can choose between RAW DV (.DV) or M2T (HDV).

Raw DV can be recorded from a DV deck, camcorder, vision mixer with IEEE-1394 (iLink, FireWire, DV) output, or from an analogue video signal (Composite (CVBS), S-Video (Y/C), Component (YUV (CPbPr))).

M2T (HDV) can only be recorded from a camcorder, deck with an HDV signal via IEEE-1394 (iLink, FireWire), it is not possible to record M2T from an analogue input.

***N.B. M2T recordings cannot be played back via the analogue outputs of the DN-300 - To view recorded files set your HDV Camcorder / Deck to Recorder Mode - the DN-300 files can then be played back to the viewfinder / monitor.***

To select the Record Format:  
Press the Menu Button, to enter menu mode



Press the FWD (▶▶) Button to navigate the menus until RECORD FORMATS is displayed



Press the Next (▲) Button to enter the RECORD FORMAT set up menu



Press the FWD (▶▶) Button to select either RAW DV (DV) or M2T (HDV)



To confirm your selection and exit the menu press the Next (▲) button.



Then press the Menu Button to leave menu mode



### Input Video Standard Menu

The Input Video Standard Menu sets the DN-300 to receive either NTSC or PAL video signals.

To select the Input Video Standard:  
Press the Menu Button, to enter menu mode



Press the FWD (▶▶) Button to navigate the menus until INPUT VIDEO STANDARD is displayed



Press the Next (▲) Button to enter the INPUT VIDEO STANARD set up menu



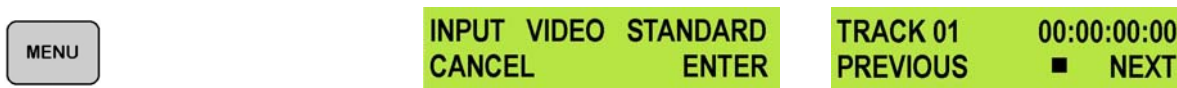
Press the FWD (▶▶) Button to select either PAL or NTSC



To confirm your selection and exit the menu press the Next (▲) button.



Then press the Menu Button to leave menu mode



### NTSC Setup Level Menu

The NTSC Setup Level Menu sets the DN-300 either 0 ire or 7.5 ire - ***This is not necessary for PAL inputs.*** 7.5 ire is most commonly used in the U.S.A. and Canada and 0 ire in far eastern countries such as Japan. If you are unsure which to set, please consult your dealer.

To select the NTSC Level:  
Press the Menu Button, to enter menu mode



Press the FWD (▶▶) Button to navigate the menus until NTSC SETUP LEVEL is displayed



Press the Next (▲) Button to enter the NTSC level set up menu



Press the FWD (▶▶) Button to select either 0 IRE or 7.5 IRE



To confirm your selection and exit the menu press the Next (▲) button.



Then press the Menu Button to leave menu mode



### Video Input Source Menu

The Video Input Source Menu sets the analogue input mode of the DN-300.

The DN-300 has Composite (CVBS), S-Video (Y/C) and Component (YPbPr) analogue inputs.

***N.B. It is only possible to record RAW DV (DV) from the analogue inputs - M2T (HDV) can only be recorded from a HDV stream via IEEE-1394 (iLink, FireWire).***

To select the Video Input Source:

Press the Menu Button, to enter menu mode



Press the FWD (▶▶) Button to navigate the menus until VIDEO INPUT SOURCE is displayed



Press the Next (▲) Button to enter the VIDEO INPUT SOURCE set up menu



Press the FWD (▶▶) Button to select either Composite, Component or S-Video



To confirm your selection and exit the menu press the Next (▲) button.



Then press the Menu Button to leave menu mode



### GPI Mode & Functions Menus

The DN-300 can be set to receive either pulse or level GPI triggers, which can be set to activate Play / Pause or Rec / Pause.

To select the GPI Mode:

Press the Menu Button, to enter menu mode



HDD MODE  
CANCEL ENTER

Press the FWD (▶▶) Button to navigate the menus until SET GPI TRIGGER MODE is displayed



SET GPI TRIGGER MODE  
CANCEL ENTER

Press the Next (▲) Button to enter the SET GPI TRIGGER MODE menu



PULSE TRIGGER ▶  
CANCEL SELECT

Press the FWD (▶▶) Button to select either Pulse Trigger or Level Trigger



PULSE TRIGGER ▶  
CANCEL SELECT

LEVEL TRIGGER ▶  
CANCEL SELECT

To confirm your selection and exit the menu press the Next (▲) button.



PULSE TRIGGER ▶  
CANCEL SELECT

SET GPI TRIGGER MODE  
CANCEL ENTER

Then press the Menu Button to leave menu mode



SET GPI TRIGGER MODE  
CANCEL ENTER

TRACK 01 00:00:00:00  
PREVIOUS ■ NEXT

### To select the GPI Function:

Press the Menu Button, to enter the menu mode

Press the FWD (▶▶) Button to navigate the menus until SET GPI FUNCTION is displayed



SELECT GPI FUNCTION  
CANCEL ENTER

Press the Next (▲) Button to enter the SET GPI FUNCTION menu



PLAY/PLAY PAUSE ▶  
CANCEL SELECT

Press the FWD (▶▶) Button to select either Pulse Trigger or Level Trigger



PLAY/PLAY PAUSE ▶  
CANCEL SELECT

RECORD/RECORDPAUSE▶  
CANCEL SELECT

To confirm your selection and exit the menu press the Next (▲) button.



RECORD/RECORDPAUSE▶  
CANCEL SELECT

SELECT GPI FUNCTION  
CANCEL ENTER

Then press the Menu Button to leave menu mode



SELECT GPI FUNCTION  
CANCEL ENTER

TRACK 01 00:00:00:00  
PREVIOUS ■ NEXT

### Set Date & Time Menu

To set the Date & Time on the DN-300

Press the Menu Button, to enter menu mode



Press the REW (◀◀) Button to navigate the menus until SET DATE & TIME is displayed



Press the Next (▲) Button to enter the SET Date & Time menu



You will see a flashing cursor on the date value.

To set the date use the Play/Pause Button to increase the value or the Stop Button to decrease the value



Use the FWD (▶▶) Button to move the cursor to the next column to the right i.e. Month / Year / Hours / Minutes or the REW (◀◀) Button to move the cursor back to the left.



Once you have set the date & time press the Next (▲) Button to exit the menu



Then press the Menu Button to leave menu mode



### Set Full Syt Menu

DV devices can sometimes conflict with one another, it is not a common occurrence but it can happen. When conflicts occur one DV device may not recognize the other, or the output from one is switched off by the other. "Set Full Syt" will overcome conflicts of this type, so if you have a conflict with another DV device switch Full Syt to Enable.

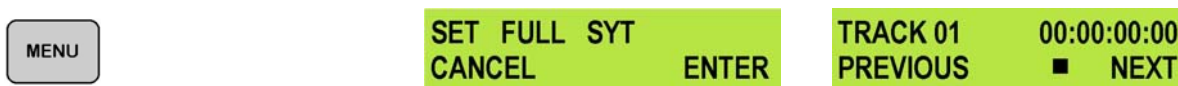
Press the Menu Button, and use the REW (◀◀) Button to navigate to SET FULL SYT



Press the Next (▲) Button to select Enable and then press it again to exit the menu.



Then press the Menu Button to leave menu mode



### Format Hard Disk Menu

Format Hard Disk will remove all tracks from the hard drive.

Press the Menu Button, to enter menu mode



Press the REW (◀◀) Button to navigate the menus until FORMAT HARD DISK is displayed

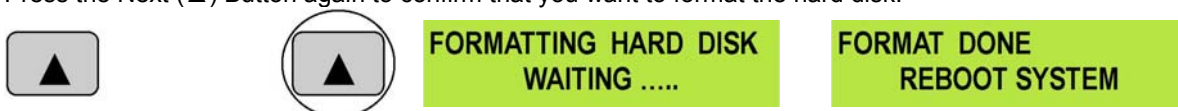


Press the Next (▲) Button to enter the FORMAT HARD DISK menu



You will see ARE YOU SURE? displayed

Press the Next (▲) Button again to confirm that you want to format the hard disk.



After a few seconds the DN-300 will reboot and the display will return to normal



### Erase Track Menu

Erase Track is used for deleting individual tracks from the DN-300.

Press the Menu Button, to enter menu mode



Press the REW (◀◀) Button to navigate the menus until ERASE TRACK is displayed



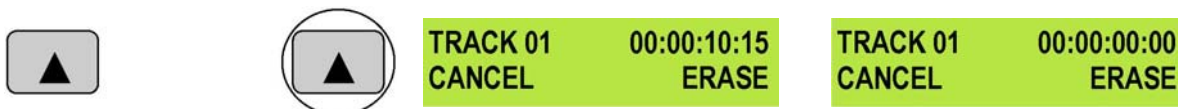
Press the Next (▲) Button to enter the ERASE TRACK menu



Use the FWD (▶▶) or REW (◀◀) Button to select the track that you want to erase - (Track 01 in this case)



Press the Next (▲) Button to erase the selected track - The track duration will return to 00:00:00:00



Then press the Menu Button to leave menu mode



### Convert DV to AVI Menu

The DN-300 has a built in file conversion utility which can convert .dv files to .avi files (type 1 or type 2). You can choose the format that best suits your NLE platform.

**N.B. The DN-300 requires sufficient HDD space to create the .avi file. For example a One GB .dv file will require at least One GB of free space on the DN-300 for the .avi file to be created.**

**Tracks that have been recorded in M2T (HDV) cannot be converted to .avi**

**The converted AVI file will not be displayed on the track list, but it will be available to drag and drop to a PC.**

The conversion takes about 60% realtime, i.e. A 1 hour track will take around 36 minutes to convert.

Press the Menu Button, to enter menu mode



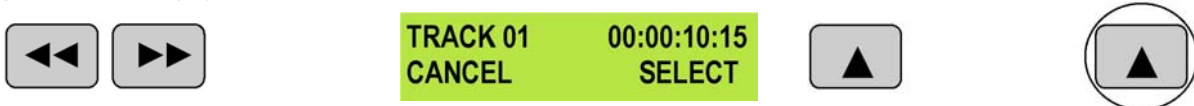
Press the REW (◀◀) Button to navigate the menus until CONVERT DV TO AVI is displayed



Press the Next (▲) Button to enter the CONVERT DV TO AVI menu



Use FWD (▶▶) or REW (◀◀) to select the track that you want to convert - (Track 01 in this case) - Then press the Next (▲) Button to confirm the selection.



Use FWD (▶▶) or REW (◀◀) to select AVI Type-1 or Type-2 and then press the Next (▲) Button to confirm the selection.



The conversion process will start - once complete CONVERSION DONE will be displayed



Press the Next (▲) Button to select OK - and then press the Menu Button to exit.



### Set Output Channel Menu

Occasionally DV device outputs will conflict. It is not a frequent occurrence but when it happens it is possible to change the Output Channel I.D of the DN-300 to overcome the conflict. For example if another DV device has the same output channel I.D. as the DN-300 this will result in a conflict, which will mean that the DN-300 output is blocked. Please change the output channel I.D. of the DN-300 to solve the problem.

The default output channel of the DN-300 is 1, selecting any other value, between 0 - 63 will overcome the conflict.

Press the Menu Button, to enter menu mode



Press the REW (◀◀) Button to navigate the menus until SET OUTPUT CHANNEL is displayed



SET OUTPUT CHANNEL  
CANCEL ENTER

Press the Next (▲) Button to enter the SET OUTPUT CHANNEL menu



CHANNEL NUMBER: 63  
CANCEL SET

Use FWD (▶▶) or REW (◀◀) to change the output channel number - in this case we have selected 1



CHANNEL NUMBER: 1  
CANCEL SET

Press the Next (▲) Button to confirm the setting



SET OUTPUT CHANNEL  
CANCEL ENTER

Then press the Menu Button to leave menu mode



SET OUTPUT CHANNEL  
CANCEL ENTER

TRACK 01 00:00:00:00  
PREVIOUS ■ NEXT

## Operation with a DV Camcorder / Deck / Vision Mixer

### Recording a track

To record from a DV Camcorder / Deck / Vision Mixer connect the DV device to the DN-300 via an IEEE-1394 (iLink, FireWire) cable. You can connect to either of the rear 6 Pin ports, or to the front mounted 4 Pin port, but only connect one DV device to the DN-300 at a time.



Rear Mounted DV 6 Pin Ports



Front mounted DV 4 Pin Port

Use the Next / Previous Buttons to select an empty track from the DN-300 track list, one that shows a duration of 00:00:00:00 in the LCD display.

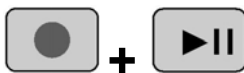
TRACK 02 01:25:12:09  
PREVIOUS ■ NEXT

Not suitable - Track has been recorded

TRACK 01 00:00:00:00  
PREVIOUS ■ NEXT

Suitable - Track is empty

Press both the Record and Play/Pause Buttons simultaneously and the DN-300 should start recording.



TRACK 01 00 : 00 : 01 : 05  
●

The counter should start counting and the REC symbol should appear

If it does not start recording check the following:

There is a DV signal from the DV device.

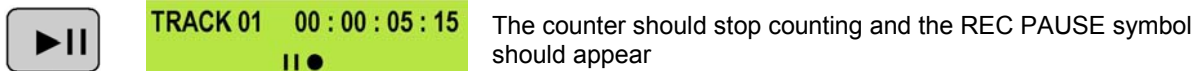
The Analog Input Button is not illuminated

The DN-300 Record Format is set to RAW DV (DV), not M2T (HDV) **see Record Formats Menu.**

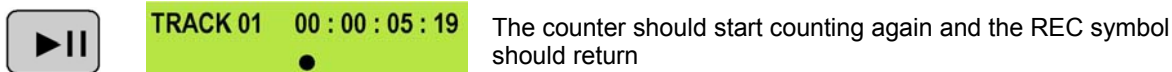
The track you have selected on the DN-300 is empty. The counter next to the TrackNo. on the LCD display should be showing 00:00:00:00.

There is some available space on the DN-300 Hard Disk - Go to the FREE SPACE Menu and check that the DN-300 is not full.

During record you can pause the DN-300 by pressing the Play/Pause button, the counter on the LCD display will stop.



To release pause press the Play/Pause button again.



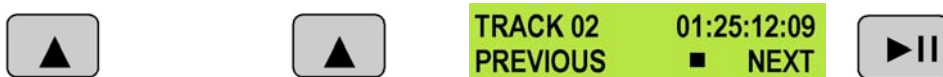
***N.B. It is not possible to stop recording and then restart on the same track, once a track has been stopped you must select a new empty track from the DN-300 to start recording again.***

### Playing a DV Track

Tracks that have been recorded in RAW DV (DV) mode can be played back to DV devices via one of the IEEE-1394 ports, or to analogue monitors or recorders via the Composite, S-Video (Y/C) or Component (YUV) video outputs.

To play a track back to a camcorder you will need to switch the camcorder to recorder / edit mode, so that it is receiving a signal from the DV port. - Please consult your camcorder instruction manual for more details.

Use the Previous (▲) / Next (▲) Buttons to select the track you want to play, and then press the Play (▶||) Button.



It is also possible to set the DN-300 to loop play. In loop play the track will seamlessly looped until stopped. To set up loop play press the Menu Button to enter menu mode and then the FWD (▶▶) Button until SETUP LOOP PLAY is displayed.



Press the Next (▲) Button to enter the setup loop play menu, and then press the FWD (▶▶) Button to select ENABLE



Press the Next (▲) Button to select SET and then press the Menu Button to return to track display.

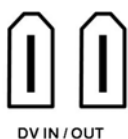


When you press play the selected track will start playing, and will loop until the Stop (■) Button is pressed. To cancel loop playback, follow the above procedure but select disable instead of enable.

## Operation with a HDV Camcorder / Deck

### Recording a track

To record from a HDV Camcorder / Deck connect the HDV device to the DN-300 via an IEEE-1394 (iLink, FireWire) cable. You can connect to either of the rear 6 Pin ports, or to the front mounted 4 Pin port, but only connect one HDV device to the DN-300 at a time.



Rear Mounted DV 6 Pin Ports



Front mounted DV 4 Pin Port

Make sure that the DN-300 Record Format is set to M2T (HDV). **Please see Record Formats Menu for more details.**

Use the Next / Previous Buttons to select an empty track from the DN-300 track list, one that shows a duration of 00:00:00:00 in the LCD display.

<b>TRACK 02</b> <b>PREVIOUS</b>	<b>01:25:12:09</b> ■ <b>NEXT</b>	Not suitable - Track has been recorded	<b>TRACK 01</b> <b>PREVIOUS</b>	<b>00:00:00:00</b> ■ <b>NEXT</b>	Suitable - Track is empty
------------------------------------	-------------------------------------	---	------------------------------------	-------------------------------------	------------------------------

Press both the Record and Play/Pause Buttons simultaneously and the DN-300 should start recording.



**TRACK 01** 00 : 00 : 01 : 05

The counter should start counting and the REC symbol should appear

If it does not start recording check the following:

There is a HDV signal from the HDV device. Some camcorders have options to put out DV or HDV via their IEEE-1394 (iLink) ports, make sure the output is set to HDV.

The Analog Input Button is not illuminated

The DN-300 Record Format is set to M2T (HDV) **see Record Formats Menu.**

The track you have selected on the DN-300 is empty. The counter next to the TrackNo. on the LCD display should be showing 00:00:00:00.

There is some available space on the DN-300 Hard Disk - Go to the FREE SPACE Menu and check that the DN-300 is not full.

During record you can pause the DN-300 by pressing the Play/Pause button, the counter on the LCD display will stop.



**TRACK 01** 00 : 00 : 05 : 15  
|| ●

The counter should stop counting and the REC PAUSE symbol should appear

To release pause press the Play/Pause button again.



**TRACK 01** 00 : 00 : 05 : 19  
●

The counter should start counting again and the REC symbol should return

**N.B. It is not possible to stop recording and then restart on the same track, once a track has been stopped you must select a new empty track from the DN-300 to start recording again.**

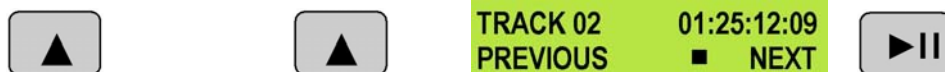
### Playing a M2T (HDV) Track

Tracks that have been recorded in M2T mode can only be played back to HDV devices via one of the IEEE-1394 ports.

**N.B. It is not possible to playback M2T tracks to analogue monitors or recorders via the Composite, S-Video (Y/C) or Component (YUV) video outputs.**

To play a track back to a camcorder you will need to switch the camcorder to recorder / edit mode, so that it is receiving a signal from the HDV port. - Please consult your camcorder instruction manual for more details.

Use the Previous (▲) / Next (▲) Buttons to select the track you want to play, and then press the Play (▶) Button.



It is also possible to set the DN-300 to loop play. In loop play the track will seamlessly looped until stopped. To set up loop play press the Menu Button to enter menu mode and then the FWD (▶▶) Button until SETUP LOOP PLAY is displayed.



Press the Next (▲) Button to enter the setup loop play menu, and then press the FWD (▶▶) Button to select ENABLE



Press the Next (▲) Button to select SET and then press the Menu Button to return to track display.



When you press play the selected track will start playing, and will loop until the Stop (■) Button is pressed. To cancel loop playback, follow the above procedure but select disable instead of enable.

### Operation with an Analogue Video Source

The DN-300 can record DV files from analogue video sources, Composite CVBS, S-Video (Y/C) or Component Video (YUV (YPbPr)).

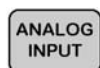
**N.B. It is not possible to record M2T (HDV) files from an analogue video input.**

#### Recording a track

To record from an analogue video source you first need to set the analog input – see **Video Input Source Menu for more details.**

Ensure that the DN-300 is set to record .DV (RAW DV) – see **Record Formats Menu for more details.**

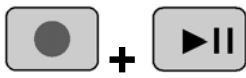
Press the Analog Input Button so that it is illuminated. You should see the video source on your output monitor



Use the Next / Previous Buttons to select an empty track from the DN-300 track list, one that shows a duration of 00:00:00:00 in the LCD display.



Press both the Record and Play/Pause Buttons simultaneously and the DN-300 should start recording.



The counter should start counting and the REC symbol should appear

If it does not start recording check the following:

There is an analogue video input present.

The Analog Input Button is illuminated

The DN-300 Record Format is set to RAW DV (DV), not M2T (HDV) **see Record Formats Menu.**

The track you have selected on the DN-300 is empty. The counter next to the TrackNo. on the LCD display should be showing 00:00:00:00.

There is some available space on the DN-300 Hard Disk - Go to the FREE SPACE Menu and check that the DN-300 is not full.

During record you can pause the DN-300 by pressing the Play/Pause button, the counter on the LCD display will stop.



The counter should stop counting and the REC PAUSE symbol should appear

To release pause press the Play/Pause button again.



The counter should start counting again and the REC symbol should return

***N.B. It is not possible to stop recording and then restart on the same track, once a track has been stopped you must select a new empty track from the DN-300 to start recording again.***

***N.B. Because DN-300 is a multi format HDD recorder, so while you use Analogue input to DN-300, it will also convert signal to DV output. If you connect DV input in status, it may happen expected error. Please don't connect Analogue video input signal and DV input signal input both to DN-300 while you want to use Analogue input to record.***

For details of playback please see **Playing a DV Track.**

## Connecting to a Computer

Files that have been recorded onto the DN-300 can be transferred directly to a PC or MAC via the IEEE-1394 (iLink, FireWire) port.

The files appear in the root directory of the DN-300 hard disk, and are numbered with the track number that appears in the LCD display when you are recording or playing back the track.

The DN-300 uses a FAT32 file structure, so large tracks are broken down into 2 GB files which are sequentially named:

For example if Track 02 is 1 hour in duration it will appear as follows:

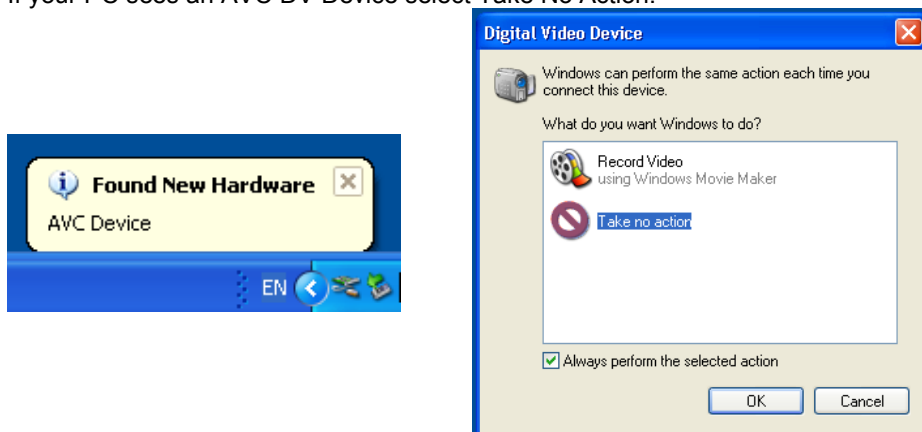
dv02.dv (2 GB)	-	dv02 is the file name for Track 02
dv02_01.dv (2 GB)	-	Each 2 GB section is given a sequential _xx numeric extension
dv02_02.dv (2 GB)		
dv02_03.dv (2 GB)		
dv02_04.dv (2 GB)		
dv02_05.dv (2 GB)		
dv02_06.dv (77 MB)	-	The last file in the sequence is likely to be smaller than 2GB.

Once transferred to a PC / MAC files can be dropped onto a timeline, in a suitable NLE application, and they will playback seamlessly.

**Connecting to a PC**

**NB: Although a PC may see the DN-300 as an AVC compliant DV Device it is not intended to be operated as such.**

If your PC sees an AVC DV Device select Take No Action.



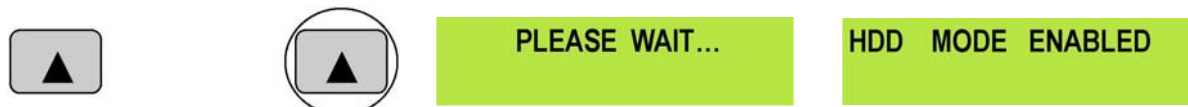
Connect the DN-300 IEEE-1394 output to a PC.  
To set the DN-300 into HDD Mode firstly press the Menu button so that it is illuminated.  
You will see the display change to the HDD Mode Menu



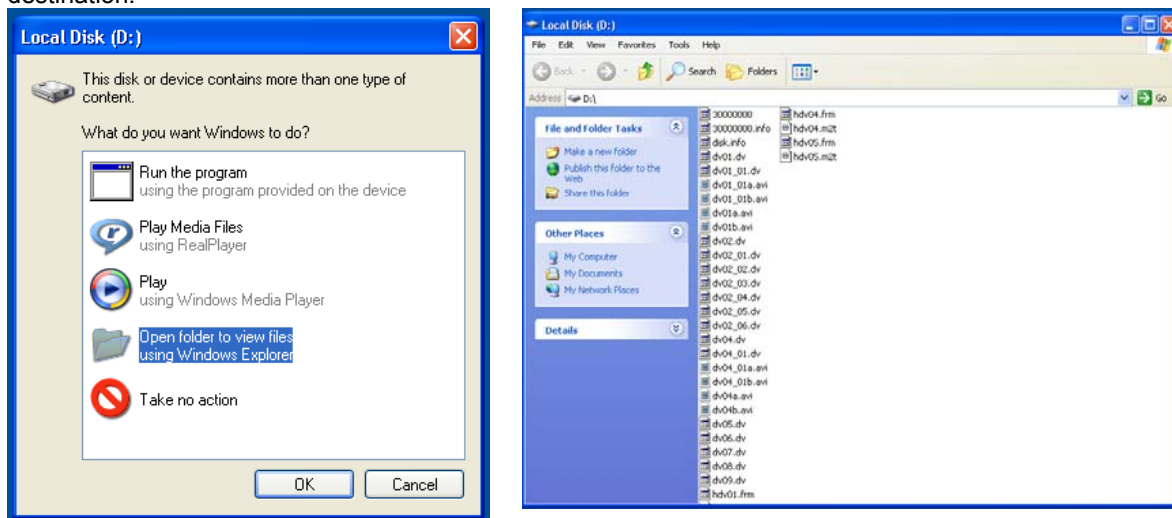
Press the Next (▲) Button to select ENTER and the display will show the HDD Enable Confirmation Screen



Press the Next (▲) Button again to confirm, after a few seconds HDD Mode will be enabled



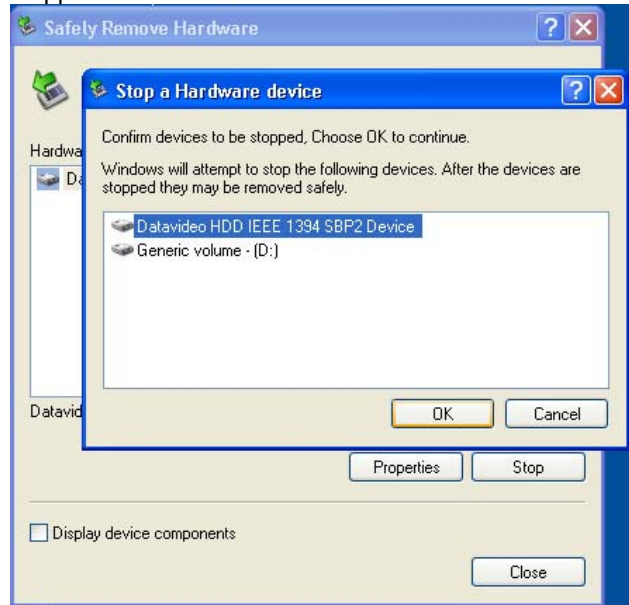
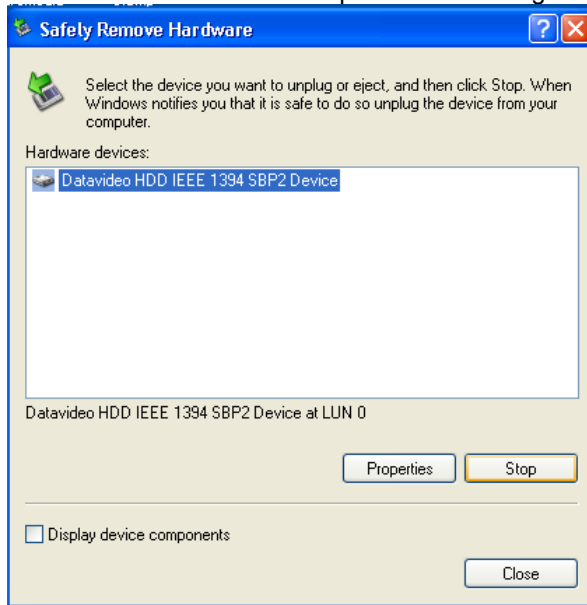
The PC should recognise that an external IEEE-1394 (Firewire)HDD has been connected. Select Open Folder to View Files. The drive should also appear in My Computer as an internal HDD. Once connected the DN-300 can be used just like any HDD. You can select the required files and drag and drop them to the required destination.



To return the DN-300 to Deck Mode use “Safely Remove Hardware”. You will find “Safely Remove Hardware” on the Taskbar.



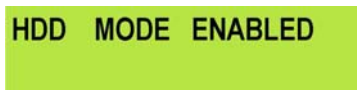
Double click on Safely Remove Hardware and the dialog box will appear, select the Datavideo HDD IEEE SBP2 Device and click on Stop. A second dialog box will appear.



Select Datavideo HDD IEEE SBP2 Device and click on OK. After a few seconds a “Safe To Remove Hardware” message should appear above the Taskbar. You can then disconnect the DN-300.



Once un-mounted from the PC the DN-300 display will leave HDD Mode and return to Track Display.



### Connecting to a MAC

**NB: Although a MAC may see the DN-300 as an AVC compliant DV Device it is not intended to be operated as such.**

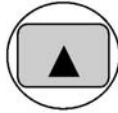
Connect the DN-300 IEEE-1394 output to a MAC.  
To set the DN-300 into HDD Mode firstly press the Menu button so that it is illuminated.  
You will see the display change to the HDD Mode Menu



Press the Next (▲) Button to select ENTER and the display will show the HDD Enable Confirmation Screen



Press the Next (▲) Button again to confirm, after a few seconds HDD Mode will be enabled



PLEASE WAIT...

HDD MODE ENABLED

The MAC should see the DN-300 as a HDD and the files will appear in the root directory of the drive.



You can select the required files and drag and drop them to the required destination.

To un-mount the DN-300 from your MAC either "Eject" the drive, or drag it to the Trash Can. Once the DN-300 is un-mounted from the MAC the LCD display will return to normal.

HDD MODE ENABLED

TRACK 02 01:25:12:09
PREVIOUS NEXT

## Specifications

### Supported Video Formats:

NTSC - DV 25 Mbps, 8-bit Y.U.V. 4:1:1

PAL- DV 25 Mbps, 8-bit Y.U.V. 4:2:0

HDV 1080i / 60 25 Mbps 8-bit Y.U.V. 4:2:0

HDV 1080i / 50 25 Mbps 8-bit Y.U.V. 4:2:0

### Supported File Formats:

HDV - .m2t

DV - .dv + .avi type 1 or 2 via conversion utility

### Analogue Video Format:

Composite Video: 75Ω 1.0 V p-p

S-Video (Y/C): 4 Pin Mini Din 75Ω Y: 1.0 V p-p, C: 0.627 mV p-p

Component: BNC Y, R-Y, B-Y 75Ω

Bandwidth: > 5.0 MHz

Noise Ratio: > 50dB

DA, DP < 3%, 3°

### Digital Audio:

Embedded 2 Ch (16 bit 48 kHz) or 4 Ch (12 bit 32 kHz via IEEE1394)

2 Ch (16 bit 48 kHz) via Analogue Input

### Analogue Audio:

Unbalanced Audio In / Out +10 dB Maximum - Phono (RCA) plugs

Bandwidth: 20 ~ 20 kHz

Noise Ratio: > 65dB

THD: < 0.3%

### RS-422 & GPI Control Interface:

Sony Standard RS-422 Interface

GPI via 3.5mm Jack, Pulse or Level

Operating Temperature: 0° - 50 °C

Operating Humidity: 0 - 70%

Power: 12V 4.2A

Dimensions: 170mm (W) x 250mm (D) x 70mm (H)

Weight: 2.5 Kg

All the trademarks are the properties of their respective owners.  
Datavideo Technologies Co., Ltd. All rights reserved 2007.

Specifications are subject to change without notice

## Service and Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site [www.datavideo-tek.com](http://www.datavideo-tek.com) for answers to common questions, support requests or contact your local office below.

### Datavideo Corporation (USA)

12300-U East Washington Blvd., Whittier, CA 90606 USA  
Tel: +1 562 696 2324                      [contactus@datavideo.us](mailto:contactus@datavideo.us)                      [www.datavideo.us](http://www.datavideo.us)

### Datavideo Technologies Europe BV

Floridadreef 106, 3565 AM Utrecht, The Netherlands  
Tel: +31 30 261 9656                      [info@datavideo.nl](mailto:info@datavideo.nl)                      [www.datavideo.info](http://www.datavideo.info)

### Datavideo UK Limited

Unit 2 Waterside Business Park, Hadfield, Glossop, Derbyshire SK13 1BE UK  
Tel: +44 1457 851000                      [sales@datavideo.co.uk](mailto:sales@datavideo.co.uk)                      [www.datavideo.info](http://www.datavideo.info)

### Datavideo Technologies Co., Ltd.

10F, 176 Jian-Yi Rd, Chung Ho City, Taipei Hsien, Taiwan 235  
Tel: +886 2 8227 2888                      [service@datavideo.com.tw](mailto:service@datavideo.com.tw)                      [www.datavideo.com.tw](http://www.datavideo.com.tw)

### Datavideo Technologies China Co.

2F-D, 2 Lane 777, West Guangzhong Rd, Zhabei District, Shanghai, China  
Tel: +86 21 5603 6599                      [service@datavideo.cn](mailto:service@datavideo.cn)                      [www.datavideo.cn](http://www.datavideo.cn)

### Datavideo Technologies (S) PTE Ltd.

No. 22, Lorong 21A Geylang, #09-02 Prosper Industrial Building, Singapore 388431  
Tel: +65 6749 6866                      [info@datavideo.sg](mailto:info@datavideo.sg)                      [www.datavideo.info](http://www.datavideo.info)

### Datavideo Hong Kong Limited

G/F., 26 Cross Lane, Wanchai, HK  
Tel: +852 2833 1981                      [info@datavideohk.com](mailto:info@datavideohk.com)                      [www.datavideohk.com](http://www.datavideohk.com)