

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 install of **QuickClip** will need to be licensed for the Network Control Option for the target device to support remote control via **SyncControl** software.

**Please note:** This is a reference manual for the settings and modes of **SyncControl**. If you are looking for information on using **SyncControl**, there is a [Tutorial](#) available on our web site.

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 each 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**.

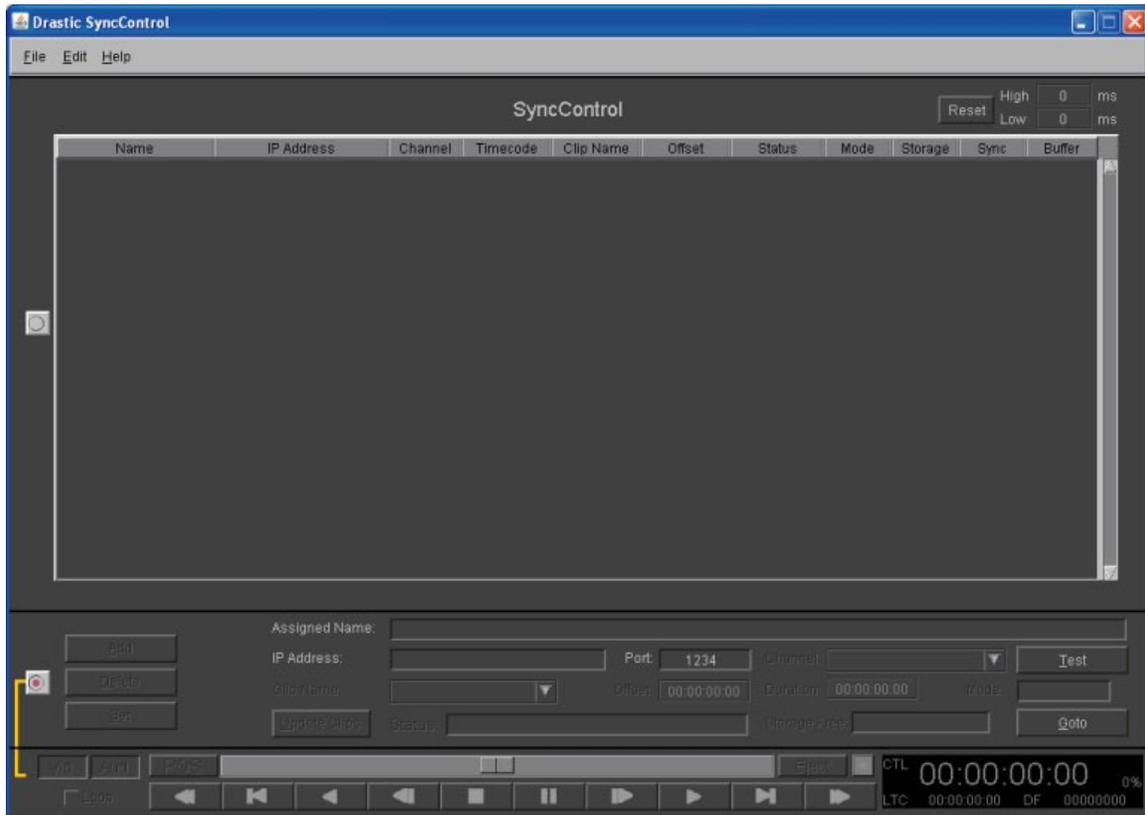
# Set Up

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

## Add Controlled Channels

Once the system is connected, 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 **SyncControl** 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	Channel	Timecode	Clip Name	Offset	Status	Mode	Storage	Sync	Buffer
Right Eye	Typhon-0808	0	00:00:42.22	Eyes-0	00:00:00.00	Record	Clip	157 GB	0	4%
Left Eye	Typhon-0808	1	00:00:42.22	Eyes-1	00:00:00.00	Record	Clip	157 GB	0	4%

*Channels Loaded*

Above is a diagram of the **Sync Clips List** wherein two channels have been loaded from one Target device. Channel names have been entered (see the **Name** column) for each channel corresponding to a view offered by monitor placement

The user might also input channel names corresponding to location identifiers, device channels etc. using the **Assigned Name** field to set their choices.

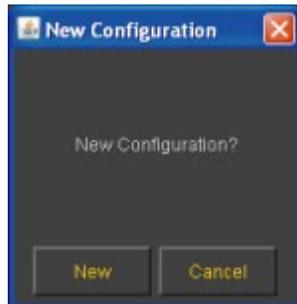
## Use Configuration Files

Having gone through the work to set up **SyncControl**, you will want to save the setup if you intend to use it again. 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*

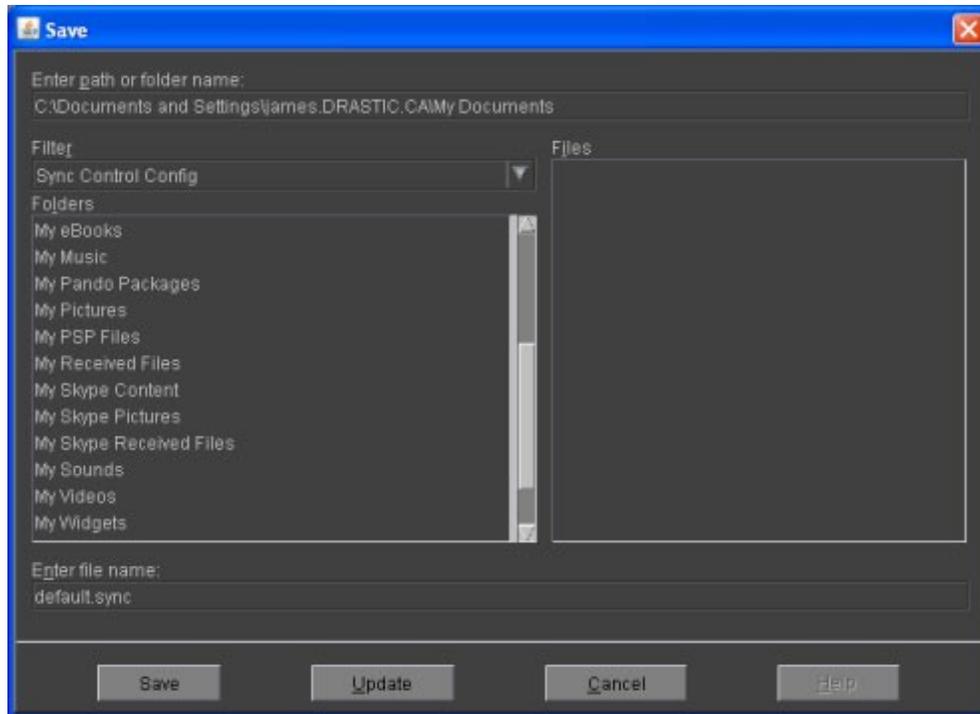
Press the **New** button to clear **SyncControl** of all parameters. The user will be prompted as to whether they wish to save their present configuration. Once having selected a course of action (**Save** or **Discard**), the **SyncControl** interface is cleared.

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.



*Save dialog box*

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.

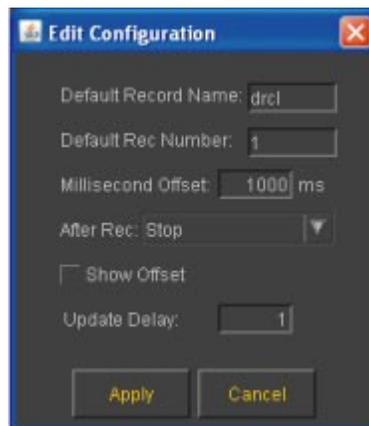
In this mode, channel 1 should play from 00:00:00:00, and channel 2 should play from 00:00:02:00. Frame advance allows the user to simultaneously advance through the media (separated by the offset amount), seeing each frame of video.

## 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:



*Edit Configuration dialog box*

**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

**Show Offset** – select this checkbox to display the amount of offset.

**Update Delay** – set the amount of update delay in this field.

## Multiple Channel Capture

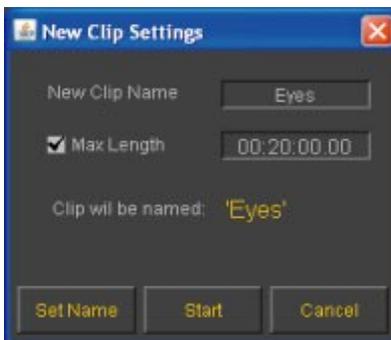
Select the **Sync Mode** button. This provides control over all channels present in the **Sync Clips List**.

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.



**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. Pass-through 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. Pass-through 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.

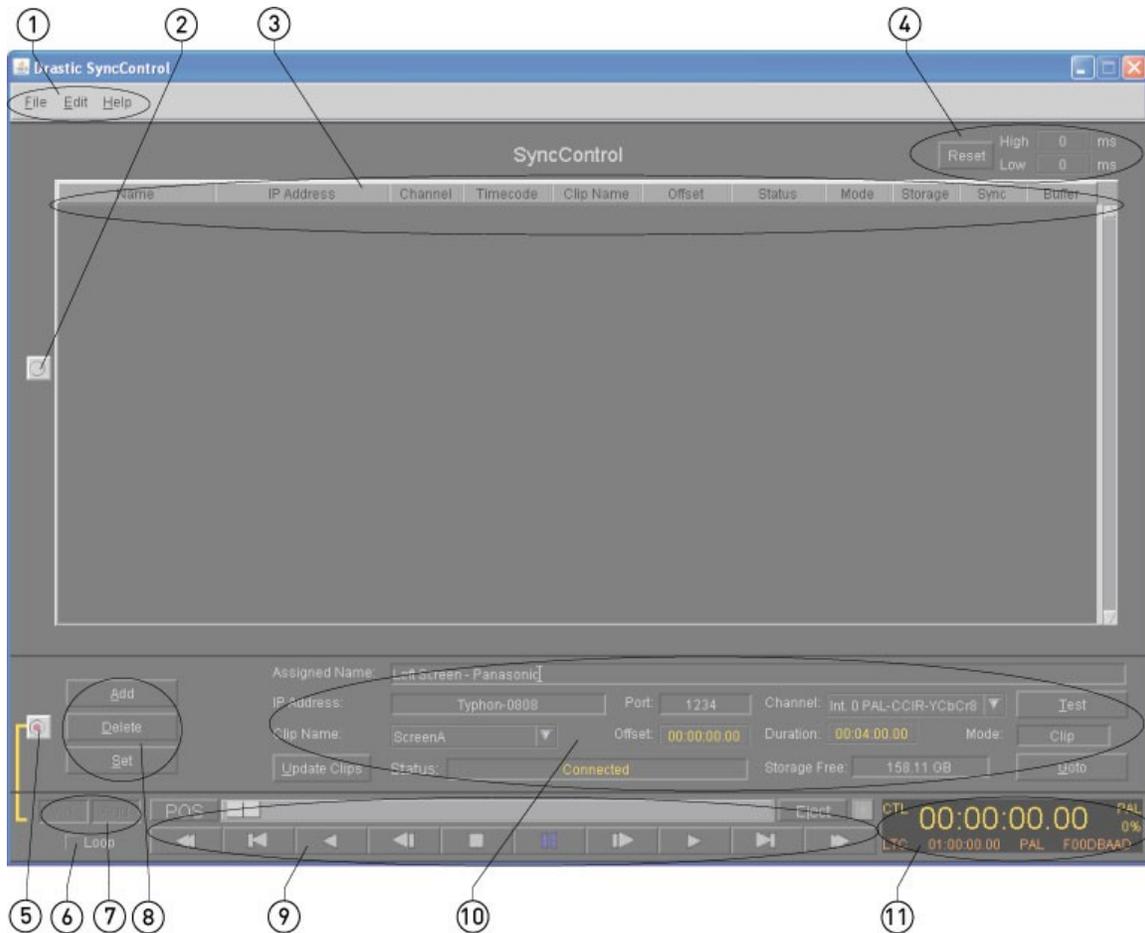
Once the duration of the capture has completed, time code will stop advancing on both the Target devices and **SyncControl**. The files created during capture will now appear in the **Clip Bins** of the Target devices available for playback.

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



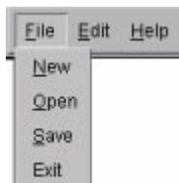
*SyncControl Main interface*

As illustrated in the above diagram, the interface has been divided into numbered sections to more closely look at the elements that make up the interface. Please see the chart below for information on the sections.

1.	<b>Main Menus</b>	The <b>Main Menus</b> allow the user to save and load configurations, and to set up the "capture" configuration in a Sync Record application.
2.	<b>Sync Mode</b> button	When selected, all of the channels loaded in the <b>Channels</b> 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.	<b>Sync Clips List</b> field	Displays all channels added to <b>SyncControl</b> , along with details about

		the channel and loaded media on that channel.
4.	<b>Sync Accuracy</b> 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.	<b>Edit Mode</b> button	With the <b>Edit Mode</b> button selected, the user may control the channel loaded in the <b>Channel</b> pulldown menu.
6.	<b>Loop Mode</b> button	Check the <b>Loop Mode</b> checkbox to specify that <b>SyncControl</b> 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.	<b>VID</b> and <b>AUD</b> 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.	<b>Channel Set</b> controls	<b>Add</b> a channel, <b>Delete</b> a channel, or <b>Set</b> channel parameters entered by the user into memory.
9.	<b>Transport</b> 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.	<b>Connection Settings</b> section	Connect to the Target device and enter settings specific to the channels. See the <b>Connection Details</b> section for more detailed information on these controls.
11.	<b>Transport</b> display	Transport display section; <b>Control</b> type, <b>Time Code</b> location, <b>Percentage</b> of Play Speed, Target device <b>Video Standard</b> , <b>Time Code</b> type, <b>Offset</b> time code, Target device other <b>Video Standard</b> return (click on this control to cycle through any other available time code types) and <b>User Bits</b> values are displayed.

## Main Menu - File



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

1.	<b>New</b>	Create a new configuration
2.	<b>Open</b>	Search for and open a saved configuration.
3.	<b>Save</b>	Save the current configuration in a location and with the name of your choice.
4.	<b>Exit</b>	Close <b>SyncControl</b> without saving the present configuration.

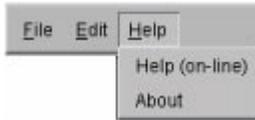
## Main Menu - Edit



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

1. **Configure** Set up the present configuration.

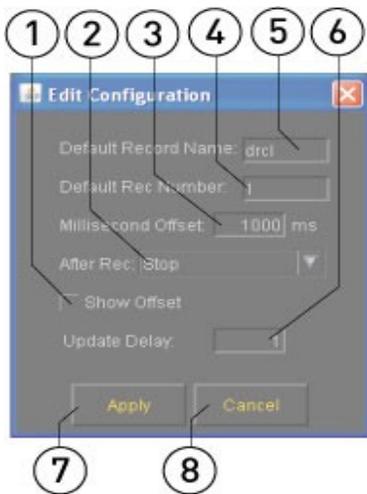
## Main Menus - Help



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

1.	<b>Help (on-line)</b>	Opens the on-line help file
2.	<b>About</b>	Opens the <b>About</b> window, which displays version information for <b>SyncControl</b> .

## Edit Configuration Dialog Box



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

1.	<b>Show Offset</b> checkbox	Display the amount of offset to assist calibration testing and adjustments.
2.	<b>After Rec</b> pull-down menu	Allows the user to select the state to which <b>SyncControl</b> will return after each capture. <b>Last</b> retains the last clip that was loaded before the capture action, <b>Stop</b> places each channel of the Target device in Stop mode after a capture, <b>Auto-Load New</b> loads the clip just created for each channel upon completion of a capture.
3.	<b>Millisecond Offset</b> 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.	<b>Default Rec Number</b> 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.	<b>Default Record</b>	This field supplies the default file prefix (drcl, or Drastic Clip). The user

<b>Name</b> field	may edit this prefix. The prefix will be used as the suffix to automatically create clip names for media capture.
<b>6. Update Delay</b> field	Set the amount of delay for the offset field display to be updated.
<b>7. Apply</b> button	Confirm any changes entered by the user and apply them during file capture.
<b>8. Cancel</b> button	Reject any changes made, and close the <b>Edit Configuration</b> window.

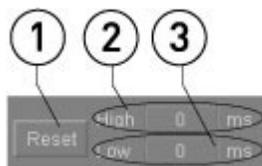
## Sync Clips List

1	2	3	4	5	6	7	8	9	10	11
Name	IP Address	Channel	Timecode	Clip Name	Offset	Status	Mode	Storage	Sync	Buffer
Left Screen - Panasonic	Typhon-0808	0	00:00:49:09	ScreenA	00:00:00:00	Play	Clip	158 GB	0	82%
Right Screen - Panaso	Typhon-0808	1	00:00:49:09	ScreenB	00:00:00:00	Play	Clip	158 GB	0	88%
Center Screen - JVC/H	192.168.100.227	0	00:00:49:09	ScreenC	00:00:00:00	Play	Clip	236 GB	0	86%

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

<b>1. Name</b> column	Displays the <b>Assigned Name</b> of this channel of the Target device.
<b>2. IP Address</b> column	Displays the <b>IP Address</b> or network name of the Target device.
<b>3. Channel</b> column	Displays the internal, control or external <b>Channel</b> value.
<b>4. Timecode</b> column	Displays the timecode location within any loaded clip on this channel.
<b>5. Clip Name</b> column	Displays the name of the clip that is loaded on the channel.
<b>6. Offset</b> 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.
<b>7. Status</b> column	Displays the current transport status for the channel (whether in Play, Pause etc.)
<b>8. Mode</b> column	Displays whether the Target device is in Clip (Server) or VTR (VTR TC Edit) mode.
<b>9. Storage</b> 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.
<b>10. Sync</b> 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.
<b>11. Buffer</b> column	Displays the buffer levels for each channel.

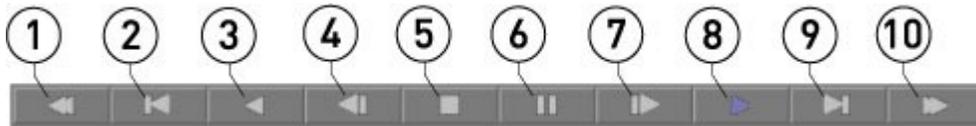
## Sync Accuracy Section



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

1.	<b>Reset</b> button	Reset the high and low peak values to 0.
2.	<b>Peak High</b> field	Displays the peak amount of sync "slippage" (Over, or too high), divergence from absolute synchronization in milliseconds.
3.	<b>Peak Low</b> 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.	<b>Fast Reverse</b> button	Playback in reverse at the fastest speed supported by the hardware.
2.	<b>5 Seconds Reverse</b> button	Go to the location five seconds prior to the present location and pause, displaying the frame of video found there.
3.	<b>Reverse Play</b> button	Play the media in reverse, at -100% of play speed.
4.	<b>Frame Reverse</b> button	Go to the location one frame prior to the present location, and pause on, or display the frame of video found there.
5.	<b>Stop</b> button	Pause at the present location, and go into passthrough mode.
6.	<b>Pause</b> button	Pause at the present location and display the frame of video found there.
7.	<b>Frame Advance</b> button	Go to the location one frame after the present location, and pause on, or display the frame of video found there.
8.	<b>Play</b> button	Play the media at normal (100%) of play speed from the present location to the end, unless interrupted by another command.
9.	<b>5 Seconds Advance</b> button	Go to the location five seconds after the present location and pause, displaying the frame of video found there.
10.	<b>Fast Forward</b> 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

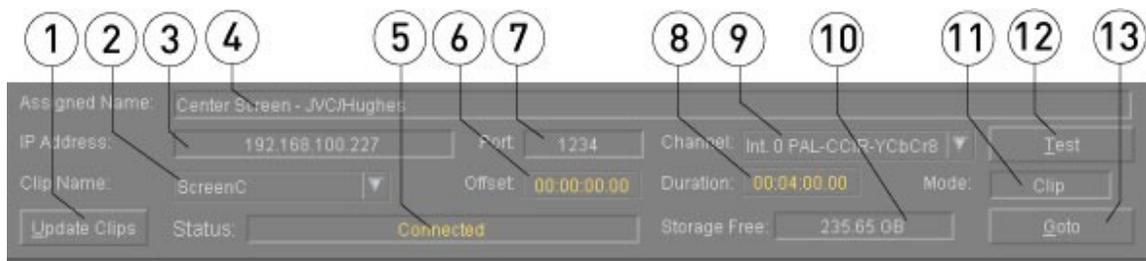


Please refer to the following chart for available controls and their functions:

1.	<b>Set Name</b> button	Sets any details entered into memory, so that capture may begin immediately upon pressing the <b>Start</b> button.
2.	<b>Max Length</b> checkbox	Check the <b>Max Length</b> checkbox to activate the <b>Max Length</b> field.

3. <b>Start</b> button	Press the <b>Start</b> button to begin the capture as set up in this dialog box.
4. <b>Max Length</b> field	With the <b>Max Length</b> 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. <b>New Clip Name</b> field	A default clip name is supplied by <b>SyncControl</b> . 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. <b>Cancel</b> 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.	<b>Update Clips</b> button	Press to update the display of any clips in the <b>Clip Bin</b> of the Target device.
2.	<b>Clip Name</b> pulldown menu	Displays any media which has been added to the <b>Clip Bin</b> of the Target device. Allows the user to select between available media clips for playback.
3.	<b>IP Address</b> field	Type in the <b>IP Address</b> or network name of the Target device here.
4.	<b>Assigned Name</b> 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.	<b>Status</b> display	Displays the status of the connection to the Target device.
6.	<b>Offset</b> 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.	<b>Port</b> 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.	<b>Duration</b> field	Displays the length of the selected clip.
9.	<b>Channel</b> pulldown menu	Allows the user to select between all channels available on a Target device.
10.	<b>Storage Free</b> 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.	<b>Mode</b> field	Displays the mode of the Target device, whether Clip mode or VTR mode.

12. <b>Test</b> button	Press to test the connection to a Target device.
13. <b>GoTo</b> button	Press to go to a specific location in the loaded clip.

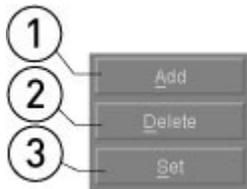
## Transport Display



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

1. <b>Time Code 1</b> type	Displays the time code type being used.
2. <b>Time Code 1</b> location	Displays the current time code location.
3. <b>% of Play Speed</b>	Displays the percentage of play speed (100% being normal play speed).
4. <b>Video Standard 1</b>	Displays the video standard used by the Target device.
5. <b>Warning Code</b>	This area flashes a warning code to alert of a missing or invalid connection: REF if reference, IN if input, etc.
6. <b>Time Code 2</b> type	Displays an alternate time code type if present, such as LTC or VITC
7. <b>Time Code 2</b> location	Displays the current time code location using the alternate time code type if present.
8. <b>Video Standard 2</b>	Displays the video standard associated with the alternate time code if present.
9. <b>User Bits</b>	Displays any user bits associated with the selected file.

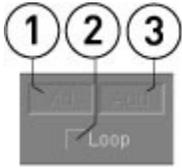
## Channel Edit Buttons



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

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

# VID, AUD and Loop buttons



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