7/22/2022

ER Media ToolKit 2 Pro

User Guide

by

AUDIO SPOT – CREATIVE TOOLS

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Introduction:

This ToolKit is the fastest and easiest way to replace audio in a video (non-destructively), batch convert any video into Apple ProRes, DNxHD, DNxHR, AVC video aka H264 (MPEG-4 Part 10), HEVC (aka H265), and much more.

Supported video formats:
.mov .mxf .mp4 .avi .mp2 .m2v .m2t .mpg .mpeg .mpeg4 .f4v .m4v .mkv .webm .qt .vob .mqv .wmv .avc .mpv .rm .rmvb .f4p .3gp .ogv .m2ts .ts

Supported audio formats:
.wav .aiff .aif .mp3 .aac .flac .ogg .wma .mpa .m2a .m4a .m4p .au .ac3 .3ga .m4r .amr .ape .caf .w64 .opus

Audio files can be used either to add an additional audio stream to a video or to replace all existing audio stream in a given video, both options support mono, stereo, multichannel or surround sound audio files.

This ToolKit can easily convert image sequences into video in just two clicks, our supported image sequence formats:
.tif .tiff .png .tga .exr .gif

"ER Media ToolKit" uses under the hood FFmpeg code with easy to use and user friendly User Interface, to easily create new media in a simple Drag & Drop.

There's no **START** button simply because this toolkit is designed to convert automatically once a video is dragged on the main App window, therefore all controls must be set to your desired export needs before dragging media for processing.

After a short adjustment period to this unique workflow, you'll find this method quite enjoyable and much faster than the conventional approach because:
A. it forces you to think beforehand and in doing so you get much more efficient.
B. you'll see after a while that most of the time you use the same conversion settings over and over again, which makes this workflow more logical and definitely faster once you've found your preferred settings and rhythm.
C. It enables things that wouldn't be possible otherwise like converting media without even opening the application, just by dropping the media over the application desktop icon (or Mac's dock icon), furthermore, it works even with media batches.

The Settings window is unified in all the ToolKit applications, that is why you'll find it explained only once and it applies to all the applications apart from the BRxDVD App which has a bit limited settings window but it works essentially the same and explained in the BRxDVD introduction section.

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Installing the ToolKit on Windows systems:

Download latest version, unpack the zip archive, install.
If previous version installed just install the newer version over it, the installer recognizes the older version and automatically update the necessary files.

In rare cases when updating older version an install error may occur, if so just un-install current 'ER Media ToolKit' first via Control Panel Add/Remove Programs, then install latest version.

Some antiviral agents pause installers to scan for threats, just let them work and authorize it in a few seconds.

First time install creates new 'Windows environment variables' (on systems that are not previously set to work with FFmpeg global commands) if you get a massage: "The application cannot locate FFmpeg or FFprobe. ER Media Toolkit will not work etc." you may need to restart Windows to make the new global variables take effect on Windows logon.

The installer supports 64 bit Windows 7 up to 11.

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macOS installation and program update:

ER Media ToolKit applications run under macOS 10.12 and above. Please don't ask for backward compatibility, there is none since this project started in 2017.

First time setup instructions:

To use ER Media ToolKit Apps under macOS you need to have *FFmpeg* installed on your system, in case you are not sure whether FFmpeg installed on your system, or if it works with our software; , just install our bundle using the dmg installer (see step 3). Once installed, go to the applications folder, open the folder '**ER Media ToolKit v2**', in it you'll see an application named **First Time, Run This!** run it. this tool will immediately look for the FFmpeg assets and in case it can't find it, it instantly offers to fetch it from the web and set it for you. Just make sure you have an active internet connection, and follow the on-screen progress.
If the application do find the necessary FFmpeg assets on your system, it opens up with no splash screen warning, directly into the main app window, where you can perform several maintenance tasks such as: update the FFmpeg assets, scan your computer for older ER Media ToolKit versions and remove them to clean your system from older version leftovers for a fresh start with your new v2 bundle.
After the 'first run procedure' you may close this utility/app, make sure you have activated the licenses (Demo or Perpetual) and start enjoying the products in the toolkit.

If it fails for any reason such as lack of internet connection or missing elevated user permissions etc. or in case you wish to do it all by yourself, you can download the full FFmpeg Static build from https://ffmpeg.org/download.html#build-mac , just make sure you select the macOS 64-bit, Static build. Extract it and copy both FFmpeg and FFprobe, and paste them into: /Users/Shared/AudioSpot/ERAssets (if you only have part of this path, create the rest to complete it in full).

However, the methods specified above will only let you use FFmpeg within ER Media ToolKit, if you wish to take advantage of FFmpeg outside the ER Media ToolKit via Terminal for instance, you may want to use Homebrew or other method, just google search 'install ffmpeg on mac' and choose the best way for you.

In case you have *FFmpeg* and *FFprobe* installed elsewhere on your system (i.e. at /opt/homebrew/bin/ or at /Users/Shared/AudioSpot/ERAssets/), you can create a Symbolic Link (in the Terminal utility) to one of the above locations/paths by typing:
ln -s /original/file/path /destination/file/path (or google for: create a Symbolic Link on Mac).

Users who want to install *FFmpeg* in full we suggest using Homebrew, it's the easiest way to add packages on your Mac but it takes some time to install.

?Homebrew is a command-line package manager, in order to use it you need to install brew:
Open Spotlight, type: **Terminal** and open the Terminal utility application.

Tip: to figure out if *Homebrew* is already installed on your system type: **which brew**

If it returns a path such as: /opt/homebrew, it means *Homebrew* is installed on your system.
You can do the same for *FFmpeg*, type: **which ffmpeg** (if **which ffmpeg** returns with a path make sure it's one of the paths specified above**,** If brew installed and working but *FFmpeg* returns: *ffmpeg not found* jump to Step 2 (Installing *FFmpeg* via brew)

If **which brew** returns: *brew not found* do the following:

1. (Step 1) Installing Homebrew*:*

Go to the Homebrew website and follow the up-to-date instructions on how to install it.

When it's done you can use 'brew' to setup *FFmpeg*.

2. (Step 2) Installing FFmpeg via brew:

Copy the following line, paste it into the Terminal command-line and press Enter:

brew install ffmpeg

This process may take between 5 up to 25 minutes depending on your computer and internet connection, just leave it be and go back to your business until it is done.

3. (Step 3) If you haven't already done so download ER Media ToolKit latest version, run it and drag the content of the package (Four Apps) onto the Applications folder in the center, you may also want to create shortcuts onto the Dock for your convenience.

Updating previously installed versions:

Download latest version, run it and drag the content of the package onto the Applications folder in the center as before, when asked select replace/overwrite all older versions with the newer ones.

Send audio replacement file directly from Steinberg's software:

Windows users get this as part of the windows installer, just enable it at the bottom of the "Export Audio Mixdown" Window in your Steinberg's DAW Post Process Tab.

macOS users, do the following to add "MediaER" as Post Process in Steinberg's "Export Audio Mixdown" Window:

Download this zip file

Copy the files: " OpenInMediaERPro.aepp" and "MediaER.png" from the zip into:

/Library/Application Support/Steinberg/Audio Export Post Process Scripts

Launch your Steinberg's DAW and enjoy :)

License Activation: (all operating systems)

Perpetual (Purchased) License Activation:

1. Wait for a confirmation email, saying; the products you purchased been deposited into your account.
2. Download and install the latest iLok License Manager application, found at iLok.com
3. Open it and Sign In to your iLok account with your iLok user ID and password.
4. Click on “View” from the menu bar and choose “Available Licenses”.
5. In the main list box, find the ER product you purchased and select it.
6. Click on “Licenses” from the menu bar and choose “Activate”.
7. In the new window that opens up; choose where you wish to activate your new license and click Activate.
8. You can now use our products that you just activated, Enjoy!

In addition, you can open a Cloud Session from the iLok License Manager and use our product license(s) via this Cloud Session if you wish to operate on more than one system using the same license(s).
In such case follow the above steps 1 to 3 and instead of the above steps 4 to 7:

Click on “File” from the menu bar and select “Open Cloud Session.” Once finished, click “OK” when prompted. Please note that all available iLok Cloud licenses will be activated to your account active Cloud Session.

Once you successfully establish a Cloud Session, no further action is needed, just make sure you have a stable/steady internet connection to maintain a healthy iLok Cloud Session with no interruptions.

Starting a 20 days Trial/Demo:

Just make sure you have an internet connection and open any of our products. Follow the simple on-screen Trial/Demo activation steps, if you haven’t already created your own iLok.com User account, we urge you to do so in advance even though it is not mandatory for the process, it will save time later on when you buy your perpetual license.

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Editorial:

From version 2.0 all applications in the ToolKit are "Single Instance App", which means one can no longer launch more than one instance of the application simultaneously.

That is in fact great news since with that comes a bonus that enables the ER applications to receive an endless number of media files pushed from other apps such as Cubase, Nuendo, and all other applications that support the "Post Process" feature (i.e. pass arguments to third-party applications) and also any item that been dragged & dropped on the application's icon is added to the job list and processed in its time, not only the first batch in case of video files or the last one in case of an audio file. Windows users will be happy to know that the application doesn't lock the windows explorer window anymore and messages always appear centered on top of the application window.

So finally, all previous version limitations have been dealt with and you can now do even more complex actions with the ToolKit that you couldn't do before.

Version 2.0 also supports continued file drags while the process is still running, so you can drag more and more files while the process is still in progress and the application puts them at the end of the existing job list.

multiple audio support with a new 'Audio Bank' window that accommodates all dragged audio files or pushed audio items from another application as mentioned above, so for instance, if you drag audio and use it as an audio replacement, once the process is over you can reuse this audio by pulling it back from the Audio Bank without the need to locate the media's location

<Alt> + click the audio name in the audio replacement field to immediately revealed its location on your disk drive.

The Pro version also includes some exciting new super-fast features that will upgrade your workflow significantly, like; quickly create Picture in Picture videos, watermark your logo on any video, Stamp custom Timecodes on the fly or retain original timestamp, Burn visual Timecode on videos, faster audio / video split, adding multiple audio streams into a video in one click, configure custom user suffix on demand and save it with all your preferences, Queue mode and audio loudness normalization, all of which transform this already amazing toolset into an even more powerful must-have tool for anyone dealing with video/audio at any level.

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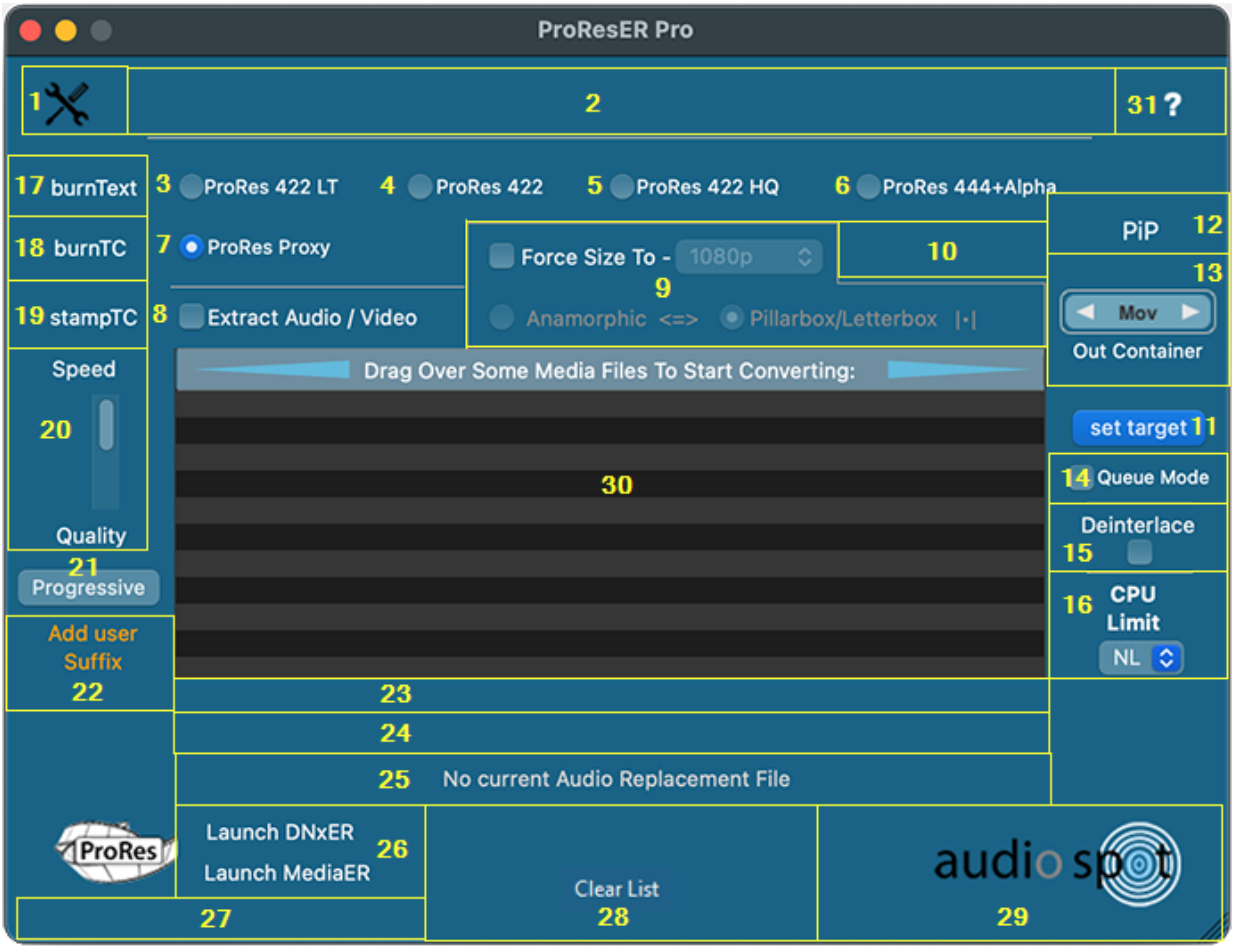
ProResER introduction:

ProResER was created to convert any media into Apple ProRes codec hosted inside QT Mov container or MXF on both Mac and PC Windows operating systems.

ProResER Main window controls:



Ctrl + Q (windows) / CMD + Q (Mac) = Quit The Program, no matter which window is open.

1) Click here to open Settings window.

2) Main App textual communication and notifications area.

3 to 7 are five possible render flavors for the Apple ProRes codec family.
Apple ProRes codec supports all frame sizes including SD, HD, 2K, 4K, 5K, 6K, 8K.

3) ProRes 422 LT - Second highly compressed ProRes, has fair quality, target data rate is approximately 102 Mbps at 1920x1080 - 29.97 fps, not designed for broadcast use.

4) ProRes 422 - High-quality compressed codec offering nearly all the benefits of Apple ProRes 422 HQ, but at 66 percent of the data rate for even better multistream, real-time editing performance. The target data rate is approximately 147 Mbps at 1920x1080 - 29.97 fps.

5) ProRes 422 HQ - Higher-data-rate version of Apple ProRes 422 that preserves visual quality at the same high level as Apple ProRes 444 but for 4:2:2 image sources. ProRes 422 HQ offers visually lossless preservation of the highest-quality professional HD video that a single-link HD-SDI signal can carry. target data rate is approximately 220 Mbps at 1920x1080 - 29.97 fps.

6) ProRes 444 + Alpha - An extremely high-quality version of Apple ProRes for 4:4:4:4 image sources (including alpha channels). This codec features full-resolution, mastering-quality 4:4:4:4 RGBA color, and visual fidelity that is perceptually indistinguishable from the original material. target data rate of approximately 330 Mbps for 4:4:4 sources at 1920x1080 - 29.97 fps.

7) ProRes Proxy - Proxy is the lowest ProRes quality, used for reference only, target data rate is approximately 45 Mbps at 1920x1080 - 29.97 fps.

8) 'Extract Audio / Video' checkbox, lets you separate audio stream/s from within any media container into Wave 48khz 16 or 24 bit file format or extract the Video / Audio streams depending on the user's choice, once chosen, it affects all the following videos dragged to extract/split Audio-Video.
You may hold <Shift> and click this control's caption to scroll through all available options,
Or hold briefly <Ctrl> + <Shift> + C to reset this control to default factory setting.

*If the dragged media container includes more than one audio stream the App creates multiple Wave files side by side (matching the audio stream count) and naming them: xxx-str1, xxx-str2, xxx-str3 etc. streams may include any combination of mono, stereo, multichannel or surround sound all kept accordingly after extraction.

9) 'Force Size To – Uncheck to retain input video dimensions in output media or check it to force output media dimensions to one of the following: 720p mid res HD (1280x720), 1080p HD TV (1920x1080), 2160p UHD TV (3840x2160) , DCI 2K Cinema (2048x1080), DCI 4K Cinema (4096x2160), 9:16 small (Portrait 720x1280), 9:16 Full (Portrait 1080x1920), 1:1 small (Square 720x720), 1:1 Full (Square 1080x1080), 1.91:1 (Landscape 1200x628).
Choose your desired output video dimensions from the drop-down list and then choose the method in which this resizing occur:
Anamorphic = if the input video has different aspect ratio than selected as target the video is stretched to fit target dimensions.
Pillarbox/Letterbox = if the input video has different aspect ratio than selected as target the video is resized

without affecting its original aspect ratio and black fillers/bars will be added on the sides (Pillarbox) or on the top and bottom (Letterbox) to fill the target media dimensions.

10) Abort Process push button area, showing only while conversion process is running to allow the user to break the process before it ends.

11) Set Target (push button), By default the processed media always placed in the same folder as the original video. Clicking this push button allows the user to define a custom destination folder to which all processed media will be sent. Once a custom target folder is set this push button caption shows as: 'change target' indicating that a custom target is set and to let you know that all output media is being directed to a single predefined folder of your choice.
To remove the predefined custom folder completely hold <Ctrl> and click this push button, the caption will now show 'set target' indicating you're back to default output folder Behavior.

    In addition, one can drag over any supported media while holding the <Option> modifier to quickly set a custom target path, starting at the dragged media parent folder instead of the default start location; current user desktop folder, using this option will expedite your workflow.

12) PiP (Picture in Picture) can be done with one video source for both main picture and the PiP or two different videos as main video and Picture in Picture video, to use two different videos place the PiP video in the audio replacement field by holding <Shift> + <Ctrl> while dragging over the media, when done properly you'll see the video name in the audio replacement field. Now drag over the main video (without holding any modifiers while dragging), doing so will automatically start the PiP creation so make sure you set all related controls beforehand i.e. the picture in picture position in the main video frame, PiP size and PiP delay (PiP delay mainly used when both main and PiP are the same video source in ADR production or other voice tracking sessions).
Warning: PIP creation is a unique action which cannot be performed together with some other actions:
Add or replace audio streams, Audio Offset Auto Fix, Queue Mode, Extracting Audio/Video to separate streams, Burning Visual Timecode on video, Video frame rate (FPS) Re-Conform.
Therefore, when processing Picture in Picture (PiP) any and all of the above actions are temporarily ignored.

    Important sizing note: Half, Quarter, Ninth etc. refers to the PiP alone, meaning: if the PiP image dimensions are 3840x2160 (UHD) and the main video is only 1920x1080 (FHD), when you choose "Half" as PiP size you will actually get PiP size of 1920x1080 while the main video is also 1920x1080, so the PiP will cover the entire output frame and nothing will left of the main video!
    Or if using the same example only entering "Quarter" as the size setting: the PiP size will cover Half the frame.

    When this feature is active the text (link) in the main app window turns orange to indicate that it's ON otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode)

    A cool side benefit: Once PiP configured and activated (show in orange on the main window) instead of using another video in the small picture, one can drag an image like a logo or anything you wish to use as watermark on top of your main video. After loading the photo drag in the main video and the application will add the photo on top of the video (for all its duration) watermark style.
    Supported image formats are: .png .tif .tiff .gif .tga

13) Container, select between Mov or MXF as output format (in both cases the video codec stays ProRes but MXF has some more advanced features such as an additional full length SMPTE Timecode track).

14) Queue Mode: when checked the 'Audio Bank' becomes a job Queue list, which means one can arrange the audio items in the 'Audio Bank' list in a specific desired order (drag items up and down the list to reorder them), then drag over video files that need to be paired with those audio files, each video dragged over will pull the first item/file from the 'Audio Bank' list and use it as an audio replacement, once done that audio is reduced/removed from the 'Audio Bank', so the next video dragged over will pair with the next item/file in the 'Audio Bank' list because it is now the first item. As long as there are items in the 'Audio Bank' list, more video files can be dragged over to pair with the items in the 'Audio Bank' list until it is fully exhausted (empty). For example, if the 'Audio Bank' started with 3 items and you dragged 2 video files, the 'Audio Bank' now has 1 item, and that item is the one that was last when the process started.
One cannot check the 'Queue Mode' checkbox before the 'Audio Bank' contains at least 2 items.
Once checked, the application instantly shows the ‘Audio Bank’ to let you review and arrange it before you start.

15) Deinterlace check box, Converts any interlaced input media into a non-interlaced form.
small clarification: deinterlacing may introduces some quality loss, but on the other hand if you convert interlaced media into progressive form without deinterlacing you might experience irreversible jagged video-output due to flipped (odd/even) fields order that cannot be corrected afterwards.

16) CPU Limit drop-down list, Here you can limit the number of CPU Cores assigned to render the output media, this may come handy when you have a very long film to process or large amount of media clips in batch process which will result in long computing time and you would like to work on other things undisturbed while the application keep processing in the background.

17) burnText, Click and setup to burn a visual text on any output video. Once opened, it is pretty much self-explanatory. Note the random Bars pattern animation that occurs in the background to help you configure the various controls while it simulates color changes in a real-video scenario, one can conveniently turn it off by clicking the "Hide Bars" text (right under the video frame simulation item).

    Several "hidden" features you should note, the text is burned to the output video, click <Shift>+i if you wish to change it to burn the text on the input video and only then create the output video from that media.
    If you want to use a specific font rather than the default font, press <Shift> + F and wait until the program scans all available True-Type Fonts on your system, once done, a font selection window appears and you can browse all available fonts or search a specific font in the designated field, each font you select immediately shown in the preview box and at the same time shown in the simulation window in the middle of the burnText window. We strongly recommend doing a test on a short video file to ensure that the font looks as expected, as some fonts do not show correctly in the preview while looking fine in the final render and vice versa.
    Another handy hidden feature is a numeric counter, if you need to name something such: Music Option 1, Music Option 2, etc. instead of reopening the text burning window after every video you process and manually change the version number, you can use the designed #? symbol phrase that acts as a placeholder for an active counter that increases after each successful video process. When you add the #? (anywhere in your text line), you'll be prompted to confirm you really want to add a counter and select its start value.
    All the settings in this window are saved along with all other app settings when clicking “Save App Status Now” or by using the Hotkey <Cmd> + S on macOS or <Ctrl> + S on windows.

18) BurnTC, Click and setup to burn a visual Timecode on any output video. Once opened, it is pretty much self-explanatory. Note the random Bars pattern animation that occurs in the background to help you configure the various controls while it simulates color changes in a real-video scenario, one can conveniently turn it off by clicking the "Hide Bars" text (right under the video frame simulation item), in addition, note that the timecode is burned to the output video, click <Shift>+i if you wish to change it to burn the timecode on the input video and only then create the output video from that media. and of course all changes are saved like any other control when clicking the 'Save App Status Now' in the settings window.

    Note: when this feature is active the text (link) in the main app window turns orange to indicate that it's ON, otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode).

    *The simulation window is just to get a general idea but not 1:1 accurate as it impossible to replicate full size outcomes in such a small preview.

19) StampTC, Stamps Timecode data (Timecode of first frame) into the video's metadata in case of ordinary containers such as Mov, Mpeg (all flavors), WMV, MKV, etc. But MXF container output format exclusively supports an additional full length SMPTE Timecode track upon the regular 'Timecode of first frame' metadata. This feature lets the user to choose between two main options:
    -Use a custom start time only when no timecode data found in the original media.
    -Overwrite any original Timecode stamp/timecode track and replace it with the user's custom timecode.

    Additionally, when writing a new custom timecode one can select to automatically increase the timecode value by predetermined time intervals (Hours/Minutes/Seconds) for each consecutive video dragged over.

    Note: when this feature is active the text (link) in the main app window turns orange to indicate that it's ON otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode)

20) The ProRes creation algorithm in form of Speed or Quality, when the slider set to Speed the App uses generic ProRes encoder with very good quality but focused on faster process, the 'Quality' mode is a much slower encoder that delivers YUV 10-bit color depth on all ProRes profiles plus it register under both Mac and Windows as 'apl1' (the Apple vendor ID for ProRes encoding). It is important to know that the 444 profile will always use the slower encoder even if you set the slider to speed because the faster encoder does not support Alpha channels.

21) Interlaced/Progressive push button toggle, for those who need to preserve interlacing with their videos or to Fake interlaced media in progressive input by duplicating fields and flagging/tagging the output media as Interlaced. Note that using Interlaced mode with progressive input media is valid only when using 'Quality' mode combined with 'Force Size To'.

22) User Suffix view and setup area. This area is empty when you first open the application.
    One can click this box to proactively enter desirable unique suffix (or change existing one) plus, it automatically takes the user entry once the application encountered naming conflict and offers the user to add User Suffix. When 'Preserve Original File Name' is checked (in settings window) Any media generated by the application carry this saved User Suffix at the end of each original file name.

    In case you have such Suffix saved the text: "Reset Unique Suffix" is shown in this area, indicating you can click it

to reset/remove the saved Suffix property and informing you that this property exists.
Hover over this area to get a tooltip with the saved suffix text.
Clicking this text immediately empty the 'User Suffix' property and the text: “No user Suffix” appears to indicate that the request has been carried out.

This value is saved along with all other controls when clicking the ‘Save App Status Now’ in the settings window.

23) Progress bar indicator, visible only when process is in progress.

24) Current and Overall media time (length) display area (visible only while processing a media).

25) Audio replacement file field, this area designed to host and present any type of audio file for later use as an ‘audio replacement stream’ in the next dragged video. Drag an audio file and you’ll see its name shown inside this area, Click the name and a popup message box appears offering to remove that audio file, pull another audio from the Audio Bank or cancel if clicked by mistake. Alternatively, one can change the existing audio file by dragging a new audio (without removing the existing one beforehand).
As long as an audio replacement file is placed here, the next video dragged will be rendered with this audio instead of its original audio. Once this operation is done this area resets and you'll have to place another file if you wish to replace the audio in another video or use the audio ‘Queue Mode’ to replace audio in multiple video files at once.

In case ‘Extract Audio / Video’ is selected and you drag an audio to replace in a video, the application automatically unchecks the ‘Extract Audio / Video’ checkbox to help you perform this operation undisturbed (because those two operations contradict each other).

Note: During the creation of any ProRes media codec ProResER App converts any and all audio stream/s into Uncompressed PCM Wave audio format as 48 kHz 16 or 24 bit (whichever you choose when it asked).

<Alt> + click an audio in the audio replacement field to immediately revealed its location on your disk drive.

26) Press one of the texted hyperlinks to close ProResER and open DNxER or MediaER instead.

27) Process Elapsed Time and Estimated Time Left Display area. Five seconds after a process begins (or after process reaches 1%, the latest between the two) it shows an estimated time left to end of the process, constantly recalculating the time estimation and updating the display.
Click this field to view Elapsed time instead and click again to toggle back to Estimated time left view.

28) In this area you’ll see a progress wheel (‘MacOS Style’ on both Windows and Mac) as long as a Shell operation is in progress, once all items finished processing the progress wheel disappears and the text: “Clear List” is shown to indicate one can click here to clear all items for the main list box, leaving the processed media untouched on the hard drive.

29) The ‘audio spot’ logo area is also a hyperlink to this product’s web page, clicking it will launch the default OS web browser and navigate to https://audiospot-creativetools.com providing there is active internet connection.

30) Processed items list box, in this area you'll see all finished jobs and you'll be able to perform the following:

A) double click an item in the list to play it with your chosen media player (see media player options under settings window).

B) Right click an item to delete it completely from both list and hard drive (as safety measure, an action confirm dialog appears to warn you about this irreversible operation).

C) Shift click an item 'pushes' the selected item as 'command-line argument' to MediaInfo App which returns a popup window listing the media relevant technical properties and tag data. In case MediaInfo App is not installed on your system the App offers you to download this free tool from the web on Windows systems or refers you to Apple's App Store if you want to buy it for Mac ($0.99), should you choose to accept this offer and install MediaInfo you will need to restart any ER running App to make it available from within the ER ToolKit. (Windows users: MediaInfo install instructions included with the install offer).

D) To open the item's folder location on disk in Finder(MacOS) / Explorer(Windows systems) select the item and click + <Cmd> (Mac) or <Ctrl> (Windows).

31) Open User Guide.

ProResER Main window hotkeys:

<Shift> + F = Activate/deactivate Force Size to.

<Shift> + E = Activate/deactivate Extract Audio / Video.

<Shift> + M = Opens the settings window.

<Shift> + D = Darker UI Enable/Disable.

<Shift> + P = Enable/Disable 'Preserve Original File Name'.

<Shift> + X = Disable the Quit application/Shutdown the computer once countdown starts.

<Cmd> + S macOS, <Ctrl> + S Windows = Save Application Status (On all full size screens/windows)

<Ctlr>+<Shift>+ C Reset the 'Extract Audio / Video' control.

Press O to open the 'Set Target Folder'

<Ctlr>+<Shift>+ B Enable/Disable Error Reporting mode (debugging) in case of a repeated errors;
When ON the app generates an error report file to desktop, which you can then send by mail for analysis.

<Ctrl> + Q (<Cmd> + Q on a Mac) Quit The Application

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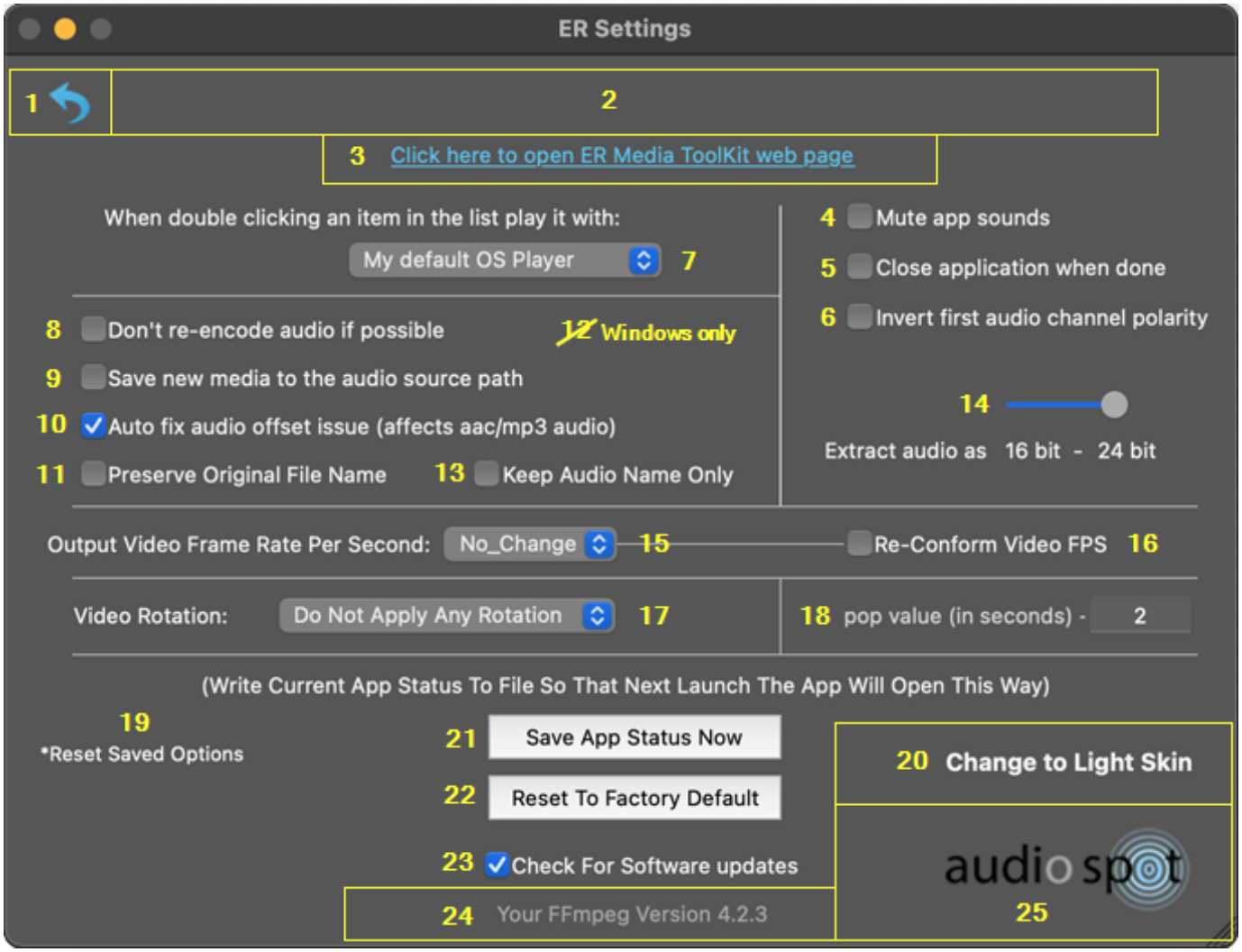
ER Media ToolKit (all Apps) Settings window:



Ctrl + Q (windows) / CMD + Q (Mac) = Quit The Program, no matter which window is open.
Press Ctrl + w (Windows) / CMD + w (Mac) when in settings window to return back to main window.
Or alternatively press Backspace key to return to main window.

1) Back button, navigate back to main App work window.

2) Settings window textual communication and notifications area.

3) Smart textual hyperlink for online navigation area, clicking it will launch the default OS web browser and navigate to: https://audiospot-creativetools.com (providing there is an active internet connection).
If a newer version detected (see section 18) this area shows the following text:
"Click to download ER Media ToolKit newest version" assuming there is active internet connection clicking it starts the newer version download process, it only downloads the relevant package, then the user need to

extract the files and run the installer.

4) Check this to disable/mute all application notification sounds (enabled by default).

5) Close application when done (or Shutdown computer) - Enables automatic application Quit or complete computer shutdown if selected with an 8 seconds countdown during which you can use the designed <Shift>+X hotkey to call off this action.
It gets activated only when all media creation processes completed successfully. This option can be activated or deactivated even during process, so for instance, if you encounter a process which taking its time and you predict it would end long after you leave the station you can go to the settings window while the process is running and check it so the application automatically quit or shut down your computer when it's done.

   To activate shutdown mode the checkbox needs to be checked and only then one can press <Shift> + S keyboard shortcut to change the action from application close to full computer shutdown mode, note that in this case it will ask for confirmation before activating computer shutdown mode. The <Shift> + S hotkey actually toggles between 'Close application' and 'Shutdown computer' as long as this checkbox is checked.
   Note: If any other machine is logged on to the target computer you are trying to shut down, this action will never get carried out by itself, as a warning dialog box pops out, waiting for user confirmation to disconnect the third-party machine from the system.

6) Invert first audio channel polarity (CheckBox: exists only in MediaER application), Check this in case Left - Right Audio channels relationship is in 180 degrees phase reverse.

7) Here you can set your preferred media player that the App uses when double clicking an item in the main media Drag & Drop area and processed items list (see main App window controls).
   By default the App uses the default OS media player but you can choose any media player installed on your system by selecting 'Customized Media Player' from the drop-down list and navigating to a specific media player on your system, for instance, you can even choose Google Chrome as your media player.
   There are a few predefined known media players that the App looks for at startup, if one or more are not found at program launch they will show in the drop-down list but the user will not be able to select them.

8) 'Don't re-encode audio if possible' (Disabled by default) **Exists Only in MediaER Pro** application.
   This feature takes effect in replace audio or render a new video as H264/H265, it is not in use for adding more audio streams or any other function.
   When enabled, it allows the user to replace an audio without re- encoding the new audio brought over.
   Which means, that if 'Replace Audio' was selected while this feature is enabled, both audio and video will be Same As Source in the target media, given the below criteria are met:
   For this to work; in the case of replacing the audio in a .mp4 container, the audio needs to be either: mp3 or aac or m4a. if the target media container is a .Mov extension it accepts almost any type of audio file, and in case of videos with .wmv extension it only works with .wma audio file extension.
   In cases that it doesn't find the audio qualified for 'no re- encoding', as specified above, it automatically uses audio re-coding mode, to adjust the audio format to fit into the target media container standard.

9) 'Save new media to the audio source path', (Disabled by default) **Exists Only in MediaER Pro** application.

As the name implies, when checked and only when replacing the audio in a video file, any new video is created in the audio replacement source folder instead of the default that creates the new video in the same folder of the source video.
This preference can also be activated/controlled from the main application window by Option + Clicking the 'set target' button. Note: setting a custom target folder overwrites this preference.

10) 'Auto fix audio offset issue' (enabled by default).
Introduction and background: Due to extensive video decoding time, some highly compressed and complex codecs are designed to offset their included audio streams to 'force' video/audio playback synchronization while played in their native form via various media players in various devices, However, converting those codecs into none compressed form may introduce the opposite result!
Therefore, we designed a unique smart algorithm that detects those potential offset problems in both input and target (audio/video), and only if necessary adjust intelligently the audio stream offset to keep it 'in sync' with the target video, resulting in less than 1ms (more precisely, less than 45 samples) sync accuracy between video and audio streams with most popular mp4 containers, but never ever risking adjusting into negative values that result in audio material beginning cutoffs (like you may experience with most other conversion algorithms that try to deal with this issue). The fix applies to AAC and MP3 audio streams, all other audio codecs are unaffected in this process.
If you choose to disable this option the audio will not be analyzed and processed with this unique algorithm and shall be passed on exactly as it originally created in the source (compressed) media form. This method is unique for ER Media ToolKit in both Video conversion and 'Extract Audio to Wave'.

11) 'Preserve Original File Name' : We created an intelligent file naming scheme based on years of experience in media post-production hands on work. However, sometimes adding a lot of text to the original file name may get too cluttered and you may want to keep it simple with the original media name. Check this checkbox and all naming schemes will be dropped, leaving only the original name. Be advised, you may get a message that the file already exists when saving the new media to the same location of the original media.

12) WEV FF Path (Checkbox), This control visible only under Windows OS. If checked (Default state) the software uses 'Windows Environment Variable' (in short: WEV) as FFmpeg Path when it executes shell commands, on certain computers WEV has internal conflicts which cause the operation to fail generating: FFmpeg error type 1 in such case try to uncheck this control so that the application may use 'Static Path' to a predetermined path instead, usually C:\Program Files\ffmpeg\bin (set by the software windows installer).

13) Keep Audio Name Only; this checkbox is visible only when 'Preserve Original File Name' is checked.
While 'Preserve Original File Name' preserves only the video name in the output video file, this flips the output video file name to contain only the audio file name. Note that this preference does not affect the User Suffix. If you entered any User Suffix text, it would always be added at the very end of the file name.

14) Here you can define the audio bit depth for the audio extraction process and conversion to Wav process. Note that this control does not affect adding or replacing audio in video that requires uncompressed (PCM) audio format, in such event a dialog box pops out for each file separately, asking you to define target audio bit depth.

15) Frame rate conversion and frame rate define for 'Image Sequence to video conversion', by default this control is set to 'No_Change' meaning any dragged & dropped video will keep its original frame rate (the system designed to alert on any FPS anomalies like nonstandard professional FPS, in such cases you'll see a red texted message

appear on the App's main window).
In case Re-Conform checkbox is unchecked (section 13) and frame rate conversion is set to a specific target FPS any video processed by the App that had a different frame rate will be converted while keeping the video original length, meaning, if the target FPS is lower than the input FPS the output video total frame count will be lower than it originally was before conversion.
In case you want to keep total frame count in the output video on account of keeping original video length check the Re-Conform checkbox.

Creating video from an Image Sequence: done by first selecting FPS for your target video (usually the original image sequence frame rate), then go back to the main App window, Drag & Drop the first image on the main media drop zone. Note: the image sequence count have to start at 0 and to be longer than 4 seconds in total, leading zeros are essential, Example formatting: image_000.tif
Supported image sequences formats are - tif, png, tga, exr, gif
Note: to prevent any mistakes it is advised placing image sequences in a sub-folders of their own.

16) Re-Conform, conforming the video frame rate is another frame rate conversion method designed to preserve video playback smoothness by keeping all original video frames on account of video length. For example converting one minute of PAL (25 FPS) video into Film (24 FPS) looks like so:
60(sec) x 25(frames in each second) = 1500 (total frame count)
1500 / 24(the new frame rate) = 62.5 (new time in seconds)

17) Video Rotation: video rotation is rarely needed, even if a video was shot upside down or rotated 90 degrees with a cellular phone most of the time this rotation is not a problem because most smartphones are smart enough to TAG this rotation within the media metadata and the ER Media ToolKit is smart enough to acknowledge that hidden data while a file is dragged & dropped for conversion, therefore, if such rotation data exists ER Media ToolKit will convert that media file with its correct orientation.
However, we provide you the ability to rotate the video frame in the following orientations:
90 Degrees Clockwise, 180 Degrees, 90 Degrees Counter Clockwise.

18) 2-pop value (in seconds) **available only in MediaER app**, as default this field will always be 2 seconds. You may change it to whatever you desire if you have longer audio portion to cut in the beginning of an audio file, that value is used only in trimming video mode and applies only if 2-pop checkbox is selected.
Please note that the application will not save changes made to the default 2 seconds value when you press Save App Status To File but it will reset this field back to 2 seconds when you press Reset To Factory Default, this acts as a safety measure so you won't forget it next time you run the application.

19) Reset Saved Options, refers to places where you click the 'don't ask again' option in the popup dialog boxes, for example, the action to take when the software detects non-standard video FPS.

20) Skin Change, click this text to flip between Dark/Light skin modes or use the <Shift>+D hotkey.

21) Save App Status Now: allow the user to load his own favorite settings (controls) each time the application launches. It saves all current controls state to a dedicated startup file. By doing so you also gain a Super-Fast workflow: you can drop media or media batches directly on the App's desktop (dock) icon which immediately invoke this saved status and fire up the conversion process with no need to open the application and set it up

before you can start your file conversion.

22) Reset To Factory Default, when pressed it also removes the user saved status (section 16)

23) The ER Media ToolKit Apps are checking for software updates at App launch every three days (i.e. every third, sixth, ninth of the month etc.) unless this checkbox is unchecked.

24) Installed FFmpeg version display for your convenience and information, click it to get a more detailed view.

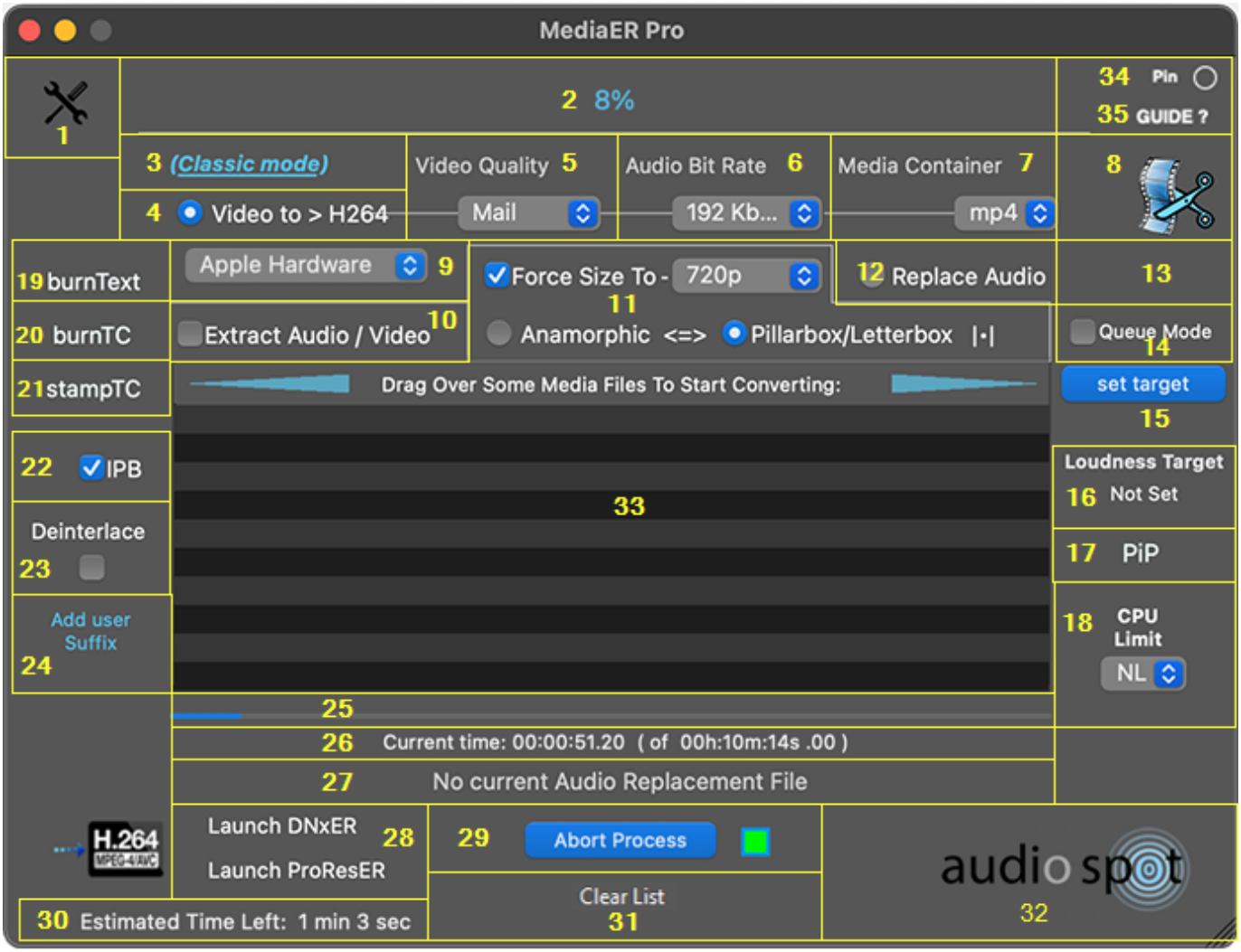
25) Just like section 3 the logo area is a hyperlink, clicking it will launch the default OS web browser and navigate to: https://audiospot-creativetools.com (providing there is an active internet connection).
If a newer version detected (see section 18) clicking this area (assuming there is active internet connection) immediately starts the newer version download process, it only downloads the relevant package, the user needs to extract the files and run the installer.

audio spot

MediaER introduction

This tool was designed as a multi-purpose tool, creating preview media to send by Email, making high quality H264 (AVC) or H265 (HEVC), for use in a DAW or NLVE sessions and as an audio replacing/adding tool in any kind of media enabling the user to keep any video's unique technical properties while only adding or replacing the audio stream in a super-fast process that doesn't include any video re-coding/transcoding or re-rendering of any kind.

MediaER Main window controls:



Ctrl + Q (windows) / CMD + Q (Mac) = Quit The Program, no matter which window is open.

1) Click here to open Settings window.

2) Main App textual communication and notifications area.

3) MediaER mode selector. Click the text to switch between behavioral modes: Classic, Fixed video and Fixed audio
Classic – each dragged & dropped media processed immediately.

Fixed video – lets the user choose a fixed video that will stay available until the user switches out of Fixed video mode, once a video was loaded it is shown inside the audio replacement field and any audio dragged & dropped from that point forward is merged into that fixed video. One may swap the fixed video file by holding Option(Alt)+Shift while dragging in a new video file.
Use case example: you have a single video edit and you want to send the client several musical options to choose from all of which aligned with that single video edit.
Fixed audio - lets the user choose a fixed audio that will stay available until the user switches out of Fixed audio mode, once an audio was loaded it is shown inside the audio replacement field and any video dragged & dropped from that point forward is merged with that fixed audio. One may swap the fixed audio file by holding Option(Alt)+Shift while dragging in a new audio file.
Use case example: you got a single sound mix and you want to send the client several video options all aligned with that single sound mix to choose from.

* Note: modes are totally independent from all other controls, therefore it is possible to create any controls combination along with any of the three modes, which makes it a very powerful tool for special batch processes.

4) Converts any video into H264 / AVC (aka MPEG-4 Part 10) codec or the newer HEVC (aka H265), those formats may be incorporate inside several media containers (see 'Media Container' section 7).
Hold the Alt key (Option key on a Mac) while clicking the text ***Video to > H264*** to toggle between H264 and H265, just note that some media players have hard time decoding H265, as it is more complex.

5) Video Quality: sets the video bitrate (per second) for the H264/H265 video creation, it differs significantly according to the video output dimensions and selected quality. It has five quality levels that you can choose from and a Custom mode which lets you define specific target video bitrate in kilobytes, the specs for h264:

Lower: set to 500 kB/s (Kilobyte per second) for 480p media ; 650 kB/s for 720p ; 1000 kB/s for 1080p ; 2400 kB/s for 2160p ; 1050 kB/s for DCI 2K ; 2400 kB/s for DCI 4K ; 650 kB/s for Small 9:16 ; 1000 kB/s for Full 9:16 ; 455 kB/s for Square 720 ; 700 kB/s for Square 1080 ; 650 kB/s for 1.91 Landscape.

Mail: (App's default) set to 750 kB/s (Kilobyte per second) for 480p media ; 1250 kB/s for 720p ; 1950 kB/s for 1080p ; 5000 kB/s for 2160p ; 2010 kB/s for DCI 2K ; 5000 kB/s for DCI 4K ; 1250 kB/s for Small 9:16 ; 2000 kB/s for Full 9:16 ; 875 kB/s for Square 720 ; 1400 kB/s for Square 1080 ; 1100 kB/s for 1.91 Landscape.

Social media: set to 1000 kB/s (Kilobyte per second) for 480p media ; 2000 kB/s for 720p ; 4000 kB/s for 1080p ; 12000 kB/s for 2160p ; 4000 kB/s for DCI 2K ; 12000 kB/s for DCI 4K ; 2000 kB/s for Small 9:16 ; 4000 kB/s for Full 9:16 ; 1500 kB/s for Square 720 ; 3000 kB/s for Square 1080 ; 1900 kB/s for 1.91 Landscape.

Higher: set to 1150 kB/s (Kilobyte per second) for 480p media ; 4000 kB/s for 720p ; 9000 kB/s for 1080p ; 18000 kB/s for 2160p ; 8000 kB/s for DCI 2K ; 18000 kB/s for DCI 4K ; 3000 kB/s for Small 9:16 ; 6000 kB/s for Full 9:16 ; 2100 kB/s for Square 720 ; 4200 kB/s for Square 1080 ; 2800 kB/s for 1.91 Landscape.

Work: set to 6000 kB/s (Kilobyte per second) for 480p media ; 8000 kB/s for 720p ; 13000 kB/s for 1080p ; 25000 kB/s for 2160p ; 12500 kB/s for DCI 2K ; 25000 kB/s for DCI 4K; 8000 kB/s for Small 9:16 ; 13000 kB/s for Full 9:16 ; 7000 kB/s for Square 720 ; 10000 kB/s for Square 1080 ; 8000 kB/s for 1.91 Landscape.

Custom: lets you customize your video's bitrate by opening an input dialog box where you can enter values

between 300 kB/s and 50000 kB/s.

* In cases where the Forced Size checkbox is unchecked the application determine the appropriate bitrate according to the input video dimensions.

6) Audio Bit Rate Drop-down List: Choose between 48Kbps (Kilobyte per second), 64Kbps, 96Kbps, 128Kbps, 160Kbps, 192Kbps (default), 256Kbps, 320Kbps or 448Kbps, this preference take effect only when the audio is being converted into compressed form. When audio target format is PCM this preference is ignored and you'll be prompted to enter audio bit depth instead.

7) Media Container: by default MediaER is designed to use mp4 as target media container for its wide support on various mobile and desktop devices, however, here you can choose a different legitimate container such as QT Mov, MKV and AVI to host the H264 / AVC or HEVC/H265 output video.

8) Opens up the Video Trimming Window.

9) H264/H265 Process Encoding Method: This Drop-down List includes all available H264/H265 encoding options (software and hardware-accelerated) for both Windows PC and Apple computers. Software encoding is compatible with any hardware but obviously slower than the hardware options.
On Apple computers, one can take advantage of the Apple Hardware option, which is compatible with any Apple machine but uses defiant hardware depending on the installed hardware.
Windows users need to know what kind of hardware acceleration they have available on their system and select the appropriate option from Nvidia GPU/AMD GPU/Intel QSV (hardware embedded in modern Intel CPU).
Note that any attempt to process files with inexistent hardware acceleration will result in Error Code 1.
We encourage you to experiment with all available options and decide what works best for you.

10) 'Extract Audio To Wav' 'Extract Audio / Video' checkbox, lets you separate audio stream/s from within any media container into Wave 48khz 16 or 24 bit file format or extract the Video / Audio streams depending on the user's choice, once chosen, it affects all the following videos dragged to extract/split Audio-Video.
[Only in MediaER Pro: extra option added that lets you extract the audio in its native form without conversion]

You may hold <Shift> and click this control's caption to scroll through all available options,
Or hold briefly <Ctrl> + <Shift> + C to reset this control to default factory setting.

*If the dragged media container includes more than one audio stream the App creates multiple audio files side by side matching the audio stream count and naming them: xxx-str1, xxx-str2, xxx-str3 etc. streams may include any combination of mono, stereo, multichannel or surround sound all kept accordingly after extraction.

11) Force Size To – Uncheck to retain input video dimensions in output media or check it to force output media dimensions to one of the following: 480p low res HD (854x480), 720p mid res HD (1280x720), 1080p FHD (1920x1080), 2160p UHD TV (3840x2160) , DCI 2K Cinema (2048x1080), DCI 4K Cinema (4096x2160), 9:16 small (Portrait 720x1280), 9:16 Full (Portrait 1080x1920), 1:1 small (Square 720x720), 1:1 Full (Square 1080x1080), 1.91:1 (Landscape 1200x628).
Choose your desired output video dimensions from the drop-down list and then choose the method in which this resizing occur:

Anamorphic = The video is stretched to fit the target dimensions if the input video had a different aspect ratio than the selected target.
Pillarbox/Letterbox = The video is resized without affecting its original aspect ratio if the input video had different aspect ratio black fillers/bars will be added on the sides (Pillarbox) or on the top and bottom (Letterbox) to fill the target media dimensions.

12) Replace Audio: clicking this radio button neutralizes the MediaER H264/H265 conversion mechanism and turns on the App's 'Same As Source' audio replacing/adding mechanism.

    Replace/Add Audio, Order of Action:
    Drag an audio replacement file and make sure you its name in the audio replacement field.
    Replacing an audio: make sure control 13 is unchecked (Hint: control 12 caption shows "Replace Audio").
    Adding audio stream: check control 13 checkbox (Hint: control 12 caption shows: "Add Audio Str").
    Next, Drag & Drop a video file that you wish to add or replace its audio. The process begins automatically the moment a video file is dragged over.
    In both above methods you'll have to repeat the process for each media you wish to replace the audio in Or for each additional audio stream you wish to add.

    Adding multiple audio streams at once into a single video: [Only in MediaER Pro]
    Drag & Drop all the audio files you wish to add, the 'Audio Bank' window immediately opens up, showing you all the audio items waiting for process.
    Make sure the list is in the order you wish them to be added into a video, if needed drag items in the list to reorder them, make sure you see in the list only the audio files you wish to add into the next video (right click any unwanted audio in the list and choose 'Remove from list'.
    When done double click any of the items in the list (doesn't matter which one)
    Now <Shift> Click control 13 checkbox, you should see the plus sign (+) turn into two plus signs (++) and drag the video you wish to process. The process begins automatically the moment the video is dragged over and all the audio files shown in the 'Audio Bank' window will be added into the selected video in a single process.
    * All audio files stay in the 'Audio Bank' at the end of such action (unlike Queue Mode that removes all files)

    In MediaER all the above methods support any media container format and ensure keeping its video stream unique properties intact while replacing/adding an audio stream in a super-fast process that doesn't include any video re-coding/transcoding or re-rendering of any kind.

13) Use this checkbox to toggle between 'Replace Audio' and 'Add Audio Stream'.
    [Only in MediaER Pro] <Shift> Click to switch between multiple audio stream adding mode and single stream adding. Multiple represented by two plus signs (++), single mode multiple represented by one plus sign (+).

14) Queue Mode: when checked the 'Audio Bank' becomes a job Queue list, which means one can arrange the audio items in the 'Audio Bank' list in a specific desired order (drag items up and down the list to reorder them), then drag over video files that need to be paired with those audio files, each video dragged over will pull the first item/file from the 'Audio Bank' list and use it as an audio replacement, once done that audio is reduced/removed from the 'Audio Bank', so the next video dragged over will pair with the next item/file in the 'Audio Bank' list because it is now the first item. As long as there are items in the 'Audio Bank' list, more video files can be dragged over to pair with the items in the 'Audio Bank' list until it is fully exhausted (empty). For

example, if the 'Audio Bank' started with 3 items and you dragged 2 video files, the 'Audio Bank' now has 1 item, and that item is the one that was last when the process started.
One cannot check the 'Queue Mode' checkbox before the 'Audio Bank' contains at least 2 items.
Once checked, the application instantly shows the ‘Audio Bank’ to let you review and arrange it before you start.

15) Set Target (push button), By default the processed media always placed in the same folder as the original video. Clicking this push button allows the user to define a custom destination folder to which all processed media will be sent. Once a custom target folder is set this push button caption shows as: ‘change target’ indicating that a custom target is set and to let you know that all output media is being directed to a single predefined folder of your choice.
To remove the predefined custom folder completely hold <Ctrl> and click this push button, the caption will now show ‘set target’ indicating you’re back to default output folder Behavior.
One may also hold <Option> while clicking this button to activate the ‘Save new media to the audio source path’ (user preference). In such case, the button’s caption will show: ‘audio path’ indicating that, if the user is replacing the video’s audio, the output video is being created in the audio replacement source folder.
If the ‘Save new media to the audio source path’ user preference is enabled, one can disable it by holding <Ctrl> and clicking this push button.

In addition, one can drag over any supported media while holding the <Option> modifier to quickly set a custom target path, starting at the dragged media parent folder instead of the default start location; current user desktop folder, using this option will expedite your workflow.

16) Loudness Target: LUFS normalization [Available Only in MediaER Pro],
When set (green value displayed under the Loudness Target) any audio or video dragged for processing will undergo loudness analysis, if it's an audio it will be instantly processed to the selected loudness target and replaced with the original one for further processing.
Video files are analyzed and the data is stored waiting for the media conversion process to begin in which the loudness values are applied as part of the media re-creation process, in case one wants to preserve the video intact (same as source) but still want to normalize the audio using loudness standards, the approach would be: Extract the audio stream from the video, drag the extracted audio item from the 'finished jobs' list into the audio replacement field, then setup loudness normalization values, change the process to 'Replace Audio' and drag the original media over the app again, the app will apply loudness normalization on the audio and replace the original audio stream with the normalized one keeping the video same as source.
One can also loudness normalize any audio loaded in the 'Audio Replacement' field or directly from the finished jobs list, for this: setup desired normalization values and click save, when back to the main window hold <Shift> and drag the text (file name) from the 'Audio Replacement' field into the Loudness target value or in case you wish to process an audio from the finished jobs list you can now drag it from the list onto the Loudness target value, in this case you don’t need to hold Shift or any other modifiers.

17) PiP (Picture in Picture) can be done with one video source for both main picture and the PiP or two different videos as main video and Picture in Picture video, to use two different videos place the PiP video in the audio replacement field by holding <Shift> + <Ctrl> while dragging over the media, when done properly you’ll see the video name in the audio replacement field. Now drag over the main video (without holding any modifiers while dragging), doing so will automatically start the PiP creation so make sure you set all related controls beforehand i.e. the picture in picture position in the main video frame, PiP size and PiP delay (PiP delay mainly used when

both main and PiP are the same video source in ADR production or other voice tracking sessions).
Warning: PIP creation is a unique action which cannot be performed together with some other actions:
Add or replace audio streams, Audio Offset Auto Fix, Queue Mode, Extracting Audio/Video to separate streams, Burning Visual Timecode on video, Video frame rate (FPS) Re-Conform.
Therefore, when processing Picture in Picture (PiP) any and all of the above actions are temporarily ignored.

Important sizing note: Half, Quarter, Ninth etc. refers to the PiP alone, meaning: if the PiP image dimensions are 3840x2160 (UHD) and the main video is only 1920x1080 (FHD), when you choose “Half” as PiP size you will actually get PiP size of 1920x1080 while the main video is also 1920x1080, so the PiP will cover the entire output frame and nothing will left of the main video!
Or if using the same example only entering “Quarter” as the size setting: the PiP size will cover Half the frame.

When this feature is active the text (link) in the main app window turns orange to indicate that it's ON otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode)

A cool side benefit: Once PiP configured and activated (show in orange on the main window) instead of using another video in the small picture, one can drag an image like a logo or anything you wish to use as watermark on top of your main video. After loading the photo drag in the main video and the application will add the photo on top of the video (for all its duration) watermark style.
Supported image formats are: .png .tif .tiff .gif .tga

18) CPU Limit drop-down list, Here you can limit the number of CPU Cores assigned to render the output media, this may come handy when you have a very long film to process or large amount of media clips in batch process which will result in long computing time and you would like to work on other things undisturbed while the application keep processing in the background.

19) burnText, Click and setup to burn a visual text on any output video. Once opened, it is pretty much self-explanatory. Note the random Bars pattern animation that occurs in the background to help you configure the various controls while it simulates color changes in a real-video scenario, one can conveniently turn it off by clicking the "Hide Bars" text (right under the video frame simulation item).

Several "hidden" features you should note, the text is burned to the output video, click <Shift>+i if you wish to change it to burn the text on the input video and only then create the output video from that media.
If you want to use a specific font rather than the default font, press <Shift> + F and wait until the program scans all available True-Type Fonts on your system, once done, a font selection window appears and you can browse all available fonts or search a specific font in the designated field, each font you select immediately shown in the preview box and at the same time shown in the simulation window in the middle of the burnText window. We strongly recommend doing a test on a short video file to ensure that the font looks as expected, as some fonts do not show correctly in the preview while looking fine in the final render and vice versa.
Another handy hidden feature is a numeric counter, if you need to name something such: Music Option 1, Music Option 2, etc. instead of reopening the text burning window after every video you process and manually change the version number, you can use the designed #? symbol phrase that acts as a placeholder for an active counter that increases after each successful video process. When you add the #? (anywhere in your text line), you'll be prompted to confirm you really want to add a counter and select its start value.

All the settings in this window are saved along with all other app settings when clicking “Save App Status Now” or by using the Hotkey <Cmd> + S on macOS or <Ctrl> + S on windows.

20) BurnTC, Click and setup to burn a visual Timecode on any output video. Once opened, it is pretty much self-explanatory. Note the random Bars pattern animation that occurs in the background to help you configure the various controls while it simulates color changes in a real-video scenario, one can conveniently turn it off by clicking the "Hide Bars" text (right under the video frame simulation item), in addition, note that the timecode is burned to the output video, click <Shift>+i if you wish to change it to burn the timecode on the input video and only then create the output video from that media. and of course all changes are saved like any other control when clicking the ‘Save App Status Now’ in the settings window.

    Note: when this feature is active the text (link) in the main app window turns orange to indicate that it's ON, otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode).

    *The simulation window is just to get a general idea but not 1:1 accurate as it impossible to replicate full size outcomes in such a small preview.

21) StampTC, Stamps Timecode data (Timecode of first frame) into the video's metadata in case of ordinary containers such as Mov, Mpeg (all flavors), WMV, MKV, etc. But MXF container output format exclusively supports an additional full length SMPTE Timecode track upon the regular 'Timecode of first frame' metadata. This feature lets the user to choose between two main options:
    -Use a custom start time only when no timecode data found in the original media.
    -Overwrite any original Timecode stamp/timecode track and replace it with the user’s custom timecode.

    Additionally, when writing a new custom timecode one can select to automatically increase the timecode value by predetermined time intervals (Hours/Minutes/Seconds) for each consecutive video dragged over.

    Note: when this feature is active the text (link) in the main app window turns orange to indicate that it's ON otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode)

22) IPB (checkbox), that feature take effect only when using custom video bitrate. It allows you to select whether the output video will be created with ‘Group Of Pictures’ (GOP) Hence, I-frames P-frames and B-frames (IPB) OR All-i (every frame is a keyframe). Therefore, un-check this box if you wish to produce a video that has only intra-frame compression witch you can then use in any video/audio editing software, similar to what you achieve with any ProRes or DNx codec but still an AVC with its playback drawbacks.

23) Deinterlace check box, Converts any interlaced input media into a non-interlaced form.
    Small clarification: deinterlacing may introduces some quality loss, but on the other hand if you convert interlaced media into progressive form without deinterlacing you might experience irreversible jagged video-output due to flipped (odd/even) fields order that cannot be corrected afterwards.

24) User Suffix view and setup area. This area is empty when you first open the application.
    One can click this box to proactively enter desirable unique suffix (or change existing one) plus, it automatically takes the user entry once the application encountered naming conflict and offers the user to add User Suffix. When ‘Preserve Original File Name’ is checked (in settings window) Any media generated by the application carry this saved User Suffix at the end of each original file name.

In case you have such Suffix saved the text: "Reset Unique Suffix" is shown in this area, indicating you can click it to reset/remove the saved Suffix property and informing you that this property exists.
Hover over this area to get a tooltip with the saved suffix text.
Clicking this text immediately empty the 'User Suffix' property and the text: “No user Suffix” appears to indicate that the request has been carried out.

This value is saved along with all other controls when clicking the ‘Save App Status Now’ in the settings window.

25) Progress bar indicator, visible only when process in progress.

26) Current and Overall media time (length) display area (visible only while processing a media).

27) Audio replacement file field, this area designed to host and present any type of audio file for later use as an ‘audio replacement stream’ in the next dragged video. Drag an audio file and you’ll see its name shown inside this area, Click the name and a popup message box appears offering to remove that audio file, pull another audio from the Audio Bank or cancel if clicked by mistake. Alternatively, one can change the existing audio file by dragging a new audio (without removing the existing one beforehand).
As long as an audio replacement file is placed here, the next video dragged will be rendered with this audio instead of its original audio. Once this operation is done this area resets and you'll have to place another file if you wish to replace the audio in another video or use the audio ‘Queue Mode’ to replace audio in multiple video files at once.

In case ‘Extract Audio / Video’ is selected and you drag an audio to replace in a video, the application automatically unchecks the ‘Extract Audio / Video’ checkbox to help you perform this operation undisturbed (because those two operations contradict each other).

In case section 13 is checked MediaER adds the audio from this field to all existing audio streams in the media you dragged, for instance, if the video had 2 audio streams attached to it, after process it will includes 3 audio streams (this operation is possible only when the dragged media is a valid media container such as MP4, AVI, WMV, MOV, MKV, MXF etc.)

Either way once this operation is done this area resets and you'll have to place another file if you wish to replace the audio in another video unless you were using the ‘Adding multiple audio streams at once’ option.

Note: During the creation of any H264/H265 media codec the MediaER App converts any and all audio stream/s into Advanced Audio Coding (AAC) audio format, so make sure you set a desirable audio bit rate (Section 6).

Tip: You can use any video’s audio stream as your audio replacement in another video file, just drag any video onto the main App window while holding <Ctrl> + <Shift> and you'll see the dragged video appear in the audio replacement position, now you can drag & drop the second video as you normally would and the application automatically starts incorporating the audio from the first video into the second video.

In addition, you can instantly convert any type of audio into PCM Wave by clicking the text shown above this field right after you drag an audio file that is not a .Wav extension (Uniquely in MediaER App).

<Alt> + click an audio in the audio replacement field to immediately revealed its location on your disk drive.

[Only in MediaER Pro] After you have set up Loudness Target values and came back to the main app window, hold <Shift> and drag the audio from this field onto the Loudness Target value, result in an immediate loudness normalization of that audio file.

28) Press one of the texted hyperlinks to close MediaER and open DNxER or ProResER instead.

29) Abort Process push button, visible only while conversion process is running to allow the user to break the process when needed.

30) Process Elapsed Time and 'Estimated Time Left' Display area. Five seconds after a process begins (or after process reaches 1%, the latest between the two) it shows an estimated time left to end of the process, constantly recalculating the time estimation and updating the display.
Click this field to view Elapsed time instead and click again to toggle back to Estimated time left view.

31) In this area you'll see a progress wheel ('MacOS Style' on both Windows and Mac) as long as a Shell operation is in progress, once all items finished processing the progress wheel disappears and the text: "Clear List" is shown to indicate one can click here to clear all items for the main list box, leaving the processed media untouched on the hard drive.

32) The 'audio spot' logo is also a hyperlink to this product's webpage, click it will launch the default OS web browser and navigate to https://audiospot-creativetools.com providing there is active internet connection.

33) Processed items list box, in this area you'll see all finished jobs and you'll be able to perform the following:
A) double click an item in the list to play it with your chosen media player (see media player options under settings window).

B) Right click an item to delete it completely from both list and hard drive (as safety measure, an action confirm dialog appears to warn you about this irreversible operation).

C) Shift click an item 'pushes' the selected item as 'command-line argument' to MediaInfo App which returns a popup window listing the media relevant technical properties and tag data. In case MediaInfo App is not installed on your system the App offers you to download this free tool from the web on Windows systems or refers you to Apple's App Store if you want to buy it for Mac ($0.99), should you choose to accept this offer and install MediaInfo you will need to restart any ER running App to make it available from within the ER ToolKit. (Windows users: MediaInfo install instructions included with the install offer).

D) To open the item's folder location on disk in Finder(MacOS) / Explorer(Windows systems) select the item and click + <Cmd> (Mac) or <Ctrl> (Windows).

34) Open User Guide.

35) Pin/Un-Pin the window to be 'Always On Top' above all other windows, aka: TopMost or FloatingWindowLevel

audio spot

MediaER Main window hotkeys:

Holding <Shift> while dragging over a video along with a surround sound 5.1 replacement audio file, will force MediaER Pro to include the new 5.1 audio as ac3 instead of the default aac audio codec, in both full process mode (recoding video into h264/H265) and Replace Audio mode. Note, let go of the <Shift> modifier key only when the render process begins. If you are processing more than one file (in a batch sequence), you need to hold the <Shift> modifier each time a new process begins, otherwise, the next process will be created using the default aac audio codec.

<Shift> + R = Activates replace audio.

<Shift> + H = Activates convert to H264/H265.

<Shift> + F = Activate/deactivate Force Size to.

<Shift> + E = Activate/deactivate Extract Audio / Video.

<Shift> + M = Opens the settings window.

<Shift> + T = Open video trimming window.

<Shift> + D = Darker UI Enable/Disable.

<Shift> + P = Enable/Disable ‘Preserve Original File Name’.

<Shift> + X = Disable the Quit application/Shutdown the computer once countdown starts.

<Cmd> + S macOS, <Ctrl> + S Windows = Save Application Status (On all full size screens/windows)

<Ctlr>+<Shift>+ C Reset the ‘Extract Audio / Video’ control.

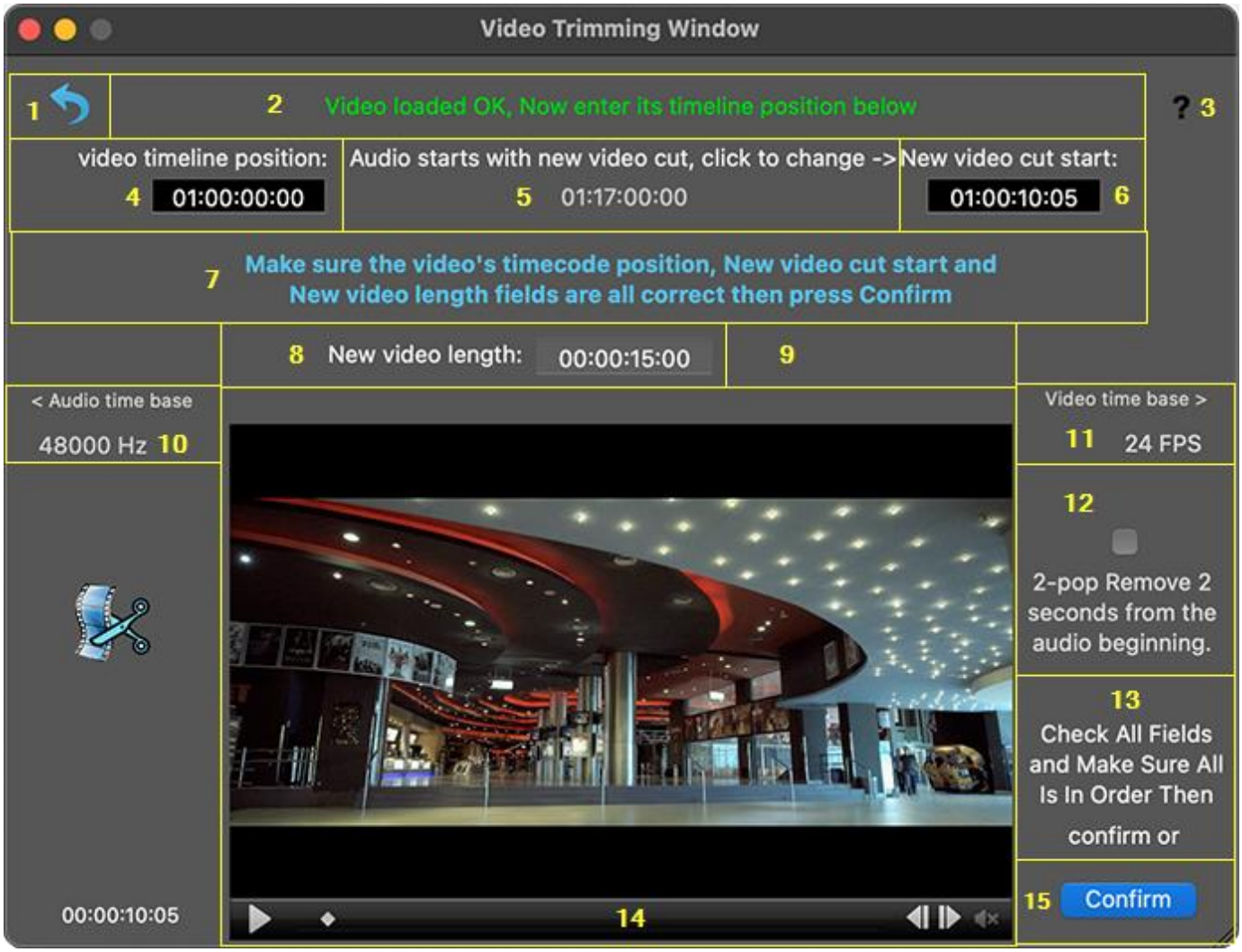
Press O to open the 'Set Target Folder'

<Ctlr>+<Shift>+ B Enable/Disable Error Reporting mode (debugging) in case of a repeated errors;
When ON the app generates an error report file to desktop, which you can then send by mail for analysis.

<Ctrl> + Q (<Cmd> + Q on a Mac) Quit The Application.

audio spot

Video Trimming window controls:



Ctrl + Q (windows) / CMD + Q (Mac) = Quit The Program, no matter which window is open.
Press Ctrl + w (Windows) / CMD + w (Mac) when in Video Trimming window to return back to main window.
Or alternatively press Backspace key to return to main window.

1) Back button, navigate back to main App work window.

2) Top window textual communication and notifications area, it indicates successful media import and show error reasoning for incorrect data entry in designated fields.

3) Open User Guide.

4) Video timeline position text field, in case you replace the audio using BWF (Broadcast Wave File) enter the video's position on your DAW or NLE timeline, in any other case you can leave it at 00:00:00:00

5) Audio position (grabbed from BWF metadata), in case you replace the audio while trimming the video and the audio has been rendered as Broadcast Wave File (BWF) this field shows the written Time Stamp in the file metadata (BWF Time Reference).
In order to see a correct number of frames (last two digits at the far right) one must have both audio and video files dragged over the window because the calculation of this value requires both audio (10) and video time base (11) data.
By default the audio time reference is placed as the new video cut start time, assuming the audio already starts where you want the new video to begin, but in case the audio starts in sync with the original video you can click the text above the audio time where it say: Audio starts with new video cut, click to change ->
Once clicked a dialog box pops out asking to confirm the action, click "Change" and the app will know that the audio starts with the original video, the BWF time stamp will be copied to “video timeline position” time field and the text above the audio time changes to:
<- Audio starts with video start, click to change
In such case the user must then enter his desired start for the new video cut (6) and duration (8).

   When replacing audio It is important to remember: the audio replacement file must have synchronization to either the original video start or the position of the new video cut you are about to create and the user must associate the audio to the right one otherwise the output video will have out of sync audio attached to it.

   If for any reason you wish to ignore/remove the BWF time stamp included with the dragged audio file, you can always hold <Ctrl> and click the text above the audio time (where you normally click to change audio linking) a dialog window will pop out to confirm this action, once you click Remove button the BWF time stamp is removed completely and the audio treated from now on as regular audio which means you must enter manually your video timeline position (4), new video cut (6) and duration (8) respectively.

6) New video cut start time field, enter the timecode value where you wish your new video cut to begin in relationship to the original media/video timeline position. When a BWF audio is present this area automatically filled with the BWF Time Reference value but you can change it manually to your desire. In case a BWF Time Reference value exists and you changed this field but want to retrieve the BWF Time Reference value back into this field hold the modifiers <Shift>+<Ctrl> and mouse click inside this time field.

   One can alternately locate a desired start point in the built-in media player, hold the modifiers <Shift>+<Alt> (<Shift>+<Option> on a Mac) and mouse click inside this time field. As a result the player’s current time position is placed as the new video beginning.
   One can also paste an already copied timecode into this box by using <Ctrl>+V or <Cmd>+V on a Mac.
   In case you changed the video timeline position (4) from its initial zero value and let's say for the sake of argument you want the new video to begin two minutes and thirty seconds from the original video beginning but you don’t want to calculate the value you need to enter in your head, in such case you can conveniently enter 02:30:00 followed by Numeric keypad **+** key, as a result the application adds 2 min and 30 seconds to the video timeline position value.

7) Center window textual communication and notifications area, here you can see your progress and next step guidelines or suggestions.

8) New video length time field, the value shown in this box is the total duration for the new video produced by the application.

In case of audio replacing this field automatically accepts the dropped audio file duration but like all field can be altered manually to your desire.
When new video cut start time (6) is filled with a desired value, one can alternately locate a desired ending point in the built-in media player, then hold down modifiers <Shift>+<Alt> (<Shift>+<Option> on a Mac) and mouse click inside this time field, the application calculate the player's current time position with the selected start time and as a result places the difference between those two values as the new video total duration.

9) As we mentioned in the previous section (8) In case of audio replacing the new video duration automatically accepts the dropped audio file duration, if you changed that value for any reason and wish to retrieve the audio duration value, click where it say: (click to use audio length) and the audio duration will be re-placed in as the new video total duration.

10) Audio time base indicator (read only) lets you know an audio file has been scanned and usable.

11) Video time base indicator (read only) lets you know a video file has been scanned and its frame rate is as shown. In case of nonstandard video frame rate it will be marked in red (Yellow in dark mode).

12) 2-pop remove [check box]. In case the audio has extra 2 seconds before the video begins (used for old school A/V synchronization) you can check this box which will force the application to delete, supposedly ignore those 2 seconds at the beginning of the audio that are not part of your audio to video content. But note that it only works when replacing audio and only if this audio begins 2 seconds before the video you dragged for trimming, therefore in such event the audio linking will get locked to the beginning of the dragged video and cannot be changed to "Audio starts with new video cut". Also look at the corresponding Settings window 2-pop amount preference.

13) Extra cautious textual notifications area, warn the user to double check all fields before committing the process.

14) Built-in media player, automatically loads any new video media dragged over for process (it even loads the last video that was dragged over the main application window before entering video trimming mode).

15) Confirm button, serves as start new video creation process in case all fields are filled correctly. If any of the fields are blank you will not see this push button at all.

Trimming videos, operating Instructions and tips:

Overall where are three possible ways to trim/cut a video:

1. **Video only** - Drag an original video media onto the MediaER video trimming window, enter the desired start time and desired duration, press confirm to create your trimmed video.

2. **Video plus non-stamped audio replacement** –Import any non-stamped audio as a replacement audio to include with the generated new video, drag a video onto the MediaER video trimming window.
In which case the user must enter all designated fields and adjust all relevant controls manually, press confirm to

create your trimmed video.

3. **Video plus BWF audio replacement** - Import a BWF audio file as a replacement audio to include with the generated new video, drag the video onto the MediaER video trimming window.
   In which case the application automatically fills all boxes except the unknown video timeline position which the user must enter manually and be sure to associate the audio's synchronization attribute to the original video start in case the audio does not begin at the new video cut start position.

Note that in case 1 and 2 you don't need to change the default zero setting of the video's timeline position but rather configure all other fields in relation to the video's zero setting, while in case 3 you only need to set the video's timeline position and change the audio synchronization relationship in case it starts along with the beginning of the original video rather than the beginning of the new video cut.

Audio can be imported as usual in the main application window before you enter video trimming window or dragged over after opening the video trim mode and as always one can drag & drop the audio media on the app's desktop icon beforehand (or dock icon on Mac), and like always Steinberg users may use the Steinberg's audio export window post-process tab to 'push' the audio directly into MediaER.

Video trimming is done according to the main window and settings window controls setup but does not include frame rate change of any sort.
However, it is important to note that in case your original video is highly compressed or based on advanced video coding such as H263, H264, H265, WebM, VP8, VP9 it might be wiser to avoid 'Same As Source' procedure and always re-render the trimmed portion of the video using Video to > H264 (or H265), otherwise it may not always respect your start TC and selected duration but rather use the closest GOP in order to retain the source compression.

If you wish you may use 'Same As Source' setting with most other video formats such as ProRes video, all DNx codec family, Photo-jpeg, Animation, DV, XDCAM, IMX, DVCPro, Blackmagic RGB and even Mpeg-2.

Another important point to keep in mind is that not all video types are fully supported in the built-in media player previewer, for instance, in many occasions MKV container will not playback its included video stream smoothly if at all in the previewer, plus, most of its still frames will not show when setting the new video cut start time, but if you enter blindly the values of which you wish to cut/trim the original media and your desired duration then re-render into H264/H265 you should get your desired results anyway.

Tips:

Any time you change digits in any of the three timecode field boxes and before you press enter decide to disregard those changes click ESC key.

<Ctrl> +Z (Cmd + Z on Mac) Undo last timecode entry in any of the three timecode field boxes (once clicked in any time field this 'undo' buffer copy its value therefore you can't 'undo' further back).

<Ctrl> +Y (Cmd + Y on Mac) Redo last Undo in any of the three timecode field boxes (once clicked in any time field this 'redo' buffer reset therefore you can't 'redo' any more until you click Undo again).

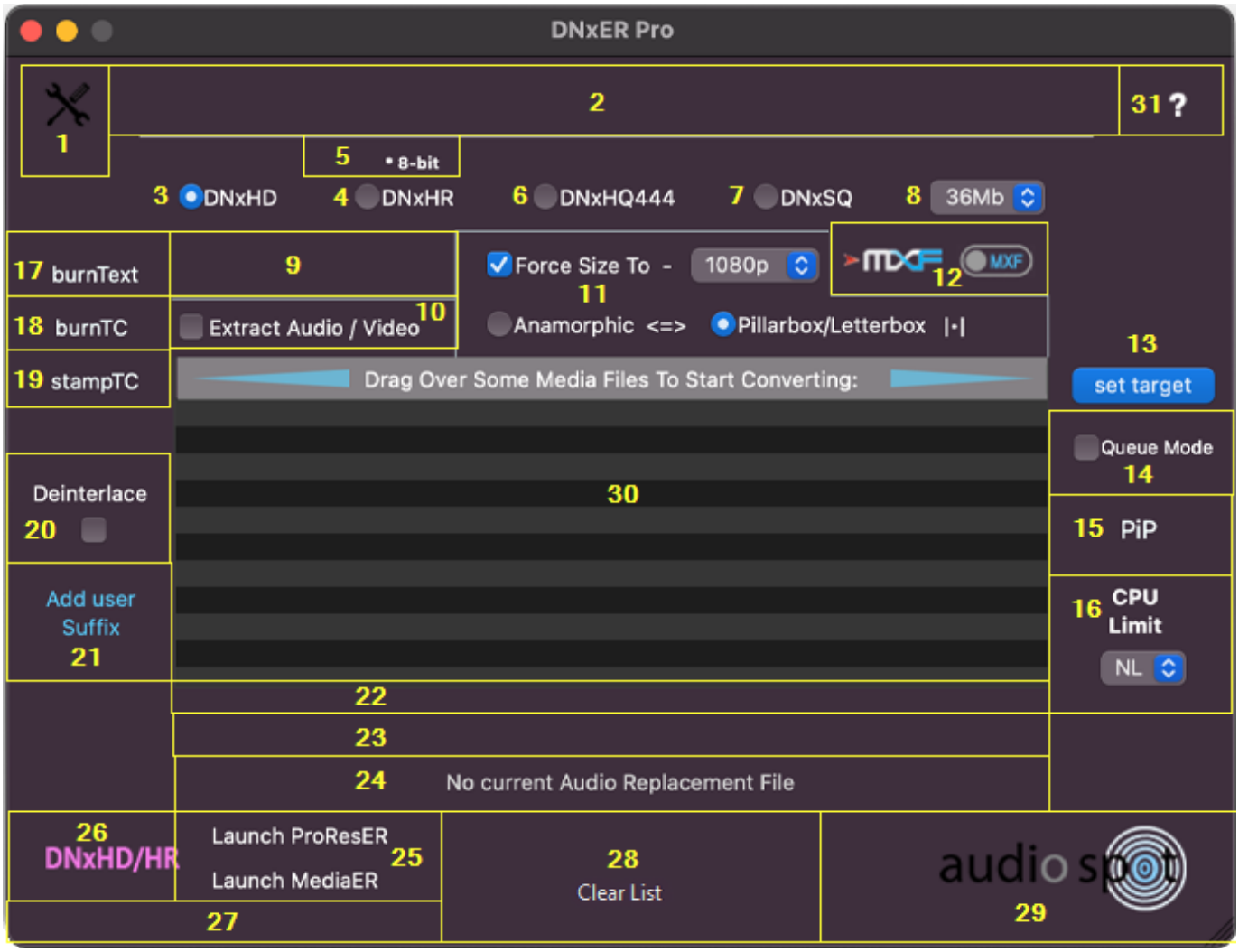
audio spot

DNxER introduction

This tool was designed specifically to create Avid's DNxHD and DNxHR for editing and as presentation format. typically stored in an MXF container, although it can also be stored in a QuickTime Mov container.

This format is limited by Design wherefore highly advisable learning about all DNx flavors and their supported dimensions as well as their target supported video bit rate before using this format conversion or alternatively always keep 'Force Size To – ' checkbox enabled to ensure successful media creation by giving the App the freedom to disable unsupported controls and bit rates according to your selected target dimensions.

DNxER Main window controls:



Ctrl + Q (windows) / CMD + Q (Mac) = Quit The Program, no matter which window is open.

1) Click here to open Settings window.

2) Main App textual communication and notifications area.

3) DNxHD: For FHD 1920x1080 media and below, supports professional work with mastering-quality.

4) DNxHR: HQ High-res up to 4K, high quality; offers a great balance of beauty at a smaller bandwidth for editorial.

5) DNxHR Video Bit depth (Color depth), by default set to 8-bit but hover over this control, hold <Ctrl> and click to toggle between: DNxHR-HQ (forced 8-bit); DNxHR-HQX (forced 10-bit); Keep source video bit-depth.

6) DNxHQ 4:4:4 Color space; up to 4K, super gorgeous imagery, ideal for high-quality color correction and finishing.

7) DNxSQ: Standard Quality High-res up to 4K, ideal for editorial.

8) Video Quality \ Video Bit Rate (in Megabytes per second) available bit rates are automatically updating according to the selected video dimensions and DNx type you have selected (Varies from 36Mb up to 750Mb).

9) Abort Process push button, visible only while conversion process is running to allow the user to break the process before it ends.

10) 'Extract Audio / Video' checkbox, lets you separate audio stream/s from within any media container into Wave 48khz 16 or 24 bit file format or extract the Video / Audio streams depending on the user's choice, once chosen, it affects all the following videos dragged to extract/split Audio-Video.
You may hold <Shift> and click this control's caption to scroll through all available options,
Or hold briefly <Ctrl> + <Shift> + C to reset this control to default factory setting.

*If the dragged media container includes more than one audio stream the App creates multiple Wave files side by side (matching the audio stream count) and naming them: xxx-str1, xxx-str2, xxx-str3 etc. streams may include any combination of mono, stereo, multichannel or surround sound all kept accordingly after extraction.

11) Force Size To – Highly recommended to keep this control enabled at all times to ensure successful DNxHD/DNxHR media creation (when checked it disables unsupported controls and bit rates so you can only select valid DNx outputs according to your selected target dimensions).

Those are all the video dimensions supported by the Avid DNxHD and DNxHR codecs: 720p mid res HD (1280x720), 1080p HD TV (1920x1080), 2160p UHD TV (3840x2160) , DCI 2K Cinema (2048x1080), DCI 4K Cinema (4096x2160).

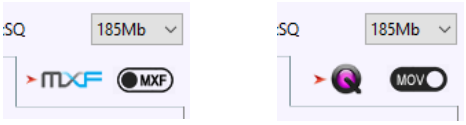
Choose your desired output video dimensions from the drop-down list and then choose the method in which this resizing occur:

Anamorphic = The video is stretched to fit the target dimensions if the input video had a different aspect ratio than the selected target.

Pillarbox/Letterbox = The video is resized without affecting its original aspect ratio if the input video had different aspect ratio black fillers/bars will be added on the sides (Pillarbox) or on the top and bottom (Letterbox) to fill the target media dimensions.

Uncheck this option to keep input video dimensions in output media, but be advised that you might get a processing error message if your video dimensions and/or selected video bit rate are incompatible with your selected DNx flavor.

12) DNx typically stored in an MXF container but it can also be stored in a QuickTime Mov container, Press to toggle between both supported containers.



13) Set Target (push button), By default the processed media always placed in the same folder as the original video. Clicking this push button allows the user to define a custom destination folder to which all processed media will be sent. Once a custom target folder is set this push button caption shows as: 'change target' indicating that a custom target is set and to let you know that all output media is being directed to a single predefined folder of your choice.
To remove the predefined custom folder completely hold <Ctrl> and click this push button, the caption will now show 'set target' indicating you're back to default output folder Behavior.

In addition, one can drag over any supported media while holding the <Option> modifier to quickly set a custom target path, starting at the dragged media parent folder instead of the default start location; current user desktop folder, using this option will expedite your workflow.

14) Queue Mode: when checked the 'Audio Bank' becomes a job Queue list, which means one can arrange the audio items in the 'Audio Bank' list in a specific desired order (drag items up and down the list to reorder them), then drag over video files that need to be paired with those audio files, each video dragged over will pull the first item/file from the 'Audio Bank' list and use it as an audio replacement, once done that audio is reduced/removed from the 'Audio Bank', so the next video dragged over will pair with the next item/file in the 'Audio Bank' list because it is now the first item. As long as there are items in the 'Audio Bank' list, more video files can be dragged over to pair with the items in the 'Audio Bank' list until it is fully exhausted (empty). For example, if the 'Audio Bank' started with 3 items and you dragged 2 video files, the 'Audio Bank' now has 1 item, and that item is the one that was last when the process started.
One cannot check the 'Queue Mode' checkbox before the 'Audio Bank' contains at least 2 items.
Once checked, the application instantly shows the 'Audio Bank' to let you review and arrange it before you start.

15) PiP (Picture in Picture) can be done with one video source for both main picture and the PiP or two different videos as main video and Picture in Picture video, to use two different videos place the PiP video in the audio replacement field by holding <Shift> + <Ctrl> while dragging over the media, when done properly you'll see the video name in the audio replacement field. Now drag over the main video (without holding any modifiers while dragging), doing so will automatically start the PiP creation so make sure you set all related controls beforehand i.e. the picture in picture position in the main video frame, PiP size and PiP delay (PiP delay mainly used when both main and PiP are the same video source in ADR production or other voice tracking sessions).
Warning: PIP creation is a unique action which cannot be performed together with some other actions:

Add or replace audio streams, Audio Offset Auto Fix, Queue Mode, Extracting Audio/Video to separate streams, Burning Visual Timecode on video, Video frame rate (FPS) Re-Conform.
Therefore, when processing Picture in Picture (PiP) any and all of the above actions are temporarily ignored.

Important sizing note: Half, Quarter, Ninth etc. refers to the PiP alone, meaning: if the PiP image dimensions are 3840x2160 (UHD) and the main video is only 1920x1080 (FHD), when you choose “Half” as PiP size you will actually get PiP size of 1920x1080 while the main video is also 1920x1080, so the PiP will cover the entire output frame and nothing will left of the main video!
Or if using the same example only entering “Quarter” as the size setting: the PiP size will cover Half the frame.

When this feature is active the text (link) in the main app window turns orange to indicate that it's ON otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode)

A cool side benefit: Once PiP configured and activated (show in orange on the main window) instead of using another video in the small picture, one can drag an image like a logo or anything you wish to use as watermark on top of your main video. After loading the photo drag in the main video and the application will add the photo on top of the video (for all its duration) watermark style.
Supported image formats are: .png .tif .tiff .gif .tga

16) CPU Limit drop-down list, Here you can limit the number of CPU Cores assigned to render the output media, this may come handy when you have a very long film to process or large amount of media clips in batch process which will result in long computing time and you would like to work on other things undisturbed while the application keep processing in the background.

17) burnText, Click and setup to burn a visual text on any output video. Once opened, it is pretty much self-explanatory. Note the random Bars pattern animation that occurs in the background to help you configure the various controls while it simulates color changes in a real-video scenario, one can conveniently turn it off by clicking the "Hide Bars" text (right under the video frame simulation item).

    Several "hidden" features you should note, the text is burned to the output video, click <Shift>+i if you wish to change it to burn the text on the input video and only then create the output video from that media.
    If you want to use a specific font rather than the default font, press <Shift> + F and wait until the program scans all available True-Type Fonts on your system, once done, a font selection window appears and you can browse all available fonts or search a specific font in the designated field, each font you select immediately shown in the preview box and at the same time shown in the simulation window in the middle of the burnText window. We strongly recommend doing a test on a short video file to ensure that the font looks as expected, as some fonts do not show correctly in the preview while looking fine in the final render and vice versa.
    Another handy hidden feature is a numeric counter, if you need to name something such: Music Option 1, Music Option 2, etc. instead of reopening the text burning window after every video you process and manually change the version number, you can use the designed #? symbol phrase that acts as a placeholder for an active counter that increases after each successful video process. When you add the #? (anywhere in your text line), you'll be prompted to confirm you really want to add a counter and select its start value.
    All settings in this window are saved along with all other app settings when clicking “Save App Status Now” or by using the Hotkey <Cmd> + S on macOS or <Ctrl> + S on windows.

18) BurnTC, Click and setup to burn a visual Timecode on any output video. Once opened, it is pretty much self-explanatory. Note the random Bars pattern animation that occurs in the background to help you configure the various controls while it simulates color changes in a real-video scenario, one can conveniently turn it off by clicking the "Hide Bars" text (right under the video frame simulation item), in addition, note that the timecode is burned to the output video, click <Shift>+i if you wish to change it to burn the timecode on the input video and only then create the output video from that media. and of course all changes are saved like any other control when clicking the 'Save App Status Now' in the settings window.

    Note: when this feature is active the text (link) in the main app window turns orange to indicate that it's ON, otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode).

    *The simulation window is just to get a general idea but not 1:1 accurate as it impossible to replicate full size outcomes in such a small preview.

19) StampTC, Stamps Timecode data (Timecode of first frame) into the video's metadata in case of ordinary containers such as Mov, Mpeg (all flavors), WMV, MKV, etc. But MXF container output format exclusively supports an additional full length SMPTE Timecode track upon the regular 'Timecode of first frame' metadata. This feature lets the user to choose between two main options:
    -Use a custom start time only when no timecode data found in the original media.
    -Overwrite any original Timecode stamp/timecode track and replace it with the user's custom timecode.

    Additionally, when writing a new custom timecode one can select to automatically increase the timecode value by predetermined time intervals (Hours/Minutes/Seconds) for each consecutive video dragged over.

    Note: when this feature is active the text (link) in the main app window turns orange to indicate that it's ON otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode)

20) Deinterlace check box, Converts any interlaced input media into a non-interlaced form.
    Small clarification: deinterlacing may introduces some quality loss, but on the other hand if you convert interlaced media into progressive form without deinterlacing you might experience irreversible jagged video output due to flipped (odd/even) fields order that cannot be corrected afterwards.

21) User Suffix view and setup area. This area is empty when you first open the application.
    One can click this box to proactively enter desirable unique suffix (or change existing one) plus, it automatically takes the user entry once the application encountered naming conflict and offers the user to add User Suffix.
    When 'Preserve Original File Name' is checked (in settings window) Any media generated by the application carry this saved User Suffix at the end of each original file name.

    In case you have such Suffix saved the text: "Reset Unique Suffix" is shown in this area, indicating you can click it to reset/remove the saved Suffix property and informing you that this property exists.
    Hover over this area to get a tooltip with the saved suffix text.
    Clicking this text immediately empty the 'User Suffix' property and the text: "No user Suffix" appears to indicate that the request has been carried out.

    This value is saved along with all other controls when clicking the 'Save App Status Now' in the settings window.

22) Progress bar indicator, visible only when process in progress.

23) Current and Overall media time (length) display area (visible only while processing a media).

24) Audio replacement file field, this area designed to host and present any type of audio file for later use as an 'audio replacement stream' in the next dragged video. Drag an audio file and you'll see its name shown inside this area, Click the name and a popup message box appears offering to remove that audio file, pull another audio from the Audio Bank or cancel if clicked by mistake. Alternatively, one can change the existing audio file by dragging a new audio (without removing the existing one beforehand).
As long as an audio replacement file is placed here, the next video dragged will be rendered with this audio instead of its original audio. Once this operation is done this area resets and you'll have to place another file if you wish to replace the audio in another video or use the audio 'Queue Mode' to replace audio in multiple video files at once.

    In case 'Extract Audio / Video' is selected and you drag an audio to replace in a video, the application automatically unchecks the 'Extract Audio / Video' checkbox to help you perform this operation undisturbed (because those two operations contradict each other).

    Note: During the creation of any DNx media codec DNxER App converts any and all audio stream/s into Uncompressed PCM Wave audio format as 48 kHz 16 or 24 bit (whichever you choose when it asked).

    <Alt> + click an audio in the audio replacement field to immediately revealed its location on your disk drive.

25) Press one of the texted hyperlinks to close DNxER and open ProResER or MediaER instead.

26) Click to view the online Avid DNxHR Knowledge Base and learn more about DNx Bandwidth Specifications (Provided there is active internet connection).

27) Process Elapsed Time and 'Estimated Time Left' Display area. Five seconds after a process begins (or after process reaches 1%, the latest between the two) it shows an estimated time left to end of the process, constantly recalculating the time estimation and updating the display.
Click this field to view Elapsed time instead and click again to toggle back to Estimated time left view.

28) In this area you'll see a progress wheel ('MacOS Style' on both Windows and Mac) as long as a Shell operation is in progress, once all items finished processing the progress wheel disappears and the text: "Clear List" is shown to indicate one can click here to clear all items for the main list box, leaving the processed media untouched on the hard drive.

29) The 'audio spot' logo area is also a hyperlink to this product's web page, clicking it will launch the default OS web browser and navigate to https://audiospot-creativetools.com providing there is active internet connection.

30) Processed items list box: in this area you'll see all finished jobs and you'll be able to perform the following:

    A) double click an item in the list to play it with your chosen media player (see media player options under settings window).

B) Right click an item to delete it completely from both list and hard drive (as safety measure, an action confirm dialog appears to warn you about this irreversible operation).

C) Shift click an item 'pushes' the selected item as 'command-line argument' to MediaInfo App which returns a popup window listing the media relevant technical properties and tag data. In case MediaInfo App is not installed on your system the App offers you to download this free tool from the web on Windows systems or refers you to Apple's App Store if you want to buy it for Mac ($0.99), should you choose to accept this offer and install MediaInfo you will need to restart any ER running App to make it available from within the ER ToolKit. (Windows users: MediaInfo install instructions included with the install offer).

D) To open the item's folder location on disk in Finder(MacOS) / Explorer(Windows systems) select the item and click + <Cmd> (Mac) or <Ctrl> (Windows).

31) Open User Guide.

DNxER Main window hotkeys:

<Shift> + F = Activate/deactivate Force Size to.

<Shift> + E = Activate/deactivate Extract Audio / Video.

<Shift> + M = Opens the settings window.

<Shift> + D = Darker UI Enable/Disable.

<Shift> + P = Enable/Disable 'Preserve Original File Name'.

<Shift> + X = Disable the Quit application/Shutdown the computer once countdown starts.

<Cmd> + S macOS, <Ctrl> + S Windows = Save Application Status (On all full size screens/windows)

<Ctlr>+<Shift>+ C Reset the 'Extract Audio / Video' control.

Press O to open the 'Set Target Folder'

<Ctlr>+<Shift>+ B Enable/Disable Error Reporting mode (debugging) in case of a repeated errors;
When ON the app generates an error report file to desktop, which you can then send by mail for analysis.

<Ctrl> + Q (<Cmd> + Q on a Mac) Quit The Application.

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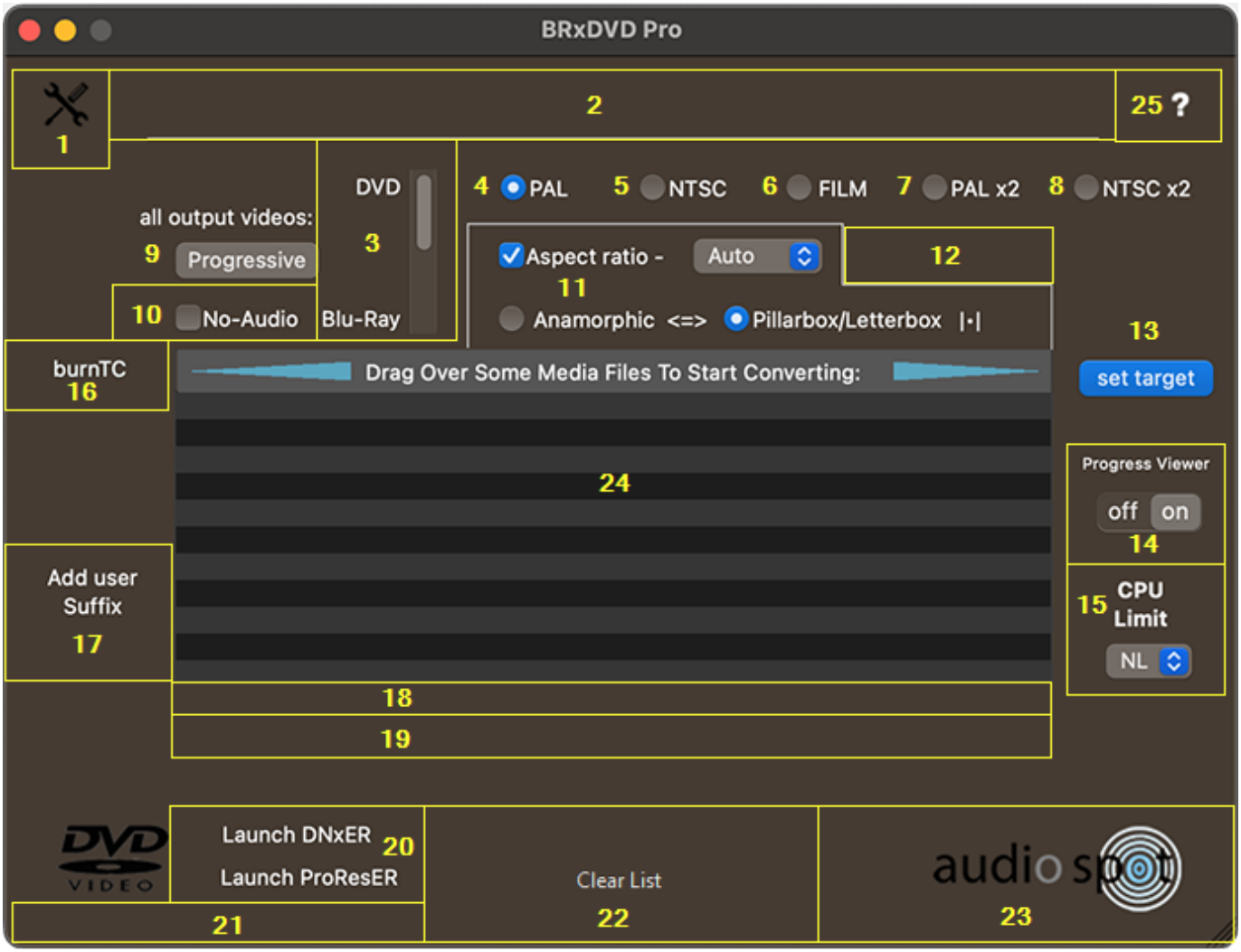
audio spot

BRxDVD introduction

This tool only creates video streams for later used in Blu-Ray or DVD authoring software and offers a large adjustment options to fit videos into both BR and DVD formats but for that same reason it has limited controls due to the nature of these formats and the very specific input media they require.

- In this tool we removed the free frame rate conversion in the settings window, frame rate(fps) handled by choosing PAL/NTSC/FILM/PAL x2/NTSC x2
- There is no Extract audio to Wave, audio bit depth setting or 'Audio Replace drag & drop area'.
- There is no 'Preserve original file name' option in this tool's settings.
- In the settings window we added an option to select between two target containers: mp4 and m2ts both are valid for Blu-Ray creation (DVD is always MPEG Version 2).

BRxDVD Main window controls:



<Ctrl> + Q (windows) / <CMD> + Q (Mac) = Quit The Program, no matter which window is open.

audio spot

1) Click here to open Settings window.

2) Main App textual communication and notifications area.

3) DVD / Blu-Ray target selector, choose your desired target media by clicking one of the optional disc media or hover cursor over this area and scroll your mouse wheel up or down.

4) PAL – constrain output media to 25 fps (frames per sec.) / in DVD mode it locks the video dimensions to PAL 720x576

5) NTSC - constrain output media to 29.97 fps / in DVD mode it locks the video dimensions to NTSC 720x480

6) FILM - constrain output media to 24 fps / in DVD mode it locks the video dimensions to FILM 720x480

7) PAL x2 - constrain output media to 50 fps / in DVD mode it locks the video dimensions to PAL 720x576

8) NTSC x2 - constrain output media to 59.94 fps / in DVD mode it locks the video dimensions to NTSC 720x480

9) Progressive / Interlaced (push button toggle), constrain all video output to either progressive scan or interlaced scan (interlaced doubling the perceived frame rate of a video display without consuming extra bandwidth).

10) No-Audio – if checked removes all audio streams that may have come with the video.

11) Force Size To / Aspect Rate – This control functionality and caption determined by the target media selector (section 3).

    In DVD mode (caption shows: Aspect Rate) it sets the target video Aspect Ratio with three DDL (drop-down list) modes: Auto, lets the application determine the aspect ratio according to input detection. 4:3 forces any input to fit 4:3 standard dimensions. 16:9 forces any input to fit 16:9 widescreen dimensions.

    In Blu-Ray mode (caption shows: Force Size To) forces video dimensions to: BR 720p/i , BR HD 1080p/i , BR HDV 1080p/i , BR UHD 2160p/i , PAL TV, NTSC TV
    Choose you target BR (Blu-Ray) media dimensions and in case it is above 720 select the target frame rate(fps) in controls 4 to 8, in case target aspect ratio is different than the input aspect ratio, make sure to define the aspect ratio conversion method:
    Anamorphic = input video is stretched to fit target media dimensions.

    Pillarbox/Letterbox = input video is resized without affecting its original aspect ratio and black fillers/bars will be added on the sides (Pillarbox) or on the top and bottom (Letterbox) to fill the target media dimensions.

12) Abort button, visible only while conversion process is running to allow the user to break the process.

13) Set Target (push button), By default the processed media always placed in the same folder as the original video.

Clicking this push button allows the user to define a custom destination folder to which all processed media will be sent. Once a custom target folder is set this push button caption shows as: ‘change target’ indicating that a custom target is set and to let you know that all output media is being directed to a single predefined folder of your choice.
To remove the predefined custom folder completely hold <Ctrl> and click this push button, the caption will now show ‘set target’ indicating you’re back to default output folder Behavior.

In addition, one can drag over any supported media while holding the <Option> modifier to quickly set a custom target path, starting at the dragged media parent folder instead of the default start location; current user desktop folder, using this option will expedite your workflow.

14) Progress Viewer On / Off, Here you can disable the progress bar view, progress percentage view and progress current time position display to reduce CPU usage and increase the overall render speed if you have limited resources or just want it speed up the process. Note that the toggle works only before dragging new media for process.

15) CPU Limit drop-down list, Here you can limit the number of CPU Cores assigned to render the output media, this may come handy when you have a very long film to process or large amount of media clips in batch process which will result in long computing time and you would like to work on other things undisturbed while the application keep processing in the background.

16) BurnTC, Click and setup to burn a visual Timecode on any output video. Once opened, it is pretty much self-explanatory. Note the random Bars pattern animation that occurs in the background to help you configure the various controls while it simulates color changes in a real-video scenario, one can conveniently turn it off by clicking the "Hide Bars" text (right under the video frame simulation item), in addition, note that the timecode is burned to the output video, click <Shift>+i if you wish to change it to burn the timecode on the input video and only then create the output video from that media. and of course all changes are saved like any other control when clicking the ‘Save App Status Now’ in the settings window.

Note: when this feature is active the text (link) in the main app window turns orange to indicate that it's ON, otherwise the text on the main window is either black or white (depending on the OS Dark/Light mode).

*The simulation window is just to get a general idea but not 1:1 accurate as it impossible to replicate full size outcomes in such a small preview.

17) User Suffix view and setup area. This area is empty when you first open the application.
One can click this box to proactively enter desirable unique suffix (or change existing one) plus, it automatically takes the user entry once the application encountered naming conflict and offers the user to add User Suffix.
When ‘Preserve Original File Name’ is checked (in settings window) Any media generated by the application carry this saved User Suffix at the end of each original file name.

In case you have such Suffix saved the text: "Reset Unique Suffix" is shown in this area, indicating you can click it to reset/remove the saved Suffix property and informing you that this property exists.
Hover over this area to get a tooltip with the saved suffix text.
Clicking this text immediately empty the 'User Suffix' property and the text: “No user Suffix” appears to indicate that the request has been carried out.

This value is saved along with all other controls when clicking the 'Save App Status Now' in the settings window.

18) Progress bar indicator, visible only when process is in progress.

19) Current and Total time display area (visible only while processing a media) showing: Current time position and Total media duration.

20) Press one of the texted hyperlinks to close BRxDVD and open DNxER or MediaER instead.

21) Process Elapsed Time and 'Estimated Time Left' Display area. Five seconds after a process begins (or after process reaches 1%, the latest between the two) it shows an estimated time left to end of the process, constantly recalculating the time estimation and updating the display.
Click this field to view Elapsed time instead and click again to toggle back to Estimated time left view.

22) In this area you'll see a progress wheel ('MacOS Style' on both Windows and Mac) as long as a Shell operation is in progress, once all items finished processing the progress wheel disappears and the text: "Clear List" is shown to indicate one can click here to clear all items for the main list box, leaving the processed media untouched on the hard drive.

23) The 'audio spot' logo area is also a hyperlink to this product's web page, clicking it will launch the default OS web browser and navigate to https://audiospot-creativetools.com providing there is active internet connection.

24) Processed items list box: in this area you'll see all finished jobs and you'll be able to perform the following:

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B) Right click an item to delete it completely from both list and hard drive (as safety measure, an action confirm dialog appears to warn you about this irreversible operation).

C) Shift click an item 'pushes' the selected item as 'command-line argument' to MediaInfo App which returns a popup window listing the media relevant technical properties and tag data. In case MediaInfo App is not installed on your system the App offers you to download this free tool from the web on Windows systems or refers you to Apple's App Store if you want to buy it for Mac ($0.99), should you choose to accept this offer and install MediaInfo you will need to restart any ER running App to make it available from within the ER ToolKit. (Windows users: MediaInfo install instructions included with the install offer).

D) To open the item's folder location on disk in Finder(MacOS) / Explorer(Windows systems) select the item and click + <Cmd> (Mac) or <Ctrl> (Windows).

25) Opens the User Guide.

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Several general workflow speed ups and tips:

On both Mac and Windows platforms, scroll up and down using mouse wheel while hovering the cursor over controls such as list boxes and sliders to quickly change index values without a single mouse click.

<Ctrl> + Q (windows) / CMD + Q (Mac) = Quit the program, in both main and settings windows.

Press <Ctrl> + W (Windows) / CMD + W (Mac) when in settings window to quickly return back to main window Or alternatively press BACKSPACE key, whatever feels more natural and quicker.

If you already selected an audio bit-depth (16 or 24-bit), but wish to change your selection: hold the <Shift> key while dragging a new video, and keep holding it until the process begins and the 'audio bit depth selection' dialog box pops out (This is relevant when using the Replace audio procedure with PCM audio).

At the bottom of the settings window, unchecking 'Check For Software updates' speeds up the application's boot time, But note that in doing so, you will never know when a newer improved version is available. You might want to consider leaving it checked or manually check for updates on our website from time to time (the In-App Auto check for updates is scheduled to work only in three days intervals, i.e. every third, sixth, ninth, etc. of the month).

Steinberg software users encouraged to take advantage of our 'send audio replacement file to MediaER' directly for "Export Audio Mixdown" - Post Process (at the bottom of the export window).

Be very careful when updating FFmpeg version by yourself, some recent FFmpeg version releases has Defected algorithms that may affect this ToolKit smooth operation or even break some of its methods.
In case you installed FFmpeg on your Mac via Homebrew and you wish to update it, repair it, etc.
Here are some handy commands you can use in the Terminal utility app:

brew update && brew upgrade ffmpeg (Update and upgrade all ffmpeg assets)
brew doctor (Check your Homebrew installation for common issues)
brew prune (Remove dead symlinks from Homebrew's prefix)

To upgrade FFmpeg version first remove the current FFmpeg version from your system:
brew uninstall ffmpeg
brew update (Update formulae and Homebrew itself)
brew upgrade --all (Install newer versions of outdated packages)
brew cleanup (Remove all installed or specific formulae, remove any older versions from the cellar. Also, old downloads from the Homebrew download-cache are deleted)

Now install FFmpeg back on using:
brew install ffmpeg --with your preferred options if not already installed.

External Links:

More about FFmpeg can be found at: https://ffmpeg.org/
More about MediaInfo can be found at: https://mediaarea.net/en/MediaInfo