

MediaNXS

Drastic DDR Software User Guide



© 2009 Drastic Technologies Ltd.
All Rights Reserved

Information in this document is subject to change without notice and does not represent a commitment on the part of Drastic Technologies Ltd. The software described in this document is furnished under a license agreement or non-disclosure agreement. The software may be used or copied only in accordance with the terms of the agreement. It is against the law to copy the software on any medium except as specifically allowed in the license or non-disclosure agreement. The licensee may make one copy of the software for backup purposes. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or information storage and retrieval systems, for any purpose other than the licensee's personal use, without the express written permission of Drastic Technologies Ltd.

2009 Drastic Technologies Ltd. All rights reserved.
Printed in Canada

Any particular application may or may not take advantage of the **DDR** software features described within this document. Drastic Technologies Ltd. reserves the right to make changes in the specifications at any time and without notice. The information provided herein is believed to be accurate and reliable. However, no responsibility is assumed by Drastic Technologies Ltd. for its use; nor for any infringements of patents or other rights from its use. No license is granted under any patents or patent rights of Drastic Technologies Ltd. Drastic Technologies Ltd. makes no warranties, express or implied, with respect to the performance of third party products described herein.

Drastic Technologies Ltd., the **VVW Series**, the **Titan Series**, **QuickClip**, **QuickClip v3**, **QuickClip Pro**, **QuickClip VTR**, **QuickClip MDI Admin**, **QuickClipXO**, **QuickClip Server**, **MediaNXS**, **DrasticPreview**, **PreviewPro**, and **MediaReactor** are trademarks of Drastic Technologies Ltd. Other product names mentioned in this document may be registered trademarks or trademarks of other companies.

Disclaimer:

This manual has been written carefully and is believed to be correct as of the date of publication. However it is subject to change without notice and does not represent commitment on the part of Drastic Technologies Ltd.

Copyright © 1995-2009 Drastic Technologies Ltd. All rights reserved.

Parts of this manual that describe optional soft - or hardware modules do usually contain a corresponding note. A lack of this note does not mean any commitment from the point of Drastic Technologies Ltd.

Table of Contents

INTRODUCTION.....	1
DDR Overview.....	1
Conventions.....	1
Installation.....	1
Licensing.....	2
License DDR.....	2
License MediaNXS.....	3
System Connections.....	4
MEDIANXS USER GUIDE.....	5
Setup – the Config Section.....	5
Config – Internal Channels Tab.....	6
Config – External Channels Tab.....	7
Config – Advanced Tab – Video Output.....	8
Config – Advanced Tab – VGA Settings.....	9
Config – Advanced Tab – General.....	10
Setup - Info.....	11
Setup - Licensing.....	12
Display.....	13
View - VGA Display.....	13
View - Vector Scope.....	13
View - Wave Form Monitor.....	13
View - Wave Form RGB Monitor.....	14
View - Histogram.....	14
View - Meta Data.....	15
View - Clip List.....	15
View - Thumb View.....	16
View - Thumb Context Menu.....	16
View - Output Window.....	17
OPERATIONS.....	17
Main Menus - File.....	17
Project Files.....	17
Import.....	18
Export.....	19
Recent.....	20
Exit.....	20
Input.....	20
Input From File.....	20
Input Record.....	21
Input Record At.....	22
Input Batch Capture.....	23
Output.....	24
Output - Time Line.....	25
Timeline Context Menu.....	26

<i>Output - Edit Decision List</i>	27
EDL Context Menu.....	27
<i>Output - Import Media</i>	28
EDL Channel Presets.....	29
<i>Output - VTR Out</i>	29
<i>Output - To File</i>	32
REFERENCE	34
MEDIANXS REFERENCE	34
Main Interface Overview	34
<i>Operations Selector</i>	36
System Display	37
Transport Controls	38
Input - From File	40
Input - Record	41
Input - Record At	42
Input - Batch Capture	44
Output - Time Line	45
Output - EDL	46
Output - VTR Out	47
Output - To File	49
File - Import Media	50
Setup - Config Channels Internal	52
Setup - Config Channels External	54
Setup - Config Advanced - Video Output	56
Setup - Config Advanced - VGA Settings	57
Setup - Config Advanced - General	59
Setup - Info	61
Setup - Licensing	62
View - VGA Display	64
View - Vector Scope	65
View - Wave Form Monitor	67
View - Wave Form RGB	68
View - Histogram	69
View - Meta Data	70
View - Clip List	72
View - Thumb View	73
View - Output Window	74

Introduction

DDR Overview

DDR software provides the advanced capture, control and playback features of Drastic's award winning digital disk recorders. **DDR** may be licensed for varying levels of functionality, depending on the device or product. **MediaNXS** is a featured interface for **DDR** software.

Conventions

This manual assumes the following:

- That the user knows how to operate a mouse and keyboard and perform the basic functions of Microsoft Windows operating system.
- That the user is familiar with video editing and how to use VTRs
- That the user has access to MIS technicians capable of placing the device on the network and setting up any SAN systems if necessary.
- That the user has access to audio/video technicians capable of installing and timing the device into a facility or video setup.

Within the content of the document:

- The name of a control or display present on the interface will be displayed in **bold** text.
- Where a portion of the manual is referred to the name of section mentioned will be displayed in *italics*.
- Certain images in this document have been grayed out where it is useful or necessary to place indicator marks to show specific controls or displays above a darker background.

To view information regarding the required hardware, please see the *Requirements* section.

To view information on how to install **DDR** software, please see the *Installation* section.

To view information on how to generate or update a license, please see the *Licensing* section. A license update may be required to extend a demo, to enable a new configuration, or to convert a duration-limited installation into a permanent license.

For the purposes of this document, the system which this software is installed on will be referred to as the DDR.

Installation

Install **DDR** software on the system: Regardless of the delivery method, the software will be available at some level as an (executable) installable file. Double-click on the file, or right click and select **Open** from the context menu. The installation may be protected by password. If so, the password will be supplied by Drastic. Follow the prompts to set where the software should be installed and make other installation-specific decisions. Restart the system after installation.

Licensing

This software uses a hardware locked copy protection system, and must be licensed to run without watermarking on all video.

Matched Site Code and Site Key: The licensing software provides a **Site Code**. This **Site Code** is sent to Drastic via email, and Drastic replies with a matched **Site Key** specific to the installed machine. Drastic Technologies' licensing offices are located in the Eastern Standard Time Zone of North America. Licensing requests will usually only be processed during regular business hours, 9am to 5pm Monday to Friday EST.

License DDR

This is a dedicated licensing application which can provide varying levels of functionality depending on the product. Here is how to license **DDR** software:

Run the licensing dialog: if the default installation has been used, you will be able to open it at: **Start Menu|<Program Installation Dir>|Util|License DDR**.

Generate a Site Code: Enter a user name into the **User Name** field. Enter a valid email address into the **Email Address** field - this is where the license reply will be sent. Press the **Generate Code** button.

Send us the Site Code: If the system is set up with an email client, press the **Send to Drastic** button. If not, select and **Copy** the **Site Code** (you can use the **Copy** button to the right of the **Site Code** field). **Paste** the **Site Code** into the body of an email. Send this email to the following address:

authorization@drastictech.com

Please do not try to convey **Site Codes** verbally. The **Site Code** is a long string of characters and it is easy to misinterpret characters, which results in the license not being validated properly.

You will receive an email reply from Drastic Technologies Ltd containing a **Site Key**. **Copy** this **Site Key**. **Paste** it into the **Site Key** field.

Press the **Register** button.

Note: If the **Site Key** sent by Drastic fails to update the license, check the **Site Code** displayed against the one sent to Drastic to make sure it has not changed since the time of the request for authorization. If the **Site Code** is different, resend the request for authorization with the new **Site Code**.

Restart the Drastic Device to enable the new license status.

If you want to confirm the status of your license, you can run the licensing dialog and press the **Status** button.

License MediaNXS

MediaNXS software is available as a standalone application, and so has dedicated licensing features built in. Here is how to license **MediaNXS** software:

Run the licensing dialog: run **MediaNXS**. If the default installation location has been used, you will be able to open it at: **Start Menu|Programs|Drastic DDR|MediaNXS**. Use the main menus or the tabs to go to: **Operation|Setup|Licensing**.

Generate a Site Code: Enter a user name into the **User Name** field. Enter a valid email address into the **Email Address** field - this email address is where the license reply will be sent. Press the **Generate License** button.

Send us the Site Code: If the system is set up with an email client, press the **Send to Drastic** button. If not, select and **Copy** the **Site Code** (you can use the **Copy** button to the right of the **Site Code** field). **Paste** the **Site Code** into the body of an email. Send this email to the following address:

authorization@drastictech.com

Please do not try to convey **Site Codes** verbally. The **Site Code** is a long string of characters and it is easy to misinterpret characters, which results in the license not being validated properly.

You will receive an email reply from Drastic Technologies Ltd containing a **Site Key**. **Copy** this **Site Key**. **Paste** it into the **Site Key** field.

Press the **Register** button.

Note: If the **Site Key** sent by Drastic fails to update the license, check the **Site Code** displayed against the one sent to Drastic to make sure it has not changed since the time of the request for authorization. If the **Site Code** is different, resend the request for authorization with the new **Site Code**.

Restart the Drastic Device to enable the new license status.

System Connections

There are a number of connections the user should confirm in order to use the features of the DDR. Here is a quick checklist of the more important connections:

External Storage - get the external storage up and running, and connected to the DDR before you turn on the DDR.

Video and Audio inputs and outputs - to record, attach the signal of your audio/video source (i.e. camera, switcher etc.) to the input of the DDR. If your hardware includes a breakout box, connect the breakout box to the DDR using the included cables, and then connect the video source to the correct input on the breakout box. To output, or play your media, connect the signal output (either direct or via the breakout box) to a monitor, or to the next device in the workflow (typically a switcher, monitor or VTR).

Genlock - If you need to use a master genlock timing source, connect it to the genlock input on the DDR (or breakout box), and when you run **DDR** software you can set it to lock to this signal. Alternately you can set the DDR to lock to the video input. If the system is not set to lock to a timing source, frame accurate edits may not be possible (and there may be other timing related issues).

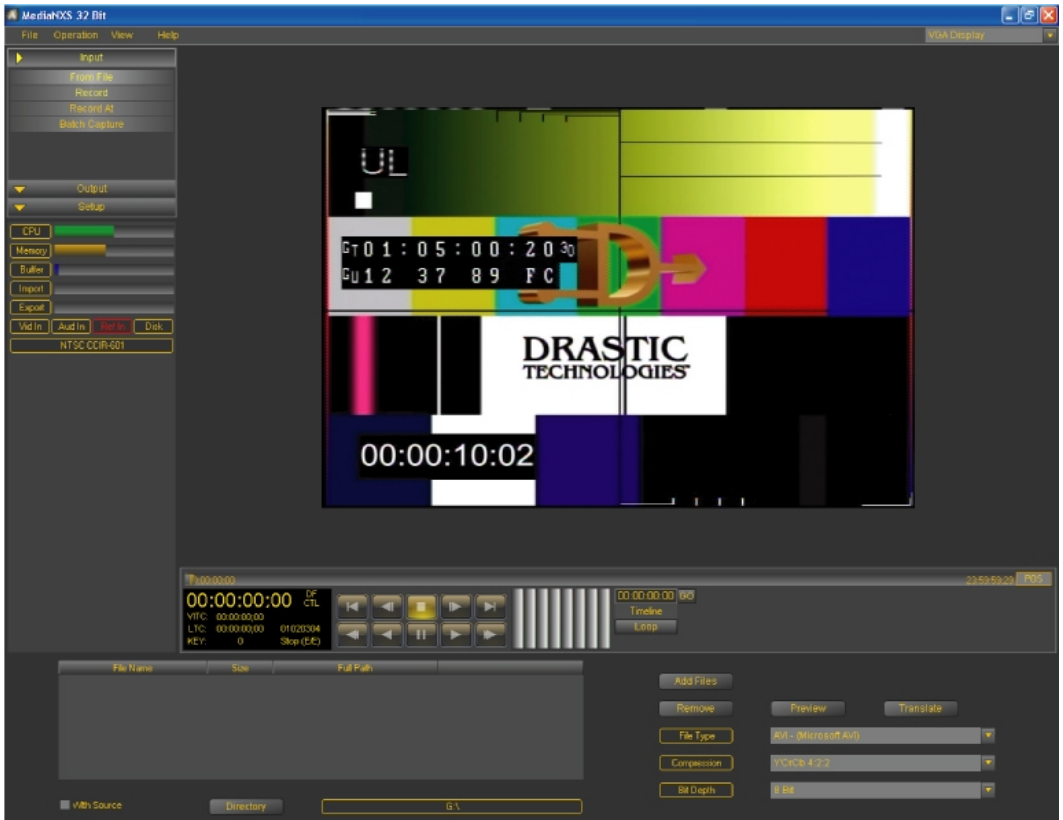
Network Connection - insert a network cable into the DDR, through the Network Port. Connect the other end of this cable to the network at the preferred point of access, which will often be a network switch/router. Network connectivity provides file sharing and web update functionality as well as a potential layer of device control.

Serial Control/VTR Emulation - in a DDR which only offers on-board (motherboard-anchored) serial ports, connect a B&B adapter + a Drastic NULL adapter to the serial port, then connect a serial cable between the adapter set and the controller device. In a DDR with a PCIe serial adapter card, simply connect a serial cable between the serial port on the card and the controller device. Confirm that the serial controller device (such as a BUF or DNF controller) is powered up and running in the correct mode to control the DDR before running **DDR**. VTR Emulation may not be an included feature of all installs of **MedianXS** software.

External VTR Control - To control an external VTR using the DDR as a controller, if you are using the motherboard-based COM port, connect a single B&B adapter to the serial port to adapt it from 232 to 422. Connect a serial cable between the adapter and the serial control port on the VTR. In a system with a PCIe serial adapter card, simply connect a serial cable between the serial port on the card and the VTR serial control port. For laybacks, connect the video and audio output of the DDR to the video and audio input of the VTR. For pull-ins, connect the video and audio output of the VTR to the video and audio input of the DDR.

MediaNXS User Guide

If this installation of **MediaNXS** was provided as a standalone application, the default installation location is: **Start|Programs|Drastic MediaNXS|MediaNXS**. If the installation of **MediaNXS** is a component of **DDR**, the default installation location is: **Start|Programs|Drastic DDR|MediaNXS**.



Run **MediaNXS**. You will see the above interface.

There are basic setup tools within the application to set up the DDR for the application.

Setup – the Config Section

The **Config** section provides various configuration settings.

Select the **Setup** tab and click on the **Config** button. Or, go to the main menus, under **Operation|Setup|Config**. This reveals the **Config** section of the interface.

Note: The range of controls offered will be limited in most cases to the set of capabilities supported by the configuration of the DDR. However there are controls which can be set incorrectly, and this may result in a loss of the DDR functionality. So take care to make only necessary changes to the settings, and to limit the changes to known good values.

Config – Internal Channels Tab

The **Internal Channels** Tab features controls for the internal channel(s), to control a video board or DVI/VGA playback channel in the DDR.

Select the **Setup** tab. Click on the **Config** button, or go to the main menus under **Operation|Setup|Config**, and select **Channels**. If the **Advanced** section is selected, click on the **Channels** tab on the left or **Channels** button on the right. Confirm that the **Channel Type** pulldown menu is set to **Internal**.

Use the **Channel** pulldown menu to select the internal channel to which any changes will apply.

Video Settings

- The upper middle rectangle offers controls for the video type used. Use the **Video I/O** pulldown menu to select between **Serial Digital Single Link**, **Serial Digital + Alpha**, or **Serial Digital Dual Link**.
- Use the **Video Standard** pulldown menu to select a video standard.
- Use the **Conversion Standard** pulldown menu to select the video conversion mode, for monitor output (to SD, to 720, to 1080 or direct)
- Use the **Output Type** pulldown menu to set the output type; choices could include Component YUV, Component RGB or Composite.
- Use the **File Type** pulldown menu to select the file type that will be created during capture.
- Use the **Compression** pulldown menu to select between available compression settings for the selected file type.
- Use the **Conversion Type** pulldown menu to specify the up-, down- or cross-conversion signal mapping strategy to be used, if any.
- Use the **Bit Depth** pulldown menu to select between available bit depth settings for the selected file type.

Audio Settings

- The lower middle rectangle offers controls for the audio type used. Use the **Audio Channels** pulldown menu to set the number of audio channels. Use the **Audio Container** pulldown menu to set the audio container type.
- Use the **Audio Source** pulldown menu to set between available audio types.
- Use the **Audio Bit Depth** pulldown menu to set the bit depth for the selected audio type.

Directory and System display

- The rectangle on the right provides a display for the audio and video type, reference and offers a button to confirm or change the record directory. Pressing the **Record Directory** button opens a browser which allows you to browse to and select the storage (drives) to record the video/audio/data files onto.
- The video standard is displayed
- The audio channel extents are displayed
- The reference setting is displayed. Use the **Reference Source** pulldown menu to set the reference source.

The **Advanced** button at the upper right allows you to select the **Advanced** section. You can also select the tab at the left - click on the word **Advanced** (just under the word **Channels**).

Config – External Channels Tab

The **External Channels** Tab features controls for the external channel(s), to control an external VTR.

Select the **Setup** tab. Click on the **Config** button, or go to the main menus under **Operation|Setup|Config**, and select **Channels**. If the **Advanced** section is selected, click on the **Channels** tab on the left or **Channels** button on the right. Confirm that the **Channel Type** pulldown menu is set to **External**.

Use the **Channel** pulldown menu to select the external channel to which any changes will apply.

Serial Control Port

- Use the **Port** pulldown menu to set the COM port through which serial control will be exercised.
- Use the **Standard** pulldown menu to specify the standard being used or keep it on **Auto** (automatic sensing)

Protocol

- Check the **Sony 422** checkbox to specify Sony 422 serial protocol
- Check the **Odetics** checkbox to specify Odetics protocol
- Check the **Louth/VDCP** checkbox to specify Louth/VDCP protocol

Timing Adjustments

- The setting for **Edit On** is displayed in number of frames. The default setting for most systems is 4 frames. This setting may be changed by selecting the field and typing in a new value
- The setting for **Edit Off** is displayed in number of frames. The default setting for most systems is 4 frames. This setting may be changed by selecting the field and typing in a new value
- The **In Point Frames** setting is displayed and may be adjusted by number of frames

- The **In Point Milliseconds** setting is displayed and may be adjusted by milliseconds
- The **Out Point Frames** setting is displayed and may be adjusted by number of frames
- The **Out Point Milliseconds** setting is displayed and may be adjusted by milliseconds

Config – Advanced Tab – Video Output

Click on the **Setup** tab and select **Config** or go to the main menus, under **Operation|Setup|Config**. Select the **Advanced** section (if it is not already selected) - click on the **Advanced** tab on the lower left or **Advanced** toggle button to the right. Select **Video Output** in the upper pulldown menu.

The **Advanced Tab Video Output** section features the following application specific controls

Video Hardware

- **SD Only Cards** - Select the **SD Only Cards** checkbox to allow direct capture and playback of SD video types. If the hardware is SD-only, leave the **HD/SD Cards** checkbox unchecked.
- **HD/SD Cards** - Select the **HD/SD Cards** checkbox to allow direct capture and playback of both SD and HD video types. Some SD/HD hardware may require that both the **SD Only Cards** and **HD/SD Cards** checkboxes are checked to ensure all formats work correctly.

Vertical Blanking Interval

- **Save VBlank** - To capture vertical blanking information (VITC), click to select the **Save VBlank** checkbox, otherwise leave it unchecked.
- **Use VBlank** - To display and maintain vertical blanking information (VITC), click to select the **Use VBlank** checkbox, otherwise leave it unchecked.

Lookup Table

- **Enable LUT** - To apply a color lookup table to the DDR's output, click to select the **Enable LUT** checkbox, otherwise leave it unchecked.
- **LUT Linear** - To apply a Linear color lookup table to the DDR's output, click to select the **LUT Linear** checkbox, otherwise leave it unchecked. For this to work the **Enable LUT** checkbox will also need to be checked.

Slow Motion Interpolation

- **Use Field Duplication** – use field duplication for slow motion when checked.

Inhibit Record/Play

- **Play Only** – select the **Play Only** checkbox to disable any record functionality for the DDR if present.
- **Record Only** – select the **Record Only** checkbox to disable any playback functionality for the DDR if present. Note that with both **Play Only** and

Record Only checked, the system will have very few capabilities left as it will not be able to play or record.

Output Channel

- **Match Output To Clip** – select **Match Output to Clip** checkbox to match the video output to current clip settings
- **Allow Independent Channel Configuration** – select **Allow Independent Channel Configuration** to allow separate channels in a multichannel DDR to be set up differently.

Play Delay

- **Play Delay Frames** – use the field to set the number of frames the DDR will delay before entering play mode. This helps fine tune the DDR to provide frame accurate response to connected devices.

The **Channels** button at the upper right allows you to select the **Channels** section. You can also select the tab at the left - click on the word **Channels** (just above the word **Advanced**).

Config – Advanced Tab – VGA Settings

Click on the **Setup** tab and select **Config** or go to the main menus, under **Operation|Setup|Config**. Select the **Advanced** section (if it is not already selected) - click on the **Advanced** tab on the lower left or **Advanced** toggle button to the right. Select **VGA Settings** in the upper pulldown menu.

The **Advanced Tab VGA Settings** section features the following application specific controls

Force Overlay On/Off

- **Force VGA** – select the **Force VGA** checkbox to display only VGA/DVI and ignore any video hardware if present.
- **Disable VGA/DVI Monitoring** – select the **Disable VGA/DVI Monitoring** checkbox to turn off VGA/DVI display and route all video output through the video hardware.

DirectX Settings

- **DirectX Enable** – select the **DirectX Enable** checkbox to enable specific YUV/RGB settings for display
 - **RGB Overlay** – select **RGB Overlay** to enable RGB Overlay for DirectX
 - **RGB Direct** – select **RGB Direct** to enable RGB for DirectX.
 - **YUV Overlay** – select **YUV Overlay** to enable YUV Overlay for DirectX
 - **YUV Direct** – select **YUV Direct** to enable YUV for DirectX.

Display Frame Rate

- **Reduce VGA Frame Rate** – select the **Reduce VGA Frame Rate** checkbox to activate the pulldown menu. The pulldown menu allows the user to set a reduced number of frames for VGA display as a ratio of frames displayed to

frames output. This allows the user to place fewer demands on the DDR during specific resource intensive operations.

Superimpose Time Code - on all video output or VGA only

- **Superimpose** – select the **Superimpose** checkbox to activate the pulldown menu, which allows the user to set the type of time code overlay they will superimpose over the video output of the DDR.
- **VGA Only** – select the **VGA Only** checkbox to superimpose time code only on the VGA display and not on the video output through hardware.
- **X and Y Position** fields – set the position of the superimposed time code over the VGA display. This allows the user to specify a certain part of the screen for time code display.

The **Channels** button at the upper right allows you to select the **Channels** section. You can also select the tab at the left - click on the word **Channels** (just above the word **Advanced**).

Config – Advanced Tab – General

Click on the **Setup** tab and select **Config** or go to the main menus, under **Operation|Setup|Config**. Select the **Advanced** section (if it is not already selected) - click on the **Advanced** tab on the lower left or **Advanced** toggle button to the right. Select **General** in the upper pulldown menu.

The **Advanced Tab General** section features the following application specific controls

Varicam settings

- **Enable Varicam Mode** – select the **Enable Varicam Mode** checkbox to allow sending a variable frame rate signal through a fixed frame rate pipeline, marking selected frames for correct playback. Use the pulldown menu to select for the desired playback frame rate.
- **Varicam Inverted** – with the **Enable Varicam Mode** checkbox selected, you can select this checkbox to invert Varicam field bits for old equipment.
- **Sequence Frame Rate** – use the pulldown menu to select between available default frame rates for Varicam sequence playback

Audio Delay

- **Audio Capture Offset** – use the **Audio Capture Offset** pulldown menu to specify the number of frames by which to offset audio capture, so as to compensate for audio timing issues.

Output Settings

- **Limit SDI Out** – use the **Limit SDI Out** pulldown menu to select between various SDI output settings
- **Enable Overlapped I/O** – select the **Enable Overlapped I/O** checkbox to enable overlapped reads and writes on the DDR.
- **Enable Dual DMA for Single Link DPX Time Code** – select the **Enable Dual DMA for Single Link DPX Time Code** checkbox to enable direct

memory access for single link DPX formats. This setting allocates more bandwidth (PCIe or PCI-X 133) so the DDR can capture DPX from a single line HD-SDI and use the second YCbCr capture to decode RP-215 time code.

- **Use YUV2 for 4:2:2 YCbCr** – select the **Use YUV2 for 4:2:2 YCbCr** checkbox to specify the YUV2 codec (typically used for AVI) for 4:2:2 YCbCr formats (else it is 2vuy)
- **Use YV12 for 4:2:0 YCbCr** – select the **Use YV12 for 4:2:0 YCbCr** checkbox to specify the YV12 codec (typically used for AVI) for 4:2:0 YCbCr formats (else it is I420/IYUV)
- **Dither Video (for 8 bit YCbCr Only)** – apply dithering for 8 bit formats to minimize the appearance of large scale pattern errors.
- **Single Link – Normal RGB Range (def on)** – select the **Single Link – Normal RGB Range (def on)** checkbox to apply the normal RGB range to single link formats
- **Dual Link Expanded/Contracted RGB (def off)** – select the **Dual Link Expanded/Contracted RGB (def off)** checkbox to apply an expanded/contracted RGB range to dual link formats.
- **Match Output To Clip** – select **Match Output to Clip** checkbox to match the video output to current clip settings.

2K Monitor Position

- **2K HD offset** X and Y Position Fields sets where a 2K frame will be located in the VGA display window during VGA/DVI monitoring and output.

The **Channels** button at the upper right allows you to select the **Channels** section. You can also select the tab at the left - click on the word **Channels** (just above the word **Advanced**).

Setup - Info

The **Info** section displays certain important system settings. Select the **Settings** tab and click on the **Info** button. Or, go to the main menus, under **Operation|Setup|Info**. This reveals the **Info** section of the interface.

The following displays are present:

- The **VVW Type** field describes the settings for the type of DDR and video hardware or DVI/VGA if none
- The **Channel Type** field describes channel settings for the DDR.
- The **VVW Version** field specifies the version of **DDR** software installed.
- The **Total Storage** field describes the entire amount of storage present in the selected media drive or drive set.
- The **Storage Time** field describes the available amount of space that can be overwritten without deleting files.
- The **Memory** field describes current memory usage.
- The **Video Input** field describes the video signal seen by the DDR if detected.
- The **Reference Input** field describes the timing source the DDR is set to if detected.

- The **Audio Input** field describes the audio channels seen by the DDR if detected.

Setup - Licensing

The **Licensing** section of the interface provides information about the current licensing status and allows you to request a new license. To open the licensing dialog, click on the **Setup** tab and select the **Licensing** option. Or, go to the main menus, under **Operation|Setup|License**. This reveals the **Licensing** section of the interface.

DDR must be licensed in order to run without the "D" overlay (and/or cross hairs or other watermarking) on output. Where the DDR has a valid license, no licensing dialog will be offered. Instead, information about the status of the license will be displayed.

Where the DDR is unlicensed, the licensing section will display "**No authorization present for MediaNXS**", and offer a licensing dialog. Here is how to update the license status using the licensing dialog:

Fill Out the form

- Enter a user name in the **User Name** field.
- Enter a valid email address into the **Email Name** field - this is where the license reply will be sent.

Generate a Site Code

- Press the **Generate Code** button. This generates a Site Code (a lengthy and random string of alphanumeric characters) specific to this installation of **DDR** in the **Site Code** field.

Send us the Site Code

- Copy the site code (either select it and press Ctrl+C, or press the Copy button) to place the code into a file to send to us via email. If this DDR is set up for email you can press the **Send to Drastic** button. This will create a new email to [Drastic](#) with the **Site Code** in the body of the email. Include any particular specifications about your workflow or application you think we may need to know about in this email.
- Send us the email containing the Site Code.

Input the Site Key

- You will receive a reply with a **Site Key** (another string of numbers and letters) matched to the **Site Code** you sent.
- Run this licensing dialog and paste the **Site Key** into the field to the right of the **Send to Drastic** button.

Register and Restart

- Press the **Register** button.
- Restart the DDR after licensing.

This will enable all features provided by the license.

Display

This section describes the various views. Clips may be displayed during playback/passthrough via the on-screen **VGA Display**. The signal may also be reviewed using the on-board **Vector Scope**, **Wave Form Monitor** or **Histogram**. **Metadata** may be viewed in association with a clip or to view or change system metadata settings. A list of clips may be viewed in either **Clip List** or **Thumb View** views.

View - VGA Display

The output of the system can be viewed using the on-screen **VGA Display**. Use the **View** pulldown menu to select **VGA Display**. Alternately, go to the main menus, click on **View**, and select **VGA Display**.

Clips played, cued, being recorded or shown in passthrough will be displayed here. The proportional size of the **VGA Display** window within the GUI varies depending on the source media and any up-, down- or cross-conversions being applied, and may be scaled down if the interface is not "maximized".

Mouse "Drag and Scroll" – Click with the mouse on the frame of video in the window and "drag" to the right to scroll forward through the clip. Click and "drag" to the left to scroll backward through the clip. Double click with the mouse to start playback, or go into Pause if already in Play.

View - Vector Scope

The output of the system can be viewed using the built in **Vector Scope**. Use the **View** pulldown menu to select **Vector Scope**. Alternately, use the main menus, under **View**, to select **Vector Scope**.

A virtual vector scope is displayed as above to assist in signal review and analysis. The **Drastic Luma Stick** shows the distribution of luminance within the signal and is displayed in the middle. The signal being analyzed is displayed on the right (scaled down) to confirm the correct signal.

This vector scope and its accompanying VGA monitor are real time and will display vector scope information and the video stream while media is playing.

Mouse "Drag and Scroll" – Click with the mouse on the frame of video in the window and "drag" to the right to scroll forward through the clip. Click and "drag" to the left to scroll backward through the clip. Double click with the mouse to start playback, or go into Pause if already in Play.

View - Wave Form Monitor

The output of the system can be viewed using the built in **Wave Form Monitor**. Use the **View** pulldown menu to select **Wave Form**. Alternately, go to the main menus, click on **View**, and select **Wave Form**.

A virtual wave form monitor is displayed as above. Three views are displayed - Y, Cb and Cr. A scaled down version of the Y (luma) portion of the signal is displayed.

This wave form monitor and its accompanying VGA monitor are real time and will display wave form monitor information and the video stream while media is playing.

Mouse "Drag and Scroll" – Click with the mouse on the frame of video in the window and "drag" to the right to scroll forward through the clip. Click and "drag" to the left to scroll backward through the clip. Double click with the mouse to start playback, or go into Pause if already in Play.

View - Wave Form RGB Monitor

The output of the system can be viewed using the built in **Wave Form RGB Monitor**. Use the **View** pulldown menu to select **Wave Form RGB**. Alternately, go to the main menus, click on **View**, and select **Wave Form RGB**.

A virtual wave form monitor is displayed as above. Three views are displayed - R, G and B. A scaled down version of the signal is displayed.

This RGB wave form monitor and its accompanying VGA monitor are real time and will display RGB wave form monitor information and the video stream while media is playing.

Mouse "Drag and Scroll" – Click with the mouse on the frame of video in the window and "drag" to the right to scroll forward through the clip. Click and "drag" to the left to scroll backward through the clip. Double click with the mouse to start playback, or go into Pause if already in Play.

View - Histogram

The output of the system can be viewed using the built in the **Histogram** view. Use the **View** pulldown menu to select **Histogram**. Alternately, go to the main menus, click on **View**, and select **Histogram**.

A histogram is displayed as above showing the distributed frequencies of the red, blue and green portions of the spectrum. Three views are displayed - one for each of R, G and B. A scaled down version of the signal is displayed.

This Histogram and its accompanying VGA monitor are real time and will display histogram information and the video stream while media is playing.

Mouse “Drag and Scroll” – Click with the mouse on the frame of video in the window and “drag” to the right to scroll forward through the clip. Click and “drag” to the left to scroll backward through the clip. Double click with the mouse to start playback, or go into Pause if already in Play.

View - Meta Data

Metadata elements can be viewed and set in the **Meta Data** view. Use the **View** pulldown menu to select **Meta Data**. Alternately, go to the main menus, click on **View**, and select **Meta Data**.

A list of metadata elements is displayed, depending on the mode selected.

Record Metadata

With the **Record** checkbox selected, the **Set** and **Get** buttons become active. Selecting **Set** allows the user to set metadata elements for media captured on the system. Selecting **Get** allows the user to return all metadata elements to the default setting.

View Timeline Metadata

With the **Time Line** checkbox selected, the **Time Line** pulldown menu becomes active and the user may select any of the clips currently in the **Time Line**. Use the pulldown menu to select a clip and the selected clip’s metadata will be displayed in the list.

View Clip Metadata

With the **Clip** checkbox selected, the **Clip List** pulldown menu becomes active and the user may select any of the clips currently in the **Clip List**. Use the pulldown menu to select a clip and the selected clip’s metadata will be displayed in the list.

View - Clip List

The contents of the current clip list can be viewed in the **Clip List** view. Use the **View** pulldown menu to select **Clip List**. Alternately, go to the main menus, click on **View**, and select **Clip List**.

The **Clip List** contains information about each of the clips that have been captured into or added to the list. Each clip occupies a row. For each clip, there is a picon, the clip name, its Reel ID (if present), clip duration, the channel presets (audio and video channels associated with each clip) and the file’s location.

To view the options for a clip, select it. A selected clip will display its context options as links on the right of the clip – they are as follows:

- **Remove** - to remove a clip from the list, select **Remove**. This choice takes the clip out of the **Clip List**, but leaves the file on the disk.
- **Delete** - to permanently delete a clip, select **Delete**. This choice takes the clip out of the **Clip List**, and as well permanently deletes the clip from the disk -

make sure this choice is intentional because the clip will become permanently unavailable.

- **Edit** - to edit the length of the clip, select **Edit**. This choice does not create another instance of the clip in the **Clip List**. Selecting **Edit** loads the clip into the following **Clip Edit** dialog box, where the user can edit the clip parameters.
- **Duplicate** - to create a duplicate copy of the selected clip (often to trim the in and out points to create a sub-clip), select **Duplicate**. This choice loads the clip into an **Open Media** dialog box, where the user can edit the clip's details, such as its name, the In and Out points, and its position on the timeline. A second copy of the same clip will show up in the **Clip List** with the new details.
- **Metadata** - to view any metadata associated with the clip, select **Metadata**. This choice displays a list of metadata elements for the selected clip over the **Clip List**.

Metadata displayed includes over 100 elements - each clip may not have a value associated with each category of metadata. You may be able to set specific metadata elements using the **Meta Data** window, which will apply to subsequent clips recorded using **MediaNXS**.

View - Thumb View

The contents of the clip list can be viewed in the **Thumb View** view. Use the **View** pulldown menu to select **Thumb View**. Alternately, go to the main menus, click on **View**, and select **Thumb View**.

The **Thumb View** contains information about each of the clips that have been captured into or added to the list. For each clip, there is a picon, the clip name, the start time code and the clip's duration.

View - Thumb Context Menu

Each clip in the **Thumb View** view may be edited or removed from the list. Use the **View** pulldown menu to select **Thumb View**. Alternately, go to the main menus, click on **View**, and select **Thumb View**.

Right click on a clip to view the choices in the context menu.

- **Remove From bin** = takes the clip out of the **Clip List**, but leaves the file on the disk.
- **Delete From Disk** - takes the clip out of the **Clip List**, and as well permanently deletes the clip from the disk - make sure this choice is intentional because the clip will become permanently unavailable.
- **Duplicate** - loads the clip into an **Open Media** dialog box, where the user can trim the clip and set a new In Point on the timeline. A second copy of the same clip will show up in the **Thumbs View**.
- **Edit** - loads the clip into an **Open Media** dialog box, where the user can edit the clip parameters. This choice does not create another instance of the clip in the **Thumbs View**.

- **Meta Data** - displays the clip's metadata over the **Clip List**. Metadata displayed includes over 100 elements - each clip may not have a value associated with each category of metadata. You may be able to set specific metadata elements using the **Meta Data** window, which will apply to subsequent clips recorded using **MediaNXS**.
- **Find On Timeline** - this displays the selected clip's location on the timeline if the clip has been placed on the timeline.

View - Output Window

Errors, Warnings and Messages are automatically recorded and can be viewed in the **Output Window**. Go to the main menus, click on the **View** pulldown menu and select **Output Window**. This opens the **Output Window**.

Typical information displayed relates to add clip events, conversions, recordings made and so on. Where an action or process has encountered errors, it may be useful to view the **Output Window** to gain more information.

The three buttons on the right function as on/off toggles for display of categories of information. The **Errors** button displays/hides error entries. Errors are important and indicate serious problems. The **Warnings** button displays/hides warning entries. Warnings may be useful to know about, but do not usually indicate serious issues. The **Messages** button displays/hides message entries. Messages are simple notifications of events as they occur.

- **Save** - to save the information contained in the **Output Window** for later review, press the **Save** button.
- **Load** - to load a saved file, press the **Load** button.
- **Clear** - to clear the list, press the **Clear** button.
- **Send** - to send this information via email, press the **Send** button.

Operations

MediaNXS can be used to capture files from an incoming signal, to output existing or captured media, and to convert, or transcode files within a range of supported file formats. The system can be set to control another device and capture media from that device with frame accuracy.

Main Menus - File

The main menus provide controls for specific operations. The **File** menu provides access to **Project**, **Import/Export**, **Recent** and **Exit** operations.

Project Files

Each time **MediaNXS** is run, it maintains a "Project" file with settings and timeline information pertinent to the operation being performed. **MediaNXS** can create a **New** project, **Open** an existing project or **Save** an open project. This feature allows you to save time in setup for the operations you use the most.

New Project

In the main menu, under **File**, select **New Project**. This opens the **Save As** dialog box, with the Drastic Config File (*.dt) file type in the **Save as Type** field. It is also possible to select XML (*.xml) file types using this pulldown menu. If you change settings pertinent to the project file during the operation, you will be prompted to save these changes upon closing or attempting to open another project file.

Once you have for example captured files, selected/changed the file type, loaded/created an EDL, etc, you can save the **Project** file to load these settings up the next time the **Project** file is loaded.

To save any changes you have made to the loaded project file, go to the main menus and select **File|Save Project**. If you have made changes to an existing project file and do not want to overwrite it but would rather create a new file, you can select **Save Project As**. A dialog box will open, and you can save the file in the location and with the new name of your choice.

Existing Projects

To open an existing (saved) project file, go to the main menus and select **Open Project**. This opens an **Open** dialog box with the Drastic Config File (*.dt) file type in the **Files of Type** field. It is also possible to select XML (*.xml) file types using this pulldown menu.

Import

In the main menus, under **File|Import**, there are options for importing media onto the system. The **Import** operation allows you to take media files existing on your network and add them to the clip list or timeline/EDL, and provides the option to change the file type during the import, in order to make them available for real time playback.

- **File|Import|Media** lets you browse for existing media on your storage to add to the accessible media, Clip List or existing EDL for the system. Selecting it opens the **Open** dialog window. The **Files of Type** field offers a pulldown menu to restrict the search to specific file types.
- **Import Media Dialog:** Once the file has been selected, pressing **Open** loads it into the **Import Media** window. A picon of the clip and specific file information is displayed to allow you to confirm you have the right clip.
- **Timeline insertion:** If you would like to add the media to the Time Line, Click in the **Add to Timeline** checkbox. This activates the **Position** field. Enter into

the **Position** field the location on the **Timeline** where you would like this clip to be inserted. If not, leave the **Add to Time Line** checkbox unchecked.

- **Sub-clip:** The **Start** and **End** points of the clip may be edited to add only a portion of the clip. To trim frames off the beginning, click in the **Start** time code field and enter a time code location (greater than zero, less than the existing out point). To trim frames off the end, click in the **End** time code field and enter a time code location (less than the current out point but greater than the current/edited in point). If you do not wish to trim the clip, leave the time codes of the **Start** and **End** points as they are.
- **File Conversion:** If you would like to convert the media to another file type, confirm that the **Convert** checkbox is checked. This activates the **Convert** section. To convert the media to the file type to which the DDR is currently set, keep the **System Settings** checkbox checked. To convert the file to a different file type, uncheck the **System Settings** checkbox. This activates conversion options other than the settings the system is currently using. Use the pulldown menus to set the **File Type**, **Compression** and **Bit Depth** settings to use for the conversion. If you do not wish to change the file type during the **Import** process, leave the **Convert** checkbox unchecked.

Press the **Import** button to import the clip, or **Cancel** to exit the operation without importing the clip.

File|Import|Batch Capture EDL lets you browse for and open an EDL to use for a batch capture.

File|Import|Time Line EDL lets you browse for and open an existing time line EDL to replace the current time line.

File|Import|Merge Time Line lets you import media from the time line as a merged clip.

Export

In the main menus, under **File|Export**, there are options for exporting the time line as an EDL.

To export the time line, select **File|Export|Time Line As**. This opens a browser which allows you to save the time line with the name and in the location of your choice. Use the **Save As Type** pulldown menu to select the correct EDL type for your application. Supported types include:

- CMX 340, 3400, 3600 EDLs (*.edl)
- Grass Valley EDL (*.edl)
- Sony 9100 EDL (*.edl)
- Avid Log Exchange (*.ale, *.alg)
- Avid EDL (*.edl)
- Final Cut Pro EDL (*.edl)
- Flex Format (*.flx)

- PlayLists and Logs (*.ply, *.log)
- Text Format (*.txt)
- EDL and Time Code Space (*.edl, *.tcs)

Press the **Save** button to save the Time Line EDL as specified or press **Cancel** to exit the operation without saving a file.

Recent

In the main menus, under **File|Recent**, there is a list of recent Time Line EDLs. To load one of the recent EDLs, click on it.

Exit

In the main menus, select **File|Exit** to close the application. Or, click on the **X** in the upper right hand corner. Or, right click on the **MediaNXS** icon in the **Status Bar**, and select **Close** from the context menu.

Input

This section describes how to get files into the system:

Input From File

Here is how to select files from local or networked storage for conversion to a specific format. Select the **Input** tab and click on the **From File** button. Or, go to the main menus, under **Operation|Input|From File**. This reveals the **Input From File** section of the interface.

Create a list of files to be converted - Press the **Add Files** button. This opens a browser which allows you to find and load the file you want. It will be added to the list with its **File Name**, **Size** and **Full Path** information displayed. Any number of files can be selected and added to the list using this procedure. If you decide a file on the list does not need to be converted, select it and press the **Remove** button.

Target file choices - the Target file is the file type you are going to create during this conversion. Use the **File Type** pulldown menu to select the file type. Use the **Compression** pulldown menu to select the compression setting for the file. Use the **Bit Depth** pulldown menu to set the bit depth of the file.

"Save at" choices - this is where the files will be saved upon conversion. If the converted files should be placed in the same directory as the source files, click to select the **With Source** checkbox. To set another location, press the **Directory** button and browse to select the folder of your choice.

Preview a file - To play a file before it is converted, select it and press the **Preview** button. Playback may not be possible with incompatible file types. Once all of the choices have been addressed and you are ready to convert the files, press the **Translate** button. The files will be converted one by one. A

progress bar arises to the right of the **File List** field, which shows you percentage of completion of each conversion. If you want to stop the conversion procedure, press the **Terminate** button.

Input Record

Here is how to capture media from an incoming video signal using triggered capture control or stop motion (set interval-based) capture control. Select the **Input** tab and click on the **Record** button. Or, go to the main menus, under **Operation|Input|Record**. This reveals the **Record** section of the interface.

Clip Capture Details

- **Use Duration** - if you need to capture a clip of a set length, select the **Use Duration** checkbox and enter a clip length by time code.
- **Clip Naming** - clip names automatically increment (upward in numerical sequence from a "0000" suffix - the default clip naming convention starts at DRCL0000, then DRCL0001 etc.). You can edit the clip name for each clip by editing this field. Input any clip name of up to 8 characters and it will begin to increment upward with each subsequent record, using the last characters as placeholders for numbers. The **Shot** field displays the current shot number - this starts at 0000 and increments upward by one each time the user presses the **+** button. The **Take** field displays the current take for this shot. Each record made with the current shot number will cause the take to increment upward by one. When the shot number is changed, the **Take** field will reset to 0000 and begin counting upward with each record again.

Where the Clip ends up

- **After the last clip on the time line** - Select **Add Clip To End** to specify that the captured clip should be placed at the end of the current time line.
- **At a location you type in** - Select **Add Clip At Time Code** and enter a time code location to specify that the captured clip should be added to a specified time code location in the time line.
- **Don't add the clip to the time line** - Select **Don't add clip** to specify that the captured clip should not be added to the time line, but simply created and stored on the hard drive.

Trigger Capture

Trigger Capture assumes the user will start the capture using a trigger such as that included in the GUI, or a keyboard/controller record command.

- **Start Record** - Press the **Press Shift+Q to Record** button to start the recording. On these DDRs, actually pressing the Shift key + the "Q" key on the keyboard will work the same way. If you have checked the **Use Duration** checkbox, the capture will automatically stop once the set number of frames has been captured.
- **Stop Record** - If the **Use Duration** checkbox has not been checked, press the **Space to Stop** button to end the capture. On these DDRs, actually pressing the Space key on the keyboard will work the same way.

Stop Motion Capture

Stop Motion Capture assumes the user will capture a set number of frames every so often (as in a time lapse video or frame by frame animation application):

- **Time Between Record Starts** - Enter a time code length into the **Rec Interval** field - this is how often the system will go into record.
- **How long it goes into record for** - Enter a number of frames into the **Duration** field and click in the **Use Duration** checkbox.
- **Sequence naming** - If the **Auto Increment** field is checked, or selected, the names of the frames captured will follow in numerical sequence. This can be handy if you intend to reconstruct a series of frames as a stream.
- **Start the Stop Motion Record** - Press the **Rec Interval** button. The button changes to **Cancel**
- **Stop the Stop Motion Record** - To exit time lapse capture mode, press the **Cancel** button.

If for example the **Duration** field is set to 00:00:00:01 (one frame of video), and the **Rec Interval** field is set to 00:00:10:00 (ten seconds), upon pressing the **Rec Interval** button, every 10 seconds the system is set to capture one frame of video.

Input Record At

Here is how to capture incoming video at a certain time of day. Confirm that the DDR "system clock" is set correctly. Select the **Input** tab, and click on the **Record At** button. Or, go to the main menus, under **Operation|Input|Record At**. This activates the **Record At** section of the interface.

Clip Capture Details

- **Use Duration** - to capture a clip of a set length, select the **Use Duration** checkbox and enter a clip length by time code.
- **Clip Naming** - clip names automatically increment (upward in numerical sequence from a "0000" suffix - the default clip naming convention starts at DRCL0000, then DRCL0001 etc.). You can edit the clip name for each clip by editing this field. Input any clip name of up to 8 characters and it will begin to increment upward with each subsequent record, using the last characters as placeholders for numbers. The **Shot** field displays the current shot number - this starts at 0000 and increments upward by one each time the user presses the **+** button. The **Take** field displays the current take for this shot. Each record made with the current shot number will cause the take to increment upward by one. When the shot number is changed, the **Take** field will reset to 0000 and begin counting upward with each record again.

Where the Clip ends up

- **After the last clip on the time line** - Select **Add Clip To End** to specify that the captured clip should be placed at the end of the current time line.

- **At a location you type in** - Select **Add Clip At Time Code** and enter a time code location to specify that the captured clip should be added to a specified time code location in the time line.
- **Don't add the clip to the time line** - Select **Don't add clip** to specify that the captured clip should not be added to the time line, but simply created and stored on the hard drive.

Time of Day Capture

- **Start Capture** - Set a time for video capture to start in the **Wait** field. This is accomplished by selecting each of the time code segments (hours, minutes, seconds) and pressing the up or down arrows at the side of this field to adjust them.
- **End Capture** - Set a time for video capture to stop in the **End Time** field. This is accomplished by selecting each of the time code segments (hours, minutes, seconds) and pressing the up or down arrows at the side of this field to adjust them.
- **Start Recording** - Click in the **Record Enabled** checkbox. The DDR will display a countdown from the present time to the record time, based on the DDR's system clock. Wait until the specified time and video capture will start.
- The capture will end at the time of day specified in the **End Time** field, unless interrupted by the operator or some other factor.

Upon completion of the capture, the DDR will begin counting down to the next day's record time.

Input Batch Capture

DDR can control an external device (most often a VTR) to capture its media by using or generating a list of the edits required (In and Out points) and performing all the edits as a batch capture. Select the **Input** tab, and click on the **Batch Capture** button. Or, go to the main menus, under **Operation|Input|Batch Capture**. This activates the **Batch Capture** section of the interface.

The current channel display shows: **Ext VTR**. The time code display should now reflect the state of the VTR and the transport controls should be able to operate the VTR. To see the output of the external device in the VGA display, select the **E/E** checkbox.

If an EDL already exists for this pull-in, press the **File** button and select **Open**. Alternately you can right click on the list and select **Open Existing List** from the context menu. This opens a browser which lets you browse for and load the EDL. Otherwise, you can set up an EDL using the "Batch Capture" dialog as below.

Make an Edit - each edit specifies an In and Out point and references a specific tape (Reel). Here is how to make edits.

- **Reel ID** - set the **Reel ID** to an identifier (4 alphanumeric characters or shorter) for the tape you are pulling media from. You can use the default Reel ID supplied or type in a new one. If you intend to use the EDL to pull in media from more than one tape, use a different **Reel ID** for the edits from the

second and for each subsequent tape. When the batch capture is performed, each time the **Reel ID** changes in the list, the operator will be prompted to load the new tape.

- **Set In Point** - use the transport controls to control the VTR, and seek to the first frame of the section of media you want to record. Alternately you can enter this time code location into the time code field, and press the **Q In** button. Press the **Set In** button to set this location as the In Point.
- **Set Out Point** - seek to the last frame of the first section, (or go there by time code) and press the **Set Out** button.
- **Set Timeline In** - to set an In point on the time line (where the clips pulled in will be placed on the time line), enter this location into the **Record In** field (to the right of the **Set Rec In** button) and press the **Set Rec In** button.
- If you want a file name that is different from the clip name for one or more items, enter a name into each **File Name** field.
- If desired, enter a comment into the **Comment** field for each item.
- To preview this edit, press the **Preview** button.
- If everything seems correct, press the **Add** button to add it to the list.

Make More Edits

- This is a single correct edit added to the list. More edits may be constructed and added to the EDL using these methods. If you decide that you want to clear the list, press the **File** button and select **New**.
- Once the list contains all the edits to be performed, you can save it. Press the **File** button and select **Save**.

Correct an Edit

- If you notice that an edit in the list is incorrect (maybe the comment is mistyped or the out point is a frame off for example), double click on it to load its parameters back into the dialog.
- Change the parameters that need changing, and press the **Set** button. This changes the edit in the EDL.

Options to Perform the Pull-in

- **Capture button options** - to perform all of the edits in the list press the **Capture** button and select **All**. To perform some of the edits but not all, select them and press the **Capture** button then select **Selection**. To perform one of the edits, select it, press the **Capture** button and select **Single**.
- **Context menu options** - to perform one of the edits in the list, select it, right click on it and select **Capture Single** from the context menu. To perform all the edits in the list, right click on the list and select **Capture All** from the context menu.

Output

This section describes how to play, or output files.

The interface features transport controls (play, stop, pause, fast forward etc.) analogous to a home VTR. Real time display of transport status is provided. Above the

controls is the Jog/Shuttle transport control bar. Pressing the **Position** button shuttles through various transport controls for quick review, cueing, variable speed playback and display.

Depending on the mode of output selected, the system may be playing a single clip or a sequence of clips or frames.

Output - Time Line

Here is how to play media using the time line. Select the **Output** tab in the operations section, and click on the **Time Line** button. Or, go to the main menus, under **Operation|Output|Time Line**. This reveals a **Time Line** section of the interface.

The **Timeline** display offers a way to quickly cue up sections of media, and to view details about each media segment on the timeline.

TC Timeline - The top timeline is the **TC Timeline** - it displays all 24 hours of time code space.

The **TC Timeline** contains a slider whose size represents the amount of time code space displayed at the current zoom level. To zoom in (see less of the time line but more detail) press the **+** button. To zoom out (see more of the time line but less detail) press the **-** button. When zoomed out enough (it grows as you zoom out), it becomes gray and may be dragged along to any section of time code space to display that area. When zoomed in enough (it shrinks as you zoom in), it turns into a yellow line.

The left arrow next to the **TC Timeline** selects and displays the previous adjacent section of media (or cues to the beginning if close enough). The right arrow selects and displays the next adjacent section of media (or the last section if close enough to the end).

Display Timeline - The middle timeline is the **Display Timeline**. It shows the section of time code space displayed at this zoom level, and corresponds to the size of the upper bar's slider. There is a slider in the **Display Timeline** to move along what is displayed in the **Clip Timeline**.

Clip Thumb - A thumb of the clip is present on the left lower side of the time line, containing a picon (scaled down frame of the clip), with the In point, out point, position (on the time line), duration and clip name displayed. To display this information for each clip in the time line, use the mouse to cross over, hover near or click on the clip.

Clip Timeline - The lower timeline is the **Clip Timeline**. Each clip you have captured or placed into the time line is displayed graphically as a group of "tracks" represented by colored bars. The top bar of each group represents the video portion of the file, and the lower associated bars represent the audio tracks in the file. When selected (or hovered over), the clip's information is displayed to the left of the time line along with

its picon. Each clip may be moved to a different position on the time line by dragging it with the mouse - right is forward, left is back, or reverse. Use the **+** button to zoom in on the time line, and use the **-** button to zoom out.

Cue to any location by double clicking at that point on the lower time line row - this will change where the DDR is cued to. Or, double-click on a clip to load its first frame. Double click on it again to load its last frame.

The **Transport Controls** can be used to play media from any cued location. The DDR's non-linear flexibility allows you to play in reverse or forward (also fast forward or fast reverse) through the entire Timeline, or to jump forward or backward frame by frame, or by 5 second intervals. **Pause** displays the current frame, and **Stop** provides passthrough signal if present (reverts to **Pause** if not). Where there is no media in the Timeline, **DDR** will play black and silence.

Timeline Context Menu

The **Timeline** offers a context menu which allows you to add or remove clips from the **Timeline**.

Insert choices - right click on a clip to reveal the context menu choices:

- **Insert Before** - To insert a clip before the selected clip, select **Insert Before**. This reveals the choices: **From Disk** or **From Bin**. Choosing **From Disk** opens a browser which allows you to search your storage for a file to add. Choosing **From Bin** reveals a list which allows you to select any clip present in the **Clip Bin**. Once a clip is selected from the disk or from the bin, it is loaded into the **Import Media** dialog box, to allow you to set the parameters of its inclusion. Unless you change the **Timeline In** in the **Import Media** dialog box, the media will be added before the selected clip.
- **Insert After** - To insert a clip after the selected clip, select **Insert After**. This reveals the choices: **From Disk** or **From Bin**. Choosing **From Disk** opens a browser which allows you to search your storage for a file to add. Choosing **From Bin** reveals a list which allows you to select any clip present in the **Clip Bin**. Once a clip is selected from the disk or from the bin, it is loaded into the **Import Media** dialog box, to allow you to set the parameters of its inclusion. Unless you change the **Timeline In** in the **Import Media** dialog box, the media will be added after the selected clip.

Relink File

- **Relink File** - where a file has been moved or renamed, it may not be found in the location that a list expects it to be, and the media will not be playable. Press **Relink File** to browse to the location of the file and select it. This action revises the path and file name information for the clip so the list has correct references and can play the media.

Looping playback

- **Play Loop** – to loop a clip in the **timeline**, select it and right click on it, then select **Play Loop**. The clip will play from start to finish (100% speed) over and over again until interrupted (press stop or pause).

Remove media from the timeline

- **Remove** - to remove a selected clip from the **timeline**, select it and press **Remove**.
- **Remove Ripple** - to remove a clip from the **timeline** and pull all subsequent edits in the **Timeline** back the same number of frames as were in the removed clip, select **Remove Ripple**.
- **Remove All** - to remove all the clips from the **Timeline**, select **Remove All**.
- Where an action has taken place that can be undone, a menu item such as **Undo Last** or **Undo Remove** (context-specific) will be placed at the bottom of the context menu list. To undo the action, select this option.

Output - Edit Decision List

Here is how to output files using the EDL (Edit Decision List). Select the **Output** tab and click on the **Edit Decision List** button. Or, go to the main menus, under **Operation|Output|Edit Decision List**. This reveals an **Edit Decision List** section of the interface.

Select any clip in the EDL by clicking on it. It will be highlighted and the transport display loads the first frame of the clip into the display in pause mode.

The **Transport Controls** can be used to play at various speeds in forward or reverse from any cued location. Non-linear flexibility allows you to play in reverse or forward (also fast forward or fast reverse) through the entire EDL from wherever location the system is cued to, or to jump forward or backward frame by frame, or by 5 second intervals. **Pause** displays the current frame and **Stop** provides passthrough signal if present. Where there is no media in the EDL, **DDR** will play black and silence.

EDL Context Menu

The **Edit Decision List** (EDL) may be edited by inserting or removing clips. It also offers a context menu which allows you to add or remove clips from the **EDL**. Select the **Output** tab, then the **Edit Decision List** button. Or, go to the main menus, under **Operation|Output|Edit Decision List**. Right click on any clip in the **EDL** to reveal the context menu.

Insert choices - right click on a clip to reveal the context menu choices:

- **Insert Before** - To insert a clip before the selected clip, select **Insert Before**. This reveals the choices: **From Disk** or **From Bin**. Choosing **From Disk** opens a browser which allows you to search your storage for a file to add. Choosing **From Bin** reveals a list which allows you to select any clip present in the **Clip Bin**. Once a clip is selected from the disk or from the bin, it is loaded into the **Import Media** dialog box, to allow you to set the parameters of its inclusion.

Unless you change the **Timeline In** in the **Import Media** dialog box, the media will be added before the selected clip.

- **Insert After** - To insert a clip after the selected clip, select **Insert After**. This reveals the choices: **From Disk** or **From Bin**. Choosing **From Disk** opens a browser which allows you to search your storage for a file to add. Choosing **From Bin** reveals a list which allows you to select any clip present in the **Clip Bin**. Once a clip is selected from the disk or from the bin, it is loaded into the **Import Media** dialog box, to allow you to set the parameters of its inclusion. Unless you change the **Timeline In** in the **Import Media** dialog box, the media will be added after the selected clip.

Relink File

- **Relink File** – where a file has been moved or renamed, it may not be found in the location that a list expects it to be, and the media will not be playable. Press **Relink File** to browse to the location of the file and select it. This action revises the path and file name information for the clip so the list has correct references and can play the media.

Looping playback

- **Play Loop** – to loop a clip in the **timeline**, select it and right click on it, then select **Play Loop**. The clip will play from start to finish (100% speed) over and over again until interrupted (press stop or pause).

Remove media from the timeline

- **Remove** - to remove a selected clip from the **timeline**, select it and press **Remove**.
- **Remove Ripple** - to remove a clip from the **timeline** and pull all subsequent edits in the **Timeline** back the same number of frames as were in the removed clip, select **Remove Ripple**.
- **Remove All** - to remove all the clips from the **Timeline**, select **Remove All**.
- Where an action has taken place that can be undone, a menu item such as **Undo Last** or **Undo Remove** (context-specific) will be placed at the bottom of the context menu list. To undo the action, select this option.

Output – Import Media

Once you have selected **Insert After** or **Insert Before** from the context menu, the media is loaded into the **Import Media** window.

Position on the time line

- To add the selected media to the timeline or EDL, confirm that the **Add to Time Line** checkbox is selected. The current selected position (before or after the selected media segment or clip) is loaded into the **Position** field, but may be edited here.

Edit the length of the clip you are going to add

- The **Start** and **End** times of the clip are displayed, but may be trimmed (new In point greater than 00:00:00:00, and/or new Out point less than the current Out point) to add only a portion of a clip.

Rename the clip

- The clip name is displayed, but may be edited to help keep track of sub-clips (for example). Select the existing name, backspace and type in a new name.

Change the file type during import

- The clip may be transcoded to another file type during the Import Media process. Check the **Convert Media** checkbox to enable conversion.

Convert to current system settings

- If you want to convert the selected file to the current DDR settings, make sure that the **System Settings** checkbox is checked.

Convert to another file type

- To create another file type during the import process, confirm that the **System Settings** checkbox is not selected.
- Use the **File Type** pulldown menu to select the file type.
- Use the **Compression** pulldown menu to set the compression for the selected file type.
- Use the **Bit Depth** pulldown menu to set the bit depth for the selected file type.

Once all the choices are correctly entered, press the **Import** button to insert the media as specified, or press the **Cancel** button to exit this procedure without inserting any media.

EDL Channel Presets

The **Edit Decision List (EDL)** allows you to confirm which channels are present in a selected file. Select the **Output** tab and click on the **Edit Decision List** button. Or, go to the main menus, under **Operation|Output|Edit Decision List**. This reveals an **Edit Decision List** section of the interface.

Double click on the channel presets (in the **EDIT** column) of any clip in the **EDL** to reveal the **Channel Presets** window. The **Channel Presets** window displays how many channels have been set up for the system (how many boxes there are), and how many channels are presently associated with the selected file (which of those boxes have been checked, or selected).

Some applications may allow the user to click on the checkboxes to select or deselect specific audio or video channels for record.

Output - VTR Out

Here is how to record files onto an external VTR using the **VTR Out** mode. Select the **Output** tab, and select the **VTR Out** button. Or, go to the main menus, under **Operation|Output|VTR Out**. This reveals a **VTR Out** section of the interface.

In **VTR Out** mode, **DDR** controls an external VTR to make it record cooperatively while a portion of the timeline is played out. This is sometimes referred to as a “layback”, in that media is laid back from the DDR to the VTR.

Control over external VTRs can be set up using the **Setup Wizard**. If the default installation path has been used for a standalone version of **MediaNXS**, the **Setup Wizard** will be located at: **Start|Programs|Drastic MediaNXS|SetupWizard**. Or if **MediaNXS** has been installed as part of a **DDR** package, it will be located at: **Start|Programs|Drastic DDR|Util|SetupWizard**.

Place the edit tape (the one upon which you want to record) into the VTR.

Confirm control over the external VTR

- Where control over an external VTR has been established, upon selecting **VTR Out** mode the **Transport Display** should show time code and other information from the external VTR.
- Pressing **Play** should cause the VTR to go into play mode.
- Entering a time code into the time code field and pressing the **Go To** button should cause the VTR to cue to a specific location on its tape.

Edit clips onto the time line

- Set up the time line to contain the media you would like to lay back to the external VTR.
- See the *Timeline Output* section for more information about adding media to the timeline.

Set In and Out points for the media on the time line

- **Set In Point** - Enter the time code location of the first frame of the media into the In Point field. If this location is the first frame of a clip on the time line, you can double click on the clip to toggle between cueing the first frame and cueing the last frame. Or you can enter a known location into the Go To time code field and press the **Go To** button. It is possible to roughly cue to a location on the time line by double clicking on the **Clip Time Line**. Press the **Set In Point** button.
- **Set Out Point** - Enter the time code location of the last frame of the media you want to be recorded onto the VTR into the **Out Point** field. Or, cue to this frame, press the **Set Out Point** button.

Set the In Point on the external VTR

- Use the **Transport Controls** to operate the external VTR to cue up the point on the tape at which you would like to start recording the media from the DDR. Press the **Set VTR In** button.

Confirm the layback using Preview

- To preview the media being laid back, press the **Preview** button.

Choose between Insert and Assemble Edit modes

- **Assemble Edit** - To perform an assemble edit (replace all tracks including the control track within the destination time code locations) select **Assemble** from the pulldown menu.
- **Insert Edit** - To perform an insert edit (replace specific audio or video tracks within the destination time code locations but leave the control track intact) select **Insert** from the pulldown menu. To choose which tracks will be laid back to the external VTR, click on their channel preset buttons to toggle them on or off. Where the track is off, its label will be black. Where the track is active and will be laid back during an insert edit, its label is orange.

Once all the parameters are correctly set, press the **Start** button to begin the layback. Where a number of clips have been laid end to end they will be output as a single stream of frames to the VTR. Where there is space in between clips, black and silence will be laid back to the external VTR.

Output - VTR Out Context Menu

The **VTR Out** list may be edited before laying media back to the external device. Select the **Output** tab, and select the **VTR Out** button. Or, you can go to the main menus, under **Operation|Output|VTR Out**. This reveals a **VTR Out** section of the interface.

Right click on a clip in the **VTR Out** list to reveal the context menu.

Insert choices - right click on a clip to reveal the context menu choices:

- **Insert Before** - To insert a clip before the selected clip, select **Insert Before**. This reveals the choices: **From Disk** or **From Bin**. Choosing **From Disk** opens a browser which allows you to search your storage for a file to add. Choosing **From Bin** reveals a list which allows you to select any clip present in the **Clip Bin**. Once a clip is selected from the disk or from the bin, it is loaded into the **Import Media** dialog box, to allow you to set the parameters of its inclusion. Unless you change the **Timeline In** in the **Import Media** dialog box, the media will be added before the selected clip.
- **Insert After** - To insert a clip after the selected clip, select **Insert After**. This reveals the choices: **From Disk** or **From Bin**. Choosing **From Disk** opens a browser which allows you to search your storage for a file to add. Choosing **From Bin** reveals a list which allows you to select any clip present in the **Clip Bin**. Once a clip is selected from the disk or from the bin, it is loaded into the **Import Media** dialog box, to allow you to set the parameters of its inclusion. Unless you change the **Timeline In** in the **Import Media** dialog box, the media will be added after the selected clip.

Relink File

- **Relink File** - where a file has been moved or renamed, it may not be found in the location that a list expects it to be, and the media will not be laid back. Press **Relink File** to browse to the location of the file and select it. This action

revises the path and file name information for the clip so the list has correct references and can play the media.

Looping playback

- **Play Loop** – to loop a clip in the **timeline**, select it and right click on it, then select **Play Loop**. The clip will play from start to finish (100% speed) over and over again until interrupted (press stop or pause).

Remove media from the timeline

- **Remove** - to remove a selected clip from the **timeline**, select it and press **Remove**.
- **Remove Ripple** - to remove a clip from the **timeline** and pull all subsequent edits in the **Timeline** back the same number of frames as were in the removed clip, select **Remove Ripple**.
- **Remove All** - to remove all the clips from the **Timeline**, select **Remove All**.
- Where an action has taken place that can be undone, a menu item such as **Undo Last** or **Undo Remove** (context-specific) will be placed at the bottom of the context menu list. To undo the action, select this option.

Output - To File

Here is how to output a portion, or all of the timeline to a specified file type using the **To File** mode. Select the **Output** tab, and click on the **To File** button. Or, go to the main menus, under **Operation|Output|To File**. This reveals a **To File** section of the interface.

The **Time Line** is loaded into the **Transport Displays**. The **Transport Controls** can now play media from the **Time Line**. Here is how to set up converting selected media on the timeline to a specific file type.

Set the target file type

- Use the **File Type** pulldown menu to select the file type to convert to.
- Use the **Compression** pulldown menu to select between available compression settings for the selected file type.
- Use the **Bit Depth** pulldown menu to select between available bit depth settings for the selected file.

Set the record to location

- Confirm that the directory indicated is where you want to save the converted files, or press the **Set Directory** button to set the correct location.

Cue to and Set the In location

- Use the transport controls to cue the first frame of media to be converted (it doesn't necessarily have to be 00:00:00:00 though this is one way you could organize the time line), or enter a time code location into the small time code field to the right of the **Transport Controls**, and press the **Go** button to cue up a specific frame. Press the **Set** button to the right of the **In Point** field to set this location as the In Point.

Cue to and Set the Out location

- Use the transport controls to cue to the last frame of media to be converted. Press the **Set** button to the right of the **Out Point** field to set this location as the Out Point.

Convert the selected media

- To convert the media within the selected area of time code space to the file type selected, press the **Translate** button.
- A progress meter will arise to the left of the pulldown menus, showing the percentage of completion. Once complete, the files will become available in the directory you set. They should function identically to files generated on hardware which uses the file type as native.

Terminate the conversion

- If for any reason you need to cancel this operation while it is in progress, press the **Terminate** button.

Reference

The reference section provides a detailed look at the elements in the **Drastic DDR™** graphical user interfaces.

MediaNXS Reference

The controls and displays of the **MediaNXS** interface are detailed in this section.

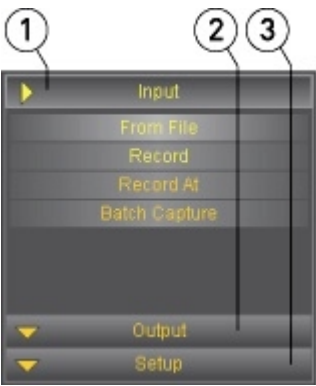
Main Interface Overview



1 Main Menu	Offers controls for Files, Operations, a View Selector and the Help Menu.
2 Operations	Allows the user to select Input , Output and Setup operations, and

	Selector	indicates which operation the system is currently set to. These dialogs can also be accessed through the main menus, under Operations .
3	System Display	Shows the CPU performance, the Memory performance, the Buffer level, and progress bars for Import and Export operations as percentage bars. The Video, Audio, Reference and Disk are displayed in yellow if working fine, in red if there appears to be an issue. The video standard the system is set to is displayed below these indicators.
4	Operations section	This section of the interface contains controls and displays specific to the operation being performed.
5	Transport Controls and Display	Provides real time display of time code location, standard, time code type, transport state, secondary time code information, as well as transport controls for playback and cueing and audio meters.
6	View section	This section is used to display the VGA Monitor, Vector Scope, Wave Form Monitor, RGB Wave Form Monitor, Histogram, Clip List, Thumb View and Log/Output Window, depending on what is selected in the View Selector or in the main menus, under View .
7	View Selector	Allows the user to select what will be displayed in the View section.

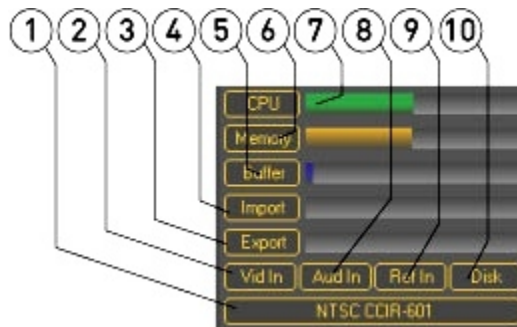
Operations Selector



The **Operations Selector** provides access to the various operations that may be performed within **MediaNXS**. Clicking on either the **Input**, **Output** or **Setup** tabs reveals the choices for each operation. These controls are also duplicated in the **Main Menus**, under the **Operations** heading.

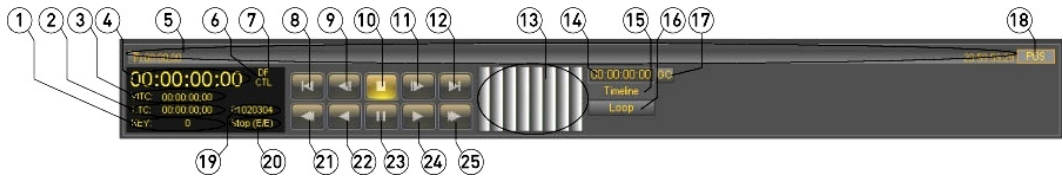
1	Input tab	Pressing the Input tab expands it so the input options are revealed. Choices include From File , Record , Record At , and Batch Capture . These controls are duplicated in the main menu, under Operations Input .
2	Output tab	Pressing the Output tab expands it so the output options are revealed. Choices include Time Line , Edit Decision List , VTR Out , and To File . These controls are duplicated in the main menu, under Operations Output .
3	Setup tab	Pressing the Setup tab expands it so the setup options are revealed. Choices include Config , Info , and Licensing . These controls are duplicated in the main menu, under Operations Setup .

System Display



1	Video Standard status display	Displays the video standard the DDR is currently set to.
2	Vid In status display	Indicates the status of the video input based on the color the label Vid In is displayed in - yellow if working fine, red if there appears to be a problem
3	Export progress meter	Progress display for export operations
4	Import progress meter	Progress display for import operations
5	Buffer usage meter	Usage level meter for the buffer
6	Memory usage meter	Usage level meter for the memory
7	CPU usage meter	Usage level meter for the CPU
8	Aud In status display	Indicates the status of the audio input based on the color the label Aud In is displayed in - yellow if working fine, red if there appears to be a problem
9	Ref In status display	Indicates the status of the timing reference input based on the color the label Ref In is displayed in - yellow if working fine, red if there appears to be a problem
10	Disk status display	Indicates the status of the disk throughput based on the color the label Disk is displayed in - yellow if working fine, red if there appears to be a problem

Transport Controls

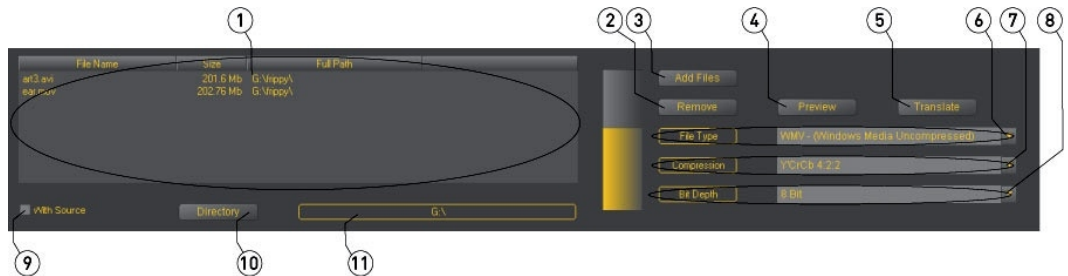


1	Key Code display	Displays any key code information associated with the loaded clip
2	LTC display	Displays any LTC information associated with the loaded clip
3	VITC display	Displays any VITC information associated with the loaded clip
4	Main Time Code display	Displays the current timecode location
5	Jog/Shuttle Controller slider	Depending on the mode selected, this slider shows the position within a clip, the time line, the relative percentage of play speed, or provides a jog button to assist cueing media. The In and Out points of the selected media (whether clip or time line) are displayed at the left (In Point) and right (Out point) of the slider.
6	Control Type display	Displays the control type being used
7	Video Standard display	Displays the video standard the system is set to, whether NTSC (DF, NDF), PAL, etc.
8	5 Seconds Reverse button	Move to a position 5 seconds before the present location and display the frame of video found there.
9	1 Frame Reverse button	Move to a position 1 frame before the present location and display the frame of video found there.
10	Stop button	Halt any playback and go to E/E, or passthrough display
11	1 Frame Forward button	Move to a position 1 frame after the present location and display the frame of video found there.
12	5 Seconds Forward button	Move to a position 5 seconds after the present location and display the frame of video found there.
13	Audio meters	Displays the current audio output levels if supported by the system hardware.
14	Timeline Position field	To cue to a position in the timeline, enter a location into the Timeline Position field and press the GO button.
15	Channel mode	Displays whether the current channel is in Clip Bin or Time Line view, or if an External channel is being addressed.
16	Loop button	Press the Loop button to open the Loop Settings window, which

		allows the user to set In and Out points, and start looping playback.
17	GO button	Press the GO button to cue to the location in the Timeline Position field.
18	Jog/Shuttle Controller button	The button offers a pulldown menu when pressed, which lets you choose between position controller modes. POS = Position, which places a marker in the current position to which you are cued, and allows the user to pull it along to cue up other portions of the clip. JOG = Jog, this setting provides a slider which when moved plays the display along slowly, for fine cuing of clips. SHTL = Shuttle, this setting provides a slider which when moved plays the clips somewhat more quickly for scene viewing. VAR = Variable, this setting places a slider which moves transport along correspondent to the position of the slider, i.e. further to the right playback moves faster in a forward direction.
19	User Bits display	Displays any user bits information associated with the file.
20	Transport State display	Displays the current transport state (whether in Play, Stop, Pause etc.)
21	Fast Reverse Play button	Play the cued clip in reverse at the fastest speed possible.
22	Reverse Play button	Play the cued clip in reverse at -100% of play speed.
23	Pause button	Stop any playback and display the current frame.
24	Play button	Play the cued clip at 100% of play speed.
25	Fast Forward button	Play the clip at the fastest speed possible.

Input - From File

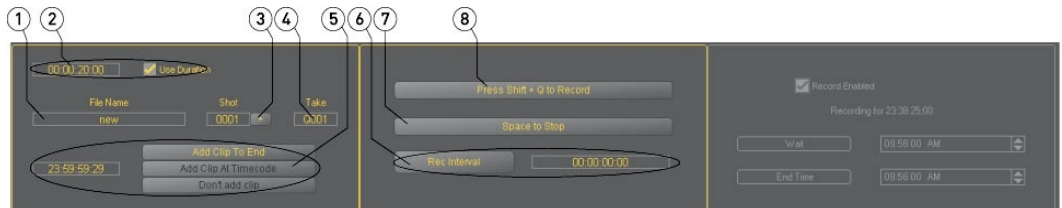
From the main menus, select **Operation|Input|From File**. Alternately use the **Operations Selector** to select **Input|From File**.



1	File List field	Contains a list of all the files selected, and displays the file name, size and full path.
2	Remove button	To remove a file from the File List field, select the file in the list and press the Remove button.
3	Add Files button	Press the Add Files button to browse for media to add to the File List field.
4	Preview button	Press to play the selected clip.
5	Translate button	Press to begin the translation of the clips in the File List field to the selected file type, compression and bit depth.
6	File Type pulldown menu	Use the pulldown menu to select the file type you want to use.
7	Compression pulldown menu	Use the pulldown menu to select between available compression setting for the selected file type.
8	Bit Depth pulldown menu	Use the pulldown menu to select between available bit depth settings for the selected file type.
9	With Source checkbox	Click this checkbox to specify that the translated files should be saved in the same directory as their source files.
10	Directory button	Press to browse for a location in which the translated files will be saved. Confirm that the With Source checkbox is not checked if you want the converted files to be saved into a location other than where the source files are located..
11	File Path display	Displays the current location into which translated files will be saved.

Input - Record

From the main menus, select **Operation|Input|Record**. Alternately use the **Operations Selector** to select **Input|Record**.



1	File Name field	Drastic file names are designed to increment upwards numerically by single integers. The File Name field displays the current file name prefix, to which the shot and take number are appended. By default the DRCL0000 file name is loaded, but the user can edit the file name by selecting it and typing in a new name.
2	Use Duration checkbox	The time code field displays the current edit duration. This field may be edited via keyboard. When the Use Duration checkbox is checked, all records will stop at the specified duration. For stop motion applications this should be set to 00:00:00:01.
3	Shot controls	The Shot number starts at 0 by default (but can be incremented upward by pressing the + button). All records which use the same File Name and Shot number will cause the associated Take number to increment upward by single integers. Each time the Shot number is changed the Take counter will be reset to 0. The Shot number resets to 0 each time the file name is changed.
4	Take controls	All records which use the same File Name and Shot number will cause the Take number to increment upward by single integers. Each time the Shot number is changed the Take counter will be reset to 0000.
5	Add Clip checkbox	Select At Clip At End to specify that a captured clip will be added to the timeline after the last clip. Select Add Clip At Timecode and edit the time code field to specify where a clip will be added in the timeline. Select Don't Add Clip to specify that the captured clip will not be added to the timeline.
6	Rec Interval button	This is used for stop motion applications, to set the interval at which MediaNXS will go into record. Set the interval in the time code field to the right of the Rec Interval button. Set a duration (say, 00:00:00:01) in the Duration field and check the Use Duration checkbox. Once you press the Rec Interval button, it will count down the set amount of time and begin a record, using the duration amount to stop the record, then it will begin the count again, putting the system into record each time the countdown reaches 00:00:00:00. Press the Space to Stop button to stop the recording.
7	Space To Stop	Press the Space to Stop button to stop a recording.

button	
8 Press Shift+Q To Record button	Press the Press Shift+Q To Record button to start a recording.

Input - Record At

From the main menus, select **Operation|Input|Record At**. Alternately use the **Operations Selector** to select **Input||Record At**.



1 File Name field	Drastic file names are designed to increment upwards numerically by single integers. The File Name field displays the current file name prefix, to which the shot and take number are appended. By default the DRCL0000 file name is loaded, but the user can edit the file name by selecting it and typing in a new name.
2 Use Duration checkbox	The Use Duration checkbox is disabled during Record At operations, as the DDR will use the Wait and End Time parameters to create in and out points.
3 Shot controls	The Shot number starts at 0 by default (but can be incremented upward by pressing the + button). All records which use the same File Name and Shot number will cause the associated Take number to increment upward by single integers. Each time the Shot number is changed the Take counter will be reset to 0. The Shot number resets to 0 each time the File Name is changed.
4 Take controls	All records which use the same File Name and Shot number will cause the Take number to increment upward by single integers. Each time the Shot number is changed the Take counter will be reset to 0000.
5 Add Clip Options checkbox	Select At Clip At End to specify that a captured clip will be added to the timeline after the last clip. Select Add Clip At Timecode and edit the time code field to specify where a clip will be added in the timeline. Select Don't Add Clip to specify that the captured clip will not be added to the timeline.
6 End Time selector	Use the time of day field and arrows to specify the End Time , which is the time of day the DDR will end the recording.
7 Wait selector	Use the time of day field and arrows to specify the Wait time, which is the time of day at which the DDR will begin recording.
8 Record Enabled checkbox	With this checkbox selected, the system will immediately begin to display a count down to record time just below the checkbox (or it will go into record if it is already within the Record parameters) then it will

		go into record mode at the time of day specified in the Wait field, and stop at the time of day specified in the End Time field. At that point it will begin to count down to the next day's record. To stop time of day-based recording, uncheck the Record Enabled checkbox.
--	--	---

Input - Batch Capture

From the main menus, select **Operation|Input|Batch Capture**. Alternately use the **Operations Selector** to select **Input|Batch Capture**.



1	Set In controls	The time code field displays the current In point for the edit. The user may enter a time code location into the timecode field and press the Q In button to cue to this location. Pressing the Set In button sets the current cued location as the In point for the edit.
2	File button	Use the pulldown menu to select a New batch capture EDL, Open a batch capture EDL, or Save the current batch capture EDL as the EDL type of your choice, and in the location and with the name of your choice.
3	Capture Options button	Start the batch capture by selecting one of the following: Single to capture a single selected edit, Selected to capture some but not all of the edits in an EDL, All to capture all of the edits in the EDL.
4	Add button	Press this button to add the current edit to the EDL field.
5	Set button	Press the Set button to enter any changes which have been made to the current edit into the EDL.
6	EDL field	This field displays the current EDL being set up for batch capture.
7	Set Out controls	To set the current timecode location as the Out point for the edit, press the Set Out button. To specify a location by timecode, enter the location into the timecode field and press the Q Out button to cue to this location. Press the Set Out button to set the current cued location as the Out point for the edit.
8	Reel ID field	Displays the Reel ID , or the identifier for the tape that this edit describes, and allows the user to enter a new or edit the existing Reel ID for each item being created.
9	Set Rec In controls	The time code location field displays the current Record In point for the edit, and allows the user to edit the existing or enter a new Record In for the edit. Pressing the Set Rec In button sets the time code location in the time code field as the new Record In point for the edit.
10	E/E checkbox	Click in the E/E checkbox to view pass-through video of the source tape. This provides display of In and Out points as each edit is being

		created.
11	Preview Edit controls	The timecode field displays the length of the current edit. Press the Preview button to play the edit without capture.
12	File field	Displays the current file name. To edit the file name for this edit to a name of your choice, select it and type in a new name.
13	Comment field	Displays existing comments and allows the user to enter a comment for each particular edit in the EDL, if desired.

Output - Time Line

From the main menus, select **Operation|Output|Time Line**. Alternately use the **Operations Selector** to select **Output|Time Line**.



1	Clip Details display	Displays the details of the last selected clip including a picon (thumbnail, or picture icon), In/Out points, Position on the timeline, duration and clip name.
2	Magnify and Reduce controls	Press the + button to zoom in, or magnify the view of the time line. Press the - button to zoom out, or reduce the view of the time line.
3	Move TC TimeLine View controls	Use the right and left arrows to select the next adjacent area of the TC TimeLine and move the view along, including the clips list.
4	Move Clip TimeLine controls	Use the right and left arrows to move the Clip TimeLine along.
5	TC TimeLine control	Displays the entire 24 hour timeline and offers a slider to move the Time Line View row around within the timeline.
6	Display TimeLine row	Displays the section of the timeline the user has zoomed in on, and offers a slider to move within this area.
7	Clip TimeLine row	Displays the time code location associated with the clip locations, and if the user double clicks on a location within the Clip Timeline, it will cue to that location, and any media at that location will be loaded for playback or signal analysis.
8	Timeline Display field	Displays the audio and video tracks of the clips in the timeline.

Output - EDL

From the main menus, select **Operation|Output|EDL**. Alternately use the **Operations Selector** to select **Output|EDL**. The columns may be moved (drag and release) or resized (hover near the edge and drag the line) so you can put them in the order and width you prefer. Therefore at some point they may not be exactly the same as the below diagram.

1	2	3	4	5	6	7	8	9	10	11
#	SEEK	REEL	EDIT	FRAME IN	FRAME OUT	RECORD IN	DURATION	PATH	COMMENT	
000	00:00:00:00	DRCL0000	VIA1A2A1A	00:00:00:00	00:00:04:10	00:00:00:00	00:00:04:10	G:\DRCL0000_0001_0001.mov		

1	# column	Displays the number of each media segment.
2	Seek column	Displays the seek parameters of each media segment.
3	Reel column	Displays the Reel ID of each media segment.
4	Edit column	Displays the channels present in each media segment.
5	Frame In column	Displays the Frame In of each media segment.
6	Frame Out column	Displays the Frame Out of each media segment.
7	Record In column	Displays the Record In of each media segment.
8	Duration column	Displays the duration, or length of each media segment.
9	Path column	Displays the file path of each clip in the media segment.
10	Comment column	Displays the comment for each media segment.
11	EDL field	Displays each media segment from first at the top to last at the bottom of the list, and offers a slider to display any clips not shown by the view.

Output - VTR Out

From the main menus, select **Operation|Output|VTR Out**. Alternately use the **Operations Selector** to select **Output|VTR Out**.

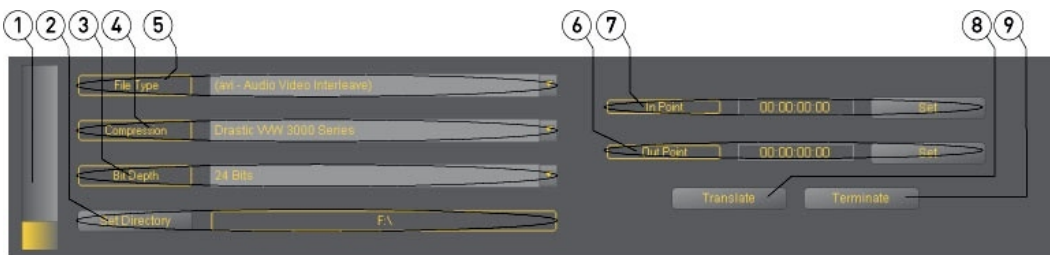


1	Clip Details display	Displays the details of the last selected clip including a picon, In/Out points, Position on the timeline and the clip's duration.
2	Magnify/Reduce controls	Press the + button to zoom in, or magnify the view of the time line and clips, so that less of the entire time line is shown. Press the - button to zoom out, or reduce the size of the individual clips so that more of the entire time line is shown.
3	Move TC Timeline View controls	One press of the right or left arrow moves the TC Timeline view along, including the clips list, to reveal the next adjacent portion of the time line, at the same level of zoom.
4	Move Clip Timeline controls	Use the right and left arrows to move just the Clip Timeline along.
5	TC Timeline row	Displays the entire 24 hour timeline and offers a slider to move the TC Timeline row around within the timeline.
6	Display Timeline row	Displays the section of the timeline the user has zoomed in on, and offers a slider to move within this area.
7	Clip Timeline row	Displays the time code location associated with the clip locations, and if the user double clicks on a location within the Clip Timeline, a red bar will move to indicate the cued to location, and any media at that location will be loaded into the VGA display.
8	Timeline Display field	Displays the audio and video tracks of the clips you have loaded into the timeline.
9	Start button	Press the Start button to begin the layback
10	Set VTR In controls	Set an In Point on the external VTR for the record to begin at
11	Channel Presets buttons	Indicates whether each video or audio channel is active or present in the file or signal. Allows the user to select or deselect channels depending on hardware constraints.
12	Set In Point controls	Set an In Point on the timeline for media to start at
13	Set Out Point controls	Set an Out Point on the timeline for media to end at
14	Preview	Press the Preview button to see the clips you intend to use in the

	button	layback.
15	Insert or Assemble toggle button	Switches between Insert and Assemble modes of editing to the VTR. Insert mode assumes a tape striped with time code into which the user can place video or audio or both but leave the time code intact. Assemble mode assumes time code will be laid down along with all audio and video channels present in the signal, replacing any material in this portion of the tape.

Output - To File

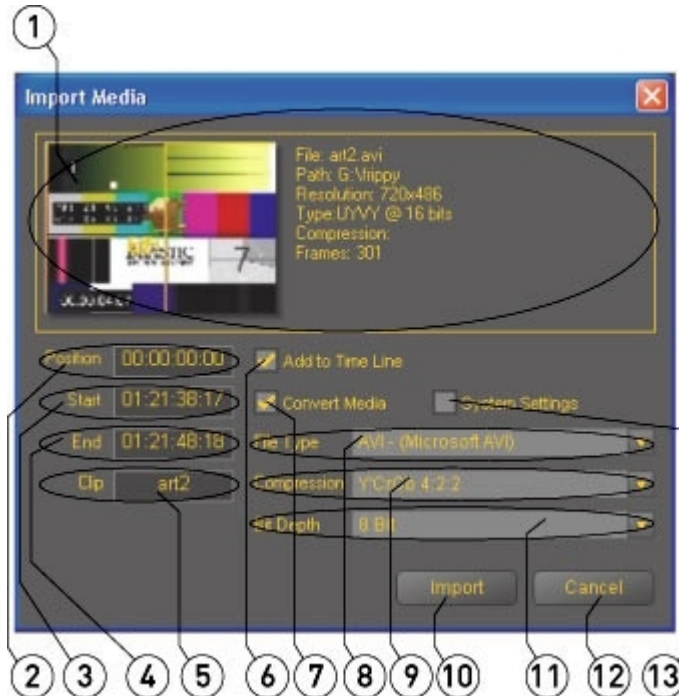
From the main menus, select **Operation|Output|To File**. Alternately use the **Operations Selector** to select **Output|To File**.



1	Progress display	The Progress display shows the percentage of completion of the conversion operation as a graphic bar which fills its box based on the estimated remaining amount of time the task will take.
2	Set Directory controls	Press the Set Directory button to set the location into which the converted files will be saved.
3	Bit Depth pulldown menu	Use the pulldown menu to select between the available Bit Depth settings for this type of file.
4	Compression pulldown menu	Use the pulldown menu to select between the available Compression settings for this type of file.
5	File Type pulldown menu	Use the pulldown menu to select between the available File Types to convert to.
6	In Point controls	Edit the timecode field to set a specific location or press the Set button to set the present location as the In Point for source files to be converted.
7	Out Point controls	Edit the timecode field to set a specific location or press the Set button to set the present location as the Out Point for source files to be converted.
8	Translate button	Press the Translate button to convert the selected portion of the timeline to the file type specified.
9	Terminate button	Press the Terminate button to stop the translation in progress.

File – Import Media

The **Import Media** dialog box allows you to add media to the **Time Line** and **EDL** output lists, and **Clip List** or **Thumbs View** lists. From the main menus, select **File| Import|Media**. Use the **Open** window to select a clip. Upon selection it is loaded into the **Import Media** dialog.

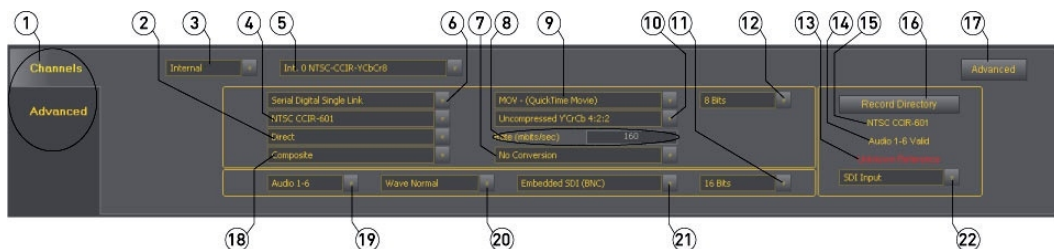


1	Clip Details section	The selected clip's picon is displayed, along with the file name, file path, resolution setting, video type, compression and length information (in frames).
2	Position field	The Position field becomes active when the Add to Time Line checkbox is checked. Enter a time code location within this field to set where the media will be placed on the Time Line .
3	Start field	The clip's starting time code location (00:00:00:00) is loaded here. To trim frames from the beginning, enter a time code location greater than zero (and less than the End time code) in this field.
4	End field	The clip's end time code location is loaded here. To trim frames from the end, enter a time code less than the current End time code but after the Start time code in this field.
5	Clip field	The current clip name is displayed. It can be edited to help identify this instance of the clip more clearly, especially useful where a portion of a clip (sub-clip) has been imported.
6	Add to Time	Checking this checkbox activates the Position field and specifies that

	Line checkbox	the clip shall be added to the Time Line (at that location) during this import operation.
7	Convert Media checkbox	Clicking in the Convert Media checkbox activates the System Settings checkbox, and allows you to specify that the media shall be converted during this import operation.
8	File Type pulldown menu	Where the Convert Media checkbox is checked, and the System Settings checkbox has been unchecked, this pulldown menu becomes active. Use it to select the file type you would like to create with the conversion.
9	Compression pulldown menu	Where the Convert Media checkbox is checked, and the System Settings checkbox has been unchecked, this pulldown menu becomes active. Use it to select the compression for the file type you would like to create with the conversion.
10	Import button	Press this button to begin the import process.
11	Bit Depth pulldown menu	Where the Convert Media checkbox is checked, and the System Settings checkbox has been unchecked, this pulldown menu becomes active. Use it to select the compression for the file type you would like to create with the conversion.
12	Cancel button	Press this button to exit the Import window without importing any files.
13	System Settings checkbox	Where the Convert Media checkbox is checked, the System Settings checkbox becomes active. With the System Settings checkbox checked, the file will be converted to the same file type, compression and bit depth the system is currently set to. With the System Settings checkbox unchecked, the File Type , Compression and Bit Depth pulldown menus become active, and you can set these to create the required file type upon import.

Setup – Config Channels Internal

From the main menus, select **Operation|Setup|Config**. Alternately use the **Operations Selector** to select **Setup|Config**. The **Config** section of the interface opens with the **Channels** tab selected. Confirm that the **Channel Type** pulldown menu is set to **Internal**.

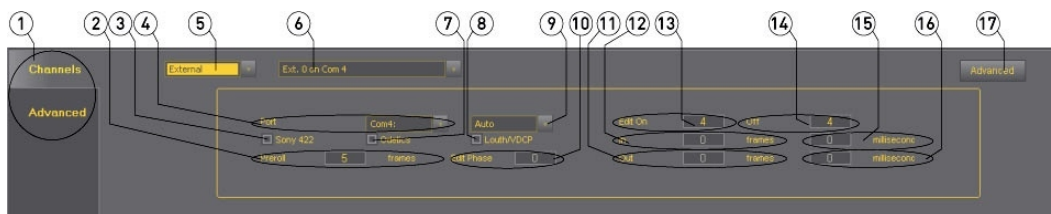


1	Config Selector tabs	Use the Channels tab to display the Config Channels section of the setup controls. Use the Advanced tab to display the Config Advanced section of the setup controls.
2	Up-, Down-, or Cross-Conversion pulldown menu	Use this pulldown menu to select the up-, down-, or cross-conversion that will be applied to the output for monitoring. Choices here may include None , to SD , Direct , to 720 and to 1080 .
3	Channel Type pulldown menu	Use the Channel Type pulldown menu to select between the internal or external channel settings.
4	Video Standard pulldown menu	Use the Video Standard pulldown menu to select the video standard that will be used.
5	Channel Selector pulldown menu	Use the Channel Selector pulldown menu to select the channel to which any configuration changes will apply. Choices will be limited to the channels supported by the system.
6	Input pulldown menu	Use the Input pulldown menu to select the type of signal for capture.
7	Conversion pulldown menu	Use the Conversion pulldown menu to set the conversion cropping/scaling strategy that will be applied to the output signal for monitoring.
8	Data Rate field	Displays the current setting for the data rate of specific compressed formats, in megabits per second. May be adjustable depending on the DDR and format selected.
9	File Format	Use the File Format pulldown menu to select the file format that will

	pulldown menu	be used.
10	Codec pulldown menu	Use the Codec pulldown menu to select the type of codec (compressed or uncompressed) used for this format.
11	Audio Bit Depth pulldown menu	Use the Audio Bit Depth pulldown menu to set the bit depth for the selected audio file type.
12	Video Bit Depth pulldown menu	Use the Video Bit Depth pulldown menu to set the bit depth for the selected format. Bit depth setting choices vary according to the file format selected.
13	Reference display	Displays the reference source if detected.
14	Audio Channels display	Displays the number of audio channels set up for the DDR.
15	Video Standard display	Displays the video standard set up for the DDR.
16	Record Directory button	Use the Record Directory button to open a browser which lets you set a new directory into which files will be saved.
17	Advanced button	Use the Advanced button to display the Config Advanced section of the setup controls.
18	Output Type pulldown menu	Use the pulldown menu to set the output type, typically between composite, component and SDI.
19	Audio Channels pulldown menu	Use the Audio Channels pulldown menu to set the number of audio channels that will be created during capture. Take care not to exceed the number of audio channels supported by the capabilities of the hardware.
20	Audio Container pulldown menu	Use the Audio Container pulldown menu to set the audio file type and how audio files are created.
21	Audio Type pulldown menu	Use the Audio Type pulldown menu to set the audio input/output type, whether AES/EBU or embedded.
22	Genlock Source pulldown menu	Displays and allows the user to set the genlock source. Choices include: None , Input and Reference In .

Setup – Config Channels External

From the main menus, select **Operation|Setup|Config**. Alternately use the **Operations Selector** to select **Setup|Config**. The **Config** section of the interface opens with the **Channels** tab selected. Set the **Channel Type** pulldown menu to **External**.

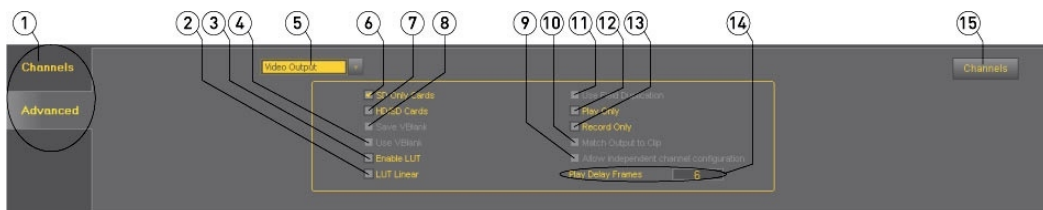


1	Config Selector tabs	Use the Channels tab to display the Config Channels section of the setup controls. Use the Advanced tab to display the Config Advanced section of the setup controls.
2	Preroll field	Displays the current setting for preroll in number of frames. The default setting is best for most devices, but the setting can be edited where this will produce a more accurate response by selecting the value in the field and typing in a new number of frames.
3	Sony 422 checkbox	Check to specify the use of Sony 422 protocol to control an external VTR.
4	COM Port pulldown menu	Use the COM Port pulldown menu to specify the COM port or serial control port that will be used to control the external VTR.
5	Channel Type pulldown menu	Use the Channel Type pulldown menu to select between the internal or external channel settings.
6	External Channel pulldown menu	Use the External Channel pulldown menu to choose the external channel to which these configuration settings apply.
7	Odetics checkbox	Check to specify the use of Odetics protocol to control an external VTR.
8	Louth/VDCP checkbox	Check to specify the use of Louth/VDCP protocol to control an external VTR.
9	Video Standard pulldown menu	Use the Video Standard pulldown menu to specify the video standard of the external VTR. In many cases the user will be able to select Auto , or auto-sensing.
10	Edit Phase field	Displays the current setting for edit phase in degrees based on deviation from 0. Where it will improve frame accuracy this setting may be edited in some systems by selecting the value and typing in a new value.

11	Out Frames field	Displays the current Out Frames setting - can be edited by selecting the value and typing in a new value.
12	In Frames field	Displays the current In Frames setting - can be edited by selecting the value and typing in a new value.
13	Edit On field	Displays the current Edit On setting - can be edited by selecting the value and typing in a new value.
14	Edit Off field	Displays the current Edit Off setting - can be edited by selecting the value and typing in a new value.
15	In Milliseconds field	Displays the current In Milliseconds setting - can be edited by selecting the value and typing in a new value.
16	Out Milliseconds field	Displays the current Out Milliseconds setting - can be edited by selecting the value and typing in a new value.
17	Advanced button	Use the Advanced button to display the Config Advanced section of the setup controls.

Setup – Config Advanced – Video Output

From the main menus, select **Operation|Setup|Config**. Alternately use the **Operations Selector** to select **Setup|Config**. Press the **Advanced** button, or use the **Advanced** tab to select the **Advanced** section of the **Config** menu. Use the **Advanced Config** pulldown menu to select **Video Output**.

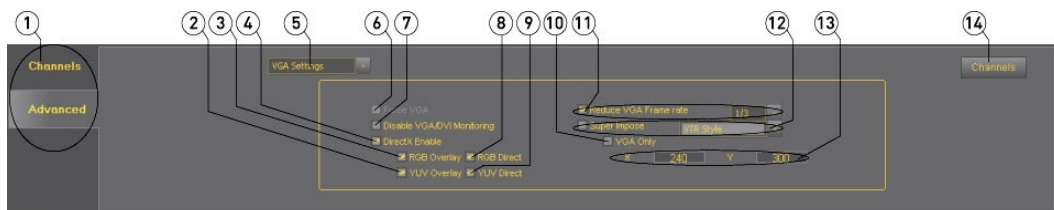


1	Config Selector tabs	Use the Channels tab to display the Config Channels section of the setup controls. Use the Advanced tab to display the Config Advanced section of the setup controls.
2	LUT Linear checkbox	Select the LUT Linear checkbox to apply a linear lookup table to output, otherwise it will be algorithmic. Confirm that the Enable LUT checkbox is selected for this to have any effect.
3	Enable LUT checkbox	Select the Enable LUT to apply a lookup table to output. The lookup table used is algorithmic by default; you must select LUT Linear to use a linear lookup table.
4	Use VBlank checkbox	Select the Use VBlank checkbox to decode and display VITC time code values.
5	Advanced Config pulldown menu	Use the Advanced Config pulldown menu to select between the Video Output , VGA Settings and the General sections of the Advanced Config section of Setup .
6	SD Only Cards checkbox	Select the SD Only Cards checkbox to set up the system for SD-only applications.
7	HD/SD Cards checkbox	Select the HD/SD Cards checkbox to set up the system to support both SD and HD formats. Some configurations may require that the HD/SD Cards checkbox and the SD Only Cards checkboxes both be checked before all formats will be supported.
8	Save VBlank checkbox	Select the Save VBlank checkbox to write VITC into files being created and/or recorded.
9	Allow Independent Channel Configuration checkbox	Select the Allow Independent Channel Configuration checkbox to allow the user to configure different channels in a multiple channel system independently. For example one channel might be set up for SD MOV, and the other set up for HD DPX.

10	Match Output to Clip checkbox	Select the Match Output to Clip checkbox to match the video output to the current clip settings.
11	Use Field Duplication checkbox	Select the Use Field Duplication checkbox to duplicate fields for output in slow motion display applications.
12	Play Only checkbox	Select the Play Only checkbox to disable all capture/encoding functions.
13	Record Only checkbox	Select the Record Only checkbox to disable all playback functions. Note: if you select both the Play Only and Record Only checkboxes, you will disable the system.
14	Play Delay Frames section	Displays the number of frames delay between receiving a play command and the actual output of frames. This number can be reset (for select applications) by selecting it and typing in a new number, which may improve frame accuracy for serial control.
15	Channels button	Press the Channels button to reveal the Channels Config section of Setup .

Setup – Config Advanced – VGA Settings

From the main menus, select **Operation|Setup|Config**. Alternately use the **Operations Selector** to select **Setup|Config**. Press the **Advanced** button, or use the **Advanced** tab to select the **Advanced** section of the **Config** menu. Use the **Advanced Config** pulldown menu to select **VGA Settings**.

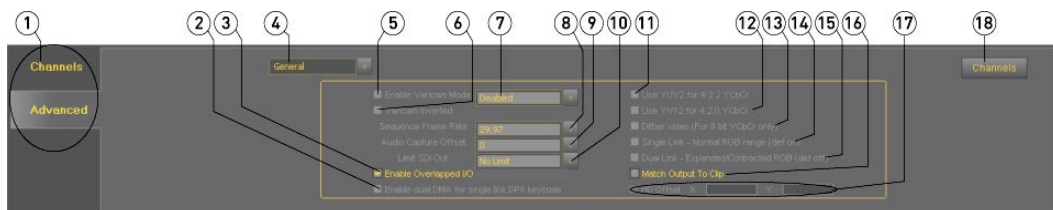


1	Config Selector tabs	Use the Channels tab to display the Config Channels section of the setup controls. Use the Advanced tab to display the Config Advanced section of the setup controls.
2	YUV Overlay checkbox	With the DirectX Enable checkbox selected, select the YUV Overlay checkbox to use YUV overlay within DirectX.
3	RGB Overlay checkbox	With the DirectX Enable checkbox selected, select the RGB Overlay checkbox to use RGB overlay within DirectX.
4	DirectX Enable checkbox	Select the DirectX Enable checkbox to activate the 4 checkboxes just below for DirectX display options.

5	Advanced Config pulldown menu	Use the Advanced Config pulldown menu to select between the Video Output, VGA Settings and the General sections of the Advanced Config section of Setup .
6	Force VGA checkbox	Select the Force VGA checkbox to display only VGA/DVI and ignore the video hardware if present. Note, if you select both the Disable VGA/DVI Monitoring checkbox and the Force VGA checkbox, the system will not offer an output.
7	Disable VGA/DVI Monitoring checkbox	Select the Disable VGA/DVI Monitoring checkbox to only play out through the video hardware, and disable VGA/DVI output. Note, if you select both the Disable VGA/DVI Monitoring checkbox and the Force VGA checkbox, the system will not offer an output.
8	RGB Direct checkbox	With the DirectX Enable checkbox selected, select the RGB Direct checkbox to use RGB Direct within DirectX.
9	YUV Direct checkbox	With the DirectX Enable checkbox selected, select the YUV Direct checkbox to use YUV Direct within DirectX.
10	VGA Only checkbox	Select the VGA Only checkbox to superimpose time code on the VGA/DVI output only, and allow the video output through hardware to pass through unaffected. For this to work, the Superimpose checkbox must be selected.
11	Reduce VGA Frame Rate section	The Reduce VGA Frame Rate section provides a checkbox to activate the setting, and a pulldown menu which allows the user to reduce the number of frames output through the VGA/DVI display during playback, for bandwidth-intensive operations.
12	Superimpose section	The Superimpose section allows the user to superimpose time code over both the VGA/DVI and the video output. A checkbox is provided to activate the setting, and a pulldown menu which allows the user to select the type of time code that will be superimposed.
13	X and Y fields	The X and Y fields allow the user to set the location of the time code that is superimposed on output.
14	Channels button	Press the Channels button to reveal the Channels Config section of Setup .

Setup – Config Advanced – General

From the main menus, select **Operation|Setup|Config**. Alternately use the **Operations Selector** to select **Setup|Config**. Press the **Advanced** button, or use the **Advanced** tab to select the **Advanced** section of the **Config** menu. Use the **Advanced Config** pulldown menu to select **General**.

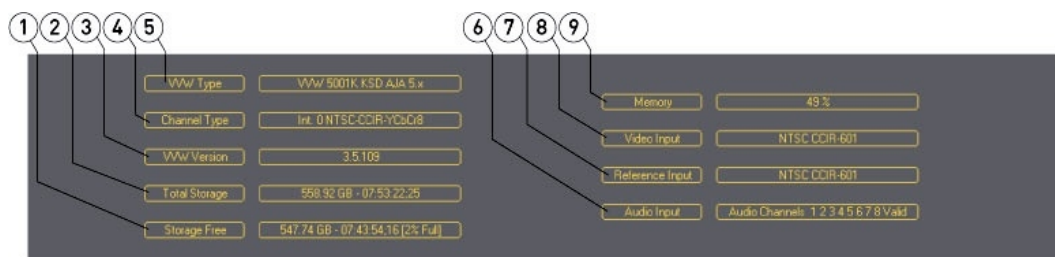


1	Config Selector tabs	Use the Channels tab to display the Config Channels section of the setup controls. Use the Advanced tab to display the Config Advanced section of the setup controls.
2	Enable Dual DMA for single Link DPX keycode checkbox	Select the Enable Dual DMA for single Link DPX keycode checkbox to enable direct memory access for single link DPX formats. This setting allocates more bandwidth (PCIe or PCI-X 133) so the system can capture DPX from a single line HD-SDI and use the second YCbCr capture to decode RP-215 time code.
3	Enable Overlapped I/O checkbox	Select the Enable Overlapped I/O checkbox to allow overlapped reads and writes on the system.
4	Advanced Config pulldown menu	Use the Advanced Config pulldown menu to select between the Video Output , VGA Settings and the General sections of the Advanced Config section of Setup .
5	Enable Varicam Mode checkbox	Select the Enable Varicam Mode checkbox to send a variable frame rate signal down a fixed frame rate pipeline, marking correct frames for playback.
6	Varicam Inverted checkbox	With the Enable Varicam Mode checkbox selected, select this checkbox to invert Varicam field bits for old equipment.
7	Varicam Rate pulldown menu	With the Enable Varicam Mode checkbox, use this pulldown menu to select between available frame rates.
8	Sequence Frame Rate pulldown menu	Use the Sequence Frame Rate pulldown menu to select between available frame rates that will be used to output a series of sequential frames.
9	Audio Capture Offset pulldown menu	Use the Audio Capture Offset pulldown menu to select between available audio capture offset values to correct "lip sync" (audio/video timing) errors.
10	Limit SDI Out checkbox	Select the Limit SDI Out checkbox to choose between available settings to apply to the SDI output.
11	Use YUV2 for	Select the Use YUV2 for 4:2:2 YCbCr checkbox to use the YUV2

	4:2:2 YCbCr checkbox	codec by default when specifying YCbCr 4:2:2 formats, otherwise the UYVY/2vuy codec will be used.
12	Use YV12 for 4:2:0 YCbCr checkbox	Select the Use YV12 for 4:2:0 YCbCr checkbox to use the YV12 codec by default when specifying YCbCr 4:2:0 formats, otherwise the I420/IYUV format will be used.
13	Dither Video (for 8 bit YCbCr only) checkbox	Select the Dither Video (for 8 bit YCbCr only) checkbox to apply a dithering effect to smooth out noticeable luminance artifacts associated with 8 bit YCbCr.
14	Single Link Normal RGB range (def on) checkbox	Select the Single Link Normal RGB range (def on) checkbox to use an expanded RGB range for single link formats. By default MediaNXS uses the normal RGB range for single link formats.
15	Dual Link Expanded/Contracted RGB (def off) checkbox	Select the Dual Link Expanded/Contracted RGB (def off) checkbox to use the normal RGB range (contracted) for dual link formats. By default MediaNXS uses an expanded RGB range for dual link formats.
16	Match Output to Clip checkbox	Select the Match Output to Clip checkbox to match the video output to the current clip settings.
17	2K HD Offset X and Y position fields	Use the 2K HD Offset X and Y position fields to set a specific offset location to display 2K sequences via VGA/DVI output.
18	Channels button	Press the Channels button to reveal the Channels Config section of Setup .

Setup - Info

From the main menus, select **Operation|Setup|Info**. Alternately use the **Operations Selector** to select **Setup|Info**.



1	Storage Free field	Displays the amount of storage available that can be written to without deleting files.
2	Total Storage field	Displays the total amount of storage available to the system.
3	VVW Version field	Displays the software version number.
4	Channel Type field	Displays the channel number, I/O standard and compression settings for the channel.
5	VVW Type field	Displays the system configuration.
6	Audio Input field	Displays the status of the audio input if detected.
7	Reference Input field	Displays the status of the reference input if detected.
8	Video Input field	Displays the status of the video input if detected
9	Memory field	Displays the memory (RAM) usage

Setup - Licensing

From the main menus, select **Operation|Setup|Licensing**. Alternately use the **Operations Selector** to select **Setup|Licensing**.

Licensing - Valid License

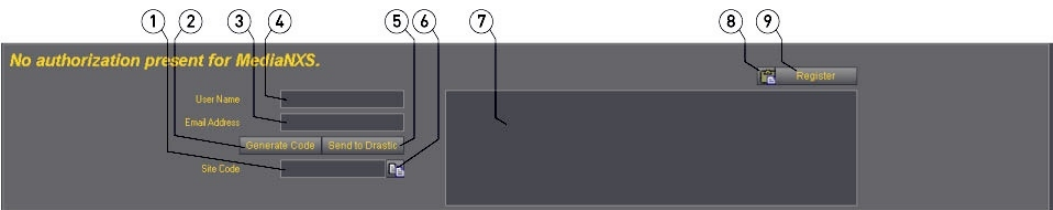
If the license is valid, the screen will display the licensing information.



1	License Status field	The status of the license is displayed including the number of remaining days in a duration limited license.
2	Registered Customer field	The name that was used to register the license is displayed.
3	Customer Email field	The customer email (the email address the license response was sent to) is displayed.
4	Registration Date field	The date the license was registered is displayed.

Licensing - No License

If there is no licensing in place, the screen will display a licensing dialog to allow the user to create a license for the DDR.



1	Site Code field	If you input a user name in the User Name field and an email address into the Email Address field, pressing the Generate Code button places a site code in the Site Code field.
2	Generate Code button	Press this button to generate a site code once you have input a user name and email.
3	Email	Input the email address at which you would like to receive the site

	Address field	code to license this install of DDR .
4	User Name field	Input your user name for this install of DDR .
5	Send to Drastic button	Press the Send to Drastic button to create an email addressed to Drastic Licensing with the site code in the body of the email.
6	Copy button	Press this button to copy the site code to the clipboard.
7	Site Key field	When you receive your Site Key, paste it into this field and press the Register button to update the license for the system.
8	Paste button	Press this button to paste the contents of the clipboard into the Site Key field.
9	Register button	Once you have received your new site key and pasted it into the Site Key field, press this button to update the license.

View - VGA Display

From the main menus, select **View|VGA Display**. Alternately use the pulldown menu at the top right to select the **VGA Display** view.

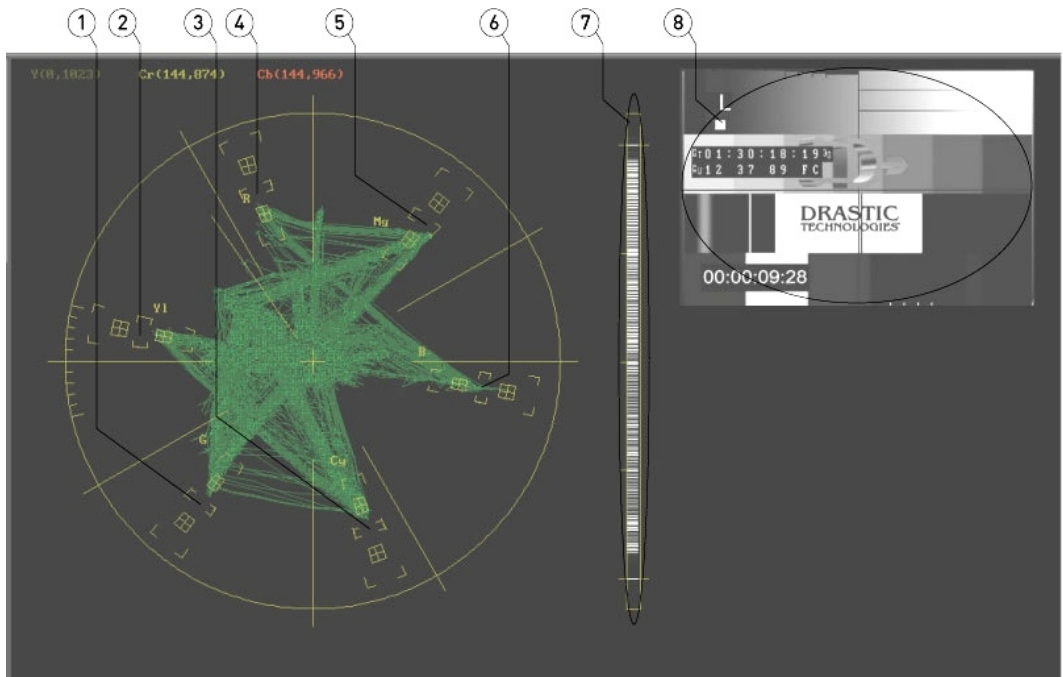


The VGA Display shows video output in **Play** (stream) or **Pause** (frame) modes, and displays pass-through video (or E/E) if present when in **Stop** mode.

View - Vector Scope

From the main menus, select **View|Vector Scope**. Alternately use the pulldown menu at the top right to select the **Vector Scope** view.

The **Vector Scope** displays the distribution of chrominance within the signal, isolating specific regions of color within assigned vectors, useful for maintenance of optimum signal reproduction. The **Luma Stick** provides a representation of the luminance within a signal, and offers markers for legal color signal gamut.



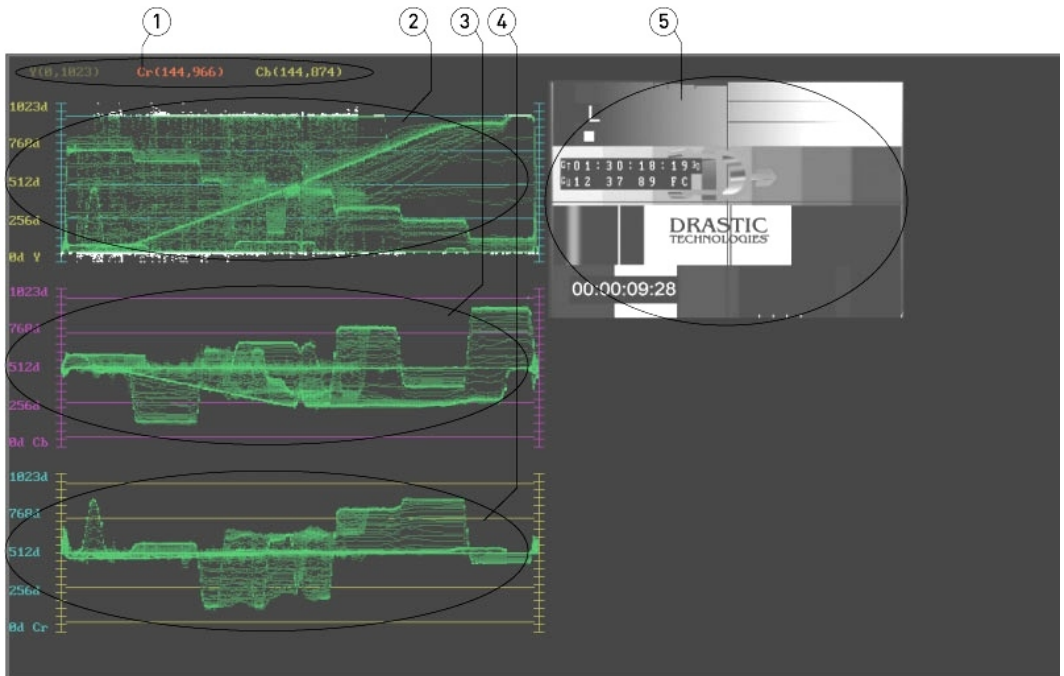
1 Green field	Describes where the green component of a color bar signal should be located
2 Yellow field	Describes where the yellow component of a color bar signal should be located
3 Cyan field	Describes where the cyan component of a color bar signal should be located
4 Red field	Describes where the red component of a color bar signal should be located
5 Magenta field	Describes where the magenta component of a color bar signal should be located
6 Blue field	Describes where the blue component of a color bar signal should be located
7 Luma Stick	Displays the distribution of luminance within the signal in a "stick"

	display	format, with white at top and black on the bottom.
8	Signal display	The signal being passed through the vector scope is displayed in a scaled down version.

View - Wave Form Monitor

From the main menus, select **View|Wave Form**. Alternately use the pulldown menu at the top right to select the **Wave Form** view.

The **Wave Form Monitor** displays the distribution of chrominance within YCbCr signal types as three separate displays.

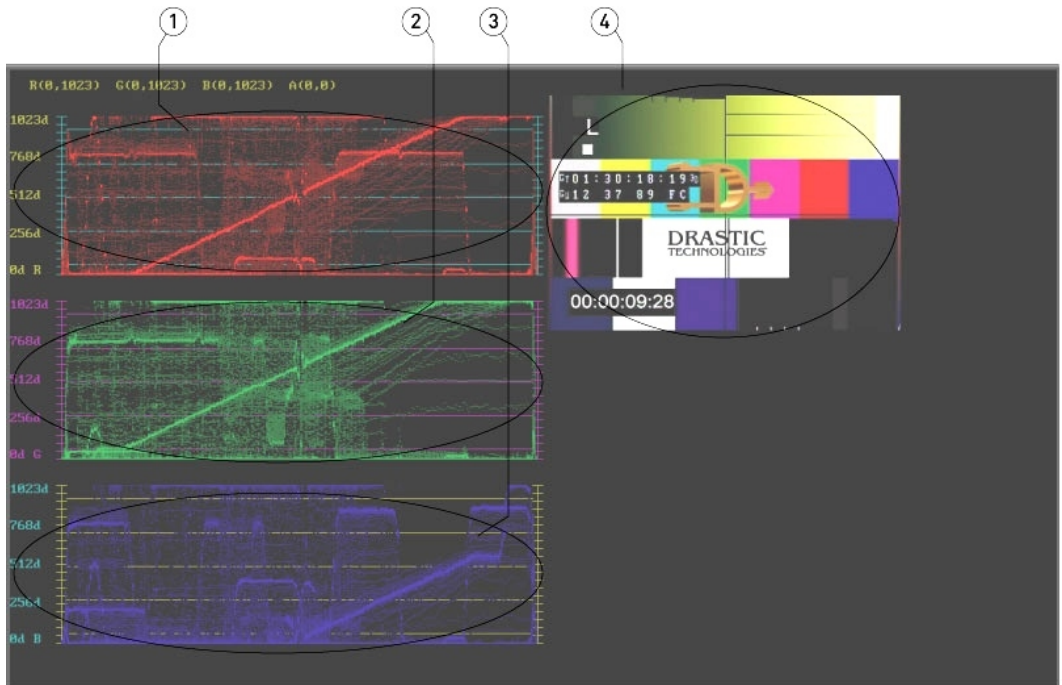


1	YCbCr value display	Displays the range of Y, Cb and Cr.
2	Y display	The distribution of Y within the signal is displayed.
3	Cr display	The distribution of Cr within the signal is displayed.
4	Cb display	The distribution of Cb within the signal is displayed.
5	Signal display	The signal being passed through the wave form monitor is displayed in a scaled down version.

View - Wave Form RGB

From the main menus, select **View|Wave Form RGB**. Alternately use the pulldown menu at the top right to select the **Wave Form RGB** view.

The **Wave Form RGB Monitor** displays the distribution of chrominance within RGB signal types as three separate displays.

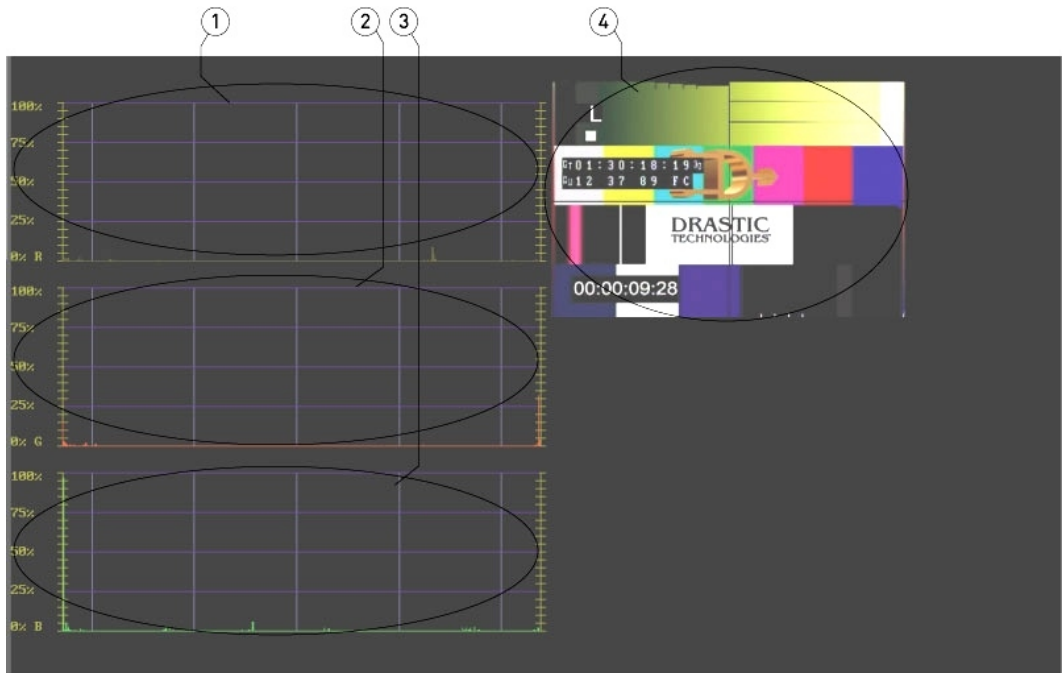


1 R display	The distribution of R within the signal is displayed.
2 G display	The distribution of G within the signal is displayed.
3 B display	The distribution of B within the signal is displayed.
4 Signal display	The signal being passed through the wave form monitor is displayed in a scaled down version.

View - Histogram

From the main menus, select **View|Histogram**. Alternately use the pulldown menu at the top right to select the **VGA Histogram** view.

The **Histogram** view displays the signal as a histogram.



1	R display	The distribution of R within the signal is displayed.
2	G display	The distribution of G within the signal is displayed.
3	B display	The distribution of B within the signal is displayed.
4	Signal display	The signal being passed through the wave form monitor is displayed in a scaled down version.

View - Meta Data

From the main menus, select **View|Meta Data**. Alternately use the pulldown menu at the top right to select the **Meta Data** view.

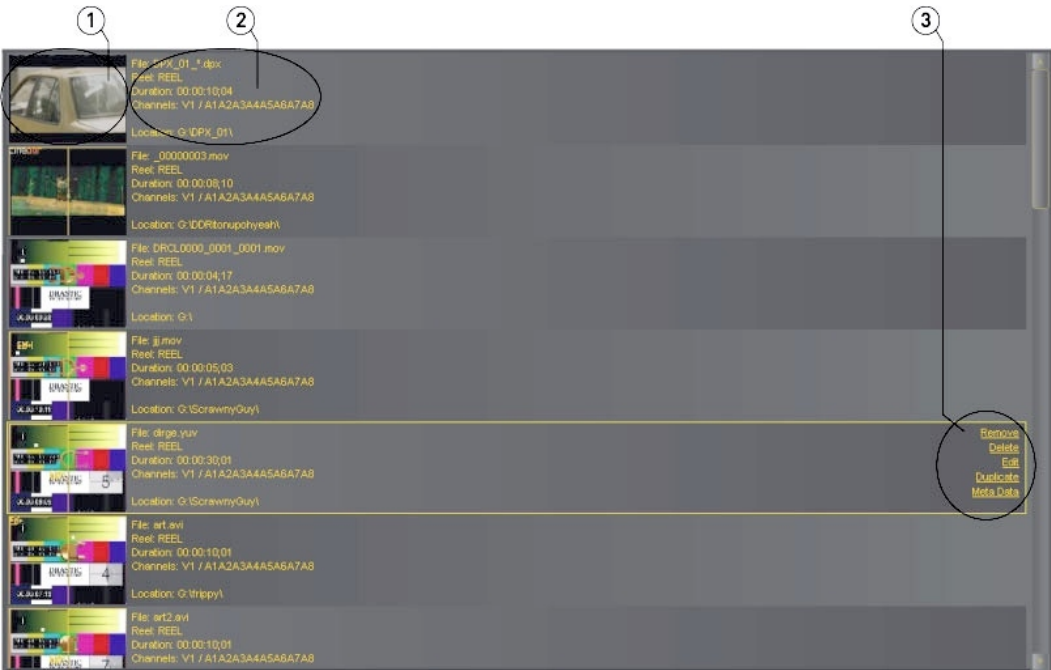


1	Record checkbox	Click in the Record checkbox to reset metadata elements or to retrieve the default settings for metadata.
2	Set button	Press the Set button to set any changes to metadata elements into memory.
3	Get button	Press the Get button to return the metadata elements to their default settings.
4	Time Line checkbox	Click in the Time Line checkbox to view metadata information for media on the timeline.
5	Time Line pulldown menu	Use the Time Line pulldown menu to select media from the timeline to view its metadata elements.

6	Clip checkbox	Click in the Clip checkbox to view metadata information for clips in the Clip List .
7	Clip pulldown menu	Use the Clip pulldown menu to select a clip from the Clip List to view its metadata elements.
8	Meta Data display	Metadata information is displayed in this table.

View - Clip List

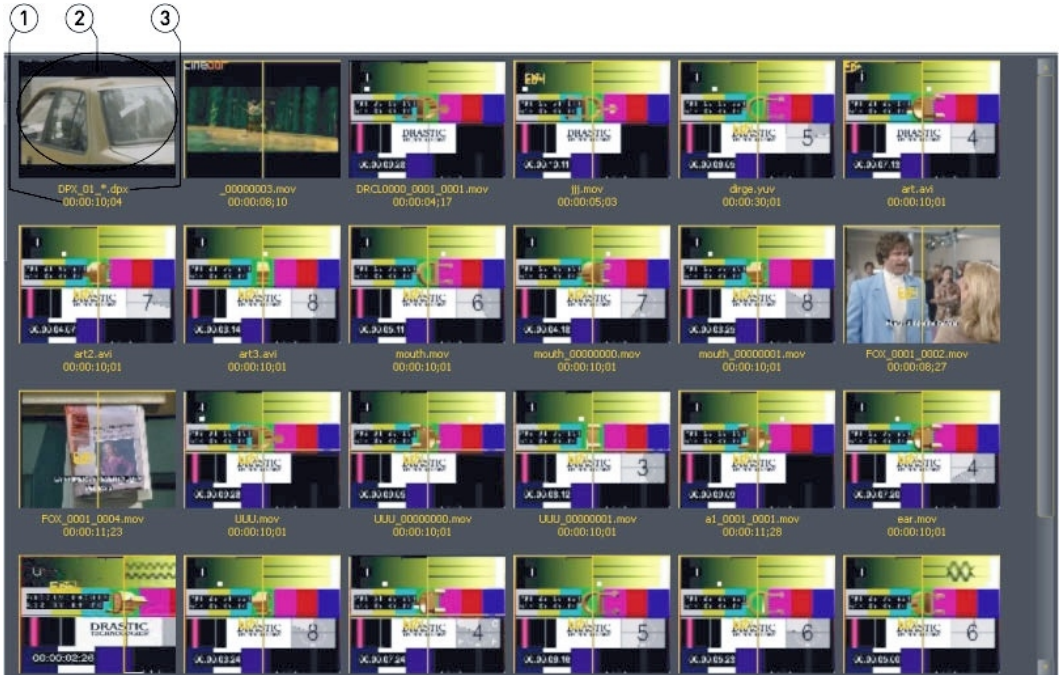
From the main menus, select **View|Clip List**. Alternately use the pulldown menu at the top right to select the **Clip List** view.



1	Picon display	A picon (a picture icon, or reduced size image of one frame of the video) is displayed for each clip in the Clip List .
2	Clip Information display	Clip information includes the clip name, the duration, the channel presets and the file/path information.
3	Options controls	The following controls are provided for a selected clip: Remove – remove the clip from the list but do not delete it, Delete – erase the clip – (it will be permanently gone!), Edit – trim or rename this instance of the clip, Duplicate – create another instance of this clip in the list to edit, Meta Data – view any metadata associated with the selected clip as an overlay on the Clip List .

View - Thumb View

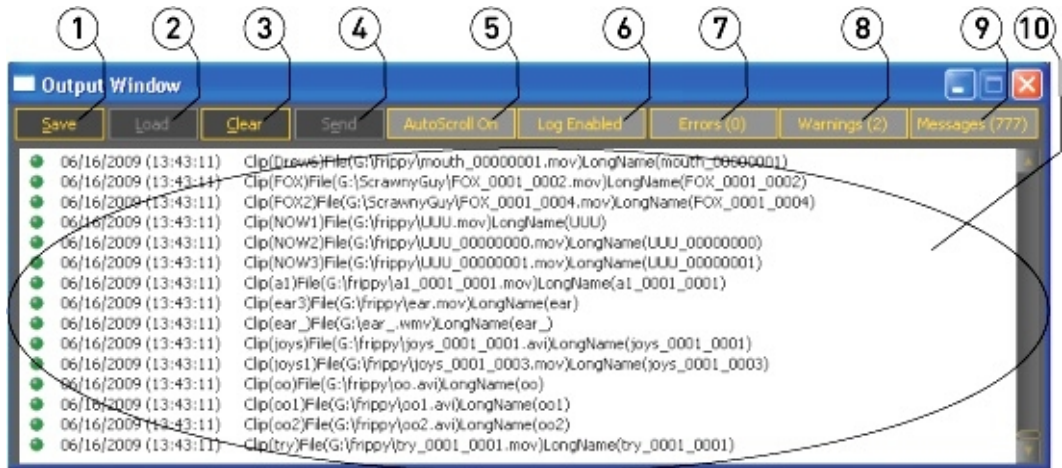
From the main menus, select **View|Thumb View**. Alternately use the pulldown menu at the top right to select the **Thumb View** view.



1	Picon display	A picon (thumbnail or picture icon) is displayed for each clip in the Thumb View .
2	Clip Name display	The Clip Name is displayed here.
3	Duration display	The duration (length of the clip) is displayed here.

View - Output Window

From the main menus, select **View|Output Window**.



1	Save button	Press the Save button to save the messages in the Output Window .
2	Load button	Press the Load button to load the contents of a saved Output Window .
3	Clear button	Press the Clear button to empty the Output Window of any messages.
4	Send button	Press the Send button to send the current Output Window information as an email.
5	AutoScroll On button	The AutoScroll button when selected automatically scrolls the output message list to display information about specific DDR-related events as they arrive in the list.
7	Errors button	The Error button functions as an on/off toggle for the display of any error messages in the Output Window .
8	Warnings button	The Warnings button functions as an on/off toggle for the display of any important warning messages in the Output Window .
9	Messages button	The Messages button functions as an on/off toggle for the display of various non-critical messages in the Output Window .
10	Output Log list	The list of DDR-related events is displayed in this area. The list includes errors (indicate problems), warnings (not critical but should be noted) and messages (typical behavior the user might possibly want to know about).

This manual has been compiled to assist the user in their experience using **DDR** products. It is believed to be correct at the time of writing, and every effort has been made to provide accurate and useful information. Any errors that may have crept in are unintentional and will hopefully be purged in a future revision of this document. We welcome your feedback.

Drastic Technologies Ltd
523 The Queensway, Suite 102
Toronto, ON, M8Y 1J7
Canada
(416) 255 5636
(416) 255 8780

(c)copyright 2009, Drastic Technologies Ltd. All Rights Reserved.