MRWS™

MediaReactor Workstation User Guide

Introduction

This manual is for MediaReactor Workstation version 2.0 software from Drastic Technologies, Ltd.

Conventions

This manual assumes the following:

That the user knows how to operate a mouse and keyboard and perform the basic functions of Microsoft Windows operating system.

That the user is familiar with video editing and how to use VTRs

That the user has access to MIS technicians capable of placing the device on the network and setting up any SAN systems if necessary.

The name of a control or display present on the interface will be displayed in **bold** text.

Where a portion of the manual is referred to the name of section mentioned will be displayed in *italics*.

Certain images in this document have been grayed out where it is useful or necessary to place indicator marks to show specific controls or displays above a darker background.

About MediaReactor Workstation Software

MediaReactor Workstation software provides plug in components to allow various third party applications to access supported file types in real time without a transcoding step. There is also a user directed interface called MR Lite, as well as command line components.

System Requirements
Recommended Environment

MediaReactor Workstation software must be installed on a system at least as powerful as the configurations listed below.

Minimum Hardware Platform
PIII proc 450 MHz, 128 MB RAM, 20 MB program drive, SCSI or Fibre Storage, CD-ROM/DVD, 1024 x 768 SVGA adapter & compatible monitor, 100 BaseT/Gigabit Ethernet

Recommended Hardware Platform
Dual Xeon P4 proc 2.6 GHz, 1024 MB RAM, 20 MB program drive, SCSI or Fibre Storage, CD-ROM/DVD, 1024 x 768 SVGA adapter & compatible monitor, 100 BaseT/Gigabit Ethernet

Demo downloads of MediaReactor Workstation software are available for the user to test their application and to confirm their hardware setup. Faster and more powerful hardware will provide better performance. In some cases, specific hardware will be required in order to enable resource-intensive, advanced or optional features.

Supported Operating Systems

MediaReactor Workstation software currently supports Windows and Mac OS.

Getting Started

Installation

Here is how to install MediaReactor Workstation. Attach a standard keyboard, mouse and VGA monitor to the system. Plug the system in and turn it on.

IMPORTANT! Log on as Administrator. If the user name and password entered do not extend Administrator privileges, MediaReactor Workstation will not install properly. If unsure as to what level of privilege the log-on provides, consult a System Administrator.

Confirm that any other programs are closed before starting this installation.

Make sure the system clock is properly set. Open the **Control Panel**, go to **Date/Time**. If the time is reset while running a duration-limited license, it may destroy the license.

Double-click or run the executable MediaReactor Workstation file. The user will be prompted to move through each step of the install by pressing the "**next**" or "**finish**" button. Carefully read the instructions that are provided.

There is software made by other companies that must be on the device for MediaReactor Workstation software to function properly. Some or all of these packages may already be installed on the system. If not, the user should obtain the most recent version from the web. Here are some links:

Java: http://www.java.com/en/.

Windows media encoder: http://www.microsoft.com/windows/windowsmedia/forpros/encoder/default.mspx

Windows Media 9 codec: shttp://www.microsoft.com/windows/windowsmedia/forpros/format/codecdownload.aspx

QuickTime: http://www.apple.com.

Direct X: http://www.microsoft.com/windows/directx/default.mspx.

Upon install completion, MediaReactor Workstation will prompt the user to **Restart**. Agree to **Restart**.

License MediaReactor Workstation

MediaReactor Workstation uses a software-based copy protection system, and must be licensed to run.

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

Here are the steps to license MediaReactor Workstation software:

Run **License MediaReactor**. License MediaReactor resides by default in the MediaReactor Workstation install folder, and it may additionally have a shortcut placed in the Start menu, within Start/Programs/MediaReactor/License MediaReactor.

Enter a first and last name into the **User Name** field. Enter a valid email address into the **Email Address** field. Press the **Generate** button. Pressing the **Generate** button populates the **Site Code** field with a string of characters. You will need to copy and send this string of characters (known as the Site Code) to Drastic.

Copy the Site Code, either by selecting it and pressing Ctl+C, or by pressing the **Copy** button. Paste the Site Code into an email, and send the Site Code to Drastic, at the following email address: authorization@drastictech.com. If the system is set up with email, pressing the **Send** button opens up an email properly addressed containing the **Site Code**. Given that many of Drastic's products use the same copy protection system you may be asked to specify which product and level (including any options) the Site Key needs to enable.

Please do not try to convey **Site Codes** verbally.

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

Press the **Register** button.

Restart the system to enable the new license status.

License MediaReactor Controls and Displays

Here is a close look at the License MediaReactor interface.
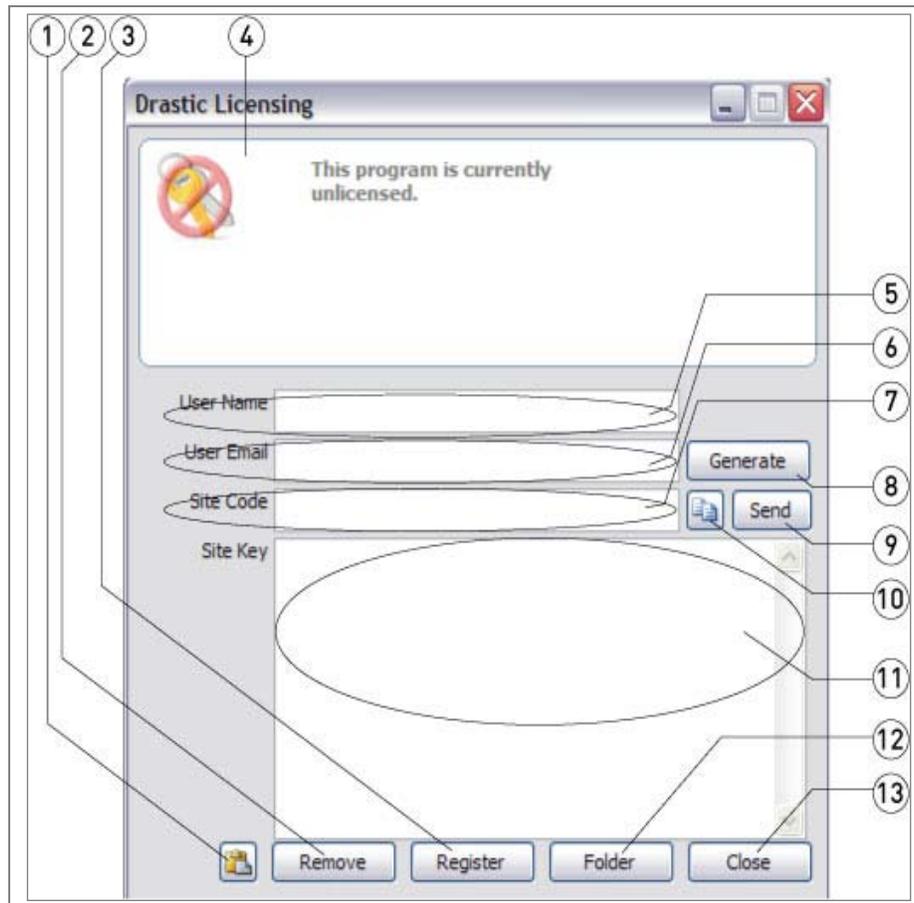
1	**Paste** button	Pressing the **Paste** button pastes the contents of the clipboard into the **Site Key** field.
2	**Remove** button	Pressing the **Remove** button deletes the existing license.
3	**Register** button	Pressing the **Register** button matches the **Site Key** with the **Site Code**, and provides a license if the combination is valid.
4	**License Status** field	Displays the current status of the license.
5	**User Name** field	In the license generation process, the user will need to enter a first and last name into this field.
6	**User Email** field	In the license generation process, the user will need to enter a valid email into this field. Note that the email provided to Drastic in this dialog will be the recipient of the **Site Key**, which is required to complete the license generation process.
7	**Site Code** field	This field displays the **Site Code**, if one has been generated.
8	**Generate** button	In the license generation process, once the user has entered a name and email, pressing the **Generate** button will populate the Site Code field.
9	**Send** button	If the system is set up with email, pressing the **Send** button creates an email containing the site code, addressed to authorization@drastictech.com.

10	**Copy** button	Pressing the **Copy** button copies the **Site Code** to the clipboard.
11	**Site Key** field	This field is where the user will paste the Site Key in order to proceed with the license generation process.
12	**Folder** button	Pressing this button opens the folder in which the license is contained.
13	**Close** button	Pressing this button closes License MediaReactor.

Technical Issues

Be aware of the following technical issues regarding certain potential computer activities:

Updating a version: Make sure to never uninstall MediaReactor Workstation software unless specifically instructed to do so by a Drastic Technical Support Agent. Install the new version in the same directory as the existing one. This will overwrite the old version yet leave the licensing intact.

The following will cause the license to fail:

Program Drive Failure: After replacing the drive and re-installing the software, contact Drastic Technical Support and request a new authorization. You may be asked to explain the reasons for your request.

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

MediaReactor Workstation Features

MediaReactor Workstation is designed to provide direct, real time editing of non editor native formats for Adobe, Avid, Apple, Assimilate, and other QuickTime or DirectShow based products.

MediaReactor Workstation installs a series of plug-ins which allow editors to add media (which would normally have required a transcoding step) directly into their editing package, and use the media as if it were a natively understood format.

Additionally, MediaReactor Workstation provides the MR Lite interface, for user directed transcoding. This is an application which the user can start up independently, to select media and transcode it to their preferred format.

For specific applications there are also command line components available for use.

NOTE: When outputting Panasonic P2 formats, a CONTENTS and a series of subdirectories are created to contain the file – these are not created in the selected directory.

Adobe Premiere CS5/6

To bring a file into Premiere for editing, select the menu **File | Import** (1) or right click in the Project area and select **Import** (2).
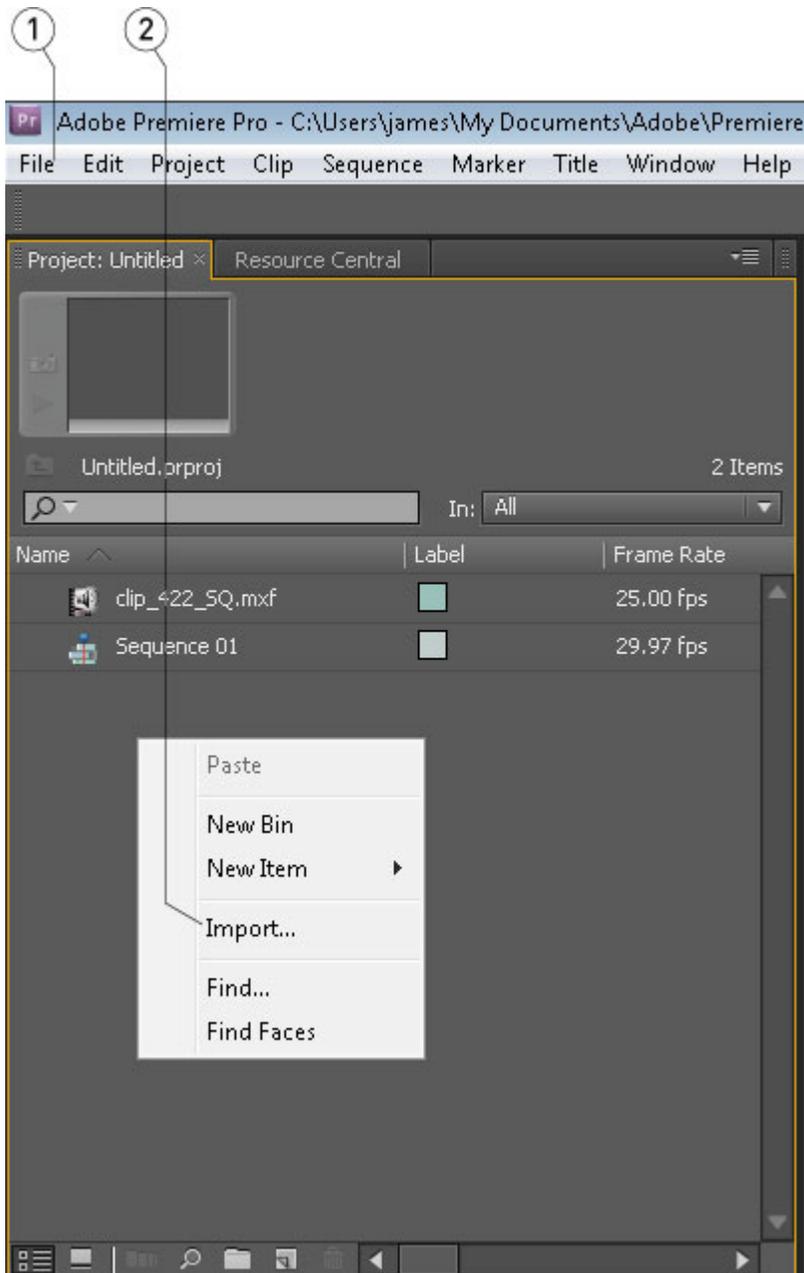
Adding files via the Media Browser area is also supported.

To export a file from Premiere, select the menu **File | Export → Media** (1).
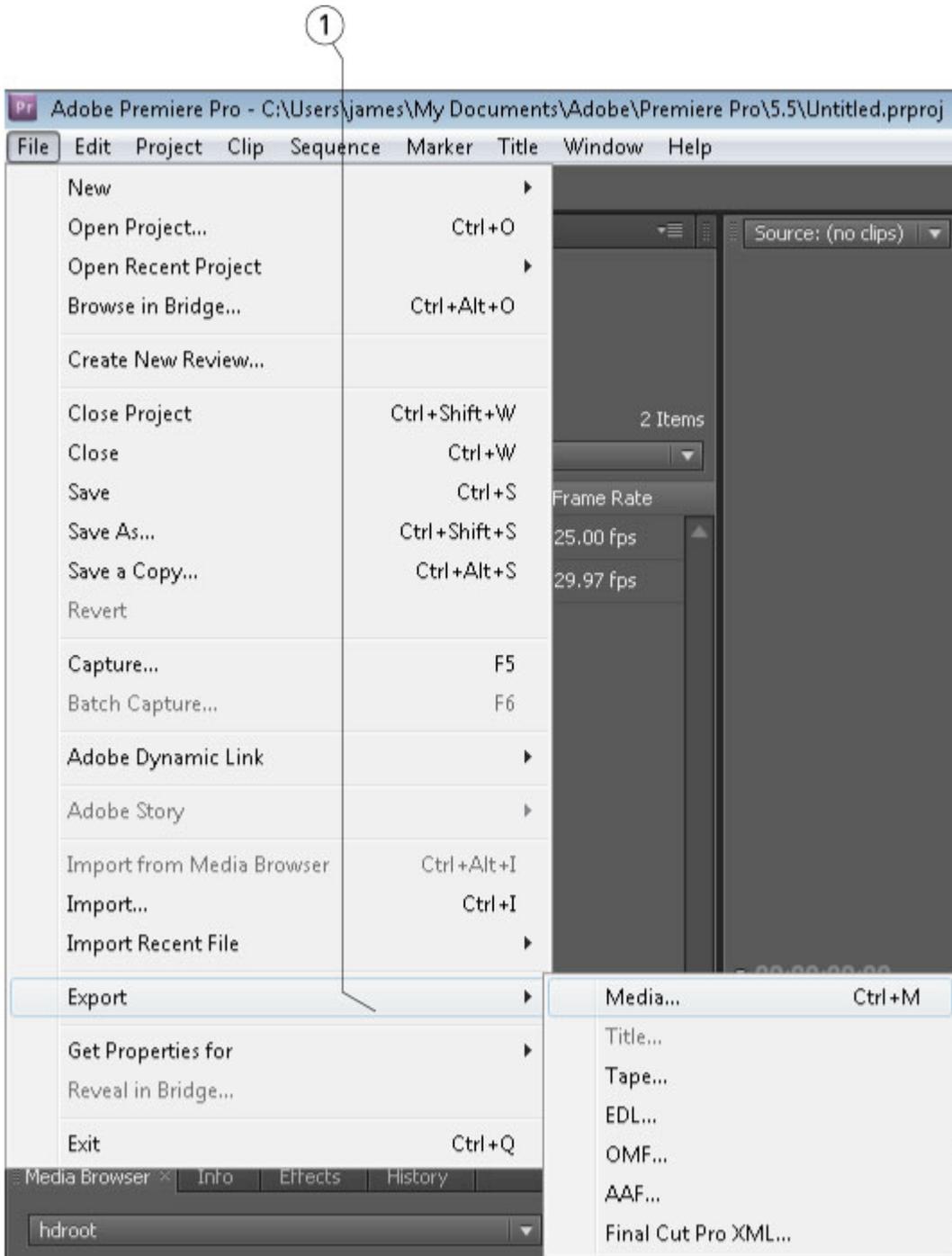
This loads the file into the dialog box.
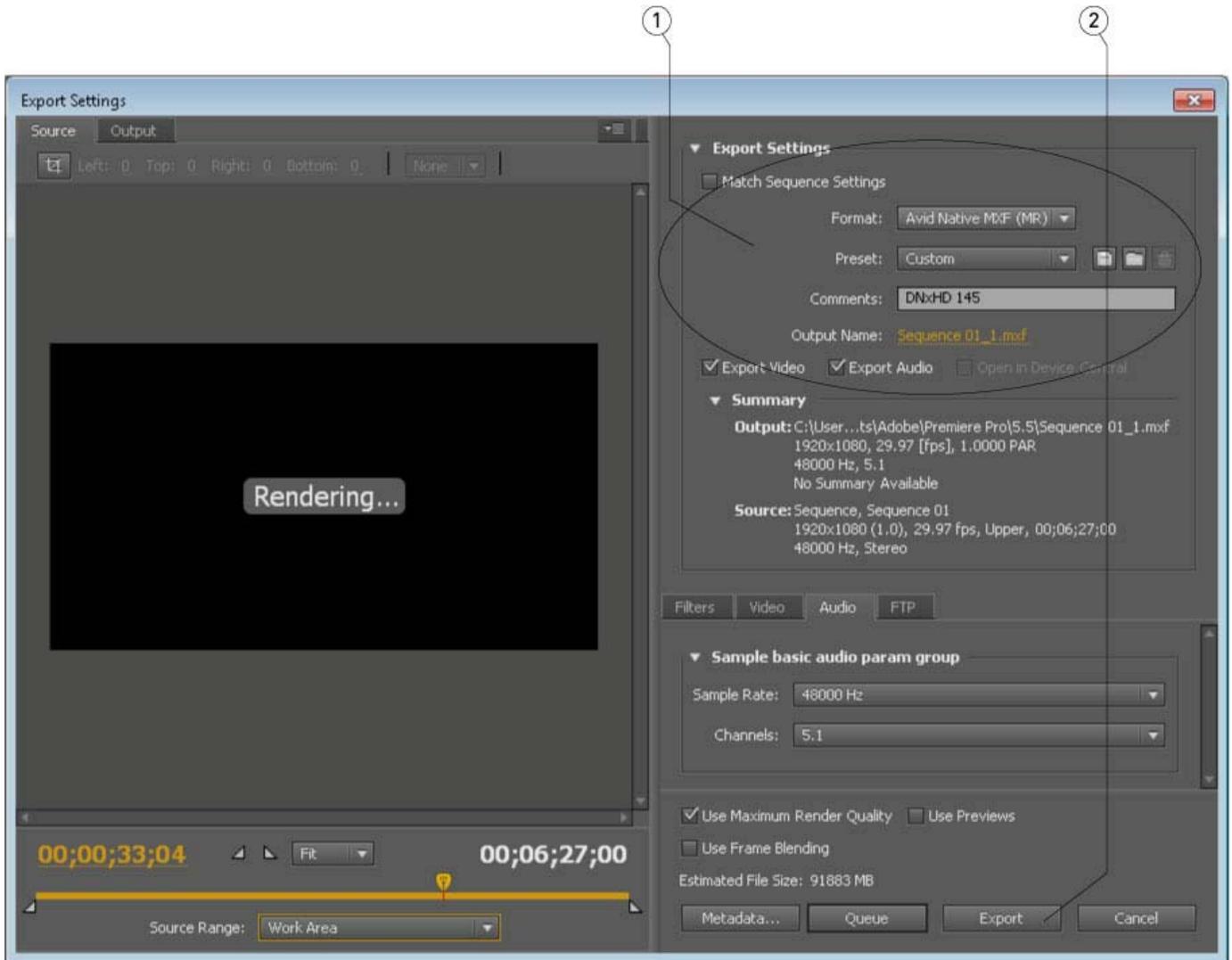
Select the Format drop down (1) to select the type. Set the settings and click the Export button (2).

NOTE: Outputting via Adobe only supports 0, 2 or 6 channels of audio. Files with more than 6 channels of audio will be limited to one of those numbers.

Apple Final Cut Pro (Suite 3/7)

To bring a file into FCP for editing, go to the **File** menu and select **Import** (1). Alternately, right click on the bin and select **Import->Files** (2). Browse to the file and select it.
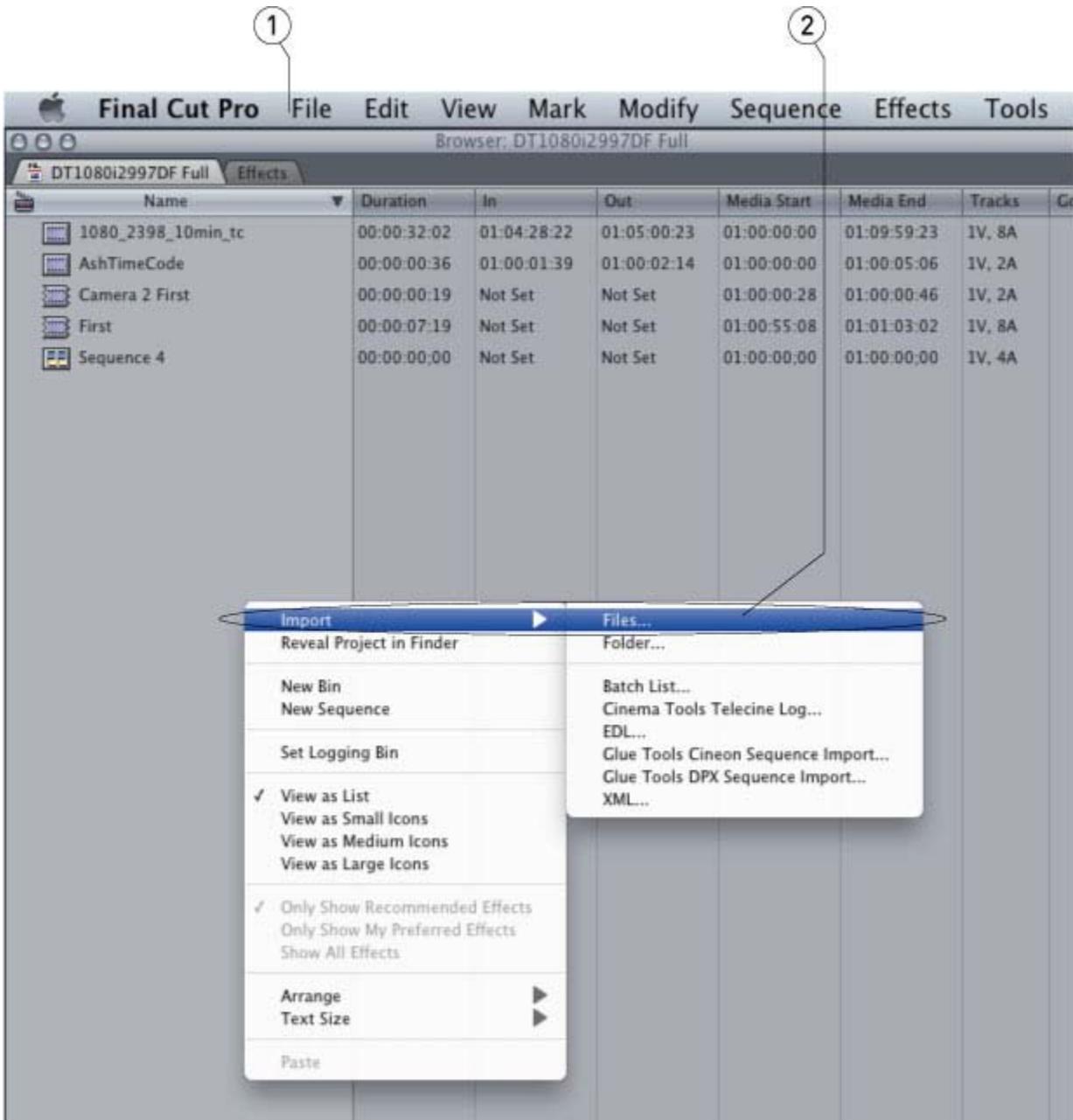
To export a file from FCP, click on the sequence you want to export. Select the **File** menu (1), then **Export->Using QuickTime Conversion**... (2).
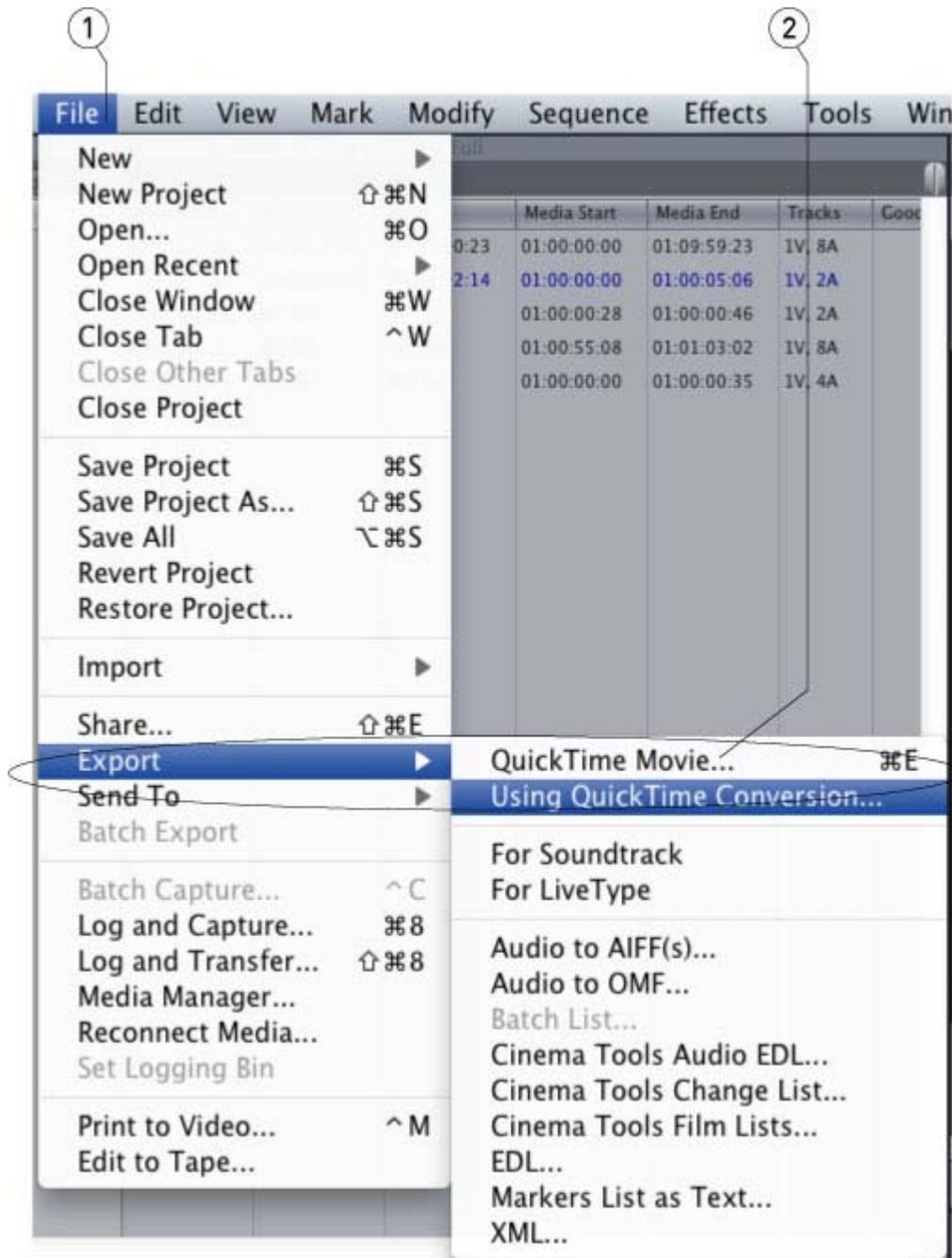
Open the **Format** list box and select the output type you want (1).
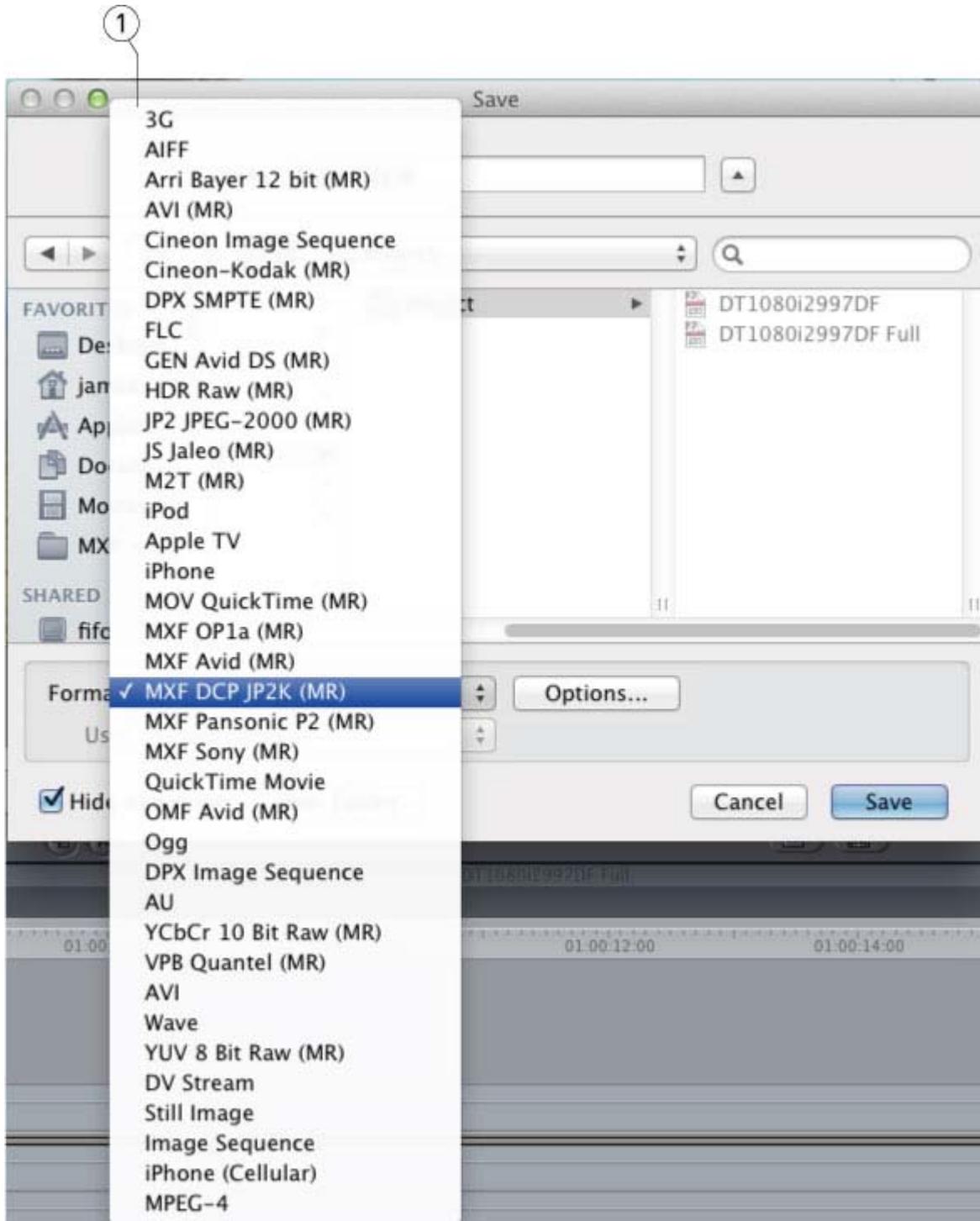
Click the **Options** button to set the options.
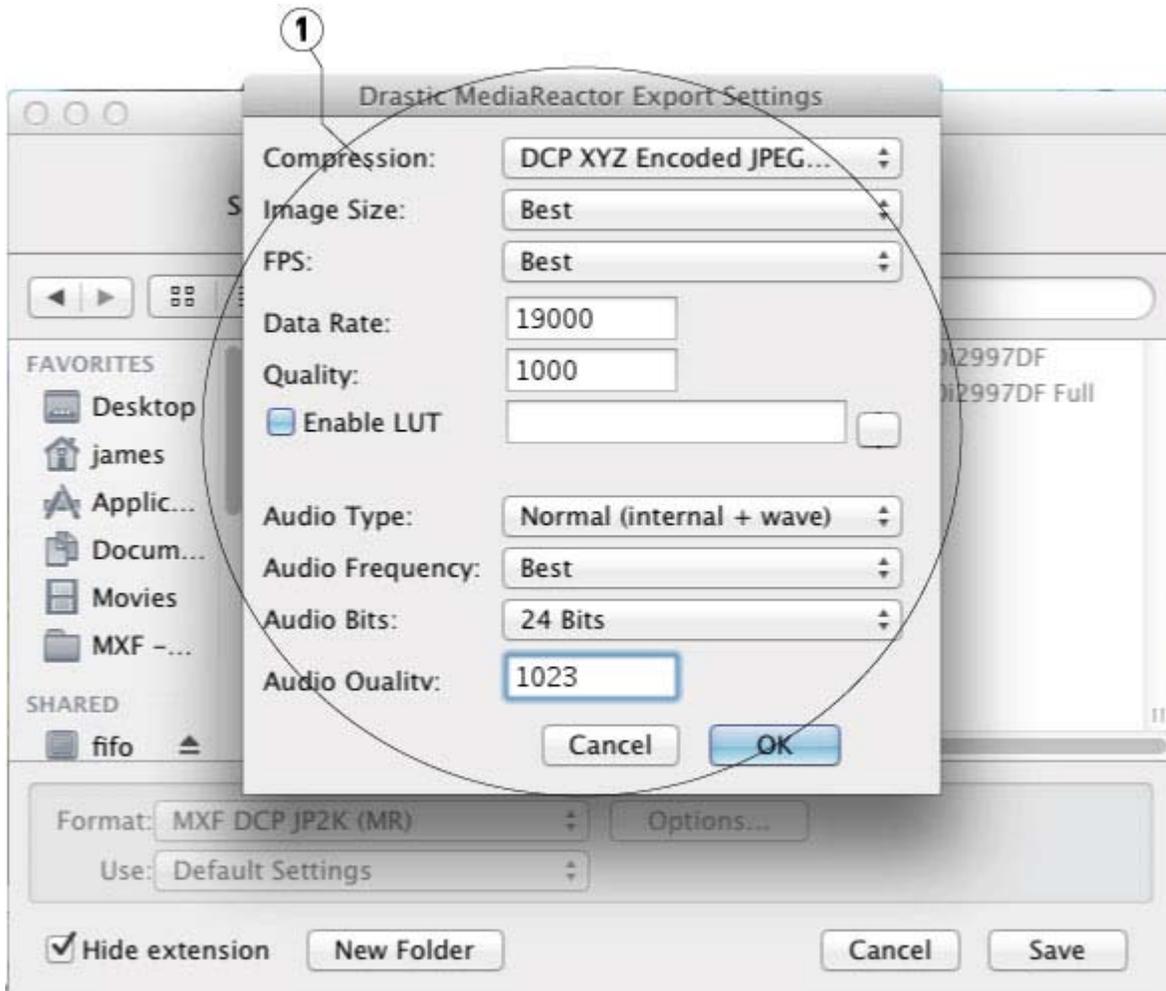
Set the name and add the correct extension (FCP will not do this for you). Click Save to export the sequence.

Assimilate Scratch/Lab

To bring a file into Assimilate Scratch/Lab, from the **TimeLine | Media** area, select **Load Shot**.
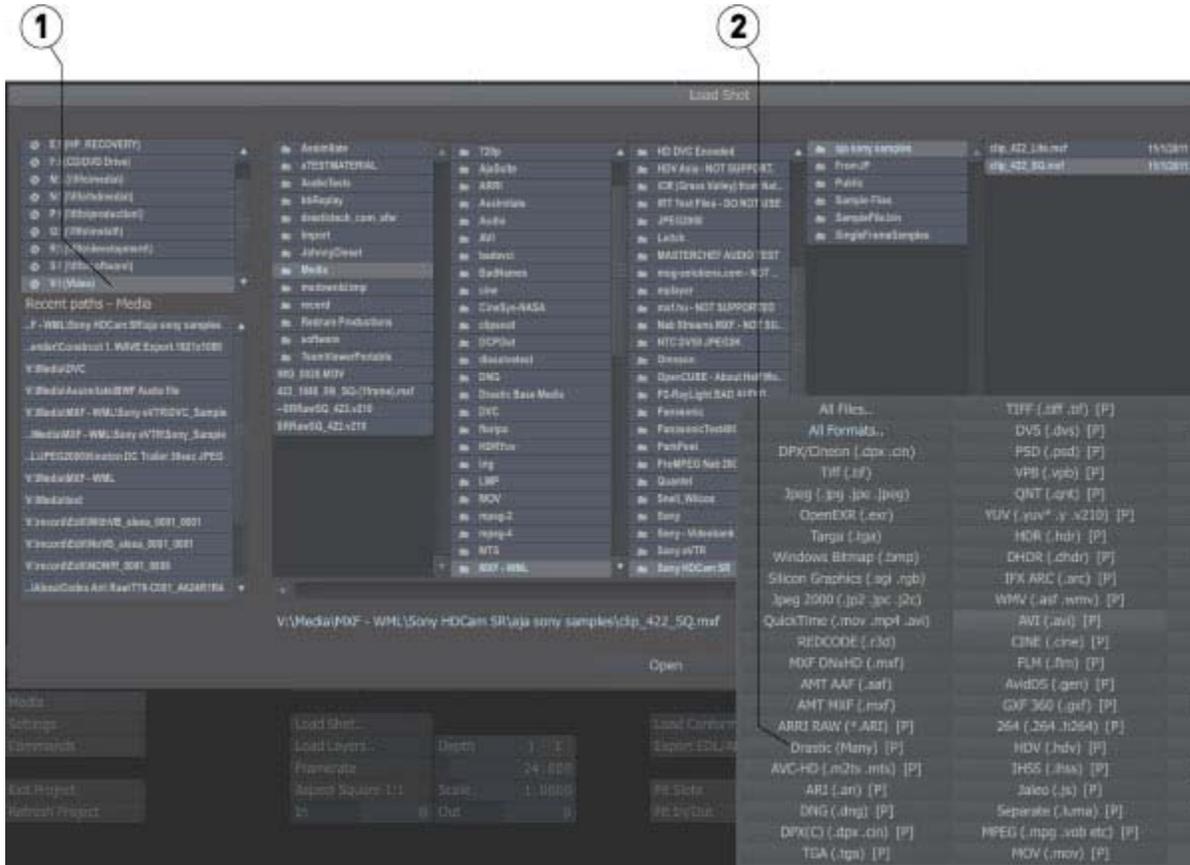
The file browser (1) will contain all the compatible types. For types that are supported in Scratch and MediaReactor Workstation (e.g. Arri, MXF), select the **Drastic Many** file filter (2) to force the MediaReactor Workstation plug in to be used.

To export a file from Assimilate Scratch/Lab, from the **Output** area, press the **Add Single Output** button (1) to add a single node.
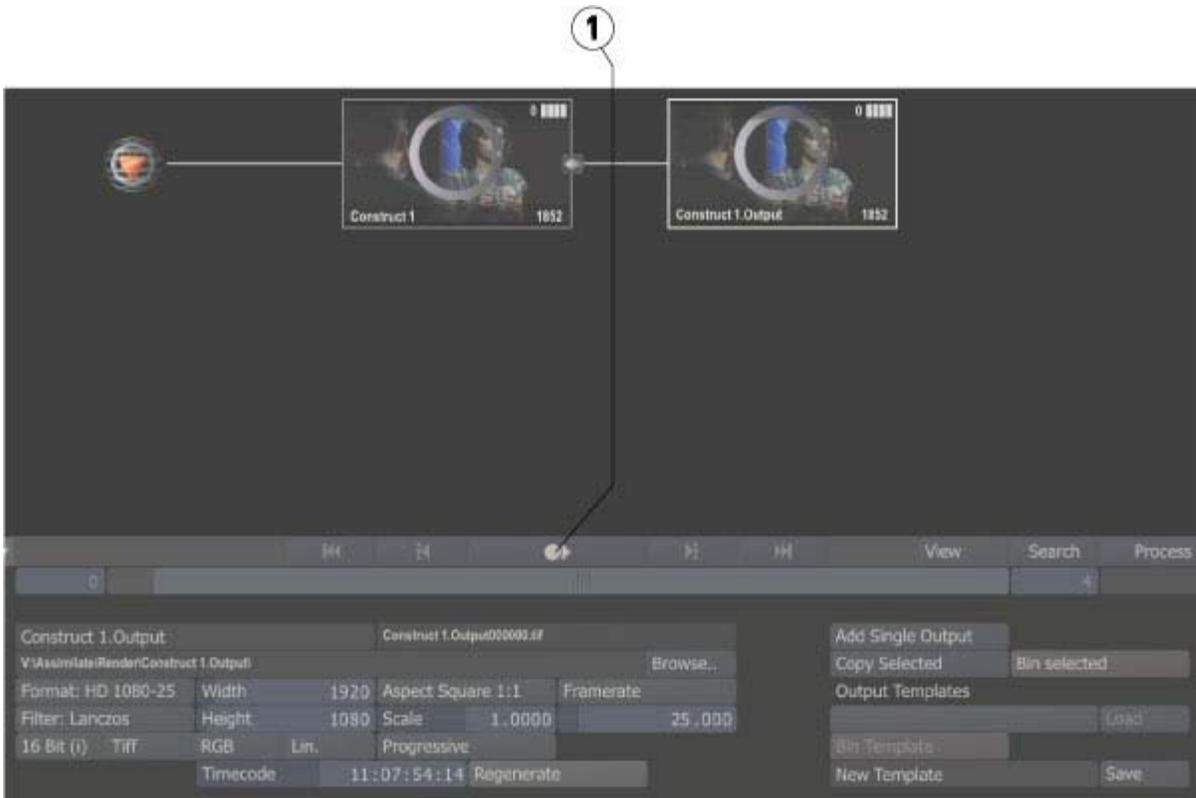
Press the **Play** button (1) – it's the circle with an arrow in it - to go to the output page.
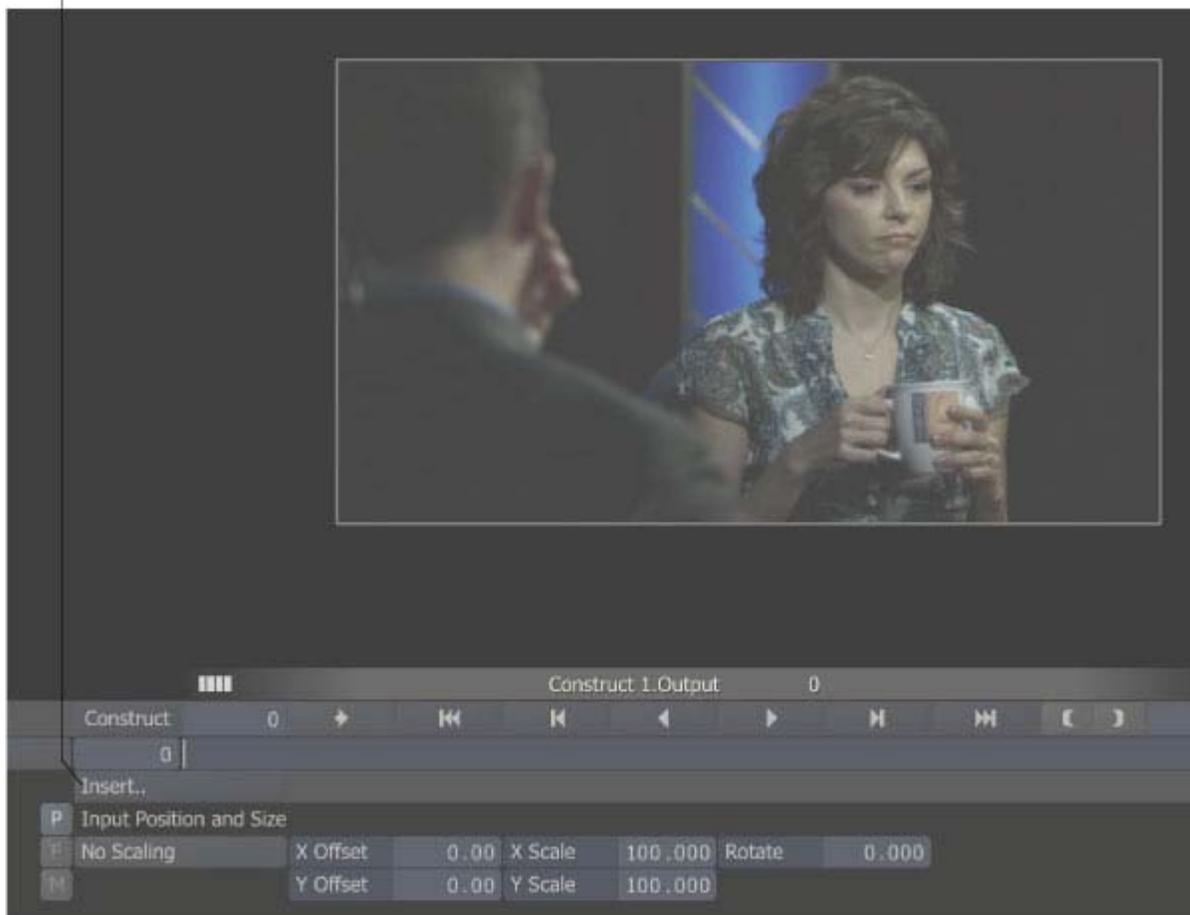
Click the **Insert...** button (1) to open the Export Plug Ins window.
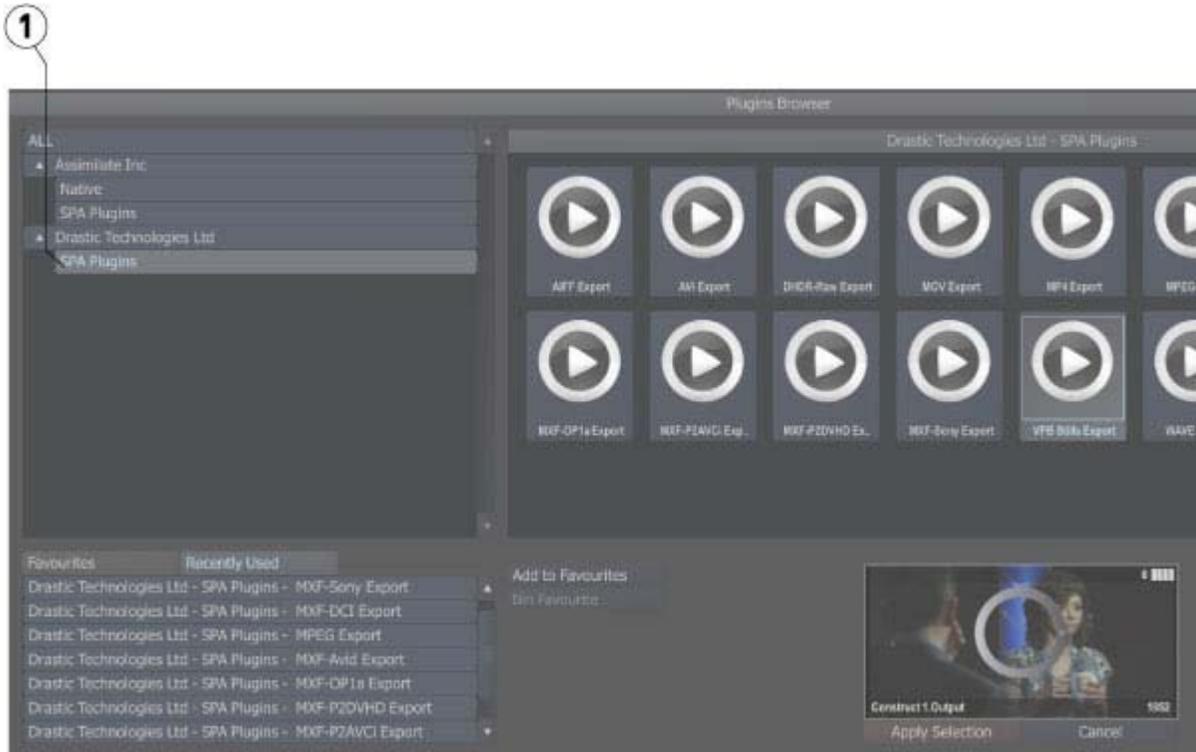
Use the **Export Plug Ins** window to select the output type from the **Drastic SPA Plug Ins** (1).
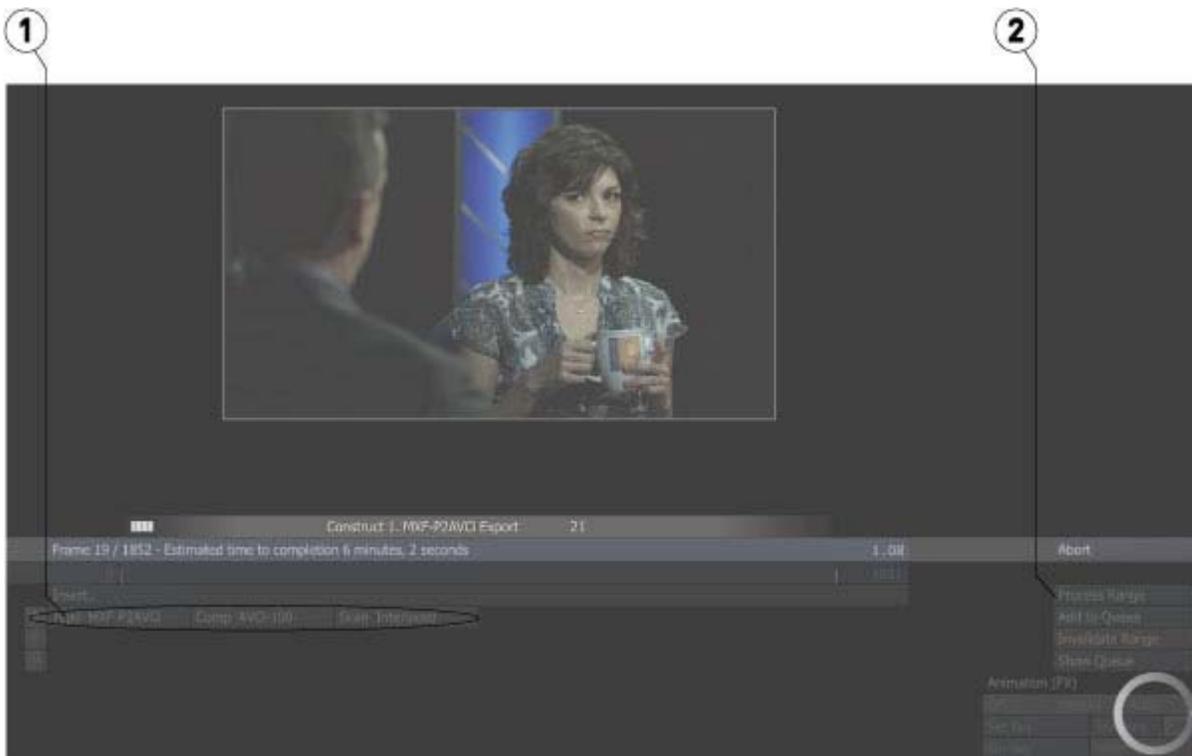
Adjust the parameters (1), and click the **Process Range** button (2) to export.

Avid Media Composer 6 (Symphony, NewsCutter)

To bring a file into the editor:
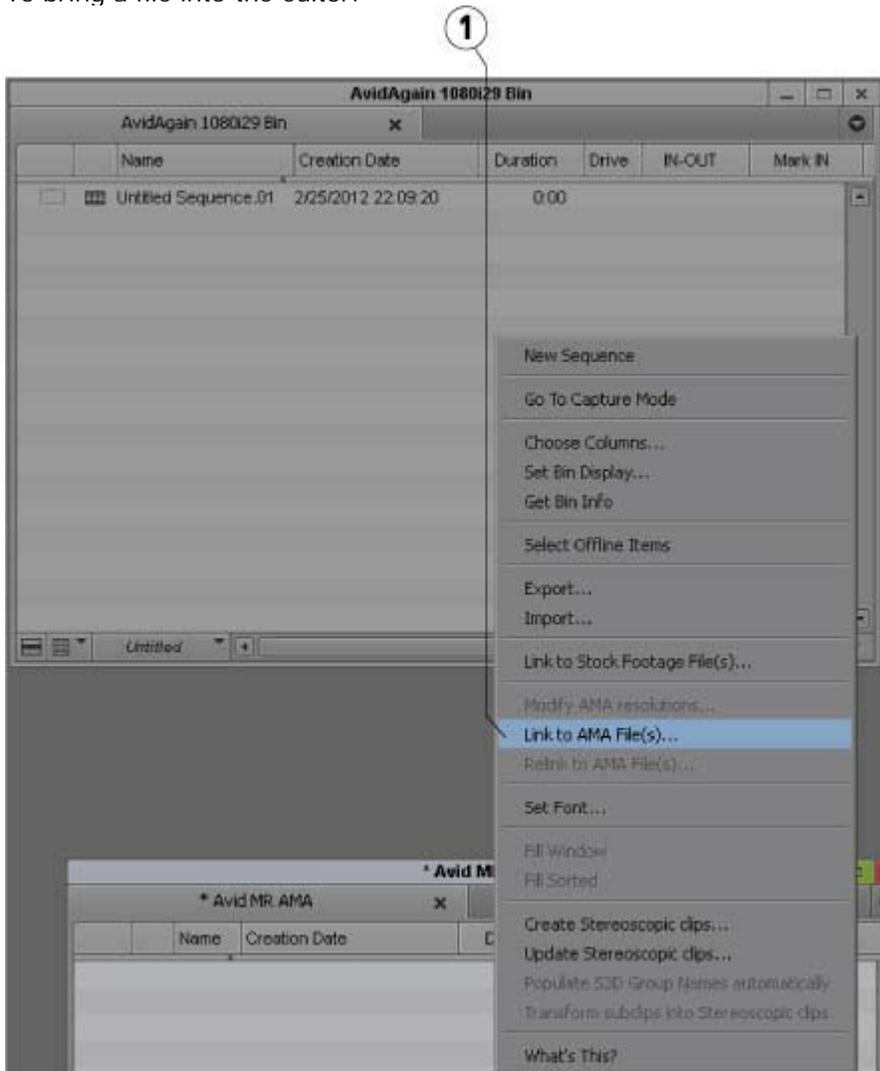
Right click on the bin and select the **Link to AMA File(s)...** menu (1) and select the file.
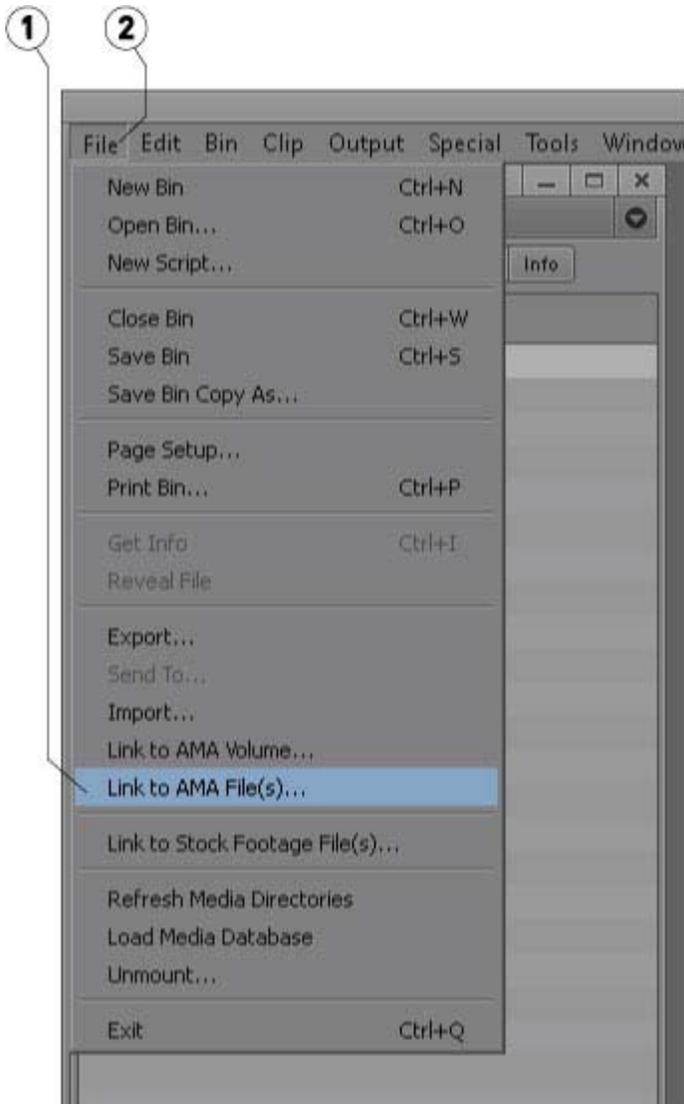
The **Link to AMA File(s)** menu (1) is also available under the **File** menu (2).

If your source files are on a network drive, you need enable access to the network drives in Media Composer. Open a **Console** window (menu **Tools | Console**) and type 'alldrives' without the quotes and hit **Return**. This only needs to be done once.

Apple Compressor

To convert from a MediaReactor Workstation file: Create an output profile.
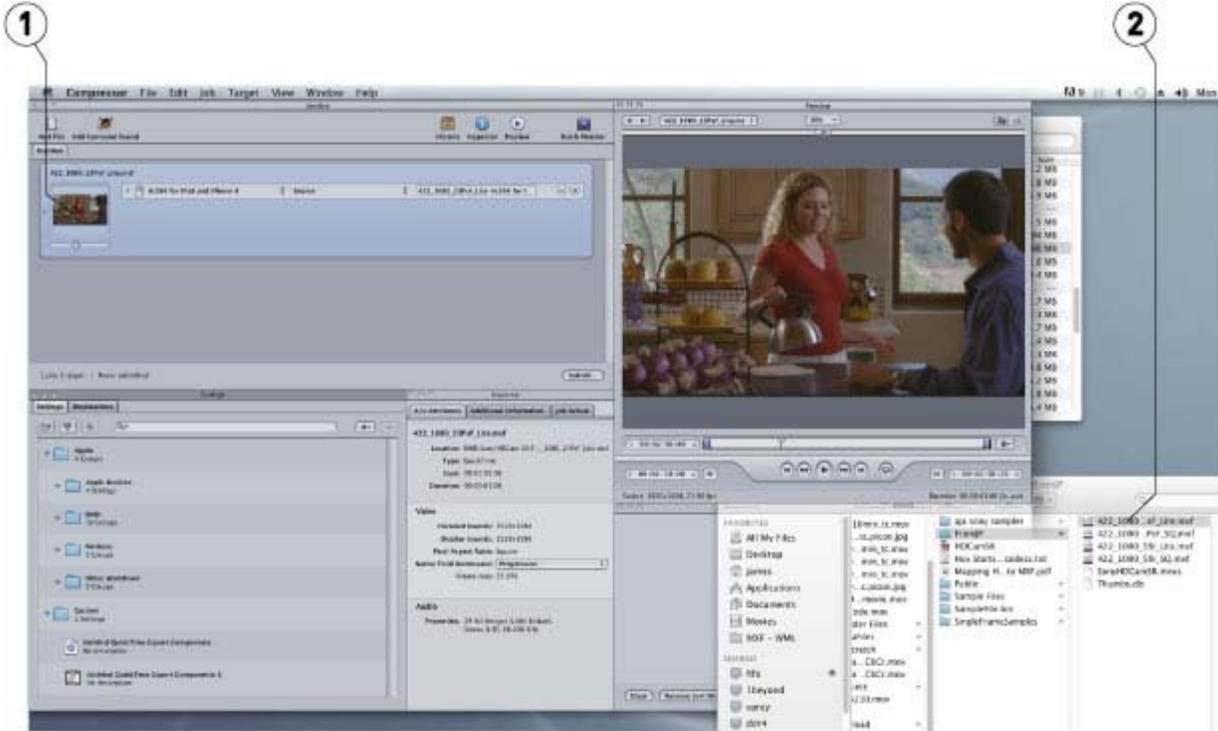
Drag the source file (2) on top of the output profile and drop it (1).

Apple Motion

To use a MediaReactor Workstation file in Motion, use the built in **File Browser** (1) to find and select the file.
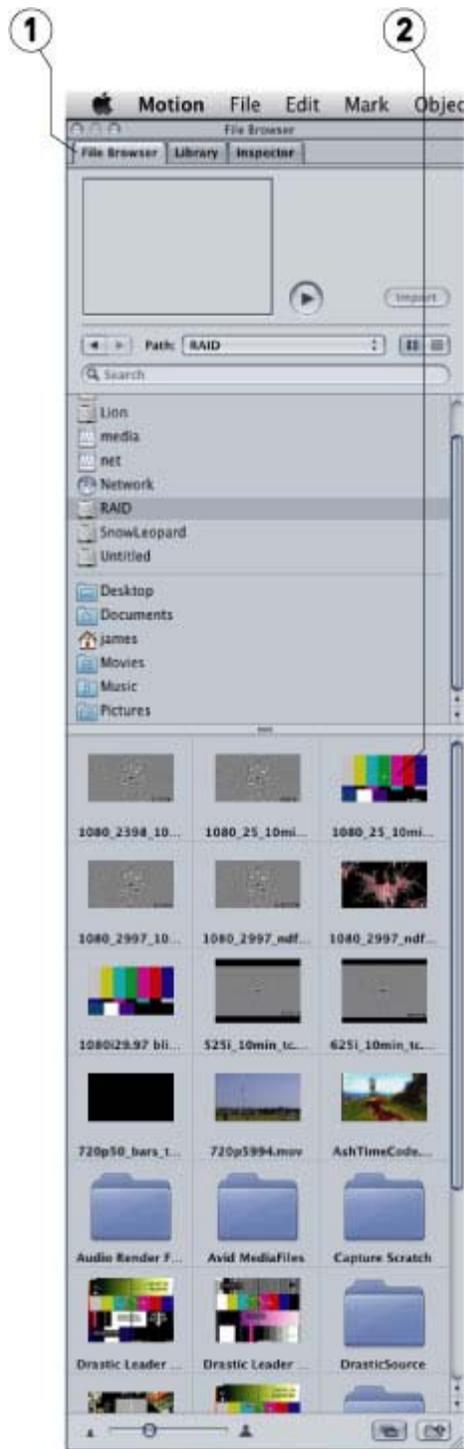
Supported files will appear as a picture of one of the frames (2) in the browser.

Adobe Media Encoder

To add a MediaReactor Workstation file:
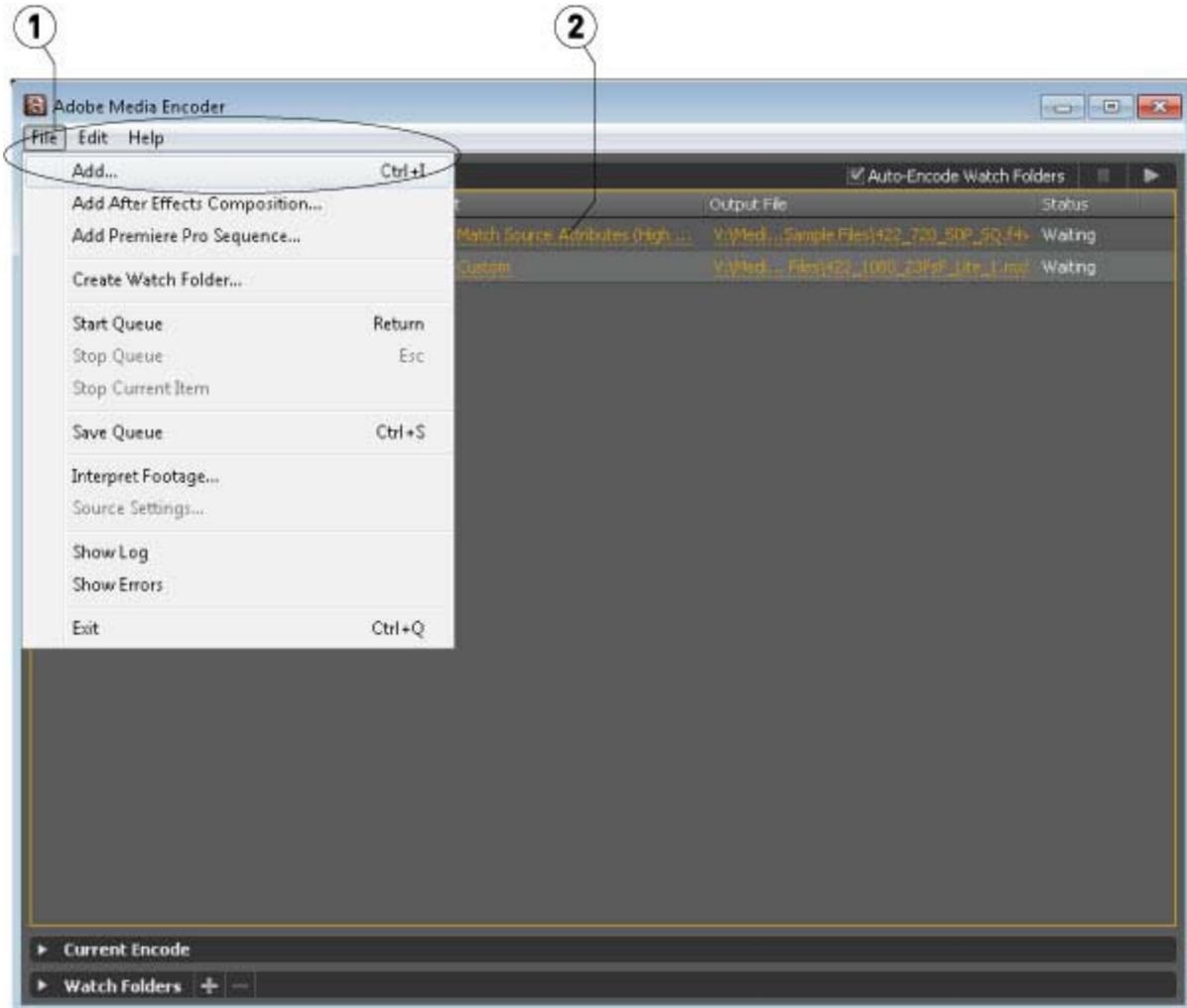
Use the menu **File | Add** (1), or drag and drop the file on the application. Click on the **Format** (2) or **Preset** column link. This opens the **Export** window.

The **Export** window opens with the selected file loaded (1). The **Export** window provides various controls (2) to allow the user to set the type of file that will be created during the export process.
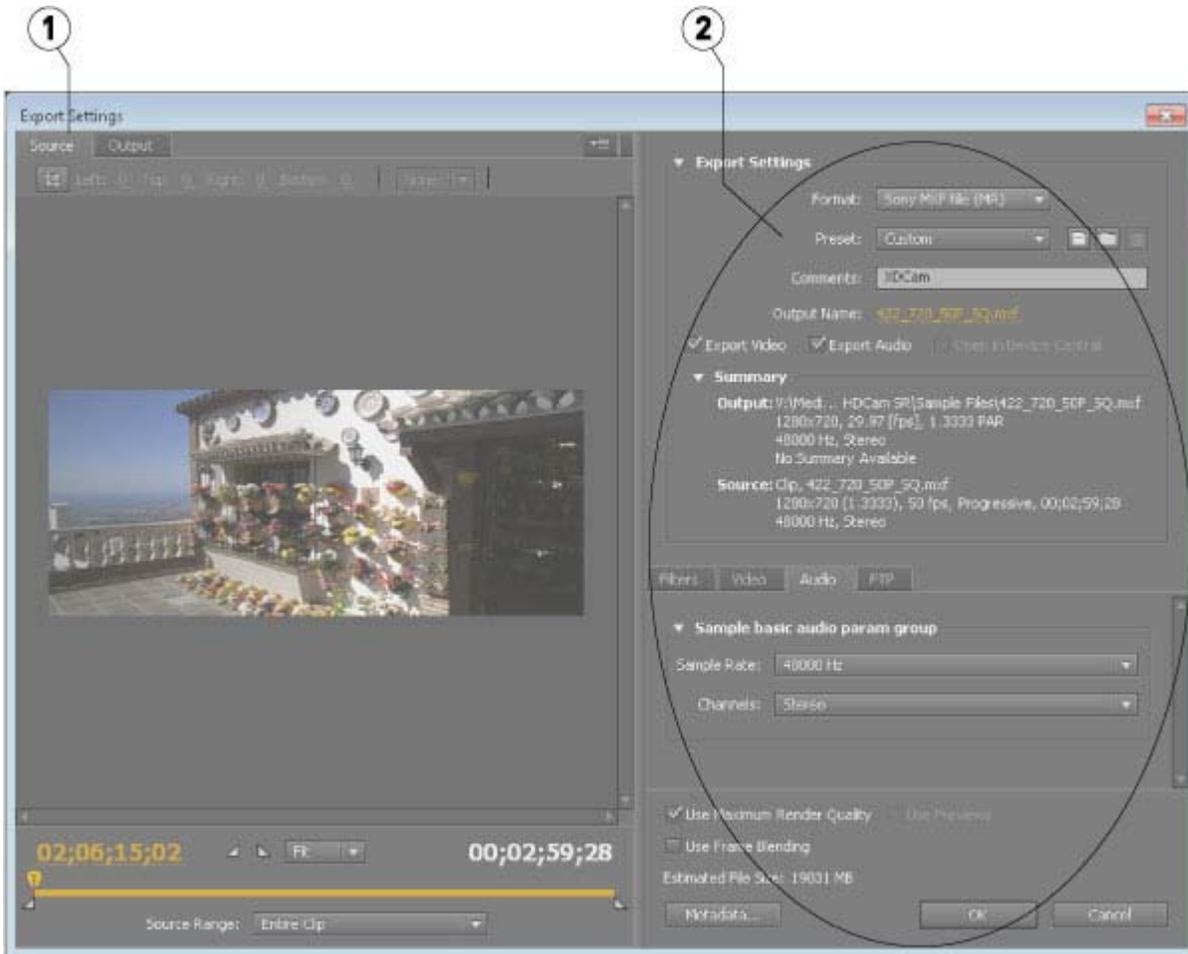
Once all the parameters have been sent the user can press the **OK** button to close the **Export Settings** window. The file will have been updated in the queue, with the parameters that will be used to create the new file displayed.

NOTE: Outputting via Adobe only supports 0, 2 or 6 channels of audio. Files with more than 6 channels of audio will be limited to one of those numbers.

QuickTime Player

To open a file in QuickTime Player (free or full version), select the **File | Open File** menu. In Windows it is necessary to set the file filter to all (*.*) to see non mov/avi files.

To export a file from QuickTime Player (requires full version), select the menu **File | Export…** In the export dialog, select the output type and options. Type in the file name and file extension.

When outputting a file in QuickTime, a 0k file is created in the directory which we do not use.

Windows Media Player

To open a file in Windows Media Player, select the **File | Open** menu, or drag and drop the file on the Player

The MR Lite Interface

The MR Lite interface is installed with MediaReactor Workstation to provides user directed transcoding functionality. The user may select a file, set up the transcoding parameters, and create a new file which is a copy of the media in the original file, but in a new file type.

MR Lite Displays and Controls

Main interface
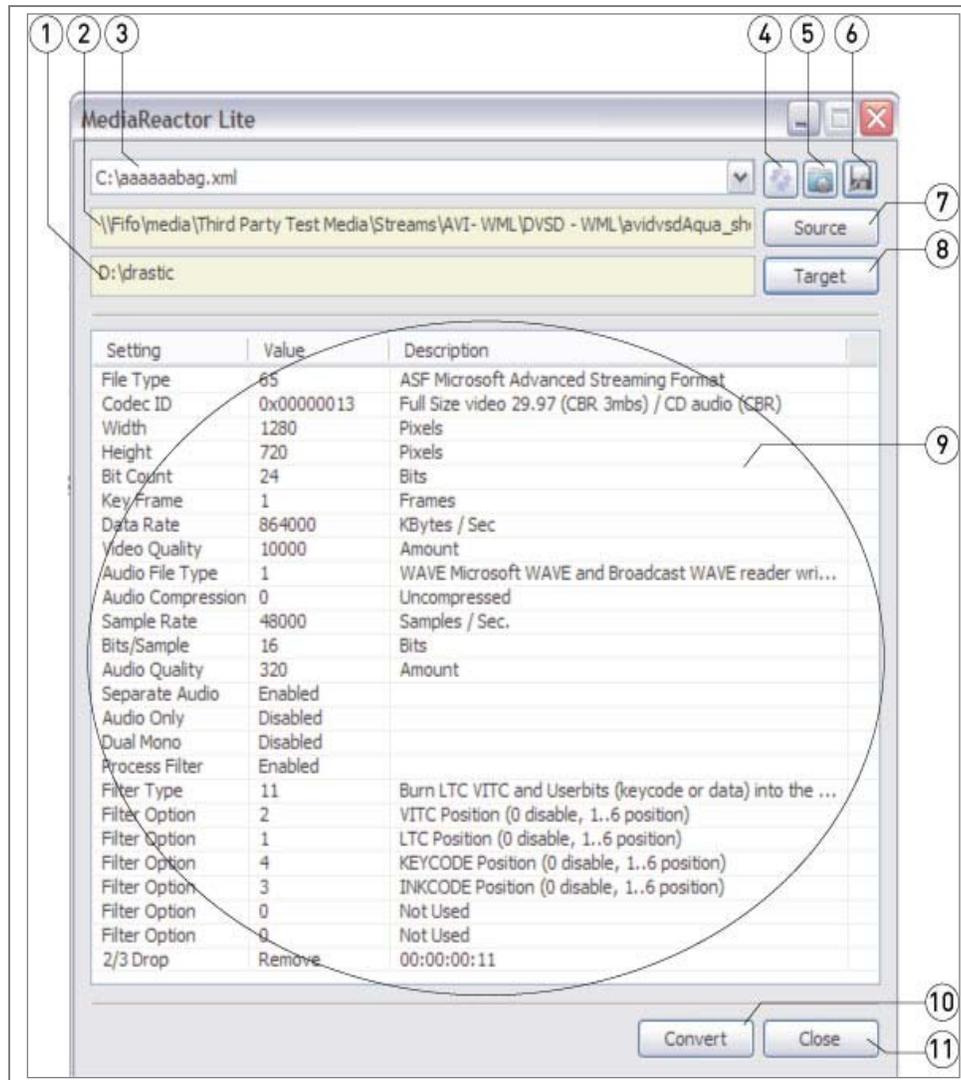
1	**Target Folder** field	Displays the location that has been set for the transcoded file to be saved into.
2	**Source Media** field	Displays the network path for the selected media file that is going to be transcoded.
3	**Configuration File** field	Displays the location for the current configuration file, if any has been created.
4	**Configure** button	Pressing this button opens the **MediaReactor Settings** window, which allows the user to view and change the settings for the file that will be created in the transcoding process.
5	**Load** button	Pressing this button opens a browser which allows the user to navigate to and load a configuration file.
6	**Save** button	Pressing the **Save** button opens a browser which allows the user to save the current configuration in a location and with the name of the user's choice.

7	**Source** button	Pressing the **Source** button opens a browser which allows the user to navigate to and select a media file to transcode.
8	**Target** button	Pressing the **Target** button opens a browser which allows the user to set the location in which the transcoded file will be saved.
9	**Configuration Details** field	All of the details about the type of media file that will be created in the transcode process are displayed in this field. Each setting displays a value and a comment if available.
10	**Convert** button	Pressing the **Convert** button begins the transcode, if one has been set up.
11	**Close** button	Pressing the **Close** button closes the application.

Settings
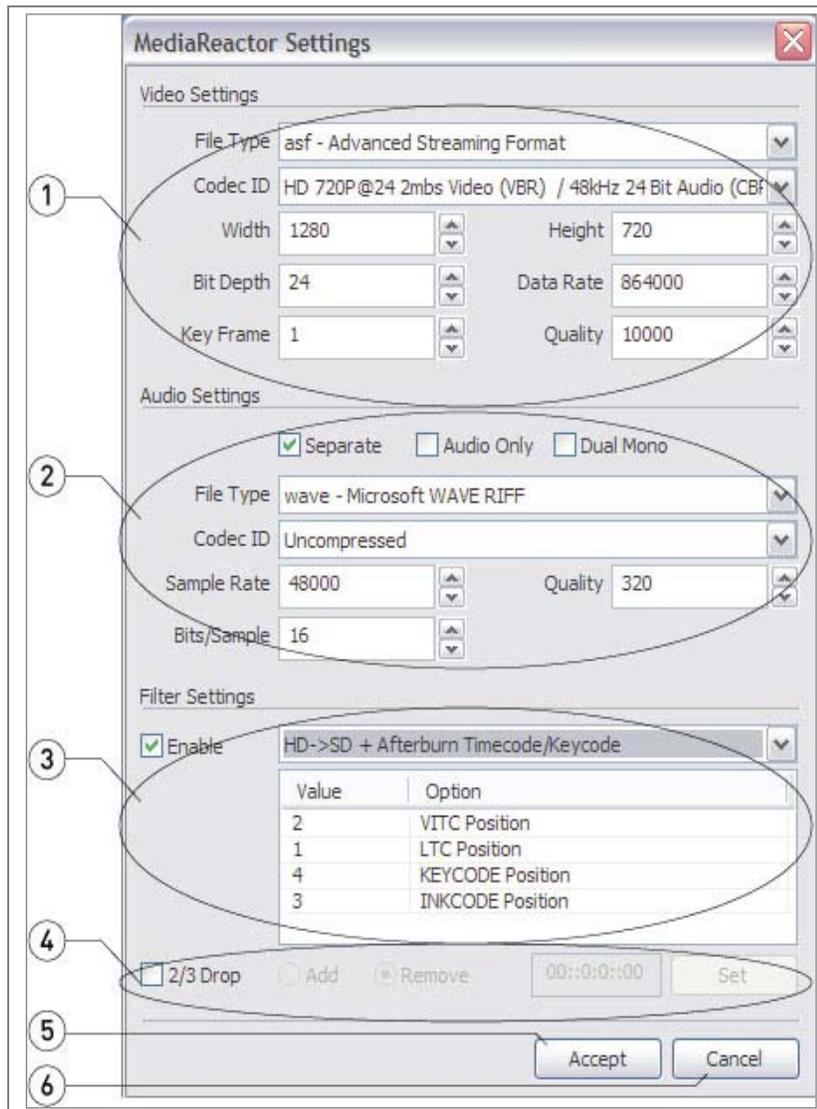
1	**Video Settings** section	This section contains controls to set the type of video that will be created during the transcode process.
2	**Audio Settings** section	This section contains controls to set the type of audio that will be created during the transcode process.

3	**Filter Settings** section	This section contains controls to set any filters that will be applied to the media created during the transcode process.
4	**2/3 Drop** section	This section contains controls to add or remove any 2/3 drop processing for specific Telecine applications.
5	**Accept** button	Pressing the **Accept** button sets any changes the user has made into the current configuration, and closes the **MediaReactor Settings** window.
6	**Cancel** button	Pressing the **Cancel** button closes the **MediaReactor Settings** window without changing the current configuration.

MediaReactor Settings – Video Section
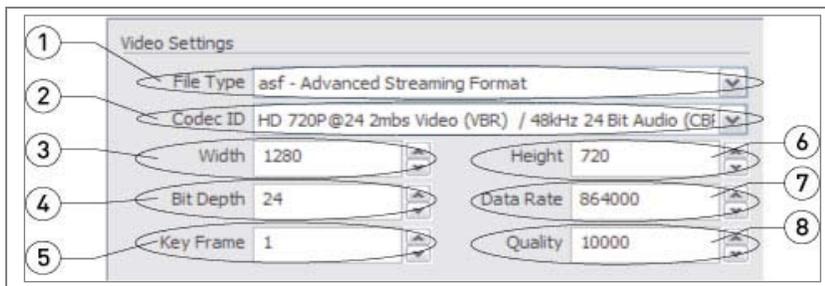
1	**File Type** pulldown menu	Use this pulldown menu to select between available video file types for the transcoded file.
2	**Codec ID** pulldown menu	Use this pulldown menu to select between available video codecs for the transcoded file.
3	**Width** selector	Clicking the up and down arrows to the right of the **Width** field allows the user to adjust the width of the transcoded video.
4	**Bit Depth** selector	Clicking the up and down arrows to the right of the **Bit Depth** field allows the user to adjust the bit depth of the transcoded video.
5	**Key Frame** selector	Clicking the up and down arrows to the right of the **Key Frame** field allows the user to adjust the key frame of the transcoded video.
6	**Height** selector	Clicking the up and down arrows to the right of the **Height** field allows the user to adjust the height of the transcoded video.
7	**Data Rate** selector	Clicking the up and down arrows to the right of the **Date Rate** field allows the user to adjust the data rate of the transcoded video.
8	**Quality** selector	Clicking the up and down arrows to the right of the **Quality** field allows the user to adjust the quality of the transcoded video.

MediaReactor Settings – Audio Section
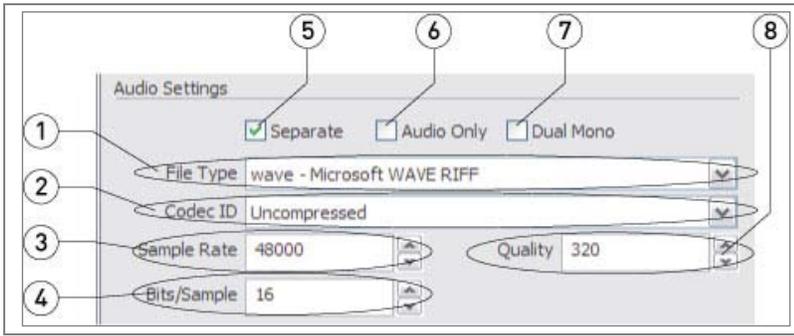
1	**File Type** pulldown menu	Use this pulldown menu to select between available audio file types for the transcoded file.
2	**Codec ID** pulldown menu	Use this pulldown menu to select between available audio codecs for the transcoded file.
3	**Sample Rate** selector	Clicking the up and down arrows to the right of the **Sample Rate** field allows the user to adjust the sample rate (how many samples per second) of the audio associated with the transcoded file.
4	**Bits/Sample** selector	Clicking the up and down arrows to the right of the **Bits/Sample** field allows the user to adjust the bits per sample rate (how many bits are in each sample) of the audio associated with the transcoded file.
5	**Separate** checkbox	Select this checkbox to specify that the audio being created in the transcode process should be separate from the video.
6	**Audio Only** checkbox	With the **Separate** checkbox selected, the user would be able to select this checkbox to specify that no video file should be created during the transcode process.
7	**Dual Mono** checkbox	With the **Separate** checkbox selected, the user would be able to select this checkbox to specify that the separate audio file being created should provide two mono streams of audio.
8	**Quality** selector	Clicking the up and down arrows to the right of the **Quality** field allows the user to adjust the quality of the audio associated with the transcoded file.

MediaReactor Settings – Filter Section

| 1	**Enable** checkbox	Selecting this checkbox allows the user to apply a filter to the transcoded file.
2	**Filter** pulldown menu	Use the pulldown menu to select between available filters. Currently the following filters are available: Blend Fields, Burn-in Time Code/User bits, Deinterlace Blend, Deinterlace Interpolate, Duplicate Field 1, Duplicate Field 2, Flip Horizontal, Flip Vertical, HD->SD + Afterburn Timecode/Keycode, Invert Fields, Invert Temporal and Field Order, Invert Temporal Order.
3	**Filter Settings** field	Where a filter has values that can be adjusted, the values will be displayed in this field, and the user will be able to edit the value by clicking on the value and typing in a new value.

MediaReactor Settings – 2/3 Drop Section

1	**2/3 Drop** checkbox	Select the **2/3 Drop** checkbox to specify that either (a) a file has been created by a telecine and needs to have frames added to create a standard frame rate video, or (b) a telecine-derived video file which has had frames added needs to have those frames removed to return to a telecine frame rate.
2	**Add** button	Select the **Add** button to specify that frames will be added to create a standard frame rate video from a telecine-derived video file. Selecting this button de-selects the **Remove** button.
3	**Remove** button	Select the **Remove** button to specify that frames will be removed from a standard rate video file to create a telecine compatible video file. Selecting this button de-selects the **Add** button.
4	**Time Code** field	Where the user is removing frames from a standard rate video file created by adding frames to a telecine-derived video file, the user can set the "A" frame, which is typically an interpolated frame, by typing in the time code location of the "A" frame.
5	**Set** button	Once the time code location of the "A" frame has been entered into the **Time Code** field, pressing the **Set** button sets the time code into memory.

MR Lite Basic Operation

Here is how to select a media file, set up various parameters, and transcode the media file into another type of media file.

Transcode a File

Run **MR Lite**. **MR Lite** resides by default in the MediaReactor install folder, and it may additionally have a shortcut placed in the Start menu, within Start/Programs/MediaReactor 4/MediaReactor Lite.

Select a Source File

Select the file you want to transcode:
Press the **Source** button to open the source file browser. Navigate to the location of the file you want to transcode and select it. Press the **Open** button. The browser will close and the network path of the selected file will appear in the **Source File** field.

Select a Target Location

Select a folder to save the new file in:
Press the **Target** button to open the target location browser. Navigate to the location of the folder in which you would like the transcoded file to be saved. An option is available to create a new folder. Once the location has been properly selected, press the **OK** button.

Set the Transcoding Parameters

Determine the type of file you want to create:
Press the **Configure** button. This opens the **MediaReactor Settings** window.

Video Settings

Use the **File Type** pulldown menu to select the file type.
Use the **Codec ID** pulldown menu to select the codec.
Use the **Width** and **Height** selectors to set the frame size.
Use the **Bit Depth**, **Data Rate**, and **Quality** selectors to set up transcoding to file types that have adjustable resolution settings.
Use the **Key Frame** selector to set the key frame interval for transcoding to file types that require key frames to reconstruct interpolated frames.

Audio Settings

Use the **Sample Rate**, **Quality**, and **Bits/Sample** selectors to set up transcoding to file types that support adjustable audio resolution.
The **Separate** checkbox is available for transcodes that require an audio file to be created outside of the context of the video file. Selecting the **Separate** checkbox activates the other controls in the **Audio Settings** section.
If **Separate** has been selected, selecting the **Audio Only** checkbox will ignore the video in the source file and only create an audio file during the transcode.
If **Separate** has been selected, selecting the **Dual Mono** checkbox will create two mono audio files during the transcode.
If **Separate** has been selected, use the **File Type** pulldown menu to set the file type for the separate audio file that will be created during the transcode.
If **Separate** has been selected, use the **Codec ID** pulldown menu to set the codec for the selected audio file type.

Filter Settings

Specific filter settings are additionally available for the transcoded file. One filter may be applied per transcode.

Select the **Filter** checkbox to activate the controls in the **Filter Settings** section.

Use the pulldown menu to select the **Blend Fields** filter where the transcoded file should have both fields of a frame blended together.

Use the pulldown menu to select the **Burnin – Timecode/User Bits** filter where the transcoded file should display the time code and user bits over the transcoded video. The **TC-UB Display** values may be set to 2 for both time code and user bits, or to 1 for time code only. The **X Position** and **Y Position** values set the location on the image where the time code and possibly user bits will be displayed. The **Display Scale 1-4** value sets the size of the time code and possibly user bits that will be displayed.

Use the pulldown menu to select the **Deinterlace Blend** filter where the source file is an interlaced type and the transcoded file should have these fields deinterlaced and blended. The **Edge** value may be set to determine how much blending should be applied to detected edges. The **Threshold** value may be set to determine the level at which blending will be applied.

Use the pulldown menu to select the **Deinterlace Interpolate** filter where the source file is an interlaced type and the transcoded file should have these fields deinterlaced, and interpolated. The **Edge** value may be set to determine how much interpolation should be applied to detected edges. The **Threshold** value may be set to determine the level at which interpolation will be applied.

Use the pulldown menu to select the **Duplicate Field 1** filter where the transcoded file should replace each field 2 with its associated field 1.

Use the pulldown menu to select the **Duplicate Field 2** filter where the transcoded file should replace each field 1 with its associated field 2.

Use the pulldown menu to select the **Flip Horizontal** filter where the transcoded file should be reversed left to right.

Use the pulldown menu to select the **Flip Vertical** filter where the transcoded file should be reversed top to bottom.

Use the pulldown menu to select the **HD->SD + Afterburn Timecode/Keycode** filter where the source file is an HD frame size and should be transcoded to standard definition, and additionally should have the time code and key code displayed over the image. The **VITC Position** value may be set to specify where in the sequence VITC will be displayed, from 1 (at the top) to 4 (at the bottom). The **LTC Position** value may be set to specify where in the sequence LTC will be displayed, from 1 (at the top) to 4 (at the bottom). The **Keycode Position** value may be set to specify where in the sequence keycode will be displayed, from 1 (at the top) to 4 (at the bottom). The **Inkcode Position** value may be set to specify where in the sequence Inkcode will be displayed, from 1 (at the top) to 4 (at the bottom).

Use the pulldown menu to select the **Invert Fields** filter where the transcoded file should have each field 2 first, followed by field 1.

Use the pulldown menu to select the **Invert Temporal and Field Order** filter where the transcoded file should have each field 2 first, followed by field 1, and additionally should begin at the last frame and end at the first frame.

Use the pulldown menu to select the **Invert Temporal Order** filter where the transcoded file should begin at the last frame and end at the first frame.

2/3 Drop Settings

2/3 Drop Settings are available for telecine applications. Where a file has been created by a telecine at standard 24 fps frame rate, frames may be added to create a standard 30 fps frame rate file. Where a file has been created by a telecine and has had frames added to create a standard 30 fps frame rate file, the added frames may be removed.

Select the **2/3 Drop** checkbox to activate the controls in the **2/3 Drop Settings** section.

Select **Add** if you need to add frames to a 24 fps telecine derived file to create a standard 30 fps frame rate file.

Select **Remove** if you need to remove added frames from a telecine derived file which has had frames added. In this case you will need to set the "A" Frame, or the first frame that has been added. To accomplish this, step through the file frame by frame (starting at the first frame) until a frame appears whose quality is noticeably lower than its neighboring frames – this will be the "A" Frame. Note the time code location of this frame and enter it into the time code field. Press the **Set** button to set this as the first added frame. Since frames are added in a predictable sequence, selecting the first "A" Frame reliably specifies all of the added frames.

Accept Settings

Once all of the configuration settings have been correctly set for the required transcode, press the **Accept** button. This closes the **MediaReactor Settings** window. Looking back at the main **MR Lite** interface, the user will see their specified values within the **Configuration Settings** field.

Begin the Transcode

Press the **Convert** button to begin the transcode. A progress bar along the bottom of the window shows how the transcode is progressing. If desired, the user may stop the transcode by pressing the **Abort** button.

A checkbox is available to display the transcoded file during the transcode. Select the **Show Output** checkbox. This action displays frames from the current transcode over the **Configuration Settings** field. The current frame number and the total number of frames are displayed at the bottom left of this field. The time code location of the current frame is displayed at the bottom right of this field.

Configuration File Options

The user may save their configuration settings as a file. This allows the user to save their most commonly used (or all of their) configurations as XML files for later use.

Save Configuration Settings

Here is how to save the current configuration settings for use on other source files. Press the **Save** button. This opens a standard browser. Use the browser to navigate to and select a folder in which you would like to save the configuration. Enter a name for the configuration. Press the **Save** button.

Load Configuration Settings

Configuration settings that were created and saved (or created elsewhere and loaded) with the current install of **MR Lite** will show up in the **Configuration Settings** pulldown menu at the top of the **MR Lite** interface. However if a configuration settings file has been created outside of this instance the user may still load it. Press the **Load** button. This opens a standard browser. Navigate to the location of the configuration settings XML file and select it. Press the **Open** button.

Close MR Lite

Once all required transcodes have been completed, the user may close **MR Lite**. Press the **Close** button. The MR Lite interface will close.

Command Line Utilities

mrcmd

mrcmd - Drastic MediaReactor Command Line Interface
Build: 854
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Usage: mrcmd [?] [-s#] [-e#] [-x#] [-y#] [-b#] [-q#] [-d#] [-k#] [-sm] [-r#] [-a#] [-c#] [-p#] [-F<audiofiletype>] [-AV] [-f<filety
e>] [-v<codec>] [-n#] [-i#] [=P<profile>] <inputname> <ouputname>
[] = optional
Parameters:

-s#	= start frame (def: 0)
-e#	= end frame (def: length of input)
-t	= allow transcode stream (def: convert stream)
-x#	= Horizontal size >1 (def: same as input)
-y#	= Vertical size >1 (def: same as input)
-b#	= Bit depth 8/16/24/32 (def: optimal)
-q#	= Video quality 0..10000 (def: highest)
-d#	= Video data rate >=0 (def: highest)
-k#	= Key frame distance (def: 15)
-s	= Separate audio files (def: internal)
-m	= Dual mono audio files (def: stereo, requires -s)
-r#	= Audio frequency/rate (def: same as input)
-a#	= Audio sample size 8/16 (def: same as input)
-c#	= Audio channels 1/2/4/5/6/8 (def: same as input)
-p#	= Audio quality 0..10000 (def: highest)
-i#	= Output video file ID (from codeclist.txt)
-f<filetype>	= Output video file type - AVI/MOV/OMF (def: auto sense)
-F<filetype>	= Output audio file type - WAV/AIF/AU (def: auto sense, requires -s)
-v<codec>	= Output video codec (text) - MMES/2yuv/DVSD (def: RGB uncompressed)
-n#	= Output video codec (numeric hex) - 88000001/1/a/f
-A	= Disable audio output (def: depends on input)
-V	= Disable video output (def: depends on input)
-P<profile>	= MediaReactor profile file path/name (optional)
<inputname>	= Input file path/name (required)
<outputname>	= Input file path/name (required)

To get a list of all the file type available in the file codeclist.txt, use
        mrcmd -all
To get a list of the codecs for a file type, use
        mrcmd #

mkrtindex

mkRtIndex - Make an rtin (RTIndex) file for a MOV, MXF, AVI, etc, by Drastic Technologies (www.drastic.tv)
Usage: mkRtIndex <sourcefile> [-v]
        parameters must be in order
<sourcefile> File to be indexed.
-v   Optional, verify rtIndex instead of create.

addtcmov

addtcmov - Add a time code track to a QuickTime movie file, by Drastic Technologies (www.drastic.tv)
Usage: addtcmov -i <moviefile> -s <tcframe> -t <tctype> -r [reelname]
-i <moviefile> QuickTime MOV to add tc track to
-s <tcframe>   Integer time code frame number of first frame in movie file.
-t <tctype>   Time code type
   24   = 1
   NonDropFrame = 2
   DropFrame   = 4
   Pal   = 8
   50   = 16
   59.94   = 32
   59 special = 34
   60   = 64
   23.98   = 128
   23.98 true = 132
   hundredths = 68
-r <reelname>   Reel name for file

mkrefmov

mkRefMov - Make a QuickTime reference movie file for a GXF, MXF, AVI, etc, by Drastic Technologies (www.drastic.tv)
Usage: ./mkrefmov -i <sourcefile> [-o <targetfile>]
    -i <sourcefile> File to be referenced.
    -o [targetfile] Optional, reference file name.

mrmetadata

mrmetadata - Extract metadata information from GXF, MXF, AVI, etc, by Drastic Technologies (www.drastic.tv)
Build: 888
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Usage: mrmetadata.exe -i <sourcefile> -qx -j # -k <picon.jpg> -e # -c -n 1 -w <output.wav> -m <reference.mov>
    -i <sourcefile> File to be referenced.
    Optional paramaters:
    -q   Quiet mode.
    -x   Do NOT export metadata XMLS
    -j #   Create a JPEG picon from frame #
    -k <picon.jpg>   Filename for JPEG picon frame
    -e #   Extract a JPEG picon for every # frame
    -c   Extract closed captioning
    -n #   First channel of source audio for the wave file (0,2,4)
    -w <output.wav>   Extract audio to a wave file
    -m <reference.mov> Create a QuickTime reference file

mranalyze

mranalyze - Video/Audio analysis tool, by Drastic Technologies (www.drastic.tv)
Usage: ./mranalyze -a <source a> -b <source b> [-o <targetfile>]
    -a <source a>   Original file.
    -b <source b>   Compressed file.
    -q   Quiet (no output) must be first argument.
    -p #   PSNR type
    -s #   SSIM type (0-Square, 1=Guassian)
    -m #   MS-SSIM type
    -g #   Global checks (0-none, 1-basic, 2-advanced)
    -o [targetfile] Optional, reference file name.

mrfix

mrfix - Change metadata in media files, by Drastic Technologies (www.drastic.tv)
Build: 888
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Usage: mrfix -i <sourcefile> -m c [per mode paramaters]
    -i <sourcefile>   File match string (e.g. *.ari)
    -q   Quiet, minimal print outs
    -t   Test, and do not alter files
    -m <mode>   What kind of file operation:
     a   Arri file metadata update
    For mode details, specify the mode (e.g. mrfix -m a ?)

Arri Metadata
    The Arri file metadata is specified in pairs, after the main parameters above. Each pair consists of the element that should be changed, and what it should be changed to. There are three types of data: U32 (a 32 bit integer number, e.g. 24), R32 (a floating point value, e.g. 1.223) and U8 (a string with a maximum size, e.g. "this is metadata"). When specifying strings, quote marks must be used if the string contains spaces. For FPS settings, they can be specified as simple frame rates (e.g. 24, 25, 30) or non integer frame rates by multiplying by 1000 (e.g. 23976, 29970).

    WhiteBalance U32
    GreenTintFactor R32
    WhiteBalanceFactorR R32
    WhiteBalanceFactorG R32
    WhiteBalanceFactorB R32
    WBAppliedInCameraFlag U32
    ExposureIndex U32
    BlackLevel U32
    WhiteLevel U32
    LookFile U8[32]
    SensorFps U32   (note: should match ProjectFPS)
    ProjectFps U32   (note: should match SensorFPS)
    CircleTake U32
    ReelName U8[8]
    SceneName U8[16]
    TakeName U8[8]
    Director U8[32]
    DoP U8[32]
    ProductionName U8[32]
    Company U8[32]
    Notes U8[256]
    SoundFileName U8[32]
    SoundRollName U8[32]
    SceneFileName U8[32]
    TakeFileName U8[32]
    Info U8[32]

Example command line:

mrfix -i V:\Test*.ari -m a SensorFPS 24 ProjectFPS 24 ExposureIndex 1200 WhiteBalanceFactorR 0.901 WhiteBalanceFactorG 1.0 WhiteBalanceFactorB 1.34 LookFile testlook.look Director "James L Brooks" Info "This is a line of information

Technical Support

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