



Drastic SyncControl

File Edit Help

SyncControl Reset High 16 ms
Low -32 ms

Name	IP Address	Port	Channel	Timecode	Clip Name	Offset	Status	Mode	Enabled	Sync
a	ddr2	1234	Int. 0 NTS...	00:00:06:11	LW5-0	00:00:00:00	Record	Clip	On	0
b	ddr2	1234	Int. 1 NTS...	00:00:06:12	LW5-1	00:00:00:00	Record	Clip	On	0
c	ddr2	1234	Int. 2 NTS...	00:00:06:13	LW5-2	00:00:00:00	Record	Clip	On	0
d	ddr2	1234	Int. 3 NTS...	00:00:06:15	LW5-3	00:00:00:00	Record	Clip	On	0

Assigned Name: d

IP Address: ddr2 Port: 1234 Channel: Int. 3 NTSC-CCIR-YCr... Test

Clip Name: LW4-3 Offset: 00:00:00:00 Duration: 00:00:00:00 Mode: Clip

Update Clips Status: Connected

Loop POS Eject CTL 00:00:06:14 NDF 0%
LTC 00:36:30:15 NDF 00000000

The SyncControl interface

Introduction

Drastic's **SyncControl** software allows the user to simultaneously control multiple capture/ playback channels on one or more **QuickClip**-based digital video workstations over a network. Capture operations may be synchronized between these devices, so that multiple files share the same time code duration and start frame. Media files present in the devices being controlled may be viewed in sync or offset, for display and monitoring applications.

The **VVW Series** DDRs are **QuickClip**-based, and support remote control via **SyncControl** software. Standalone **QuickClip** software installs may be licensed for the Network Option, and support remote control via **SyncControl** software.

This document provides a user guide to **SyncControl** software including a brief tutorial and a reference section which describes all of the available controls and their functions.

In the context of this document each **QuickClip**-based station being controlled will be referred to as a "Target device". The controlling station (the station using **SyncControl** software) will be referred to as the "Controller".

The *Set Up* section shows the user how to connect to a Target device and set up **SyncControl** to control the Target devices for playback and capture.

The *Actions* section provides a task-based approach to learning how to use the features of **SyncControl** software.

The *Reference* section of this document provides more detailed information about the available controls and functions of **SyncControl**.

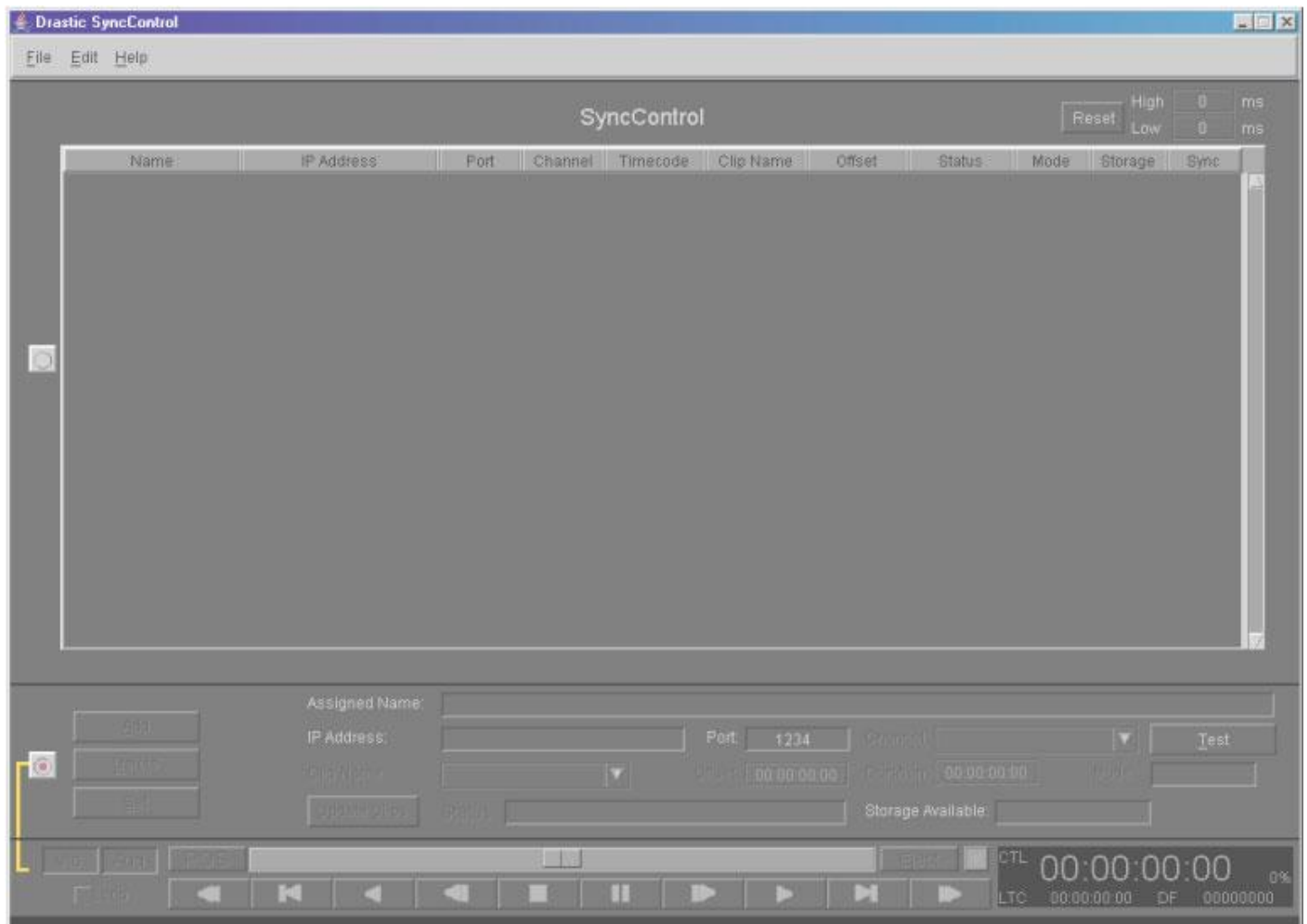
Set Up

Set up the Environment

- Confirm that any Target device being controlled and the Controller are on the same network and accessible to each other.
- Run **LocalConfig** software on the Target device and confirm that the **Network Interfaces** checkbox is selected. Close **LocalConfig**.
- Run **QuickClip** software on the Target device or devices being controlled.
- To use **SyncControl** to control the playback of media, confirm that the necessary media is loaded or will be loaded (as by a **SyncControl** -controlled capture) into the Clip Bin(s) of the Target device(s).
- To use **SyncControl** to control video capture, confirm that each Target device is set up properly to capture video. Provide a valid video signal (camera, VTR etc.) to the Target device. It may be necessary to provide a valid timing/genlock signal to any Target devices and other peripheral video signal devices being used in the application.

Run SyncControl

Run **SyncControl** software on the Controller. The **SyncControl** interface will open in disconnected state.



SyncControl in disconnected state

Connect to Target Devices

In the Connection Details section click with the mouse to activate the cursor in the **IP Address** field. Enter the IP address or the network "name" of a Target device.

Press the **Test** button. **SyncControl** will search for the Target device's IP Address or Network Name and connect if it is found.

If the connection is successful, the **Status** field will display "Connected". If the connection is not successful, this field will display a message to explain why the connection was not successful, such as "Connection Refused", or "IP address does not exist". If the connection has been refused, check that the name or IP Address that was typed in is correct. Confirm that all network-related and device hardware is operational. Check that other network denizens can "see" the systems on the network.

Add Controlled Channels

Each channel of the Target device which the user wants to control must be added. Channels on a Target device not being controlled should not be added. For example if the user has a four channel Target device, and capture operations are only intended for the first two channels, the first two channels would be added and the other two channels would be left alone.

Here is how to add channels:

Add the First Channel

The **Channel** pulldown menu (in connected state) will display any channels present in the Target device. Use this pulldown menu to select the first channel to control. This will typically be the Int0 channel.

Note: To use an offset during playback, remember that the first channel added is the reference; other channels are offset in relation to this channel.

The following details can now be entered for this channel:

- Name:** The user may assign a name or other identifier to the Target device by entering a name or other identifier in the **Assigned Name** field. If a name is entered here, it will be displayed in the **Name** field in the **Sync Clips List** (when connected). If not, the IP Address or Network Name will appear in this field.
- Port:** The default setting for the **Port** is 1234. To change this, select the specific port you need to use for the channel.
- Offset:** The first channel may not be offset. The first channel added is the reference – all other channels' playback is offset in relation to this channel.
- Clip:** The Target device provides a **Clip Bin** which lists available clips for each channel (all of the clips are available to all channels on the Target device). To select a clip from the **Clip Bin** of the Target device to load for playback, use the **Clip Name** pulldown menu to select the clip from a list of loaded clips.
- VID:** To play and record video, confirm that **VID** is selected. A "pressed" state indicates "on" status. A "raised" state indicates "off" or deselected status. This control is not active on all versions and is used in VTR mode only.
- AUD:** To play and record audio, confirm that **AUD** is selected. A "pressed" state indicates "on" status. A "raised" state indicates "off" or deselected status. This control is not active on all versions and is used in VTR mode only.
- Add:** Press the **Add** button. The channel will be added to the **Sync Clips List** field according to the parameters entered.

Add Other Channels

The other channels present in the Target device may now be added. Select the next channel (typically Int1) using the **Channel** pulldown menu, and enter the name "Channel 2" in the **Assigned Name** field. Select a **Port**, **Offset** and **Clip Name** if necessary using the above methods. Confirm any other important states for the channel. Press the **Add** button.

Use this method to add (for example) channel three (Int2), and channel four (Int3) and any other channels present in the Target device.

Edit Channel Parameters

Once a channel has been added, the below parameters may be reset for the channel at any time. Select the channel by double-clicking on its row in the **Sync Clips List**. The following adjustments may be made:

Name: Type in a name for the channel in the **Assigned Name** field. Press the **Set** button.

Port: Type in the specific port for the channel in the **Port** field. Press the **Set** button.

Clip Name: Use the **Clip Name** pulldown menu to search for and select another clip for playback. When a clip is selected it will be loaded into the active channel automatically.

Offset: Type in an offset value into the **Offset** field. Press the **Set** button.

Delete Channels

To delete a channel, select it by double-clicking on its row in the **Sync Clips List**. Press the **Delete** button. This channel will now be removed. It may be added again at any time.

Connect to Other Target Devices

To add another Target device's channels, enter the IP address or the network "name" of the Target device into the **IP Address** field. Press the **Test** button. Once the Target device is connected, the user may **Add** any of its channels using the above methods.

Name	IP Address	Port	Channel	Timecode	Clip Name	Offset	Status	Mode	Storage	Sync
ddr2	ddr2	1234	Int 0 NTS	00:00:00:00	UH09-0	00:00:00:00	Pause	Clip	78 GB	0
ddr2	ddr2	1234	Int 1 NTS	00:00:00:00	UH09-1	00:00:00:00	Pause	Clip	78 GB	0
ddr2	ddr2	1234	Int 2 NTS	00:00:00:00	UH09-2	00:00:00:00	Pause	Clip	78 GB	0
ddr2	ddr2	1234	Int 3 NTS	00:00:00:00	UH09-3	00:00:00:00	Pause	Clip	78 GB	-31
ddr3	ddr3	1234	Int 0 NTS	00:00:00:00	Test	00:00:00:00	Pause	Clip	269 GB	5
ddr3	ddr3	1234	Int 1 NTS	00:00:00:00	Test	00:00:00:00	Pause	Clip	269 GB	0
ddr3	ddr3	1234	Int 2 NTS	00:00:00:00	Test	00:00:00:00	Pause	Clip	269 GB	0
ddr3	ddr3	1234	Int 3 NTS	00:00:00:00	Test	00:00:00:00	Pause	Clip	269 GB	0

Channels Loaded

Above is a diagram of the **Sync Clips List** wherein eight channels have been loaded from two Target devices. Channel names have been entered (see the **Name** column) for each channel corresponding to its position in the sequence in the **Sync Clips List**. The **IP Address** column however indicates that the first four channels are from (Target device) DDR2 and the next four channels are from (Target device) DDR3.

Further examination of the **Channel** column reveals that channels Int0 – Int3 have been added in order from each Target device. The user might also input channel names corresponding to for example camera views, or location identifiers using the **Assigned Name** field to set their choices.

Use Configuration Files

The user must step through a number of choices to set up **SyncControl** for their application. They must connect to the Target device, then select and add each of the channels present in the device one at a time. Once configured, **SyncControl** may be used in its intended capacity.

The configuration process however can be time consuming, so **SyncControl** allows the user to set up their configuration once, and save that configuration. This configuration is saved to a file, which can be opened to load all of the parameters set up by the user through a few simple clicks.

Multiple configuration files may be saved, to allow for all of the setups that the user may require. When **SyncControl** is running, the user may load each setup as needed using just a few clicks through the menus.

New Configuration

When it is first opened, **SyncControl** provides a blank slate with no parameters loaded. This is a **New Configuration**. Once a number of Target devices and/or channels have been loaded and set, the user may want to control other Target devices without the inconvenience of deleting the existing setup. To quickly clear the interface of all parameters, select **New** from the Main Menus. The **New Configuration** window will open.



New Configuration window

Press the **New** button to clear **SyncControl** of all parameters. The user will be prompted as to whether they wish to save their present configuration. Once having selected a course of action (**Save** or **Discard**), the **SyncControl** interface is cleared.

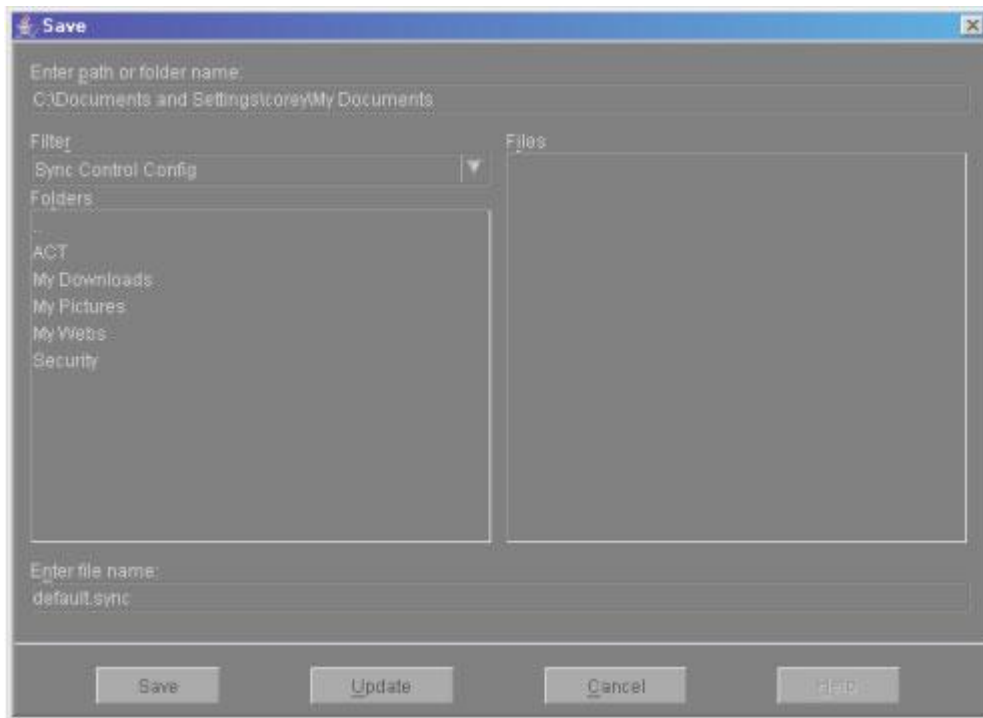
To exit this action without making any changes to the present configuration, press the **Cancel** button.

Save a Configuration

Once **SyncControl** has been set up (all controlled channels have been added from all Target devices being controlled) and everything is working, the user can choose to save the setup configuration. If this is the only setup that will be used, this configuration can be saved as "default.sync", which is loaded whenever **SyncControl** is opened.

Go to the main menus, under **File/Save**.

Pressing the **Save** button opens up the **Save As** dialog box, allowing the user to browse through their storage using the explorer-type menu to select the optimum location in which to save the configuration.



Enter the path or folder name of the drive/ folder/ subfolder location in which the configuration file should be saved. The filter is set by default to show only **SyncControl** configuration files. To see all files touch the pulldown menu and select *. This removes the file type filter.

If files have been added to a drive/ folder/ subfolder location and they are not displayed, press the **Update** button to refresh the file list for that location.

Double-clicking on a folder in the **Folders** field will load that folder into the **Path or Folder Name** field and display all of its subfolders in the **Folders** field. Select the correct folder.

Click once with the mouse in the **Enter the Name** field and type in a name for the configuration file.

Press the **Save** button to save the configuration. This will create a *.sync file in the user-specified location which can be loaded to set the parameters for **SyncControl**.

If you do not wish to perform a **Save Configuration** action at this time, press the **Cancel** button.

Opening a Saved Configuration

To open a saved configuration, go to the main menus, under **File/ Open**. This opens a standard **Open** dialog box, allowing the user to browse for and load a saved configuration file. Upon loading the configuration file, **SyncControl** will test the connection and connect if successful.

Deleting a Saved Configuration

If the user has amassed a number of unused configuration files, or if a particular configuration file or files has become problematic for any reason, the user may delete them. Navigate to the folder in which the files have been saved. Select the files no longer needed (they will be easily identified by the `.sync` extension). Press the delete button on the keyboard or select **Delete** from the folder or context (right-click) menus.

A delete function for configuration files is not present in the **SyncControl** interface to avoid unintentional configuration file destruction. You have to really want to destroy the files and purposely hunt them down before they will perish.

Actions

Media Playback

Once all of the Target devices have been connected and their channels added into the **Sync Clips List**, **SyncControl** may be used.

Single Channel Playback

Select a channel by double-clicking on its row in the **Sync Clips List**. Select the **Edit Mode** button. Confirm that there is a clip loaded in this channel of the Target device. Press the **Play** button. Media playback should commence on the Target device. Press the **Stop** button. Media playback will stop, and the Target device should go into E-E (Edit to Edit) mode (showing passthrough video and audio).

SyncControl transport controls allow the user to shuttle or advance forward or backward through the media. The **Position Controller** bar provides quick media cueing to allow the user to find and view a specific portion of the file.

Multiple Channel Playback

Select the **Sync Mode** button. All of the channels will respond to the transport controls simultaneously. Select the position bar and pull it to the left to return all of the channels to 00:00:00:00. Press the **Play** button. All of the channels will begin playback simultaneously.

Looped Playback

SyncControl allows the user to loop the playback of files. A single file may be looped, or more significantly multiple files may be looped to provide synchronized continuous playback. This feature is useful for display and review applications. Loop mode playback plays clips from the present location to the end of the file, then goes to the beginning and plays from start to finish over and over again until interrupted.

Select the **Loop** checkbox to specify looping playback.

With **Edit Mode** selected, the single active (selected) channel will play in loop mode.

With **Sync Mode** selected, all channels will play in loop mode.

Offset Playback

SyncControl allows the user to simultaneously play multiple media clips using an offset. An offset allows simultaneous playback of different locations within a clip or of time-shifted portions of media from multiple camera views for event review and process analysis.

The offset is calculated from the first channel in the **Sync Clips List**, so be sure to add the channels in the right order when setting this up.

For example, assume the user wants to view multiple locations within the same clip. Add a channel to the **Sync Clips List** with the clip loaded. Then add a second channel with the same clip loaded, but enter an **Offset** (say, 2 seconds). Set these details and then select **Sync Mode**. Set the first channel to 00:00:00:00. Press the **Play** button.

In this mode, channel 1 should play from 00:00:00:00, and channel 2 should play from 00:00:02:00. Frame advance allows the user to simultaneously advance through the media (separated by the offset amount), seeing each frame of video.

Media Capture

SyncControl may be used to control a single or a number of Target device channels to simultaneously begin and end video capture, so that clip duration and start frame by time code are matched between the media files created.

Edit Configuration

To automate clip capture, **SyncControl** provides a configuration dialog box for clip naming, numbering and state upon completion of capture. Go to the main menus, under **Edit/Configure**. The below window will open:



Default Record Name - Select the text in the **Default Record Name** field and replace it with a clip prefix of your own creation. Keep in mind that each clip name is limited to 8 characters, so if for example the user has 9 or less channels being controlled, the clip prefix will be limited to 5 characters to allow the default record number and the channel number (plus the dash). If the user has between 10 and 99 Target device channels to control, this name prefix will be limited to 4 characters.

Non-alphanumeric characters will be ignored and will cause your clip name to be replaced with a default clip name supplied by **SyncControl**.

Default Record Number – The user may specify the number suffix used to identify each capture action in a sequence of captures. A default number is supplied, but the user may reset this number by selecting the text in the **Default Rec Number** field and entering a number of their own (this will be added to the end of the **Default Record Name**). Each subsequent record will use the **Default Record Name** plus the number, which will be incremented upward by one integer per capture operation to create the clip name.

Millisecond Offset – the user may adjust the millisecond offset value used to synchronize timing between the Controller and the Target devices. If you need to adjust this number you should be aware that an incorrect setting may result in a loss of accuracy or synchronization.

After Rec – the user may specify the state to which **SyncControl** will return after each capture. If the user selects **Stop**, all of the channels will return to a **Stop** state after a capture. If the user selects **Last**, all of the channels will retain the last clip that was loaded before the capture. If the user selects **Auto Load New**, all of the channels will load the clip associated with that channel that was just created during the last capture operation.

Once all of the settings have been adjusted correctly, press the **Apply** button to enable the choices. Alternately, the user may press the **Cancel** button to exit this dialog box without changing the default capture conditions.

Multiple Channel Capture

Select the **Sync Mode** button. This provides control over all channels present in the **Sync Clips List**.

Confirm that the Target devices are properly set up to capture video. Confirm that **QuickClip** is running on the Target devices, and that all video signal(s) and timing reference are properly connected to each Target device.

Open Length Capture

The user may initiate a capture with a set In Point but no Out Point. This is called an Open Length capture.

Press the **Record** button. This brings up the **New Clip Settings** dialog box.



The default **New Clip Name** is supplied by **SyncControl**, but the user may enter a new clip name. In a multiple channel capture, the default clip name will be used as a prefix.

If the user accepts the default clip name supplied above, (assuming a capture operation using a four channel Target device) the following files will be created during the record: drcl1-0, drcl1-1, drcl1-2 and drcl1-3.

If "AAA" is entered as the New Clip Name in a 4 channel capture as above, the following files will be created: AAA1-0, AAA1-1, AAA1-2 and AAA1-3.

A second capture using the above parameters would provide the following files: drcl2-0, drcl2-1, drcl2-2 and drcl2-3, or (assuming "AAA" prefixes) AAA2-0, AAA2-1, AAA2-2 and AAA2-3.

In an Open Length capture, do not select the **Max Length** checkbox.

Press the **Set Name** button to enter the details into memory. Press the **Start** button.

Video capture will commence. Passthrough video and audio should be present in the monitors attached to the Target device. **SyncControl** will indicate "Record" mode, and time code will advance on both the **SyncControl** interface and the Target device. The **Record** button and the Time Code in the **Time Code Display** section will turn red for the duration of the recording.

Once enough video has been captured, press the **Stop** button. Time code will stop advancing on both the Target devices and **SyncControl**. The files created during capture will now appear in the **Clip Bins** of the Target devices available for playback.

Depending on the conditions set in the **Edit Configuration** dialog box, either the **Last Clip** will load, the Target device(s) will go into **Stop** mode, or the clips just created will be loaded (if **Auto Load New** is selected).

Set Length Capture

The user may initiate a capture with a set In Point and a set Out Point. This is called a Set Length capture.

Press the **Record** button. This brings up the **New Clip Settings** dialog box.

Edit the default clip name as above (if necessary) or leave the default clip name as supplied in the **New Clip Name** field.

A **Max Length** must be specified. This is the duration of the new clip by time code. As each clip starts at 00:00:00:00, the time code location of the last frame would be one less than the length specified. For example a clip that is 2 minutes long (00:02:00:00) would use 00:01:59:29 as the last frame. Select the **Max Length** checkbox and enter the clip duration by time code in the **Max Length** field.

Press the **Set Name** button to enter the details into memory. Press the **Start** button.

Video capture will commence. Passthrough video and audio should be present in the monitors attached to the Target device. **SyncControl** will indicate "Record" mode, and time code will advance on both the **SyncControl** interface and the Target device. The **Record** button and the Time Code in the **Time Code Display** section will turn red for the duration of the recording.

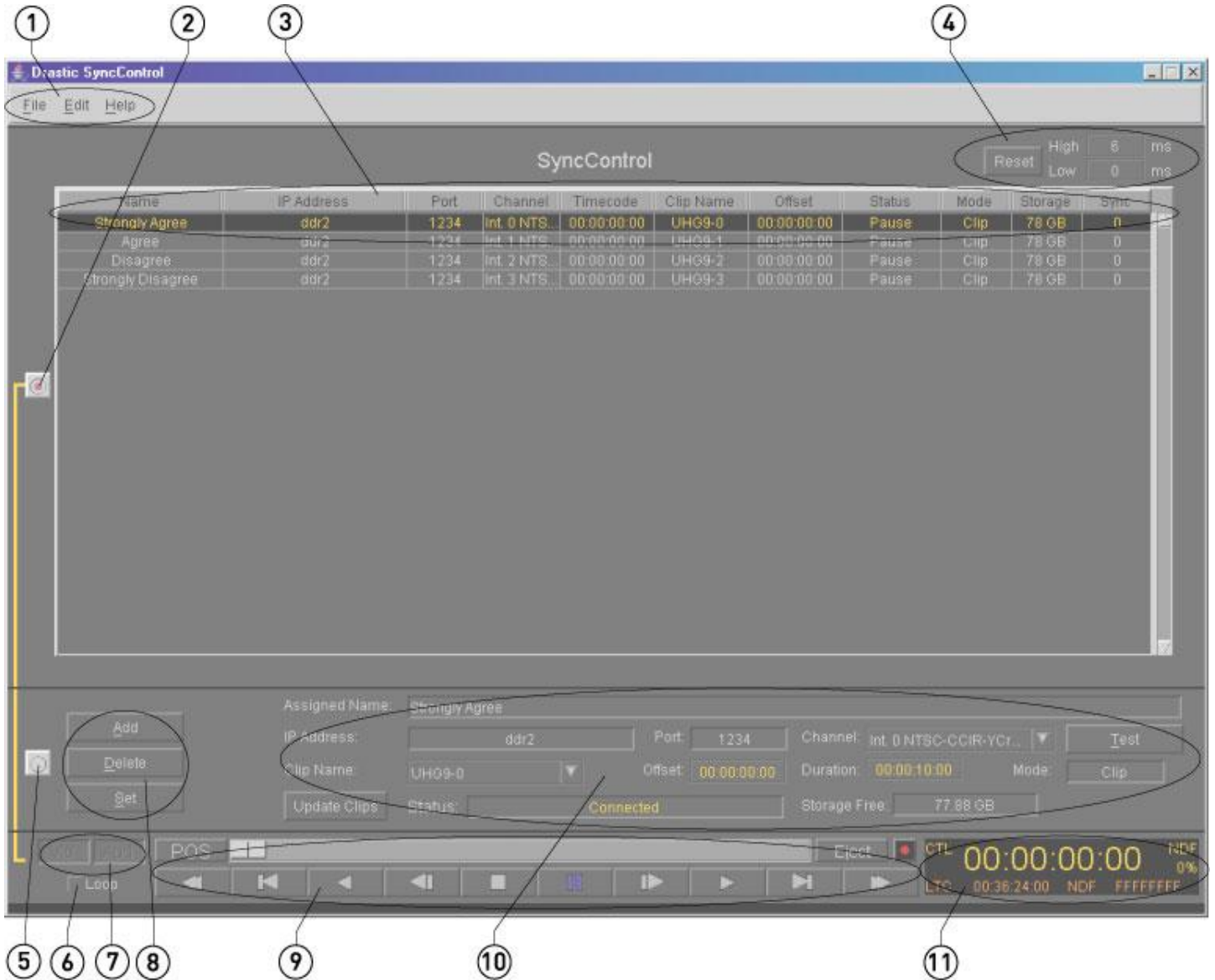
Once the duration of the capture has completed, time code will stop advancing on both the Target devices and **SyncControl**. The files created during capture will now appear in the **Clip Bins** of the Target devices available for playback.

Depending on the conditions set in the **Edit Configuration** dialog box, either the **Last Clip** will load, the Target device(s) will go into **Stop** mode, or the clips just created will be loaded (if **Auto Load New** is selected).

Reference

The **SyncControl** interface has been carefully documented in this section. View information regarding available controls and their functions.

SyncControl Main Interface



Above is the Main Interface for **SyncControl**. As illustrated in the diagram, the interface has been divided into sections to more closely look at the components that make up the interface. Please see the chart below for available controls and their functions.

1.	Main Menus	The Main Menus allow the user to save and load configurations, and to set up the "capture" configuration in a Sync Record application.
2.	Sync Mode button	When selected, all of the channels loaded in the Channels field will be controlled in sync. Recording and transport actions will commence and cease at the same time and at the same frame for all channels.

3.	Sync Clips List field	Displays all channels added to SyncControl , along with details about the channel and loaded media on that channel.
4.	Sync Accuracy section	This section displays in milliseconds the peak high and low values for any divergence from absolute synchronization, and offers a reset button to return the values to zero.
5.	Edit Mode button	With the Edit Mode button selected, the user may control the channel loaded in the Channel pulldown menu.
6.	Loop Mode button	Check the Loop Mode checkbox to specify that SyncControl plays all loaded media from all selected and enabled channels from present location to finish, then from start to finish over and over again.
7.	VID and AUD buttons	Select or deselect video and/or audio for capture and playback. A pressed-in state indicates selected and a raised state indicates deselected. Not available on all versions and specific to VTR Mode applications.
8.	Channel Set controls	Add a channel, Delete a channel, or Set channel parameters entered by the user into memory.
9.	Transport controls	Media playback and cueing controls. Forward and reverse play, plus or minus one frame, plus or minus five seconds, fast forward or reverse play, stop and pause controls are available.
10.	Connection Settings section	Connect to the Target device and enter settings specific to the channels. Channel selector, Port field, Offset field, IP Address field, Assigned Name field, Clip Name pulldown menu controls are available. (Connection) Status , Storage Free , (Target device) Mode and (clip) Duration displays are also provided.
11.	Transport display	Transport display section; Control type, Time Code location, Percentage of Play Speed, Target device Video Standard , Time Code type, Offset time code, Target device other Video Standard return (click on this control to cycle through any other available time code types) and User Bits values are displayed.

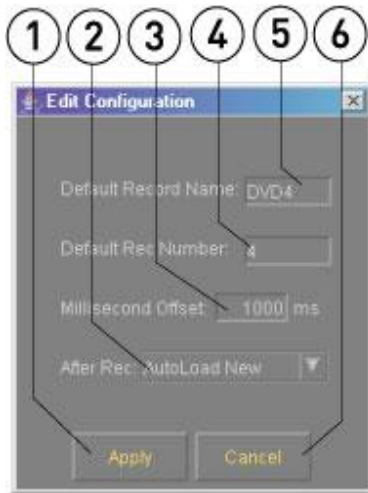
Main Menus



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

1.	File menu	Open - opens an explorer-type browser, allowing the user to browse through their storage for available media, Save – opens a Save dialog box, allowing the user to save the present configuration, Exit - stop any actions in progress and close SyncControl .
2.	Edit menu	Configure - opens the Edit Configuration dialog box, allowing the user to configure SyncControl for synchronized capture applications.
3.	Help menu	About - opens the About screen, which displays the version of SyncControl .

Edit Configuration Dialog Box



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

1.	Apply button	Confirm any changes entered by the user and apply them during file capture.
2.	After Rec pulldown menu	Allows the user to select the state to which SyncControl will return after each capture. Last retains the last clip that was loaded before the capture action, Stop places each channel of the Target device in Stop mode after a capture, Auto-Load New loads the clip just created for each channel upon completion of a capture.
3.	Millisecond Offset field	The user may enter an offset (a delay of “start capture” commands), which can provide better synchronization between the Target device and the Controller. Any current offset is displayed in this field.
4.	Default Rec Number field	Allows the user to set the record number used as a suffix in creating clip names during capture. This number by default increments upward by one integer each time a capture action is performed.
5.	Default Record Name field	This field supplies the default file prefix (drcl, or Drastic Clip). The user may edit this prefix. The prefix will be used as the suffix to automatically create clip names for media capture.
6.	Cancel button	Reject any changes made, and close the Edit Configuration window.

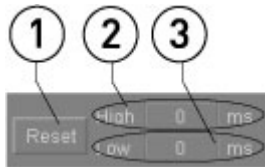
Sync Clips List

1	2	3	4	5	6	7	8	9	10	11
Name	IP Address	Port	Channel	Timecode	Clip Name	Offset	Status	Mode	Storage	Sync
Strongly Agree	ddr2	1234	Int. 0 NTS	00:00:00:00	UH99-0	00:00:00:00	Pause	Clip	78 GB	0
Agree	ddr2	1234	Int. 1 NTS	00:00:00:00	UH99-1	00:00:00:00	Pause	Clip	78 GB	0
Disagree	ddr2	1234	Int. 2 NTS	00:00:00:00	UH99-2	00:00:00:00	Pause	Clip	78 GB	0
Strongly Disagree	ddr2	1234	Int. 3 NTS	00:00:00:00	UH99-3	00:00:00:00	Pause	Clip	78 GB	0

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

1.	Name column	Displays the Assigned Name of this channel of the Target device.
2.	IP Address column	Displays the IP Address or network name of the Target device.
3.	Port column	Displays the Port that has been set for the channel.
4.	Channel column	Displays the internal, control or external Channel value.
5.	Timecode column	Displays the timecode location within any loaded clip on this channel.
6.	Clip Name column	Displays the name of the clip that is loaded on the channel.
7.	Offset column	Displays the offset for this channel. The offset is a playback offset, designed to allow the user to play multiple locations within a file simultaneously. The offset is specified in SMPTE time code format. The offset uses the first channel as a reference, all other channels are offset in relation to the first channel.
8.	Status column	Displays the current transport status for the channel (whether in Play, Pause etc.)
9.	Mode column	Displays whether the Target device is in Clip (Server) or VTR (VTR TC Edit) mode.
10.	Storage column	Displays the amount of storage available to the Target device in Gigabytes (GB). This is updated in real time, so the user may watch their drives fill up (and the available storage decrease) during capture operations. If during capture all available storage is used up, the capture will stop, and video files will be created based on how much can be saved without destroying existing files.
11.	Sync column	Displays the amount of divergence from perfect sync accuracy in milliseconds for the controlled station. Zero equals accurate sync. This allows the user to keep track of any sync slippage problems by noting them as and where they occur.

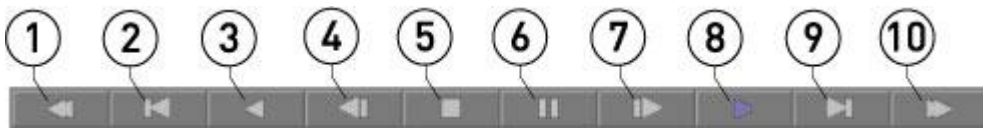
Sync Accuracy Section



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

1.	Reset button	Reset the high and low peak values to 0.
2.	Peak High field	Displays the peak amount of sync "slippage" (Over, or too high), divergence from absolute synchronization in milliseconds.
3.	Peak Low field	Displays the peak amounts of sync "slippage" (Under, or too low), divergence from absolute synchronization in milliseconds.

Transport Controls



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

1.	Fast Reverse button	Playback in reverse at the fastest speed supported by the hardware.
2.	5 Seconds Reverse button	Go to the location five seconds prior to the present location and pause, displaying the frame of video found there.
3.	Reverse Play button	Play the media in reverse, at -100% of play speed.
4.	Frame Reverse button	Go to the location one frame prior to the present location, and pause on, or display the frame of video found there.
5.	Stop button	Pause at the present location, and go into passthrough mode.
6.	Pause button	Pause at the present location and display the frame of video found there.
7.	Frame Advance button	Go to the location one frame after the present location, and pause on, or display the frame of video found there.
8.	Play button	Play the media at normal (100%) of play speed from the present location to the end, unless interrupted by another command.
9.	5 Seconds Advance button	Go to the location five seconds after the present location and pause, displaying the frame of video found there.
10.	Fast Forward button	Playback in forward at the fastest speed supported by the hardware.

Position Controller

JOG



The Position Controller **Jog** setting allows the user to pull the red slider to move by one or two frames to seek for a location within the media (right is forward and advances the time code; left is reverse). When the JOG slider is released it goes back to a rest position. Press the **JOG** button to cycle through the available position controls.

POS



The Position Controller **Position** setting displays the relative location within the media and allows the user to “pull” the slider to any location within the media. In this mode the user may press a location within the Position Slider field to park all enabled channels at this location (in Sync Mode). Press the **POS** button to cycle through available position controls.

SHTL



The Position Controller **Shuttle** setting allows the user to view media at variable speeds in forward or reverse. When the SHTL slider is released it goes back to a rest position. Press the **SHTL** button to cycle through available position controls.

VAR



The Position Controller **Variable** setting allows the user to play media at a speed other than 100%, in forward or reverse. “Grab” the slider. Move it to another position and release it. It stays there, playing the media at the speed correspondent to that location. Press the **VAR** button to cycle through available position controls.

Record and Eject buttons



The **Eject** button instructs the external VTR to eject its tape if any is present.

The **Record** button opens the **New Clip Settings** dialog box, which allows the user to set a clip name and length, then begin a capture.

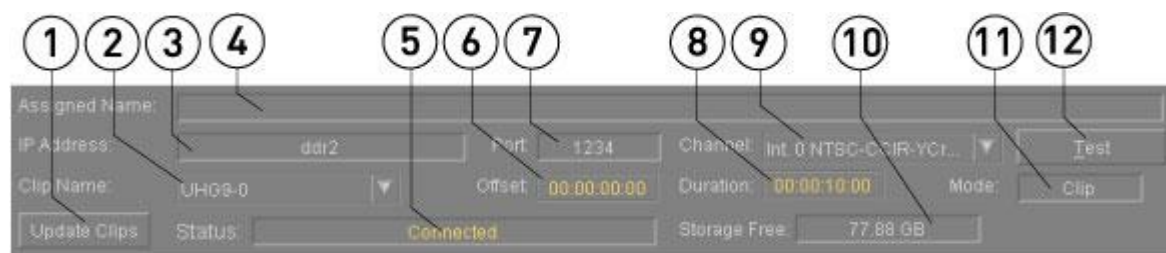
New Clip Settings Dialog Box



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

1.	Set Name button	Sets any details entered into memory, so that capture may begin immediately upon pressing the Start button.
2.	Max Length checkbox	Check the Max Length checkbox to activate the Max Length field.
3.	Start button	Press the Start button to begin the capture as set up in this dialog box.
4.	Max Length field	With the Max Length checkbox checked, the user may enter the clip duration into this field. This allows the user to specify the length of the captured clip(s).
5.	New Clip Name field	A default clip name is supplied by SyncControl . The user may enter a new clip name. Note: this clip name is restricted to 8 characters in this field to maintain compatibility with certain automation controllers. This is used as a prefix, so the first 6 (or less) characters would be used, and a channel number (plus a dash) is used as the suffix for the clip name for the capture.
6.	Cancel button	Reject any changes made and close this dialog box. A capture action will not be performed.

Connection Details Section



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

1.	Update Clips button	Press to update the display of any clips in the Clip Bin of the Target device.
2.	Clip Name pulldown menu	Displays any media which has been added to the Clip Bin of the Target device. Allows the user to select between available media clips for playback.
3.	IP Address field	Type in the IP Address or network name of the Target device here.
4.	Assigned Name field	Type in a unique identifier for each channel that has been added – assign a name for this channel. This allows the user to view each discrete channel based on logic suggested by their workflow and not by each Target device’s internal names.
5.	Status display	Displays the status of the connection to the Target device.
6.	Offset field	The user may type in an offset value used for playback, calculated from the location of the first channel, to simultaneously view multiple locations within a clip or time-shifted views of multiple clips.
7.	Port field	Displays the current Port selection, through which control is sent and/ or received. To use a specific Port to control this channel, type in the Port number here.
8.	Duration field	Displays the length of the selected clip.
9.	Channel pulldown menu	Allows the user to select between all channels available on a Target device.
10.	Storage Free display	Displays the amount of storage available to the Target device in Gigabytes (GB). This is updated in real time, so the user may watch their drives fill up during capture operations. If during capture all available storage is used up, the capture will stop, and video files will be created based on how much can be saved without destroying existing files.
11.	Mode field	Displays the mode of the Target device, whether Clip mode or VTR mode.
12.	Test button	Press to test the connection to a Target device.

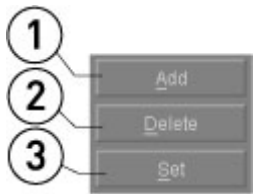
Transport Display



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

1.	Time Code 1 type	Displays the time code type being used by the Target device.
2.	Time Code 2 type	Displays an alternate time code type if present, such as LTC or VITC.
3.	Time Code 1 location	Displays the current time code location.
4.	Time Code 2 location	Displays the current time code location using the alternate time code type if present.
5.	Video Standard 2	Displays the video standard associated with the alternate time code if present.
6.	User Bits	Displays any user bits associated with the selected file.
7.	Video Standard 1	Displays the video standard used by the Target device.
8.	% of Play Speed	Displays the percentage of play speed (100% being normal play speed).

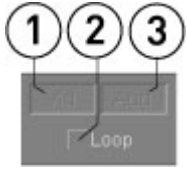
Channel Edit Buttons



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

1.	Add button	Add the selected channel of the Target device into the Sync Clips List using the parameters entered by the user in the Connection Details section. Ensure that each channel is added only once.
2.	Delete button	Delete the selected channel from the Sync Clips List .
3.	Set button	Set the parameters entered by the user into memory for the selected channel

VID, AUD and Loop buttons



1.	VID button	Select to allow video capture and playback for the selected channel. When the VID button is deselected, Audio Insert edits may be performed in VTR Mode. (version-specific)
2.	AUD button	Select to allow audio capture and playback for the selected channel. When the AUD button is deselected, Video Insert edits may be performed in VTR Mode. (version-specific)
3.	Loop button	Select to specify looped playback.