

VideoReDo Plus Overview

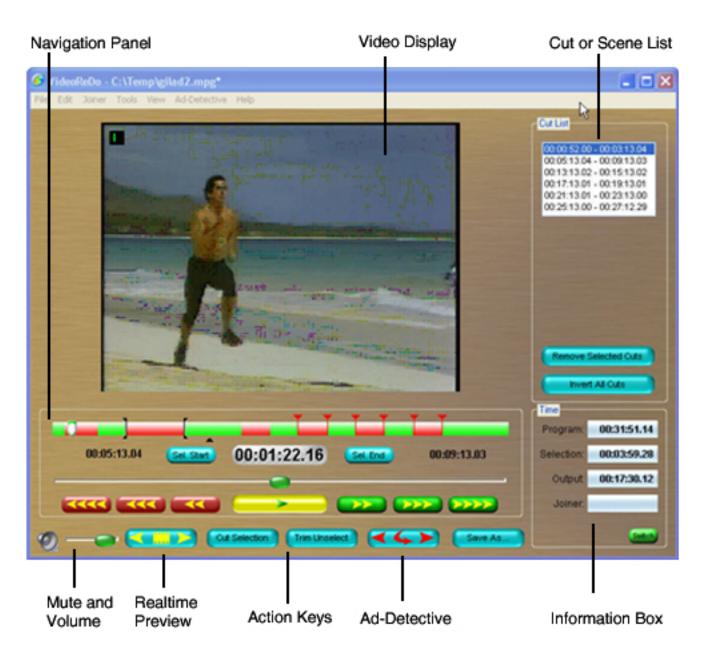
Learn how to use VideoReDo Plus:

- Screen Layout An overview of the VideoReDo screen.
- <u>Getting Started How open open files, navigate, create selections, and</u> <u>save your work</u>.
- Using Preview Mode.
- Using the thumbnail and audio graph.
- Using Ad-Detective How to setup and run VideoReDo's computer assisted commercial detection.
- Reference to individual dialogs.
- Keyboard shortcuts A complete list of Keyboard shortcuts.
- How to Register Your Copy of VideoReDo.
- Getting support and help.

Screen Layout

The VideoReDo screen layout is intuitive yet powerful. Its customizable navigation controls provide speed and flexibility to quickly find material in long videos, yet accurately position to the exact frames you want to cut.

Click on the appropriate label to learn more.



Getting Started

Overview:

Editing MPEG video is a snap with VideoReDo. This section will take you through the basic features and capabilities of the program.

VideoReDo works directly with compressed digital video, specifically MPEG1 and MPEG2. It allows you to remove unwanted scenes from a video program (cutting) and piece together scenes from multiple programs into one seamless file (joining). Since VideoReDo works without decoding and re-encoding the source material, the original video quality is preserved through multiple edits. Edit points are accurate to a single frame, and, with a variety of rich navigation tools you can move quickly through your video programs to find the exact material you want to include or exclude from your output file.

VideoReDo will automatically fix MPEG files that contain corrupted or missing audio or video material resulting in MPEG files that stay in sync. Should your original source program not be in perfect audio/video sync, VideoReDo has the tools that let you adjust the audio back into perfect synchronization.

VideoReDo Plus adds additional options such as real-time preview of your edits, computer assisted commercial detection, and thumbnail previews.

For additional information:

- Quick Start Guide
- Navigating the video program
- Managing selections
- Joining multiple programs together
- Getting Help

Using Preview Mode

VideoReDo has two modes, **Edit Mode** and **Preview Mode**. Edit mode is the default when a file is opened and is the mode in which cuts are marked and manipulated. Preview mode gives you an opportunity to preview your work before saving. In edit mode, the navigation bar shows the entire original program and is colored red and green to indicates where in the original program the marked cuts and scenes are. When you switch to preview mode, the navigation bar switches to a purple color. In addition the <u>thumbnail window</u>, if displayed, changes background color.

In preview mode, all displayed time codes are based on their position in the output file, not the input file, and scene markers which lie in cut sections will not be visible.

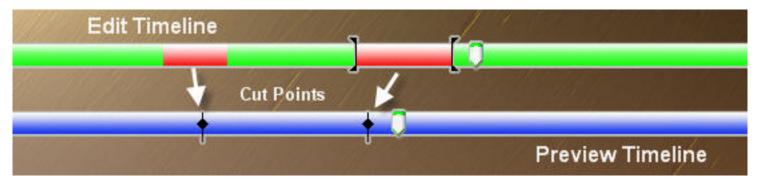
Switching between modes:

You can toggle between preview and edit either by pressing the **P** key, or pressing the

center, film strip, section of the preview buttons:

You can also switch from preview mode back to edit mode, by clicking on either of the selection button:

When you switch between modes, the cut regions are transferred into diamonds on the preview navigation bar.



Jumping to the next or previous cut:

You can jump to the next or previous cut by pressing the right or left arrow of the

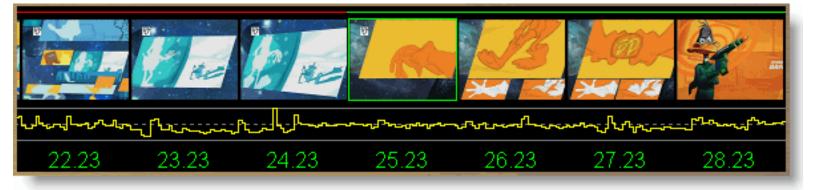
preview button: contract or pressing the Tab or Shift+Tab key.

Automatically previewing your cuts:

VideoReDo lets you automatically preview your cuts. To enable this feature, set the **Preview Lead-in (secs)** on the <u>General Parameters</u> option page to a non-zero value. Then when you jump to the next or previous cut while in preview mode, VideoReDo will automatically jump to the Lead-in seconds before the cut and start playing.

Using the thumbnail and audio graph

The thumbnail and audio graph is an advanced navigation tool of VideoReDo Plus.



There are four parts to the thumbnail window. Starting from the top:

- 1. **Cut Line:** The thin red and green line at the top indicates which frames will appear in the saved output file. Red indicates the frames will be cut, while green indicates the frame will be included.
- 2. **Thumbnails:** The thumbnails will span the width of the application. The center thumbnail, surrounded by a green frame corresponds to the currently displayed frame in the main video window.
- 3. **Audio graph:** The audio graph displays the relative volume levels of the audio stream. The graph is auto-scaling based on the displayed data and does not represent absolute audio levels. Therefore we do not recommend using the graph to compare levels between programs or different sections of the same program.

Note: For performance reasons, the audio graph is only displayed for thumbnail intervals of 2 seconds or less.

4. **Time code:** The time code line shows the timecode for each frame. A "P" suffix next to the time code indicates that this is a "Pseudo Frame", created for display purposes only for 3:2 pulldown material. Edits cannot be performed on these frames as they are generated for playback only.

Note: The audio graph and time code sections are optional and can be disabled using the <u>Thumbnail Options</u> screen.

Activating the thumbnail window:

The thumbnail can be displayed or removed either by pressing the **F11** key or clicking on **View > Show Thumbnails**.

Changing the thumbnail interval: One of the most powerful features of the thumbnail

window is the ability to change the interval between each thumbnail from single frame to multiple seconds. There are 10 different interval presets which can be customized using the <u>Thumbnail Options</u> screen. To change the interval use one of the following methods:

- 1. Use the + or keys to increase or decrease the interval by one step.
- 2. **Double-click** the mouse on the center thumbnail to decrease the interval by one step.
- 3. Press Ctrl+<number key> (e.g. Ctrl+0) to switch the interval to a specific step.
- 4. **Right-click** on the thumbnail window to display a menu from which you can select a thumbnail interval:

	Single Frame	Ctrl+0
	0.1 Seconds	Ctrl+1
	0.25 Seconds	Ctrl+2
	0.5 Seconds	Ctrl+3
	One Second	Ctrl+4
	2 Seconds	Ctrl+5
~	5 Seconds	Ctrl+6
	10 Seconds	Ctrl+7
	30 Seconds	Ctrl+8
	60 Seconds	Ctrl+9
-		

Navigating using the thumbnail window: The the thumbnail window can be used as a navigation tool as well.

- 1. **Clicking** on a thumbnail will cause the video to jump to that frame. If you **doubleclick** on a thumbnail frame, VideoReDo will jump to that frame and change the display to the next lower interval.
- 2. **Press one of the number keys** to jump to specific frame. The center frame with the green surround corresponds to the number '5'. The frame immediately to the left is '4' the frame to the right is '6'. Likewise two frames to the left and right are the keys '3' and '7'. You can only use the keyboard to jump the 5 frames to the left of the current frame or 4 frames to the right of the current frame.

Thumbnails in preview mode:

The thumbnail window operates the same in preview mode with two exceptions: (1) The background color of the thumbnail window changes and (2) the Cut Line bar is not displayed. You can customize the background color of the thumbnail window for both edit and preview modes using the <u>Thumbnail Options</u> screen.

Using Ad-Detective

Ad-Detective is the VideoReDo capability to detect, mark and cut commercials. Depending upon your preferred method of working, it can be used interactively or in a batch oriented mode. In an interactive mode, Ad-Detective is used to augment the manual search and editing process, while in a batch oriented mode, the entire program is first scanned, marked for possible commercials with the results saved as a VideoReDo project file. Later on, the results of this scan are reviewed by accuracy and final editing. Which method you use is based upon your working style as well as the amount of time you have. Complete Ad-Detective scans generally take about 12 minutes / hour of video although actual performance will vary greatly based upon the the speed of your CPU as well as the type of material. HD material can take substantially longer to process.

Interactive Mode:

To start an Ad-Detective scan from the current location, click on the red arrow button:

or pressing **Ctrl+A**. VideoReDo will start to decode frames looking for scene changes. When a scene change is found, a red marker is placed on the navigation bar timeline. Additional behavior such as pausing, or automatically cutting the commercial is determined by settings in the <u>Ad-Detective Parameters</u> dialog.

To stop a scan, press the arrow button again, the pause / play button, or the **space bar**.

Batch mode:

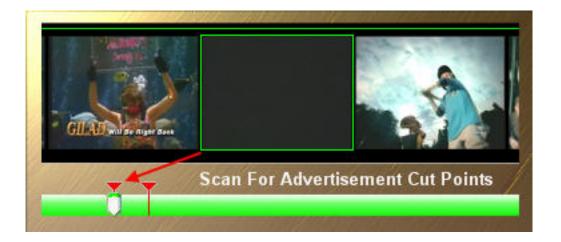
You can run Ad-Detective from the batch VideoReDo Batch Manager by selecting the Ad Detective Scan as the batch destination type:

Destination Type: VPrj - Ad-Detective Scan

This option will run Ad-Detective against the entire program and save the scene markers in a VideoReDo project file (VPrj).

Scene Markers:

Scene markers indicate the possible location of commercial breaks which occur when scenes change between programs and commercial material. Scene markers appear as red flags along the navigation bar:



To jump to a scene marker: You can jump to the previous or next scene

marker by pressing **F5** or **F6**. The red scene jump arrows **E**. If you switch to preview mode, only those scene markers which are in un-cut areas will be visible.

To remove or manually add a scene marker: To remove a scene marker, place the cursor on top of a marker by jumping to it and then pressing **A** or selecting Add / Remove from the Ad-Detective menu. Doing the same action where there is currently no scene marker will add a new marker.

To remove all scene markers: Press Ctrl+Shift+A or click on the "Clear All Scene Marks" on the Ad-Detective menu.

Reference

Please click on the topic below for additional information:

<u>Context and</u> <u>Edit Menu</u>	Options available from the edit and context menu.
• Joiner Editing	How to add, remove or change the sequence of joined program material.
 Keyboard Shortcuts 	Complete list of keyboard shortcuts for VideoReDo
• <u>MPEG</u> <u>Program</u> <u>Information</u>	Dialog box which displays the internal formats of the MPEG2 Program headers
 <u>Create</u> <u>Trimmed File</u> <u>Copy</u> 	How to copy a portion of your raw input file. Primarily used for support purposes.
• <u>Output</u> <u>Processing</u> <u>Complete</u>	Description of the fields displayed after your edits have been saved.
 <u>Overlapping</u> <u>Selections</u> 	Description of your options when a new selection intersects with an existing selection.
• <u>QuickStream</u> <u>Fix</u>	Facility to quickly fix all the timing codes in an MPEG file. It will also re-synchronize out of order audio and video.
• <u>Video Frame</u> <u>Capture</u>	Captures the currently displayed video frame to the Windows Clipboard or a BMP file.
 <u>Stream</u> <u>Selection</u> 	Dialog to choose which set of audio and video streams in your file to edit.

 <u>Change</u> <u>Display</u> <u>Properties</u> 	This dialog will let you adjust the brightness and contrast of your display.
 <u>Set</u> <u>Thumbnail</u> <u>Parameters</u> 	This dialog is used to configure the thumbnail and audio graph window.
 <u>Set Ad-</u> <u>Detective</u> <u>Parameters</u> 	Dialogs to tune the sensitivity and behavior of the Ad-Detective scans.
Program Options	
General Parameters	Description of parameters which affect the behavior of VideoReDo.
• Navigation	How to change the behavior of the navigation buttons, sliders, and keyboard commands.
• Stream	Options to change the format of the output video stream.

- **<u>File Types</u>** How to make VideoReDo the default program for opening MPEG files.
- PlaybackHow to tailor VideoReDo to make optimal use of your sound card and
video adapter.
- **<u>Start Up</u>** Control the behavior of VideoReDo when the program begins.
- ChapterChange the behavior and format of VideoReDo's chapter markingMarkscapabilities.
- <u>Audio Alerts</u> Enable audio alerts and sound selection.

Parameters

Keyboard Shortcuts

Relative movement keys: These keys move the program forward or backward by the specified interval. When held down, as opposed to being immediately released, these keys will automatically repeat allowing you to quickly zoom through sections of the video program. The repeat rate may be set using the keyboard option in the Windows Control Panel.

Page Page Up Down	Simulates pressing the back C , or forward D 120 second buttons. The exact number of seconds may be modified with the <u>Navigation options dialog</u> .
\leftarrow	Backward or forward one frame. Behavior may also be altered by simultaneously pressing the shift and control keys. Please see the Navigation options dialog to see all the movement options.
	Simulates pressing the back () , or forward) buttons. The exact number of second may be modified with the <u>Navigation</u> <u>options dialog</u> .

Jump keys: These keys move the program to a specific location in the file:

Home End	
Shift + Home	Jump to the beginning (home key) or the end of the program. In zoom mode, jumpto the beginning or end of the zoomed segment of the timeline.
Shift + End	In zoom mode, jump to the beginning or the end of the program.
	B sets the bookmark to the current cursor position the navigation bar. The bookmark is display as a (triangle).
BJ	J jumps to the current bookmark.
	These actions may also be selected from the <u>context popup menu</u> by pressing the right mouse button.

SE	Jumps to the start (S Key) or end (E Key) selection marker. These actions are also available from the <u>context popup menu</u> .
TAB	Tab jumps to the next selection marker in the cut or scene list.+Tab jumps to the previous selection marker in the cut or scene list.Identical to pressing the left or right arrow on the preview buttons:
Shift + TAB	
Ctrl + T	Jump to a specific time code.

Action keys: These keys affect the actions and/or operation of the program.

Pause Space	Toggles Pause / Play. You can also left-click the mouse anywhere in the video to toggle between pause and play.
	Marks the beginning (F3) or end (F4) of a selection. Same as pressing the Sel. Start and Sel. End buttons. When One-Click Selection is
F3 F4	enabled, the Sel. Start / Sel. End button labels are changed to Mark In / Mark Out indicating that One-Click Selection is active. These actions are also available from the <u>context popup menu</u> .
Delete	In Cut mode, this key will add the selected material to the cut list. Same as pressing: Cut Selection
Beield	In Scene mode, this key will delete the un-selected material from the output file, same as pressing:
	In Cut mode, this key will include the unselected material from output file, causing the selected material to be deleted. Same as
Insert	
	In Scene mode, this key will add the selected material to the scene list. Same as pressing: Add Selection
Delete	enabled, the Sel. Start / Sel. End button labels are changed to Mark In / M Out indicating that One-Click Selection is active. These actions are als available from the <u>context popup menu</u> . In Cut mode, this key will add the selected material to the cut list. Same as pressing: Cut Selection In Scene mode, this key will delete the un-selected material from the output file, same as pressing: Add Unselect In Cut mode, this key will include the unselected material from outp file, causing the selected material to be deleted. Same as pressing: Trim Unselect

Р	Toggles between edit and preview mode. Same as pressing:
M Shift + M Ctrl + M	M, by itsself, toggles the audio mute. Same as pressing the speaker icon:
Ctrl + F4	Closes the current file.
Ctrl + B	Saves the current edits to a unique project filename and queues this project for batch processing.
Ctrl + C	Captures the currently displayed video frame to either the Windows Clipboard or a BMP file.
Ctrl + D	Toggle the information window display between program times and program sizes (MBytes).
Ctrl +	Inverts all the cuts. Same as pressing:
Ctrl + O	Opens a video file.
Ctrl + P	Saves the edits to the project file.
Ctrl + Q	Opens the stream selection dialog. If your file contains multiple streams, this dialog can be used to select which stream to edit.

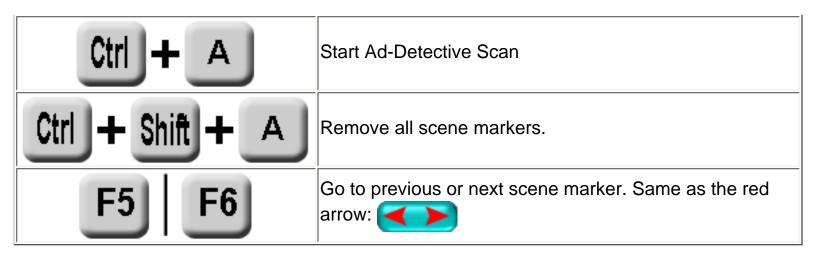
Ctrl + R	Removes the current selected cuts. Same as pressing:
Ctrl + S	Write the edited video back to disk.
Ctrl + Z	Undo last edit. Each time you change the cut list, VideoReDo keeps a backup copy incase you change your mind. You can select Undo multiple times to remove multiple edits. Once an edit has been Undone, there is no re-do key to restore it.

Thumbnails keys : These keys control the thumbnail behavior.

0-9	Jump to the frame displayed by a particular thumbnail. 5 jumps to the center thumbnail. 4 to the one just to its left, 6 one to its right. 3 two to the left, 7 two to the right, etc.
Ctrl + 0 - 9	Change the thumbnail display interval. Ctrl+0 jumps to the smallest interval (highest resolution), while Ctrl+9 to the lowest resolution.
F11	Toggle the display of the thumbnail window.
Shift + F11	Display the thumbnail options dialog.
+ -	Increase (+) or decrease (-) the thumbnail interval.

Ad-Detective keys : These keys control the behavior of Ad-Detective and Scene markers.

	Set	or Remove a Scene marker.
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Appearance keys: These keys affect appearance of VideoReDo

Alt + Enter	Toggles the display between standard size and maximized (full screen).
F1	Displays help appropriate for the current window or dialog.

Zoom keys

Z	Toggles the timeline between standard and zoom mode.	
F7 F8	Zoom magnification is adjusted in and out.	
	Shifts the zoom area left or right.	

Purchase and Registration

VideoReDo Evaluation

VideoReDo		Thank you for eval VideoReDo Plu	
	The fast MF	EG editor for videophiles.	
		already purchased VideoReDo, sy you received now.	please enter the
	0	21 days left	21
Purchase a VideoReDo Plus registration now.	Name:		
 Update or enter my software key. 	Key:		
Paste key fro	m Clipboard	Register Key	Register Later

You can use this dialog to purchase a perpetual license to use VideoReDo. When you purchase such a license, you will be asked to supply a user name. Upon validation of your payment you will receive, generally via email, a registration key which will remove the expiration and other trial copy limitations of the program.

To purchase VideoReDo: Select the purchase radio button and click "Register Now". Your browser will launch and take you to the registration screen.

To enter or change your software key: Select the "Update my software key" radio button. The name and key edit controls will be enabled allowing you to enter the registration data. For protection purposes, the registration key can be up to 60 characters so we suggest you copy it to the windows system clipboard using the select and copy functions of your email program. You can simply click on the "Paste key from Clipboard" button to paste it directly into the key field.

Note; When entering your key, make sure you also enter the name, as supplied with your key, into the **Name:** field.

Special Note: Each license key provided for use with VideoReDo is intended for a specific user. We ask that you not share it with others as unauthorized usage may result in the license key being marked as invalid. Please review the <u>license agreement</u> in this help file for additional details

Technical Support

Technical support for VideoReDo is provided, without charge, through the links at our website. Here you will find multiple resources to assist you in solving problems with VideoReDo and to take maximum advantage of the program's features.

Support Forum:

http://forums.VideoReDo.com This community of VideoReDo developers and users is the primary place to get your questions answered quickly and learn more about the product.

Email:

<u>support@VideoReDo.com</u> You may email our support group directly with your questions and product comments.

Webform:

http://www.VideoReDo.com/Contact.htm This page provides a web-based contact form which can be used instead of email.

How To Guides :

http://www.videoredo.com/HowTos/HowToContents.htm This page contains a series of step-by -step instructions for accomplishing some of the frequently used or sophisticated tasks with VideoReDo.

Adjust Audio Levels

You can adjust the playback volume using the slider in the lower left of the screen.



You can also mute audio by clicking on the speaker symbol (or pressing the "M" key).

The volume can be raised or lowered by pressing the Shft+M to raise the volume and Ctrl+M to lower it.

Managing Selections

Selections are the fundamental building blocks of the VideoReDo editing process. With selections, you indicate which portions of the source video program you wish to include or exclude from the edited output. There is no limit to the number of selections you can create during the editing process. You can also save your selections to a <u>project file</u> so that they may be retrieved for additional editing in the future.

Creating selections: Creating selections is a three step process:

1. <u>Navigate</u> the video to the desired start of the selection, and press the Sel. Start button.

The start selection marker, will appear at the current cursor position. If the new selection is to the right of end selection marker, the end selection marker will be moved to the end of the file.

2. <u>Navigate</u> the video to the desired end of selection, and press the <u>Sel. End</u> button. The

end selection marker, will appear at the current cursor position. If the new selection end is to the left of the current start selection marker, the start selection marker will be moved to the start of the file.

3. If you are operating in **Cut Mode**, you create the cut selections by pressing the

Cut Selection or Trim Unselect buttons. The Cut Selection button will mark the area between the selection markers as the selection and add that selection to the list of cuts on the right of the screen. Trim Unselect will add the areas outside the selection markers to the cut list creating two new selections. A portion of the background on the navigator bar will be red to signify the sections of the video program that will be cut.

Before Cut:	
Cut Selection:	
Trim Unselected:	

and

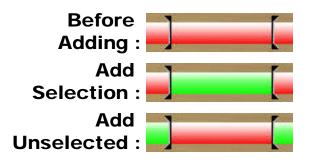
Add Unselect

If you are operating in **Scene Mode**, scene selections are added using the

Add Selection

buttons. Add Selection will add the area between

the selection markers, while **Add Unselect** will add the areas outside the selection markers. A portion of the navigator bar background will be green to signify the sections of the video program that will be included in the output program.



4. If you have the optional Enable One-Click Selection checked on the <u>General</u> <u>Parameters</u> options page, the Sel. Start and Sel. End buttons will be labeled,
Mark In and Mark Out. They function the same as described above except that when you press Mark Out the selection is automatically Cut or Added. This will save you time by not having to press the Cut Selection or Add Selection buttons.

Overlapping selections: If you attempt to create a cut or scene that overlaps a previous selected cut or scene, the following dialog box will appear.

Overlapping Cut	Press Combine to combine the
New cut range of:00:00:00.73 to 00:00:05.95 Overlaps Existing cut range of:00:00:00.73 to 00:00:02.74	two overlapping selections into one.
Please choose to: Combine the two cuts into one. Replace the original cut, or cancel this request.	Press Replace to delete the old selection and replace it with the new one.
Combine <u>R</u> eplace <u>C</u> ancel	or, Press Cancel to simply abort this operation.

Note: If you have the **Auto Replace Overlapping Cuts** selected on the <u>General Parameters</u> options page, the new cut or scene will automatically replace the previous overlapped one.

Deleting selections:



You can delete existing selections by highlighting one or more entries in the list box and pressing Remove Selected Cuts. Simply

click on an entry to turn the highlight on or off. You can also highlight a selection by moving the navigation cursor into an existing selection. As the navigation cursor crosses into a selected area, the selection in the cut/scene list is highlighted.

To select multiple selections: Hold the Shift key down to select a range of entries, or hold the Ctrl key down to select individual entries (as shown in the example to the left).

Pressing **Invert All Cuts** will reverse all the entries in the list box. That is, areas that were previously selected to be cut will now be included, and those that were selected to be included will now be cut.

Modifying selections:

There are times when you might want to modify the range of a selection, perhaps to add a little more to the beginning, or take some off the end. Follow these simple steps:

- 1. Double-click on the selection you wish to modify either by double-clicking on the entry in the cut/scene list or the selection itself on the navigation bar. This will cause the selection markers on the navigator bar to be re-positioned to bracket this selection.
- 2. To modify the start of the selection, simply use your mouse and/or keyboard navigation

options to move the program to the desired start and then press, Sel. Start. You can always jump back to the current start of the selection by pressing the **S** key.

To modify the end of the selection, press the **E** key (or use the <u>context menu</u>) to jump to the end of the section. Use the mouse or keyboard to navigate to the new desired end and then press, <u>Sel. End</u>.

Cut Selection

Add Selection

3. Depending upon the mode you are in, click on the or button. Since you are overlapping a previous selection, the overlapping selections dialog will appear. Select **Replace**, and the modification is complete.

Navigating The Video Program

VideoReDo offers many ways of navigating through the video program.

Navigating with the mouse:

All of the VideoReDo navigation functions can be completed using the mouse. Click on any of the controls in the picture below to view its function.



Program cursor: The program cursor is the primary navigation tool for moving quickly through large sections of the program. Simply place the mouse cursor anywhere on the navigation bar and click the left mouse button. The cursor and video will jump to the desired location. While still holding down the mouse button, drag the slider to the left or right to zip through the video. Navigating using the **program cursor** will always position the video to the nearest I-Frame. For finer movements, you will need to use the other navigation controls.

When the video is playing, the **program cursor** will automatically advance with the program time. As the cursor passes over a selected area, the selection is highlighted in the Cut List box.

Note: Double clicking on the program cursor, while it is in within a selected area, will move the start and end markers to surround the selection.

Fine tuning slider: Use the **fine tuning slider** to move the video forward or backward in smaller increments. Click and drag the slider to the right to advance the program, to the left to move it backwards. By default, the slider will move the program up to 120 seconds in either direction. You can change this value on the <u>Navigation options</u> page.

You can temporarily make the **fine tuning slider** less sensitive (i.e. more accurate) by holding down the control and or shift buttons while moving the slider. The control and shift buttons will reduce the range of the slider in proportion to their value. For example, if the shift multiplier on the <u>Navigation options</u> page is 2 and the slider range is ± 120 seconds, then holding down the shift button will reduce the range to ± 60 seconds.

Note: Dragging the fine tuning slider with the right mouse button will give you very fine control by limiting the range of movement to +/- one second.

Forward and Backward Movement Buttons: The three forward and backward movement buttons will move the program ahead or backward by single frames, 30, and 120 seconds respectively. You can hold down the shift and/or control keys to increase the amount of movement. Once again, you can set the time increments for these controls from the <u>Navigation options</u> page. There are also <u>keyboard substitutes</u> for these controls.

Pause / Play button: Press this button to toggle between pausing and playing. When the button background is yellow, the program is paused, when green the program is playing. You can also toggle between pause and play by clicking the left mouse button anywhere on the video picture itself, or simply press the space bar.

Cursor clock: The cursor clock, in the center of the screen, indicates the position of the program cursor in hours, minutes, seconds and frame count. This is a display-only control. The two other clocks, without backgrounds just below the navigation bar, display the current position of the start- and end-selection markers. Double-clicking on the cursor clock will let you position by <u>entering a time code</u>.

Navigation Bar: The navigation bar is a display-only control depicting a graphical view of your selections. Where the background is green, program material will be transferred to the output file, where red, it won't. When you open a video file in **Cut mode**, the background of the navigation bar will be entirely green indicating that the entire program will be written unless you make selection cuts. Likewise, when you open a video file in **Scene mode**, the background of navigation bar will be red indicating that nothing will be output until you identify selections to include.

Note: When you switch into Preview Mode, the navigation bar turns purple to indicate you are no longer in an editing mode.

Bookmark: The location of the bookmark is highlighted by the triangle symbol: A. To set the bookmark, press the "B" key or right-click to display the <u>context-menu</u>. You can jump to the bookmark by pressing the "J" key or from an option on the edit- or <u>context-menus</u>.

The current position of the start and end selection markers, **and** and **are** also shown. Please see <u>Managing Selections</u> for additional information on setting the selection markers.

Navigating with the keyboard:

Many users prefer to navigate using the keyboard instead of the mouse. One benefit of navigating with the keyboard is that when a key is held down it automatically repeats. This can make scanning the program, forward or backward, at high speed a painless process. Please see the section on <u>keyboard substitutes</u> for more detail.

Timeline Zoom:

Zoom mode is used to magnify a section of the navigation bar to better see cut points and scene markers. Its useful when editing long programs where the markers may be too close together to be distinguished from one another.

The "Z" key will toggle zoom on and off. You can also press the "F7" and "F8" keys to decrease or increase the level of magnification. These same options are available on the View menu as well.

Standard view:

00:01:32.02 Sel. Start	00:03:43.20	Sel. End 00:02:02.03

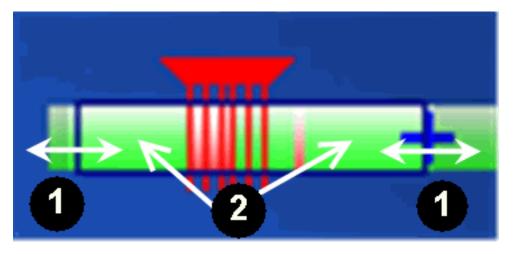
Zoomed view: Note that the navigation bar only shows the zoomed or magnified area. The lower slider has been replaced with the a graphic highlighting the zoomed area within the entire timeline.



Changing the zoomed area:

You can increase or decrease the zoomed area by positioning the mouse on the edges of the zoom window (see #1 below) and dragging them to the left or right. If you prefer, pressing the "F7" or "F8" keys to decrease or increase the zoom window size.

To move the zoom window, click inside the zoom area in zoom bar (see #2 below). The cursor will change to the image of a hand and you can then drag the zoom window to the desired position. You can also pressing the comma or period keys to move the zoom area left or right, respectively.



Quick Start

This page will lead you through the most basic steps of opening, editing and saving your video program files.

Setting the program mode:

Before you start editing your video program, you need to decide whether VideoReDo should be run in **Cut Mode** or **Scene Mode**. The mode is selected via a selection box on the <u>General Parameters option</u> dialog.

In **Cut Mode** the scenes you select will be removed or cut from the output video. For example, lets say you have a video of a television program from which you want to remove the commercials. Using **Cut Mode** you can highlight the start and end of each commercial segment and remove them from the output file. When you initially open a program in **Cut Mode**, the navigation bar will show with a green background. The green area in the navigation bar indicates those portions of the video that will be saved when you save your video. As you "cut" or remove sections of your program, parts of the navigation bar will turn from green to red indicating where the cuts have been made and that those cuts will not be saved.

Cut Mode Operation:



In **Scene Mode**, only the specific scenes or segments from the program that you select will be written to the output file. Scene mode is often used when it is easier to identify the scenes you want to keep, such as when piecing together a video collection.

When a program is opened in **Scene Mode**, the navigator bar's background starts out red, indicating that no scenes have been selected for output. Each time you select a specific scene to output, a section of the bar will turn green indicating that it will be included in the output file.



The program mode option may be changed at any time, but will only take effect when a new video program is opened.

Opening a video program file:

VideoReDo can edit MPEG1 program streams and MPEG2 program streams, transport streams as well as VOB streams from a DVD. There are four different ways to open a file:

- 1. Selecting Open Video from the File menu (shortcut key Ctrl+O). Select an existing MPEG file from the file selection dialog. You will note that there is an additional combo box at the bottom of the file selection dialog which keeps a list of recently used file folders.
- 2. Drag a file from the Windows File Explorer into the VideoReDo window. If VideoReDo is not yet opened, you can also drag a file from the Windows Explorer onto the desktop icon.
- 3. If VideoReDo is configured as the default application for your MPEG files, you can automatically start VideoReDo and open a file by double clicking on it from the Windows Explorer. You can enable this feature from the <u>File Associations option</u> dialog.
- 4. Selecting one of the most recently opened files listed at the bottom of the File menu.

Navigating and selecting video segments:

The editing process consists of selecting video segments for inclusion (scene mode) or exclusion (cut mode).

- To select a segment you start by moving the current video position to the beginning of the desired segment and pressing Sel. Start.
- To mark the end of the segment, move the current video position to the end of the segment and press, Sel. End. When you press either of these buttons, a segment indicator will appear on the navigation bar.
- Once a segment has been marked, you can elect to include it in the output video by pressing, Add Selection (scene mode) or exclude it by pressing, Cut Selection.
 Pressing either of these buttons will add the selection to the selection list box on the right.

There are many ways to navigate around your programs and we suggest you read the <u>navigation page</u> for additional details. However, the simplest way to move through your program is to drag the upper slider close to the desired point. Then use the lower slider to fine tune the selection point.

Saving the edited program:

You can save the edited program by selecting "Save Video As..." from the file menu or

pressing the Save As... button.

Joining Programs

Joining is used to concatenate multiple video files into a single file. MPEG program stream files are structured with a number of internal time stamps. The VideoReDo joiner realigns these time stamps as it puts your selection of files together into one file.

The joiner is used by adding project or MPEG files to the joiner list. To add a project, open an MPEG file or an existing VideoReDo project. Create your cut or scene list as you normally would, but instead of saving the edits, add the open project to the joiner list by clicking on **Joiner>Add Current Project To Joiner List**. You can also add multiple multiple MPEG files or saved projects to the joiner list in one step using the <u>Window drag and drop feature</u>.

Joiner Restrictions: There are a few restrictions on nature of the files that can be joined. You will be warned if you attempt to join files that don't meet these criteria.

- 1. Files must be of the same type. You can only join MPEG-2 files with other MPEG-2 files and MPEG-1 files with other MPEG-1 files.
- 2. Audio sample rates must be identical. You cannot join files that have different audio characteristics. The audio bit rates may be different between files.
- 3. Video picture size must be the same. MPEG files can be encoded with a variety of picture sizes (i.e. 720x480, 480x480, 640x480, ...). The joiner will insure that only files of the same size can be joined. The video bit rates may be different between files.

The Joiner List: The Joiner list is the collection of video program files along with their edit selections. Entries are added to the joiner list by selecting **Add Current Project To Joiner List** from the joiner menu. When you select this command, the current edit project will be added to the joiner list. If, for example, you have previously selected two scenes to cut from the program, the project being added will have the cut scenes omitted.

If you have checked the "Prompt For Joiner Descriptions" option in the <u>General Parameters</u> <u>dialog</u>, a prompt will appear asking you to enter a short description to describe this segment. You may find these descriptions useful when editing the joiner list. The descriptions are for informational purposes only and do not affect the output in any way.

Joiner		
Add	Current Project To Joiner List	
Edit	Edit Joiner List	
Create Video from Joiner List		

Edit Joiner List: This command display the Joiner Edit dialog. From this dialog you can

remove or change the order of segments in the joiner project.

Create Video From Joiner List...: Select this option to create a new video program file from the segments listed in the joiner project.

Using the joiner to improve audio synchronization: Whenever possible, VideoReDo attempts to correct audio and video synchronization problems it detects in the source program. However, some synchronization issues can only be corrected using our manual synchronization adjustment. When a project is added to the joiner list, the project's current audio/video synchronization offset is remembered by the joiner. By default the synchronization offset is 0 meaning that the audio and video synchronization of the source file will be used as is. However, if you change the audio synchronization this change will persist through the joiner processing for that specific project. One use for this feature is to correct a video program that gets progressively more and more out of sync from beginning to end.

Adding multiple files to joiner in one step: You can add multiple MPEG files or VideoReDo projects into the joiner by dragging multiple files from the windows file explorer into the VideoReDo main window. Start by opening both VideoReDo and a copy of the Windows File Explorer. In the Windows Explorer select multiple filenames using a combination of the shift and control key. Then in one step, drag all the selected files into the VideoReDo window. The files will be sorted by name and added to the joiner list.

Getting Help

Help	VideoReDo offers many options for getting help. You can invoke help at any time by pressing the F1 key or selecting the
Contents Keyboard Shortcuts Tip Of The Day	"Contents" option from the help menu. When a dialog box is displayed and you press F1, the help system will automatically jump to the help text appropriate for that dialog.
Purchase VideoReDo Enter Software Key	If you need support, please email our support staff at: support@VideReDo.com or visit our forum at http://forums.
Technical Support	videoredo.com
About VideoReDo	

General Parameters

General Parameters

Play Video When Opened		Enable One-Click Selection
		Auto Replace Overlapping Cuts
Editing Accuracy	Frame Accurate	Queue To Batch Clears Cut List
Editing Mode:	Cut Mode	Prompt For Joiner Descriptions
Default File Save Format:	MPEG Program Stream (mpg	✓ Tooltip Delay: Fast ✓
Queue To Batch Format:	MPEG Program Stream (mpg	Preview Lead-in (secs) 0 🗸
Auto save options:	Warn if unsaved edits	~
		Clear Recent Files / Folders

Play Video When Opened: Check this option to automatically start playing the video when you open an MPEG file.

Editing Accuracy : By default, VideoReDo is enabled for frame accurate editing. This means the cut points you specify will be accurate to within a single frame. VideoReDo will decode and re-code the frames around the cut points to insure that only your desired frames are included in the output file. When set to "GOP Accurate" the cut points are rounded to the next I-Frame or start of GOP (Group of Pictures). There are typically 15 frames in a GOP since that is the DVD standard, although the MPEG2 permits a GOP to have an arbitrary number of frames in it. With 15 frames in a GOP, GOP accurate edit points are accurate to approximately 1/2 second.

Editing Mode: VideoReDo can operate in two different modes, cut mode and scene mode. In Cut mode, you indicate sections of the video program that will be removed by the editor. All "un-cut" sections will be included in the output file. In Scene mode you indicate sections (scenes) of the video that will be included by VideoReDo in the output file. Please see <u>Getting Started</u> for a more through discussion of editing modes.

Default File Save Format: Chose the default output format you wish to save to. This value can be overridden using the "File Type" option on the File > Save dialog. Options are:

- Program Stream (MPG) A standard MPEG1 or MPEG2 program stream.
- Elementary Stream (MPV) A demultiplexed version of the output program. Separate audio and video files will be written.
- **DVD Stream (VOB)** These files are VOB formatted files suitable for input to the DVDAuthor utility. They cannot be used directly on a DVD. They will need to be processed by a DVD authoring utility.
- Transport Stream (ts) Industry compliant Transport Streams
- DVR-MS (dvr-ms) Microsoft Media Center files. Also known as MCE files.
- Topfield REC (rec) Topfield REC format. A transport stream file with a Topfield header
- **Tivo (tivo)** MPEG program stream formatted with a Tivo metadata header. If the source file is not a Tivo file, the output file will be formatted as an industry standard program stream.

Queue To Batch Format : Chose the output format that projects queued to the batch processor will be saved as. The choices are same as those used by the Default File Save Format.

Auto save options: This option affects what happens when you open a new video program or try to exit the program and have unsaved edits. The unsaved edit status is cleared when you save your video or perform a project save. Please choose from one of the following three options:

- Warn if unsaved edits If you have not saved your latest edits as either a project or new video program you will be asked to confirm your action.
- Autosave project This option will automatically save your edits as a project file. The filename will be the program filename, a version number and the .Vprj file type. For example, if you are editing a program "Show.mpg" the auto save project filename might be, Show_001.Vprj. *Note: Although project files do not consume a lot of disk space, you might find them cluttering up your directories if you do a lot of editing.*
- No warning This selection will let you open a new file or exit the program without a warning message. Any unsaved edits will be lost.

Enable One-Click Selection: One-Click selection can speed up your editing process by saving you additional mouse clicks. When enabled, the Sel. Start / Sel. End button labels are changed to Mark In / Mark Out indicating that One-Click Selection is active. When One-Click is active you can press Mark Out to automatically set the selection marker and perform the Cut Selection or Add Selection action. For One-Click to work, the cursor must be to the right of the Mark In marker.

Auto Replace Overlapping Cuts: Enable this option to avoid having to respond to the <u>Overlapping</u> Selection dialog. The Overlapping Selection dialog is normally displayed if a new selection would overlap a previous one. When this option is selected the new selection will automatically replace the previous overlapped cut. **Queue To Batch Clears Cut List:** When checked, the cut list is automatically cleared after the current project is queued to the batch processor. This option is ideal when creating multiple extractions from a single program. Set VideoReDo to scene mode, select the first scene, and queue to batch. Then, select the next scene and queue to batch, etc.

Prompt For Joiner Descriptions: You can check this option to be prompted for a description whenever a project is added to the joiner list. These descriptions will help you identify joiner segments later on.

Tooltip Delay: This combo box lets you specify how quickly tool tips are displayed for the various controls on the page.

Preview Lead-in (secs): This value is used with the preview feature. When its non-zero, jumping to the

next cut using the Tab / Shift+Tab key or the **Section** buttons will cause VideoReDo to position before the cut and start automatically playing. Its a simple way of quickly previewing your cuts. The value in this field specifies how many seconds before the cut the preview will start.

Clear Recent Files / Folders: Click this button to clear the most recent file list from the file menu and the most recent folders combo box in the file open dialog.

Thumbnail Options

Thumbnail Options	
Thumbnail Interval Seconds 0: 5: 2 1: 0.1 6: 5 2: 0.25 7: 10 3: 0.5 8: 30 4: 1 9: 60 Enter 0 For Single Frame Background Color Edit View	Thumbnail Size: Brightness: Medium Normal Company Display Timecode w/Thumbnail Display Timecode Select Timecode Font Audio Waveform Display Visualize Audio Graph Color Axis Color Log Scale
Preview	Show "No Graph" Warning
OK	Cancel

Thumbnails are an optional feature of VideoReDo Plus. If enabled from the View menu (or F11 key) they will appear just below the video display. This dialog page is used to configure operations and look of the thumbnail display:

Thumbnail Interval Seconds: The ten edit boxes in this section specify the number of seconds between each thumbnail image. For single frame intervals, use '0'. Decimal values are allowed, for example using 0.50 seconds to display thumbnails at 1/2 second intervals. To display a different thumbnail interval use one of the following: the ctrl+<number> key, the "+" or "-" key, or right click on the thumbnail window and choose an interval from the displayed context menu.

Background Color: This option sets the background color of the thumbnail window. There are two colors, one for when VideoReDo is in edit mode and another for when Preview mode is active. Click on either button to change the color.

Thumbnail Size: Choose from one of three different thumbnail sizes as shown below. Note the size selection determines the height of the thumbnail. The width is calculated automatically

from the video's aspect ratio.

Size:	Pixel Height	Sample:
Small	40	
Medium	60	
Large	85	

Brightness: Choose from three different levels (Normal, Bright, or Intense) of display intensity. Dark frames can be hard to see at normal brightness levels. This parameter changes the display brightness of the thumbnail and does NOT affect the output created by VideoReDo.

Display Timecode w/Thumbnail: If you want to display the time code below each thumbnail, then enable this feature. You can customize the time code display font size and color by clicking on the **Select Timecode Font** button.

Audio Waveform Display: The thumbnail window can optionally display a graphical representation of the audio waveform. The options in this window let you choose the graph color, Axis color and scaling options. The default waveform display is **linear**, that is a sound that is recorded at twice the level of another will be twice as high on the graph display. The **Log scale** option changes the scale to a logarithmic scale, which corresponds to how people perceive the relative difference in volumes. In general, a linear scale (Log scale not selected) will make it easier to view where quiet passages are in the audio waveform.

Note: The thumbnail window automatically scales the visible waveform depending upon the data that is being displayed. It is not an absolute scale.

Show "No Graph" Warning: When Visualize Audio is selected, space is reserved in the

thumbnail window for audio graph. However, the graph is actually drawn only if the following two conditions are met:

- 1. The file being edited contains an audio stream.
- 2. The interval between thumbnails is 2 seconds or less.

If **Visualize Audio** is selected and VideoReDo is unable to display a graph the following warning is displayed if this option is selected:

Use a thumbnail interval below 2 seconds to see audio display.

VideoReDo Plus Help - $\ensuremath{\textcircled{O}}$ 2003-2006 DRDSystems, Inc.

Ad-Detective Common Parameters

Common Parameters	
Scanning Behavior Pause Scan At Beginning Of Block Pause Scan At End Of Block Pause Scan At Each Scene Change Automatically Cut Detected Scenes Disable Display Update	Minimum Seconds Between Marks: 🚦 Maximum Block Length Seconds: 180
OPU Priority While Scanning ● Normal ● Low	

The Common Parameters dialog is used to control the behavior the scene detection methods:

Scanning Behavior:

Pause Scan At Beginning of Block:

When checked, an interactive Ad-Detective scan will pause at the start of each commerical block. The start of a commerical block is identified as the first scene transition with <u>Maximum Block Length Seconds</u>.

Pause Scan At End of Block:

When checked, an interactive Ad-Detective scan will pause at the end of each commerical block. The end of a commerical block is identified as the last scene transition followed by <u>Maximum Block Length Seconds</u> of program material.

Pause Scan At Each Scene Change:

When checked, an interactive Ad-Detective scan will pause whenever a scene change is detected.

Automatically Cut Detected Scenes:

If checked, VideoReDo will add the material between the begin and end of a block to the cut list.

Disable Display Update:

If checked, the video screen will not be updated during an interactive scan.

CPU Priority While Scanning:

The Ad-Detective scanning process is very CPU intensive. You can make your system more responsive by setting the priority option to "Low". Once the scan is complete or manually stopped, the CPU priority of VideoReDo will be reset to "Normal" automatically.

Minimum Seconds Between Marks:

If two scene changes are detected within this many seconds of each other, the first one will be removed.

Maximum Block Length Seconds:

This value should represent the maximum number of seconds between for an entire commerical block. If your commercial blocks are 3 minutes long or less, then set this to 180 seconds.

A "start of commerical block" is defined as a scene marker with this many seconds of uninterrupted program material in front.

An "end of commerical block" is defined as a scene marker with at least this many seconds of program material before another scene marker is detected.

Context Menu

Set Selection Start		
Set Selection End		
Cut Selection Trim Unselected		
Go To Start Selection Go To End Selection		
Go To Program Start Go To End Of Program Go To Timecode	You can display the context menu by clicking on the right-mouse button. It is used as a shortcut for common program operations. All of the functions on this menu have equivalent <u>keyboard shortcuts</u> .	
Go To Bookmark Set Bookmark		
Show Plot Mask		
Toggle Thumbnail View Preview Your Edits		
Set Select Start Set Selection End	These functions can be used to reset the current selection start and end points and are the same as clicking on the Sel. Start or Sel. End buttons.	
Cut Selection Trim Unselected	These perform the same functions as the Cut Selection and Trim Unselect buttons.	
Go To Start Selection	These will jump the video to the current selection start or end points. The selection start and end points are indicated by vertical markers on	
Go To End Selection	the top navigation slider bar:	
Go To Program Start Go To End Of Program	Use these options to jump to the beginning or end of the program.	
Go To Timecode	Jump to a specific time code using the <u>Enter Timecode dialog</u> . Same as double-clicking on the program time or pressing Ctrl+T .	
	Toggles the Plot Mask on or off. The size of the plot mask can be set	

Go To Bookmark Set Bookmark	Use the Set Bookmark to set a marker at the current position on the top navigation slider bar. The bookmark position is indicated with a triangular marker:
Toggle Thumbnail View	Enable or disables the <u>thumbnail view</u> . Same as pressing F11 .
Preview Your Edits	Toggles the display mode between preview and edit mode. Same as pressing P or clicking on

Joiner Editing

Joiner Selections			
Filename c:\temp\barry10.mpg C:\temp\talkingheadsOriginal.mpg c:\temp\barry10.mpg	Description 1st 9 seconds of barry All news last 9 secs of barry	Duration 00:00:09.16 00:05:31.97 00:00:11.65	Up Down Remove Desc
Clear <u>A</u> ll			ancel

You can use the Joiner Selections dialog box to change the order of video sections when the joiner is used to output the video. The buttons on the right are enabled only when an entry in the dialog is selected.

Up Down	Move the selected entry up or down in the list. These buttons are used to change the order of scenes that will be output.	
Remove	Removes the selection from the list of scenes that will be output.	
Desc.	Changes the description associated with the selected scene(s). The description is only used for identification within this dialog.	
Clear All	Clear list of all joiner selections.	

Program Information

This dialog displays information from the MPEG sequence headers about the format of the data in your program file.

v	ideo Program I	nformation		×
	Video Stream			
	File Type:	PS - MPEG2	Encoding:	MPEG 2
	Dimensions:	720 x 480	Stream ID:	xEO
	Display Size:	720 x 480	Aspect Ratio:	4/3
	Frame Rate:	29.97 FPS	Bit Rate:	4.000 Mbps
	VBV_Buffer:	224 KB	Profile:	Main/Main
	Progressive:	Prog or Int	Chroma:	4:2:0
	Show Int	ra Quant Matrix	Show Non-	Intra Quant Matrix
	Audio Stream			
	Stream ID:	xC0	MPEG Layer:	Layer 2
	Bit Rate:	224 Kbps	Sampling Rate:	48000 Hz
	Copy To Clipbo	bard		ОК

Press the 'Copy to Clipboard' button to save this information on the Windows clipboard in text format. This capability is useful when information is needed by customer support and can be pasted directly into an email response.

Create Trimmed File Copy

Create Trimmed File Copy		
Source File: File z:\temp\BarryLyndon.mpg is	s 5272.5 MB	
Output File: Z:\temp\BLTrim.mpg		
 Output Options From Beginning To End Of File Start At MByte: 	MBytes To Output: 1	
O Use Selection Markers	Start Copy Close	

This dialog is used to make byte-for-byte copies of portions of the original program file. Its primary use is for you to create small copies of files that can be uploaded to the VideoReDo support team.

Source File: If you started this dialog after a video has been opened, the Source File will be filled in with the name of the currently open video program file. Otherwise, click on the "..." button to select a source file.

Output File: This is the file that portions of the source file will be copied to. Click on "..." to display the standard file dialog box so that you can choose an output file.

Output Options:

From Beginning: Select this option to start writing from the beginning of the file. Use the MBytes to Output control to specify how many MBytes of data to write. A MByte is 1,048,576 bytes.

To End Of File: Select this option to output the desired number of MBytes at the end of the file. For example, if you specify 10 MBytes to End Of File, the last 10 MBytes of the file will be copied. Note: VideoReDo looks for an MPEG packet boundary before starting the output. This may result in a file that is slightly smaller the exact size you specify. **Start At MByte:** This option is used to copy data from the middle of the file. You will need to specify both the starting MByte and MBytes To Output. Once again, VideoReDo looks for an MPEG packet boundary before starting the output. This may result in a file that is slightly smaller the exact size you specify.

Use Selection Markers: Click on this button to have VideoReDo automatically calculate the Start MByte and MBytes to Output based on the position of the selection markers. This option is extremely useful if you've identified a section of video you want to copy. Position the Start and

End selection markers, and to bracket the area you which to copy. You cannot use this option if you don't have the file open for editing.

Start Copy: Click this button to start the copy process.

Please note: This function performs a byte-for-byte copy and does not create MPEG compliant files. However, you can trim the end off of a video and leave the file MPEG compliant as long as you copy from the beginning.

Output Processing Complete

0	Output Processing Complete		
	Output Com	plete	
	Video output frames:	2915	
	Audio output frames:	3800	
	Processing time (secs):	4	
	Processed frames/sec:	661.45	
	Actual Video Bitrate:	6.10 Mbps	
	ОК		

This dialog is displayed when VideoReDo has finished creating the output file. Items displayed in red are warnings which may indicate possible problems with the input or output file.

The data from this dialog is always written to the log file.

Output Statistics:

Video output frames:	Number of video frames output.	
Audio output frames:	Number of audio frames written to the output file.	
Processed frames/sec:	Number of video frames per second processed.	
Processing time (secs):	Elapsed time to create the output file.	
Padding output packets:	Number of padding packets written. You can reduce the amount of padding, and overall file size by not including padding packets. Refer to <u>Advanced Stream Parameters</u> for additional information.	

Note: Audio and frames have different durations and it normal for the number of Audio output frames to be quite different from the number of Video output frames.

Warning counts: If present, these statistics may indicate potential problems with the source program material. These values are displayed in Red in the dialog box, and preceded with an "*" in the log file.

PTS underflows occur when the presentation time stamps (PTS) fall behind the system clocks in the program pack stream headers(SCR). An MPEG program stream has two sets of time stamps, one for the overall file and another for each elementary audio and video stream. The PTS underflow indicates that the bit rate for at least one of the elementary streams exceeds the overall bit rate for the entire file (SCR). A few (< 100) PTS underflow errors will not affect the output program. You can increase the overall bit rate of the file by	
program. You can increase the overall bit rate of the file by overriding the video bit rate on the Output Options dialog.	
Note: If you intend to author this file to a DVD, the overall bit rate should not exceed 10 Mbps.	
When using the <u>audio volume adjustment</u> to increase the volume, its possible that audio levels may be increased to the point of clipping. Internally, audio levels are stored as integers ranging between +/- 32767. In increasing the volume outside of this range causes clipping. Since each audio frame is 24 msec long, you may be able to tolerate clipping on a few frames. The solution, if you have too many clipped frames, is to reduce the amount of volume adjustment.	

* Audio frame errors:	All audio frames start with a 32-bit header. An audio frame error occurs when the editor does not find the expected header where it thinks an audio frame should start. Audio frame errors are usually caused by dropped frames in the input file and if not too frequent are generally recoverable without a problem. However, Audio Frame Errors can also occur if the audio characteristics such as bit rate or sampling rate change in the middle of a program. In this case, the editor will not be able to recover. You can set the maximum number of allowable frame errors on the <u>Advanced Stream Parameters</u> option page.
* Program clock overflow:	A program clock overflow occurs when the actual PTS clocks of an output segment exceed the calculated segment length. The primary cause of this problem are erroneous time stamps in the original file.
r rogram clock overnow.	The suggested solution is to run Tools>QuickStream Fix on the source file before editing. This will cause all the time stamps to be re-calculated. If the problem persists after that, please contact support.
* Input Sequence Errors:	Input sequence errors occur when the temporal reference of a video frame is outside the allowable values. It indicates that there were some problems with the source video material, probably dropped frames.
* Video resync frames removed:	This value represents the number of video frames that were removed to keep the program's audio and video in synchronization. Video frames are gradually removed if the program detects missing audio frames when creating the output file.
	Please refer to <u>Advanced Stream Parameters</u> for additional information.
* Video resync frames added:	This value represents the number of video frames that were added to keep the program's audio and video in synchronization.
	Please refer to <u>Advanced Stream Parameters</u> for additional information.

* Audio resync frames removed:	If you ask VideoReDo to detect and compensate for missing audio and video frames in the <u>Advanced Stream Parameters</u> dialog, this value will represent the number of audio frames that were removed to keep the audio and video in synchronization. Typically audio frames are removed if there are missing video frames.
* Stream errors during	If MPEG2 stream errors are encountered during the decode, the decoder will exit. This will result in the entire GOP being copied to the output file rather than performing a clean edit on just the frames you specify.
decode:	Decoder stream errors are written to the log file along with their original timestamp.

Overlapping selections

This dialog is displayed when you try to create a selection that overlaps a previous one. You will need to select one of the options listed:

Overlapping Cut	Press Combine to combine the
New cut range of:00:00:00.73 to 00:00:05.95 Overlaps Existing cut range of:00:00:00.73 to 00:00:02.74	two overlapping selections into one. Press Replace to delete the old
Please choose to: Combine the two cuts into one. Replace the original cut, or cancel this request.	selection and replace it with the new one.
Combine <u>R</u> eplace <u>C</u> ancel	or, Press Cancel to simply abort this operation.

You can disable this dialog by selecting "Auto Replace Overlapping Cuts" in the <u>General</u> <u>Parameters</u> options dialog. When this option is selected, new overlapping cuts will replace the existing cut.

QuickStream Fix

Quick Stream Fix	\mathbf{X}
Input Stream:	
c:\temp\Test.Mpg	
Enable Filters	Select Stream
Output Stream:	
c:\temp\QSF_Test.mpg	
Bit Rate: 10 Mbps	
	Start Quick Fix Cancel

This dialog is used to re-multiplex an MPEG2 program stream. It will copy the input file to the output file through the VideoReDo stream processing routines. This means that all the time stamps in the output file, such as PTS and GOP headers, will be re-calculated. In addition, all the processing parameters as specified on the <u>Advanced Stream Dialog</u> will be honored as well. In other words the output file will be MPEG2 compliant file.

The key purpose of QuickStream Fix is to re-align the time stamps in the output file. Sometimes, video captured from DVB Satellite or sourced from DVD VOB or VRO files may have internal time stamps that are not sequential. When you normally open a file in VideoReDo it will search for these non-sequential time stamps and handle them gracefully. Occasionally it is unable to do so effectively and the QuickStream Fix function will prove useful.

Input Program Stream: If you started this dialog after a video has been opened, the Source File will be filled in with the name of the currently open video program file. Otherwise, click on the "..." button to select a source file.

Enable Filters: Check this box to enable filtering within QuickStream Fix by displaying the filtering dialog. QuickStream Fix Filtering will remove all frames that do not correspond to a particular video dimensions. This feature is useful when trying to edit a file where the video dimensions change in the middle of the file. VideoReDo can only edit a file with a single set of video dimensions.

Select Stream ...: If there are multiple audio and / or video streams in your file, click this

button to select which streams to process via the Stream Selection dialog.

Output Program Stream: This is the file that the source file will be copied to. Click on "..." to display the standard file dialog box so that you can choose an output file and <u>output file options</u>.

Start Quick Fix: Click this button to start the processing.

Note: Running QuickStream Fix in batch mode: You can process multiple files through QuickStream Fix at one time using our <u>batch manager</u>. In the batch manager, select one or more MPEG (program or transport stream) files to process. The batch manager will assume that you want to run QuickStream Fix on the file since you specified a video file rather than a VideoReDo project file.

Frame Capture

Frame Capture	
 Destination Clipboard 	⊙ BMP File
c:\temp\Eagles edit.bmp	
Size	
Full Size (640 x 480)	🔿 1/4 Size (160 x 120)
🔘 1/2 Size (320 x 240)	🔿 1/8 Size (80 x 60)
OK	Cancel

Frame capture will copy the currently displayed video frame to a bitmap file or the windows clipboard. This dialog is used to determine the frame capturing options. The current video image can be captured to either the Windows Clipboard or a bitmap file (. bmp). To initiate a Frame Capture, select **Capture Frame** from the Edit menu or simply type **Ctrl+C**.

Destination: Select whether you want to capture to the clipboard or a bitmap file (.bmp).

Size: VideoReDo gives you the option of four different sizes. The primary size is based upon the actual video image display size. The rest of the sizes are smaller versions of the primary size.

Stream Selection

Stream Selection
MPEG2 Video, PID: 33 > 1 AC-3 Audio Lang: eng, PID: 36
MPEG2 Video, PID: 33
1 AC-3 Audio Lang: eng, PID: 36
2 AC-3 Audio Lang: spa, PID: 37
MPEG2 Video, PID: 49
3 AC-3 Audio Lang: eng, PID: 52 🔤
MPEG2 Video, PID: 65
4 AC-3 Audio, PID: 68
5 AC-3 Audio, PID: 69
MPEG2 Video, PID: 81
6 AC-3 Audio, PID: 84
7 AC-3 Audio, PID: 85
MPEG2 Video. PID: 97
OK Cancel

If your stream contains multiple video and/or audio streams, this dialog can be used to choose which stream combination to edit. By default, VideoReDo will edit the first set of streams in finds in your file. When you select a different stream, your current edits will be lost and the file re-opened.

Keyboard users will notice that allowable selection is preceded by a number. Simply type that number to move the selection bar to the appropriate entry.

The PID numbers are the internal stream ID codes used within your file.

Note: Currently, VideoReDo can only process a single audio / video stream pair. If there are multiple audio streams in a program, VideoReDo will only output the selected one.

Display Adjustment

Display Adjustment	
Brightness	Contrast
<u>R</u> eset	OK Cancel

This dialog is used to adjust the brightness and contrast of the VideoReDo display. It does not, in any way, affect the appearance of the your edited file.

To use keyboard commands with this dialog, click on Alt+B to set keyboard focus to the brightness slider, or Alt+C to set the focus to the contrast slider. Then use the left and right arrow keys to move the slider. You may also use the Tab key to cycle through each of the controls on this dialog.

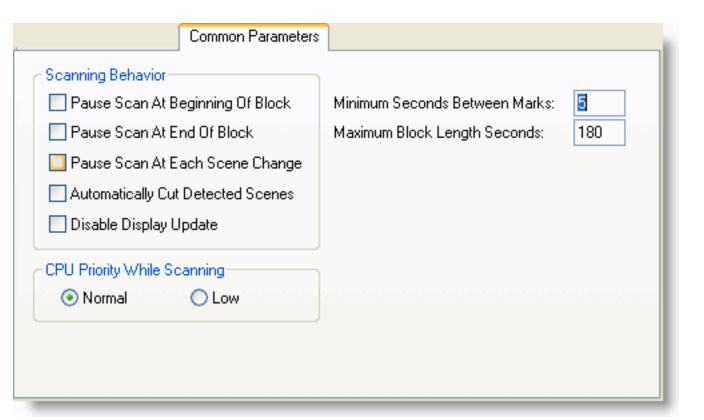
Pressing the "Reset" button will revert the controls back to their default positions which indicate no change to either brightness or contrast.

Your display adjustment settings are saved between runs and need not be enabled each time you start VideoReDo.

Ad-Detective Parameters

Ad-Detective parameters

Black Level Parameters	
Enable Black Level Detection Detection Area (offsets are % of display area) 10 <td>Threshold Levels Average Level: 35 Peak Level: 180 Max Contrast: 5 Display / Set Levels Train Using Current Sel. Image: Contrast Search Reset To Defaults</td>	Threshold Levels Average Level: 35 Peak Level: 180 Max Contrast: 5 Display / Set Levels Train Using Current Sel. Image: Contrast Search Reset To Defaults



Navigation Options

Navigation

	Un-shifted: Move next Frame 🗸	
30	Shift Move next Second 🗸	
	Ctrl Move 1 Minute 🗸	
Shift Multiplier 2	Ctrl+Shift Move 10 Seconds 🗸	
Ctrl Multiplier 3 Enter 0 seconds to move by frame.		
Mouse Wheel	Slider Range (seconds): 120	
Move next I-Frame		
Reverse Direction	Reset to Defaults	

Button movements: The values in these boxes indicate the number of seconds to move the program forward or backward. A value of zero seconds indicates single frame movement. The Shift- and Ctrl-Multipliers permit you to move the program at an accelerated rate by holding them down prior to pressing the desired button.

	Default: single frame (0 seconds). Pressing the up and down arrow keys will also simulate pressing these buttons. Please see <u>Keyboard Shortcuts</u> for more detail.
	Default: 30 seconds
	Default: 120 seconds. Pressing the Page Up and Page Down keys will simulate pressing these buttons. Please see <u>Keyboard Shortcuts</u> for more detail.
Shift Multiplier:	Default: Double the above values to 20, 60, and 240 seconds. In the case of single frame movement, this will double the number of frames moved.
Ctrl Multiplier:	Default: Triple the above values to 30, 90, and 360 seconds. In the case of single frame movement, this will triple the number of frames moved.

Mouse Wheel: This option lets you select how far to advance or retard the program when the mouse wheel is rotated. By default, rotating the mouse wheel towards the back of the mouse will advance the program. The "**Reverse Direction**" checkbox will reverse that behavior so that rotating the mouse wheel towards the front of the mouse will advance the video.

Left/Right Arrow Keys: This set of combo boxes permit you to set the movement for the left

right arrow keys with and without the control and shift keys set.

Note: If the arrow keys are held down for more than a second or two, they will automatically repeat allowing you to quickly advance through your program.

Slider Range: This value controls the number of seconds that the lower slider will advance or retard the video. The default value of 120 seconds means that moving the slider all the way to the right will advance the video by 2 minutes. Likewise, moving the slider all the way to the left will move the video backward by 2 minutes.

Note: When using the fine tune slider, the Shift and Ctrl multipliers increase the accuracy of navigation by reducing the effective range. For example with a slider range of 120 seconds and a Shift Multiplier to 2, the effective range of the fine tune slider will become 60 seconds if the shift key is pressed while moving the slider.

Note: You can also use the right mouse button on the fine-tune slider to give you even greater positional accuracy.

Reset to Defaults: Click this value to reset all the parameters to their original pre-programmed values.

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and

Stream Parameters

Stream Parameters	
Detect / Resync Missing Frames R	esync - Remove Audio Frames 💉 Delta Frames 3 💌
Maximum Audio Frame Errors: 32	000 Video Buffer Memory
Discontinuity Checkpoints 8	Skip Encoder Conformity Checks
Convert All I-Frames To GOPs	✓ Ignore Transport Stream Maps
Output Diagnostic Data To Log Fi	e Encoder Quality: Auto
Coutput Stream Parameters	
Start Video Frame In New Pack	et Drop Frame Timecode In GOPs
Add Padding To Short Pac	kets Multiplexor Audio Lag Msecs: 20
Align Packet Data To Word Bou	undary (DigiTV users)
✓ Output PTS With Each Video Fr	ame
✓ Output PS Pack Header With A	Il Packets
Output Packet Length MPEG2:	2028 - DVD V MPEG1: 2324 - VCD Std V

Detect / Resync Missing Frames: VideoReDo continually checks for missing or corrupt audio and video frames. These frames may be a short and temporary annoyance when the program is played on back in VideoReDo or other PC-based software players. However, many DVD authoring programs do not handle these frames gracefully and they will create very noticeable audio and video synchronization problems on the newly authored DVD.

VideoReDo continually checks the synchronization of the input file and will insert or remove audio or video frames in an attempt to maintain output synchronization. Corrections behavior is controlled by this option.

Ignore: VideoReDo will not attempt to correct small synchronization errors. However if the synchronization error is so severe that VideoReDo's internals buffers might overflow, then audio or video frames will be removed to reestablish synchronization. This will occur if the synchronization error exceeds 4 seconds (8 seconds if the <u>Double Video Buffer</u> Memory Option is selected).

Resync - Insert Extra Video Frame: If the video starts to lags behind the audio, VideoReDo will insert extra replicated frames into the GOP in order to maintain sync. This setting is useful when the source material is digitized from old

or noisy video tapes. Often these tapes create multiple video drop outs, yet the audio is perfect. By inserting the extra frames into the output stream, the audio track as well as sync is preserved.

Note: Because the extra replicated frames can lengthen a GOP so that it is no longer DVD compliant. Although most modern DVD players will handle longer than compliant GOPs you can use the <u>Maximum GOP Size</u> output option to have VideoReDo reduce the newly lengthened GOP back into compliance.

Resync - Remove Audio Frames: With this option, if the video lags behind the audio, VideoReDo remove audio frames until the programs are back in sync.

Note: When the audio lags behind the video, VideoReDo's only option is to remove video frames. There is no provision to insert additional audio frames.

Delta Frames: This parameter determines how much synchronization offset can be tolerated before VideoReDo starts to resync the program. The default value of 3 starts making fixes when the audio and video are out of sync by 3 frames, which is 100 msec for NTSC, or 120 msec for PAL. For 720p HD material, audio durations are used which either either 24 or 32 msec/frame depending upon the way the audio is encoded. Using a lower value will result in more frequent sync correction. This parameter is only a trigger of when to start synchronization correction. Once the correction is started, VideoReDo will attempt for correct sync to be within a audio or video frame.

Maximum Audio Frame Errors: Audio frames occur when VideoReDo does not find the start of an audio frame when expected. This situation is typically caused when the capture card drops frames when writing the program stream to the disk. When an audio frame error is encountered, the editor will automatically attempt to re-synchronize itself to the audio stream and proceed. This parameter specifies how many re-synchronization attempts should be attempted before VideoReDo stops processing the present file. Audio frame errors may be encountered both during playback as well as output processing. The number of audio errors encountered during output processing is reported in the <u>Output Processing Complete Dialog</u>. By default, VideoReDo sets this parameter to a very high value of 32000 so that only the most corrupt audio streams will trigger an error.

Discontinuity Checkpoints: This number represents how thorough a check VideoReDo does of the input file to adjust for non-sequential time stamps. When a file is opened, VideoReDo checks the file, at evenly spaced intervals, to see if the time stamps are sequential. If the timestamps are not sequential, then VideoReDo automatically builds an internal table to compensate. The higher this value, the more sections of the are checked, but the slower the file will open. A value of 0 disables this feature.

Non-sequential time stamps usually manifest themselves as navigation issue, where the cursor seems to randomly jump around. Sometimes the problems are severe enough that VideoReDo will hang while trying to open the program. In almost all circumstances, this problem can be rectified by running Tools>QuickStream Fix, but this can add minutes to the editing process as well as consuming additional disk space for the output file. Another possibility is to increase the number of Discontinuity Checkpoints so that the file is more thoroughly scanned during the open.

Convert All I-Frames To GOPs: When checked, VideoReDo will insure that all I-Frames contain the necessary header information to be considered GOPs. This will insure the up most in DVD compatibility. Most source files already mark I-Frames as GOPs, however, this will option will insure that behavior.

Output Diagnostic Data To Log File: Check this option to have VideoReDo output detailed data to its log file when editing or saving a video. This option is typically used if VideoReDo encounters a problem in the output file, such as an out-of-sync condition, and the VideoReDo support team asks you to provide additional information. It is recommended that you leave this option off to save log file space and reduce the time it takes to save your video programs.

Double Video Buffer Memory: The internal video buffer within VideoReDo is between 4 and 5 seconds depending upon whether you are editing NTSC- or PAL-based programs. If the audio program drops out longer than this interval, VideoReDo can experience a video buffer overflow as it tries to synchronize audio to sync with the video. When this option is checked, the video buffer is doubled in size so that 8 to 10 seconds of material is retained. This larger buffer requires about 20MB more memory and slightly slows down internal processing such as navigation through the file. It is recommended that you leave this option "**unchecked**" unless your programs trigger a "video buffer overflow" error.

Note: Some programs digital captures, especially satellite broadcasts or Tivo extractions utilize very long GOPs. For these programs, you might experience better performance by enabling this option.

Skip Encoder Conformity Checks: VideoReDo's internal MPEG2 encoder checks to insure that the bit stream it is encoding conforms to the MPEG2 Main Profile. If your bit stream exceeds the parameters in the main profile, VideoReDo will warn you that you are editing a video that is out of MPEG specification and will not proceed with the edits. Check this box to disable these checks.

Ignore Transport Stream Maps: When a transport stream is opened, VideoReDo attempts to determine the available programs in the stream by processing the stream's program maps (PAT and PMT packets). Many broadcasters either omit these packets or send

them with incorrect information. This can cause VideoReDo to not detect all the video and audio streams in the file. Checking this options disables the processing of these sections. Instead VideoReDo scans the first 10,000 packets of the file and tries to decipher what program contents are present. The disadvantage of disabling this feature is that the program does not always pick up each and every stream, especially secondary audio streams. The preferred mode is to leave this enabled unless your particular transport captures open with missing audio or video streams.

Encoder Quality: This parameter determines the level of quality used by the VideoReDo MPEG encoder. The quality determines the video rate of the frames which are encoded at cut points and during GOP reduction if you have selected to perform that function. Your choices are:

- Auto: The bitrate is set the bit rate of the current GOP being cut / recoded. This option is best used when outputting transport streams since a consistent bit rate is critical to avoid PTS underflows.
- **High:** The default setting, optimizes the quality over speed and bit rate. Occasionally this setting can result in frames of high bit rates that may exceed the maximum bit rate for the file. One symptom of this is a high number of PTS underflows during output. Setting a lower encoder quality will reduce the encoders target bit rate and reduce the possibility of PTS underflows. At its highest setting the encoder's target bit rate is the bit rate specified in the MPEG header. Often this bit rate can be much larger than the actual bit rate. For example, all DVB broadcasts use an MPEG header bit rate of 15 Mbps, but the video bit rate may only be 3-6 Mbps. In this case, using the Auto or Low setting may be more appropriate.

The bit rate for the file is reported on the <u>Tools>Show Program Info dialog</u> and may be changed using the <u>Output Options dialog</u>.

- Medium: At medium, the quality / bit rate is 2/3rds of the MPEG header bit rate.
- Low: At low, the quality / bit rate is 1/2 of the MPEG header bit rate.

Output Stream Parameters: The following options deal with how video packets are packetized to form a program stream. A program is made up of one or more elementary streams where an elementary stream represents a contiguous stream of audio or video data. The bytes from each of these elementary streams are broken up into fix sized packets with each packet marked whether it belongs to an audio stream or video stream. Some of these packets are marked with a time stamp known as the "Presentation Time Stamp" (PTS) so that when played back, the audio and video are synchronized. The default options supplied by the program should not have to be changed.

Start Video Frame In New Packet: If checked, a new packet will be started each time a new video frame is encountered. This option should be used

when VideoReDo's output is intended to be used with other video editors or programs that might require the files to be in a particular format.

Add Padding To Short Packets: This option is only used when video frames are packet aligned. Elementary stream packets are normally fixed length except when they are truncated early due to packet alignment. When checked, padding data is inserted into the program stream to preserve a constant overall file bit rate. There is no program content in these padding packets. Checking this option (along with the video frame alignment) can increase file size by 5% to 10%.

Align Packet Data To Word Boundary (DigiTV): Some software players such as the Nebula-DigiTV player require MPEG streams with certain internal packet alignment. You should only need to check this option when you intend for your videos to be played one on of these players. Otherwise, you will be wasting bytes within the file.

Output PTS With Each Video Frame: Program time stamps are used to synchronize audio and video streams. By default all audio packets are marked with a time stamp. When checked, each video frame is marked with a timestamp. When not checked, only GOP frames have a timestamp. Leaving this box checked increases the output file by less than 800KB per hour of video.

Output PS Pack Header With All Packets: Program Stream Pack Headers (PS Packets) are used to keep the internal clock of the playback device (e.g. DVD player) in synchronization with the time stamps inside the program stream file. When checked, every elementary stream packet is preceded by PS packet. When not checked, only elementary stream packets with time stamps (PTS) are preceded by a PS packet. Checking this box adds 1-2% to the output file size.

Program Stream Packet Length: This is the length of the fix-length program stream stream packets (PES). There are two different sizes, one for MPEG2 and another for MPEG1 The MPEG2 value should be increased to 2304 for an SVCD compliant file. The default value of 2028 is the standard for DVD compliant program streams. The MPEG1 size of 2324 is the VCD standard and is recommended for all MPEG1 situations.

Drop Frame Timecode in GOPs: If this option is checked and the video is NTSC, the timecode in the GOP will be coded with a drop frame timecode. The drop frame timecode is designed to account for the differences between 30 frames per second and the actual frame rate of 29.97 frames per second. When this option is not set, the timecode in the GOP is calculated by dividing the PTS

by the frame rate. This option is not used for PAL videos.

Multiplexor Audio Lag Msec: When a program stream is written by VideoReDo, the audio data typically trails a frame by a fixed amount of time. This parameter tells VideoReDo's internal multiplexor how long after the video frame is written to write out the audio frame. The default value of 20 msec should be sufficient for most situations.

Note: This parameter does NOT affect audio / video synchronization. It only changes the location of the audio packets in the program stream relative to their corresponding video packets.

File Types

File Type	File Open	Project Open	Associate	
apters xml				
r-ms				
peg	ব			
npg ec			V V	
ivo		Ē		
p				
S				
VOB				
VPrj VRO			ৱারারারারার	
		-	-	
	(Double click on	a file type to remove	e it from the list.)	
Add New File Typ	e	Register	File Associations	
	Add Er	toy	matically On Program Sta	rt Now
			matically on Flogram Sta	

This dialog lets you setup and maintain the relationship between file types and VideoReDo. File types are defined as the text that appears after the period in a filename. For example, MPEG program streams usually have a file type of ".mpg" or ".mpeg". When a file type is associated with a program, Windows will let you automatically open the file by double-clicking or right-clicking on the filename in the file explorer. When you install VideoReDo it does **not** by default associate any files with itself. You need to use this dialog to create those associations.

The **File Types** parameter page shows all the file types that are being related to VideoReDo. Notice that the file types are all in lower case and the leading period is **not** included. Next to each file type are three check boxes:

- File Open: When checked, files of this type will be displayed as a supported file type in the File Open dialog.
- **Project Open:** When checked, files of this type will be displayed as supported file type in the Project Open dialog.
- Associate: When checked, Files of these types will be marked as being associated with VideoReDo in the windows shell. This means you can automatically open and edit files of these types simply by double clicking on them.

Checkboxes can be toggled on or off by simply clicking on them.

Add New File Type: Type the new file type into the "Add New File Type" edit box and click on "Add Entry". This will add the file type to the list.

Register File Associations:

Automatically On Program Start: When checked, each time VideoReDo starts it will re-register with Windows all the file types marked with a checkbox. This option is useful if other programs compete with VideoReDo for the same file association.

Now: Click this button to immediately register the file types marked for association.

To delete an existing file type from the list: Double-click on the file type entry.

Playback Devices

Deinterlace On Use Video Card YUV Acceleration		Displayed Aspect Video Driver:	Ratio: Auto	×
		video biivei.	DirectA	
-Audio Device				
O Use Default WAVE		Swap LPCM Audio Bytes		
Use DirectSo	ound drivers:			
Device:	Realtek HD Audio output	~		
O Edit Without	Audio			

This dialog is used to optimize the playback of your videos program while editing. It does **not** affect, in any way, the format or quality of your saved edits.

Video Display Options:

Deinterlace On: If checked, VideoReDo will de-interlace the video display. Interlaced video can cause lines to appear on screen, especially during scenes with lots of fast moving action. Deinterlacing removes these artifacts with a very slight (usually un-noticeable) loss of display quality.



Interlaced Video

De-Interlaced Video

Use Video Card YUV Acceleration: This option enables causes VideoReDo to request that your video card convert the MPEG signal from its native YUV format to the computer screen's RGB format. Most modern video cards support YUV hardware acceleration. Choosing this option will often result in a slightly better picture quality, and will reduce the CPU usage of VideoReDo by 5% to 15%. If you select this option, but VideoReDo is unable to take advantage of this feature, then VideoReDo will revert, temporarily, to non-accelerated mode. A message indicating this has happened is written to the log file. For slower machines CPUs (less than 1GHz), enabling YUV acceleration can have a dramatic improvement of VideoReDo's interactive response.

Note: If VideoReDo detects that you are editing HD material it will attempt to automatically enable YUV acceleration regardless of this setting.

If you have multiple monitors on your system, you might want to disable the YUV acceleration mode as VideoReDo only supports YUV acceleration on the primary monitor. You will not be able to see your video picture on other monitors when using this mode.

Displayed Aspect Ratio: Use parameter to force the video to display at a particular aspect ratio. In "Auto" mode (the default), VideoReDo will set the displayed aspect ratio according to the first sequence header found in the file. If the aspect ratio switches in the middle of the file, the displayed picture will not look correct in parts of the file. This parameter can be used to lock in a setting regardless of the file's aspect ratio.

Note: This parameter does **NOT** affect the output aspect ratio. That can only be changed on the <u>Output Options</u> dialog.

VideoDriver: This drop down box lets you select which software driver VideoReDo should use to display the main video window while editing. This parameter does NOT affect the output video in any way. The VMR7 or VMR9 drivers should be used if your system has multiple attached monitors.

- DirectX The DirectX driver relies on DirectDraw7 and should provide excellent performance on most single monitor machines and should have the highest level of compatability especially on older systems.
- **DirectX-Multi Mon**: This upgrade to the DirectX driver will support systems that have multiple monitors. We do no recommend using as it is being phased out in favor of the two VMR filters.
- VMR7: The VMR7 (video mixing renderer version 7) is available, by default, on Windows XP and other systems where DirectX9 has been installed. It is one of the two drivers used by Windows Media Player and works well on systems with both single and multiple monitors.
- VMR9: The VMR9 driver will work on all systems that have Direct3D installed. This includes all systems with newer graphics cards. In terms of overhead, DirectX has the least, followed by VMR7 and then VMR9.

Audio Device:

Use default WAVE: There are two types of sound drivers on Windows system, WAVE and DirectSound. You might want to experiment which driver sounds the best for your system. In most situations, the WAVE driver is the "safer" choice as this driver usually has a lower latency. The latency is defined as the time from when the program asks the driver to output a sound and it is eventually heard by the user. When using the WAVE driver, VideoReDo's volume control affects the volume of all applications on your system. However, some newer devices especially external USB and Firewire sound devices, may not come equipped with WAVE drivers.

Use DirectSound drivers: If you can use the DirectSound drivers you should see a couple of advantages over WAVE drivers. (1) You will be able to select the specific device to playback your audio. This can be a real advantage for systems with multiple sound cards or audio devices. (2) VideoReDo's volume control is limited to adjusting the volume of the current MPEG program. In fact, you can have multiple VideoReDo instances open each playing a video program at a different volume.

The problem with DirectSound is that some older sound card drivers introduce very high (> 100 Msec) latency in the audio. In this is the case, you will have to revert to WAVE-based audio.

Edit Without Audio: If there is no audio device on your system enable this option to allow VideoReDo to open the file. This option may be useful if you are editing over a remote keyboard / display connection where the audio is severely delayed or a remote link audio driver is not available.

Swap LPCM Audio Bytes: Enable this option if you are editing LPCM audio and the sound does not play properly. Some programs will reverse the order of the audio bytes in a sound track. This option will compensate for that behavior.

Start Up

Start Up				
Check Day:	s Between Ch	Version At Startup	emet	
Application	Background	And Colors		
 Graphic 		Blue Media Center	~	
O Solid Co	olor	Select Colo	лг	
Selection T	ìme Color:	Select Cold	и	
Log File Fol C:\Docum		ings\Application Data\V		

This dialog is to control the behavior of VideoReDo each time it starts.

Check For Updated Version At Startup: If checked, VideoReDo will poll the VideoReDo web site to determine if there is a later version of the software available and inform you when there is one.

Days Between Checks: VideoReDo will check the web site for a new version at most once per day. You can increase the time between checks by setting this field to a higher number of days.

Ask For Permission Before Accessing The Internet: When checked, VideoReDo will ask you if its OK to access the internet. This option is useful if you have an internal firewall blocking requests from unauthorized programs. All version request checks are made using the HTTP protocol over Port 80, just like your web browser. Other than performing version checks, VideoReDo performs no other internet access.

Background Graphic: Use this option to customize the background of VideoReDo's main edit screen. You can choose from one of five different dynamic and pleasing backgrounds.

Solid Color: Click on this radio button to have VideoReDo use a solid color background. Then, press the "Select Color" button to choose a color.

Selection Time Color: Use this option to customize the Sel. Start and Sel. End font time color displayed at each end of the timeline

Log File Folder: This edit box can be used to change the location of the log file. The log file folder contains the VideoReDo.log file and other supporting files, such as the VideoReDo.VPrj file and the batch queue file. The log file can be opened using Notepad from the menu by clicking ont Help>Display VideoReDo.log

Chapter Marks

		finimum Chapter	Interval Secs: 1	
At Scene I	Markers			
🗌 Use Equal	Spacing 5	Minutes 🛛 🔽		
utput Format				
Automatica	ally Create A Chapter File			
File Type:	Text File		Substitutions	1
no rypo.			%F - Output Filename	
a da	SVE Characters but		%T - Time Code	
Dutput File:	%F_Chapters.txt			
Dutput File: Line Format	%F_Chapters.txt		%N - Frame Number	

VideoReDo has the capability of creating chapter files suitable for import directly into DVD authoring programs. A chapter file can created either by clicking on File > Save Chapter File, or automatically everytime a file is saved. The parameters on this options page control the format and types of chapter marks created.

Chapter Marks: This section determines the location of the chatper marks. There are three non-exclusive options. You may select any combination of the three location methods:

At Cut Points: The method will create a chapter marker at each cut point in the file.

At Scene Markers: Checking this option will cause chapters to be created at each scene marker.

Use Equal Spacing: Create chapter markers at equally spaced intervals.

Minimum Chapter Interval Secs: This value resolves conflicts between the various methods listed above by preventing chapter markers from appearing too close together.

Output Format: This section is used to specify the chapter filename, file format.

Automatically Create A Chapter File: Check this box to have VideoReDo save a chapter file each time a file is output. If this box is not checked, chapter files can only be created by explicitly saving them from the file menu.

File Type: This option offers two choices:

- 1. **Text File:** The chapter file will be a text file with one line per chapter according to the format you specify below.
- 2. **DVDAuthor XML File:** DVDAuthor is a free open source DVD authoring tool which can be run from the command line. One option is to accept parameter input via an XML file. This option will create a DVDAuthor XML file with the chapter markers properly formatted.

Output File: This text box contains a template that is used to build the chapter filename. . The "%F" substitution will substitutes the output filename at the desired location. The chapter file is always created in the same folder as the output file.

Evampla	Output	c:\temp\myVideo. mpg
Example:	mpeg file:	mpg
	Template:	%F_chapter.txt
	Chapter file name:	myVideo_chapter. txt

Line Format: This text box contains the template this is used to format each line in the chapter file. There are three substitution strings:

- 1. **%T** substitutes the time code. The Timecode format is determined by the selection box below.
- 2. **%N** Frame number. Please note that the frame number is the displayed frame number and not the input frame number. The displayed frame number can be different when the program employes 3:2 pulldown material.
- 3. **%C** Chapter number: A sequential number which will range from 1 to the total number of generated chapters.

Example: Template:	Output:
%T	00:30:10.22

Chapter %C, Chapter 5, Frame: Frame: %N 35721

Timecode: Use this select box to choose the timecode format that is appropriate for your DVD Authoring program. Choose from one of these formats:

•	HH = Hours
HH:MM:	MM = Minutes
SS:ff	SS = seconds
•	ff = frame number (0 to one less
HH:MM:	than number of frames / second).
SS;ff	hh = hundredths of a second
•	
HH:MM:	
SS:hh	
•	
HH:MM:	
SS;hh	
•	
HH:MM:	
SS	
• H:MM:	
SS.ff	

Audio Alerts

¥

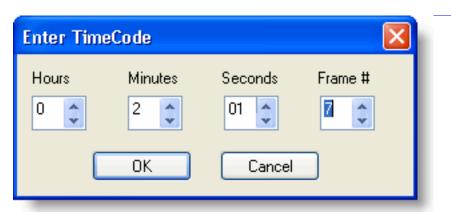
This options dialog is used to set the sound that VideoReDo when it has completed outputting your edits.

Upon Output Completion Play Sound: This selection box lets you specify when a sound should be played. Options are:

Never:	Don't play audio when output is complete.
Interactive Only:	Only play audio on output complete only when VideoReDo is running in an interactive mode.
Interactive and Batch:	Play a sound whenever an output file is created.

External WAV File: Enter or lookup a WAV Filename. Press the button to the right of the edit box to search for an existing WAV file on your system.

Enter TimeCode



This dialog will let you jump to a specific time code in your video by entering the appropriate time into the edit boxes.

This dialog can be displayed either by double-clicking on the Cursor Time window:

00:25:10.14 or pressing Ctrl+T.

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Loading and saving projects

Projects are the internal list of edit selections. When you open a video file, the internal project is empty as there are no selections. Each time you add or change a selection the internal project is updated. You can save the internal project file to disk using the "Save Project File As..." from the file menu. The currently active project can be saved by selecting the "Save Project" option or by simply pressing Ctrl+P.

You can open a previously saved project from the same menu.

File		
Open Video	Ctrl+O	
Save Video As	Ctrl+S	
Close		
Open Project		
Save Project - Temp.VPrj	Ctrl+P	
Save Project As		
Add Edits To Batch Queue	Ctrl+B	

Audio Synchronization and Output Volume

Audio Adjustments		
- Audio Sync		
	0 Msec.	
Cutput Volume		
	1.0 x	
Repeat Selection	<u>R</u> eset <u>C</u> lose	

You can use this dialog to alter the synchronization between audio and video streams. This might be necessary if the original program is out of sync. You can also adjust the volume of the output file. This is different from the audio level adjustment in the main display which only affects playback volume. Any volume adjustment is heard during playback and will be adjusted in the output file.

The primary control on this dialog is the slider. It will let you alter the synchronization by up to 1 second (1,000 Msec) in either direction. Move the slider to the left to cause the audio to lag behind the video. If you move the slider to the right, the audio will lead the video. Most people's perception of audio synchronization is limited to about 75-150 Msec of accuracy. That is, differences less than 75 Msec are generally inaudible.

The **Repeat Sel**" checkbox is used to automatically repeat the current selection until the dialog box is closed. You will find this useful when a section of video is located where audio / video synchronization is obvious such as a close-up of people speaking or the occurrence of a sharp sound effect. Note, you only need to set the selection markers, you don't have to actually **Cut** the scene to utilize the **Repeat Selection** feature.

The **Audio Sync Adjustment** is retained after you close the dialog, but is cleared whenever a new file is opened..

The **Audio Sync Adjustment** will be applied consistently across the entire file when you save your work. If you add the current editor project to be joined with other files, each file / project within the joiner will have its own sync adjustment. One particular use for this is if the audio video synchronization gets progressively worse from beginning to end of the video. In this case, you might consider separating your video into multiple scenes and adding each scene separately, with its own **Audio Sync Adjustment**, to the joiner. When you are done, create the output file via the <u>Process / Save Joiner List</u> menu command.

The **Output Volume** will be modifed when you save your file and the audio properties will also be modified from the original file. You can select MPEG audio and bit rate or LPCM/WAV audio during output file save by pressing the <u>Options</u> button.

Enhanced Plus Features

Enhanced Plus Fe	atures
- Auto Combining	
 Store VLST In So 	urce Folder
O Specify Folder:	c:\temp
Auto Processing (
CRID Folder	C:\Temp\jean-chunks
Allow CRID	Deletions and Renames
Auto Combine Se	quential Filenames
Multiple File Open or	
Plot Masking Area:	Extra Large 🔽
Reduce CPU Priority	y While Saving

The parameters on this options page control the some of the unique features now available in VideoReDo Plus.

Combining: Combining is the ability of VideoReDo to logically merge multiple files into single large file while editing. This feature is useful for situations where a single program file is split into multiple storage segments. For example, the VOB files on a DVD are limited, by the DVD specification, to a maximum of 1 GByte per file. Therefore, when a title is longer there will be multiple VOB files. For example, a typical DVD may be VOB files named:

VTS_01_01.VOB VTS_01_02.VOB VTS_01_03.VOB etc.

Some video capture devices also split their files during recording. You'll notice this is the case if each program is made up of multiple files.

To Use Combining: You can have VideoReDo Plus combine multiple files in three different ways:

1. When opening a video simply select multiple files in the file open dialog or drag multiple files from the Windows File Explorer into the VideoReDo Plus window or desktop icon. Then you try to open multiple files, VideoReDo Plus will offer you the option of joining or combining the files. You can change this behavior using the "Multiple File Open or Drag" drop-down list.



- 2. If you have a Siemens M740AV PVR, the CRID options can be enabled to automatically process the M740AV CRID files.
- 3. If the "Auto Combine Sequential Files" is checked, simply opening any file in a numbered sequence will cause the entire sequence to automatically be combined. This option is especially useful if your capture card creates many sequential files and you don't want to have to select each and every file.

Auto Combine Sequential Filenames: Checking this option will allow VideoReDo to auto-concatenate a series of files that are sequentially numbered. This feature is useful for home-recorded DVDs containing VOBs or Transport Streams recorded as consecutively named files. When enabled, each of the component files are logically appended within to so that you are editing a larger virtual file. For example, a typical DVD may be VOB files named:

VTS_01_01.VOB VTS_01_02.VOB VTS_01_03.VOB etc.

When Auto combine is checked, VideoRedo Plus will see that each of this VOBs are part of the same set and load all three of them, as one long file, whenever you open any of them.

Note: When working with VOB files, the filename VTS_??_00.VOB always contains menu and background images. VideoReDo Plus knows **not** to include this VOB file name in the Auto Combine set.

When a series of files are to be combined, VideoReDo Plus automatically creates a VLST file. This text file contains the list of the component files. You may select the location of the saved VLST (Videoredo file LiST) file by one of two methods:

Store VLST in Source Folder : Will automatically create the VLST in the original location of the source files.

Specify Folder : Allows you to specify an alternative folder location when your source media is write protected or for convenience purposes.

Note: You must specify an alternative folder location if importing from the DVD directly. DVDs are write protected and the file cannot be created on the DVD. Generally, we recommend copying DVD material to your hard drive before editing.

Auto Processing Of .CRID Files : Allows the auto-concatenation of sequential files produced by a Siemens M740AV receiver / DVR which receives DVB transmissions. The CRID file contains meta data (program name, description, etc) as well as the links to the actual files which contain the audio and video information. When the CRID option is enabled, an additional menu item, File > Open CRID File will enabled. The menu option will appear the next time you restart VideoReDo Plus.

CRID Folder: Specify the folder location of the CRID files.

Allow CRID Deletions and Renames: Allows for the rename and deletion of CRID files in the <u>CRID file open dialog</u> box, since by default VideoReDo Plus does not provide for alteration or deletion of the source video file,

Plot Masking Area: Allows an area of the screen to be covered with a rectangle to reduce to opportunity to see the program's plot while editing. Options include small, medium, large, and Extra Large. This feature can be enabled from the menu: View > Show Plot Mask This will allow you to edit video without previewing a significant portion in order to enjoy the video after editing.

Reduce CPU Priority While Saving: Checking this option slightly lowers the CPU priority of VideoReDo Plus during the save process. This may slightly improve system responsiveness while VideoReDo Plus is saving your edits while extending the time it takes to complete the output. This option also affects the priority when saving from batch. When output is complete, the CPU priority of VideoReDo Plus is restored to its normal state.

Multiple File Open Or Drag: This drop down box lets you determine the behavior when more than one file is specified in the file open dialog or when multiple files are dragged into VideoReDo. There are three options:

- 1. Prompt Each time you open multiple files you'll be offered the option whether you want to combine or join.
- 2. Join Sort the file list and add them to the joiner.
- 3. Combine Sort the file list and combine them into one logical file.

Remarks about Combining versus Joining:

The VideoReDo joiner performs it's work during the output phase, each file to be joined is separately opened and analyzed. Part of this analysis is searching for the first I-Frame (GOP start) in the file. So, if a file being joined does not begin on GOP boundary the frames prior to the start of that GOP are ignored.

The combining function is an input function. Data from each file in the concatenation list (VLST file) is logically appended to the end of the previous file. The entire set of files is then treated as one single file by VideoReDo Plus. In many cases, VOB or transport stream files are split at arbitrary byte boundaries without regards to MPEG formats like I-Frames splits or even audio frame splits. The Auto Concatenation ignores these issues and will treat the input files as if the original splits never occurred.

However, using combining on files that do not come from a single source is not recommended. In this case you should use the joiner to ensure proper attention is paid to audio and video alignments.

Note: Combining does minimal error checking on each component file. For example combining different file types, such as program and transport streams may result in unpredictable results or even program failure. Joining does not have this limitation as each file is opened and processed independently.

Output Options

Output File Options		
Video Properties Aspect Ratio: 1 : 1	Bit Rate: 8 Mbps	Max GOP Length:
Audio Properties Encoding MPEG	Bit Rate: 224	✓
Remember These Setting	15	OK Cancel

This dialog is displayed by pressing the "Options" button in the File Save As dialog box.

Aspect Ratio: Use this option to change the aspect ratio bits in the MPEG2 sequence header. Changing these bits does not affect the actual video stream nor will it convert video from one format to another. It is used when the actual aspect ratio recorded by the capture card is incorrect.

Bit Rate: This option is used to change the bit rate fields in the MPEG2 sequence header. Changing this field does not affect the actual video stream. It is used when the actual bit rate, as recorded in the file, is incorrect. It is most often used to change the DVB 15Mbps bitrate to a lower value so that the resultant MPEG2 stream is acceptable to DVD authoring programs and players.

Technical Note: If you specify a bit rate override of 10 Mbps, VideoReDo will assume that you want the MPEG headers to correspond to DVD specifications. The video bit rate will be set to 9.80 Mbps less the audio bit rate, and the overall program stream mux rate will be set to 10.08 Mbps.

Maximum GOP Length: This parameter is used to have VideoReDo reduce the GOP size when when writing the output stream. GOP size reduction is usually used to take long GOP program material, such as those captured from satellite or PVRs, and make the program DVD compliant. Compliant DVDs have a maximum of 18 frames per GOP although 15 frames seems to be a more frequently used convention. If you set the maximum GOP size to a value greater than 4, VideoReDo will recode frames so that all GOPs in the output file will be less than or equal to that maximum size. *This frame recoding*

will add significantly to the time it takes to output your video, and will also increase the file size by at least 10%.

Audio Properties

Encoding: Use this option to specify the audio stream type of the output file. Options are: No Change, MPEG audio, or LPCM/WAV audio

Bit Rate: This option is used to change the bit rate of the MPEG audio stream. Changing this field affects the output audio stream. LPCM audio is uncompressed and does not have a bitrate option.

Note: If you specify a change to the Audio Properties, the audio output stream is modified. This is not simply a change to the header information.

QuickStream Fix Filter

QuickStream Fix Filter Setup		
Video Dimension Filter:	720 x 480	~
	Rescan File Samples 8	
OK	Cancel	

If your video file contains video with multiple dimensions, VideoReDo will not be able to edit it. This dialog, which is enabled via <u>QuickStream Fix</u>, will let you limit the QuickStream Fix operation to video frames of a particular dimension.

Video Dimension Filter: This drop down box displays all the video dimensions that VideoReDo has encountered in this file. The list is created by scanning the file at equal intervals and looking at 4 second chunks of the file at each interval.

Rescan File: Press this button to rescan the file. This is typically done after changing the number of samples.

Samples: This is the number of 4 second samples to scan. For example, if your source file is 1 hour long and samples is set to 8 seconds, then the sampling points will occur at 7 minute intervals. You will likely want to increase the number of samples if VideoReDo fails to detect multiple dimensions on its first scan.

Batch Builder

VideoReDo Batch I	Builder					
Source Project / File:	TestFile1					
Destination Folder:	C:\Data\D\VideoReDoCOM					
Destination Modifier:	VRD_ Destination Type:	MPG - MPEG Program St	ream 💌			
Destination Filename:	C:\Data\D\VideoReDoCOM\VRD_TestFile1.MPG					
.BPRJ Disposition:	.BPRJ Disposition: Delete after processing 💌 🔽 Run Silently					
Source		Destination	Туре			
C:\Temp\jean-no-audio\j1.BPrj C:\Temp\jean-no-audio\part-one-end.BPrj C:\Temp\gilad2_001.BPrj		C:\Data\D\VideoReD C:\Data\D\VideoReD C:\Data\D\VideoReD	MPG MPG MPG			
Add Entry Remove Save Commands Save and Execute Done						

The VideoReDo Batch Builder is used to process multiple edit project files (*.VPrj) at one time. This way you can perform your edits quickly using the interactive portions of VideoReDo and then have the VideoReDo Batch Builder handle the more time consuming output tasks at a more convenient time.

The Batch Builder relies upon VideoReDo project files. Project files are short files which contain the information needed to edit your files. Information such as the name of the input file and the start and end points of each of your cuts. You can create project files in VideoReDo by selecting "Save Project" from the File menu. You can also create an automatic project and queue directly into the Batch Builder by using the "Queue To Batch" from the File menu, or pressing **Ctrl+B** anytime in VideoReDo.

When you start the batch builder, any projects previously queued using the **Queue To Batch (Ctrl+B)** are automatically loaded into Batch Builder processing list. You can also load previously saved projects manually by selecting them into the Source Project / File: window. The batch builder will automatically create a destination filename based upon the input filename, destination folder, destination modifier and Elementary Stream Output Flag. Click on Add Entry to add it to the list of projects to be processed.

When your list of projects to be processed is complete, click either on "Save Commands" or "Save and Execute". Save Commands will create a windows .CMD file that you can run

yourself at a later time. Save and Execute will not only save the .CMD file, but execute it immediately.

Source Project / File: You may enter the name, including the file folder, of an existing VideoReDo project. Click on the "..." button to the right to select project(s) using the file entry dialog. Note: You can select multiple projects at one time in the file entry dialog. If you do so, all the projects selected will be entered directly into the batch list.

Destination Folder: This field is the default destination for the output file. Click on the ".." button to the right to browse for a folder. The destination folder along with the input file name is used to form the destination filename.

For example: Your input file is c:\source\fb1.mpg and the destination folder is: <u>d:\edits</u>, then the proposed destination filename will be d:\edits\fb1.mpg

Destination Modifier: This string, if present, precedes the output file. You can use the Destination Modifier alone or in conjunction with the Destination Folder.

Special note: The destination modifier will prefix the actual filename unless the modifier begins with a '-' or '_' in this which it will suffix the filename.

Examples:

Original Filename	Destination Folder	Destination Modifier	Output File
<u>c:\temp</u> <u>\fb1.mpg</u>	<u>d:\edits</u>	VRD_	d:\edits \VRD_fb1.mpg
<u>c:\temp</u> <u>\fb1.mpg</u>	<u>d:\edits</u>	VRD_	<u>d:\edits</u> \VRD_001_fb1. mpg
<u>c:\temp</u> \fb1.mpg	<u>d:\edits</u>	-	<u>d:\edits\fb1-</u> 001.mpg
<u>c:\temp</u> <u>\fb1.mpg</u>	<u>d:\edits</u>	-VRD_	<u>d:∖edits</u> ∖fb1- VRD_001.mpg

For example: You input file is <u>c:\source\fb1.mpg</u>, the destination folder is <u>d:\edits</u> and the destination modifier is "Cuts_". Then your proposed destination filename will be <u>d:\edits</u>

<u>\Cuts_fb1.mpg</u>.

Destination Type: Select the desired output file format:

- MPG MPEG Program Stream Standard MPEG Program Stream
- **MPV** Elementary Streams Separate Audio and Video into separate files.
- TS Transport Stream

Industry compliant Transport Stream.

DVR-MS

Format used by Microsoft Media Center

REC - Topfield REC

Topfield REC format. A transport stream with a Topfield header.

τινο

Program stream file formatted with a Tivo metadata header. If the source file is not a Tivo file, the output file will be formatted as an industry standard program stream.

VOB - MPEG w/NAV Packets

An MPEG Program Stream with blank NAV packets. This format is suitable for input directly into some DVD authoring programs such as the open source program: DVDAuthor.

VPRJ - Ad-Detective Scan

Rather than edit a file, this destination type requests the batch manager to perform a complete Ad-Detective scan on the source file. The output will be VideoReDo project file with scene markers set at the commercial transitions.

Destination Filename: This is the filename that the Batch Builder has proposed to output your edited video to. It is a combination of the input filename, Destination Folder, and Destination Prefix. If the filename is acceptable, simply click on "Add Entry" to accept the entry and add it to the Batch Builder List.

.BPRJ Disposition: The .BPrj files are project files created automatically when you select the queue to batch command in VideoReDo. Use this option to either have the .BPrj files deleted after processing, or left on your hard drive. If you elect to have them deleted, they will only be deleted if the batch processor actually creates an output file. If the .BPrj files remain on your system after batch processing then double check the size and content of your output files. They may indicate a problem.

Run Silently: If checked, the output progress dialog will not be displayed during batch processing.

Add Entry: Click on this button to add the project and Destination filename to the batch

builder list.

Remove: This button will be active if you have selected one or more entries in the batch builder list. Click on it to remove the items from the list.

Save Commands: Click on this button to have the Batch Builder create a windows .CMD for you. This .CMD file can be run later from the command line, windows scheduler or Run box.

Save and Execute: Click on this button to create the windows .CMD file and begin executing it immediately.

Open CRID Files

Description	Date			
Anatomie	09/17/2005 04:45:00 PM			
Anatomie 2	10/22/2005 04:25:00 PM			
Der Soldat James Ryan	09/03/2005 04:11:00 PM			
Die Mumie	10/23/2005 07:00:00 PM			
Dogma	08/20/2005 04:49:00 PM			
French Kiss	08/12/2005 02:16:00 PM			
Men in Black II	04/10/2005 02:16:00 PM			
Oliver & Co.	03/11/2005 02:15:00 PM			
Save the Last Dance	10/22/2005 02:16:00 PM			
Stuart Little	05/08/2005 02:15:00 PM			
Sweet Home Alabama - Liebe auf Umwegen	10/23/2005 02:16:00 PM			
Verhandlungssache	06/11/2005 04:33:00 PM			
WE LOVE in Concert: Robbie Williams live in Berl	10/20/2005 05:45:00 PM			
Right Click Selection For More Options				
Change Folder	Open Selection Cancel			

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