QuickClipTM

DDR Software Installation Manual and User Guide



© 2005 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.

2005 Drastic Technologies Ltd. All rights reserved. Printed in Canada

Any particular application may or may not take advantage of the QuickClip 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, QuickClip, QuickClip Pro, QuickClip VTR 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 © 1995-2005 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

QUICKCLIP SOFTWARE USER GUIDE	1
Requirements Supported Operating Systems Supported Video Hardware Other Supported Hardware Cabling/Peripherals Keyboard, mouse and monitor External Storage if Present	5
External Storage ij Freseni	0
QUICKCLIP INSTALLATION	9
Third Party Software Installation	9
QUICKCLIP LICENSING	
Standard Licensing Floppy License Transfer Network License Transfer License Info Technical Issues	Error! Bookmark not defined. Error! Bookmark not defined. Error! Bookmark not defined.
LOCALCONFIG SETUP	14
Select a Default Configuration Set the "Record To" Drive	
EXTERNAL DEVICE CABLING	
Video and Audio Input Genlock Video and Audio Output	
BASIC CONCEPTS	
Modes of Operation Server Mode Single Mode VTR Tape Mode All Modes	
QUICKCLIP TUTORIAL	

Video Capture	
Server Mode	24
VTR Tape Mode	26
Video Playback	
Server Mode	28
VTR Tape Mode	32
Variable Speed Playback	33
Editing/Accessing Media	
Server Mode	34
VTR Tape Mode	37
Control External Devices	
Perform an External Pull-In	40
Capture via EDL	42
Laybacks	44
Accept Controller Input	
QUICKCLIP REFERENCE	
LandGarfa	47
LocalConfig Main Menus - File Menu	
	40 49
Main Menus - Quick Setup Menu Main Menus - Reset Menu	49 50
Main Menus - Reset Menu Main Menus - About Menu	50
Global Configuration	52
External Configuration	54
Control Configuration	56
Internal Configuration	59
Transport/ Clip Control window	- ,
Transport Control Section	65
Clip Details Section	67
Time Code Section	69
Setup Section	71
The Toolbar	
Clip Bin	
Clip Bin Context Menu	75
VTR Mode TC Edit List	77
Add Media to Time Code Space	79
Blank Time Code Space	81
PlayList in ON-AIR Mode	85
PlayList Context Menu	86
Command Edit window	88
New Clip Settings window	
Clip Edit Window	
External Pull-in window	
Get Reel ID window	95
Transport Section	96 08
Time Code Section	98
Clip Details Section	100

Setup Section	101
Context (right-click) Menu	103
T-Bar Shuttle	
Sync Record window	
AutoProxy	
AutoProxy Setup	109
Auto Proxy Window	110
Options Menus	
Options Menus - Local System	112
Options Menus – General	114
Options Menus – Video In	116
Options Menus – Video Out	119
Options Menus – Audio In	122
Options Menus – Audio In - Advanced	124
Options Menus – Audio Out	126
Options Menus – Storage/Format	128
F3 - Properties Display window	
Incompatible Codec	134
Incompatible Vertical Size	135
Channel Status window	
Data Window	
Error Log Window	
VVW Preview Display	
The Status Bar	
Authorization Window	
About window	
The Main Menus	
File Menu	144
Edit Menu	147
View Menu	149
Channels Menu	151
Window Menu	152
Help Menu	154
Video Standard	
Time Code Source	
Time Code Type	
ROUBLESHOOTING	
No Video Output	
No Audio Output	
No Control	
Some Clips Are Playing Back As Black	
I Can Only Use the First X Seconds from My Controller	
I See the Clips but I Cannot Load Them	
Seeks Are Not Instantaneous	
My Controller Does Not Recognize the Device	
My Controller Is Sluggish	
Hardware Integration Recommendations	

Enabling/Disabling Serial Protocols	159
Sony 422 – Tape Emulation (VTR Mode)	159
Odetics – Tape Emulation/Server (Server Mode)	159
Louth – Server (Server Mode)	159
My Automation System Will Not Capture Spots	160
My Automation System Plays Extra Frames to Air When Playing Clips/Spot Lists	160
My Automation System Sees a VTR, Not a Server with Clips	160
MANUFACTURER'S WARRANTY	161
DRASTIC TECHNOLOGIES LTD TECHNICAL SUPPORT	164

QuickClip Software User Guide

QuickClip software provides advanced capture, control, conversion and delivery of digital media, based on hard drive capture and non-linear media access. QuickClip as featured on the VVW Series digital disk recorders offers the greatest range of features and functionality. QuickClip Pro is a software-only version for user-integrated capture and playback (including external device control and playback under control features), and QuickClip VTR software offers a subset of the capture and playback features of QuickClip Pro (including external device control).

Note: an RS-422 adapter or adapters may be needed to enable the serial and external device control features of QuickClip software.

Here is a comparison of the features of Drastic's **VVW Series** DDRs and **QuickClip** software:

Feature/Model	Feature/Function	QuickClip VTR	QuickClip Pro	<u>Drastic</u> <u>VVW</u> <u>Server</u>
Control External	Sony Serial Protocol,			
Device	Louth/VDCP, Odetics	Y	Y	Y
	Multiple Device Support,			
	Network			Y
	Sony Serial Protocol,			
VTR/DDR	Louth/VDCP, Odetics, Multiple			
Emulation	Emulation Support		Y	Y
	Network			Y
				▲
EDL Support	Avid Log	Ι	Ι	Ι
(I - Irun ort	CMX 34xx	I/E	I/E	I/E
(I = Import E = Export)	Sony 8/9x00	I/E	I/E	I/E
$\mathbf{L} = \mathbf{Linpoint}$	GVG 1-2.4	I	I	I
	GVG 2.4+	I/E	I/E	I/E
	DVision	Ι	Ι	Ι
	Drastic EDL	I/E	I/E	I/E
	Drastic LOG	I/E	I/E	I/E
Capture Support	Multi Reel w/Tape Request	Y	Y	Y

QuickClip Pro/QuickClip VTR/VVW Comparison Chart

	Edit/Modify EDL	Y	Y	Y
	Auto Clip Naming	Y	Y	Y
	Multi List Capture			Y
	Head/Tail Support	Y	Y	Y
Output Support	Sony Serial Protocol	Y	Y	Y
	Louth/VDCP			Y
	Odetics			Y
	Multiple Device Support			Y
	Play List (clips)	Y	Y	Y
	Edit List		Y	Y
	Break/GPI/Loop		Y	Y
	Multiple GPI I/O			Y
	Multiple List Support		Y	Y
Web/HTTP/Java	Integrated Web Server			Y
	Integrated Java Client			Y
	Optional FTP Server			Y
	Network Server Interface			Y
	Network Client Interface			Y
Media				
Conversion	Import MediaReactor	1	1	Y
	Export MediaReactor	1	1	Y
	Film<->Video Conversion			Y
	De Interlace SD/HD			Y
	Field/Frame Operations			Y
	Export Edit List			Y
Graphical User				
Interface	Basic List I/O	Y	Y	Y
	Advanced EDL I/O		Y	Y
	Maximum Internal Channels	1	1	8
	Maximum External Channels	1	2	32
	Maximum Network Channels	0	0	64
	Clip Control (Internal External)	Y	Y	Y
	Clip Edit/Trim	Y	Y	Y

	Command Edit		Y	Y
	Multi Channel Sync Record			Y
	VTR Edit Space List		Y	Y
	T-Bar Shuttle	Y	Y	Y
	Channel State		Y	Y
	Film Output Trigger			Y
Hardware		User	User	Included

This manual assumes the following:

- That the user knows how to use 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.

If you intend to take advantage of **QuickClip** software and would like to view information regarding the required hardware, please see the **Requirements** section to view details on the platform for **QuickClip**.

If you have purchased or downloaded **QuickClip** software and need to install it, the method for installation is covered in the **Installation** section.

If you need to update the license for any reason, the licensing instructions are in the **Authorization** section. This may be required to extend a demo, to enable specific hardware configurations, or to convert a duration-limited installation into a permanent license.

If you have purchased a **VVW Series** DDR, it should arrive installed, licensed and authorized. There may be instances where a **VVW Series** DDR would require reinstallation of the software or an update of the license.

For the purposes of this document, the hardware platform upon which **QuickClip** has been installed will be referred to as the Drastic Device.

Requirements

QuickClip software must be installed on a system at least as powerful as the minimum configuration listed below. Faster and more powerful hardware will provide better performance. In some cases, specific hardware will be required in order to enable advanced or optional features. Contact Drastic Technologies or your reseller to confirm support for your application.

	Minimum hardware platform	Recommended hardware platform, compressed	Recommended hardware platform, uncompressed
Processor	PIII processor 450 MHz	P4 processor 1.8 GHz	dual Xeon P4 processor 2.6 GHz
RAM	128 MB RAM	2 x 256 MB RAM	2 x 512 MB RAM
Program Drive	20 MB program drive	20 MB program drive	20 MB program drive
Storage	SCSI or Fibre Channel	SCSI or Fibre Channel	2GB Fibre Channel recommended, SCSI may be used if there are enough drives
CD-ROM, DVD	CD or DVD reader for updates	CD or DVD reader for updates	CD or DVD reader for updates
VGA adapter	1024 X 768 SVGA adapter + compatible VGA monitor	1024 X 768 SVGA adapter + compatible VGA monitor	1024 X 768 SVGA adapter + compatible VGA monitor
Network	10/100 BaseT	10/100 BaseT or Gigabit Ethernet	Gigabit Ethernet

Recommended Minimum Hardware Platform for QuickClip

Supported Operating Systems

QuickClip software currently runs on Microsoft Windows 2000 and Windows XP (hardware-dependent). Specific legacy hardware will also run on Microsoft Windows NT 4.0.

Supported Video Hardware

The user will need to determine which video capture and/or playback board they will use. At this time, the following boards are supported for use with a version of QuickClip:

- AJA Video_____KSD, KHD, KSD-22, and Xena SD/HD capture/playback hardware
- **Bluefish444** HD Fury, HD Lust, HD Vengeance, Wildblue AV, Deepblue I/O, SD Envy capture/playback hardware
- **Bluefish444**...... HD Iridium/ XP, Deepblue LT, Iridium SD, Iridium AV, SD Pride decoder (playback-only) hardware
- **Digital Rapids** DRC Stream encoder (capture-only) hardware
- **DVS** HDStationOEM, SDStationOEM capture/playback hardware
- **Matrox** DigiSuite, DigiSuite LE, DigiSuite DTV, DigiServer or DSDTI capture/playback hardware
- **Optibase**_____VideoPump SD, VideoPump HD capture/playback hardware
- **Optibase** VideoPlex, VideoPlex Pro and VideoPlex YUV decoder (playback-only) hardware
- **Stradis** SDM230, SDM260, SDM280 and SDM290 decoder (playback-only) hardware
- Vela CineView Pro/XL MPEG decoder (playback-only) hardware
- **Vela** Argus MX, Argus 4:2:2, Argus 4:2:0 and Argus LC encoder (capture-only) hardware
- **Other** platforms are currently OEM only

Specific features may be dependent on the physical capabilities of the system. To successfully integrate **QuickClip** software, please review the next section on other supported hardware.

Other Supported Hardware

Drastic Technologies has tested the following hardware for use with QuickClip:

Motherboards	ASUS P4PE-X motherboard Tyan Thunder i7505 (S2665) motherboard Supermicro X5DPE-G2 motherboard
RS-422 Adapters	RS-422 adapter B&B #422LP9R + RS-422 adapter null (Playback under control) RS-422 adapter Drastic Technologies Ltd (Control an external VTR)
SCSI Cards	Adaptec 29160 SCSI Ultra 160 controller
RAID Cards	Adaptec 2200S dual SCSI Ultra320 RAID controller Adaptec 39320R SCSI RAID controller 3Ware Escalade IDE RAID controller
Fibre Cards	Atto Express PCI FC adapter Q-Logic 2300 FC Adapter Q-2 GB 1 channel Fibre HBA Q-Logic SANBlade 2342 dual channel Fibre HBA
VGA Cards	Matrox G450 VGA card Matrox G550 VGA card ATI Radeon 9600 Pro VGA card ATI Radeon 9700 Pro VGA card ATI Radeon 9800 Pro VGA card PNY Quadro FX 1100 VGA card

There may be other hardware which can be used with **QuickClip** software. The manufacturer continues to perform compatibility tests according to current development priorities and reserves the right to add new devices to this list from time to time.

Cabling/Peripherals

Keyboard, mouse and monitor



- Plug the **keyboard** into the keyboard port of the Drastic Device. The keyboard port is located on the rear of the unit.
- Plug the **mouse** into the mouse port of the Drastic Device. The mouse port is located on the rear of the unit.
- Connect the **VGA monitor** to power. Connect the VGA monitor to the Drastic Device via the standard VGA cable. The VGA port is located on the rear of the unit. Turn on the monitor.

External Storage if Present



• Connect the **external storage** if present to the Drastic Device via the standard SCSI or Fibre Channel cable. Connect the external storage to AC power. Turn on the storage device.

This allows the Drastic Device to "see" the storage immediately upon power-up, and avoids any potential "record to" drive re-assignation.

QuickClip Installation

Here is how to install QuickClip software.

Log on as Administrator. **IMPORTANT**! If your user name and password do not extend Administrator privileges to you, you will not be able to install **QuickClip**. If you are unsure what level of privileges your password gives you, ask your System Administrator.

- It is recommended that you close any other programs during this installation.
- Make sure your system clock is properly set. This may be accomplished through the Control Panel, in Date/Time.
- Double-click or run the executable **QuickClip** file (**SetupQC*********exe) (this will be provided in the form of a CD or from the demo download).
- The installation will stop and the user will be prompted to provide a password. If the software has been obtained from a demo download, the user will be required to glean the password from the automated email reply. Otherwise, if needed this password will be provided by Drastic.
- You will be prompted to move through each step of the install by pressing the "**next**" or "**finish**" button. Carefully read the instructions that are provided.
- You will be offered a choice of **QuickClip** versions. Make sure you select the correct version to match your hardware configuration. If you are unsure as to what version you need, contact your Reseller or Drastic Technical Support.

Third Party Software Installation

There is software made by other companies that must be on your system for the **QuickClip** software to function properly. You may already have some or all of these packages installed. If not, the QuickClip setup program will let you install them at this time.

The third party software installation also lets you add other codecs to your system that you can use from **QuickClip**. During the installation, the user may be prompted to restart. Do not restart until the software has completed installing **QuickClip**.

Install the following during the install dialog:

- o QuickTime
- DirectX
- o DXMEDIA

- o DXMEDIA extra
- o DXMEDIA patch
- Intel Indeo v5
- o MS Media Players

You may need to press the **Finish** button to complete the installation. Once the installation procedure has completed, the installation program will prompt you to restart. Agree to restart.

Note: the QuickTime and Direct X installs are offered in the case of a clean install where there is no version available. These versions may be old. Once the installation is complete the user will want to update these to the latest compatible version.

- To install the latest version of QuickTime, go to the <u>Apple website</u>.
- To install the latest version of Direct X, go to the Direct X website.

Note: Make sure that you **never** uninstall **QuickClip** software unless specifically instructed to do so by a Drastic Technician. To update an existing **QuickClip** version, install the new version in the same directory as the existing one. This will overwrite the old version yet leave the licensing intact.

QuickClip Licensing

Standard Licensing

QuickClip uses a software-based copy protection system, and must be licensed to run. You will not have to install any additional hardware (like a dongle) in or on your system in order to run **QuickClip**.

To license **QuickClip** software, the user must obtain the **Site Code** from their install of **QuickClip**. This **Site Code** then must be sent to Drastic via email. Drastic will reply via email with a **Site Key** specific to this install. This **Site Key** is then entered into the licensing dialog box, and the user can press **Update** to enable the new licensing status.

Drastic Technologies' offices are located in the Eastern Standard Time Zone of North America. Licensing requests may only be processed during regular business hours, 9am to 5pm Monday to Friday EST.

Site Code Generation: be aware that specific activities, (some of which are enabled by a shutdown or restart) will cause the **Site Code** to update (generate a new code which will not work with a **Site Key** based on the former code). The **Site Key** response provided by Drastic is based on and will only work with the current **Site Code**. Therefore, try to keep **LicenseVVW** software running during the licensing procedure to avoid generating a new **Site Code**. If the **Site Code** has regenerated, the new **Site Code** will need to be sent to Drastic, so that the **Site Key** is correctly generated.

Demo Downloads: QuickClip software demo downloads will automatically offer a "**Try**" button to enable a 30 day demo. The copy protection software will only allow you to run one Drastic demo per system. A second demo of any Drastic software beyond the initial thirty days will require a license.

License Expiry: If the user is running a duration-limited version of **QuickClip**, this license may be extended by Drastic upon request in certain circumstances. If the duration-limited license is allowed to expire, it may be necessary for the user to perform major system maintenance before Drastic software will run on the system again. If you need to extend your license, please send your request as early as possible to avoid any delays in processing.

Here is how to license QuickClip software:

• Run LicenseVVW (QuickClip licensing software) by selecting Start/ Programs/ Drastic Technologies/ LicenseVVW. The below interface will open:



- 1. The user should select and Copy the Site Code (the first box in the diagram above). Paste the Site Code into the body of an email. Send this email to the following address: <u>authorization@drastictech.com</u>. Please do not try to convey Site Codes over the telephone.
- 2. Once you have sent us the email containing the Site Code, you will receive an email reply from us containing your Site Key. Copy this Site Key. Paste it into the Site Key field (the second box in the diagram above).
- **3.** Now push the **Update** button. This will update the license for **QuickClip**. Press **OK** to close **LicenseVVW**.

Technical Issues

You should be aware of the following technical issues regarding certain potential computer activities:

The following will cause your license to fail:

- **Disk Failure** After replacing the drive and re-installing the software, contact

 QuickClip Technical Support to obtain a new authorization. Please explain the situation in your request.
- Clock Change Changing the clock will be detected and cause your license to fail. Confirm the system clock is set correctly before authorizing QuickClip.

Disk Compression or de-fragmentation software

Using a de-fragmentation program or any other program that may alter the integrity of your disk (like Norton Speed Disk) can damage your license. If you wish to use one of these programs make sure you configure them not to move any *.ent, *.rst and *.key files.

The preceding two sections have described how to install and license QuickClip software.

Before running **QuickClip**, the user will need to confirm specific settings in the **LocalConfig** menu. Confirm that **QuickClip** is closed.

LocalConfig Setup

Run the LocalConfig program from Start Menu\ Programs\ Drastic Technologies\ QuickClip\ LocalConfig. The below window will open.

Local Configuration	×
File Quick Setup Reset About Global Config Image: Config Image: Config Image: Direct Hardware Image: Config Image: Config Image: Direct Show Image: Config Image: Config Image: Direct	Internal IV Enable Channet Int0 • add det Edit On 7 Off 7 Ptay 7
External Channel Ext0 add del Port COM2: 38.46-o-1 Auto Com2: 38.46-o-1 Auto Com2: Control Control Channel Cli0 Control Clin Control Clin Clin	V V1 V1 VA A1-6 PhayOnty Γ RecOnty P VGA OStrare/Default edl Peplay Disabled O frames P Frame SlowMo1 AUD 16 Bits Normel Pile Type avi
Port COM1 Int0	YCrCb 4:2:2
Type Drestic VVW Disk Recorder IF Sony 422 IF Odetics IF Louth IF GPI	
Image: Peplay → Camera Int 0 Image: Peplay → Edit On 7 frames Offset 0 ms	Al-1 My Documents Al-In-one
DrasticDDR Stopped IF Restart Service?	d [Applications] Done

Most users will be able to select a default **LocalConfig** setting (from the **Quick Setup** or the **Reset** menus) for their Drastic Device. If you are unsure as to which default setting most closely matches your actual setup, contact a Drastic Support Technician. For a more detailed look at the controls and functions of **LocalConfig**, go to the **Reference** section in this manual.

Select a Default Configuration

In the **LocalConfig** interface, open the main menus, under **Quick Setup**. This reveals a pulldown menu offering a few specific resets for capture/ playback.

Quick Setup

Windows Media Source – AVI QuickTime 8 bit YCbCr (YUV) QuickTime 10 bit YCbCr (YUV) Key Fill RGBA (TGA) Key Fill RGBA (TIFF) Single input DPX Dual input DPX

As well, there are more extensive default settings based on specific VVW Series DDR models, or specific QuickClip versions/ applications.

Reset

Compressed DDRs VVW 1900 **VVW 2500** Edit Recorder (250x) VVW 3000 VVW 3600 **VVW 3700 VVW 5000** VVW 5000 - PAL VVW 5000 – NTSC **VVW 7000** VVW 7000 1080psf 23.98 VVW 7000 1080psf 24 VVW 7000 1080P 24 VVW 7000 1080i 25 VVW 7000 1080i 29.97 VVW 7000 1080i 30 VVW 7000 720P 59.94 VVW 7000 720P 60 Film 2K 2048 x 1536 @ 14.98 2048 x 1536 @ 15 2048 x 1556 @ 14.98 2048 x 1556 @ 15 QuickClip VTR SD

QuickClip VTR SD PAL QuickClip VTR SD NTSC QuickClip VTR HD 1080 psf 24 QuickClip Pro Matrox QuickClip Pro SD QuickClip Pro SD PAL QuickClip Pro SD NTSC QuickClip Pro HD 1080psf 24

Select the default setting that matches your product.

You may have a custom install or configuration settings not covered by the above choices. Consult the **Reference** section to set up **LocalConfig** for your application, and save your configuration using the main menus, under **File/ Save**. This saves a configuration file you can load in case the system settings are incorrectly adjusted.

Set the "Record To" Drive

In **LocalConfig**, confirm that you are **not** set to record any media onto your program drive. Use the **Record To** drive pulldown menu to set the "record to" drive to a media storage drive. Note that it is possible to make **QuickClip** inoperable through incorrect **LocalConfig** settings.

Confirm that you are set to create the maximum video and audio channels supported by your system for each channel addressed. This can be adjusted in the **Internal Configuration** section of **LocalConfig**, in the Video and audio channels pulldown menus. Particularly note that the default setting for audio files is A12, offering two audio files for each video file created, whereas some hardware supports more channels of audio per video channel.

Confirm that your audio and video types are set to create a file type supported by your system.

If you do not see an internal video channel loaded in the **Channel** pulldown menu, add one. Every system will at least have one internal channel.

In the **Global** section, confirm that:

- If you want to control an external VTR, select the **VTR Control** checkbox. Setting up control of an external VTR is explained in the tutorial.
- If you want to use an external controller to control the Drastic Device, select the **Serial Control** checkbox. Setting up control of the Drastic Device using an external controller is detailed in the tutorial.

The above is the minimum you will want to address in order to start **QuickClip** and begin performing media capture and playback.

Before running QuickClip, confirm that all settings are correct and close LocalConfig.

External Device Cabling

Video and Audio Input



• Confirm that the **video source device** (such as a camera or VTR/DDR) is powered up and running. Connect the video output of this device to the video input of the Drastic Device. The type of cable necessary will vary depending on the input type. There may be more than one input and/or output type. You may need to connect the audio and video using separate cables, or there may be one cable combining both signals.

Genlock



• Provide **genlock**, or an **external reference timing signal** to your Drastic Device and the video source, as well as to any attached controller or slave devices. This can be accomplished by sending the house-generated timing signal to a distribution amplifier, then connecting this timing output to each device using an equal length of matched cable. This includes the Drastic Device and any cameras, VTRs or controllers etc., connected to it.

Confirm that the timing signal is of the correct type and strength to synchronize the timing signals of these units. For example, NTSC standard video uses blackburst, whereas HD formats expect a tri-level sync reference signal.

You should know that improper adjustment or setup of the reference signal may result in poor video quality or loss of frame accuracy in editing.

Video and Audio Output



- Connect the video output of the Drastic Device to your video target; i.e., a switcher for on-air broadcast, or to a monitor to see the output of your Drastic device.
 Depending on the hardware, there may be a separate monitor output in addition to the main video output.
- Connect the **audio output** of the Drastic Device to the audio target; i.e. the VTR's audio inputs, or to a mixer for processing and/or monitoring. The type of cable necessary will vary depending on the input type. You may need to connect the audio and video using separate cables, or there may be one cable combining both signals.

Basic Concepts

Modes of Operation

QuickClip has two modes of operation. Choosing the correct mode is critical for proper operation. The modes are **Server Mode** and **VTR Tape Mode**. *Note that capture and playback features are version and hardware -dependent*.

Server Mode

In **Server Mode**, the user captures and plays back digital media as "clips". These clips are captured (digitized) and are saved as files in the storage/hard drive. The clips are not associated with a unique location in time code space, as would tape-based media. In fact, all clips start at 00:00:00:00. **Server Mode** enables the **PlayList** features, which allows the user to sequence playback of multiple clips, including trigger, wait and delay commands.

Server Mode causes the unit to act like a file server. In this mode the unit may be controlled by a Louth or Odetics -compatible serial control device as well as the internal clip bins and pull-in windows. The clip names displayed in the **Clip Bin** will appear on the controller and may be used individually or in groups to play or transfer the spots to other devices.

Single Mode

A sub-mode of **Server Mode** is **Single Mode** with special heads, tails and slate insertion features for specific versions of QuickClip Pro.

Heads and Tails

Single mode adds user defined amount of black video "heads" and "tails" before and after the clip. These black "bookends" are the equivalent of a videotape striped with black. The default is 1 minute of video, and can be set to any length. Each clip recorded in this mode starts with the initial "black" segment (the head), the clip and then the final "black" segment (the tail).

Slate Offset

Single Mode also uses an offset to allow the user to insert a "slate" prior to the start of media. The slate is a screen displaying information about the clip (typical in an ad insertion application). The slate is then displayed during pre-roll (but not during playback). The offset can be set by the user to provide for example 2 seconds of slate, 2 seconds of black, then the start of media (SOM).

Clip-based Media

Single Mode uses clip-based media handling, as in Server mode. Odetics and VDCP protocol are supported in this mode. **Single Mode** is only available on **Vela** and **Stradis**-based versions of QuickClip Pro.

Serial Protocols Supported: Odetics, Louth, HP

VTR Tape Mode

In **VTR Tape Mode**, the user can capture and play back digital media as a section of "time code space". Drastic's virtual time code space functions as would a non-linear 24-hour long videotape "striped with black" (with control track intact). The user may capture video from a live input by specifying **In** and **Out** points. The user may also import EDLs (edit decision lists) to control the capture of material from tape. The user may play the media from any location by entering a time location and pressing **Play**. Shuttle/Jog features are included for quick media cueing.

Each section of media recorded in time code space appears as if it was edited onto a preblacked tape at that time code location. This means that between each media section there is black and silence (unless media is recorded back-to-back in time code space). The pre roll may begin before the spot and end after the spot, just as it would on a standard VTR.

Serial Protocols Supported:	Sony VTR, Sony Digital Extension, Panasonic /JVC
	Extensions

All Modes

The unit may have the same media available in all modes. Here are some examples of the correct mode for various operations.

Front panel VTR editing	VTR Mode
RM-450 or equivalent	VTR Mode
Axial Editor	VTR Mode
DNF 2MCE	VTR Mode
DNF ST-300	Server Mode
DNF Button Box	Server Mode
Odetics Roswell (or equiv.)	Server Mode
Louth Automation	Server Mode

QuickClip Tutorial

This tutorial will address the following functions:

Video Capture Server Mode VTR Mode

Video Playback Server Mode (including PlayLists) VTR Mode Variable Speed Playback

Editing/Accessing Media Clip Editing via Clip Bin Clip Editing via PlayList Editing/Saving Clip Bins Editing Time Code Space Multiple Time Code Spaces

Types of Control External Pull-ins Capture via EDL Laybacks to External VTR Playback via Controller Input

Once everything is set up as detailed in the preceding sections, the user will be able to open **QuickClip** and begin accessing all the features of the software.

5 6 QuickClip Full YVW Ha EdR View Channels Window Iransport/Clip Control X 副印図 30 92 H H H H Set Picon < = P 14 Þ itz auto A1 AZ FreName dt inlavi 720 x 486 4 = > In 00.00:11:14 0 Vities M \Drastic Test Media\Stream NT Universal loca DRASTIC 14 4 11 P PI Setup Du 00.00.22.28 0 SourceLocat M:\Drastic Test Media\Streams\ Hue N/2 HostComput PLUTO Edit 00.08:11:14 P Chrono 11/2 File Name Date Directory Clip Name Duration Size Video Test 01:00:00:00 <internal> 13:39 Special be fuetault ed VTR Tape Mode ٠ Audo 1.00.1 19/10 18/11/200 44.14 Megs M\Drastic Test M 0094 00:00:06:26 dt nl avi IN UNTSCICER BGRA32 . 00:00 10:29 dt_nl.wmv 9:10 18/11/200 7:87 Megs M\Drastic Tes dt_nl.evi 19:10 18/11/200 44.14 Mags M\Drastic dt_nl 00.00.11.00 114 dt nl44 00.00.06.03 dt nl.evi 19:10 18/11/200 44.14 Megs MADra: Test M 19:10 18/11/200 44.14 Me 30.00 11:0 dt_nl avi 4 × 7 4 V1 - IX NTSC - Retrash ClearAl Add Blank # |File Name Edit Time Line Clip In Time Out File Dir Duratio SPL ICE HE RE DRASTIC 4 00:00:00:00 Fleady, 1345.16.28 N

Run QuickClip via the Start menu, in Programs\ Drastic\ QuickClip\ QuickClip.

The above **QuickClip** interface will open. The numbers indicate a few of the more commonly used windows the user will employ while operating **QuickClip** software:

- 1. The **Main Menus** standard Windows menus and sub-menus offering control over most of the features of **QuickClip** through various interfaces.
- 2. The **Toolbar** –commands likely to be used often are offered on the **Toolbar** for quick, one-button access.
- 3. The **Transport**/ **Clip Control** window this is the engine of capture and playback, offering VTR-like controls and specific setup options.
- 4. The VGA Display window QuickClip offers a virtual monitor of the video output displayed on the VGA monitor (within the QuickClip interface).
- 5. The **Clip Bin** window the **Clip Bin** contains/displays all media captured on this channel in Server Mode.
- 6. The VTR Mode TC edit list window this contains/displays all media captured or loaded into time code space and accessible in VTR Tape Mode.

Video Capture

Server Mode

Capture from Live Video

Mode Selection - Select Server Mode from the Transport/ Clip Control window.

External Connections Needed

- **Genlock** send a genlock or timing signal to the video source and the Drastic Device.
- **Video Input** Confirm that you have a live video signal (either from tape or camera) connected to the video input of the Drastic Device.
- **Video Monitor** Attach the video output of the Int0 channel to the video input of a video monitor, switcher or other video device.
- **Audio Monitor** Attach the audio output(s) of the Int0 channel to the input(s) of an audio monitor, mixer, amplifier or other audio device.

Select Input

- Select Channel Select the internal channel to record onto from the Channel pulldown menu on the Transport/ Clip Control window. For this exercise, select Int0, or the first internal channel.
- Set the **Video Standard**. In the **Transport**/**Clip Control** window, above the transport controls, to the right of the time code numbers are the time code type and the video standard. The video standard may be changed by simply clicking on the type (**DF**, **NDF**, etc.) with your mouse. This action cycles through the available time code types. Not all video standards will be available on all models.
- Set the Time Code Type. Below the Video Standard is the Time Code Type selector. By clicking on the time code type with your mouse, you can cycle through the available types and select the correct one for your application (VITC, LTC, TC, CTL etc.). Not all time code types will be available on all models.

QuickClip [™] Software

- **Select Video Input Type** Select from the video input type pull-down list. This will determine which input type this channel will record. The choices will be limited to the video types supported by the system.
- **Select Audio Input Type** Select from the audio input type pull-down list. The choices will be limited to the audio types supported by the system.

With the unit in stop and your video source active, you should perceive pass-through video and audio on your monitors. Adjust the monitors to a nominal level.

Set Capture Parameters

- **Press Record** At the top center of the **Transport/ Clip Control** window, press the **Record** button. Pressing this brings up the **New Clip Settings** window.
- Enter a Clip Name Assign a name to the clip to be recorded. QuickClip automatically provides a default clip name based on a DRCL ("Drastic Clip") prefix and a number. Please note that the length of the clip name is restricted to eight characters at this time to retain compatibility with certain automation controllers. Select the clip name in the New Clip Settings window and enter the new name.
- Max Length Select the Max (maximum length) box in the New Clip Settings window and enter a time of 00:02:00:00, or two minutes for the clip duration. The format for time code length is (HH:MM:SS:FF) (Hours/Minutes/Seconds/Frames). If you do not select a Max Length, QuickClip will record until interrupted, or until the storage is completely filled.
- **File** If you want to have a file name which is different from the clip name, you may select the **File** checkbox, and enter a custom file name. This would allow you to use a file name which is perhaps longer than eight characters, or helps to reference your project in some strategic way.
- Set Name Pressing Set Name sets these details into a memory buffer, so that recording may begin immediately upon pressing the OK button.

Perform the Capture

- **Press OK** When you press the **OK** button, recording begins immediately and will record for the duration specified in the **Max** field (if selected). The Drastic Device will begin recording and continue until reaching the 2 minute length specified. This end time code will be two minutes minus one frame.
- **Press Stop** When the recording ends, pressing **Stop** will refresh the screen and your clip will appear in the **Clip Bins**. This clip may now be played out on any channel

in the Drastic Device. Since it is a media file residing on storage, it may be copied, the copies may be distributed, multiple versions may be created in different formats – in short, the user now has many output/ distribution options.

VTR Tape Mode

Video Capture in VTR Tape Mode

Mode Selection - Select VTR Tape Mode from the Transport/ Clip Control window.

External Connections Needed

- **Genlock** send a genlock or timing signal to the video source and the Drastic Device.
- **Video Input** Connect a live video signal (either from tape or camera) to the video input of the Drastic Device.
- **Video Monitor** Attach the video output of the Int0 channel to the video input of a video monitor, switcher or other video device.
- **Audio Monitor** Attach the audio output(s) of the Int0 channel to the input(s) of an audio monitor, mixer, amplifier or other audio device.

With the unit in stop and your video source active, you should perceive pass-through video and audio on your monitors. Adjust the monitors to a nominal level.

I/O Mode Selection

- Select Channel Select Int0 from the pulldown channel menu on the Transport/ Clip Control window.
- Set the Video Standard. In the Transport/ Clip Control window, above the transport controls, to the right of the time code numbers is the video standard. The video standard may be changed by simply clicking on the type (DF, NDF, etc.) with your mouse. This action cycles through the available time code types. Not all video standards will be available on all models. Confirm that you select the correct standard for your application.
- Set the Time Code Type. Below the Video Standard is the Time Code Type selector. By clicking on the time code type with your mouse, you can cycle through the available types and select the correct one for your application (VITC, LTC, TC, CTL etc.). Not all time code types will be available on all models

- **Select Video Input Type** Select from the video input type pull-down list. This will determine which input type your system will record from. Also, this may help you determine which input jack to plug the video input into.
- **Select Audio Input Type** Select from the audio input type pull-down list. Your choices here will be limited to the types of audio supported by the video input type.

Set Capture Parameters

- Input a Time Code Location as an In Point Select the time code in the In Point field on the Transport/ Clip Control window. Enter the time code location at which you want your video to start. This is entered in standard SMPTE HH:MM:SS;FF (hours:minutes:seconds;frames) format.
- **Cue and Set the Time Code Location** Press the **Q** next to the **In Point** field. The time code location displayed in the **Transport**/**Clip Control** window should update to match this location. Press the **In** button to set this location as the start point of the capture.
- Enter an Out Point Now select the time code to the right of the Out button.
 Enter the time code location which has been selected as the Out Point for the capture. Press the Q next to the window. The time code location displayed in the Transport/ Clip Control window should update to match this location. Press the Out button. This will set the location as the last frame of the video capture.
- **Perform the Edit** Select the **Edit** button to perform the video capture.

Note that in **VTR Tape Mode**, **Edit** will perform the capture as set up above, but the **Record** button functions as a "crash record". That is, it will not look for an **Out** point, but rather keep recording until interrupted (by an event such as filling all of the available storage or the **Stop** button being pressed).

The results of the video capture should now be available for examination. **Playback** is discussed in the next section.

Video Playback Server Mode

Mode Selection - Select Server Mode from the Transport/ Clip Control window.

- Select a channel for playback. Use the pulldown channel in the Transport/ Clip Control window to select between available channels.
- Confirm that the **Clip Bin** is open for the selected playout channel. If the required **Clip Bin** is not open, open it using the main menus, under **Channels/ Internal**.
- Select AutoLoad Confirm that AutoLoad is checked in the Clip Bin.
- Select the Clip Select any clip from the Clip Bin by clicking the mouse on it. This clip should load up (if AutoLoad is selected), and the first frame should appear on that channel's output.
- **Press Play** Pressing **Play** in the **Transport**/ **Clip Control** window will play the clip on the selected channel. Any of the clips in the **Clip Bin** may be played in this manner.
- Use the Transport Controls QuickClip offers transport controls with many of the features of a professional VTR emulated in its controls. The user may Play (100%) in either forward or reverse. The user may Fast Forward or Reverse at the highest speed the hardware is capable of. The user may Step Forward or Reverse one frame at a time. Pause will display the first frame of any clip loaded, or a frame of black if there is no clip loaded. Stop will display pass-through video if the source is active or a default null screen (version-specific) if there is no video signal present. There are also controls which allow the user to step forward or backward five seconds, for quick media viewing/ cueing.

The PlayList

QuickClip allows the user to sequence and schedule the playback of media in **Server Mode** using **PlayLists**. **PlayLists** offer a way to play any number of clips in a user-selected sequence. Multiple (differing) **PlayLists** may be created using the same pool of media files without duplicating media. Clips may be easily placed into a **PlayList**. Edited versions of clips (sub-clips) may be created for each **PlayList**.

• There are a few ways to create a new **PlayList**. You may click on the **Create New PlayList** button on the toolbar or select **New PlayList**/ **VTR Layback** (**Ctrl+P**), located under **File** on the main menu. Open a new **PlayList**.

- Select a Channel Using the pulldown menu on the left side of the PlayList window, select an output channel. The available selection depends on your system configuration.
- **PlayList is now Active** now the **PlayList** is active, and the user may add clips to it. The following methods may be used to add clips to the **PlayList**.

Drag and Drop – click on a clip in the **Clip Bin** and drag it with your mouse onto the blank area of the **PlayList** and release the mouse.

Copy and Paste – select a clip with your mouse and use the copy command in your menus (Ctrl+C), then select the **PlayList** and use the paste command (Ctrl+V).

Context (Right Click) Menu – right-click on a clip in the **Clip Bin** to reveal the **Clip Bin Context Menu**. Select **Copy**, then click on the **PlayList** so that it is activated, and then right-click on any clip or on the **PlayList** clips field to bring up the **PlayList Context Menu** from which you may select various **Paste** options.

Toolbar – select a clip from the **Clip Bin** and press the **Copy** button on the **Toolbar**. Then select a clip in the **PlayList** or the blank area of the **PlayList** and select one of the **Paste** options from the **Toolbar**.

- **Press Break**. This will verify the clips, and allow the user to select the media for playback.
- **Press Play.** The clips will play in sequence, from the first selected clip to the end of the **PlayList**.

Commands in the PlayList

The user may further customize the **PlayList** by adding commands to insert timing delays, or set up the conditions for triggered playback. To insert commands into the **PlayList**, confirm that you are still in **Server Mode**, and have an active **PlayList** opened into which you want to add commands.

- Open the **Command Edit** window. Select a clip in the **PlayList** and right-click on it.
- Select **Insert Command** from the **PlayList Context Menu** and the **Command Edit** window will open. Following are the types of commands that can be added:

Break - Keypress Check the **Break** button, then select **Start on any letter keypress**. This will instruct the Drastic Device to play the list until it reaches the command, then wait for a keypress. Once a key is pressed on the keyboard, **QuickClip** will resume **PlayList** activity.

Break - GPI - Check the **Break** button, then select **Any GPI**. This will instruct the Drastic Device to play the list until it reaches the command, then wait for a GPI trigger (+5V) pulse to resume **PlayList** activity.

Wait – To insert a Wait command, press the Wait checkbox. Then enter a time of day (this uses a 24 hour clock) via keyboard. This command instructs the Drastic Device to wait until the time entered, and resume **PlayList** activity.

Delay Command – To insert a **Delay** command, press the **Delay** checkbox. Then enter a delay period via keyboard. This command instructs the Drastic Device to wait for the exact length of the delay and then resume **PlayList** activity.

• SET - Set the command into memory by pressing the Set button at the lower right corner. You'll see that our command has been inserted at the bottom of the PlayList and that the focus has now gone back to the PlayList window.

Pressing **Play** starts the **PlayList** running. The current clip that is playing will be the top of the highlighted area. All the clips below the current clip will also be highlighted in burgundy, and the clips above the currently playing clip will turn white as they finish playing.
Saving and Opening PlayLists

- **QuickClip** users may save multiple versions of **PlayLists**, which allows the user to quickly tailor the content to the playout channel.
- Save the PlayList Confirm that the PlayList is the active window. Go to the main menus, under File/ Save EDL or PlayList (Ctrl+S), or Save As/ PlayList. This will open a standard browser, allowing the user to save the PlayList in the location of their choice.
- Open a Saved PlayList go to the main menus, under File, and select Open (Ctrl+O), or select Open PlayList/VTR Layback. This opens up a standard browser. Navigate through your storage, and find the desired PlayList. Click on it to load the file. Select Open.

VTR Tape Mode

VTR Tape Mode emulates a videotape recorder with a 24 hour tape striped with black. Keep in mind that this mode does not use clips, so the **Clip Bins** and **PlayLists** are not active in this mode.

- Run QuickClip go to the Start Menu/ Programs/ Drastic/ QuickClip (or VVW)/ QuickClip. Select QuickClip.
- Select VTR Mode from the pulldown menu on the Transport/ Clip Control window. This will deactivate the Clip Bins.
- **Open the VTR TC Edit List** window. This can be found in the main menus, under **Windows/::VTR Mode TC Edit List (Ctrl+G)**. It is recommended the user keep this window open while using **VTR Tape Mode**. This lists all the recorded media in Drastic's time code space.
- Select a start point Pressing Play at this point will allow the user to play the entire time code space from beginning to end, as the default In location is 00:00:00;00. To reach a particular section of media, enter the time code location of the media into the In field on the Transport/ Clip Control window and press Q.
- **Press Play** now press **Play**, and the media will play from the selected point to the end.

Variable Speed Playback

T-Bar Shuttle The **T-Bar Shuttle** provides for variable speed playback, including fine slow motion playback (hardware-dependent) for clip editing and review applications. The **T-Bar Shuttle** may be used in either **Server Mode** or **VTR Tape Mode**.

To use the **T-Bar Shuttle**, you must first load up the media. In **Server Mode**, load a clip into the **Transport/ Clip Control** window. In **VTR mode**, shuttle or seek to a time code location containing the media. Open the **T-Bar Shuttle** in the main menus, under **Windows/ T-Bar Shuttle**.

The user may enter a minimum and a maximum replay speed to prevent **QuickClip** from shuttling too quickly or too slowly through media. With a clip cued, grabbing the **Shuttle Bar** with the mouse allows the user to shuttle through the clip within the minimum and maximum speeds (and subject to any underlying hardware constraints).

Upon releasing the Shuttle Bar, the action specified in the Snap section is started.

- With **Play** selected, the media will play from the current location (the point at which the shuttle bar was released) at 100% of normal speed.
- With **Pause** selected, **QuickClip** will pause at the current location and display the frame of video found there.
- With **Jog** selected, **QuickClip** will pause at the current location, display the frame of video found there, and wait for the user to seek further using the shuttle bar.
- With **Hold** selected, the media will play from the current location at the speed that was last set by the location of the shuttle bar.
- With the **Entered Speed** check button selected, the media will play from the current location at the speed entered in the field to the right of the last button. This speed is entered as a percentage of 100.

The box with the pull-down menu at the very bottom of the **T-Bar Shuttle** represents the **output** channel.

For a more detailed examination of the **T-Bar Shuttle's** controls and functionality, go to the reference section of this manual.

Editing/Accessing Media Server Mode

Clip Editing – Clip Bin

Server Mode utilizes clip-based media access and delivery. Capture, playback and control features look for and use file names and clip extents to allocate and utilize media. The user may "trim" the clip, to create shorter "sub-clips". Note that each clip always begins at 00:00:00;00, so editing the beginning/In point does not provide an alternate time code location for the beginning of the clip.

- Select Server Mode from the pulldown menu on the Transport/ Clip Control window. This will activate the Clip Bin(s) and allow the user to edit a clip. If the Clip Bin is not open the user may open it using QuickClip's main menus, under Channels/ Internal. Confirm that there is at least one media clip in the Clip Bin for testing.
- **Load the Clip into the Clip Edit Window -** Double-click the clip in the **Clip Bin**. This will open the **Clip Edit** window with the selected clip loaded for editing. The clip is paused at the start frame.
- Shuttle to a New In Point Press Play to move forward through the video for about 5 seconds. Press Pause. QuickClip is paused at about 5 seconds from the start of the clip. Alternately the user may also grab the Shuttle Bar and shuttle to a good location, using the step forward and step reverse buttons to select the correct frame of video. Or, enter a time code location into the In Point field and press Q.
- **Redefine your In point** Press the **In** button and the time code of our present location will become the new **In** point. The "**In**" time code box will now display an In point of 00:00:00;00, and the clip duration will shorten accordingly.
- Shuttle to a new Out Point Press Play to move forward through the video for about 10 seconds. Press Pause. QuickClip is now cued to a location prior to the current Out point, ready to trim off all media after the present location. Note that you might simply enter a time code location into the Out time code field and press the Q (cue) button to arrive at a specific Out Point. As well, the user may grab the Shuttle Bar and shuttle to a good Out point, using the step forward and step reverse buttons to arrive at the choice location.

QuickClip [™] Software

- **Redefine your Out point -** Press the **Out** button to select the current location as the **Out** point of the edit. The **Out** time code box will change to reflect the new **Out** point, and the duration will shorten accordingly.
- o Preview Preview the edited version by pressing the Preview Edit button.
- Either Rename or Replace the current Clip if you are going to want to use the original clip, rename the sub-clip being created (Make New Clip button). To replace the clip with the edited version, select Set Cur Clip.
 - Make New Clip Type in a new name for the clip. Press the Make New Clip button. The clip will appear in the Clip Bin. Also, the Clip Edit window will reload the original clip you were editing at the time code location of the Out point of the edited clip. This timesaving feature allows you to portion a clip up into a number of "sub-clips", for easy review.
 - Set Cur Clip Do not type a new name into the name field. Press Set Cur clip. This applies the edit information you entered to the current clip. Note that this will permanently change the extents of the clip.

Clip Editing - PlayList

Create a version of a Clip for the PlayList - this allows the user to trim the **In** and **Out** points of the selected clip from the **PlayList**. Editing a clip in the **PlayList** only affects this one instance of the clip, so that each **PlayList** could have slightly different versions of the clip in them without duplicating media.

• To edit a clip in the **PlayList**, either double-click on the clip in the **PlayList**, or right-click on the clip and select **Edit** from the **PlayList** context (right-click) menu. This loads the clip into the **Transport/ Clip Control** interface for editing.

Note: if the **Clip Edit** window is open at this time, the clip will also load into it as well. The user may edit the clip from **the Transport**/ **Clip Control** window or **the Clip Edit** window, although the below example describes editing the clip from the **Transport**/ **Clip Control** window.

- Edit In Point Shuttle to or enter a new time code location into the In Point time code field. Press the In button.
- Edit Out Point Shuttle to or enter a new time code location into the Out Point time code field. Press the Out button.

QuickClip [™] Software

- Once you have made your adjustments, press the **Set** button at the lower right hand side of the **Transport/ Clip Control** window.
- The focus is now shifted to the **PlayList** and this instance of the clip has now been altered. Other instances of this clip will remain unaltered.

To use this altered version elsewhere, simply **Copy** the clip and **Paste** it as needed into this or another **PlayList**.

Add Clips to the Clip Bin

The user may load compatible media into a Clip Bin via the network.

- Select Server Mode confirm that Server Mode is selected on the Transport/ Clip Control window.
- Add Clip button press the Add Clip button to open a standard browser. The user may now browser through any local or networked storage to find compatible media to load into the Clip Bin.
- Select a clip and press **Open**. The clip is immediately loaded into the **New Clip Settings** dialog box.
- o If all extents are correct, press OK to load the clip into the Clip Bin.

VTR Tape Mode

Add Media to Time Code Space

- To add media to time code space, first determine the location in time code space at which the media file should begin. Browse to this location using the **Transport**/**Clip Control** window.
- Press the Add button in the VTR Mode TC Edit List. A standard browser will open, allowing the user to browse to available media on their local or networked storage. The user may select any compatible media whether recorded in VTR Tape Mode or Server Mode.
- Once a compatible media file has been found, either double-click to add the media or select the file and press the **Open** button. This will open the **Add to TimeCode Space** dialogue box. The clip particulars will be displayed under the **Clip Extents** section.
- It is possible to add only a portion of a file into time code space. With a media file loaded into the **Add to TimeCode Space** dialogue box, select the **In Point** time code with your mouse. Type in a new time code location (greater than zero, less than the length of the media file) for the **In Point**. Press the **Set In** button.
- The **Out Point** may also be edited in the same manner. Select the **Out Point** time code location with your mouse and type in a new **Out Point** (less than the current **Out Point**, greater than the **In Point**). Once the new **Out Point** time code has been typed into the **Out Point** field, the **End** time code location will automatically be updated.
- o Confirm that the media starts and ends at the correct time code locations.
- Press the **Add** button to insert the media into time code space as per the defined parameters.

Remove Media from Time Code Space

If you need to clear a section of media from time code space, press the **Blank** button on the **VTR TC Edit List** window.

The **Blank TimeCode** window will appear and the user will be able to clear a section of time code space of its media.

The **Start** time code and the **End** time code fields display the beginning and end point wherein media allocation will be cleared. To enter a new **In** or **Out Point**, select the time code and enter a new time code via keyboard. Press the **Set** button to the right of the time code field to enter the change into memory.

The **video** and **audio** buttons allow the user to select or deselect video and audio tracks to be removed. With a button "pressed" (selected), **QuickClip** will remove that audio or video track.

Once the clip extents and channel selections have been confirmed, press the **Edit** button to perform the media removal. Otherwise, press the **Cancel** button to close the dialog box without removing any media from time code space.

Clear Time Code Space

If you need to clear all of the media from Time Code Space, press the "Clear All" button on the VTR TC Edit List window.

The **Blank TimeCode** window will appear, but with the **End TC** set at 24 hours minus one frame, the end of time code space. Press the **Edit** button to perform this action.

If you for example want to clear all of the audio from time code space and leave the video intact, de-select the video buttons and leave the audio buttons selected. Press the **Edit** button to perform this action.

Control External Devices

QuickClip software allows the user to control external devices (VTRs and supported DDRs) for applications involving frame-accurate media capture. Drastic's range of support for various control protocols allow the user to control most industry standard devices. Here's how to set up control of an external device using the Drastic Device as a controller.

• **Basic setup** - properly installed, configured and licensed Drastic Device with keyboard, mouse, VGA and audio/video monitors.



- Adapters Connect the 232 end of the Drastic or B&B adapter to COM port on the Drastic Device allocated to external control. By default, QuickClip allocates COM 2 to external VTR control. (This may be changed in LocalConfig)
 - In the case of a VVW, the user may be able to connect directly to a hardwired serial port on the back panel.
 - Note that if there is only one COM port, plug the adapter into this port. The user will be able to set this COM Port to external VTR Control as described below.
- Serial Cable Connect a standard 9-pin Serial control cable between the 422 end of the adapter connected to the Drastic Device and the 9-pin remote (control in) port on the external VTR or digital disk recorder. Confirm that the external device is set to accept serial control. Typically the user will set a local/remote switch on the external VTR to the "remote" setting.
- **Genlock** provide an external timing source to all video devices in the chain, including the source video machine, the Drastic Device and the Controller. This

will enable editing synchronization and allow for frame accurate edits (hardware dependent).

- Make sure QuickClip is closed. Open LocalConfig.
- o Confirm that VTR Control is selected in the Global section of LocalConfig.
- **Confirm/add Ext0 Channel** If **Ext0** is not present in the **Channel** field, press the **add** button to add it. Select **Ext0**. This is the channel through which the external device will be controlled.
- Assign Port now touch the pulldown arrow to the right of the Port field to select the appropriate COM port. If the unit has only one COM port, select it here. If the unit has two or more COM ports, confirm that you have selected the right one. The default setting for a unit with more than one COM port is to have COM 1 allocated to incoming control (from a controller) and to have COM 2 allocated to control of an external device.
- Standard QuickClip is set up to auto-detect the video standard of the device being controlled. This setting should normally be on the Auto mode. If you are having problems completing an external pull-in, you may be directed to change this setting by a Drastic Support Technician.
- Edit On, Edit Off, Phase, Offset do not adjust the Edit On, Edit Off, Phase and Offset unless instructed to do so by a Drastic Support Technician. If you need to adjust these settings you know that an incorrect setting may result in poor video quality.
- Select the **Done** button to set your changes into memory. **LocalConfig** will close and the COM settings will be retained, so if your setup stays the same you will only need to do this once.

More Channels – In a multi-channel system, you may be able set up more channels of control. The limit will be the number of capture channels supported by the Drastic Device. The settings for each channel are maintained separately.

Perform an External Pull-In

- This procedure can be performed in either Server Mode or VTR Tape Mode. In Server Mode the user will create clip-based media. In VTR Tape Mode the user will allocate media to time code space.
- Set the **Control Type**. By clicking on the control type with your mouse, you can cycle through the available time code types and select the correct control type for your system (**VITC**, **LTC**, **TC**, **CTL** etc.). Some control types may require additional and/or optional hardware or software upgrades. Some control types may

not be available on your system. As a default, or if you are not sure, select **CTL** to perform this pull-in.

- Select New Digitize/VTR Pull In from the File section of the main menus.
- The Pull In will open, and the Get Reel ID menu will pop up above. You will be prompted to enter a Reel ID. QuickClip can set up a number of external pull-ins and perform them one after another, referenced to specific Reel IDs. Enter a Reel ID via keyboard, or leave the default Reel ID supplied by QuickClip and press OK.
- Confirm that the control type displayed is supported by the external VTR. If not, it is possible that the time code as displayed in the **External Pull-in** window will not match the time code on the deck. Cycle through the available control types to select the appropriate type. Confirm that the time code displayed matches the time code striped onto the tape in the external VTR or generated by the external DDR.
- The default **head** and **tail** (the amount of frames your system will record prior to the **In Point** and after the **Out Point**) is set to 0. If you don't need absolute frame accuracy and want to be sure you have a little extra media at each end of the clip, set this amount to an appropriate number of frames.
- Enter a **Base** (the prefix attached to the clip name). A default clip name will be supplied, but the application may call for something more descriptive.
- Enter a **Clip Name**. Note that the base is present in the clip name field. The user may add a suffix to the base to create a unique clip name.
- Enter a **Comment** for the clip. This is not necessary for the pull-in, but the user might want to use this field to reference the particulars of the clip, the reel, the project or some other useful comment.
- o Shuttle to an In Point using the transport controls on the External Pull-in window.
- Press **In**. Note that the **In** time code field immediately updates to display your present time code.
- Shuttle forward and find a good **Out Point**. Set this point by pressing the **Out** button. Note that the user may set In/Out points on the fly, as tape is rolling.
- Press the **Set Clip** button. This will set the information you have entered into memory.
- Once the In and Out points have been selected, you may press the Single button. (Perform the first pull-in or the only one if you have entered only one pull-in into your list) Alternately, select All (perform all pull-ins in the list if you have set up

more than one pull-in and wish them to begin recording at this time) to finish the pull-ins you have defined. The user may also select certain pull-ins from the list and press the "**Selection**" button to perform more than one pull-in, but not the whole list.

• Your system will begin capture of the VTR's source material as specified in the Pull-In. It will pre-roll, then advance in lock step with the VTR and begin its recording at the **In Point** specified. Upon completion of the media capture, the VTR will complete its post-roll actions, and pause there.

You should then see a new clip appear in the **Clip Bin**. You may rename or trim this clip as necessary using **QuickClip's** clip edit functions.

Capture via EDL

QuickClip allows the user to capture media from specific industry standard equipment using an EDL (Edit Decision List) to control the in and out points of the edit.

An EDL is a simple file that contains information regarding digital media and its associated time code. Typically a user will view a long stretch of media, and make a list of in and out points, (called an EDL) then perform the edits. Other information may be inserted or maintained with the EDL, including comments, user name, reel number etc.

Supported EDLs include:

Avid Log CMX 34xx Sony 8/9x00 GVG 1-2.4 GVG 2.4+ DVision Drastic EDL Drastic LOG

Drastic has implemented compatibility with the above EDL types. If your EDL type is not listed, please contact Drastic Technical Support to inquire about compatibility. Following is the method for performing an external pull-in using an EDL:

• **Basic Setup** - Confirm that the external system is powered up and in the correct mode to perform as the source machine in an external pull-in application. As in the external pull-in, the user will likely set a local/remote switch to the remote setting. Attach the video output of the source machine to your system. Attach the serial cable between the serial control input of the source machine and the Drastic Device's control output.

QuickClip [™] Software

- Select a Mode QuickClip may be in either VTR Tape Mode or Server Mode for this operation. Select between these options in the Transport/ Clip Control window.
- Select a Channel Set the external channel in the Transport/ Clip Control channel pulldown window.
- Audio/Video Monitors Confirm that the audio and video outputs of the external system are connected to the inputs of the Drastic Device. To confirm pass-through video, put a tape into the external system and press Play. Select the Stop button on the Transport/ Clip Control window to see pass-through video.
- Adjust monitors With pass-through video active, adjust the audio and video monitors to a nominal level.
- Browse and select the EDL Go to the Main Menus, under File, select Open Digitize/VTR Pull In (Ctrl+I). This opens up a standard browser. Select the pulldown arrow to the right of the "Files of Type" field. Select Pull In List (EDL). Browse through the local or networked storage to find and select your EDL.
- **Open the EDL**. This EDL opens in a dialogue box which is essentially **QuickClip's External Pull-In** menu. The various In/Out points, comments etc. from the EDL should now be displayed in the **External Pull-in Menu**.
- Adjust the EDL The user may adjust any of the parameters of the EDL, such as In/ Out points, comments etc. if they wish. Otherwise assume that the EDL has been correctly set up.
- **Press Edit** Once you have set everything up and you are ready to perform the capture you have set up, press the **Edit** button.

Note that the **Record** button will not perform the capture you have set up. It will instruct the VTR to begin crash recording, potentially deleting important media.

QuickClip [™] Software

Laybacks

QuickClip is capable of performing a "layback" of media to an external VTR, or supported DDR. This involves assembling a **PlayList** in **QuickClip**, and having **QuickClip** control the external VTR to record the media as per the sequence in the **PlayList**.

This allows the user to quickly put an edited version of existing media to tape for review, or collaboration purposes.

- Layback Setup The Drastic Device and the external VTR/DDR must be set up as in the External Pull-in setup with one exception: Do not connect the video output of the VTR to the video input of the Drastic Device. Instead, connect the video output of the Drastic Device to the video input of the VTR/DDR.
- Choose the option New PlayList/VTR Layback. The PlayList window will open.
- Select a Channel Using the channel pulldown menu on the PlayList window, select an output channel.
- Add Clips use "Drag and Drop", "Copy and Paste", Toolbar, Main Menu or Right-Click (context) menu commands to add clips to the PlayList.
- Set an In Point on the external VTR. Click with the mouse in the field to the right of the In button and type in a time code location. Press the In button. This sets the entered location as the point on the tape at which the media will start recording.
- With this **PlayList** open, press the **Record** button.

The Drastic Device and the external VTR/DDR will back up (pre-roll), and move forward in lockstep to begin transfer of the media from the Drastic Device to the external device. Once the external VTR/ DDR reaches the In point, recording will begin. The external VTR/ DDR will complete the capture of all the media on the **PlayList**, reach the last frame and (device-dependent) post-roll to a stop. **QuickClip** will pause at the last frame of the last clip in the **PlayList**.

Accept Controller Input

Here's how to control the Drastic Device using for example a RS-422 serial controller device (such as a BUF or DNF controller). This is useful for remote playback and operation under automation. Note that some **QuickClip** versions may not support playback under control.

Here is how to proceed:

• **Basic setup** - properly installed, configured and licensed workstation with keyboard, mouse, VGA and audio/video monitors.



- Adapters Connect the B&B Adapter + Null Adapter to COM 1 of the Drastic Device as shown in the diagram above. In the case of a VVW, the user may be able to connect a serial cable directly to a hardwired serial port on the back panel without the need for adapters.
- **Serial Cable** Connect a standard 9-pin Serial control cable between the B&B Adapter + Null Adapter combination (or 422 serial port if present), and the 9-pin remote port on the Controller.
- Make sure QuickClip is closed. Open LocalConfig.
- o Confirm that Serial Control is checked in the GlobalConfig section.

- Select Ctl0 If Ctl0 is not present in the Channel field, press the Add button to add it.
- **Port** Now touch the pull-down arrow to the right of the **Port** window to select **COM 1**. This action assigns the **COM 1** port to Ctl0, for QuickClip to respond to external controller devices.
- **Channel** set the internal channel of the Drastic Device that will respond to commands given by the controller.
- **Control Type** select the control type that will be used to control the channel. Touch the arrow to reveal a pulldown menu of available control protocol types.
- Control Protocol correctly select between the following control protocols: Sony 422, Odetics, Louth, and GPI. There are recommendations regarding the protocols selection in the Troubleshooting section of this manual.
- Edit On, Edit Off, Phase, Offset do not adjust the Edit On, Edit Off, Phase and Offset unless instructed to do so by a Drastic Support Technician. If you need to adjust these settings you know that an incorrect setting may result in poor video quality.
- **More Channels** In a multi-channel system, the user might now set up more channels of control, limited by the number of internal channels supported by the system. The settings for each channel are maintained separately.
- **Done** select the **Done** button to set the changes in memory. **LocalConfig** will close and the COM settings will be retained.

Now the unit is set up to respond to an external controller. The user may load, play, cue and capture media on the Drastic Device using the controller (subject to the constraints of the controller's feature set and the capabilities of the **QuickClip** version).

QuickClip Reference

LocalConfig

Here is the LocalConfig interface.

Local Configuration		
Giobel Contig Direct Hardware Direct Show Ouick Time DDS DLL	Post	
External Charnel Ext0 Port COM2: Edit On 7 Ott 7	add	Replay Disabled 10 frame
2	Out 0 trms 0 etics 2 touth/VDC	P AUD 16 Bits Normal
Control Channel Cti0 Port COM1	add dr	H VID. Normal - File Type avi VCrCb 42:2 • 8 Bits 2 Std NTSC 720x480/486/512
🗸 Sany 422 🔽 Odet	W Disk Recorder _	Use VBlank IT Save VBlank Enable LUT IV LUT Linear
A second	raint0 <u>▼</u> F Meni xmes Cht 7 trami s Ottset 0 ms∕	

#	Control	Function
1	Main Menus	Save and load default configuration parameters, access
		the About screen or exit.
2	GlobalConfig	Enable specific hardware when applicable.
3	External	Configure the external channel for control over an
		external VTR
4	Control	Configure the control input for use of a controller
5	Internal	Configure the default settings for the internal channel(s).

Each portion of the interface specified above is examined in detail in the following section.

Main Menus - File Menu



Please refer to the following chart for available controls and their functions.

#	Control	Function
1	File menu	Displays options regarding the LocalConfig Setup – Save, Load and Exit.
2	Save (Ctrl+S)	Save the current configuration
3	Load (Ctrl+L)	Load a saved configuration
4	Exit (Ctrl+X)	Load a saved configuration





Please refer to the following chart for available controls and their functions.

#	Control	Function
1	Quick Setup menu	Displays a few specific "quick" resets for capture/ playback.
2	Windows Media Source – AVI	Set up QuickClip for capture and playback using Windows Media source – AVI
3	QuickTime 8 Bit YCbCr (YUV)	Set up QuickClip for capture and playback using QuickTime 8 Bit YCbCr (YUV)
4	QuickTime 10 Bit YCbCr (YUV)	Set up QuickClip for capture and playback using QuickTime 10 Bit YCbCr (YUV)
5	Key Fill RGBA (TGA)	Set up QuickClip for capture and playback using Key Fill RGBA (TGA)
6	Key Fill RGBA (TIFF)	Set up QuickClip for capture and playback using Key Fill RGBA (TIFF)
7	Single Input DPX	Set up QuickClip for capture and playback using Single Input DPX
8	Dual Input DPX	Set up QuickClip for capture and playback using Dual Input DPX

Main Menus - Reset Menu



Please refer to the following chart for available controls and their functions.

#	Control	Function
1	Reset menu	Offers choices regarding default configuration settings for specific VVW Series DDRs and versions of QuickClip .
2	Compressed DDRs menu	The user may reset the configuration to support the following DDRs – VVW 1900, VVW 2500, Edit Recorder (250x), VVW 3000, VVW 3600 or VVW 3700.
3	VVW 5000 menu	The user may reset the configuration to support the following DDRs – VVW 5000 PAL or VVW 5000 NTSC.
4	VVW 7000 menu	The user may reset the configuration to support the following DDRs – VVW 7000 1080psf (23.98/24), VVW 7000 1080P (24), VVW 7000 1080i (25/29.97/30) or VVW 7000 (720P 59.94/60).
5	Film 2K menu	The user may reset the configuration to support the following Film Resolution setups: 2048 x 1536 @ (14.98/15) or 2048 x 1556 @ (14.98/15).

6	QuickClip VTR SD menu	The user may reset the configuration to support the following QuickClip versions – QuickClip VTR SD PAL or QuickClip VTR SD NTSC.
7	QuickClip VTR HD 1080psf 24 option	The user may reset the configuration to support the following QuickClip version – QuickClip VTR HD 1080psf (24).
8	QuickClip Pro Matrox option	The user may reset the configuration to support the following QuickClip version – QuickClip Pro Matrox.
9	QuickClip Pro SD menu	The user may reset the configuration to support the following QuickClip versions – QuickClip Pro SD PAL or QuickClip Pro SD NTSC.
10	QuickClip Pro HD 1080psf 24 option	The user may reset the configuration to support the following QuickClip versions – QuickClip Pro HD 1080psf 24.

Main Menus - About Menu

About About Local Config Coli+A

The About menu allows the user to select About Local Config (Ctrl+A), which opens the "About" screen (below), providing details about the version of LocalConfig.



Global Configuration

The **Global Config** section of **LocalConfig** enables specific hardware. Please refer to the following diagram and associated chart for available controls and their functions:



#	Control	Function
1	Direct Hardware	The Direct Hardware checkbox allows the user to select for direct hardware. Hardware-dependent.
2	Direct Show	The Direct Show checkbox allows the user to select for direct show. Hardware-dependent.
3	QuickTime	The QuickTime checkbox allows the user to select for QuickTime. Hardware-dependent.
4	DDR DLL	The DDR DLL checkbox allows the user to select for DDR DLL functionality. Hardware-dependent.
5	VTR Control	The VTR Control checkbox allows the user to control an external VTR.
6	Network Interfaces	The Network Interfaces checkbox allows the user to implement network-based control. Network Control is included in all VVWs and optional for QuickClip software.
7	Hardware MPEG-2	The Hardware MPEG-2 checkbox allows the user to select for specific MPEG-2 hardware. Hardware-dependent.

8	Serial Control	The Serial Control checkbox allows the user to control capture and playback on the Drastic Device using an external serial control device such as a BUF or DNF controller.

External Configuration

The **External Config** section of **LocalConfig** allows the user to set up control over an external VTR or DDR. Note that the **VTR Control** checkbox (**GlobalConfig** section) must be selected for VTR control to work. Please refer to the following diagram and associated chart for available controls and their functions:



#	Control	Function
1	Channel pulldown menu	The Channel pulldown menu displays channels of external VTR control.
2	COM Port pulldown menu	The COM Port menu displays the selected COM port and allows the user to select between available COM ports for control of an external VTR or other supported device.
3	Baud Rate display field	The Baud Rate display field describes the speed rate of the COM port selected.
4	Add button	Press the Add button to add a channel of VTR control.
5	Video Standards pulldown menu	The Video Standards pulldown menu allows the user to select between available video standards for the selected channel. Note that the Auto setting auto-detects the video standard where possible, so it is the default setting.

6	Del button	Select a channel of external VTR control and press the Del button to remove it.
7	Sony 422 checkbox	Select the Sony 422 checkbox to enable Sony 422-based control for the selected channel.
8	In field (frames)	The In field (frames) allows the user to tune the In Point action to match specific devices' behavior by specifying a number of frames to delay the commencement of capture.
9	Edit On (Pre-roll) field	The Edit On field allows the user to adjust the Pre-roll by number of frames. Pre-roll values correspond to the defaults supported by the external device.
10	In field (milliseconds)	The In field (milliseconds) allows the user to fine tune the In Point action to match specific devices' behavior by specifying a milliseconds value to delay the commencement of capture.
11	Odetics checkbox	Select the Odetics checkbox to enable Odetics-based control for the selected channel.
12	Edit Off (Post-roll) field	The Edit Off field allows the user to adjust the Post-roll by number of frames. Post-roll values correspond to the defaults supported by the external device.
13	Out field (frames)	The Out field (frames) allows the user to tune the Out Point action to match specific devices' behavior by specifying a number of frames to delay the cessation of capture.
14	Louth checkbox	Select the Louth checkbox to enable Louth-based control for the selected channel.
15	Out field (milliseconds)	The Out field (milliseconds) allows the user to tune the Out Point action to match specific devices' behavior by specifying a milliseconds value to delay the cessation of capture.
16	Edit Phase field	The Phase field allows the user to adjust the phase synchronization by milliseconds.

Control Configuration

The **Control Config** section of **LocalConfig** allows the user to set up control of the Drastic Device using an external controller. Note that the **Serial Control** option (**GlobalConfig** section) must be selected for serial control to work. Please refer to the following diagram and associated chart for available controls and their functions:



#	Control	Function
1	Sony 422 checkbox	The Sony 422 checkbox allows the user to select for Sony 422-based control.
2	Control Channel pulldown menu	The Control Channel pulldown menu displays the selected channel of serial control (control via external controller device such as a BUF or DNF controller). The user may select between available channels to set up separate parameters for each channel. Channels may be added up to the limit of the number of channels supported by the hardware.
3	Odetics checkbox	The Odetics checkbox allows the user to select for Odetics-based control.

4	COM Port pulldown menu	The COM Port pulldown menu allows the user to set the COM port for the selected channel of serial control.
5	Control Type pulldown menu	The Control Type pulldown menu offers a choice of available device protocol emulation modes. Select between available modes.
6	Louth checkbox	The Louth checkbox allows the user to select for Louth- based Control
7	Add button	The Add button allows the user to add a channel of serial control.
8	Internal Channel pulldown menu	The Internal channel pulldown menu allows the user to select which internal channel will be controlled through this port.
9	Del button	The Del (delete) button allows the user to delete a channel of serial control. Note that a channel must be selected in the Control Channel pulldown menu in order to delete it.
10	Replay checkbox	The Replay checkbox selects for and allows the user to set conditions for variable speed replay functions within QuickClip .
11	Edit On (pre-roll) field	The Edit On field allows the user to adjust the "start action" timing of control by number of frames.
12	Phase field	The Phase field allows the user to adjust the phase synchronization by milliseconds.
13	Camera In pulldown menu	The Camera In pulldown menu allows the user to select between (camera) inputs in an instant replay setup to select which channel is replayed.
14	Restart Service checkbox	The Restart Service checkbox instructs the system to restart the DrasticDDR Service upon closing LocalConfig . If running the Drastic Device as a service (e.g. boots with Windows without running QuickClip), then you need to restart it to allow access. It is automatically stopped when LocalConfig is run

15	Offset field	The Offset field allows the user to adjust the offset timing by milliseconds to synchronize between devices.
16	Edit Off field	The Edit Off field allows the user to adjust the "end action" timing of control by number of frames.
17	Menus checkbox	The Menus checkbox allows the user to select for controllers that support menu-based control.
18	GPI checkbox	The GPI checkbox allows the user to select for controllers that support GPI trigger-based control. These features may require that additional hardware or software modules be installed in the system.

Internal Configuration

The **Internal Config** section of **LocalConfig** controls settings for input/ output channels. Add or delete channels, adjust timing, select between video/audio parameters and allocate "record-to" drives. Settings for each channel are maintained separately. Please refer to the following diagram and associated chart for available controls and their functions.



#	Control	Function
1	Enable checkbox	This checkbox functions as enable/disable for the selected internal channel.
2	Channel pulldown menu	The Channel pulldown menu allows the user to select between internal channels. Once a channel has been selected in this pulldown menu, the parameters for the channel can be adjusted.
3	Edit On field	The Edit On field allows the user to adjust the "start record" timing of captures by number of frames.

4	Video Channel pulldown menu	Set the Video Channel capture parameters. Selecting V1 sets this channel to record one video file. The user may also set a channel to "lock" the capture of more than one channel internally. For example, selecting V12 in a two channel system locks the two capture channels together. The user sees one channel during the capture process, and two files are saved, having a synchronized In point. The check box next to the pulldown menu is enable/disable for video capture and playback on this internal channel.
5	Play/Record Only, VGA checkboxes	The Play Only checkbox functions as enable/ disable for playback actions on the system. The Record Only checkbox functions as enable/disable for capture actions on the system. The VGA checkbox functions as enable/disable for the VGA monitor .
6	Default Clips Log and EDL locations	The top field displays the current default location for Clips, Logs and EDL files. The lower field displays the current default location for EDL files. To change this location, press the Browse button to the right of this field.
7	Replay Actions presets	Set the parameters for slow motion replay actions. The first pulldown menu allows the user to select the number of channels to which the replay applies. The Frames field allows the user to define the number of frames prior to the present location where replay will begin. The Frame checkbox functions as enable/disable for frame- based replay. The second pulldown menu allows the user to select between available slow motion replay types. Note that QuickClip does not support negative time code, so avoid running past the beginning in a replay application.

8	AUD: (Audio Constraints) pulldown menus	 The Audio Quality pulldown menu allows the user to select between available audio quality settings. The Audio Container allows the user to select between available audio containers for 6 channel audio. Note that A1-6 must be selected in the Audio Channel pulldown menu. Selecting Normal provides for 2 channels of audio in the AVI container, and 2 external audio files each containing 2 (stereo) audio channels Selecting Stereo Ext provides for 3 external audio files each containing 2 (stereo) audio channels. This is the setting for Windows Media files, as WM9 does not support AVI w/ embedded audio files. Selecting Multi Channel provides for 6 channels of audio in one file.
9	VID: (Video Constraints) pulldown menus	The first pulldown menu is the Channel Sync pulldown menu allows the user to select between " Normal ", " In2=Alpha ", or " DualLink " settings for video capture. The Video File Type pulldown menu allows the user to select between available video file types (hardware- dependent). The Codec pulldown menu allows the user to select between available video codecs. The Resolution pulldown menu allows the user to select between available resolution settings. The Video Standard allows the user to select between available video standards for the system.
10	Enable SD checkbox	Select the Enable SD checkbox to enable standard definition video on the system.
11	Use VBlank checkbox	Select to capture the lines above the active picture, where VITC time code and RP-215 film meta data is encoded. This will allow decode of VITC and RP-215 directly (hardware-specific).

12	Enable LUT checkbox	Select the Enable LUT checkbox to use a custom or specific Lookup Table when encoding/decoding DPX or Cineon files from a single line HD-SDI interface. This feature is hardware-dependent.
13	Default "Record To" Directory	Displays the current selected default directory where clips will be stored upon capture. The user may select between folders on this drive to assign the default " Record To " directory.
14	Drive Selector pulldown menu	Allows the user to select between available drives for the default " Record To " directory assignation. You essentially want to confirm that you <i>do not</i> record any media onto the " program drive " (the drive containing QuickClip software). NOTE: It is possible to make your software inoperable through incorrect LocalConfig settings.
15	Add button	The Add button allows the user to add an internal channel. Hardware-dependent.
16	Del button	The Del button allows the user to delete an internal channel. The channel must be selected in order for the Del button to work.
17	Edit Off field	The Edit Off field allows the user to adjust the "end record" timing of captures by number of frames.
18	Play field	The Play field allows the user to adjust the start play timing by number of frames.
19	Audio Channel pulldown menu	Set the Audio Channel capture parameters. Selecting A12 sets this channel to record two audio files (a matched stereo pair) for each video file (s) recorded. Some hardware platforms support additional channels per video file. Selecting A1234 sets this channel to record four audio files for each video file, for example.
20	Enable HD checkbox	Select the Enable HD checkbox to enable high definition video on the system. This feature is hardware-dependent.

21	Save VBlank checkbox	Select the Save VBlank checkbox to save the information above the active picture, where VITC time code and RP-215 film meta data is encoded, to disk.
22	LUT Linear checkbox	Select the LUT Linear checkbox to enable the use of a flat Lookup Table; otherwise it is a logarithmic curve. This feature is hardware-dependent.
23	Done button	Select the Done button once all changes have been made and this will implement the changes and close LocalConfig .



Transport/ Clip Control window

The **Transport**/ **Clip Control** window is the main engine of **QuickClip's** functionality, and the user should be familiar with all of the controls they can access from this location. In order to capture video in all modes the user will need to access the **Transport**/ **Clip Control** window.

For the purposes of examining this window in detail, as in the above diagram, the **Transport/ Clip Control** window has been split up into 4 sections as follows:

- 1. Transport Control/ Display playback, shuttle, time code location etc.
- 2. Clip Details user, reel, channel, mode etc.
- 3. Time Code time code edit, insert edit, record etc.
- 4. **Setup** video/audio setup, selection etc.

Refer to the following diagrams and associated charts for information regarding the available controls and their functions.

Transport Control Section



#	Control	Function
1	Transport Status field	Displays transport status, whether in Stop, Play, Eject etc.
2	Time Code Location field	Displays the current time code location in standard SMPTE format: HH:MM:SS;FF (hours: minutes: seconds: frames).
3	Play Speed field	Displays the play speed as a percentage of 100. Negative play speed (reverse) is displayed with a minus symbol (i.e75%).
4	Control Type field	Displays the control type. Clicking on the control type allows the user to shuttle through the available control types to select the correct type for their application.
5	Video Standard field	Displays the video standard the channel is set to. Clicking on the standard allows the user to shuttle through the available video standards to select the correct type for their system.
6	Stop button	The Stop button will stop playback and display pass- through (E-E) video.
7	Step Reverse button	The Step Reverse button allows the user to step backward through and display the media one frame at a time.

8	Fast Reverse Shuttle button	The Fast Reverse Shuttle button allows the user to shuttle backward through the media at the fastest speed possible (hardware-dependent), for quick media cueing.
9	Reverse Play button	The Reverse Play button allows the user to "play" the media in reverse, at exactly -100% of play speed.
10	5 Seconds Rewind button	The 5 Seconds Rewind button allows the user to quickly pause at and display the frame of video 5 seconds before the present location. If this button is pressed at less than 5 seconds into the media, the unit will pause at the beginning.
11	Step Forward button	The Step Forward button allows the user to step forward through and display the media one frame at a time.
12	Fast Forward button	The Fast Forward button allows the user to shuttle forward through the media at the fastest speed possible (platform-dependent), for quick media cueing.
13	Pause button	The Pause button will stop shuttling or playback and display the frame of video at the current location within the media.
14	Play button	The Play button allows the user to play the selected media at 100% of normal play speed.
15	5 Seconds Forward button	The 5 Seconds Forward button allows the user to quickly pause at and display the frame of video 5 seconds after the present location.
16	Shuttle Bar	The Shuttle Bar allows the user to preview in forward or reverse at variable speeds according to how far the bar is "dragged" with the mouse.
Clip Details Section



#	Control	Function
1	Next button	The Next button functions in Server Mode to load the next clip in the current (active) Clip Bin .
2	Clip Name pulldown menu	The Clip Name pulldown menu (Server Mode) offers a list of clips in the current (active) Clip Bin . The user may select and load a clip from this menu.
3	Add Clip button	The Add Clip button (Server Mode) opens a standard browser, allowing the user to search through their storage for a clip to load into the active Clip Bin.
4	Remove Clip button	The Remove Clip button (Server Mode) allows the user to remove a selected clip from the Clip Bin .
5	Browse button	The Browse button opens a standard browser, allowing the user to search through their storage for media or PlayLists to load.
6	Mode Selector pulldown menu	The Mode Selector pulldown menu allows the user to select between Server Mode , Single Mode (not present in all versions) and VTR Tape Mode .
7	Compression Ratio field	The Compression Ratio field displays the current compression ratio, and offers up and down arrows to adjust the compression ratio, if the hardware supports adjustable compression.

8	External Sync checkbox	The External Sync checkbox allows the user to select for an external sync source (if checked) or to use internally generated timing (if unchecked).
9	Reel ID field	The Reel ID field (VTR Tape Mode) displays the Reel ID . The Reel ID is entered by the user in VTR Tape Mode in the external pull-in dialog.
10	User Name field	The User Name field displays the user name. The user name is entered by the user in VTR Tape Mode in the external pull-in dialog.
11	Channel pulldown menu	The Channel pulldown menu displays the current channel, and allows the user to select between available internal, external and control channels.
12	Set button	The Set button functions in all modes to enter the user's changes into memory.

Time Code Section



#	Control	Function		
1	RTZ (return to zero) button	The RTZ button cues the unit to 00:00:00;00. In Server mode, this is the beginning of the clip. In VTR Tape mode, this is the beginning of time code space.		
2	Eject button	The Eject button instructs an external VTR to eject its tape. Applies to control of an external VTR only.		
3	Record button	The Record button instructs the unit to begin video capture. In Server Mode , this calls up the New Clip Settings window. In VTR Tape Mode , this functions as a crash record button.		
4	Video and Audio channel buttons	Depending on your LocalConfig settings, the video and audio channels will be displayed as a set of buttons which can be selected or de-selected.		
5	Preroll button	The Preroll button previews the pre-roll, to avoid running past the beginning and aborting the edit/capture.		
6	Auto indicator	The Auto indicator displays as selected (active) during pull-in activities on specific platforms.		
6	Mark In Point button	The Mark In Point button marks the current time code displayed in the In Point field as the first frame of the clip (Server Mode) or the edit (VTR Tape Mode).		

7	In Point section	The In button allows the user to set the present location as the new In Point. The In Point field displays the current first frame of the clip (Server Mode) or beginning point of the edit in time code space (VTR Tape Mode). The Q button allows the user to cue to the current In Point.
8	Out Point section	The Out button allows the user to set the present location as the new Out point. The Out point field displays the current last frame of the clip (Server Mode) or end of the edit in time code space (VTR Tape Mode). The Q button allows the user to cue to the current Out point.
9	Edit button	The Edit button functions in VTR Tape Mode as a command to perform the "edit", or the video capture based on clip extents set by the user.
10	Edit duration field	The Edit duration field calculates and displays the difference between the In point and the Out point.
11	Preview Edit button	The Preview Edit button allows the user to look at the results of an edit without digitizing any video to storage.
12	Loop Playback button	The L (Loop Playback) button functions in Server Mode as an instruction to play a clip or PlayList from start to finish over and over again, until interrupted by another command.

Setup Section



#	Control	Function
1	Audio Level meters/slider bar	The Audio Level meter/slider bars allow the user to view a graphical representation of the audio level throughput, and the slider bar offers a method to adjust the input gain levels. Hardware-dependent.
2	Video Level slider bar	The Video Level slider bar allows the user to adjust the video level for this channel. Hardware-dependent.
3	Setup level slider bar	The Setup level slider bar allows the user to adjust the setup level for this channel. Hardware-dependent.
4	Hue slider bar	The Hue level slider bar allows the user to adjust the hue for this channel. Hardware-dependent.
5	Chroma level slider bar	The Chroma level slider bar allows the user to adjust the chrominance level for this channel. Hardware-dependent.
6	Video Type pulldown menu	The Video Type menu displays the current video type, and allows the user to select between available video types for this system. Choices are hardware-dependent.
7	Audio Type pulldown menu	The Audio Type menu displays the current audio type, and allows the user to select between available audio types for this system. Choices are hardware-dependent.

The Toolbar

Here is the **Toolbar**. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	New PlayList button	Opens a New PlayList
2	New Pull-in button	Opens a New External Pull-in.
3	Open button	Opens an existing PlayList or External Pull-in
4	Save button	Save the selected Pull-in or PlayList. Opens a Save As dialog box for an unsaved Pull-in or PlayList.
5	Save As button	Opens a Save As dialog box for the selected file.
6	Save All button	Save All Pull-ins or PlayLists containing unsaved changes. Functions as a Save As for any unsaved Pull-ins or PlayLists.
7	Close button	Close the selected PlayList or Pull-in.
8	Cut button	Remove the selected clip and load it into the buffer for pasting.
9	Copy button	Copy the selected clip.
10	Paste Above button	Paste the clip or clips above the selected clip.
11	Paste Over button	Delete the selected clip from the list and replace it with the clip or clips from the buffer.
12	Paste Under button	Paste the clip or clips below the selected clip.
13	Paste at End of List button	Paste the clip or clips at the end of the PlayList .

14	Delete button	Delete the selected clip without copying it to the buffer.
15	Disable Local Control button	Select this button to Disable Local Control . This allows uninterrupted remote control of the system via the network.

Clip Bin

In **Server Mode**, **QuickClip** offers a **Clip Bin** for each internal channel. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Picon display	The Picon (picture icon, a small image of a key frame from the selected video file) is displayed on the Clip Bin . The purpose of the Picon is to provide a "thumbnail" of each clip for quick reference. The Picon is set to the first frame of the clip, but can be reset by the user, by pressing the Set Picon button with the preferred frame loaded.

2	Video Standard display	The Video Standard is displayed here for each selected file. Note that the frame size in pixels, or raster size is displayed above, and the video standard is displayed below. When these parameters are compatible with the system's setup, the information is displayed in blue. When there appears to be an incompatibility issue with the selected file, the offending information is displayed in red. (See the Properties menu for more information)
3	Set Picon button	The Picon may be reset to the current frame of the selected file by pressing the Set Picon button. By default, the Picon set for each file is the first frame.
4	Meta Data display	Meta Data information saved with the file will be displayed here. Use the scroll button to view all available fields.
5	Reverse Play button	Play the selected file in reverse from the present location to the beginning, at -100% of play speed.
6	Stop button	Stop any playback in progress, go into E-to-E mode, and display pass-through video. Cues the selected clip back to the zero point.
7	Pause button	Stop any playback in progress, and Pause at the present location, displaying the frame of video found there.
8	Play button	Play the selected file from the present location (if in pause) or from the beginning, at 100% of play speed.
9	Previous Clip button	Select the clip above, or prior to the selected clip in the Clip Bin
10	AutoLoad checkbox	The AutoLoad checkbox if checked allows the user to automatically load any clip selected in the Clip Bin . When this checkbox is not selected, the user may double- click to load a clip, or select a clip and press the Play button to play it.
11	Next Clip button	Select the clip below, or after the selected clip in the Clip Bin .

12	Clip Name column	The Clip Name column displays the clip name. The clip name is restricted to 8 characters to maintain compatibility with certain industry standard automation systems.
13	Clip Duration button	The Clip Duration column displays the duration, or length of the clip in standard SMPTE format. (HH:MM:SS:FF)
14	File Name column	The File Name displays the actual file name. The file name is not restricted to 8 characters. Typically the clip name is the file name truncated to the first 8 characters.
15	Date column	The Date column displays the clip creation date.
16	Size column	The Size column displays the size of the clip, or file, in Megabytes.
17	Directory column	The Directory column displays the file path of the clip, or where the clip/file is located on the network.
18	Fragments column	The Fragments column displays the number of fragments for the clip, or the number of non-contiguous data packets associated with the media file.

Clip Bin Context Menu

The user may right-click on a clip in the **Clip Bin** to reveal the context menu for the clip. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Copy (Ctrl+C)	Copy the selected clip into the clipboard for pasting.
2	Add (Ctrl+A).	Add a clip from the hard drive. Opens a standard browser, allowing the user to search available storage for a media file to add.
3	Delete (Alt+Bksp).	Delete a clip from the hard drive. This will destroy the clip.
4	Remove (Shift+Del)	Remove the clip from the Clip Bin . This will not affect the original clip on the hard drive.
5	Properties (F3)	Loads the selected clip into the Properties dialog box.
6	Edit Clip	The Edit Clip option loads the selected clip into the Clip Edit window, allowing the user to alter the clip extents.
7	Preview Clip	The Preview Clip option will play the selected clip through the video hardware and pause on the first frame.
8	Cancel	Close the Context menu without performing any of the actions.

VTR Mode TC Edit List

The user may view all of the media currently allocated to their VTR Mode time code space in a convenient window called the VTR Mode TC Edit List. This is the VTR Tape Mode equivalent of a Clip Bin. With QuickClip running, select VTR Tape Mode from the Transport/ Clip Control interface. The user may also open it using the main menus, under Window/::VTR TC Mode Edit List (Ctrl+G). Please refer to the following diagram and associated chart for available controls and functions.

, (NTS Retresh Add	Blank Clea	IA I				
<	File Name	TimeLine	Clip In	Time Out N	File Dir	Ouretion	Fregments
	dt_nlSingleRere_D1_1 VALA	00:00:07:21	00:00:00.0	00.00.19.05	M:\Dreste	Te 00:00:11:14	(Link)
Ι	black-silence (00.00	00:00:19:05				00:00:03,16	1
	dt_nlSinglePate_D1_\VAtA	00.00.22.21	00.00.000	00.00.14:05	M\Drestic1	Te 00.00.11.14	(Unk)
l	dt_nlSingleRate_D1_\VA1A2	00:00 34:05	00.00.00.00	00:00:36:00	M:\Draste	Te 00:00.01.25	(Unk)
I	black-silence (00:00	00:00:36:00				00:00:09:18	
t	dt_nISIngleRete_D1_1 VATAD	00.00 45 18	00.00.00.0	00.00.57.02	M\Drestit	Te 00.00.11.14	(Link)

#	Control	Function
1	Channel pulldown menu	Select between available channels. All channels set up in LocalConfig will be displayed in the pulldown menu.
2	Refresh button	Update, or Refresh the view to confirm or update the media list if changes recently made are not immediately displayed.
3	Add button	Add media to time code space. Opens a standard browser, allowing the user to browse for and select media to add. Media selected is loaded into the Add to TimeCode Space window, where media is inserted into time code space as per the user's selections.
4	Blank button	Opens the Blank time code space dialog box. This allows the user to remove selected media from time code space. Select In/ Out points, remove or retain individual audio and/ or video channels.

5	Clear All button	Clear All of the media from time code space. Does not affect the original captured media.
6	Number column	The Number column displays the location of this section of media within this list as a numbered item. The media sections are numbered sequentially starting at #1.
7	File Name column	The File Name column displays the file name for each segment of media.
8	Edit column	The Edit column displays the number of audio and video channels that are associated with the file. So for example VA1A2 would indicate one video channel and two audio channels are associated with the file.
9	Time Line column	The Time Line column displays the time code location of the first frame of media for the file.
10	Clip In column	The Clip In column displays the In Point of any clips that have been added to time code space. The In Point for all clips is 00:00:00;00, unless the In Point of the clip was edited in the process of adding it to time code space.
11	Time Out column	The Time Out column displays the time code location of the last frame of video associated with this file in time code space.
12	File Dir column	The File Dir displays the directory and navigation path to the folder containing the specified media file.
13	Duration column	The Duration column displays the length, or duration of the specified media in standard SMPTE format.
14	Fragments column	The Fragments column displays the number of fragments associated with the selected media. Over-fragmentation of media files may affect performance of the system.

Add Media to Time Code Space

The user may insert media into time code space whether it was recorded in **VTR Tape Mode** or **Server Mode**. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Time Code Location - End time code field	Calculates between the clip extents and the Start time code location to display the location in time code space that will mark the last frame of media associated with this file.
2	Time Code Location - Start time code field	Displays the current or default time code location. Allows the user to enter a time code location by keyboard at which point the inserted media will start.
3	Video channels buttons	Allows the user to select or deselect video channels when adding media to time code space. Selected (pressed) buttons indicate a channel of video that will be inserted during this action.
4	Set In button	Press the Set In button after editing the In Point to update the time code location End field.
5	Cancel button	Cancel out of the Add dialog box without adding any media to time code space.

6	Clip Extents – In Point time code field	The Clip Extents – In Point field displays the start time code of the clip, usually 00:00:00;00. The user may enter a new start point for the clip when adding it to time code space. Enter a time code In point using the keyboard (less than the current Out point) and press the Set In button.
7	Clip Extents – Out Point time code field	The Clip Extents – Out Point field displays the last frame of the clip by time code location. The user may enter a new time code location via keyboard (greater than the current In Point) which will then affect the duration.
8	Audio channels buttons	Allows the user to select or deselect Audio channels when adding media to time code space. Selected (pressed) buttons indicate a channel of audio that will be inserted during this action.
9	Add button	Press the Add button to add the specified section of media into time code space according to the parameters entered into this dialog box.

Blank Time Code Space

The user may remove media from time code space. This is accomplished through the **Blank TimeCode** menu, which can be reached by pressing the **Blank** button on the **VTR Mode TC Edit List** window. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	End Time Code field	Enter a time code location into this field to specify the last frame of time code space from which media will be removed. Pressing the Set button to the right of this field will set any changes made into memory.
2	Start Time Code field	Enter a time code location into this field to specify the first frame of time code space from which media will be removed. Pressing the Set button to the right of this field will set any changes made into memory.
3	Set (End Time Code) button	Set the changes made in the End Time Code field into memory.
4	Set (Start Time Code) button	Set the changes made in the Start Time Code field into memory.
5	Video Selector buttons	Select or deselect video channels for removal when removing media from time code space. Selected (pressed) buttons indicate a channel of video that will be removed during this action.

6	Edit button	Press the Edit button to remove the media as specified.
7	Audio Selector buttons	Select or deselect audio channels for removal when removing media from time code space. Selected (pressed) buttons indicate a channel of audio that will be removed during this action.
8	Cancel button	Close the Blank TimeCode window without removing any media from time code space.

PlayList

In **Server Mode**, **QuickClip** features the **PlayList** as a way of sequencing the playback of one or more clips. Commands may be inserted into the **PlayList** to support triggers, go to commands, timed delays or wait commands. Please refer to the following diagram and associated chart for available controls and functions.

Ţ)23(456	780	9 @)()(2) (13)	
01	Contraction of the local division of the loc	SC-C 1R-B GR	A32) C:\Share	Simple Play Break				-IIX
-/01	N-AIR Play B		Add 1	Aboit	1			
	Clip Name			Direction State	Brook Run	Comment		
0	dt_nl	00.00.0000	00.00,11,00	00.00.00.00	00:00:11:00	i_dt_nl Int.	NTSC-CCIR-BGR	
2	dt_nl_a wowie	00.00.00.00		00:00:11:00			INTSC-COR-BGR	
<u>e</u>								2
14) (!	5 (16)	17) (18	3 19	2	0	

#	Control	Function
1	ON_AIR checkbox	The ON-AIR checkbox removes several controls from
		the PlayList interface, to minimize the chances of inadvertently interrupting playback while in a critical playback application.

2	Channel pulldown menu	The Channel pulldown menu allows the user to select between available channels for playback. Removed from view in ON-AIR mode.
3	Status field	The Status field displays the current clip that is currently playing or selected, and the percentage of the clip played.
4	Play Clip button	The Play Clip button plays the selected clip and pauses on the last frame. Removed from view in ON-AIR mode.
5	Pause button	The Pause button will stop any playback and display the frame of video at that location. Removed from view in ON-AIR mode.
6	Play Break button	The Play Break button will play the selected "break" of clips within a PlayList . This is typically a group of clips separated by a command, although the entire PlayList may be selected as a break.
7	Stop button	The Stop button will cause playback of this PlayList to cease, including the execution of any commands inserted into the PlayList . (Full Stop and pass the input signal through) Removed from view in ON-AIR mode.
8	In Point selector, display and Record button	Press the In Point button to select the currently displayed time code location as the In Point on the external VTR for performing a Layback of media to an external VTR. Press the Record button to perform a layback of this PlayList's media to an external VTR. Removed from view in ON-AIR mode.
9	Add Clip button	The Add Clip button adds the next clip in the PlayList to the break selection.
10	Break button and Break time code display field	Select a Break to play. Press to select all clips in the PlayList from the presently selected location to the first command in the PlayList . Pressing more than once will select all of the clips in the PlayList .

11	Abort button and current location display field	The Abort button will cease any playback of the break selected, and will deselect all but the first clip in the PlayList .
12	Insert/ Assemble button	Toggles between Insert mode (video-only or audio-only for example) and Assemble mode (full video/ audio replacement including control track etc.), for the PlayList .
13	Last Clip button/ Clip Name display field/ Next Clip button	The Last Clip button allows the user to move upward through the PlayList one clip/ command at a time. The Clip Name is loaded into the display field in the center. The Next Clip button allows the user to move downward through the PlayList one clip at a time. Removed from view in ON-AIR mode.
14	Clip Number column	This Clip Number column displays the number of each clip in the PlayList . Each clip is numbered sequentially from the beginning of the PlayList , starting at 0. Note that any commands inserted into the PlayList are not counted.
15	Clip Name column	The Clip Name column displays the name of each clip in the PlayList .
16	Clip In column	The Clip In column displays the In point of each clip in the PlayList , typically 00:00:00;00. Also displays the type of command, if any commands have been entered.
17	Clip Out column	The Clip Out column displays the Out Point of each clip in the PlayList . Where as command has been entered into the PlayList , this column displays the details of the command.
18	Break In column	The Break In column displays the point in the PlayList (by time code) at which the break will begin. Does not calculate delay commands into the running time.
19	Break Run column	The Break Run column displays the length of the selected break.

20	The Comment column displays the comment entered by the user associated with the clip, if one has been entered.

PlayList in ON-AIR Mode

Here is a view of a **PlayList** in **ON-AIR** Mode. Note that certain buttons have been removed from the **PlayList**.

	Feat	dt_nl_as.05		Break	-		
5	ON AIR Play B	eak: 🕨	Add 11	Abor:		263 265 1	
ŧ.,	Clip Nome	Clip In	Clip Out	Break	ins }	Break Run	Comment
0	cit_nl	00:00:00:00	00:00:11:00	00:00	00,00	00:00:11:00	dt_nl Int 0 NTSC-CCIR-BGRA32 00:00:1
1	dt_nl_a	00:00:00:00	00:00:11:00	00.00	11,00	00:00:22:00	dt_nl_a, Int. 8 NTSC-CCIR-BGRA32, 00:001
2:	WOWEE	00:00.68.00	00:08:11:00	00.68.	22.00	00.00:33.00	wowe Int 0 NTSC-CCIP-BGRA32 00:00 11;

The user will also note that with the **PlayList** in **ON-AIR** Mode and the **PlayList** in play mode, most of the above buttons will be grayed out as well, leaving the **Break** and **Abort** buttons active.

ON-AIR mode avoids inadvertent disruption of playback, for applications where uninterrupted playback is required.

PlayList Context Menu

The user may right-click on a clip or command in the **PlayList** to reveal the context menu for the clip or command. Please refer to the following diagram and associated chart for available controls and their functions.



#	Control	Function
1	Cut (Ctrl+X)	Remove the selected clip from the PlayList and load it into the clipboard for pasting.
2	Copy (Ctrl+C)	Load the selected clip into the clipboard for pasting.
3	Paste (Ctrl+V)	Insert the clip from the clipboard into the PlayList just above the selected clip.
4	Paste Below (Ctrl+B)	Insert the clip from the clipboard into the PlayList just below the selected clip.
5	Paste Over	Remove the selected clip from the PlayList and insert the clip that is loaded into the clipboard in its place.
6	Paste at End (Ctrl+E)	Insert the selected clip from the clipboard at the end of the PlayList .
7	Remove (Shift+Del)	Remove the selected clip from the PlayList .
8	Properties (F3)	Load the selected clip into the Properties window.

9	Insert Command (Ctrl+Z)	Opens the Command Edit window, which allows the user to insert a command into the PlayList .
10	Edit Clip	Opens the Edit Clip window with the selected clip loaded for editing/ trimming the clip extents. Only affects this one instance of the clip, although the trimmed clip may be copied and used in other locations. Does not affect the length/ duration of the original media.
11	Preview Clip	Loads and plays the selected clip out through the video hardware for preview.
12	Preview Group	Play a selected group of clips from the PlayList .

Command Edit window

QuickClip allows the user to insert commands into the **PlayList** to allow keypress/ GPI triggers, "go to", wait and delay –based sequencing of media within a **PlayList**. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Break button	Select the Break button to allow either a letter keypress or GPI trigger to resume PlayList activity.
2	Start on any letter keypress button	With the Break button selected, wait for the user to press a letter on the keyboard to resume PlayList activity.
3	Any GPI button	With the Break button selected, wait for a GPI pulse input to resume PlayList activity. May require additional or optional hardware to implement.
4	Wait button	Select the Wait button to wait for a specific time of day to resume PlayList activity. QuickClip uses a 24 hour clock, so that for example 7 pm is 19:00 hours, or 19:00:00;00.
5	Wait length time code field	With the Wait button selected, enter the duration (by time code format) for QuickClip to wait before resuming PlayList activity.

6	Go to button	Select the Go To button to begin PlayList activity from another location within the PlayList . The location is set in either the Top or Offset field.
7	Top checkbox	With the Go To button selected, check this to return to the Top of the PlayList and resume PlayList activity. This creates a looping list.
8	Offset value field	With the Go To button selected, go up (minus values) or down (positive values) the PlayList by the offset value number of clips and resume PlayList activity. Enter an offset value by keyboard.
9	Comment field	Enter a Comment via keyboard for each command entered into the PlayList . Remember to press the Set button for comments to be retained in the PlayList .
10	Delay button	Press the Delay button to wait for a specified length of time then resume PlayList activity.
11	Delay length time code field	With the Delay button selected, enter a duration (or length of delay) by time code into this field using the keyboard. QuickClip will wait for the specified length of time and then resume PlayList activity.
12	Close button	Close the Command Edit window and enter the last "set" command into the PlayList. Note that if you have selected a command but not pressed the Set button, QuickClip will insert the default or the most recent command that was set into the PlayList.
13	Set button	When the user has specified a command, press the Set button to enter the command into the PlayList . Note: if the user enters the Command Edit window, and presses the Close button (with or without making any changes to the command type), the last "set" or the default command will be entered into the PlayList . It is easy to remove a command from the PlayList – simply select it, right-click on the command and select the Cut option from the right- click menu.

New Clip Settings window

The **New Clip Settings** window allows the user to set capture parameters in **Server Mode**. Please refer to the following diagram and associated chart for information regarding the available controls and their functions.



#	Control	Function
1	New Clip Name field	The New Clip Name field displays the default clip name, or if another name has been entered by the user, the new name is displayed.
2	Max Length section	Select the Max Length button to record a clip of a specified length. The Max Length duration field to the right of the Max Length button displays the default clip length if Max Length is selected. The user may edit this value by selecting the time code in this field and entering a new length.
3	Insert button	The Insert button is permanently selected. Overwrite is not implemented in this version.
4	Overwrite button	The Overwrite button is not selectable, and has not been implemented in this version.

5	File Name section	The File Name section allows the user to enter a file name that is different from the clip name. The clip name is restricted to 8 characters, and the file name may be longer. With the checkbox selected, the File Name field becomes active, and the user may edit the default clip name.
6	Set Name field	Press the Set Name button to set the clip details into memory, so that upon pressing the OK button, QuickClip will go immediately into record mode.
7	OK button	The OK button starts the capture as set up by the user.
8	Cancel button	The Cancel button aborts the capture, and closes the New Clip Settings window.

Clip Edit Window

The Clip Edit window allows the user to trim the in and out points of a clip. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Channel pulldown menu	The Channel pulldown menu displays the channel associated with this instance of the clip.
2	In point selector button, time code field and Q (cue) button	Press the In point selector button to select the current time code location as the new In Point. The In point Time Code field displays the In point of the clip. The Q (cue) button cues QuickClip up to the current In point.
3	Clip Name pulldown menu	Displays the clip name. Touch the pulldown menu to view the available clips and select a clip for editing.
4	Current Time Code Location field	Displays the current location within the clip, in standard SMPTE time code format.
5	Out point selector button, time code field and Q (cue) button	Press the Out point selector button to select the current time code location as the new Out point. The time code field displays the Out point of the clip. The Q (cue) button cues QuickClip up to the current Out point.
6	Clip Name field	Displays the saved clip name. When making a new clip, the user will be prompted to enter another name in this field.

7	Step Frame reverse, Shuttle Bar and Step Frame forward controls	Step Frame reverse allows the user to shuttle backward one frame at a time to seek for media. The Shuttle Bar allows the user to pull the slider with their mouse to quickly shuttle through media for editing/reviewing purposes. Step Frame forward allows the user to shuttle forward through the media one frame at a time.	
8	Play button	The Play button will play the entire clip loaded into the Clip Edit window.	
9	Pause button	The Pause button causes playback to cease and displays the frame of video found at the paused location.	
10	Play Selected button	The Play Selected button will play the portion of the clip indicated by any new In/Out points entered by the user. Functions as an edit preview.	
11	Make New Clip button	The Make New Clip button creates a new virtual clip, with a new name entered by the user. Note that the original media on the hard drive is untouched by this action.	
12	Set Cur Clip button	The Set Cur (current) Clip button edits the In and/or Out points of the clip to create a new (shorter) clip with the same name. This will alter the original clip's extents.	

External Pull-in window

The **External Pull-in** window offers the dialog the user will need to address in order to pull in media from an external VTR.

For the purposes of examining this window in detail, as in the above diagram, the **External Pull-in** window has been split up into 4 sections as follows:

- 1. Transport Control playback, shuttle, time code location etc.
- 2. Time Code time code edit, insert edit, record etc.
- 3. Clip Details user, reel, channel, comment etc.
- 4. Pull-in Setup video/audio setup, selection etc.

8:(38:88 88	23.98 CTL 0%		Selection			0100.00_00	
4			rtg precol au In 00:00:00:00 Out 00:00:00:00 Edit 00:00:00:00	Image: Character Stress I	and the second second		▼ H/T 0	-
#	Clip Name	Reel	Edit	In Point	Out Point	Record In	Duration	Comment
U	DRCL0	00045	VA1A2	00.00.00_00	00.00.00_0	0 01.00.00_0	0 00 00 00 0	0 yeroc

The **External Pull-in** window allows the user to set up external capture from an external VTR. As well, the transport controls should function to control and display the external VTR's media and status.

Get Reel ID window

The **Get Reel ID** window allows the user to set the **Reel ID** for external pull-ins. Please refer to the following diagram and associated chart for information regarding the available controls and their functions.



#	Control	Function
		The Reel ID field displays a default reel identifier number. The user may enter a Reel ID using the
		keyboard in order to more efficiently identify their media.
2	Cancel button	The Cancel button closes the Get Reel ID window, and cancels the external pull-in. Performs the same function as the x button in the upper right corner.
3	OK button	The OK button sets the Reel ID to the number in the Reel ID field, and opens the New External Pull-in dialog box.

Transport Section

The transport section of the **External Pull-in** window offers transport controls equivalent to a VTR, and displays time code, status, the video standard and control type. Please refer to the following diagram and associated chart for a list of available controls and their functions.



#	Control	Function
1	Transport Status field	Displays transport status, whether in Stop, Play, Eject etc.
2	Time Code Location field	Displays the current time code location in standard SMPTE format: HH:MM:SS;FF (hours: minutes: seconds: frames).
3	Step Reverse button	The Step Reverse button allows the user to step backward through the media one frame at a time and display each frame of video.
4	Stop button	The Stop button will stop playback. If the unit is in pause, pressing Stop will clear the paused media and display pass-through (E-E) video.
5	Step Forward button	The Step Forward button allows the user to step forward through the media one frame at a time and display each single frame of video.
6	Play Speed field	Displays the play speed as a percentage of 100. Negative play speed (reverse) is displayed with a minus symbol (i.e75%).

7	Video Standard field	Displays the video standard the channel is set to. Clicking on the standard allows the user to shuttle through the available video standards to select the correct type for their system.
8	Control Type field	Displays the control type. Clicking on the control type allows the user to shuttle through the available control types to select the correct type for their system.
9	Fast Reverse Shuttle button	The Fast Reverse Shuttle button allows the user to shuttle backward through the media at the fastest speed possible (platform-dependent), for quick media cueing.
10	5 Seconds Rewind button	The 5 Seconds Rewind button allows the user to quickly pause at and display the frame of video 5 seconds before the present location. If this button is pressed at less than 5 seconds into the media, the unit will pause at the beginning.
11	Reverse Play button	The Reverse Play button allows the user to "play" the media in reverse, at exactly -100% of play speed.
12	Pause button	The Pause button will stop shuttling or playback and display the frame of video at that location.
13	Shuttle Bar	The Shuttle Bar allows the user to preview in forward or reverse at variable speeds according to how far the bar is "dragged" with the mouse.
14	Play button	The Play button allows the user to play the selected media at 100% of normal play speed.
15	5 Seconds Forward button	The 5 Seconds Forward button allows the user to quickly pause at and display the frame of video 5 seconds after the present location.
16	Fast Forward button	The Fast Forward button allows the user to shuttle forward through the media at the fastest speed possible (platform-dependent), for quick media cueing.

QuickClip [™] Software

Time Code Section

The time code section of the **External Pull-in** window offers various cueing, selection, channel and capture controls. Please refer to the following diagram and associated chart for a list of available controls and their functions.



#	Control	Function
1	Record button	The Record button functions in an external pull-in to instruct the external VTR to go into "crash record" mode. The external VTR will use its current location as the In Point for the edit.
2	Eject button	The Eject button functions in an external pull-in to cause the external VTR to eject its tape.
3	Video and Audio channel buttons	The Video and Audio channel buttons allow the user to select or deselect video and audio channels for insert editing. The number of channels displayed here should match the system's capabilities.
4	Selection button	The Selection button commands QuickClip to perform one or more pull-ins based on the selection made by the user.
5	Single button	The Single button commands QuickClip to perform one selected pull-in.
6	Preroll button	The Preroll button tests the amount of Preroll to determine whether the edit is too close to the beginning.

7	RTZ (return to zero) button	The RTZ button will cue the media to its zero point (00:00:00;00).
8	In Point selector button, time code field and Q (cue) button	The In Point selector button allows the user to set the time code displayed in the In time code field as the In point. The time code field displays the current time code location within time code space. The Q button allows the user to cue up to the time code location displayed in the time code field.
9	Out point selector button, time code field and Q (cue) button	The Out point selector button allows the user to set the time code displayed in the Out time code field as the Out point. The time code field displays the current time code location within QuickClip. The Q button allows the user to cue up to the time code location displayed in the time code field.
10	Edit selector button, time code field and P (Perform) button	The Edit selector button commands QuickClip to perform the edit. The time code field displays the length of the edit. The P (Perform) button commands QuickClip to perform the selected pull-in based on its current parameters.
11	Auto indicator	The Auto indicator displays as selected (active) during pull-in activities on specific platforms.
12	All button	The All button commands QuickClip to perform all pull- ins set up by the user.
13	Set Clip button	The Set Clip button changes the parameters of a selected edit in the Pull-in list to match the parameters entered by the user.
14	New Clip button	The New Clip button adds an edit to the Pull-in based on the parameters entered by the user.

Clip Details Section

All edits set up in the **External Pull-in** window are placed in the clip details section. Please refer to the following diagram and associated chart for a list of available controls and their functions.



#	Control	Function
1	Clip Number column	The Clip Number column displays the number of each edit. The edits are numbered, beginning at zero.
2	Clip Name column	The Clip Name column displays the name of the clip.
3	Reel column	The Reel column displays the reel of the clip.
4	Edit channels column	The Edit channels column displays the video and audio channels that will be addressed by this edit.
5	In Point column	The In Point column displays the In Point of the clip.
6	Out Point column	The Out Point column displays the Out Point of the clip.
7	Record In column	The Record In column displays the Record In point of the clip.
8	Duration column	The Duration column displays the duration (length in SMPTE time code format) of the clip.
9	Comment column	The Comment column displays the comment entered by the user for this clip.
10	Clip Rail row	The Clip Rail row displays all of the details for the clip. Each edit set up by the user will create another row.

11	Slider bar	The Slider bar allows the user to scroll to the left or right
		to view all of the information entered for the clip

Setup Section

The Setup section contains various setup controls to complete an **External Pull-in**. Please refer to the following diagram and associated chart for a list of available controls and their functions.



#	Control	Function
1	Base field	The Base field allows the user to enter a base prefix for file names created during the external pull-in.
2	Reel ID field	The Reel ID field displays the Reel ID , which is entered by the user in the process of opening up a new external pull-in.
3	Rec In (record in point) field	The Record In field displays the record In Point of the edit as set up by the user.
4	Clip Name field	The Clip Name field displays the clip name, which may be entered by the user. Note that naming conventions restrict this name to 8 characters.
5	Comment field	The Comment field allows the user to enter a comment for the edit. Click once in the field with the mouse, and type in the comment.

6	External channel pulldown menu	The External channel pulldown menu allows the user to select between external channels, and displays the current selection.
7	Internal channel pulldown menu	The Internal channel pulldown menu allows the user to select between internal channels, and displays the current selection.
8	Heads/Tails field	The Heads/Tails field allows the user to add a number of frames to the beginning and end of the clip, to provide a buffer zone for editing.
Context (right-click) Menu

Right click on the **External Pull-in** window to reveal the context menu. Please refer to the following diagram and associated chart for a list of available controls and their functions.

Delete	Alt+Eksp
Transfer Single	
Transfer All	90)(
EDL Reset Rec 1	ins
EDL Invert Rec/	Play
EDL Make B-Roll	

Delete (Alt+Bksp)	Delete the selected item from the pull-in.
Properties (F3)	Load the selected media into the Properties window.
Transfer Single	Perform a pull-in of a selected single item only.
Transfer Selection	Perform a pull-in of a selection of items from the list.
Transfer All	Perform the entire pull-in as set up in the list. All items will be performed in sequence.
EDL Reset Rec Ins	Reset all "Record In" points from all the items within this pull-in.
EDL Invert Rec/ Play	Invert the Record and Play actions within this pull-in.
EDL Make B-Roll	Make a B-Roll using the pull-in parameters.

T-Bar Shuttle

The **T-Bar** Shuttle allows the user to set up multi- and variable speed replay for media editing and review applications. This window may be opened using the main menus, under **Window/ T-Bar Shuttle (Ctrl+T)**. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Maximum Playback	Enter a maximum playback speed for the T-Bar
	Speed field	Shuttle in this field. This speed is entered as a percentage of 100.
2	Current Playback Speed field	Displays the current playback speed or 0 if not in Play mode.
3	Play button	Play the selected media.
4	Pause button	Pause playback of the selected media and display the frame of video at the current location. If in pass-through mode, will stop pass-through signal and display the first frame of video of selected media.

5	Reverse Play button	Play the selected media in reverse at -100% of play speed.
6	Shuttle Bar	Grab the Shuttle Bar with the mouse and move it up to reverse shuttle. Move it down to forward shuttle. Release the Shuttle Bar to engage the Snap action. The Shuttle Bar shuttles faster or slower depending on how far in one direction it is placed, up to a maximum speed. Playback speeds are subject to hardware constraints and the user's settings in the maximum and minimum playback speed fields.
7	Play on Snap button	With Play selected in the Snap section, releasing the Shuttle Bar will cause QuickClip to go into Play mode, and play the media from the current location.
8	Pause on Snap button	With Pause selected in the Snap section, releasing the Shuttle Bar will cause QuickClip to go into Pause mode at the current location and display the frame of video found there.
9	Jog on Snap button	With Jog selected in the Snap section, releasing the Shuttle Bar will cause QuickClip to go into Pause mode at the current location and display the frame of video found there, waiting for the user to engage the Shuttle Bar .
10	Hold on Snap button	With Hold selected in the Snap section, releasing the Shuttle Bar will cause QuickClip to play the media from the current location at the speed indicated by the last position of the Shuttle Bar .
11	Entered Speed on Snap button	With Entered Speed selected in the Snap section, releasing the Shuttle Bar will cause QuickClip to play the media from the current location at the speed entered in the field to the right of the Entered Speed button.
12	Minimum Playback Speed field	Enter the Minimum Playback Speed for the T-Bar Shuttle in this field. This is useful during media editing and review applications, to keep playback within a certain speed range to accommodate the user's preferences or workflow.

13	Channel pulldown	Displays the current playback Channel and allows the
	menu	user to select between all available playback channels using the pulldown menu to the right of this field.

Sync Record window

The **Multi-Channel Sync Record** window allows the user to synchronize the "start record" time for multiple selected channels. This window may be opened in the main menus, under **Window/ Sync Record**, or pressing **Ctrl+R**. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Duration checkbox and field	Selecting the checkbox allows the user to set a "stop record" location (a maximum length for the recording). Enter a duration for the record in the time code field (to the right of the checkbox) using standard HH:MM:SS;FF nomenclature.
2	Channels selectors	Available channels will be displayed as channel 0 above, with a checkbox and a duration field. The user may select any available channels, and synchronize the beginning of the capture for all of the selected channels.

3	Offset Display field	The user may set an offset, to allow the time code as displayed during recording to match a house, or reference time. This field is where the offset value is displayed.
4	Offset pulldown menu	Select between available offset choices. No offset turns this feature off. User defined allows the user to enter a time code value as the displayed time code. Use Clock gleans the time code from the internally generated clock.
5	Clip Name field	Displays the default clip name prefix, to which the channel number will be appended in order to create the individual clip names for each of the selected channels.
6	Record button	Select this control to start the synchronized capture of all the selected channels.
7	Stop button	Select this control to stop the synchronized capture.
8	Pause button	Select this control to Pause synchronized playback of all loaded channels.
9	Play button	Select this control to simultaneously play all loaded channels. Where the naming convention is correct, loading the first of multiple clips in the Clip Bin loads all associated clips into the Sync Record window for synchronized playback.
10	Use Recorded checkbox	Select this control to enable the use of multiple associated clips for synchronized playback upon loading the first clip in the Clip Bin .
11	Loop Playback checkbox	Select this control to loop the playback (from start to finish over and over again) of multiple associated clips.
12	Configure/ Channels toggle switch	Toggles between the Configure and Channels section of the Sync Record window. The Configure section allows the user to set up the audio and video channels. The Channels section offers controls for each of the channels being synchronized.

Sync Record window – Configure mode

The **Multi-Channel Sync Record** Configure section allows the user to select or de-select video and audio channels for the synchronized capture. Toggle between the **Channels** section and the **Channels** section using the toggle button at the lower right of this window. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Video Channels checkboxes	Select the number of associated video channels to create during the synchronized capture (hardware-dependent).
2	Audio Channels checkboxes	Select the number of associated audio channels to create during the synchronized capture (hardware-dependent).
3	Record Delay field	Adjust the delay for the start of capture by number of milliseconds.
4	Record Stop Delay field	Adjust the delay for the end of capture by number of milliseconds.

AutoProxy

AutoProxy Setup

V Proty Enable/WMV Prony	
Prolite	
HD 20P@29.97 Cribs Video (VBR) / (8kHz	
Fast Scale Force 2 Pass Fo	Gold Heating 2 Parts
C Prints	

The **WMVProxy** window is where the user will set up the profile and folder parameters for **AutoProxy**. Please refer to the following diagram and associated chart for available controls and functions.

#	Control	Function
1	Enable WMVProxy checkbox	This control enables proxy file generation during video capture
2	With Source checkbox	The proxy file is generated and stored in the same folder as the source file
3	Fast Scale checkbox	Creates a faster transcode by lowering the quality setting. This reduction in quality is set by default and may not be adjusted. This setting will not affect all codecs.
4	Duplicate Path checkbox	Selecting this checkbox will copy the structure of the source folder including the subfolders to the proxy folder selected by the user. The With Source checkbox must be de-selected to enable this choice.
5	Force 2-Pass checkbox	Some codecs may be increased in quality with a two-pass processing. This is codec-dependent. Applying two-pass encoding to certain codecs will not produce higher quality.

QuickClip [™] Software

6	Codec Requires 2-Pass checkbox	Some codecs require two passes to create a file. Some codecs may be increased in quality with a two-pass processing. Auto Proxy detects a format that requires 2- Pass encoding. To ensure 2-Pass encoding does not interfere with the capture (dropped frames etc.), it may be necessary to ensure 2-pass encoding is set to occur After Records . See the Auto Proxy window.
7	Destination Folder field	Uncheck the With Source checkbox then select the browse button to select a folder in which to store the proxy file.
8	Profile pulldown menu	Use the pulldown menu to select between available video Profile choices for the proxy file.

Auto Proxy Window



The **AutoProxy** window is where the user will be able to watch proxy file creation activity and adjust specific parameters regarding proxy file creation. Please refer to the following diagram and associated chart for available controls and functions.

#	Control	Function
1	Conditions pulldown menu	Displays the current condition under which AutoProxy will create proxy files. Use the pulldown menu to choose between available conditions.
2	Limit CPU checkbox	Select this checkbox to limit the amount of processor power dedicated to running AutoProxy by total percentage. Type

		in a value in the CPU Percentage field.
		_
3	CPU Percentage field	With Limit CPU selected, type in a value (10 per cent or greater).
4	CPU Activity field	Displays the current percentage of processing power being used by AutoProxy .
5	Current File field	Lists the current file that AutoProxy is using to create a proxy file.
6	Media Type pulldown menu	Displays the current media type. This is set up in the WMV Proxy setup dialog box.
7	Path Parameters pulldown menu	Displays whether AutoProxy is set to create proxy files in the same directory as the source files (with source), in a specified location in one folder (flat path) or in a specified location copying the folder and subfolder structure used by the source files (duplicate path).
8	Add button	Press this button to browse for a media file to add to the list of files used to create proxy files.
9	Promote button	Select a file from the list and press this button to promote it (raise it one file upward in the list). AutoProxy treats the files from this list sequentially, so a promoted file would generate a proxy file sooner.
10	Remove button	Select a file from the list and press this button to remove it from the list of files. There will be no proxy file created from this file.
11	Clear button	Press this button to clear the entire list of files. This means there will be no proxy files being created from the removed files.
12	File List field	Displays the list of files being used to create proxy files.

Options Menus

Options Menus - Local System

The **Options** menus function as an advanced setup and display interface for **Local**, **General**, **Media I/O**, and **Storage** settings. Here is the **Local System** section of the **Options** menus. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function	
1	Local System Tab	The Tabs at the top of the Options menus allow the user to select which "page" of the Options menu may be addressed. To access the Local System options, select	
		the Local System Tab.	
2	Driver Configuration	The Driver Configuration checkboxes allow the user to	
	checkboxes	select between drivers for specific installations of	
		QuickClip . These controls are duplicated in	
		LocalConfig.	

3	Local Setup buttons	Allows the user to Configure , Add , Remove or Export channel settings. Not active in all versions of QuickClip .	
4	VVW Type field	Describes the type of QuickClip installation in terms of software product or VVW model number.	
5	Channel Type field	Describes the settings for the internal media channel.	
6	VVW Version field	Describes the software version of QuickClip for the current installation.	
7	MediaReactor Version field	Describes the software version of MediaReactor for the current installation, if present.	
8	Restart button	Allows the user to Restart the Drastic Device. Not active in all versions of QuickClip .	
9	Force VGA video checkbox	Select the Force VGA video checkbox to open a VGA screen video monitor, allowing the user to view media input/output on their VGA screen.	
10	Channel pulldown menu	Displays the current Channel , and allows the user to select the pulldown menu, which displays all available channels. The user may select from the pulldown menu to apply changes to another channel.	
11	Resize VGA display pulldown menu	Resize the VGA screen virtual monitor.	
12	Done button	Select the Done button to retain any changes made and close the Options menus.	

Options Menus – General

Here is the **General** section of the **Options** menus. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Signal Format pulldown menu	Use the Signal Format pulldown menu to select between available video formats for the specified channel.
2	General Tab	Select the General Tab to access the General Options.
3	Def TC Source pulldown menu	The Define Time Code Source pulldown menu displays and allows the user to select between available time code sources, whether LTC, VITC, CTL etc.
4	Def TC Type pulldown menu	The Define Time Code Type pulldown menu displays and allows the user to select the time code type being used from a list of available types.
5	Internal Format section	The Internal Format section displays and allows the user to set the parameters of internal compression for specific systems.

6	GOP Structure section	The GOP Structure section displays and allows the user to set the parameters of MPEG-2 compression for specific hardware configurations.	
7	Channel pulldown menu	The Channel pulldown menu displays the channel to which any changes made will apply. In multiple channel systems, the user will be able to select between available channels using the pulldown menu.	
8	Def Still Length field	The Define Still Length field allows the user to enter a specific maximum length by frames for capture of a series of stills. Applicable to specific installs only.	
9	Inhibit Recording/ Inhibit Deletion checkboxes	The Inhibit Recording checkbox allows the user to prevent media capture on specific systems. The Inhibit Deletion checkbox allows the user to prevent media file deletion on specific systems.	
10	Storage Status section	 The Storage Status section displays the following information about the system's storage: 1. The total amount of storage installed in the system in megabytes 2. The length of video the system could capture at the current rate and file structure, 3. The actual amount of free storage in megabytes, 4. The length of video the system would likely be able to capture at the current rate and file structure and file structure without overwriting existing files. 	
11	Done button	Select the Done button to retain any changes made and close the Options menus.	

Options Menus – Video In

Here is the **Video In** section of the **Options** menus. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function	
1	Input TBC section	The Input TBC offers setup controls for an incoming video signal. This allows the user to adjust the Setup, Video, Hue, Chroma, UChroma and VChroma of an incoming video signal. Use the sliders to adjust the control up (greater) or down (less). Use the D buttons to return to the default setting. Not supported on all hardware platforms.	
2	Video Input pulldown menu	The Video Input pulldown menu allows the user to select between available video input types. Limited to the types supported by the hardware in the system.	
3	Video In tab	The Video In Tab allows the user to select the Video In section of the Options menu.	

4	Broadcast checkbox	The Broadcast option should only be checked when advised to do so by Drastic's Support Personnel. This control functions to enable specific hardware when applicable to the platform.
5	Auto Gain checkbox	The Auto-Gain option allows the user to apply automatic gain/limiter processing to the incoming video signal.
6	Color Killer checkbox	The Color Killer option allows the user to remove the color information from the incoming video signal.
7	Sharp (sharpness) slider	The Sharp slider allows the user to adjust the sharpness of the incoming video signal.
8	Gamma slider	The Gamma slider allows the user to adjust the gamma of the incoming video signal.
9	Bandwidth pulldown menu	The Bandwidth pulldown menu allows the user to select between available bandwidth rates for optimum performance.
10	Black (Level) pulldown menu	The Black pulldown menu allows the user to select between available black levels.
11	White (Level) pulldown menu	The White pulldown menu allows the user to select between available white levels.
12	Peaking pulldown menu	The Peaking pulldown menu allows the user to select between available peaking settings to be applied to the video input.
13	Coring pulldown menu	The Coring pulldown menu allows the user to select between available coring (a noise reduction filter useful for key and fill applications) settings to be applied to the video input signal.
14	Show button	The Show button applies any changes to the video output signal for monitoring or adjustment.
15	Channel pulldown menu	The Channel pulldown menu allows the user to select which channel the changes will apply to. Touch the pulldown arrow to reveal all available channels.

16	The Done button sets the changes into memory and closes the Options menus.

Options Menus – Video Out

Here is the **Video Out** section of the **Options** menus. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Output TBC section	The Output TBC offers setup controls for an incoming video signal. This allows the user to adjust the Setup , Video , Hue , Chroma , UChroma and VChroma of an incoming video signal. Use the sliders to adjust the control up (greater) or down (less). Use the D buttons to return to the default setting. Not supported on all hardware platforms.
2	Video Output pulldown menu	The Video Output pulldown menu allows the user to select between available output channels.
3	Video Out tab	The Video Out Tab allows the user to select the Video Out section of the Options menu.

4	Filter pulldown menu	The Filter pulldown menu allows the user to choose between available filters or no filter on video output. Not supported on all hardware platforms.
5	Color checkbox	The Color checkbox allows the user to deselect for color on output (black & white playback). Not supported on all hardware platforms.
6	Coring pulldown menu	The Coring pulldown menu allows the user to select between available coring (a noise reduction filter useful for key and fill applications) settings to be applied to the video output signal.
7	Peaking pulldown menu	The Peaking pulldown menu allows the user to select between available peaking settings to be applied to the video output.
8	Black Level pulldown menu	The Black pulldown menu allows the user to select between available settings for the black level on output. Not supported on all hardware platforms.
9	Bars button	The Bars button accesses and plays internally generated color bars for test output. Not supported on all hardware platforms.
10	Lock checkbox and pulldown menu	Select the Lock checkbox to activate the Lock pulldown menu which allows the user to select between available genlock sources.
11	Horizontal Phase slider	The Horizontal Phase slider allows the user to adjust the horizontal phase. The current setting is displayed in the field to the right of the slider.
12	Sub Carrier slider	The Sub Carrier slider allows the user to adjust the sub carrier setting. The current setting is displayed in the field to the right.
13	Delay	The Delay slider controls video delay timing on specific hardware platforms.
14	Adjust 1	The Adjust 1 slider controls video timing on specific hardware platforms.

15	Adjust 2	The Adjust 2 slider controls video timing on specific hardware platforms.	
16	Channel pulldown menu	The Channel pulldown menu displays the current channel the changes will apply to. Use the pulldown arrow to select between available channels.	
17	Done	The Done button closes the options menus. Any changes made will be applied to the selected channel.	

Options Menus – Audio In

Here is the **Audio In** section of the **Options** menus. Please refer to the following diagram and associated chart for available controls and functions.

Uptions		
Local System General Vi	deo In Video Out Audio In	Audio Out Storage/Format
Audio Inputi Audio Inputi		Advanced
		The Contract of Co
		Contra Contra
No pue pue	্র ু ব আৰু আৰু আৰ	I I Nore I
1 Jul		
annel Int ONTSC-CCIP	1-868A32 -	Done
6	H868A32	

#	Control	Function
1	Audio Inputs – audio channel, level slider, level and default buttons	Each audio input channel is listed with an input level gain slider and a current input level display beneath it. Move the slider up to increase, and down to decrease the input gain. Press the D button (Default) to return to default values for the audio channel. <i>Note: channels 5-8 are hidden when using the advanced</i> <i>Audio Input interface.</i>
2	Audio Input pulldown menu	The Audio Input pulldown menu allows the user to select between available audio input types.
3	Audio In tab	The Audio In Tab allows the user to select the Audio In section of the Options menu.

4	LTC Enable, LTC type pulldown menu and Match Output button	Select the LTC Enable checkbox to implement LTC (longitudinal time code). Select between available LTC types using the pulldown menu. Select the Match Output button to use LTC on playback. Not supported on all hardware platforms.
5	Advanced button	Select the Advanced button to reveal the advanced audio input section. Channels $5 - 8$ are grayed out during this operation.
6	Channel pulldown menu	The Channel pulldown menu allows the user to select which channel the changes will apply to. Touch the pulldown arrow to reveal all available channels.
7	DTMF Enable, DTMF pulldown menu and Match Output button	Select the DTMF Enable checkbox to implement DTMF (dual tone multi-frequency) time code. Select between available DTMF types using the pulldown menu. Select the Match Output button to synchronize DTMF output with playback. Not supported on all hardware platforms.
8	Listen button	Select the Listen button to monitor audio input locally. Not supported on all hardware platforms.
9	Done button	The Done button sets the changes into memory and closes the Options menus.

Options Menus – Audio In - Advanced

Selecting the **Advanced** button on the **Audio In** section of the **Options** menus adds specific controls to the interface. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Bit Rate pulldown menu	Select between available Bit Rate settings for audio capture. Not supported on all hardware platforms.
2	Sample Rate pulldown menu	Select between available Sample Rate settings for audio capture. Not supported on all hardware platforms.
3	Audio Mode pulldown menu	Select between available audio input modes. Not supported on all hardware platforms.
4	Head Room pulldown menu	Select between available Head Room settings for audio capture. Not supported on all hardware platforms.
5	Bass slider and input level display field	Select the Bass Slider to adjust the bass level up (right) or down (left). Input level displays the current setting. Not supported on all hardware platforms.

6	Treble slider and input level display field	Select the Treble Slider to adjust the treble level up (right) or down (left). Input level displays the current setting. Not supported on all hardware platforms.
7	Error Protect checkbox	Select the Error Protect checkbox to engage error protection during audio capture. Not supported on all hardware platforms.
8	Copyright checkbox	Select the Copyright checkbox to specify media which is protected by copyright. Not supported on all hardware platforms.
9	Original Flag checkbox	Select the Original Flag checkbox to maintain an original flag during audio capture. Not supported on all hardware platforms.
10	Audio Slave checkbox	Select the Audio Slave checkbox to engage audio slave track assignment during audio capture. Not supported on all hardware platforms.

Options Menus – Audio Out

Here is the **Audio Out** section of the **Options** menus. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Audio Outputs –	Each audio output channel is listed with an output level
	audio channel,	gain slider and a current output level display beneath it.
	output level slider,	Move the slider up to increase, and down to decrease the
	level and default	output gain. Press the D button (Default) to return to
	buttons	default values for the audio channel. Not supported on
		all hardware platforms.
2	Audio Output	The Audio Output pulldown menu allows the user to
	pulldown menu	select between available audio output types.
	_	
3	Audio Out tab	The Audio Out Tab allows the user to select the Audio
		Out section of the Options menu.
		-

4	LTC Enable, LTC type pulldown menu and Match Output button	Select the LTC Enable checkbox to implement LTC (longitudinal time code). Select between available LTC types using the pulldown menu. Select the Match Output button to use LTC on playback. Not supported on all hardware platforms.
5	Channel pulldown menu	The Channel pulldown menu allows the user to select which channel the changes will apply to. Touch the pulldown arrow to reveal all available channels.
6	DTMF Enable, DTMF pulldown menu and Match Output button	Select the DTMF Enable checkbox to implement DTMF (dual tone multi-frequency) time code. Select between available DTMF types using the pulldown menu. Select the Match Output button to synchronize DTMF output with playback. Not supported on all hardware platforms.
7	Test button	Press the Test button to generate a test tone to use for adjusting audio output level, timing, quality, or to adjust the monitors. Not supported on all hardware platforms.
8	Done button	The Done button sets the changes into memory and closes the Options menus.

Options Menus – Storage/Format

Here is the **Storage/Format** section of the **Options** menus. Please refer to the following diagram and associated chart for available controls and functions.

Recording	Storage Drive(s)
File Type Avi	T FALLEN
Video Single Link	• [[] [] [] [] [] [] [] [] []
Compression YCrCb 4:22	
Bit Depth N8 Bits	
Video Std WITSC CCIR-601	
Enable SD IV Enable HD	Media Reactor LE
Use VBlank Save VBla	File Type Open An V
Enable LUT [LUT Linea	Riphlan -
Set	Autovie Tipe Interleaved

#	Control	Function
1	Video File Type pulldown menu	Displays the current video file type QuickClip is set to record. Touch the pulldown arrow to reveal or select from a list of available video file types. Available video file types are hardware-dependent.
2	Video Channel Type pulldown menu	The Video Channel Type pulldown menu allows the user to select between "Normal" (single link), "In2=Alpha" (uses two inputs for key and fill applications), or "DualLink" (uses two inputs to provide higher color resolution) settings for video capture.
3	Compression pulldown menu	The Compression pulldown menu allows the user to select between available video codecs.
4	Bit Depth pulldown menu	The Bit Depth pulldown menu allows the user to select between available bit depth settings, which control the resolution of the image.

5	Video Standard pulldown menu	The Video Standard allows the user to select between available video standards for the system.
6	Enable (SD and HD) checkboxes	The Enable SD checkbox allows the user to enable SD capture and playback on the system. The Enable HD checkbox allows the user to enable HD capture and playback on the system. These functions are hardware-dependent.
7	Use VBlank and Save VBlank checkboxes	Select Use VBlank to use the vertical blank information. Select Save VBlank to save the vertical blank information. These functions are hardware-dependent.
8	Enable LUT and LUT Linear checkboxes	Select Enable LUT to enable the use of a specific or custom lookup table (LUT) to render color space information more accurately. Select LUT Linear to enable the use of a specific or custom Linear lookup table to render color space information more accurately. These functions are hardware-dependent.
9	Split Audio checkbox and Audio Container pulldown menu	Select the Split Audio button to create separate audio files during capture from a source which has audio and video in one file. The Audio Channel pulldown menu allows the user to set split audio capture parameters. Selecting A12 sets this channel to record two audio files (a matched stereo pair) for each video file (s) recorded. Some hardware platforms support additional channels per video file. Selecting A1234 sets this channel to record four audio files for each video file, for example. Not supported on all hardware platforms, and dependent upon file type source and target.
10	Set button	Press the Set button to enter any changes made in the Format section into memory. The changes will apply to the selected channel only.
11	Channel pulldown menu	The Channel pulldown menu allows the user to select which channel the changes will apply to. Touch the pulldown arrow to reveal all available channels.
12	Storage/Format tab	The Storage/Format Tab allows the user to select the Storage/Format section of the Options menu.

13	Storage Drives section	Hard Drives on the system which have been identified as media Storage Drives are displayed from first to last in this section. A browse button () allows the user to search for and add or change a drive in this list.
14	(MediaReactor LE) Automatic Background Conversions checkbox	Select the Automatic Background Conversions checkbox to enable automated MediaReactor file conversions during video capture. Features are specific to certain VVW models – requires an installation of MediaReactor.
15	(MediaReactor LE) File Type pulldown menu	Displays the current file type MediaReactor will convert to. Features are specific to certain VVW models – requires an installation of MediaReactor .
16	(MediaReactor LE) Split Audio checkbox	Use MediaReactor file conversion software on a VVW Series DDR to create separate audio files from a source which has audio and video in one file. Features are specific to certain VVW models – requires an installation of MediaReactor .
17	(MediaReactor LE) Audio File Type pulldown menu	Displays the current audio container MediaReactor will use when creating files. Features are specific to certain VVW models – requires an installation of MediaReactor .
18	Done button	The Done button sets the changes into memory and closes the Options menus.

F3 - Properties Display window

The **Properties** window displays the properties for selected digital media. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	File Path field	Displays the file path of the loaded file according to <i>drive/folder/subfolder/filename*.extension</i> nomenclature.
2	Video Format field	Describes the frame size and frame rate of the video in the loaded media file.
3	Audio Format field	Describes the resolution and codec of the audio in the loaded media file.

4	Advanced Properties button	Toggles between the Simple and the Advanced properties display. The Simple display removes all the display fields and controls below the Advanced Properties button.
		M:\Third Party Test Media\Streams\Avi\Motion JPEG\TVMJ Tar 720x486@29.97 jmvt
		Above is the Properties window in Simple mode.
5	Auto-Load checkbox	Select the Auto-Load checkbox to automatically load the properties of any selected clip into the Properties window.
6	Horizontal Resolution display	Describes the number of lines of horizontal resolution for the loaded file and for the system.
7	Vertical Resolution display	Describes the number of lines of vertical resolution for the loaded file and for the system.
8	Bit Count display	Describes the bit count for the loaded file and for the system.
9	Compression display	Describes the compression type (or uncompressed format) for the loaded file and for the system.
10	Image Size display	Describes the image size for the loaded file and for the system (in bytes).
11	FCC Handler display	FCC (File Compression Constraints) Handler field – displays the codec system for the loaded file and for the system.
12	Frame Rate display	Describes the Frame Rate in frames per second for the loaded file. For example NTSC drop frame is listed as 30000 / 1001, or 30,000 frames every 1,001 seconds.
13	Start display	Displays the Start frame for the loaded file and for the system.

14	Length display	Displays the Length for the loaded file and for the system.
15	Frame display	Describes the video Frame , displaying the size, and start and end frames for the loaded file and for the system.
16	Pitch display	The Pitch column describes the bytes per line count of the video for the loaded file and for the system.
17	File Information pulldown menu	Displays standard file properties information associated with Windows files. May be entered/ edited by the user for each file by right-clicking on the file and selecting properties from the menu.
18	Current File column	The Current File column displays the settings for the current (loaded) file for each row.
19	System Settings column	The System Settings column displays the settings for the system for each row.

QuickClip [™] Software

The **Properties** menu provides a method to identify incompatibility issues which might prevent real-time playback of the selected media file. Each selected file that is loaded into the **Properties** window is compared to the system settings for media files. If incompatible properties are detected, the offending information is displayed in red.

Incompatible Codec

1920x1080@29.97 v21 48000 16 Bits 2 Charry		Advanced s
	Current File	System Settings
Horizontal Resolution	1920	1920
Vertical Resolution	1080	1080
Bit Count	16	16
Compression	v210	2Mg
Image Size	5529600	4147200
FCC Handler	¥210	2vay
Frame Rale	38000 / 1007	3000071001
Start	0	
Length	4206	
Frame	1080.0.1920.0	
Plich	5120	3840

The above example shows the **Properties** window with an incompatible file loaded. A 10 bit file has been selected on a system set up for 8 bit files. This shows up in the compression field. As well, this makes the **Image Size**, **FCC Handler** and **Pitch** incorrect.

Incompatible Vertical Size

1920x1112@29.97 v21 48000 16 Bits 2 Chann		Auto Load
	Current File	System Settings
Honzontal Resolution	1920	1920
Vertical Resolution	1112	1060
Bit Count	16	16
Compression:	v210	v210
Image Size	5693440	5529600
FCC Hander	v210	v210
Frame Rate	2997 / 100	30000 / 1001
Start	0	
Length	60	
Frame	1112.0.1920.0	
Pitch	5120	5120

The above example shows the **Properties** window with an incompatible file loaded. A 1920 x 1112 raster size file has been selected on a system set up for a 1920 x 1080. This also makes the **Image Size** incorrect.

Channel Status window

The **Channel Status** window displays the status of each channel in **QuickClip**. The channels displayed will vary according to the configuration. This window may be opened using the main menus, under **Window/ Channel Status (Ctrl+H)**. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	External Channel Ext0 field	Displays the external channels with the channel number (starting at Ext0) and the COM port used.
2	Internal Channel Int0 field	Displays the internal channels with the channel number (starting at Int0) and the video standard setting for the channel.
3	CPU Usage meter	Displays the current CPU Usage as a percentage of total available CPU processing bandwidth.
4	External Channel Video Buffer meter	Displays the current video buffer usage (for the external channel) as a percentage of total available space allocated to the video buffer. This meter allows the user to confirm that the system is performing "read-ahead" video buffering during playback etc.
5	Internal Channel Video Buffer meter	Displays the current video buffer usage (for the internal channel) as a percentage of total available space allocated to the video buffer. This meter allows the user to confirm that the system is performing "read-ahead" video buffering during playback etc.

6	Displays the current memory usage as a percentage of total available memory.

Data Window

The **Data** window displays channel-specific data. Please refer to the following diagram and associated chart for available controls and functions.

ata Monitor Chen # 0	Trissmooth -	Termine La	p.Biene 5
Channel User ID 0	Channel User ID-1	Charinel User ID 2	Charmel User ID 3
Field Odd @ Field Even	@ mediled. @ rediven	Chield add @ meidliven	C Field Liver
Start Run Sancke Time Crimuth Brange2 S1 S2 S3 S4 S4 S5 S5 S5 S5 S5 S5 S5 S5 S5 S5 S5 S5 S5	Start Run Sample Time Astruth Elevation Ranget Ranget Ranget Star S3 S3 S4 S4 S4 S4 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S5 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1	Statt Pran Sample Time Azmruth Elevotion Runge1 Runge1 Runge2 S1 S2 S3 S3 S4 S4 S4 S4 S4 S4 S4 S5 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1 S1	Stori Pun Sample Tinte Armoth Enviroten Range3 Range3 S1 S2 S2 S3 S4 S4 S5 Stop

#	Control	Function
1	Channel field	Displays the channel by ID with which the data below is associated.
2	Video Field Dominance field	Displays the order of video field display, whether the first frame is even or odd-numbered. The user may reverse the field dominance by selecting the unselected button.
3	Data field	Displays the data associated with the channel listed in the field above.

Error Log Window

The **Error Log** window displays a list of specific errors encountered in **QuickClip**. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Event column	Displays the event number of the message.
2	Error checkbox	Select to enable display of error messages.
3	Save button	Press the Save button to save the error log as a text file. The error message will be saved in the Profiles directory of QuickClip .
4	Warning checkbox	Select to enable display of warning messages.
5	Time column	Displays the time of the message.
6	Caution checkbox	Select to enable display of caution messages.
7	Clear button	Select to clear the Error Log of any messages.
8	Status checkbox	Select to enable display of status messages.
9	Message column	Displays the message associated with the event being noted in the Error Log .
10	Auto Scroll checkbox	Select to allow auto-scrolling through the list of messages.
QuickClip TM Software

11	User checkbox	Select to enable display of user-associated messages.
12	Event Numbers display	Each event is numbered starting at number 1, incrementing by single integers.
13	Slider bar	Use the Slider Bar to scroll through the messages to display any messages not displayed.

VVW Preview Display

The **VVW Preview Display** window is a VGA screen media preview display. The rightclick (context) menu is displayed on the diagram below. Refer to the following diagrams and associated charts for information regarding the available controls and their functions.



#	Control	Function
1	VVW Preview Display image screen	The image screen is where video will be displayed.
2	Context Menu - Show All option	Select this option to show each individual frame of the selected media, even if real-time playback is compromised.
3	Context Menu - Channel selector	Select between available output channels.
4	Context Menu – Normal Size option	Show the VVW Preview Display screen at full size, or 100%.
5	Context Menu - ½ Size option	Shrink the VVW Preview Display screen to half size
6	Context Menu - ¹ / ₄ Size option	Shrink the VVW Preview Display screen to one quarter size, allowing more room on the desktop.

The Status Bar

The Status Bar displays real-time information regarding the channels in QuickClip. Please refer to the following diagram and associated chart for available controls and functions.



#	Control	Function
1	Activity field	Displays the current activity.
2	Date field	Displays the current date.
3	TC & Video Standard field	Displays the current time.

Authorization Window

The **Authorization** window allows the user to copy a **Site Code** and enter a **Site Key** for the purposes of updating the license status. Refer to the following diagrams and associated charts for information regarding the available controls and their functions.

Qui	kClip A ithorization
É	Please provide an authorization code to activate your program
	Please send Site Code to Diastic Technologies Ud. & Autostration@drastictech.com to obtain a site key.
0.0475	SRe Code n:
D4	E4 29C3 B6CA 373B 5B
Plea	e enter your Site Key for authorization
1.3	

#	Control	Function
1	Site Code field	This field displays the Site Code , a string of numbers and letters matched to this installation of QuickClip.
2	Site Key field	This field allows the user to input a Site Key , a string of numbers and letters which must be generated based on the Site Code .
3	Process button	Enter a Site Key into the Site Key field and press the Process button to update the license for this installation of QuickClip.
4	Close button	Close the Authorization window without updating the license.

About window

The About window displays the version number of QuickClip.



QuickClip TM Software

The Main Menus

File Menu

Here is the **File** section of the **Main Menus**. Please refer to the following chart for available controls and functions.

File		
Open Cip Bin		
Open VTR Space		
Open Film Space		
Add Media Fifes To Bin		
New Digitize/VTR Pull In	Ctrl+I	
New Playlist/VTR Lay Back	Cbi+P	
Open	Cb1+O	
Open Digitize/VTR Pull In		
Open Playlist/VTR Lay Back		
Save EDL or Playlist	Ctrl+S	
Save Au		٠
Close		
License		×
C:\Share\Simple PlayList.ply		
C:\Share\Greater_PlayList.ply		
C:\Share\Default.ed		
C:\Share\DrasticPlay.ply		
Ext		

Open Clip Bin	Open a standard browser, which allows the user to search for and open a saved Clip Bin .
Open VTR Space	Open a standard browser, which allows the user to search for and open a saved VTR Mode TC Edit List .
Open Film Space	Open a standard browser, which allows the user to search for and open a saved Film Space Edit List .
Add Media Files to Bin	Opens a standard browser, which allows the user to search for media files to add to either the Clip Bin or to VTR Tape Mode time code space.

New Digitize/VTR Pull In (Ctrl+I)	Opens a New Pull-in window, which allows the user to set up the parameters for capturing media from an external VTR (under serial control), according to In/ Out points created by the user.
New PlayList/VTR Layback (Ctrl+P)	Opens up a New PlayList window, which allows the user to set up the parameters for sequenced playback of available media, or for a "layback" of media to an external VTR or DDR (under serial control), according to In/Out points set up by the user.
Open (Ctrl+O)	Opens a standard browser, which allows the user to search for and open media files available on local, remote or networked storage.
Open Digitize/VTR Pull In	Opens a standard browser, which allows the user to search for and open a saved Pull-in list.
Open PlayList/VTR Layback	Opens a standard browser, which allows the user to search for and open a saved PlayList .
Save EDL or PlayList (Ctrl+S)	Opens a standard "Save As" dialog box, which allows the user to save an open EDL or PlayList in a location of their choice.

•	Play List
	External Pull In
	Cip Bin
	Time Code Space
	EDL.
	Inverted EDL

(Save As) PlayList	Opens a standard "Save As" dialog box, which allows the user to save an open PlayList in a location of their choice.
(Save As) External Pull In	Opens a standard "Save As" dialog box, which allows the user to save an open External Pull-In in a location of their choice.
(Save As) Clip Bin	Opens a standard "Save As" dialog box, which allows the user to save an open Clip Bin in the location of their choice.

(Save As) Time Code Space	Opens a standard "Save As" dialog box, which allows the user to save the contents of the VTR Mode TC Edit List in the location of their choice.
(Save As) EDL	Opens a standard "Save As" dialog box, which allows the user to save an open EDL in the location of their choice.
(Save As) Inverted EDL Opens a standard "Save As" dialog box, which allo user to save an open EDL in inverted format, in the location of their choice.	
Close	Close a PlayList or External Pull-in
Lice	nce License Authorization

IUI License

License – License Authorization	Opens the QuickClip Authorization window, which displays the site code, and allows the user to update the status of the license by entering a Site Key matched to the system and installation. This Site Key is provided by Drastic.
License – Kill License	Allows the user to destroy the license, which may be useful in rare circumstances where the license has become corrupted and must be replaced.
(File List)	Displays a list of recent files, including file path, name and extension information.
Exit	Exit from (and close) QuickClip. The user will be prompted to Save any unsaved files, such as PlayLists, Pull-ins etc.

Edit Menu

Here is the **Edit** section of the **Main Menus**. Please refer to the following chart for available controls and functions.

Cut	Chi+X
Copy	Ctrl+C
Paste	Ctrl+V
Paste Below	Ctrl+8
Paste Over	
Paste At End	Ctrl+E
Remove	Shift+De
Properties	FI
Insert Command	Ctriez
Edit Clip	

Edit Menu – with PlayList selected

Cut (Ctrl+X)	Remove the selected clip(s) from the Clip Bin and place it in the buffer for pasting.
Copy (Ctrl+C)	Copy the selected clip(s) from the Clip Bin and place it in the buffer for pasting.
Paste (Ctrl+V)	Paste a copied clip(s) from the buffer into the PlayList .
Paste Below (Ctrl+B)	Paste a copied clip(s) from the buffer below the clip(s) selected in the PlayList .
Paste Over	Remove a clip(s) selected in the PlayList and insert the clip(s) from the buffer in its place.
Paste at End (Ctrl+E)	Paste a copied clip(s) from the buffer at the end of the PlayList .
Remove	Remove the selected clip from the PlayList . Does not delete the clip from the hard drive.
Properties (F3)	Open the Properties menu.
Insert Command	Open the Insert Command menu, which allows the user to insert a command into a PlayList .

QuickClip TM Software

Edit ClipOpen the Edit Clip menu, which allows the user to trim the In/
Out points of a clip, or create/ rename trimmed clips.



Edit Menu – with Clip Bin selected

un menu – with C	nt Menu – with Chp Bhi selecteu		
Copy (Ctrl+C)	Copy the selected clip(s) from the Clip Bin and place it in the buffer for pasting.		
Add (Ctrl+A)	Open a standard browser, which allows the user to search for clips to add to the Clip Bin .		
Delete (Alt+Bksp)	Delete the selected clip. The clip will also be deleted from the hard drive.		
Remove (Shift+del)	Remove the selected clip from the Clip Bin . The clip will not be deleted from the hard drive.		
Properties (F3)	Load the selected clip into the Properties menu.		
Edit Clip	Load the selected clip into the Clip Edit menu.		
Preview Clip	Play the selected clip out through the video hardware for previewing purposes.		

Edt Properties F3

Edit Menu – with VTR Mode TC Edit List selected		
	Properties (F3)	Load the selected media into the Properties menu.

View Menu

Here is the **View** section of the **Main Menus**. Please refer to the following chart for available controls and functions.



View Menu	
Toolbar	Display the Toolbar or remove the Toolbar from display. A check indicates the control is displayed.
Status Bar	Display the Status Bar or remove the Status Bar from display. A check indicates the control is displayed.
	Transport Clip Control 🔹 🤟 Full Size

Transport Clip Control 🔹	/ Full Size
	Medium Size
	Edit Size
	Small Size

Transport/ Clip Control – Full Size	The default setting for the size of the Transport/ Clip Control window. Select this to return the Transport/ Clip Control
	window to its full size, with all the controls available.
Transport/ Clip	Select medium size to remove the lower section of the
Control – Medium	Transport/ Clip Control window, streamlining it for specific
Size	purposes.
	🦸 Transport/Clip Control 🔀
	I I I F FI 0/ 00 00 00 0 D Setup N/A
	Hue N/A
	A LL FETTA N/A

Transport/ Clip Control – Edit Size	Select edit size to remove the setup controls as well from the Transport/ Clip Control window, which allows for basic editing and transport controls.
Transport/ Clip	Select small size to remove all but the transport controls from
Control – Small Size	the Transport/ Clip Control window.
Options	Display the Options menus. The Options menus function as an advanced setup and display interface for Local , General ,
	Media I/O , and Storage settings. For more details, see the reference section of this document, under Options Menus .
Refresh	Refresh the display. Update open lists or fields to display any recent changes not shown.

Channels Menu

Here is the **Channels** section of the **Main Menus**. Please refer to the following chart for available controls and functions.

Channels Menu	
Disable Local	Press to disallow local control of QuickClip . This allows QuickClip to respond to network-based control. The below " Press OK to resume local control " message is opened and displays above the QuickClip interface.
	When the OK button is pressed, local control is re-enabled. Note: support for network-based control may not be included in your version of QuickClip .
Internal channels	Display all internal channels loaded, and select between the available channels.
External channels	Display all external channels loaded, and select between the available channels.
Network channels	Display all network channels loaded, and select between the available channels.

Window Menu

Here is the **Window** section of the **Main Menus**. Please refer to the following chart for available controls and functions.

Window	
Neso	
Close	
Close All	
Cascade	
Tile Horizontally	
Tile Vertically	
Arrange Icons	
Transport/Clip Control	Col+N
Clp Edit.	Col+L
T-Bar Shuttle	Ctrl+T
Command Edit	Ctrl+N
::VTR_TC Mode Edit List	Cbi+G
Sync Record	Chrl+R
Channel Status	Ctri+F
Data Window	Cbri+D
Auto Provy	Cb/+3
Error Log	Ctrl+4
1 Clip Bin - Int. 0 NTSC-CCIR-BGRA32 [C)15h	are\(Clps.log)
2 Transport/Clip Control	CANALIAS (1997)
3 (disabled - Select VTR Mode or ::VTR_TC) [C:\Share\Default.ed1
≠ 4 dt.nl	

Window Menu	
New	Open a new PlayList .
Close	Close a selected PlayList/ Pull-in/ Layback.
Close All	Close all PlayLists/ Pull-ins/ Laybacks . The user will be prompted to save any unsaved files.
Cascade	Arrange all open windows in an overlapping fashion so that the user may select a corner to bring the window to active status.
Tile Horizontally	Arrange all open windows horizontally (left to right) and resize to allow all windows to be viewed.
Tile Vertically	Arrange all open windows vertically (top to bottom) and resize to allow all windows to be viewed.

Arrange Icons	The user may move the windows around within the QuickClip interface to suit their preferences or workflow requirements. Select and drag each window with the mouse to move them. Use the size arrows that appear when the user hovers near an edge of a window to resize them.
Transport/ Clip Control (Ctrl+N)	Open the Transport/ Clip Control window.
Clip Edit (Ctrl+L)	Open the Clip Edit window.
T-Bar Shuttle (Ctrl+T)	Open the T-Bar Shuttle window.
Command Edit (Ctrl+M)	Open the Command Edit window.
::VTR_TC Mode Edit List (Ctrl+G)	Open the VTR Mode TC Edit List window.
Sync Record (Ctrl+R)	Open the Sync Record window.
Channel Status (Ctrl+H)	Open the Channel Status window.
Data Window (Ctrl+D)	Open the Data window.
Auto Proxy (Ctrl+J)	Open the Auto Proxy window.
Error Log (Ctrl+K)	Open the Error Log window.
(List)	Displays a list of currently open windows. A check mark next to the window indicates active status.

Help Menu

Here is the **Help** section of the **Main Menus**. Please refer to the following chart for available controls and functions.



Help Menu	
Help Topics	Reserved for the QuickClip Help Topics menu.
About QuickClip	Open the QuickClip About screen, which displays the version number of QuickClip .

Video Standard

QuickClip supports NTSC, PAL, Film (24fps) Rate and HDTV video standards, depending on the version and hardware configuration.

Time Code Source

QuickClip allows the user to control their system using different time code source types. These are selectable through the **Transport/Clip Control** interface.

If **VITC** (Vertical Interval Time Code) is selected, **QuickClip** can use the VBI (Vertical Blanking Interval) to receive time code control.

If **LTC** (Longitudinal Time Code) is selected, **QuickClip** can use a longitudinal time code reference to receive time code control. (This feature is an option and requires additional hardware)

If CTL is selected, QuickClip can respond to external control devices.

If **TC** is selected, **QuickClip** can accept time code-based control sources for time code reference.

If **Absolute Position** is selected, **QuickClip** can accept Absolute Position-based control sources for time code reference.

Time Code Type

If **NTSC** is selected, **QuickClip** will use standard NTSC drop frame calculations of 29.97 frames per second when returning time-code, or standard NTSC non drop frame calculations of 30 frames per second when returning time-code. Note that certain time code locations will not be accessible in drop frame mode.

If **PAL** is selected, **QuickClip** will use standard PAL calculations of 25 frames per second when returning time code.

If **Film Rate** is selected, **QuickClip** will use standard film rate calculations of 24 frames per second when returning time code.

If **HDTV** is selected, **QuickClip** allows the user to select between several different HD standards to return time code.

Troubleshooting

No Video Output

Connect a monitor directly to the video output of the Server. Try loading and playing a number of different clips. Use the monitor to trace the video connection through the setup.

No Audio Output

Connect an audio monitor directly to the audio outputs of the Server. Make sure the audio levels are all the way up (100%). Try a number of different clips. Use the monitor to trace the audio connections through the setup.

No Control

Check the RS-422 cable connections to the Server and the control. If it is a machine-to-machine edit, check for secondary (and even tertiary) serial ports and try them. If this fails, see 'Enabling/Disabling Serial Protocols' below.

Some Clips Are Playing Back As Black

Click the done button on the remote interface. Click the VTR icon on the main interface to restart the remote. See if the clips are still playing black, and if they still exist. It is possible that some clips may be removed from the system (killed) and the remote may not be immediately aware that they are no longer available. Closing and opening the remote will force a clip refresh.

I Can Only Use the First X Seconds from My Controller

If you are using an edit controller or machine-to-machine setup, make sure the remote is in VTR Mode. If an automation controller tries to seek beyond the clip length, it may only support VTRs as ingest sources. In this case, switch to VTR Mode and use the time codes to define the clip ins and outs on your automation system. If the automation system is trying to seek to a point before the clip start, shorten the pre roll or use the VTR Mode as described above.

I See the Clips but I Cannot Load Them

Make sure that the remote interface is in 'Server Mode'. While the remote is running, all protocols are available simultaneously so the automation system will see a VTR, and Odetics Device or a Louth device as is required. If the remote is not in 'Server Mode', the clip list will be returned to the automation controller, but the Server will not be able to load or play the clips.

Seeks Are Not Instantaneous My Controller Does Not Recognize the Device My Controller Is Sluggish

Some controllers work more efficiently if they recognize the device they are connected to. Changing the type drop down box will set the type of VTR to be emulated. As a rule of thumb select a VTR from the same manufacturer as the controlling device. Older models will be more generally recognized then newer ones. Make sure the model name is NOT followed by a 'P', when running in NTSC. This indicates the PAL version of a VTR. If problems persist, try using a model that the controller is unlikely to recognize. Some controllers' default behavior is much better than their 'tuned' behavior.

Hardware Integration Recommendations

If you are working with Matrox hardware (such as the DigiSuite, DigiSuite LE, DigiServer or DTV) use Windows NT 4.0 with service pack 5 or better.

If you are working with Optibase VideoPump boards, you may select either Windows NT 4.0 or Windows 2000, with one known issue with Windows 2000:

(http://www.viewgraphics.com/videopump/supportvpwin2k.htm)

Using the Optibase VideoPump with Windows 2000:

If you install a VideoPump into a system configured with Windows 2000, the New Hardware Wizard will find the VideoPump, but will identify it as either a "Coprocessor" or "PCI Device". Cancel the New Hardware Wizard and run the VideoPump software installation as normal.

When you reboot, the New Hardware Wizard will continue to find the VideoPump as a "Coprocessor" or "PCI Device". Cancel the New Hardware Wizard and open the Windows 2000 Control Panel.

Open the Administrative Tools folder and double click Computer Management. On the Devices page, scroll down to "Other Devices" and right click on Coprocessor (or PCI Device). Click on Disable. Click 'Yes' to the confirmation box.

QuickClip TM Software

Right click again on Coprocessor or PCI Device and click Enable. Answer 'Yes' to reboot the system.

When Windows 2000 restarts, the New Hardware Wizard will not be displayed. Confirm proper configuration of the VideoPump by opening the VideoPump Control Panel located in the Windows 2000 Control Panel.

Enabling/Disabling Serial Protocols

Sony 422 – Tape Emulation (VTR Mode)

This is the protocol in use by standard videotape recorders (e.g. Sony BVW-75, BVU-900, EVO-9800, UVW-1800, HDW-500/2000, Panasonic AG-7750, AU-65, AJ-D850, AJ-3700, AJ-HD150, JVC-BS822U, BR-D750, BR-DV600UA). This is the protocol used by machine to machine edits, traditional edit controllers and often for automation system ingest/pull in.

Aside from basic transport/response control, which is used by every compatible device, the Server Remote also supports many extensions defined by particular VTRs since the protocol inception. The remote will attempt to respond correctly to all commands, included Dynamic Motion Control, off-speed play commands, bumping, extended presets, dual head playback, as well as audio and video remote setup extensions. Due to the MPEG media being used, these commands may not respond exactly as expected, but should reproduce a reasonable facsimile for each operation.

Disabling this protocol has no effect if the Odetics protocol is enabled. The Odetics protocol is based on the Sony 422 protocol, so it will effectively remain enabled. If both the Sony 422 and Odetics protocols are disabled, then only Louth server protocol will be available.

Odetics – Tape Emulation/Server (Server Mode)

The Odetics protocol is an extension of the Sony 422 protocol. It uses Sony 422 protocol for basic transport/response communication and adds protocol compatible extensions to add clip server functionality. When the controller is using Odetics protocol, the extended commands can retrieve the clip/spot list, load spots and play spots in a list.

Disabling this protocol will cause the extended commands to fail. This means that the controller, (assuming Sony 422 is enabled), will see the Server as a VTR device. If both Odetics and Sony 422 are disabled, then the Server will only respond to Louth commands.

Louth – Server (Server Mode)

The Louth protocol uses the eight-character clip/spot names to load, play and play lists of clips. This protocol is entirely based on clip names and has no concept of tape based operations. Louth compatible controllers, however, may use Sony 422 protocol to ingest clips into the automation system, or even play long format material to air. Depending on the automation controller, the Server may appear as a VTR or as Louth DDR.

Disabling this protocol will cause the Drastic Device to respond negatively to any Louth commands.

My Automation System Will Not Capture Spots

Typically, the automation system is using the Server in the wrong mode or using the wrong protocol. First, the Server should be set up as VTR, and the automation system should be told it is a VTR. This should allow the ingesting of clips from their time codes. Once that is working, you may want to try and set up the Server as a Clip/Spot based server. It should be noted that the Server is not intended as an 'on-air' device. Many automation systems designed with servers are 'on-air' only. Normally, the automation system also expects to be able to record or transfer spots onto the device, which is not possible locally with the server. To set up as a server, determine what protocol the automation system for that protocol. By default, the Server will respond to either. If problems persist, try disabling the protocol that is not in use.

My Automation System Plays Extra Frames to Air When Playing Clips/Spot Lists

First, the Server is not intended as an on air device. The clip list capability exists to support possible future applications and bulk clip transfer. Secondly, the Server will play extra frames if they are required to create a clean first frame at the 'in point' of the clip as set by the user. This means that clips with the slate removed may require the black frame to properly display the actual start of the clip. When playing in an Odetics or Louth controlled clip list, the clips may be slightly longer than the in and out points would suggest.

My Automation System Sees a VTR, Not a Server with Clips

This normally occurs with Louth protocol based controllers that check the Sony 422 protocol before trying Louth. Because both protocols are active, the automation controller may not try the Louth protocol, assuming the device is a VTR. To fix this, disable the Sony 422 and Odetics protocols. This means the Server cannot be used as a VTR, but the automation system should find the Louth protocol. To use as VTR, be sure and re-enable the Sony 422 protocol.

Manufacturer's Warranty

<u>LIMITED WARRANTY</u> (5-a) Terms and Coverage: Drastic Technologies (the Manufacturer) warrants the software product to the original purchaser for a period of thirty days. The warranty period commences on the date of shipment of product by Drastic to the purchaser however the warranty period set forth in the warranty may be extended at the discretion of Drastic by up to 60 days to cover shelf life and transportation to the purchaser's end-user customer.

(b) Seller's sole and exclusive liability, and Buyer's exclusive remedies, for breach of this warranty are as follows:

(I) Seller, at its sole option, will repair or replace any Good found to be defective, except as otherwise provided in (B) and (C) below;

(II) If Seller elects to repair a defective Good or replacement part but is unable to do so within forty-five (45) days after receiving such Good or replacement part, then Buyer may elect to obtain a refund of the price paid to Seller for such Good, provided that Buyer first must so notify Seller in writing, and return the defective Good or replacement part to Seller, all freight and insurance prepaid; and

(III) In all cases, Seller's liability under this warranty is subject to the following additional conditions:

(A) Goods and replacement parts that Buyer considers to be defective shall be returned to Seller's designated facility for examination and testing; transportation costs and insurance to be prepaid by Buyer. Seller will reimburse Buyer for shipping and Buyer complies with all terms of this warranty and that Seller's testing and examination disclose a defect.

(B) Seller shall not be liable under this warranty if testing and examination by Seller disclose that the Goods or replacement parts have been modified or altered in any material manner after shipment by Seller;

(C) Seller shall not be liable under this warranty if its testing and examination disclose that the alleged defect in the Goods or replacement parts does not exist or was caused by Buyer's or any third parties misuse, neglect, improper installation or testing, unauthorized attempts to repair, or any other cause beyond the range of their intended use, or by accident, fire, or other hazard.

(D) Seller shall not be liable under any warranty under this Agreement with respect to any Goods or replacement parts that are not returned in their original shipping container or a functionally equivalent container.

(E) If Seller's testing and examination do not disclose a defect warranted under this Agreement:

(1) Seller shall so advise Buyer and dispose of such Goods or replacement parts in accordance with Buyer's instructions and at Buyer's cost; and,

QuickClip [™] Software

(2) Buyer shall reimburse Seller for its expense in testing and examining the Goods or replacement parts calculated at Seller's then current rates.

(c) Seller's liability under this warranty is expressly conditioned upon Buyer's notification of Seller on any claim by Buyer under this warranty within thirty (30) days following Buyer's discovery of facts indicating to Buyer that Goods or replacement parts shipped hereunder constitute a breach of this warranty.

(d) Buyer and Seller agree that the price offered to Buyer by Seller for the Goods or replacement parts is a consideration in limiting Seller's liability as provided in this Section 5 and in Sections 6 and 7 hereof. Accordingly, Buyer agrees that the remedy provided by Seller for any breach of this warranty adequately protects Buyer's interests and expectations in the event it received defective Goods or replacement parts from Seller, regardless of circumstances that may arise after the date of this Agreement and when the Goods or replacement parts are used by Buyer or its Customers.

(e) SELLER DOES NOT WARRANT DISK DRIVES IN ANY RESPECT. The only warranties on disk drives and remedies for breach of warranties on disk drives are those provided by or otherwise available against the disk drive manufacturer, Seller passes through to Buyer all warranties by the disk drive manufacturer as set forth in the disk drive manufacturers warranty statement that accompanies each disk warranty with such manufacturer and to communicate all warranty claims to such manufacturer.

6) LIMITATIONS ON WARRANTIES, LIABILITY, AND BRINGING ACTIONS. (a) Buyer agrees that all claims against Seller, other than for breach of warranty, arising under this Agreement shall expire and be barred forever unless an action thereon is commenced in a court of competent jurisdiction situated in the City of Toronto, in the Province of Ontario, Canada within one (1) year following Buyer's discovery of facts indicating to Buyer that a cause of action on such claims may exist against Seller. NO LAWSUIT PERTAINING TO ANY MATTER ARISING UNDER OR GROWING OUT OF THIS AGREEMENT SHALL BE COMMENCED AND PROSECUTED IN ANY COURT OTHER THAN A COURT SITUATED IN THE CITY OF TORONTO, IN THE PROVINCE OF ONTARIO, CANADA.

(b) THE WARRANTIES OF SELLER SET FORTH IN THIS AGREEMENT ARE IN LIEU OF, AND BUYER HEREBY WAIVES, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OF SELLER EXPRESS OR IMPLIED, ARISING OUT OF OR IN CONNECTION WITH THE SALE, RESALE AND PURCHASE OF SELLER'S GOODS OR PARTS, OR THE USE REPAIR OR PERFORMANCE THEREOF, OR THE COURSE OF DEALING OR PERFORMANCE UNDER ANY AGREEMENT BETWEEN BUYER AND SELLER TO WHICH THESE TERMS AND CONDITIONS APPLY. (c) EXCEPT AS PROVIDED EXPRESSLY ABOVE, SELLER SHALL NOT BE LIABLE TO BUYER, TO BUYER'S CUSTOMERS OR TO ANY OTHER PERSON. BUYER AGREES TO INDEMNIFY SELLER WITH RESPECT TO ANY CLAIMS AGAINST SELLER FOR INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL, DAMAGES, INCLUDING LOSS OF PROFIT, AND LOSS OF PLANT, EQUIPMENT OR PRODUCTION, ARISING FROM THE SALE, PURCHASE, RESALE, REPAIR, OR SUBSEQUENT USE OF SELLER'S GOODS OR PARTS AND FROM ANY PROMISE OR OFFER TO SELL, PURCHASE OR REPAIR SUCH GOODS OR PARTS, REGARDLESS OF WHETHER SELLER HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES, BUYER THAT THIS LIMITATION OF DAMAGES IS REASONABLE AND WILL NOT CAUSE IT TO LOSE ANY EXPECTED BENEFITS, RIGHTS OR REMEDIES UNDER THIS AGREEMENT.

Drastic Technologies Ltd Technical Support

Drastic Technologies Ltd. 12 Drummond St. Suite 3 Toronto, Ontario M8V 1Y8, CANADA Phone: (416) 255-5636 Fax: (416) 255-8780 Tech Support Pager: (416) 406 9829 Toll Free: (800) 830 5184 E-Mail: techsupport@drastictech.com WEB: www.drastictech.com