

ActionBlu AVCHD

OWNERS MANUAL © 2010 IEC

<http://www.ielabs.com>

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Thank you for supporting our software products. Your purchase helps support ActionBlu AVCHD updates and new features. If you like our program, please support us by purchasing a license key. We hope you find our software meets or exceeds your current needs. ActionBlu AVCHD was specifically engineered for processing High Definition camcorder content created from popular HD camcorders like: Aiptek, Canon, Flip Video, Kodak, Sony Bloggie and numerous others, including the newest Apple iPhone 4. Works with just about any HD camcorder or camera recording h.264 video in either Quicktime (.MOV) or MPEG4 Part 10 (.MP4) type file formats with line resolutions of 720p or greater, including 1080p. ActionBlu AVCHD makes authoring your memorable clips an absolute breeze. Use ActionBlu to slay that re-encoding “time vampire” strategy other packages employ once and for all. Enjoy blazing fast AVCHD authoring while also preserving your cameras high quality original HD content.

PC HARDWARE REQUIREMENTS

- DVD writable ROM Disc Drive (For burning DVD discs for playback on AVCHD compatible players).

PC SOFTWARE REQUIREMENTS

- Windows OS (e.g. Windows XP, Windows Vista, Windows 7, etc...) with sufficient computing resources capable of smooth playing back of HD content. (If you intend playback on your PC)
- Microsoft’s .NET Framework version 3.5 or greater. (Mandatory for proper execution of ActionBlu AVCHD)

ActionBlu AVCHD is a Graphical User Interface (GUI) for controlling two popular and very powerful multimedia Command Line tools, FFmpeg and tsMuxeR. These tools are freely and readily available on the internet but are already included in your programs installed directory. More information about these fine multimedia tools can also be found at their respective development sites:

FFmpeg Command Line Encoder: <http://www.ffmpeg.org>

tsMuxeR Command Line Muxer: http://www.smlabs.net/tsmuxer_en.html

LATEST NEW FEATURES AND ENHANCEMENTS

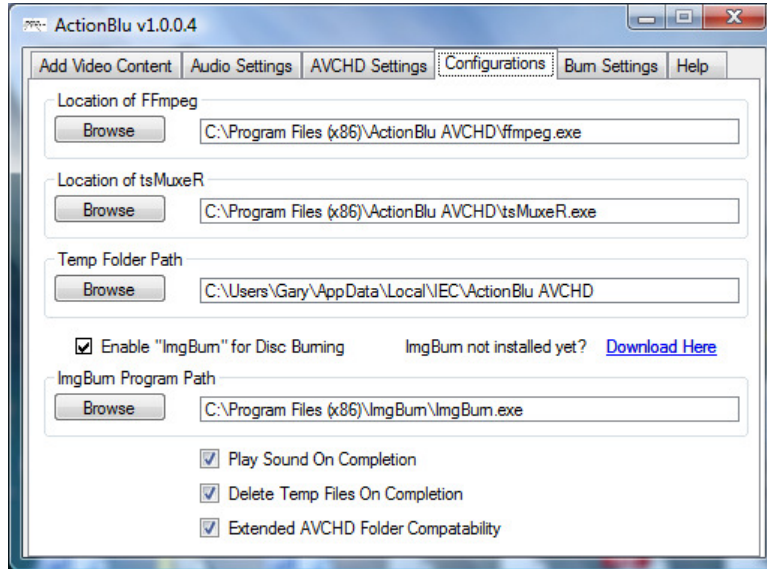
ActionBlu AVCHD now supports another fine 3rd party (freeware) disc burning software tool from Lightning UK called ImgBurn. No more fumbling around with trying to set all the proper parameters to burn your AVCHD folders to UDF formatted DVD discs. After authoring your project, ActionBlu can now launch ImgBurn with all the proper settings automatically. You can also still record your compilations to standard DVD-R discs using any burning software that supports the 2.5 version of the “Universal Disc Format” (UDF 2.5). However, we highly recommend you take advantage of our newest feature and install Image Burn. ImgBurn is readily available on the internet or from its developer’s site:

Lightning UK’s - ImgBurn Disc Burning Software: <http://www.imgburn.com/>

Once recorded, enjoy your authored creations on any compatible Blu-ray or computer software player supporting AVCHD structured playback. More detailed information on manually writing DVD-R discs using the UDF 2.5 format is also provided within the appendix section of this manual.

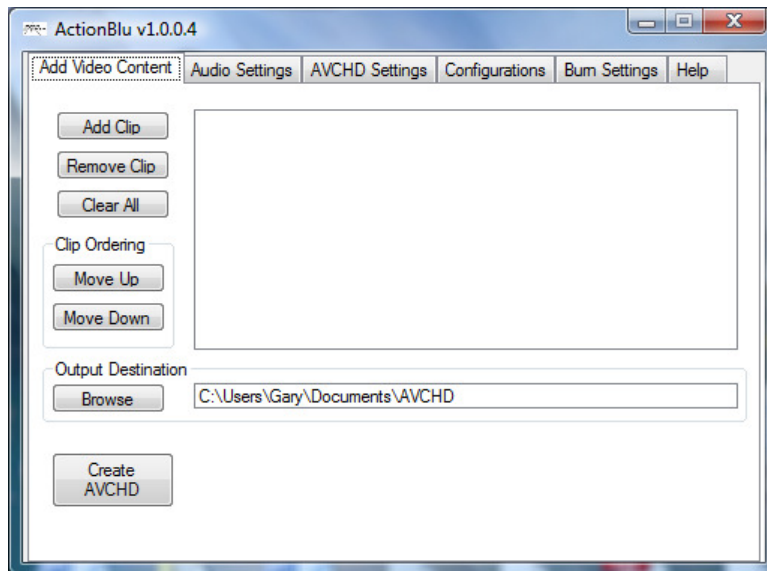
ESSENTIAL CONFIGURATIONS

It is essential that the appropriate paths to these command line executable tools remain correctly configured, so that your ActionBlu GUI can properly function. Upon initially launching the software, default paths are automatically configured to support proper functionality. After the successful authoring of your first project, these path settings are then saved as program defaults and loaded for future projects. Should these settings require modification; their paths can be found under the programs [Configurations] tab as seen below:



ADD VIDEO CONTENT

This category tab contains the programs main editing and authoring control features.



[Add Clip]

This button opens a browser file dialog feature, where you can locate and load your video clips. It supports both single and multi selection conventions for the adding of video content. Selected clip(s) are then added to the main projects listing in the order to which they are to be processed. Clip processing order can be changed anytime before AVCHD creation begins.

[Remove Clip]

This button removes a single selected (highlighted) clip within the main projects listing. This is used to remove any unwanted entries.

[Clear All]

This button completely removes all clips from the main projects listing.

[Move Up]

This button changes the processing order of a single selected (highlighted) clip within the main projects listing. The selected clip moves up in ordering each time the button is clicked by the user. This changes the sequence to which the clips will play in the completed project.

[Move Down]

This button changes the processing order of a single selected (highlighted) clip within the main projects listing. The selected clip moves down in ordering each time the button is clicked by the user. This changes the sequence to which the clips will play in the completed project.

Output Destination [Browse]

This button opens a browser directory dialog feature, which allows the user to select where the project will store the authored AVCHD content.

[Create AVCHD]

This button initiates the AVCHD authoring process. ActionBlu AVCHD does set all parameters for typical AVCHD authoring. However, before initiating authoring, be certain all user parameters are finalized (e.g. Chapter Settings, Audio Bitrate, etc...).

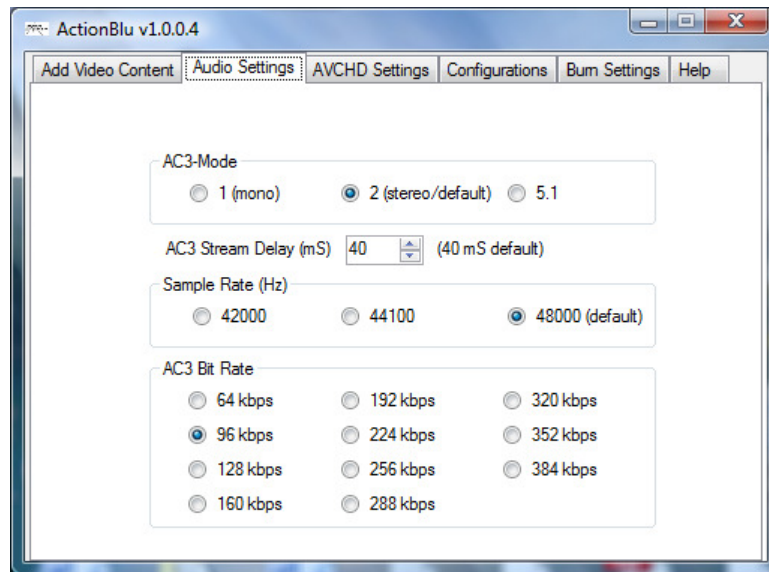
Attention Trial Users:

The trial version of ActionBlu AVCHD does impose setting of chapters, audio parameter restrictions and limit the processing/joining of clips to 5. These restrictions are completely removed in the fully licensed version of ActionBlu AVCHD.

Upon program completion, the completed project with AVCHD folder structure will be output to the specified directory field, set by the feature: Output Destination [Browse].

AUDIO SETTINGS

This category tab contains the programs audio authoring options.



[AC3-Mode] Group Box

The options within this group allow the user to select the authored output channel mode between single channel (mono), the default setting of 2 channel (stereo) and 5.1 (6-channel audio) as an expert user option. However, the use of 5.1 is highly discouraged, as processed file size will massively increase well beyond that of the camcorders original content.

[AC3-Stream Delay 40 (mS)]

This numerical box allows advanced users to “effectively” make corrective millisecond adjustments to the audio / video stream synchronization relationship. The default value of 40 mS is almost always sufficient under normal circumstances. Should discontinuity within audio / video synchronization ever arise, slight adjustments in this value might be able to correct them.

[Sample Rate] Group Box

These options select the sampling rate to be used during audio encoding. These settings should never require changing from the programs default setting of 48000 Hertz (Hz).

Note:

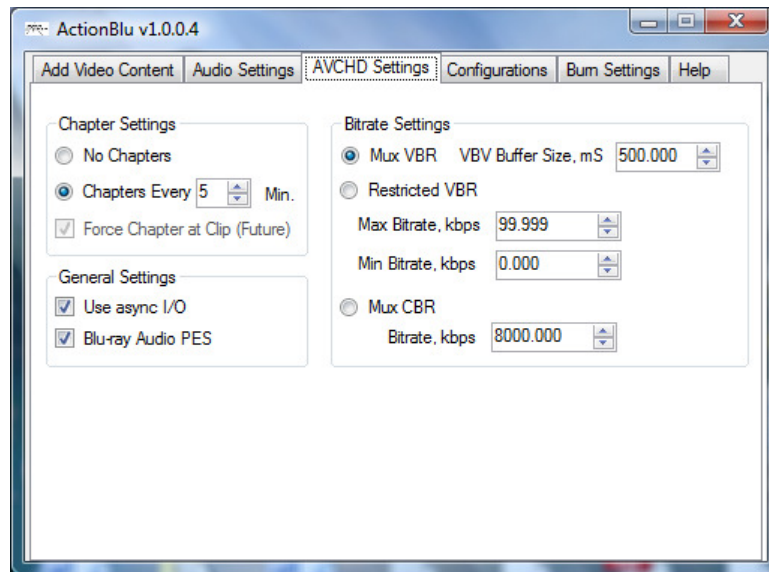
Changing these settings to anything other than the sample rate of the original camcorders content will most certainly cause audio video synchronization problems.

[AC3 Bit Rate] Group Box

The options within this group allow the user to select the audio bit rate to be used during encoding. It is recommended that the user select a minimum of 32 kbps per audio channel, as set within the AC3 Mode Group Box. The default setting of 96 kbps for 2 channel audio generally produces favorable results. Just recognize that this parameter will alter the projects over all size and may make your project too big to fit on your target disc.

AVCHD SETTINGS

This category tab contains the programs AVCHD authoring options.



[Chapter Settings] Group Box

This group allows the user to set the time interval between chapters. The default interval is set to 5 minutes but can be increased or decreased by the user. These chapters will ultimately be made available during AVCHD playback of your completed project. Note: Unfortunately, setting of chapters is not available in the trial version.

[General Settings] Group Box

Use async I/O

When checked, this option creates a separate thread for writing output files. This is set by default but can be unchecked if system resource errors occur.

Blu-ray Audio PES

When checked, this option forces audio track to 0xfd (standard Blu-ray) for AC3 audio tracks instead of 0xbd. This is set by default and should not require changing.

[Bitrate Settings] Group Box

This area sets the video stream convention as either Variable Bit Rate (VBR) or Constant Bite Rate (CBR). Restricted VBR set the minimum and maximum values that can be used. These settings are mainly included for increased flexibility and considered more for the advanced user.

NOTE:

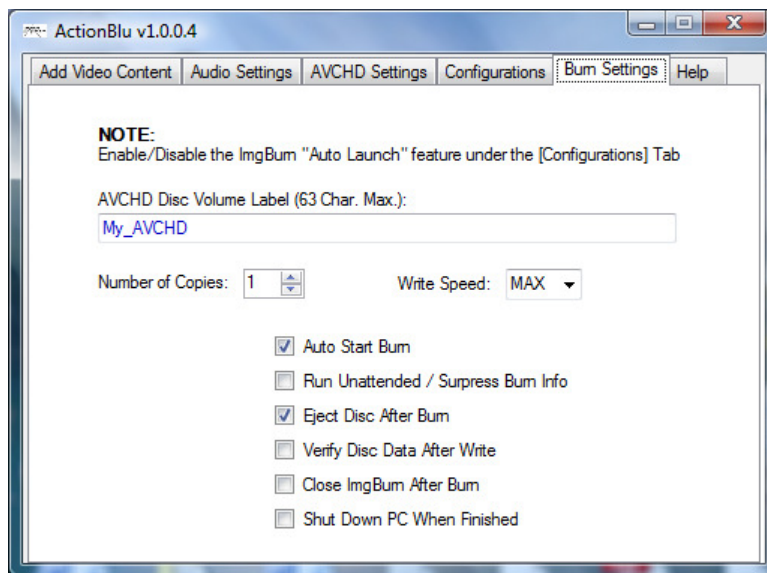
For normal AVCHD creation, these settings should always remain in their default state, which is: "Mux VBR", with a "VBR Buffer Size" set to [500.000] mS.

BURN SETTINGS

This category tab contains program configurations and settings for the automatic launching and proper UDF burning of your authored AVCHD folders to DVD recordable discs. This enables ActionBlu to become your new HD camcorder tool of choice for rapidly producing AVCHD discs.

IMPORTANT NOTE:

This feature, along with all configurations found within this section, rely upon the installation of the popular 3rd party (freeware) disc burning software tool “ImgBurn”. It also requires a DVD recordable drive be installed on your computer. Therefore, in order to take advantage of this rich new feature, it’s mandatory that “ImgBurn” be properly installed on your computer. This feature is automatically enabled by default if “ImgBurn” is installed on your computer. This new feature may also be enabled or disabled under the [Configurations] tab.



[AVCHD Disc Volume Label]

Here you can enter the text that will be used as the volume label to identify your AVCHD disc. Some typical examples (excluding the quotes of course) would be: “Summer_In_Michigan_2010”, “Moms_50th_Birthday_Party”, etc... This label will eventually be transferred to your blank “DVD recordable media” when “ImgBurn” burns your Universal Disc Format (UDF) AVCHD discs. The maximum number of characters that can be used to create this label is limited to 63.

[Number of Copies]

This numerical box sets the number of DVD (AVCHD) discs you wish to burn. You can burn any number of copies from the default value of 1, all the way up to a maximum number of 100.

[Write Speed]

This numerical box sets the desired write speed to use when burning your blank DVD media. This value must be set within the capabilities of your DVD recordable drive, as well as within your blank media's maximum write speed. The default value of "MAX" is usually sufficient and selects the maximum available write speed automatically. You should never allow speeds greater than the maximum speed imprinted on your blank media's label. If you experience any inconsistencies during AVCHD play back, especially nearing the end of your disc's playback, we recommend you try lowering disc write speed. You may also want to consider trying different brands of recordable media. Typically, DVD-R media tends to produce better results than DVD+R media on most commercial Blu-ray players. To minimize the creation of bad discs, you may also want to consider experimenting with re-writable media, such as DVD-RW, etc... at least until you resolve all your burning related issues.

[Auto Start Burn]

This option will force ImgBurn to automatically start the DVD / AVCHD burning process if blank media is already inserted in your writable DVD drive. This option is set by default.

[Run Unattended / Suppress Burn Info]

This option will suppress the "burn information" that ImgBurn normally displays. This is useful in eliminating the need for user intervention in closing the burn information message box that ImgBurn normally displays.

[Eject Disc After Burn]

This option will tell ImgBurn to automatically eject the disc after the burning process has completed.

[Verify Disc Data After Write]

Used to tell ImgBurn to automatically verify the burned data against the original data.

[Close ImgBurn After Burn]

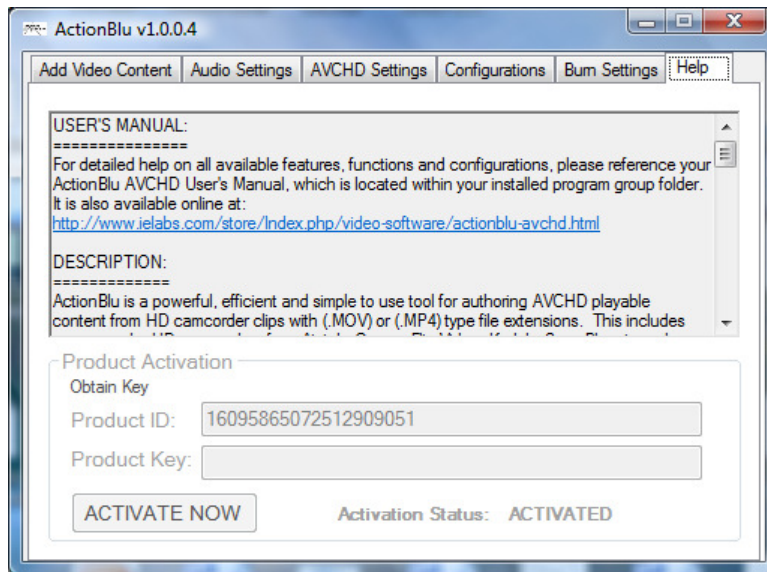
This tells ImgBurn to automatically close down after all disc writing process have completed.

[Shutdown PC When Finished]

This option enables ActionBlu AVCHD to close down all programs and shut down PC after all burning processes have completed. This option is useful when authoring and burning your projects unattended.

HELP AND LICENSING ACTIVATION

This category tab contains the programs licensing entry area.



NOTE:

Both the Product ID and Product Key allow the user to highlight and copy using the normal Windows conventions, including "Ctrl + C" for copy and "Ctrl + V" for paste.

When you have provided IEC your product ID and appropriate licensing fee, you will be provided a Product Key via email. Carefully enter (or paste) and verify your Product Key entry into the Product Key Text Box. Once you're sure it was entered correctly, click on [ACTIVATE NOW] to accept your license key entry. If you have entered the key correctly, your software will now be fully functional, with all features restored. You may purchase a license key directly from our web site at:

<http://www.ielabs.com>

APPENDIX

AVCHD FILE STRUCTURE

For more information on the AVCHD format, as well as other useful AVCHD information, please visit the AVCHD information at: <http://www.avchd-info.org/>

UDF 2.5 DISC CREATION USING IMAGE BURN (Freeware)

The Universal Disc Format is the format that must be used for proper playback of authored ActionBlu projects. We recommend the use of Image Burn available at: <http://www.imgburn.com>.

UDF 2.5 MANUAL DISC BURNING GUIDE

- 1) Follow the Install Instructions, then launch the ImgBurn software.
- 2) After ImgBurn launches, select the **[Write files/folders to disc]** from the numerous available options.
- 3) On the left side of the main window, you should see a series of five tab selections. You will need to select the **[Options]** tab first.
- 4) Within the “Options” group, you’ll need to set the **Data Type to: MODE1/2048**, the **File System to: UDF** and the **UDF Revision to: 2.5**
- 5) Next we need to enter a **UDF volume label** (63 characters max) for the disc under the **[Labels]** tab. As an example... CHRISTMAS_2009
- 6) Next we simply need to add our authored folders to the project. Click on **“File”** from the command tool bar near the top left of the project form, then **“Browse for a source folder...”** Once you’re in the folder browser dialog window, browse to the output folder to where your project files were created and highlight/select the **BDMV** folder and click on **OK** to add it to the project. Next you will need to repeat these same steps mentioned above to add the **CERTIFICATE** folder.
- 7) Verify you have a blank DVD-R inserted in your burner.
- 8) Click on the “build icon”, whose image is a **FOLDER > DISC** graphic to start burning the disc. Once it’s complete, that’s it... Now it’s time to enjoy your latest production.

QUESTIONS – COMMENTS - SUGGESTIONS?

Please direct all questions, comments and suggestions for future enhancements to:

<http://www.ielabs.com/store/Index.php/contacts/>