

CyberLink

AudioDirector

User's Guide



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Contents

Introduction.....	1
Welcome.....	1
Latest Features	1
DirectorZone and CyberLink Cloud	2
AudioDirector Versions	2
System Requirements.....	4
AudioDirector Workspace.....	5
AudioDirector Rooms.....	5
Media Library.....	6
Sorting Media in the Library	6
Adjustments and Effects Panel.....	7
AudioDirector Timeline.....	7
Audio Channels	8
Range Selection	10
Timeline View	11
Timeline Markers	12
Timeline Zoom	13
Determine Tempo/Metronome	13
AudioDirector Quick Bar.....	15
Playback Controls.....	16
Video File Playback	17
Audio Level Meter	20
Audio Output (Codec) Preview.....	21
Expanding the Workspace.....	22

- Keyframes Panel.....24
 - Volume Tab24
 - Effect Tab24
- Importing Media.....26**
- Importing Audio and Video Files.....26
 - Supported Formats26
- Downloading Sound Clips and Media Files.....27
 - Downloading Sound Clips from DirectorZone27
 - Downloading Media Files from CyberLink Cloud28
 - Sound Clips Library29
- Recording Audio.....29
 - Record Audio Settings30
 - Using Loop Recording to Record Audio31
- AudioDirector Projects.....33**
- Exporting Projects.....33
- CyberLink Cloud Projects.....34
- Basic Audio Editing35**
- Converting Audio Profiles.....35
- Using the Editing Tools.....36
- Normalizing Audio.....36
- Adjusting Audio.....38**
- Boosting Audio Volume.....38
- Applying Fades.....39
- Trimming Audio.....41
- Adjusting Length (Change Speed).....42
- Shifting Pitch.....43
- Using the Pitch Bender.....44
- Inserting Silence.....45

Inserting Noise.....	46
Reversing Audio.....	46
Ambience Match.....	47
Adding Ambience	48
Extracting Ambience	48
Adjusting the Master Volume.....	50
Panning Audio Left/Right.....	51
Applying Audio Effects.....	53
Using Dynamic Range Control.....	53
Adding Delays.....	54
Adding Reverb.....	56
Creating a Phase Effect.....	57
Creating a Flange Effect.....	58
Adding a Chorus Effect.....	60
Adding an Echo Effect.....	61
Transforming Vocals.....	63
Using the Equalizer.....	64
Using the Stereo Expander.....	65
Applying the Radio Effect.....	66
Applying the Phone Effect.....	67
Applying a Noise Gate.....	68
Removing Vocals in Music.....	69
Applying VST Effects.....	70
Restoring Audio.....	71
Using Visual Repair.....	71
Regional Selection Tools	71
Repairing the Audio	82

Using Noise Reduction.....	84
Auto Denoise	85
Noise Reduction	85
Using Clipping Removal.....	87
Using Click Removal.....	88
Using Hum Removal.....	88
Simple Mode	89
Advanced Mode	90
Using Hiss Removal.....	92
Using Plosive Removal.....	93
Mix Room.....	95
Creating an Audio Mix.....	95
Configuring Audio Profile Settings	97
Adding Media to Your Mix	97
Mixing Audio	98
Using Audio Transitions	104
Applying Adjustments in the Mix Room	107
Using Automated Dialogue Alignment.....	109
Producing the Audio.....	113
Supported Output Formats.....	113
Producing Audio.....	113
Producing Video.....	115
Sharing and Backing Up Audio.....	117
Creating CDs.....	119
AudioDirector Preferences.....	121
General Preferences.....	121
File Preferences.....	122
Project Preferences.....	122

DirectorZone Preferences.....	123
Audio Settings Preferences.....	123
Hardware Acceleration Preferences.....	124
CyberLink Cloud Preferences.....	124
AudioDirector Hotkeys.....	126
Licensing and Copyright Information.....	128
Technical Support.....	129
Before Contacting Technical Support.....	129
Web Support.....	130
Help Resources.....	130

Chapter 1:

Introduction

This chapter introduces the CyberLink AudioDirector program and includes an overview of its features. It also outlines the recommended system requirements for running the program.



Note: this document is for reference and informational use only. Its content and the corresponding program are subject to change without notice.

Welcome

Welcome to the CyberLink family of digital software programs. CyberLink AudioDirector lets you record, trim, cut, restore, and enhance digital audio from both imported audio files or the audio track in your videos. You can also apply effects to audio, save audio in different formats, and mix the audio from multiple sources into one file.

Latest Features

This section outlines some of the latest features within the CyberLink AudioDirector program.


- Record from multiple devices at once in the Mix room.
- Adds support for 360° viewer mode for 360° video.
- Remove thumps/pops in audio with Plosive Removal.
- Add background ambience to audio clips with Ambience Match, or extract it from existing clips.
- Use audio output preview to hear audio adjustments in real-time with a selected codec applied.
- Remix audio clips to make them longer or shorter.
- Adds support for VST3 plugins.


DirectorZone and CyberLink Cloud

You can upload/download sound clips, and back up media, preferences, projects, and more with the DirectorZone and CyberLink Cloud features.

DirectorZone

DirectorZone is a web service that lets you download sound clips created by other users, so you can use them in your audio. You may also share your own custom sound clips by uploading them to DirectorZone.

To access the benefits of DirectorZone, you can sign in by clicking the  button at the top of the window to open the AudioDirector preferences, and then on the **DirectorZone** tab. See [DirectorZone Preferences](#) for more information.

Also, be sure to periodically click the  button to check out the latest **DirectorZone Bulletin**. Just click in this section in the Notifications window to view the bulletin. Or go to <https://directorzone.cyberlink.com> to find out more information on the features and benefits of the DirectorZone web service.

CyberLink Cloud

CyberLink Cloud is a cloud storage service from CyberLink where users can upload and download their sound clips, AudioDirector projects, produced media clips, and more. CyberLink Cloud allows users to back up media, preferences, projects, etc., and ensure their working environment is the same on multiple computers.



Note: *CyberLink Cloud is a subscription cloud storage service that is included with some CyberLink products, and is available for purchase through our web site. For more detailed information, see <https://www.cyberlink.com/products/cyberlink-cloud/>.*

AudioDirector Versions

The features that are available in CyberLink AudioDirector are completely dependent on the version you have installed on your computer. Click the AudioDirector logo in the top right to determine the version and build number for your copy of CyberLink AudioDirector.

AudioDirector Live

AudioDirector Live is a subscription based version of CyberLink AudioDirector that provides all the audio editing features you expect, and adds the CyberLink Cloud storage service and more.

With a AudioDirector Live subscription, you get:

- All the advanced audio editing features of the Ultra version of CyberLink AudioDirector.
- The ability to back up program preferences, projects, and sound clips on the cloud storage space CyberLink Cloud.
- Guaranteed updates to the latest versions of CyberLink AudioDirector Ultra.

AudioDirector Live is the must-have solution for on-the-go audio editors who want easy access to their media and the latest up-to-date editing technologies.


Updating AudioDirector

Software upgrades and updates (patches) are periodically available from CyberLink. CyberLink AudioDirector automatically prompts you when either is available.



Note: *you must connect to the Internet to use this feature.*

To update your software, do this:

1. Click the  button to open the Notifications window.
2. Check the **New Updates** and **Upgrade Info** sections.
3. Select an item in these sections to open your web browser, where you can purchase product upgrades or download the latest patch update.

System Requirements

The system requirements listed below are recommended as minimums for running CyberLink AudioDirector.



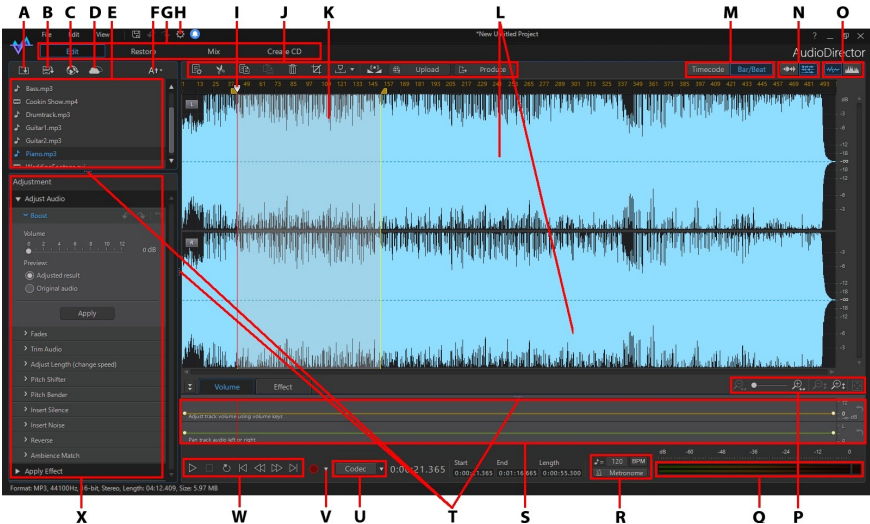
Note: *to ensure you can enjoy all the features within CyberLink AudioDirector, make sure your computer meets or exceeds the minimum system requirements.*

Minimum System Requirements	
Operating System	<ul style="list-style-type: none"> • Microsoft Windows 10, 8/8.1, 7 (64-bit OS recommended)
Processor (CPU)	<ul style="list-style-type: none"> • Multi-core Intel processor with 64-bit support
Graphics Processor (GPU)	<ul style="list-style-type: none"> • 128 MB VGA VRAM or higher
Memory	<ul style="list-style-type: none"> • 2 GB required (6 GB or above recommended)
Hard Disk Space	<ul style="list-style-type: none"> • 1 GB required
Screen Resolution	<ul style="list-style-type: none"> • 1024 x 768, 16-bit color or above
Sound Card	<ul style="list-style-type: none"> • Windows compatible sound card is required
Internet Connection	<ul style="list-style-type: none"> • Internet connection also required for initial software and file formats activation

Chapter 2:

AudioDirector Workspace

This chapter provides a complete overview of the CyberLink AudioDirector workspace. It also takes you through the settings used to customize the program to your preference.



A - Import Media, B - Open Sound Clips Library, C - Download Sound Clips From DirectorZone, D - Download Your Audio Files From DirectorZone/CyberLink Cloud, E - Media Library, F - Sort Media, G - AudioDirector Rooms, H - AudioDirector Preferences, I - Timeline Slider, J - AudioDirector Quick Bar, K - Range Selection, L - Audio Channels, M - Timebase Display (Timecode/Tempo), N - Channel Selection, O - Toggle Timeline View, P - Timeline Zoom Controls, Q - Audio Level Meter, R - Determine Tempo/Metronome, S - Keyframe Panel, T - Expand Workspace, U - Audio Output (Codec) Preview, V - Record Audio, W - Playback Controls, X - Adjustments and Effects Panel

AudioDirector Rooms

CyberLink AudioDirector has the following main rooms: the Edit, Restore, Mix, and Create CD rooms.

- **Edit:** in this room you can adjust, trim, cut, and enhance digital audio, and much more. See [Editing Audio](#) for more information.

- **Restore:** in this room you can repair audio clips using the Click Removal, Clipping Removal, and Noise Reduction features, or manually fix audio using the Visual Repair. See [Restoring Audio](#) for more information.
- **Mix:** in this room you can record and mix multiple audio tracks into one customized file. See [Mixing Audio](#) for more information.
- **Create CD:** in this room you can use the media in the library to create CDs in the audio CD format. See [Creating CDs](#) for more information.

The workspace within each CyberLink AudioDirector room is different, but do contain common features and areas. All the rooms have the audio library, as well as the AudioDirector quick bar you use to edit and add audio as required.

Media Library

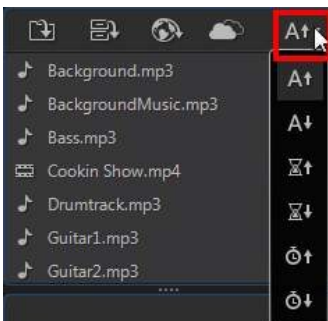
When you import media into CyberLink AudioDirector, it is available in the media library. You can freely edit, restore, and apply effects to all of the media in the media library, or use the media in the Mix room.

You can import audio and also video files into the media library, as CyberLink AudioDirector lets you edit and restore the audio track of videos you import.

See [Importing Media into the Library](#) for more information on importing audio and videos files into the media library.

Sorting Media in the Library

You can easily sort the media in the AudioDirector library by selecting a sort option from the list.



You have the option of sorting the media in ascending or descending order by file name, duration, or the date the media was created.

Adjustments and Effects Panel

The adjustments and effects panel is where you set the edits you want to make to your audio clips and apply effects. The adjustments and effects that are displayed depends on which room you are in.

AudioDirector Timeline

The timeline is a visual representation of the digital audio files selected in the media library. When a media file is selected, CyberLink AudioDirector displays each of its audio channels separately in the timeline.



Note: the timeline can display up to 8 channels (7.1 channel). See [Audio Channels](#) for more information.

The values along the top of the timeline display either the audio file's playback time (timecode) or tempo (bar/beat), depending on your selected timebase display preference.



Note: you can change the timebase display (the values along the top of the timeline) by clicking either the **Timecode** or **Bar/Beat** button above the timeline. **Timecode** displays the audio by playback time, while **Bar/Beat** displays the audio by beats per minute (BPM) or its tempo. See [Determine Tempo/Metronome](#) for more information on using Bar/Beat as your timebase display.

The values along the right of the timeline indicate the audio intensity, or loudness, measured in decibels.

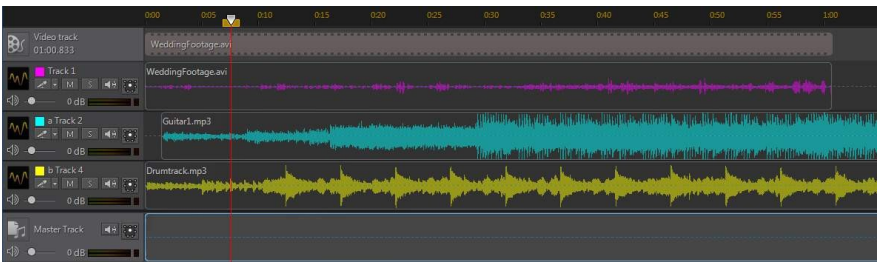


Note: you can switch the view of the timeline by clicking the buttons in the top right corner of the program. See [Timeline View](#) for more information.

The timeline is available in the Edit, Restore, and Mix rooms of CyberLink AudioDirector, and is where you work on editing, restoring, and mixing your audio files.

When you click the play button, the timeline slider begins to move, indicating the current playback position. If required, you can click and drag the timeline slider to any position if you want to jump forward in the audio.

In the Mix room there are multiple tracks in the timeline. Each file you add, adds another layer of audio onto the final outputted media represented by the Master Track.



See [Mixing Audio](#) for information on mixing audio in CyberLink AudioDirector.

Audio Channels

When a media file is selected in the library, CyberLink AudioDirector displays all of its audio channels in the timeline. The timeline can display up to eight channels, and supports the following audio channel configurations:

- 7.1 surround sound (8 channels).
- 5.1 surround sound (6 channels).
- stereo (2 channels).
- mono (1 channel).



Note: CyberLink AudioDirector supports the import and edit of audio and video files with 5.1 channel audio. It also supports the import of audio and video files with 7.1 channels, but only for .WAV audio files are all 8 channels displayed in the program and available for editing. For video files with 7.1 channel audio, two of the audio channels (BL/BR) are hidden and unavailable for editing.

Multi-Channel Display

When a media file has more than one audio channel, each audio channel is labeled in the top left corner. The following table defines the terminology for all the possible audio channel types available in a selected media file and the possible availability for the various audio channel configurations:

Channel Label	Channel Type
L	Front left
R	Front right
C	Center
LFE	Low-frequency effects
Lb	Back left
Rb	Back right
Lc	Front left of center
Rc	Front right of center
BC	Back center
Ls	Side left
Rs	Side right
TopC	Top center



Channel Label	Channel Type
TpFL	Top front left
TpFC	Top front center
TpFR	Top front right
TpBL	Top back left
TpBC	Top back center
TpBR	Top back left



Note: the type of channel that is available in the selected media file is completely dependent on the audio configuration of the file.

Selecting Channels for Editing

When you are editing and restoring audio in CyberLink AudioDirector, you can choose to apply the edits, effects, fixes, etc. to all the channels, or just one single channel.

Click  if you want to apply the edits to all of the audio channels, or  to make edits on one specific channel only. Once selected, just click the channel you want to apply the edits to in the timeline.

Range Selection

When editing and restoring audio, drag the timeline slider to a position in the timeline (or use the playback controls to find the position), and then click and drag one of the yellow nodes on either side of the timeline slider to select a range of the audio.





You can also click and drag on the waveform directly to select a range of the audio.

Note that when you select a range of the audio, the editing tools on the AudioDirector quick bar become active. See [Using the Editing Tools](#) for detailed information about using each of these tools.

Details about the selected range are indicated in the **Start**, **End**, and **Length** fields below the timeline. Once you have a range of an audio file's wave form selected, you can then preview, cut, copy, delete or crop it as required.

Timeline View

When a file is selected in the media library in the Edit or Restore rooms, CyberLink AudioDirector by default displays the waveform view for each channel in the timeline.

There are two available timeline views to choose from: click  for the waveform view, or  for spectral frequency view.

Click the buttons in the top right corner of the timeline to switch between the two available views.

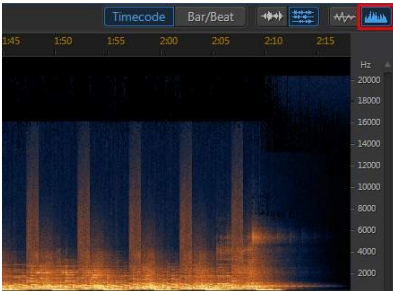
Waveform View

When a file is selected in the media library, CyberLink AudioDirector by default displays the waveform information for each channel in the timeline. The waveform view is a visual representation of both the time and the audio intensity (or loudness, measured in decibels) of the audio in each channel.




Spectral Frequency View

The spectral frequency view is a graphical representation of the audio in each channel, and is ideal when using the Visual Repair feature. The colored graph you see in this view is a three dimensional illustration of the audio attributes in the selected media file.




The graph shows playback time along the top, and the frequency (relative pitch) of the audio (measured in hertz) along the right. The colors on the graph indicate the amplitude or strength of the audio at the point in time. The lighter the color, the louder the audio is at that frequency and time.

Timeline Markers

When editing, restoring, or mixing audio, click  to add a timeline marker at the current position of the timeline slider. Markers are used to mark the positions in your audio files where you might want to edit the audio file or start an effect from. In the Mix room, use markers when adding audio clips as they will snap to the timeline markers.

Adding Timeline Markers

To add a timeline marker, do this:

1. Use the playback controls to find, or drag the timeline slider to the position where you want the marker, and then click .
2. Input a **Description** for the new timeline marker, if required.

3. Click on **OK** to add the new timeline marker.




Note: you can double-click on a time marker to edit its properties, if required.

Timeline Zoom

When editing, restoring, or mixing audio on the timeline, use the controls to zoom in on the audio timeline to make your editing more precise. There are two types of zooming available: horizontal zoom and vertical zoom.



Note: when using the zoom controls, you can click the  button at any time to zoom all the way back out for a full view of the audio waveform.

Horizontal Zoom

The horizontal zoom controls let you increase/decrease the time magnification of the audio in the timeline.



Use these zoom controls if you want to, for example, zoom in on a specific two seconds in an audio clip.

Vertical Zoom

Vertical zoom lets you increase/decrease the intensity magnification of the audio in the timeline.



Use these zoom controls if you want to, for example, zoom in on a specific noise to get a closer look at the waveform.

Determine Tempo/Metronome

When your timebase display is set to **Bar/Beat**, if required, you can determine your audio file's tempo or enable the metronome for assistance.




Note: CyberLink AudioDirector does not automatically calculate the tempo of audio clips in the timeline. The Bar/Beat timebase display is just a guideline for tempo you can use in your audio and video editing.

Determining Tempo

If you are not sure what the tempo of an audio file is, click the **BPM** button at the bottom of the Edit, Restore, and Mix rooms to open the Determine Tempo window. You can also access this window in General preferences by clicking the **Tempo** button.



Note: if you know the tempo of the audio or you want to manually set the tempo used in the timebase display, you can click in the field next to the  icon and enter it. It must be a number between 1 and 1280.

To determine the tempo of an audio file, do this:


1. Start the playback of the audio you want to determine the tempo of.
2. Click the **BPM** button at the bottom of the Edit, Restore, or Mix room to open the Determine Tempo window.
3. When ready, click the **Tap** button (or the T key on your keyboard) to the beat of music. Tap several quarter notes, as the more taps you provide, the more precise it will be in determining the tempo.
4. When you are done, click **OK** to set the detected tempo as the timebase display.



Note: before closing the Determine Tempo window, you can click **Preview** to hear the tempo you set. You can also use the metronome to hear the tempo during audio playback.

Metronome

When using the Bar/Beat timebase display, you can click the **Metronome** button to enable the metronome during playback. Once you click play to start the audio playback, the metronome will accurately play tapping sounds to the set tempo.

Use this to check that the set tempo is precise, and make any adjustments if required. You can change the set tempo by clicking in the field next to the  icon and entering it, or by clicking the **BPM** button to determine it manually. See [Determining Tempo](#) for more information.

AudioDirector Quick Bar

The AudioDirector quick bar offers you several tools you can access in all the rooms. Depending on which room you are in, the buttons on the quick bar differ.









The available functions on the AudioDirector quick bar are as follows:









Note: see [Creating CDs](#) for a description of the tools on the quick bar in the Create CD room.






Button	Function
	If in the Edit or Restore room, click this button to change the profile or quality of the selected media file. See Converting Audio Profiles for more information. If you're in the Mix room, click it to configure the profile settings of the mixed audio you produce. See Mixing Audio for more detailed information
	In the Edit, Restore, and Mix rooms you can click on this button to cut a selected portion out of the audio file, and place it on your clipboard for pasting. See Using the Editing Tools for more detailed information.
	In the Edit, Restore, and Mix rooms you can click on this button to make a copy of a selected portion on your clipboard for pasting. See Using the Editing Tools for more detailed information.
	In the Edit, Restore, and Mix rooms you can click on this button to paste the audio wave form you cut or copied to the right of the current timeline position. See Using the Editing Tools for more detailed information.
	In the Edit, Restore, and Mix rooms you can click on this button to delete a selected portion of the audio file. See Using the Editing Tools for more detailed information.
	In the Edit and Restore rooms you can click on this button to crop to the selected portion of the audio file. See Using the Editing Tools for more detailed information.
	In the Edit, Restore, and Mix rooms you can click this button to add timeline markers at the current timeline slider position. See Timeline Markers for more detailed information.

	In the Edit, Restore, and Mix rooms you can click this button to normalize the selected audio. See Normalizing Audio for more information.
	In the Edit, Restore, and Mix rooms you can click this button to share the selected audio file on DirectorZone. See Sharing Audio on DirectorZone for more detailed information.
	In the Edit, Restore, and Mix rooms you can click this button to produce the selected audio or video file, exporting it with all the edits you made applied. See Producing Audio for more detailed information.
	Click this button in the Mix room to add a mix track to the timeline. See Mixing Audio for more detailed information.
	Click this button in the Mix room to split an audio file that is selected on a mix track into two separate parts. See Mixing Audio for more detailed information.
	If you have a video clip that has audio recorded in a noisy environment, click this button to use Automated Dialogue Alignment to replace the audio. See Using Automated Dialogue Alignment for more information.

Playback Controls

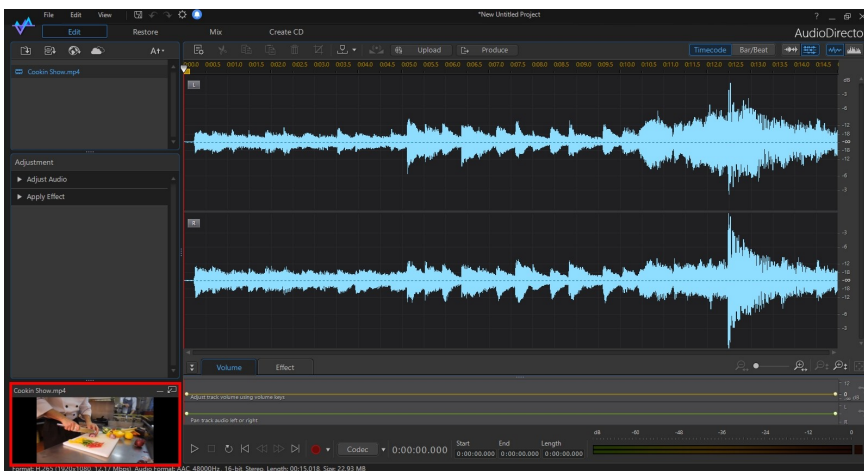
While adjusting, editing, and mixing audio in CyberLink AudioDirector, use the available playback controls to preview the audio. To preview the audio, use the controls as follows:

Playback Controls	
	Click to play the audio from the current position to the end of the track.
	Click to pause playback.
	Click to stop playback.
	If  is displayed, the current audio file plays to the end of the track. If  is displayed, the audio will loop continuously until you click pause or stop. Click to toggle between the two available audio playback behaviors.

	Click to make the timeline slider jump to the beginning of the current selected audio track or selected range of the audio waveform.
	During playback, click and hold this button to rewind through the current audio track.
	During playback, click and hold this button to fast forward through the current audio track.
	Click to make the timeline slider jump to the end of the current selected audio track or selected range of the audio waveform.
	Click to record custom audio in CyberLink AudioDirector. See Recording Audio for detailed information on recording custom audio in the program.


Video File Playback

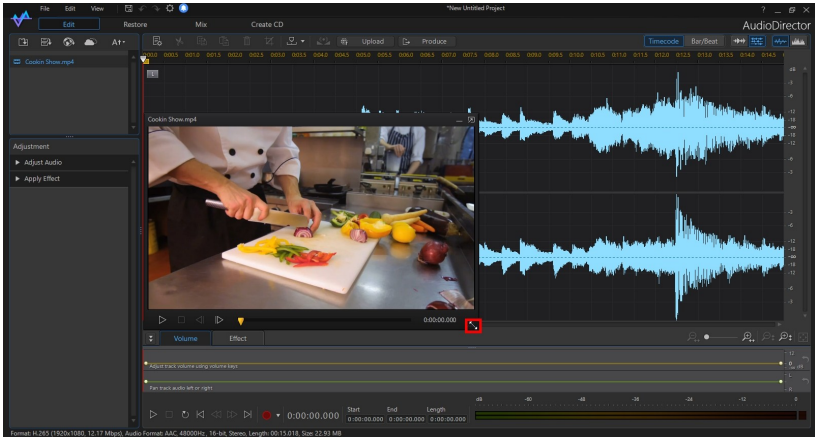
When you import video files into the library, a small video preview displays in the bottom left corner of the CyberLink AudioDirector window when it is selected. When you click play, the video plays with the audio for added reference when editing the video file's audio track.






During playback, you can:


- click  to minimize the video preview window. Click  to restore it.

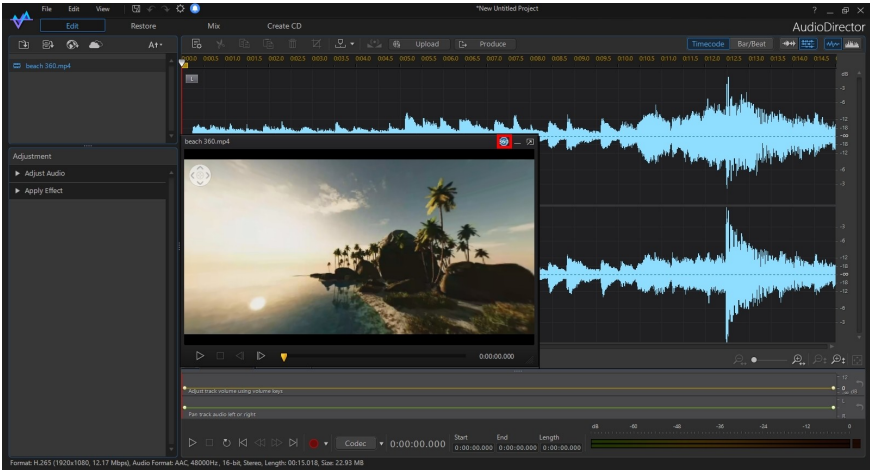
- click  to undock the preview window if you would like a larger preview that you can resize to your preference. You can also double-click on the undocked window's title bar to go to full screen, if required.



- the video preview window also includes slightly different playback controls, that include the  and  buttons you can use to step backwards or forwards one frame when the video is paused.
- click  to re-dock the preview window to the bottom left.

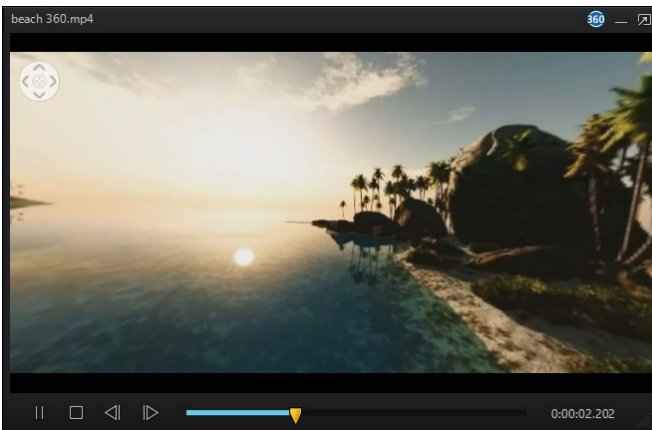
360° Videos

When 360° video files are imported into CyberLink AudioDirector, you can click the  button to view it in the 360° mode.





360 Controls

When playing 360° video files, there are extra 360° controls available in the preview window.



When viewing or playing a 360° video file, you can click and drag on the preview

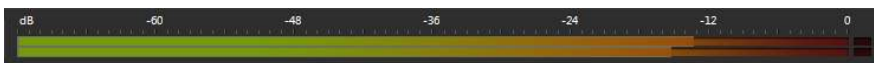
window to pan around the 360° environment or use the  controls to pan left, right, up, or down. Note that you can click the  in the middle of the controls at any time to reset to the default viewing position.



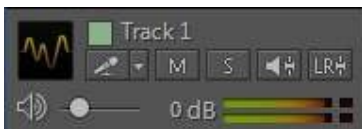
Note: you can also use your mouse's scroll wheel to zoom in and out within the 360° view.

Audio Level Meter

Use the audio level meter to view the audio level, or loudness in decibels, of the current clip at different moments in time during playback. If the audio levels rise to the red levels, you can adjust the master volume to lower the audio level.



In the Mix room, each mix track has its own audio level meter. Just use the volume slider to the left of the track to adjust the audio level as necessary.



There are also audio level meters for each track in the Mix room's mixer panel. See [Mixer Panel](#) for more information.




Audio Output (Codec) Preview

Before you adjust, edit, and mix audio in CyberLink AudioDirector, you can click the **Codec** button below the timeline to enable audio output preview. Enabling this allows you to preview your audio with a selected codec in real-time while you work.



Note: when previewing a video file's audio with a selected codec, the video is not available.

Click the  next to the **Codec** button to change the audio output preview options as follows:

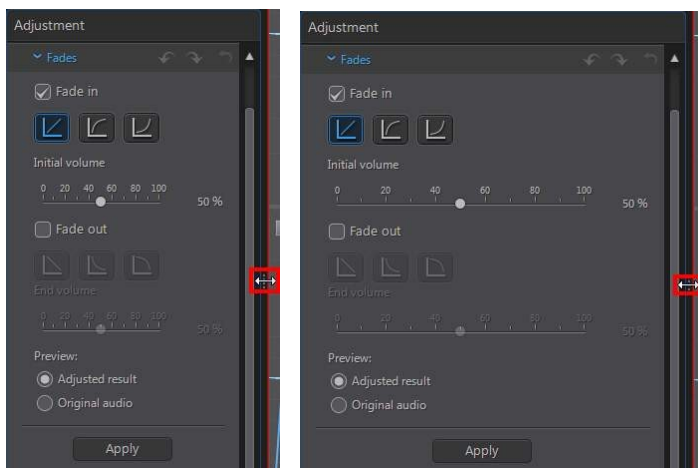
- **Format:** select the format you want to use in the audio preview from the drop-down.
- **Bitrate/Compression level:** if required, set the bitrate for the audio preview by selecting it from the drop-down.
- **Sample rate:** set the sample rate of the audio preview by selecting it from the drop-down.



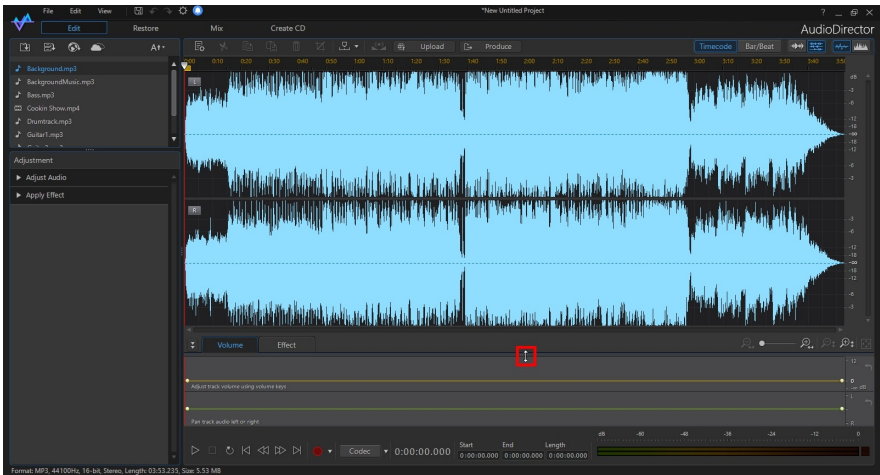
Note: the audio output preview options you set, will be used in the default profile settings when you [produce the audio](#).

Expanding the Workspace

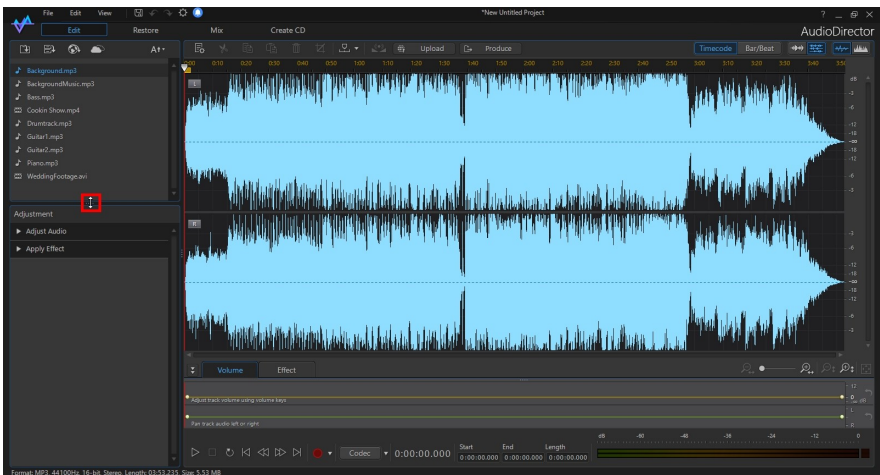
You can adjust the CyberLink AudioDirector workspace to fit your editing requirements. For example, you can expand out the adjustment and effects panel to get better look at all the available controls, if required.



You can also expand the keyframe panel for a better view when adjusting the master volume and panning audio left or right. Doing so, reduces the width of the audio tracks in the timeline.



If you have lots of media in the library, you can expand it to view all the files.



Keyframes Panel

The keyframes panel provides powerful and precise editing tools in the Edit room. On the **Volume** tab you can adjust the master volume of audio, or pan audio to the left or right channel. On the **Effect** tab, you can precisely apply multiple effects to a single audio clip.

Volume Tab

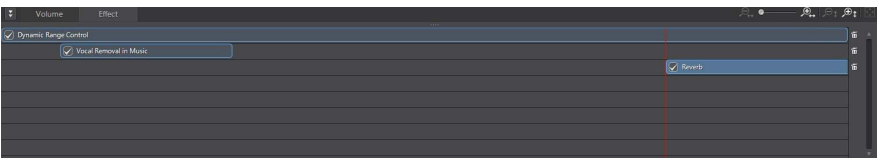
On the Volume tab on the keyframes panel, you can adjust the master volume and pan audio the left or right.




See [Adjusting Master Volume](#) and [Panning Audio Left/Right](#) for more detailed information on the use of these editing features.



Effect Tab

The Effect tab shows you precisely where effects you applied are located in the audio clip you are editing.



On this tab you can perform the following on the effects:

- deselect an effect to disable it and preview the audio without the effect applied. Reselect it to reapply it.
- hover your mouse over the effect on the tab and then click  to edit the effect in the effects panel.

- to remove effects, hover your mouse over the effect on the tab and then click  on the individual effect. Click  to the right of the panel to remove all the similar effects from the entire timeline.

Chapter 3:


Importing Media

You can import both audio and video files from your hard drive or from a removable device, into CyberLink AudioDirector. You can also record your own custom audio, or download sound clips from DirectorZone directly into the library.



Note: when media is imported into the library, CyberLink AudioDirector creates a temp working file for each file. It uses the file to log the edits and changes you want to make to the original files. The changes are not applied to the original file, as you must produce the audio and output it as a new file to apply them.

Importing Audio and Video Files

To import audio or video from your hard drive or a removable device, click , browse to its location, and then click on **Open**. You can import multiple files into the library at once and then work on them all in CyberLink AudioDirector.

When importing video files you must make sure that **Video files** is selected from the format type drop-down so that the files you are trying to import are visible.

Once imported, use the playback controls to preview both the audio and video. See [Playback Controls](#) for more information.

Supported Formats

CyberLink AudioDirector supports the import of audio and video files in the following formats:

Audio: AIF, AIFF, APE, CAF, DSD Audio, FLAC, MP3, M4A (AAC, ALAC), OGG, WAV, WMA**.



Note: ** CyberLink AudioDirector does not support the editing of WMA audio files with DRM file protection.

Video: 3GPP2, AVI, DivX (on Windows 7), DV-AVI, DVR-MS, HD MPEG-2, M2T (H.264 AVC, H.265 HEVC), MKV (H.264 AVC, H.265 HEVC), MOD, MOV, MOV (H.264 AVC), MP4 (H.264 AVC, H.265 HEVC), MPEG-1, MPEG-2, TOD, VOB, VRO, WMV, WMV-HD.



***Note:** CyberLink AudioDirector supports the import and edit of audio and video files with 5.1 channel audio. It also supports the import of audio and video files with 7.1 channels, but only for .WAV audio files are all 8 channels displayed in the program and available for editing. For video files with 7.1 channel audio, two of the audio channels (BL/BR) are hidden and unavailable for editing.*


Downloading Sound Clips and Media Files

You can download audio and video files from CyberLink Cloud, and sound clips from DirectorZone. Sound clips downloaded from DirectorZone are stored in the Downloaded Sound Clips Library of CyberLink AudioDirector.

Downloading Sound Clips from DirectorZone

You can download sound clips from DirectorZone that were shared by other CyberLink AudioDirector users. Sound clips are audio files that are up to 30 seconds in length.


To download sound clips from DirectorZone, do this:

1. Click on . CyberLink AudioDirector launches DirectorZone in your default web browser.
2. You must first sign in to DirectorZone to download content. If you don't have an account, click the **Sign up** link at the top of the page to get one for free.
3. If required, select the **Products > AudioDirector** to display all the available sound clips you can download.
4. Find a sound clip that you want to download, and then click the **Download** button.
5. Click **Download** again.
6. Save the sound clip to your computer. Find the location on your computer where you saved it, and then double-click on it to install it in the [Sound Clips Library](#).

My DirectorZone Sound Clips

If required, you can easily download the sound clips that you previously uploaded to DirectorZone and re-import them into the sounds clips library. You can also access and download sound clips from your DirectorZone download history and also your favorite sound clips.

To download My DirectorZone sound clips, do this:

1. Click on the  button.
2. Click the **My DirectorZone** tab.
3. Filter the sound clips by **My Uploads**, **Download History**, or **My Favorites**, or enter a search keyword in the field provided.
4. Select all of the sound clips you want to download.
5. Click **Download** to download them to your computer and import them into the sound clips library.

Downloading Media Files from CyberLink Cloud

If you have a CyberLink Cloud subscription you can download the audio and video files you previously backed up to CyberLink Cloud. Once downloaded, these media files are stored in the download folder specified in [CyberLink Cloud Preferences](#), and imported into the media library.


To download media files from CyberLink Cloud, do this:

1. From the menu, select **File > Download Media from CyberLink Cloud**.
2. Click the **Video** tab to download your video files, or **Music** to download your audio files.
3. Select all of the media files you want to download.
4. Click **Download** to download them to your computer and import them into the media library.


My CyberLink Cloud Audio

If required, you can also download the CyberLink Cloud audio files from within the media library.

To download audio files from CyberLink Cloud, do this:

1. Click on  button.
2. Click the **My CyberLink Cloud** tab.
3. Filter the audio files by selecting a collection from the drop-down, or enter a search keyword in the field provided.
4. Select all of the audio files you want to download.
5. Click **Download** to download them to your computer and import them into the media library.

Sound Clips Library

Click the  button to open the sound clips library of CyberLink AudioDirector. In the sound clips library you can manage and organize the clips you downloaded from DirectorZone and CyberLink Cloud*.



Note: * CyberLink Cloud is a cloud service from CyberLink that is currently only available to users who have a subscription to AudioDirector Live.

In the sound clips library you can:

- view sound clips by category.
- preview the sound clips in the library.
- import the selected sound clips into your current project.

Recording Audio


In CyberLink AudioDirector you can record your own custom audio in the WAV format, which is added directly into the timeline when in the Edit, Restore, or Mix room. The audio that is recorded is placed onto any existing audio in the timeline.


You can record using a connected microphone, or select the **What You Hear** option to loop back record audio coming from an audio device that is connected to your computer.




Note: *in the Mix room you can use loop recording to perform multiple recording takes in succession. See [Using Loop Recording to Record Audio](#) for more information.*


To record audio, do this:

1. If required, click on  to open and configure the settings for recording, including setting the recorded audio source. See [Record Audio Settings](#) for detailed information.

2. To begin recording audio, click .



Note: *if you are recording audio in the Mix room, you must first enable the track in the mix's timeline that you want to record the audio to. Click the  button on the track where you want the recording to be placed.*


3. Click  again to stop recording and save/import the recorded file into the CyberLink AudioDirector library.

Record Audio Settings

Configure the settings for recording audio as follows:

- **Devices:** select the import source, or audio device, you want to use to record audio with by doing one of the following:



Note: *in the Mix room you can record audio from multiple devices at the same time. Click  to select each device for the specific Mix room track.*

- **Microphone:** select this option and then the microphone from the list if you want to record from a connected microphone.
- **What You Hear:** select this option to loop back and record the audio that you are hearing on your computer. Just select from the devices connected to your computer that is the source of the audio, i.e. sound card, speakers, etc.
- **Channels:** select the channel (or **Stereo** if you want it recorded in both channels) you want the audio recorded to.


- **Sample rate:** set the sample rate of the recorded file by selecting it from the drop-down.
- **Bit depth:** set the bit depth of the recorded file by selecting it from the drop-down.
- **Monitor input:** set this option to **On** if you want to hear the import source during the recording. If set to **Off**, you cannot hear the input source during recording.
- **Countdown timer:** select this option to enable a countdown before CyberLink AudioDirector begins recording audio. Set the length of the countdown (maximum 30 seconds) in the field provided.



Click **OK** to save any changes you make to the recording settings.

Using Loop Recording to Record Audio

When in the [Mix Room](#) you can use loop recording to record multiple takes in succession. This can help you when recording song verses, voice overs, etc. in a mix, allowing you to choose the best take when you are done.



To use loop recording, do this:

1. In the Mix room, click on  next to the record button underneath the timeline.
2. Select the **Loop recording** option and then configure the available settings as follows:
 - **Record to new track:** select this option if you want each recorded take to be added to a new track in the Mix room timeline. This allows you to review each recorded take once the recording is finished. If you don't select this option, each new take is recorded over the previous one.
 - **Pre-roll:** select this option to enable a pre-roll before the recording starts. Once enabled, enter in the amount of time in seconds you want the other audio in the mix to play before recording starts.
 - **Post-roll:** select this option to enable a post-roll after the recording stops. Once enabled, enter in the amount of time in seconds you want the other audio in the mix to play after the recording stops before it loops back to the beginning.

- **Countdown timer:** select this option to enable a countdown before CyberLink AudioDirector begins recording audio. Set the length of the countdown (maximum 30 seconds) in the field provided.
3. Click **OK** to close the Recording settings.
 4. In the Mix room timeline, click the  button to enable recording on the track where you want the recording to be placed. Click  to configure the recording settings by selecting the import source for the recorded audio, and whether you want to monitor the input. See [Recording Settings](#) for more information.




Note: if you selected to add each looped recording on a new track, CyberLink AudioDirector automatically adds the new track underneath the enabled track in the timeline.

5. Use range selection to select where you want the recording to begin and end, i.e. its length. See [Range Selection](#) for more information.
6. Click  to record. After the pre-roll (if enabled), start recording as required. The recorded content will be added to the selected range on the enabled track.
7. Repeat your recording until you are satisfied you got the right take, and then click  to stop recording.
8. Once you have finished recording, you can preview each take as required and remove any recorded files from the mix timeline and the library.

Chapter 4:

AudioDirector Projects

When editing, restoring, and mixing audio in CyberLink AudioDirector, click the  button to save your work as a project in the .ads file format, which is used exclusively by CyberLink AudioDirector.



Note: a CyberLink AudioDirector project (.ads) file essentially contains a list of the audio and video files in the library, and that you are editing or mixing. The project file maintains a log of all the edits and effects you want to apply to audio, as well as a list of the audio for mixing and other use preferences (volume levels, timeline markers, etc.). Project files do not include the audio and video clips in them.

Use the options in the **File** menu to save, create new, or open existing projects in CyberLink AudioDirector. If you have a CyberLink Cloud subscription you can also upload saved projects and more to CyberLink Cloud. See [CyberLink Cloud Projects](#) for more information.



Note: when you create a new project, CyberLink AudioDirector resets your library. If you are in the Mix room and you want to create a new mix using the same media that's currently in your library, select **File > New Workspace**.

The changes you make to your audio clips in CyberLink AudioDirector do **not** affect the original audio files you imported into the program. Since your edits are all saved in the project file, you can edit and make adjustments to your clips, but still keep your original files on your hard drive, untouched. So let yourself get creative. If you end up changing things too drastically, you can always start over.

Exporting Projects

You can export your CyberLink AudioDirector projects by packing all the materials in a folder on your computer's hard drive or CyberLink Cloud*. Exported projects can then be imported into another computer running CyberLink AudioDirector.

To export your project, select **File > Export/Pack Project Materials**. If you are a AudioDirector Live subscriber you can select **File > Pack Project Materials and Upload to CyberLink Cloud** to back up all the media files, and the project file, in a folder on CyberLink Cloud.



Note: * CyberLink Cloud is a cloud service from CyberLink that is currently only available to users who have a subscription to AudioDirector Live.

CyberLink Cloud Projects

If you have a CyberLink Cloud subscription you can select **File > Upload Project to CyberLink Cloud** to store project files on the CyberLink Cloud service from CyberLink.

To open a project that was saved on CyberLink Cloud, including projects that were packed in a folder with their media (materials), select **Download Project from CyberLink Cloud** from the **File** menu. In the window that displays, select a project and then click **Download**.



Note: when you open a packed project stored on CyberLink Cloud, the project file and all the project media is downloaded to your local computer and stored in the download folder specified in [CyberLink Cloud Preferences](#).

Chapter 5:

Basic Audio Editing

While adjusting, restoring, mixing, or applying effects to audio, there may be some basic audio editing you need to do. This includes converting the audio, cropping, trimming it and more.




Note: the changes to the audio are not applied to the original file, as you must produce it as a new file in the Produce window. See [Producing the Audio](#) for more information.

Converting Audio Profiles

CyberLink AudioDirector lets you convert the audio profile of a media (audio or video) file by adjusting its sample rate, bit depth, and the number of audio channels it contains.

To convert the audio profile of a media file, do this:






1. In the **Edit** and **Restore** room, select the media file in the library that you want to convert.
2. Click the  button above the audio timeline.
3. As required, change the following audio profile settings:
 - **Sample rate:** select the new sample rate you want the media file to have. A higher sample rate increases audio quality and file size.
 - **Bit depth:** select the new bit depth you want the media file to have. A higher bit depth also increases the audio quality and file size.
 - **Channels:** set the number of channels you want the media file to have. Note that added channels are left empty, allowing you to further edit them in CyberLink AudioDirector later.
 - **CyberLink TrueTheater Surround:** if you want to increase the number of channels in the audio, select this option to use CyberLink TrueTheater Surround to enhance the quality of the expanded audio. You can choose from Living Room, Theater, or Stadium.
4. Click **OK** to apply the changes.

Using the Editing Tools

Use the editing tools on the AudioDirector quick bar to crop, trim, and even add portions (using the paste function) to your audio.

To edit an audio file, do this:

1. In the **Edit**, **Restore**, or **Mix** room, select the media file in the library that you want to edit.
2. Decide whether you want to perform the edits on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
3. Use range selection to select the portion of audio you want to edit. See [Range Selection](#) for more information on selecting a range of an audio file.
4. Use the editing tools to perform edits on your audio files as follows:

Editing Tools	
	Click to cut the selected portion out of the audio file, and place it on your clipboard for pasting.
	Click to make a copy of the selected portion on your clipboard for pasting.
	Click to paste the audio wave form you cut or copied to the right of the timeline slider's current position.
	Click to delete the selected portion of the audio file.
	Click to crop out the selected portion of the audio file, removing the parts of the audio file that are not selected.

Normalizing Audio

If you find that audio on some channels is much louder than on other channels when editing or restoring it, you can normalize the volume across all channels. Normalizing is the process of applying a constant amount of gain to your audio file to bring the average or peak amplitude (volume levels) to a same level. You also use this feature in the Mix room to ensure all the audio in your mix has the same volume levels.

To normalize the audio channels for a media file, do this:




Note: *this section is for normalizing the audio across all channels in the Edit and Restore rooms. For information on normalizing the audio in the Mix room see [Normalizing Audio Across Multiple Tracks](#).*

1. In the **Edit** or **Restore** room, select the media file in the library that has the audio channels you want to normalize.
2. If required, use range selection to select the portion of audio you want to normalize. See [Range Selection](#) for more information on selecting a range of an audio file.



Note: *be sure to select the entire audio file's waveform if you want to normalize the audio in the entire track.*

3. Click the  button to normalize the volume of the selected audio.

Chapter 6:

Adjusting Audio

Once you have imported media into the library, you can start using the features in the adjustments and effects panel to modify the audio to fit your requirements. To begin, select the media you want to adjust and then click **Adjust Audio** to display all the available adjustment options.



Note: when you make adjustments to audio, they are not applied to the original file until you produce it in the Produce window. See [Producing the Audio](#) for more information.

Boosting Audio Volume

Use the Boost feature to increase the volume of audio. You can boost the volume by up to 12 decibels.

To boost audio volume, do this:

1. Select the media file in the library that you want to adjust.
2. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Boost** under the **Adjust Audio** section.
3. Decide whether you want to boost the audio's volume on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Use range selection to select the portion of audio you want to boost. See [Range Selection](#) for more information on selecting a range of an audio file.






Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

5. Drag the **Volume** slider, boosting the selected range of audio the desired decibels.
6. If required, you can preview how the adjusted audio will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
7. Click **Apply** to apply the boost.




Applying Fades

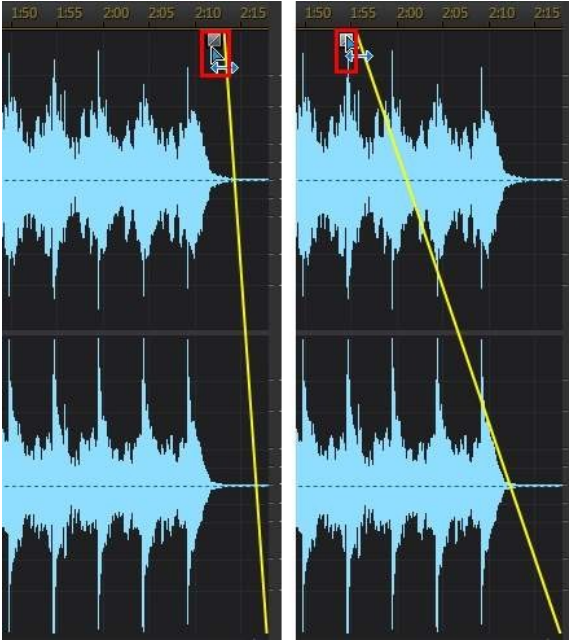
Use the Fades feature to apply fades to audio. You can make the audio fade in or out in a variety of ways.

To apply a fade to audio, do this:

1. Select the media file in the library that you want to adjust.
2. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Fades** under the **Adjust Audio** section.
3. Decide whether you want to apply the fade on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. To fade the audio in from the beginning of the clip, select the **Fade in** option and then set the following:
 - select from one of the three fade in types:  - a gradual fade in that increases the volume proportionately during the length of the fade;  - fades audio in dramatically at first, and then tapers off towards the end of the fade;  - exponentially increases the audio as it progresses through the length of the fade.
 - **Initial volume:** set the level of the audio's volume at the beginning of the fade in.
 - by default the fade in duration is 5 seconds. To change the duration, click and drag the grey square to the desired time you want the fade to end, i.e the audio to be at full volume.



5. To fade the audio out at the end of the clip, select the **Fade out** option and then set the following:
 - select from one of the three fade out types:  - a gradual fade out that decreases the volume proportionately during the length of the fade;  - fades audio out dramatically at first, and then tapers off towards the end of the fade;  - exponentially decreases the audio as it progresses through the length of the fade.
 - **End volume:** set the level of the audio's volume at the end of the fade out.
 - by default the fade out duration is 5 seconds. To change the duration, click and drag the grey square to the desired time you want the audio to begin fading out.



6. If required, you can preview how the adjusted audio will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
7. Click **Apply** to apply the fade.

Trimming Audio


Use the Trim Audio feature to trim out unwanted portions from your media clip's audio.

To trim audio, do this:

1. Select the media file in the library that you want to trim.
2. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Trim Audio** under the **Adjust Audio** section.

3. Decide whether you want to perform the trim on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Use range selection to select the portion of audio you want to trim. See [Range Selection](#) for more information on selecting a range of an audio file.
5. Select the **Mode** of trimming you want to perform as follows:
 - **Remove selected part:** select if you want to trim out the part you selected in the previous step.
 - **Keep selected part:** select if you want to keep the part you selected in the previous step, removing the portions on either side.



*Note: if required, click  to use the **Mark in** and **Mark out** previews to listen to the audio a few seconds before and after the trim points to ensure you are trimming the audio you want.*

6. Click **Apply** to trim the audio.

Adjusting Length (Change Speed)

Use the Adjust Length (change speed) feature to change the length of audio by speeding it up, or by slowing it down.

To adjust the length of audio, do this:

1. Select the media file in the library that you want to adjust.
2. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Adjust Length (change speed)** under the **Adjust Audio** section.
3. Decide whether you want to perform the adjustment on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. If required, use range selection to select the portion of audio you want to adjust the length of. If you don't select a range, the adjustment is applied to the entire audio file. See [Range Selection](#) for more information on selecting a range of an audio file.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

- To adjust the length of the audio, do one of the following:
 - Manually enter the **New audio length** in the field provided. Use this feature if you want the audio to be an exact specified length.
 - Use the **Speed multiplier** slider to speed the audio up by up to 10X, or slow it down up to 0.1X. Dragging it left slows down and lengthens the clip. Dragging it right speeds it up and shortens the clip.



Note: if required, you can use both the **New audio length** and **Speed multiplier** features together to adjust the length of the audio.

- Select the **Keep pitch** option to have CyberLink AudioDirector maintain the pitch of the original audio, so that the adjusted result does not sound sped up or slowed down.



Note: **Keep pitch** is only available if the change to the audio's length is between 0.5X and 2X.

- If required, you can preview the adjusted audio by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the audio at its original length.
- Click **Apply** to adjust the length of the audio.

Shifting Pitch

Use the Pitch Shifter feature to change the pitch of the audio. The resulting effect is audio that sounds like it is sped up or slowed down, without changing the length of the audio.

To shift the pitch of audio, do this:

- Select the media file in the library that you want to adjust.
- Click the **Edit** button, and then **Pitch Shifter** under the **Adjust Audio** section.
- Decide whether you want to perform the adjustment on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.

- If required, use range selection to select the portion of audio you want to adjust the pitch in. If you don't select a range, the adjustment is applied to the entire audio file. See [Range Selection](#) for more information on selecting a range of an audio file.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

- Drag the **Semitones** slider to adjust the pitch up or down as required.



Note: increasing/decreasing by one semitone is equivalent to changing the overall the pitch up/down one musical note in a 12-tone scale. For example, C to C# (sharp) or C to Cb (flat).

- If required, you can preview how the adjusted audio will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the audio at its original pitch.
- Click **Apply** to adjust the pitch of the audio.

Using the Pitch Bender

Use the Pitch Bender to bend the pitch of the audio by changing its tempo.

To bend the pitch of audio, do this:

- Select the media file in the library that you want to adjust.
- Click the **Edit** button, and then **Pitch Bender** under the **Adjust Audio** section.
- Decide whether you want to perform the adjustment on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
- If required, use range selection to select the portion of audio you want to bend the pitch in. If you don't select a range, the adjustment is applied to the entire audio file. See [Range Selection](#) for more information on selecting a range of an audio file.




Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.


- Select a preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.



Note: the purple line, or envelope, that displays on the timeline is a visual representation of the change in tempo in the audio.

6. If required, you can manually adjust the tempo at a point in the audio by clicking and dragging on the envelope on the timeline. Drag it up to increase the tempo, or down to decrease it.
7. If required, click  to modify the advanced settings as follows:
 - **Spline curves:** when selected, this option enables a change in tempo that is more gradual with the use of a spline curve. Deselect this option if you want the change in tempo to be more sudden, i.e. a straight line.
 - **Range (Semitone):** drag the this slider to adjust the range of the envelope. Drag it left to decrease the length of the envelope (and the new audio), or right to increase it.



Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.

8. If required, you can preview how the adjusted audio will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the audio at its original pitch.
9. Click **Apply** to bend the pitch of the audio.

Inserting Silence

Use the Insert Silence feature to add a specified amount of silence into audio clips.

To insert silence into audio, do this:



Note: you can also silence a range of audio by selecting it, right clicking on the selection, and then selecting **Silence Selected**. This does not insert a range of silence, but rather silences the selected audio.

1. Select the media file in the library that you want to add silence to.
2. Click the **Edit** button, and then **Insert Silence** under the **Adjust Audio** section.
3. Decide whether you want to perform insert the silence on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.

4. Drag the timeline slider to the position in the audio clip where you want to insert the silence.
5. Enter the duration, in seconds, of the silence to be inserted in the field provided.
6. Click **Apply** to insert the silence.

Inserting Noise

Use the Insert Noise feature to add a specified amount of generated noise, or static, into audio clips.

To insert noise into audio, do this:

1. Select the media file in the library that you want to add noise to.
2. Click the **Edit** button, and then **Insert Noise** under the **Adjust Audio** section.
3. Decide whether you want to perform insert the noise on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Drag the timeline slider to the position in the audio clip where you want to insert the noise.
5. Select one of the following types of noise from the **Noise type** drop-down:
 - **Normal:** common white noise, or static, which can be quite loud to the listener.
 - **Pink:** static like noise that sounds softer and quieter than normal white noise.
 - **Brown:** a lower frequency static like noise, which is quite quiet compared to the others.
6. Enter the duration, in seconds, of the noise to be inserted in the field provided.
7. Click **Apply** to insert the noise.

Reversing Audio

Use the Reverse feature to make a selected audio clip play in reverse.

To reverse audio, do this:

1. Select the media file in the library that you want to reverse.
2. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Reverse** under the **Adjust Audio** section.
3. Decide whether you want to perform reverse the audio on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. If required, use range selection to select the portion of audio you want to reverse. If you don't select a range, the adjustment is applied to the entire audio file. See [Range Selection](#) for more information on selecting a range of an audio file.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

5. If required, you can preview how the reversed audio will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
6. Click **Apply** to reverse the audio in the selected clip.

Ambience Match

Use the Ambience Match feature to add ambience, or background noise, into your audio and video clips. You can also use this feature to extract the ambience from a clip.

To use Ambience Match on audio, do this:

1. Select the media file in the library that you want to use.
2. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Ambience Match** under the **Adjust Audio** section.
3. Select one of the following options:
 - **Add Ambience:** select this option if you want add background noise into an existing video or audio clip. See [Adding Ambience](#) for more information.
 - **Extract Ambience:** select this option to extract the background noise in a media clip. See [Extracting Ambience](#) for more information.
4. If required, use range selection to select the portion of audio you want to add or extract ambience. See [Range Selection](#) for more information on selecting a

range of an audio file. If you don't select a range, the entire audio clip will be used.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

5. If required, you can preview how the resulting audio will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
6. Click **Apply** to add/extract the ambience in the selected clip.

Adding Ambience

To add ambience to selected audio, do this:

1. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Ambience Match** to open the Ambience Match window.
2. Select the **Add Ambience** button.
3. **Select a type of ambience** from the drop down.



*Note: click the **Ambience** button to listen to a preview of each ambience in the drop down list.*

4. Use the **Level** slider to set the volume level of the added ambience, as required.
5. If required, you can preview the audio with the added ambience by selecting **Adjusted result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.
6. Click **Apply** to add the ambience.

Extracting Ambience

The extract ambience feature can be used to:

- extract the ambience from a media clip and then save it as a preset. This ambience preset can be added to other clips as required.
- extract the ambience from a selected range, and then apply it to another range in the same clip.

Saving Ambience as a Preset

To extract ambience from selected audio and save it as a preset, do this:

1. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Ambience Match** to open the Ambience Match window.
2. Select the **Extract Ambience** button.
3. Click the **Analyze** button.



*Note: click the **Ambience** button to listen to a preview of the extracted ambience.*

4. Use the **Level** slider to set the volume level of the extracted ambience, as required.
5. Click the **Save as Preset**.
6. Enter a name for the new ambience preset and then click **OK**.
7. Click the **Cancel** button to exit the Ambience Match window.

Extracting and Applying Ambience to Same Clip

To extract ambience from selected range and then apply it to the same clip, do this:

1. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Ambience Match** to open the Ambience Match window.
2. Select the **Extract Ambience** button.
3. Use range selection to select the portion of audio where you want to extract the ambience. See [Range Selection](#) for more information on selecting a range of an audio file.
4. Click the **Analyze** button.



*Note: click the **Ambience** button to listen to a preview of the extracted ambience.*

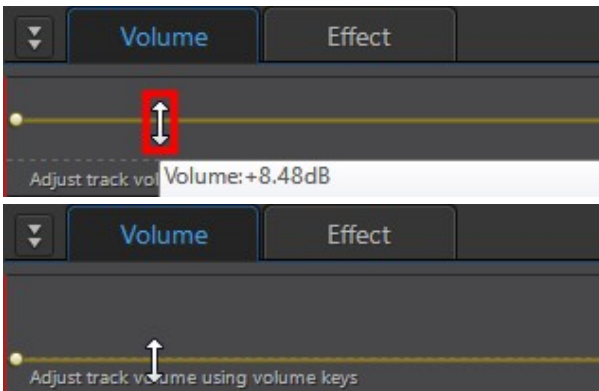
5. Use the **Level** slider to set the volume level of the extracted ambience, as required.
6. Use range selection to select a different portion of audio where you want to apply the extracted ambience.
7. If required, you can preview the audio with the applied ambience by selecting **Adjusted result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to apply the extracted ambience on the selected range.

Adjusting the Master Volume

On the **Volume** tab in the keyframe panel, you can manually adjust the volume level of an audio file at any point in the timeline.

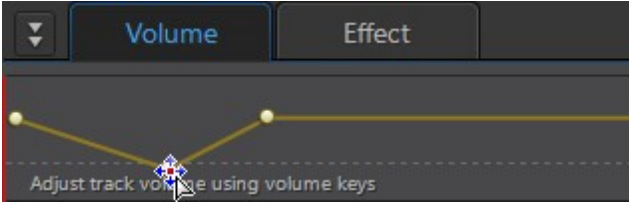
Adjusting Volume for Entire Clip Duration

To adjust the volume level for the entire duration of a clip in the timeline, just click and drag the audio level line up or down as required. Dragging the line up increases the volume. Dragging it down decreases the volume.



Using Volume Keyframes to Mix Audio Level

If you want to use volume keyframes to mix audio in the timeline, hold down the Ctrl key on your keyboard and then click on the audio level line at the point where you want to change the audio level. Drag the volume keyframe up to increase the volume, or down to decrease the volume.



Note: to remove a volume keyframe, drag it outside the border of the volume keyframe area.

Preview your edited audio and once you are satisfied with the result, you are ready to save/produce it as a new audio file. See [Producing Audio](#) for more information.

Panning Audio Left/Right

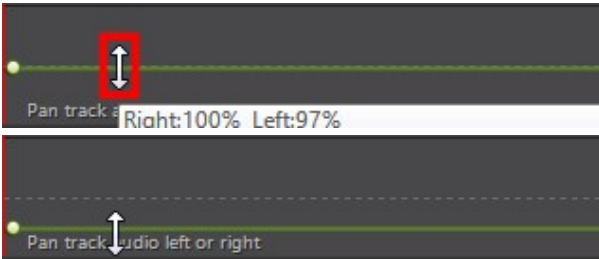
On the **Volume** tab in the keyframe panel, you can manually balance audio by panning it to the left or right channel, reducing the volume of the audio in the respective channel.



Note: when panning 5.1 or 7.1 audio, the center channels are not affected.

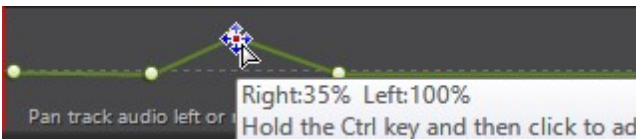
Panning Audio for Entire Clip Duration

To pan the audio level for the entire duration of a clip in the timeline, just click and drag the pan audio line up or down as required. Dragging the audio level line up pans the audio left. Dragging it down pans it right.



Using Volume Keyframes to Pan Audio

If you want to use volume keyframes to pan audio in the timeline at specific intervals, hold down the Ctrl key on your keyboard and then click on the pan audio line at the point where you want to pan the audio. Drag the volume keyframe up to pan the audio left, or down to pan it right.



Note: to remove a volume keyframe, drag it outside the border of the pan audio keyframe area.

Preview your edited audio and once you are satisfied with the result, you are ready to save/produce it as a new audio file. See [Producing Audio](#) for more information.

Chapter 7:

Applying Audio Effects

In CyberLink AudioDirector you can choose from a number of default effects and apply them to your audio files. You can also import custom VST plugin effects that you downloaded and apply them to your audio.



Note: when you apply effects to audio, they are not applied to the original file, as you must produce it as a new file in the Produce window. See [Producing the Audio](#) for more information.

Using Dynamic Range Control

Use Dynamic Range Control to adjust the shaping of the dynamics in your audio.

To use dynamic range compression on audio, do this:

1. Select the media file in the library that you want to use dynamic range compression on.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Dynamic Range Control** under the **Apply Effect** section.
5. Use the **Output Gain** slider to adjust the output gain for the processed file to make up for a decrease in the audio's volume.
6. Use the control sliders as follows:



Note: see [Common Dynamic Range Controls](#) below of a description of what each available slider does in the Dynamic Range Control window.

- **Limiters:** adjust these sliders to aggressively limit high level signals. You can use the limiter to prevent clipping or distortion.
 - **Compressor:** use these sliders to apply more gentle dynamic control to medium level signals and peaks.
 - **Gate/Expander:** use these sliders to boost (expand) the level of soft signals. Note that the expander can have a ratio greater or less than 1.0. When the ratio is greater than 1, it is operating as a gate and any signals below the threshold will be decreased in volume.
7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the Preview button. Select **Original audio** if you want to preview the original audio.
 8. Click **Apply** to apply the dynamic range control.



Note: if required, click on the Effect tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Common Dynamic Range Controls

When using the Dynamic Range Control sliders, adjusting these common control sliders will have the resulting effects:

- **Threshold:** use to set the point where the dynamics processing takes place.
- **Ratio:** use to set the ratio for its respective dynamics section. Higher ratios will result in more extreme compression, limiting or expansion.
- **Attack:** use to set how quickly the compressor, limiter or expander/gate reacts (in milliseconds) to an incoming signal when the signal passes the specified threshold.
- **Release:** use to set how quickly the module stops applying compression, limiting or expansion/gating when the signal falls below the threshold.

Adding Delays


Use the Delay effect to add analog and tape-style echoes to your tracks. This vintage gear-inspired delay unit has unique features, including a delay meter that lets you see and adjust the level and spacing of each echo generated.

To add a delay to audio, do this:


1. Select the media file in the library that you want to add the delay to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Delay** under the **Apply Effect** section.
5. Select a delay preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:
 - **Delay Time:** sets the delay time in milliseconds by default.
 - **Dry Out:** sets the output gain of the dry signal without delay added to the signal.
 - **Wet Out:** sets the output gain of the wet/delayed signal.
 - **Feedback:** sets the gain of the delay feedback. Higher values will result in longer audible feedback times, i.e. more repeats.



*Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.*

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the Preview button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the delay to the audio.



*Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.*

Adding Reverb


Use Reverb to apply an effect that reverberates the original audio, i.e. applies an echo-like effect to it.

To add reverb to audio, do this:


1. Select the media file in the library that you want to apply the reverb effect to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Reverb** under the **Apply Effect** section.
5. Select a reverb preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:
 - use the **Sparkle** slider to add a grainy sound to the audio. The more sparkle applied, the grainier it will sound.
 - use the **Room width** slider to widen a stereo audio signal without disturbing the low frequencies. This allows you to control the perceived location of the sound, ranging from a more centered source to one that is wider left and right.
 - use the **Room size** slider to add reverberation to the audio signal, simulating it being played in a room. Larger values will simulate a larger room.
 - use the **Dry-Wet mix** slider to set the ratio between the dry (original direct sound) and wet (reflected sound) audio. Adjusting the mix can help change the perceived distance of the audio from the listener, giving the audio spatial depth.



Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the reverb effect to the audio.



Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Creating a Phase Effect


Use the Phaser to create a phase effect, which is produced by splitting an audio signal and then filtering it by shifting the signal's phase to and from the audio's frequency. This modified (wet) audio signal is then mixed back together with the original (dry) audio, giving the audio a watery or sweeping sound.

To add a phase effect to audio, do this:

1. Select the media file in the library that you want to apply the phase effect to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.




Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Phaser** under the **Apply Effect** section.
5. Select a phaser preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:

- **Stage count:** from the drop-down, select the number of stages, or phase shifting filters, that are applied to the audio signal. The more stages you select, the more dense sounding the phase effect will be.
- **Delay depth:** use the slider to set how much the filters sweep below the source frequency. The larger the delay depth, the more of a trembling effect it will have on the audio.
- **Modulation rate:** use the slider to control how quickly (measured in hertz, or cycles per second) the filters sweep to and from the source frequency of the audio.
- **Feedback:** use the slider to set the percentage of the phaser output that is fed back in to the original audio. A negative value will invert the phase waveform before feeding the audio back, reducing the loudness of the audio.
- **Dry-Wet mix:** use the slider to set the ratio between the dry (original audio) and wet (modified/filtered sound) audio. Dragging the slider to the left provides more of the original audio in the mix, while to the right adds more of the modified audio.



Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the phase effect to the audio.



Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Creating a Flange Effect

The flange effect is a time delay effect that is created by mixing two audio channels together, after performing a phase shift on one of the channels and then slightly delaying its signal. This produces a subtle swirling or psychedelic sound effect in the audio.


To add a flange effect to audio, do this:

1. Select the media file in the library that you want to apply the flange effect to.


2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Flanger** under the **Apply Effect** section.
5. Select a flanger preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:
 - **Initial delay time:** use this slider to set how far behind, in milliseconds, the audio with the flange effect applied will start behind the original audio signal.
 - **Delay depth:** use this slider to control the depth of the pitch that is applied to the effect.
 - **Phase diff:** use this slider to set the phase difference between the two channels (0~360 deg).
 - **Feedback:** use the slider to set the percentage of the delayed output that is fed back in to the original audio. Adjusting this option can greatly intensify the effect.
 - **Modulation rate:** use the slider to control how quickly (measured in hertz, or cycles per second) the filters sweep to and from the source frequency of the audio.
 - **Shape:** select the shape of the transition from the initial delay time to final delay, and then back again. **Sine** makes the transition follow a sine wave, while **Triangle** makes it follow a triangle wave.
 - **Dry-Wet mix:** use the slider to set the ratio between the dry (original audio) and wet (delayed flanged audio signal) audio. Dragging the slider to the left provides more of the original audio in the mix, while to the right adds more of the modified audio.



Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the flange effect to the audio.



Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Adding a Chorus Effect


In CyberLink AudioDirector you can make your audio sound richer by adding a chorus effect to it. This is done by adding some delays and feedback, so it sounds as if multiple audio sources, voices, or instruments are playing together.

To add a chorus effect to audio, do this:

1. Select the media file in the library that you want to apply the chorus effect to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.




Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Chorus** under the **Apply Effect** section.
5. Select a chorus preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:

- **Voices count:** use this slider if you want to increase the perceived number of voices in the audio. As you drag the slider right, the number of voices heard in the audio increases.
- **Initial delay time:** use this slider to set how far behind, in milliseconds, the audio with the chorus effect applied will start behind the original audio signal.
- **Delay depth:** use this slider to control the range of sweeping in each modulation period.
- **Modulation rate:** use the slider to control how quickly (measured in hertz, or cycles per second) the filters sweep to and from the source frequency of the audio.
- **Decay:** use the slider to set the amount of decay on the effect, or the relative strength/amplitude (to the original) of the copied effect. Adjusting this option can greatly intensify the effect.
- **Dry:** use this slider to set the amount of original audio that will be in the adjusted audio.
- **Wet:** use the slider to set the amount of wet (audio with chorus effect applied) audio that will be in the adjusted audio.



Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the chorus effect to the audio.



Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Adding an Echo Effect

In CyberLink AudioDirector you can add an echo to your audio, by adding a series of delayed and decaying sources of the original audio to it.


To add an echo effect to audio, do this:

1. Select the media file in the library that you want to apply the echo effect to.


2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: *the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.*

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Echo** under the **Apply Effect** section.
5. In the window that displays, select the echo preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:
 - **Initial delay time:** use this slider to set how far behind, in milliseconds, the audio with the echo effect applied will start behind the original audio signal.
 - **Feedback:** use this slider to set the ratio that determines how long the echoed sound will last. Dragging the slider left produces less of an echo, while dragging it right can produce an echo that never seems to fade out.
 - **Equalizer:** use these sliders to adjust the room characteristics where the audio is being reflected to create the echo. More reflective surfaces create a brighter sound, while a room with absorbent walls creates an echo that is a lot darker.



Note: *once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.*

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the echo effect to the audio.



Note: *if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.*

Transforming Vocals

Use the Vocal Transformer effect to transform the voice in a media clip.

To transform the voice in a media clip, do this:




Note: for the best results, it is recommended that the audio only contains the sound of voice, as the effect can affect the other audio harmonics in the clip.


1. Select the media file in the library that you want to transform the vocals in.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Vocal Transformer** under the **Apply Effect** section.
5. Select one of the **Presets** from the drop down. Each preset provides a different effect to the voice.
6. If required, click  to modify the advanced settings as follows:
 - **Pitch:** use this slider to adjust the pitch of the transformed voice. Dragging the slider right will make the voice higher, while dragging it left will make it deeper.
 - **Timbre:** use this slider to adjust the tone quality of the voice. Adjusting this slider can significantly change the characteristics of the voice.



*Note: if you selected the **Custom** preset, you can then select **Robot voice** and/or **Duck voice** as a starting point for the custom voice you create using the above settings. Once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.*

- If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
- Click **Apply** to apply the effect to the audio.



Note: if required, click on the **Effect tab** to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Using the Equalizer


Select Equalizer effect to apply preset equalizer filters on your audio. You can also fully customize the overall sound of your audio using the available sliders.

To use the equalizer on audio, do this:


- Select the media file in the library that you want to use the equalizer on.
- If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

- Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
- Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Equalizer** under the **Apply Effect** section.
- If required, select an equalizer preset from the **Presets** drop down. Equalizer presets can enhance audio, and the preset you should select depends on the type of audio or genre of music you are editing.
- If required, click  to modify the advanced settings by dragging the equalizer sliders to customize the audio effect applied.



Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to apply the equalizer effect to the audio.



Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Using the Stereo Expander

Use the Stereo Expander to expand and pan audio for better spatial sounding audio.

To use the stereo expander, do this:

1. Select the media file in the library that you want to use the stereo expander on.




Note: you can use audio with any number of channels. However, mono audio will be converted to stereo and only the center, left, and right channels are affected in 5.1/7.1 channel audio.

2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.




Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Stereo Expander** under the **Apply Effect** section.
4. If you're using a mono audio clip, CyberLink AudioDirector will ask you if you want to convert it to stereo. Click **Yes** to proceed.
5. Select a preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:
 - **Pan with center channel:** use this slider to pan the audio from the center channel, left or right as required, until the audio sounds balanced.

- **Expand:** use this slider to expand the range of the audio in the affected channels. Drag it right to expand it wider, or left to make it narrower.



Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the echo effect to the audio.



Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.

Applying the Radio Effect

Use the Radio effect to apply a filter to your audio that mimics the sound of a radio.

To apply the radio effect to audio, do this:

1. Select the media file in the library that you want to apply the radio effect to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Radio** under the **Apply Effect** section.
5. Select the **Radio type** from the drop down. Each type provides a slightly different effect to your audio.
6. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.

7. Click **Apply** to apply the radio effect to the audio.



*Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.*

Applying the Phone Effect

Use the Phone effect to apply a filter to your audio that mimics the sound over a phone.

To apply the phone effect to audio, do this:

1. Select the media file in the library that you want to apply the phone effect to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Phone** under the **Apply Effect** section.
5. Select the **Phone type** from the drop down. Each type provides a slightly different effect to your audio.
6. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
7. Click **Apply** to apply the phone effect to the audio.



*Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.*

Applying a Noise Gate


Apply the noise gate if you want to control the volume of a media file's audio signal by blocking audio that falls below a specified threshold or decibel level. The resulting audio can then be processed differently from the original audio.

To apply a noise gate to audio, do this:


1. Select the media file in the library that you want to apply the noise gate to.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to apply the effect on all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Noise Gate** under the **Apply Effect** section.
5. Select a noise gate preset from the **Presets** drop-down. Select the preset that best suits the sound you want to achieve.
6. If required, click  to modify the advanced settings as follows:
 - **Threshold:** use this slider to determine the minimum input audio level required to make the noise gate open and pass the audio signal through.
 - **Attack time:** use this slider to set the duration that the noise gate takes to change from closed to open. Attack time is similar to a fade-in.
 - **Release time:** use this slider to set the duration it takes for the noise gate to change from fully open to closed. Release time is similar to a fade-out.
 - **Hold time:** use this slider to set the duration the noise gate stays open after the signal has fallen below the defined threshold.



*Note: once you are done modifying the advanced settings, you can click  to save your changes as a new preset. The new preset will be available in the **Presets** drop-down so you can use it on future audio files.*

7. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
8. Click **Apply** to add the noise gate to the audio.



*Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.*

Removing Vocals in Music

Use the Vocal Removal in Music effect to create a karaoke or instrumental version of your stereo music files.



Note: this effect can only be applied to stereo (two channel) audio files, and best works on files where the vocals are evenly distributed on both channels, i.e. panned to the center.

To remove vocals in music, do this:

1. Select the music file in the library that you want to remove the vocals from.
2. If required, use range selection to select the portion of audio you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio clip.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Click the **Edit** button, or **Mix** if you are in the Mix room, and then **Vocal Removal in Music** under the **Apply Effect** section.
4. If required, you can preview how the applied effect will sound by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the original audio.
5. Click **Apply** to remove the vocals from the audio.



*Note: if required, click on the **Effect** tab to see the applied effect in the edit panel. See [Effect Tab](#) for more information.*

Applying VST Effects

VST plug-in effects are the industry standard for audio processing software. You can purchase, download and then import VST effects into CyberLink AudioDirector for use.



Note: check the associated documentation for each VST plugin effect for detailed information on using these effects.

Importing VST Effects

With VST plug-in effects you can find and add the desired custom effect you want on your audio. VST plug-in effects are widely available for download from the Internet, and can easily be imported into CyberLink AudioDirector.



Note: CyberLink does not guarantee the usability of downloaded VST plug-in effects, nor the quality of the VST modules.

If you have downloaded a VST plug-in effect, do this to import it into CyberLink AudioDirector:

1. From the menu select **File > Import VST Plug-in Effects**.
2. Browse to the location where the downloaded VST plugin effect is located.



Note: CyberLink AudioDirector imports VST plug-in effects that are in the DLL and VST3 formats. If the downloaded effect is in the ZIP format, you must first unzip it before trying to import it into the program.

3. Select the VST plugin effect and then click **Open** to import the effect into the VST section of CyberLink AudioDirector.



Note: Once imported, VST effects are always available in the program every time it is launched. Right-click on imported VST effects and then select **Remove** to remove them from the CyberLink AudioDirector.

Chapter 8:

Restoring Audio

Click on the **Restore** button to repair audio clips using the Noise Reduction, Clipping, Click, Hum, Hiss, or Plosive Removal features. You can also do more precise and powerful fixing using Visual Repair.



Note: when you are repairing audio, the fixes are not applied to the original file, as you must produce it as a new file in the Produce window. See [Producing the Audio](#) for more information.

Using Visual Repair

If any of your audio clips have unwanted background sounds, such as sirens, car alarms, etc., you can use the visual repair feature to remove them. CyberLink AudioDirector provides several selection tools for you to manually find and select the unwanted sound using the spectral frequency view. The visual repair feature also has three different ways to repair audio - auto attenuate, manual attenuate, and volume adjustment to remove specific unwanted sound.

To access Visual Repair, click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.

Regional Selection Tools

CyberLink AudioDirector supplies you with five different selection tools that help you to choose the regions of an audio clip you want to repair. Once selected, use the visual repair tools to fix the audio.




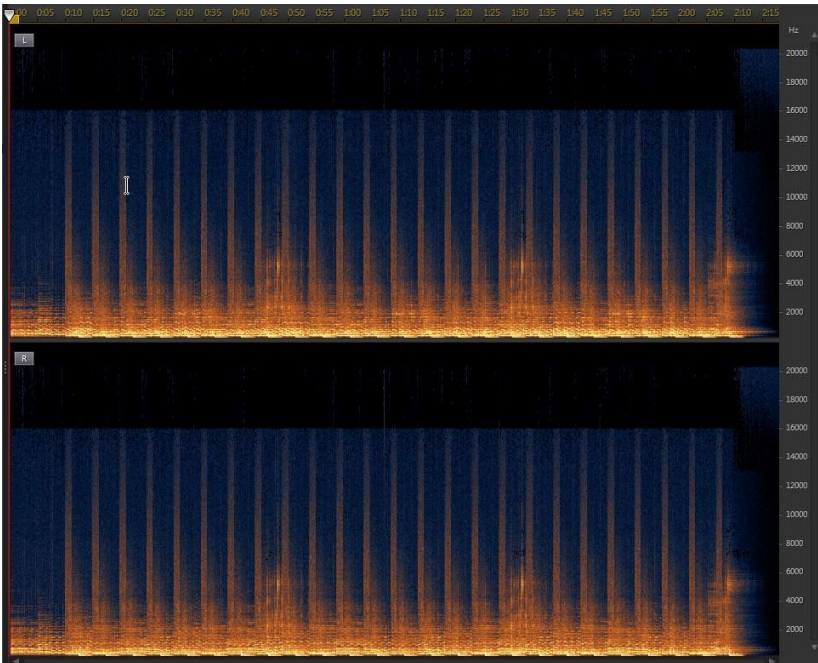
Note: these regional selection tools are only available when in the spectral frequency view. See [Spectral Frequency View](#) for more information on selecting this view.

Time Selection

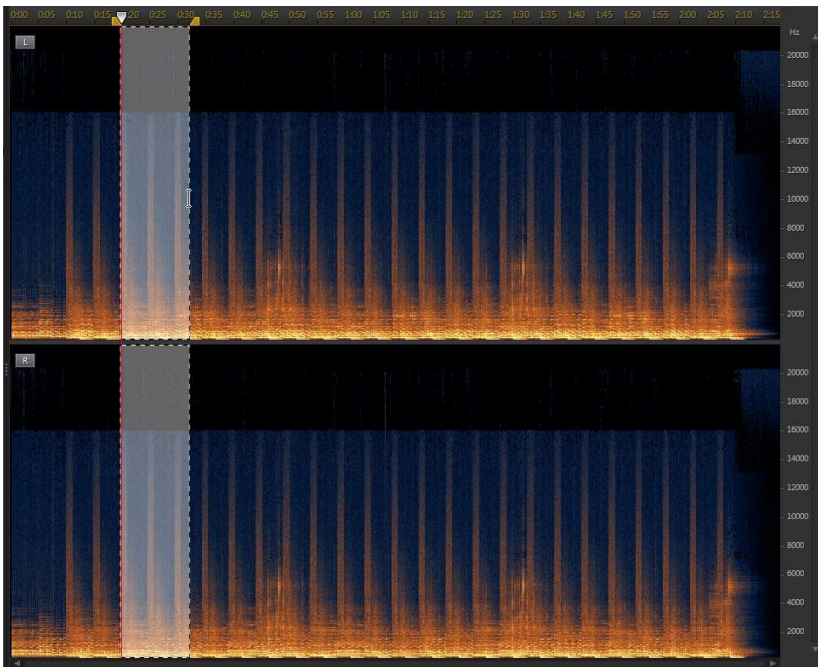
The time selection tool lets you select a vertical area of the audio clip based on playback time. This selection tool is similar to the range selection.

To use the time selection tool, do this:


1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. In Visual Repair window, click on the  button.
3. Click and drag on the region of the audio clip you want to repair.



CyberLink AudioDirector vertically selects the all of the content in the region for fixing.




Note: if you want to select more than one region of the audio clip, just hold down the Shift key on your keyboard and repeat this step.

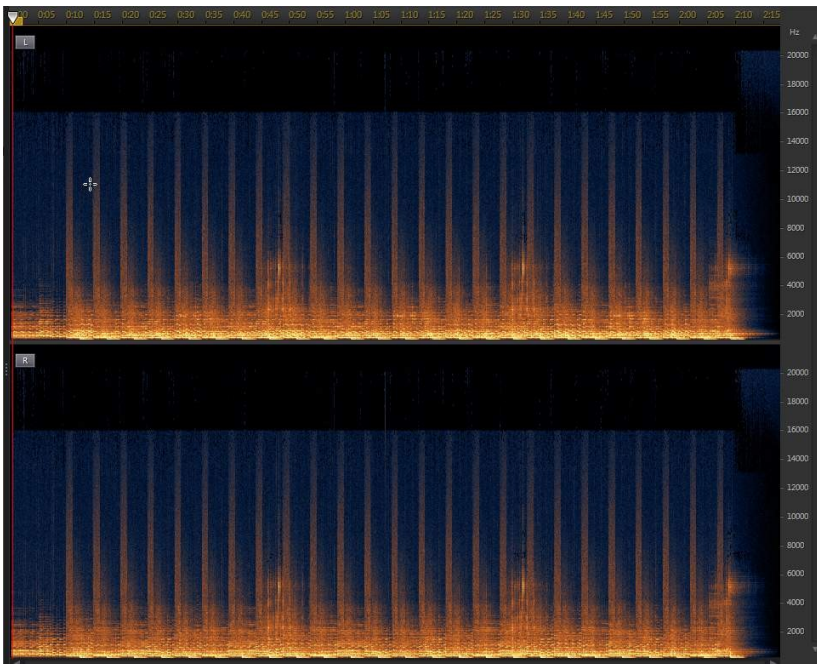
4. Click the  button to preview only the selected content to ensure it is what you need to fix.
5. Use the visual repair functions to repair the audio as required. See [Repairing the Audio](#) for more information.

Time Frequency Selection

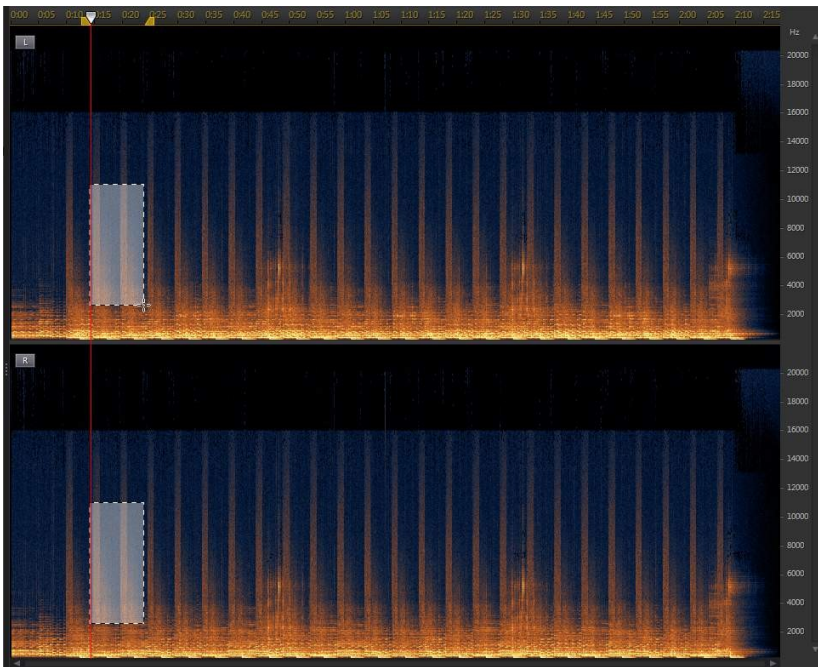
Use the time frequency selection tool to choose a more precise area of the audio, by selecting a rectangular region for fixing.

To use the time frequency selection tool, do this:


1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. In Visual Repair window, click on the  button.
3. Click and drag on the region of the audio clip you want to repair.



CyberLink AudioDirector highlights the content in a rectangle for fixing.




Note: if you want to select more than one region of the audio clip, just hold down the Shift key on your keyboard and repeat this step.

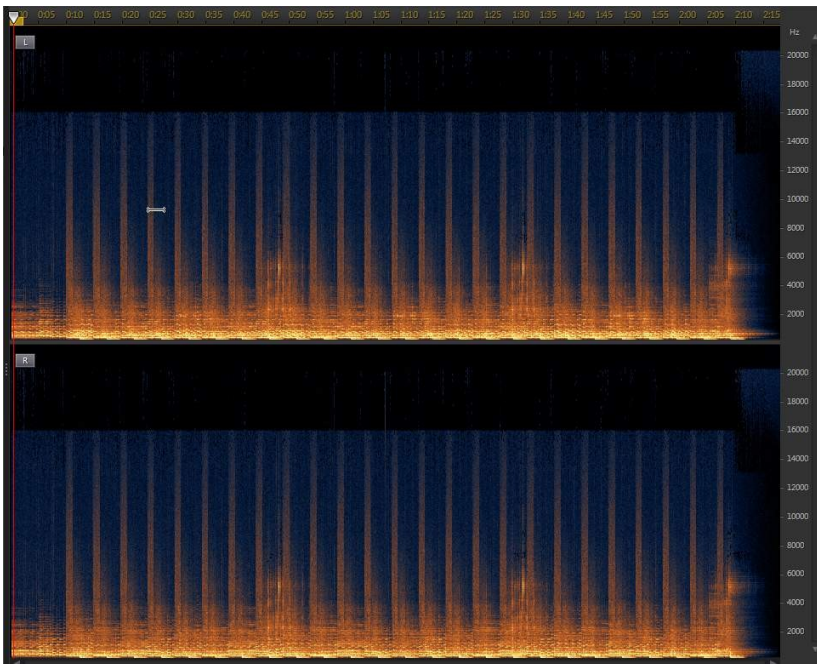
4. Click the  button to preview only the selected content to ensure it is what you need to fix.
5. Use the visual repair functions to repair the audio as required. See [Repairing the Audio](#) for more information.

Frequency Selection

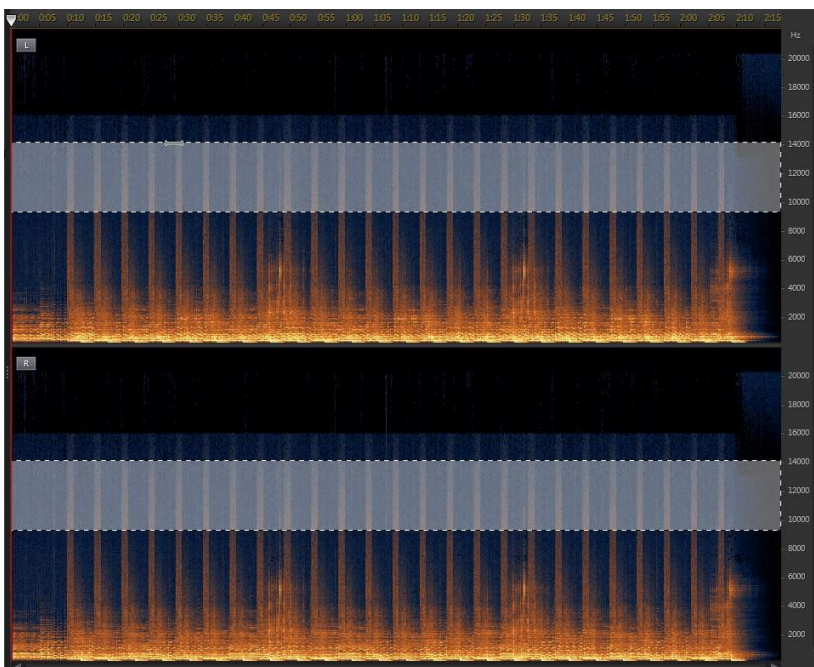
The frequency selection tool lets you select a horizontal area of the audio clip based on its frequency.

To use the frequency selection tool, do this:


1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. In Visual Repair window, click on the  button.
3. Click and drag on the region of the audio clip you want to repair.



CyberLink AudioDirector horizontally selects the all of the content in the region for fixing




Note: if you want to select more than one region of the audio clip, just hold down the Shift key on your keyboard and repeat this step.

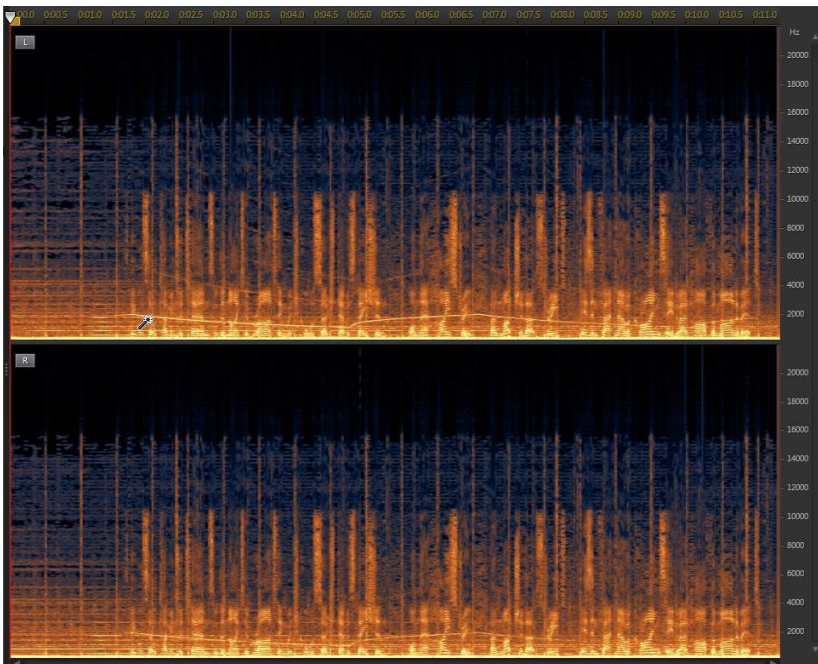
4. Click the  button to preview only the selected content to ensure it is what you need to fix.
5. Use the visual repair functions to repair the audio as required. See [Repairing the Audio](#) for more information.

Magic Wand Selection

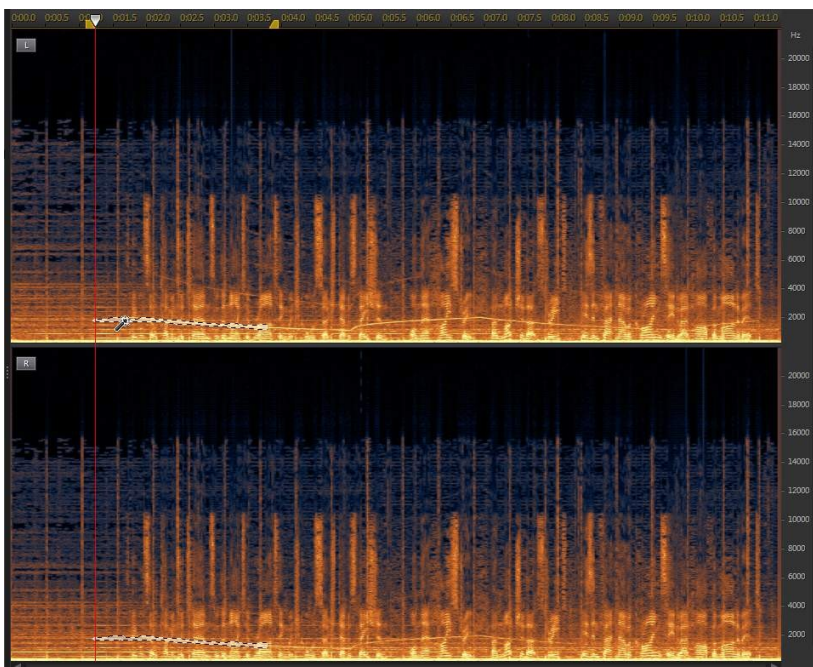
The magic wand selection tool helps you to auto select similar attributes (frequency or amplitude) in the audio clip that may be the area that requires fixing.

To use the magic wand selection tool, do this:

1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. In Visual Repair window, click on the  button.
3. Click on the region of the audio clip you want to repair.

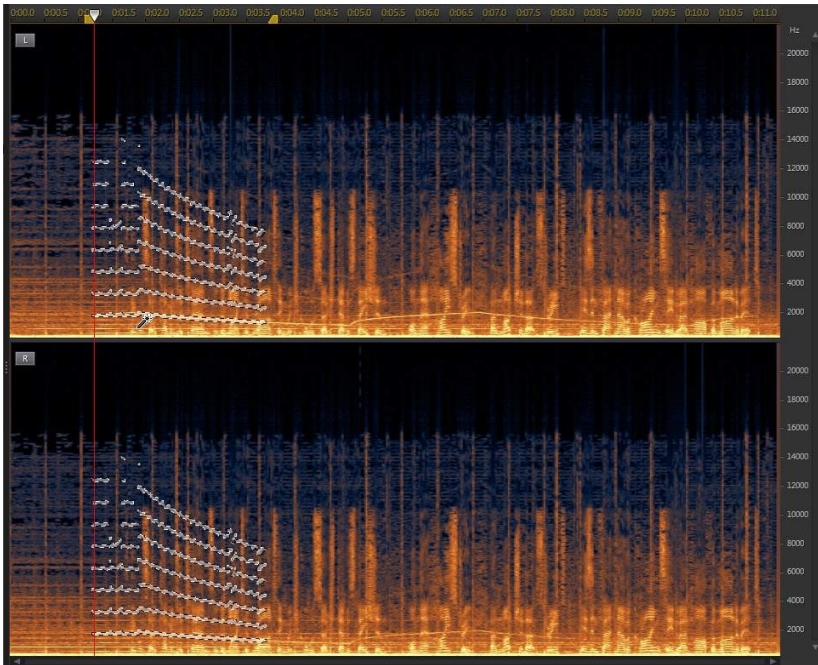



CyberLink AudioDirector auto selects the similar attributes (frequency or amplitude) for fixing.



Note: if you want to select more than one region of the audio clip, just hold down the Shift key on your keyboard and repeat this step.

4. If required, you can select the **Harmonic finder** option to have CyberLink AudioDirector auto select the attributes that have similar harmonic qualities.




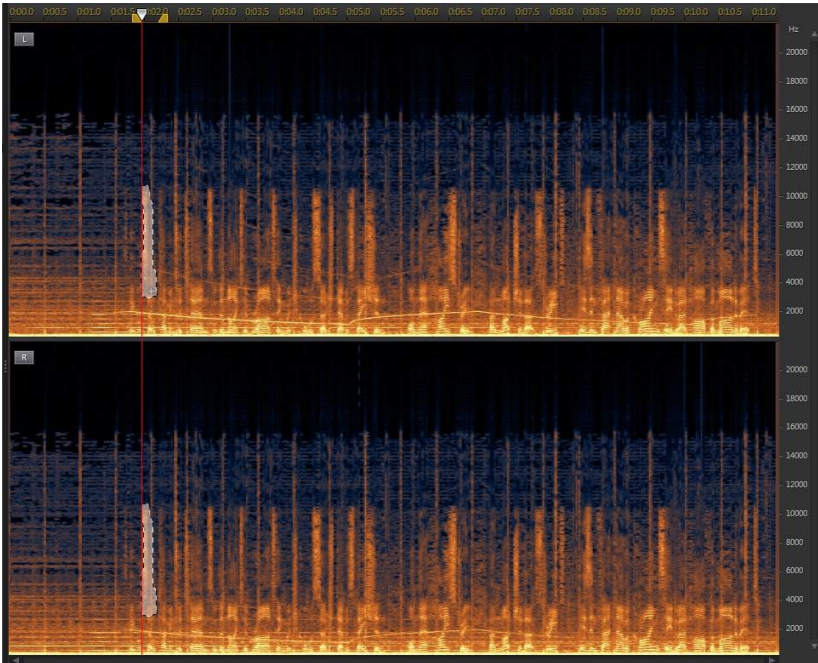
5. Click the  button to preview only the selected content to ensure it is what you need to fix.
6. Use the visual repair functions to repair the audio as required. See [Repairing the Audio](#) for more information.

Brush Selection

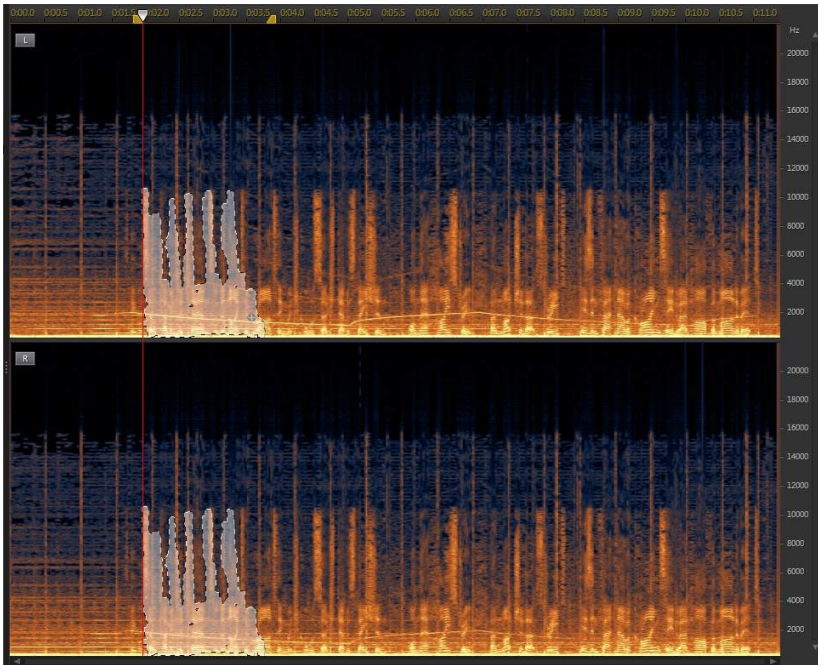
You can use the brush selection tool to select, or brush, just the parts of the audio clip you want to repair.

To use the brush selection tool, do this:

1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. In Visual Repair window, click on the  button.
3. Use the **Size** slider to set the width of the area selected by the brush.
4. Click, hold down the mouse button, and then drag the mouse over the all regions of the audio clip you want to repair.



Let go of the mouse button to finalize the selected area.



Note: if you want to select more regions of the audio clip after letting go of the mouse button, just hold down the Shift key on your keyboard and repeat this step.

5. Use the visual repair functions to repair the audio as required. See [Repairing the Audio](#) for more information.

Repairing the Audio

Once you have selected the portion of the audio that you want to repair, use one of the following functions to fix it as required.

Auto Attenuate

The auto attenuate function automatically levels off the selected audio so that it has the same attributes as the surrounding audio.

To apply auto attenuate, do this:

1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. Use a [regional selection tool](#) to select the regions you want to repair.
3. Select the **Auto attenuate** function.
4. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.
5. Click **Apply** to repair the selected audio.

Manual Attenuate

The manual attenuate function lets you manually level off the selected audio so that it has the same attributes as the surrounding audio.

To apply manual attenuate, do this:

1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. Use a [regional selection tool](#) to select the regions you want to repair.
3. Select the **Manual attenuate** function.
4. Use the **Strength** slider to set the amount of attenuation you want to apply on the selected area.
5. In the **Direction** drop-down, select whether you want to level off (attenuate) the selected area to match the attributes horizontally (above and below) or vertically (left and right) around it.
6. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.
7. Click **Apply** to repair the selected audio.

Volume Adjustment

Use this function to manually repair the selected audio by adjusting the volume, or amplitude.

To repair with volume adjustment, do this:

1. Click the **Restore** button and then the **Visual Repair** option under the **Adjustment** section.
2. Use a [regional selection tool](#) to select the regions you want to repair.
3. Select the **Volume adjustment** function.
4. Use the **Volume** slider to adjust the volume of the selected area.
5. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.
6. Click **Apply** to repair the selected audio.

Using Noise Reduction

Use the Noise Reduction feature if your audio contains unwanted static, or other background noise. There are two types of noise reduction available: **Auto Denoise** and **Noise Reduction**.

To remove unwanted noise in your audio, do this:

1. Select the media file in the library that you want to remove audio from.
2. Decide whether you want to remove it from all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
3. Click the **Restore** button and then **Noise Reduction** to open the Noise Reduction window.
4. Select one of the following options:
 - **Auto Denoise:** select this option to use audio denoise on audio that was recorded outdoors, in a room with poor acoustics, in a car, or other noisy locations. The audio denoise tool uses CLNR (CyberLink Noise Reduction) technology to automatically improve your audio's quality and reduce

background noise. Also use it if you have trouble finding an audio sample in the Noise Reduction feature. See [Auto Denoise](#) for more information.

- **Noise Reduction:** select this option to use CyberLink's Noise Reduction technology to reduce broadband and tonal noise for more natural-sounding results. CyberLink AudioDirector asks you to manually select an area that contains the noise, then through analysis helps you remove it from your audio. See [Noise Reduction](#) for more information.
5. Click **Next** to proceed.

Auto Denoise

To use the Audio Denoise on audio, do this:

1. Click the **Restore** button and then **Noise Reduction** to open the Noise Reduction window.
2. Select the **Auto Denoise** option.
3. Use the **Sensitivity** slider to adjust the degree of denoise applied to the audio.
4. Use the **Dry-Wet mix** slider to set the ratio between the dry (original audio that includes the unwanted noise) and wet (audio with denoise applied) audio. Adjusting the mix can balance the original audio and the audio with the denoise applied, reducing a loss of quality on the audio portion you want to keep.
5. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.
6. Click **Apply** to repair the audio.

Noise Reduction

To use the Noise Reduction on audio, do this:

1. Click the **Restore** button and then **Noise Reduction** to open the Noise Reduction window.
2. Select the **Noise Reduction** option.
3. In step 1, do one of the following:

- Select the first option and then select a range of the audio that only contains the noise, i.e. devoid of the audio you want to keep in the file. See [Range Selection](#) for more information on selecting a range of an audio file. Next, click the **Analyze** button to analyze the range of audio. Doing this creates a noise profile that CyberLink AudioDirector uses to remove the noise.



*Note: you can click the **Noise** button to listen to the detected noise, if required.*

- Select the second option and then **Select a preset** from the drop-down. Select the preset that best fits the type of noise you are trying to remove.
4. Use the **Sensitivity** and **Noise reduction level** sliders to adjust the amount of reduction applied to the selected range. If required, click the **Noise** button again to listen to the noise that will be removed.



*Note: when previewing the noise, if you hear portions of the audio you want to keep, it is recommended that you reduce the **Sensitivity** and/or the **Noise reduction level** until you don't hear it anymore, for the best results on the repaired audio.*

5. Use the **Dry-Wet mix** slider to set the ratio between the dry (original audio that includes the unwanted noise) and wet (audio with noise reduction applied) audio. Adjusting the mix can balance the original audio and the audio with the noise reduction applied, reducing a loss of quality on the audio portion you want to keep.
6. Click the **Next** button to go to step 2.
7. Select which range of audio you want to apply the noise reduction to by selecting one of the following:
- **Analyzed range only:** select this option to only apply the noise reduction to the range of audio you selected and analyzed in step 1.
 - **Entire audio content:** select this option if you want to apply the noise reduction to the entire audio clip.
 - **Select a different range:** select this option to select a new range of audio where you want the noise reduction applied. This range can contain both the noise and the audio content you want to keep.
8. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.



Note: click the **Save as Preset** button once you are done to save the Noise Reduction settings as a new preset. The next time you need to remove noise from audio that was recorded in the same or similar environment, you can just select the preset from the drop-down in step 1.

9. Click **Apply** to repair the audio.

Using Clipping Removal

Use Clipping Removal feature if parts of your audio's waveform is clipped off at the top or bottom, causing distortions or loss in audio quality. This feature can restore the waveform through attenuation, resulting in audio that is less intense, but without distorted or lost audio parts.

To use the Clipping Removal on audio, do this:

1. Select the media file in the library that you want to repair.
2. Click the **Restore** button and then **Clipping Removal** to open the Clipping Removal window
3. If required, use range selection to select the portion of audio you want to repair. See [Range Selection](#) for more information on selecting a range of an audio file. Next, click the **Analyze** button to analyze the range of audio. Doing this creates a noise profile that CyberLink AudioDirector uses to restore the audio.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

4. Decide whether you want to repair all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
5. Select the **Quality** amount of the clip restoration. The higher the quality selected, the more attenuation that is applied to the audio, and the lower its resulting intensity or loudness.
6. If required, use the **Threshold** slider to manually set the maximum audio level allowed. Any parts of the audio waveform that exceed the threshold will be attenuated.
7. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.

- Click **Apply** to repair the audio.

Using Click Removal

Use the Click Removal feature if your audio clips contain unwanted clicking or related sounds in them.

To use the Click Removal on audio, do this:

- Select the media file in the library that you want to repair.
- If required, use range selection to select the portion of audio you want to repair. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the entire audio clip is repaired.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

- Decide whether you want to repair all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
- Click the **Restore** button and then **Click Removal** to open the Click Removal window.
- If required, select a preset from the **Presets** drop down. These presets can auto repair your audio for you.
- Use the **Sensitivity** slider to adjust the amount of Click Removal applied to the selected audio clip.
- If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.
- Click **Apply** to repair the audio.

Using Hum Removal

The Hum Removal feature removes hum noise and its harmonics from audio clips. Hum noise is usually caused by electronics (faulty microphone, electrical interference with recording device, etc.) during the original recording.

To use Hum Removal on audio, do this:

1. Select the media file in the library that you want to repair.
2. If required, use range selection to select the portion of audio you want to repair. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the entire audio clip is repaired.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to repair all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Restore** button and then **Hum Removal** to open the Hum Removal window.
5. Select one of the following options:
 - **Simple Mode:** select this option if you want CyberLink AudioDirector to remove the hum using a selected frequency range band. See [Simple Mode](#) for more information.
 - **Advanced Mode:** select this option to use the more advanced controls. CyberLink AudioDirector asks you to manually select an area that contains the hum, then through analysis helps you remove it from your audio. See [Advanced Mode](#) for more information.
6. Click **Next** to proceed.

Simple Mode

Because most hum noise is in the 50Hz to 60Hz frequency range band, sometimes the simple mode of selecting a specific frequency range band is all that is required to remove the hum noise.

To use Hum Removal's Simple Mode, do this:

1. Click the **Restore** button and then **Hum Removal** to open the Hum Removal window.
2. Select the **Simple Mode** option.
3. Select a frequency band from the list as follows:
 - **Remove 50Hz:** select this option to remove all audio that is in the 50Hz frequency range band.

- **Remove 50Hz and the harmonics:** select this option to remove all audio that is in the 50Hz frequency range band. This option will also remove any corresponding harmonics.
 - **Remove 60Hz:** select this option to remove all audio that is in the 60Hz frequency range band.
 - **Remove 60Hz and the harmonics:** select this option to remove all audio that is in the 60Hz frequency range band. This option will also remove any corresponding harmonics.
4. Use the **Reduction level** slider to set the amount of attenuation applied on the hum noise.
 5. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.
 6. Click **Apply** to repair the audio.

Advanced Mode

For hum noise that is harder to remove, the advanced mode lets you select a region of the audio that contains the hum so CyberLink AudioDirector can detect it. Once detected, you can then customize its removal using a series of parameters.

To use Hum Removal's Advanced Mode, do this:

1. Click the **Restore** button and then **Hum Removal** to open the Hum Removal window.
2. Select the **Advanced Mode** option.
3. In step 1, do one of the following:
 - Select the first option and then select a range of the audio that only contains the hum you want to remove, i.e. devoid of the audio you want to keep in the file. See [Range Selection](#) for more information on selecting a range of an audio file. Next, click the **Analyze** button to analyze the range of audio. Doing this creates a noise profile that CyberLink AudioDirector uses to remove the hum.



Note: you can click the **Hum** button to listen to the detected noise, if required.

- Select the second option and then **Select a preset** from the drop-down. Select the preset that best fits the frequency of the hum you are trying to remove.
4. If required, use the following sliders to further remove the hum from the audio:
 - **Base frequency:** use this slider to manually specify the root note of the hum noise, if the detected hum is incorrect.
 - **Reduction level:** use this slider to set the amount of attenuation applied on the hum noise.
 - **Number of harmonics:** select the number of harmonics the hum noise appears to have.
 - **Filter bandwidth:** use this slider determine the width of the root frequency and its harmonics. Dragging the slider left affects a wider range of frequencies, while dragging it right will affect a narrower range.
 - **Harmonic slope:** use this slider to set the ratio of attenuation applied to the harmonics.
 5. Click the **Next** button to go to step 2.
 6. Select which range of audio you want to apply the hum removal to by selecting one of the following:
 - **Selected range only:** select this option to only apply the hum removal to the range of audio you selected and analyzed in step 1.
 - **Entire audio content:** select this option if you want to apply the hum removal to the entire audio clip.
 - **Select a different range:** select this option to select a new range of audio where you want the hum removal applied. This range can contain both the hum and the audio content you want to keep.
 7. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.



*Note: click the **Save as Preset** button once you are done to save the Hum Removal settings as a new preset. The next time you need to remove hum noise from audio that was recorded in the same or similar environment, you can just select the preset from the drop-down in step 1.*

8. Click **Apply** to repair the audio.

Using Hiss Removal

The Hiss Removal feature removes hiss noise from audio clips.

To use Hiss Removal on audio, do this:

1. Click the **Restore** button and then **Hiss Removal** to open the Hiss Removal window.
2. In step 1, do one of the following:
 - Select the first option and then select a range of the audio that only contains the hiss you want to remove, i.e. devoid of the audio you want to keep in the file. See [Range Selection](#) for more information on selecting a range of an audio file. Next, click the **Analyze** button to analyze the range of audio. Doing this creates a noise profile that CyberLink AudioDirector uses to remove the hiss.



*Note: you can click the **Hiss** button to listen to the detected noise, if required.*

- Select the second option and then **Select a preset** from the drop-down. Select the preset that best fits the type of hiss (frequency) you are trying to remove.
3. If required, use the following sliders to further remove the hiss from the audio:
 - **Noise level threshold:** use this slider to manually set the minimum noise level. Anything that falls above this threshold level will be left untouched by hiss removal.
 - **Reduction level:** use this slider to set the amount of hiss removal applied.
 - **Frequency smoothing:** use the slider to recover any loss of quality (on the frequency range) that was caused by the hiss removal. Dragging the slider left will use more of the original audio, dragging to right will use more of the audio with the hiss removed.
 - **Temporal smoothing:** use the slider to recover any loss of quality (over the selected range of audio) that was caused by the hiss removal. Dragging the slider left will use more of the original audio, dragging to right will use more of the audio with the hiss removed.
 - **Attenuation ratio:** use this slider to set the amount of attenuation applied.
 4. Click the **Next** button to go to step 2.

5. Select which range of audio you want to apply the hiss removal to by selecting one of the following:
 - **Selected range only:** select this option to only apply the hiss removal to the range of audio you selected and analyzed in step 1.
 - **Entire audio content:** select this option if you want to apply the hiss removal to the entire audio clip.
 - **Select a different range:** select this option to select a new range of audio where you want the his removal applied. This range can contain both the hiss and the audio content you want to keep.
6. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the **Preview** button. Select **Original audio** if you want to play the original audio.



*Note: click the **Save as Preset** button once you are done to save the Hiss Removal settings as a new preset. The next time you need to remove hiss noise from audio that was recorded in the same or similar environment, you can just select the preset from the drop-down in step 1.*

7. Click **Apply** to repair the audio.

Using Plosive Removal

This feature helps you remove plosives, which are blasts of air or thumps/pops in the audio that can occur when speaking/singing the letters b, k, p, t.

To use the Plosive Removal on audio, do this:

1. Select the media file in the library that you want to repair.
2. If required, use range selection to select the portion of audio you want to repair. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the entire audio clip is repaired.



Note: the entire audio file's waveform is selected by default when this feature is opened. If you want to apply this feature to the entire audio file, you do not need to use range selection when the entire waveform is selected.

3. Decide whether you want to repair all the available channels, or just one channel. See [Selecting Channels for Editing](#) for more information on selecting channels.
4. Click the **Restore** button and then **Plosive Removal** to open the Plosive Removal window.

5. If required, select a preset from the **Presets** drop down. These presets can auto repair your audio for you.
6. Use the **Frequency Limit** slider to set the highest frequency that plosive removal gets applied on. This prevents you from processing audio where there are no plosives, as they are usually well below 300 Hz.
7. Use the **Sensitivity** slider to adjust the sensitivity of plosive detection. If you still hear plosives after using plosive removal, try dragging the slider right to increase the sensitivity.
8. Use the **Strength** slider to adjust the amount of plosive removal applied to the selected audio clip.
9. If required, you can preview the repaired audio by selecting **Restored result** and then clicking the play button. Select **Original audio** if you want to play the original audio.



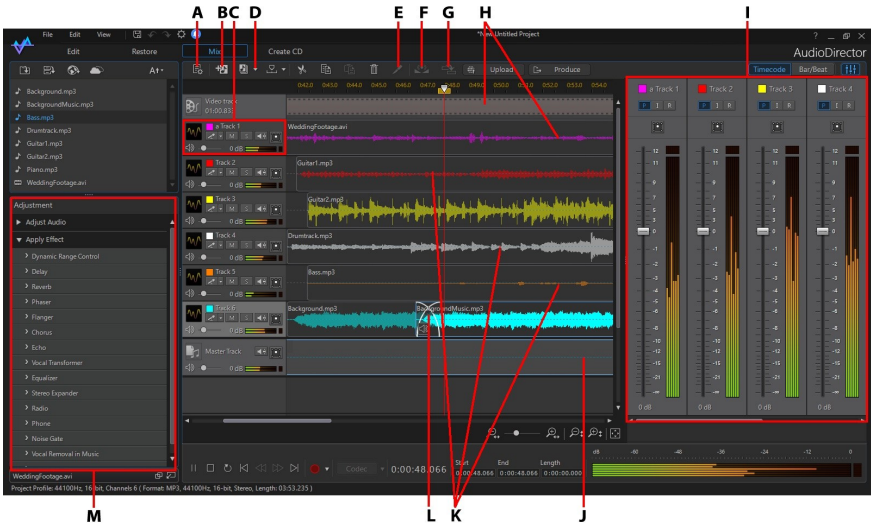
***Note:** click the **Save as Preset** button once you are done to save the Plosive Removal settings as a new preset. The next time you need to remove plosives from audio that was recorded in the same or similar environment, you can just select the preset from the drop-down.*

10. Click **Apply** to repair the audio.

Chapter 9:

Mix Room


In the Mix room you can mix audio together to create customized audio files. You can also create soundtracks for videos, by mixing audio with videos added to the video track. Click the **Mix** button to open the Mix room.








A - Configure Audio Profile Settings for Mix Room, B - Add Track, C - Mixing Tools, D - Create/Edit Group, E - Split Audio, F - Normalize Audio Across Multiple Tracks, G - Automated Dialogue Alignment, H - Video Track and its Corresponding Audio, I - Audio Mixer Panel, J - Master Track, K - Audio on Other Tracks, L - Audio Transition, M - Mix Room Adjustments and Effects

Creating an Audio Mix

To create an audio mix, do this:

1. Click the **Mix** button to enter the Mix room.
2. Before getting started, click the  button to configure your audio mix's profile settings. See [Configuring Audio Profile Settings](#) for a description of each profile setting.

3. Add the audio files that you want to include in the mix to the Mix room timeline. See [Adding Media to Your Mix](#) for more detailed information. For detailed information about the timeline in the Mix room, see [Mix Room Timeline](#).
4. Position each added audio file to start precisely when you want it by dragging it to the desired starting position. You can use [timeline markers](#) to make this task easier.
5. If required, use the     buttons to cut, copy, paste, or delete the audio on the tracks. You can also select an audio file on a track and click  to split it at the timeline slider position into two separate parts that can be moved separately among tracks.



Note: if required, you can click an audio clip on the timeline and drag the beginning or end to quickly trim the audio file length.




6. If required, right click on an audio clip and then select **Edit Clip in Edit Room** to adjust audio and apply effects in the Edit room. See [Adjusting Audio](#) and [Applying Audio Effects](#) for detailed information.



Note: you can also click on the **Adjust Audio** option in the Adjustment panel and adjust the audio right in the Mix room, however there are fewer options available. See [Applying Adjustments in the Mix Room](#) for more information.

7. If required, right click on an audio clip on a track and then select **Edit Clip in Restore Room** to fix it in the Restore room. See [Restoring Audio](#) for detailed information on editing audio clips.
8. Mix all of the audio together using the mixing tools, mixer panel, and more. See [Mixing Audio](#) for detailed information.
9. Preview your audio mix and once you are satisfied with the result, you are ready to mix it down and produce it as a new audio file. See [Producing Audio](#) for more information.

Configuring Audio Profile Settings

Before creating your mix, click the  button to configure the audio profile, or the quality and number of channels, of the audio file you are creating in the Mix room. The available options are as follows:

- **Sample rate:** select the sample rate from the drop-down that CyberLink AudioDirector will use by default when previewing audio in the mix room.
- **Bit depth:** select the bit depth from the drop-down that CyberLink AudioDirector will use when previewing audio in the mix room.
- **Channels:** select the number of channels you want in the audio preview. If you select 5.1 Channels or 7.1 Channels, you can use the [Track Panner](#) to customize the panning of each track in your mix.

Adding Media to Your Mix

Add media to your mix by dragging audio files that are in the library to any of the tracks in the Mix room timeline, and at any position. If the audio that you want to include in the mix is not in library, see [Importing Media into the Library](#) for information on importing it.

You can also add a video file to your mix. When added, CyberLink AudioDirector displays a video track in the timeline and shows the corresponding audio track.




Note: you can only have one video track in the timeline, but you can place more than one video file on this track.

When adding media to the Mix room timeline, if you drop it on to an existing clip on the timeline, you are asked if you want to split the clip and **Insert** the new clip between the two portions, or **Overwrite** the existing clip. The other options include using a transition between the clip you are adding and the existing clip on the timeline. See [Using Audio Transitions](#) for more information.

Mix Room Timeline

The following is some information that you may find helpful about the Mix room timeline:

- by default, the Mix room timeline includes four tracks, one of which is the Master Track. To hide the Master Track, just right click on it and then select **Hide Master Track**.
- you cannot add audio to the Master Track directly, as it works as a guide for your audio mix project. It is visual representation for all the audio that is in your mix.
- if you want to apply audio effects to your entire mix, you can do so by selecting the Master Track. You can also use range selection to apply the effects to just a selected range. See [Range Selection](#) for more information on selecting a range of audio.
- you can add up to 100 audio tracks in the Mix room timeline. To add a new track, click the  button.
- once a video file is added to your mix, you can right-click to the left of the video track and then select **Remove Video Track** if you only want the video's audio in the mix. You can also remove it by right clicking on the video file on the track and then selecting **Remove**.
- if you don't want to include a video file's audio in your mix, you can just remove it from the corresponding audio track.


Mixing Audio


Once you have all of the audio in the tracks of the Mix room, the next step is to mix all of the audio together. Creating your mix is the most important part of the process, and CyberLink AudioDirector provides several mixing tools to assist in the creation.

Grouping Tracks

You can group two or more tracks together in the Mix room. Adding tracks to groups makes it easier to mix the audio on the tracks, as the volume level, balance, and other mixing tools can be modified simultaneously.

To create a new group, do this:

1. In the Mix room, click .
2. Set a unique **Group ID** for each group.

3. Give the group a **Name**.
4. As required, select an available track and then click  to add it to the new group.
5. When you are done, click **Apply** to save your changes and create the group.

Tracks that were added to a group are indicated by the group ID next to the track name.




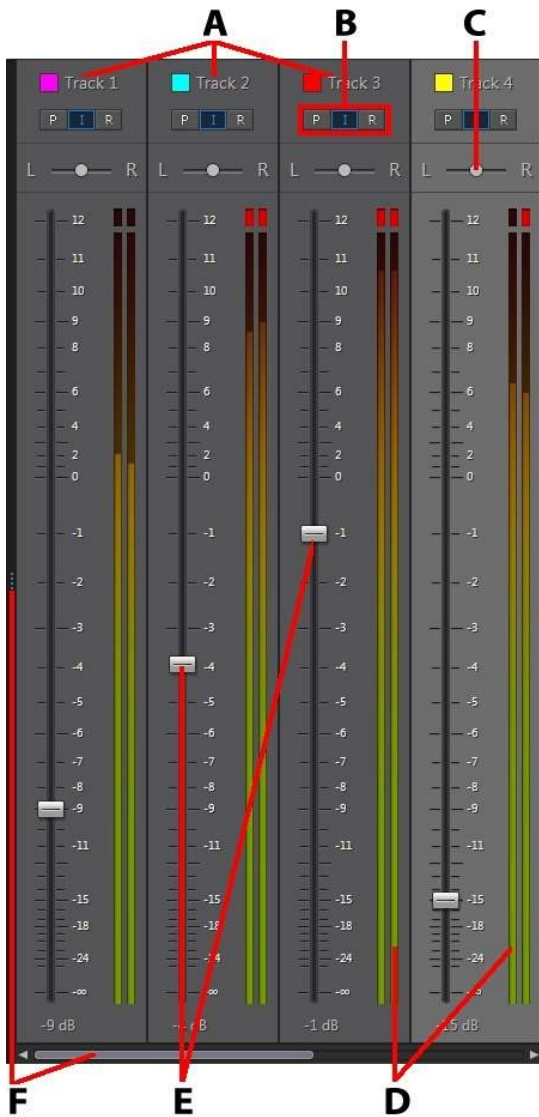
Note: *if you want to modify volume level and other mixing options for the audio on mixed tracks simultaneously, you must first press the letter on your keyboard that corresponds to the Group ID to enable this option. After you are finished, click a track that's not in the group to disable.*

Editing Groups

To edit an existing group, click  and then select **Create/Edit Group**. Edit the group as required, and then click **Apply** to save your changes.

Mixer Panel

Click the  button located in the top right above the timeline to open the mixer panel.



A - Audio Tracks in the Timeline, B - Audio Track Mode, C - Audio Track Balance, D - Audio Level Meter, E - Master Volume Control, F - Expand and Scroll

To use the mixer panel to mix your audio, do this:

- each track in your Mix room timeline has corresponding controls in the mixer panel. If you cannot find an audio track, you can click and drag on the left edge of the mixer panel to expand it, or use the scroll bar at the bottom to find the track controls. The master track is always the last control (on the right) in the mixer panel.
- to mix your audio, ensure that audio track mode **R** is selected for all the tracks that you want to alter the volume levels on. If **R** is not selected, you cannot change the volume level in that track.
- ensure that audio track mode **I** is selected to lock any audio tracks whose volume levels you don't want changed.
- click the play button and then use the master volume controls in each track to mix your audio.

















*Note: you can continually alter the volume levels on each track throughout the entire duration of the mix. When **R** is selected, CyberLink AudioDirector records and remembers the changes you made to the volume at each moment of your mix.*

- click the play button and then use the track balance controls in each track to pan the audio left or right in the mix.
- ensure that audio track mode **P** is selected and then preview your mix by playing it back. This allows you to listen to and watch the recorded volume levels (and track balance) change.

Using the Mixing Tools

The mixing tools are available for each of the tracks in the mix room timeline, except the video and master track. The tools that are available are outline in the below table.




Mixing Tools	
	If required, click this button and select a label for the track. Select an icon that closely matches the type of audio in the track.

 Track 1	<p>Click the colored square next to a track number to add a color label to the track. You can select one of the basic colors, or click in the color picker or use the slider to choose a color. You can also manually enter the color code in the HSB, RGB, or # fields to set the color. Once you set the color, click OK to close the Color Picker window. The color label is applied to the audio's wavelength and the mixer panel, so you can more easily identify the audio in your mix.</p>
	<p>Click  to enable this track for recording. Click the  button at the bottom of the CyberLink AudioDirector window when you are ready to begin recording. You can enable multiple tracks at once, recording from multiple sources. All their inputs will be recorded and added to the corresponding track, simultaneously. Click  to configure the recording settings by selecting the import source for the recorded audio, and whether you want to monitor the input. See Recording Audio for more detailed information about recording audio in CyberLink AudioDirector.</p>
	<p>Click this button to mute the corresponding audio track. If you only want to mute one single clip on an audio track, just right click on it and then select Mute Clip (or click  on the selected clip).</p>
	<p>Click the solo button if you only want to hear the audio in the corresponding track when previewing the audio mix. You can enable as many tracks as you want. All the tracks where  is not selected are muted during the preview.</p>
	<p>Click to modify the master volume for the audio file on the selected track using volume keys at specific points. See Adjusting the Master Volume for detailed information on modifying master volume keys.</p>
	<p>If your audio profile channel settings is set to mono or stereo, click this button to modify the balance of the audio file on the selected track by panning the audio left or right. See Panning Audio L/R for detailed information on panning audio.</p>
	<p>If your audio profile channel settings is set to 5.1 or 7.1, click this button to access the track panner to pan the audio on the selected track. See Using the Track Panner for detailed information.</p>
	<p>Use the slider to the right of this icon to set the audio input level for the entire duration of the track.</p>


Using the Track Panner

When mixing audio with an audio profile set to 5.1 or 7.1 channels, you can customize which channel each track is panned to in the Track Panner.

To use the Track Panner, do this.

1. On the mix track where you want to pan the audio, click  or , depending on how many channels are selected in your audio profile.
2. In the Track Panner window, click and drag  to the channel you want the audio on that track to be panned to.



3. Click  to close the window and save your changes.

Normalizing Audio Across Multiple Tracks

If you find that some of the audio in your mix is much louder than the audio on the other tracks, you can normalize the volume across multiple tracks. Normalizing is the process of applying a constant amount of gain to your mix to bring the average or peak amplitude (volume levels) to a same level.

To normalize the audio across multiple tracks, do this:




Note: *this section is for normalizing the audio across multiple tracks in the Mix room. For information on normalizing the audio in the Edit and Restore rooms see [Normalizing Audio Channels](#).*

1. Select the all of the tracks in the mix that you want to normalize.
2. If required, use range selection to select the portion of audio you want to normalize. See [Range Selection](#) for more information on selecting a range of an audio file.



Note: *be sure to select the entire audio file's waveform if you want to normalize the audio in the entire track.*

3. Click the  button to normalize the volume of the selected audio tracks.

Using Audio Transitions

When adding more than one audio clip onto a timeline track, you can use a transition to mix the two clips together.

To use an audio transition, do this:

1. Drag an audio clip to a timeline track, and then drag and drop a second clip to the position on the first clip where you want the transition to begin, i.e. the duration you want the two audio clips to overlap. You can also drag an existing clip on the timeline and drop it on the audio clip you want to transition it with.



Note: *make sure you drag and drop the second clip to the exact time position where you want the transition between the two clips to begin. You can use timeline markers to make this task easier. See [Timeline Markers](#) for more information.*

2. In the pop-up that displays, select one of the following transition options:



Note: *if you don't want to use a transition, select **Insert** to split the clip and insert the new clip between the two portions, or **Overwrite** to place it over the existing clip.*

- **Crossfade:** select this option if you want the first audio clip to gradually fade into the second clip. Once selected, choose the fade type from the available options. Use the **Preview** button to help you pick the fade type that best suits your requirements.



Note: select the **Always use selected type** check box to set the selected fade type as the default. Once selected, CyberLink AudioDirector will use this fade type automatically the next time you use a crossfade transition. To change the transition type, just right click on the transition and select **Edit Crossfade Transition**.




- **Smart Transition:** select this option to use a more customized transition. Select from the available transition effects and then adjust its properties. See [Adjusting Smart Transition Properties](#) for a detailed description of the available properties.



Note: the maximum length of a smart audio transition is 30 seconds. If the duration of the overlap between the first and second audio clip is more than 30 seconds, then the **Smart Transition** option is not available.

3. Click **OK** to apply the audio transition between the two clips.



Note: you can change the length of the audio transition by dragging the second clip and moving it to a new position. When using a crossfade, double-click on the transition area to edit the transition's properties. For smart transitions, just click , , or  (depending on the transition type) to edit the properties.

Adjusting Smart Transition Properties

When you use a smart transition you can choose one of the following transition effects between the two clips: **Tempo Transition**, **DJ Scratch**, or **Smart Repeat**.





Note: click the **Preview** button while adjusting the transition properties to preview the results and help you fine tune them to fit your requirements. If required, click the **Reset to Defaults** button at any time to reset the edited properties back to the original settings.

Tempo Transition

Creates a smooth transition between the audio clips based on the tempo of each. Once selected, edit the properties as follows:

Tempo adjustment:

- **First clip's estimated tempo:** if required, use  to adjust the tempo of the first clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.



- **Second clip's estimated tempo:** if required, use  to adjust the tempo of the second clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

DJ Scratch

Creates a transition using the scratching of a record and the tempo of each audio clip. Once selected, edit the properties as follows:

- **Scratch strength ratio:** use the slider to set the strength of the record scratch during the transition.

Tempo adjustment:



- **First clip's estimated tempo:** if required, use  to adjust the tempo of the first clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.
- **Second clip's estimated tempo:** if required, use  to adjust the tempo of the second clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

Smart Repeat

Creates a transition that repeats the last portion of the original clip a set amount times, giving the transition a skipping effect. Once selected, edit the properties as follows:

- **Number of repeats:** select the number of times you want the end of the first clip to repeat.

Tempo adjustment:

- **First clip's estimated tempo:** if required, use  to adjust the tempo of the first clip. You can speed up or slow down the tempo, depending on the tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.
- **Second clip's estimated tempo:** if required, use  to adjust the tempo of the second clip. You can speed up or slow down the tempo, depending on the

tempo of the second clip. Use **2X** to double the clip's tempo, or **0.5X** to halve it.

Applying Adjustments in the Mix Room

While mixing audio in the Mix room you can apply any of the adjustments and effects in the Adjustment panel on the left, to an audio clip in the mix.





Note: *in the Mix room, audio adjustments and effects can only be applied to one audio clip on a track at a time, or to all the audio in the mix by selecting the Master Track. If you select more than one audio clip, the adjustments and effects are not available.*

Click the **Adjust Audio** option to apply the available adjustments to your mix. See the relevant sections in [Adjusting Audio](#) for a detailed description of these adjustments. For the Adjust Length (auto remix) feature, which is only available in the Mix room, see [Using Adjust Length \(Auto Remix\)](#).

Click **Apply Effect** for a list of the available effects in the Mix room, and see [Applying Audio Effects](#) for a detailed description of these effects. For information on the use of the Surround Sound Panner, see [Using the Surround Sound Panner](#) section below.



Note: *once an effect is applied to an audio clip, click on  to view the Effect List for the clip. In the Effect List you can deselect or click  to remove the effect from the clip.*

Using Adjust Length (Auto Remix)

Use the Adjust Length (auto remix) feature to change the length of audio by remixing the selected audio clip.

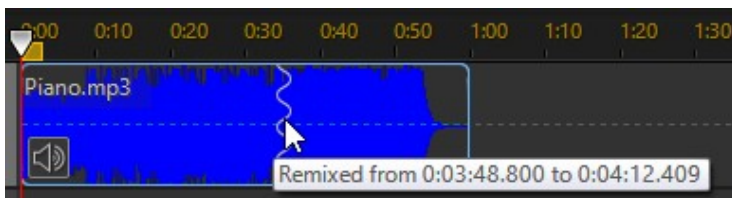
To adjust the length of audio, do this:


1. Select the media file in the **Mix** room that you want to adjust.
2. Click the **Adjust Length (auto remix)** under the **Adjust Audio** section.
3. Enter in the **New audio length** in the field provided, and then press the Enter key on your keyboard.



Note: *the new audio length cannot be shorter than 10 seconds.*

CyberLink AudioDirector will adjust the audio to the specified length. You can hover your mouse over the curvy line to view the remix details.



4. If required, click  to modify the advanced options as follows:
 - **Stretch to exact duration:** if making the clip longer, select this option to stretch the audio to the exact duration you entered.
 - **Segments:** use this slider to adjust the content and sound of the remix. Making the segments shorter, will loop more of the audio in the remix.
 - **Max slack (seconds):** adjusting this slider essentially changes the speed of the remix. For example, if you're making an audio clip longer, the remix will be a slower rendition of the audio.
5. If required, you can preview the adjusted audio by selecting **Adjusted result** and then clicking the play button on the playback controls. Select **Original audio** if you want to play the audio at its original length.
6. Click **Apply** to adjust the length of the audio.

Using the Surround Sound Panner



You can use the Surround Sound Panner to pan the audio of a selected audio clip to any or all of the available channels. You can do this manually, or select from one of the panning templates.



Note: if you haven't configured the audio profile settings yet, it is recommended that you set the desired number of channels in your mix before using the Surround Sound Panner. See [Configuring Audio Profile Settings](#) for more information.

To use the Surround Sound Panner on an audio clip in your mix, do this:

1. Select the audio clip in the **Mix** room timeline to use, or select the Master Track if want to pan all of the audio in the mix.

2. Click **Surround Sound Panner** under the **Apply Effect** section.
3. If you selected the Master Track you can use range selection to select the portion of the audio mix you want to apply the effect to. See [Range Selection](#) for more information on selecting a range of an audio file. If you don't select a range, the effect is applied to the entire audio mix.
4. Select one of the following panner options:
 - **Manually set channel output:** select this option if you want the selected audio to be panned to a specific channel, and not move. Once selected, click and drag  to the channel you want the audio to be panned to.
 - **Use panning template:** select this option if you want the selected audio clip to pan across multiple channels. Select from one of the available templates. If the panning template contains the  icon, you can click and drag its path to achieve the pan you require.



*Note: you can select the **Pan the audio twice (forward and backward)** option if you want the audio to pan forward then backward along the template path. You can also indicate how many times you want the pan to **Repeat** by entering in the number of times in the field provided.*

5. If required, click the **Preview** button to listen to how the applied effect will sound.
6. Click **Apply** to apply the pan effect to the audio.

Using Automated Dialogue Alignment

When using CyberLink AudioDirector to fix and enhance the audio in your video production, Automated Dialogue Alignment can be a very useful tool for you. If you have video clips that have dialogue that was recorded in a noisy environment, use this feature to dub in/replace the audio, syncing it in the video clip.

To use this feature, you need to prepare some clips beforehand and go through several steps to successfully dub audio in a clip.

Prepared Clips

Before using the Automated Dialogue Alignment tool, you must prepare some audio clips beforehand. You will need:

- **Original video clip with audio (base clip):** the video clip with the dialogue recorded in the noisy environment.
- **New dialogue audio clip (target clip):** re-recorded audio clips for all of the dialogue you need replaced. You can use CyberLink AudioDirector to re-record the dialogue and create the clips you need. See [Recording Audio](#) for more information.



Note: for the best results, when recording the new dialogue audio, ensure the timing/length of the new dialogue is similar to the original video clip. You can use [Loop Recording](#) to do multiple takes in succession to ensure you get the timing as close as possible.



- **Background noise clips (optional):** when the dubbed dialogue audio is replaced in the original video clip, any background noise or ambient sounds are also removed. It is recommended that you add back the "noise" in the original video clip to ensure your video's authenticity. For example, if you shot a video on a train or in a music hall, you can add these sounds back manually in the Mix room, but at a lower audible level underneath the dubbed in dialogue.



Note: CyberLink AudioDirector does not add the ambient and background noise in for you. You'd need to re-record it or get it from another source if you want to include this suggested option in your final produced video clip.


Dubbing Audio in a Clip

To use Automated Dialogue Alignment to dub audio in a video clip, do this:

1. Click on the **Mix** button to enter the Mix room.
2. Add the video clip that contains the dialogue you want to dub on the first track in the timeline.
3. For best results, drag the timeline slider to just before the dialogue and then click the  button to split the audio in the video clip.
4. Drag the timeline slider to the end of the dialogue, and then click  again.



Note: if the dialogue you want to dub in the video clip runs the entire duration of the clip, then there is no need to split the clip. However, please note that each dialogue audio clip used in Automated Dialogue Alignment can be a maximum of two minutes in length.

5. Add the new dialogue audio clip on the second track in the timeline, underneath the split clip.
6. Hold down the Ctrl key on your keyboard and then use the mouse to select both the split portion of the video clip and the new dialogue audio clip.
7. Click the  button and then modify the options as follows:
 - **Base clip:** ensure that the original video clip with audio is selected in the drop-down. If it's not, select it from the drop-down.
 - **Reference channel:** use this option to select the channel where the original dialogue audio is playing from.
 - **Base clip contains noise:** select this option if the original video clip contains a lot of background noise.
 - **Target clip:** ensure that the new dialogue audio clip is selected in the drop-down. If it's not, select it from the drop-down.
 - **Reference channel:** use this option to select the channel where the new dialogue audio is playing from.
 - **Add aligned clip to new track:** select this option if you want the aligned dubbed audio added to a new track in the Mix room timeline. If you don't select this option, CyberLink AudioDirector will just adjust the position of the target clip.
8. Click the **Apply** button in the Automated Dialogue Alignment window. CyberLink AudioDirector will analyze the clips, and then align the audio in the target clip with the audio in the original video clip.
9. Right click on the split audio in track 1 and then select **Remove** to remove it from the mix.
10. If required, add the prepared background noise clips to the other tracks in the timeline and then use the Mix room controls to set the levels. See [Creating an Audio Mix](#) for more information on mixing all the new audio in your video clip.

11. Preview your video and once you are satisfied with the result, you are ready to produce it as a new video file with the dubbed in dialogue. See [Producing Audio](#) for more information.

Chapter 10:

Producing the Audio

The last step when editing, restoring, and mixing audio files is to save and produce it to a new file. CyberLink AudioDirector uses the original media and then applies all the specified changes to it, creating a new file, either in the same format, or in a new file format if you prefer.



Note: if you have CyberLink PowerDirector 11 or above installed on your computer, you can also select an edited file in the library and then **File > Export Audio to PowerDirector** from the menu to quickly produce and export just the audio to PowerDirector.

Supported Output Formats

CyberLink AudioDirector supports the production and export of audio files into the following formats:

Audio: APE, FLAC, M4A, MP3, WAV, WMA.

Video: H.264 AVC (.M2TS, .MP4), H.265 HEVC (.MKV, .MP4), MPEG-2 (.MPG), Windows Media Video (.WMV).

Producing Audio

When you are finished performing edits, adding effects, or restoring an audio file in the library, you can save the changes and produce it as a new audio file. This produce feature is also used when mixing down all the tracks in the Mix room, combining them into a single audio file.



Note: you can also convert audio files in the library into other formats using this feature.


To produce your audio file as a new file, do this:

1. Select the audio file in the library you want to save/produce, and then click **Produce** in the AudioDirector quick bar above the timeline. The Produce Audio window opens.



*Note: if there is a video file in the Mix room, or you are editing a video file's audio track (and you only want to output the edited audio), select **Produce Audio** after clicking the **Produce** button.*

2. Set the **File information** as follows:

- **File name:** enter in a new file name for the file.
- **Location:** click on  to set the location of the folder where the produced audio is saved.



*Note: if you have a CyberLink Cloud subscription you can select the **Upload a copy to CyberLink Cloud** option if you also want the program to upload the produced file to your CyberLink Cloud storage space after production.*

3. Use the **Audio profile settings** to set the quality of the produce file as follows:



*Note: the default settings for **Format**, **Bitrate**, and **Sample rate** are copied from the [audio output preview options](#), if you enabled codec preview.*

- **Format:** select the format you want for the newly produced audio file from the drop-down. See [Supported Formats](#) for information on the supported audio file formats.
 - **Bitrate/Compression level:** if required, set the bitrate for the produced file by selecting it from the drop-down. For FLAC and APE files, you can set the **Compression level** applied to the produced file. The higher the compression level, the smaller the resulting file will be, but the longer it will take for it to be produced.
 - **Sample rate:** set the sample rate of the produced file by selecting it from the drop-down.
 - **Bit depth:** set the bit depth of the produced file by selecting it from the drop-down.
 - **Channels:** set the number of channels the produced file will have. If you are producing it as a WAV or FLAC file, you can produce it with 5.1 or 7.1 channels, if required.
 - **CyberLink TrueTheater Surround:** if increasing the number of channels in the audio, select this option to use CyberLink TrueTheater Surround to enhance the quality of the expanded audio. Choose from Living Room, Theater, or Stadium.
4. Click on **Produce**. The file is saved to the folder location specified.




Note: the new file is also added to the library and is available for use in other projects in CyberLink AudioDirector.

Producing Video

After you have edited the audio tracks of an imported video file, use the produce video function to re-render the video with the updated audio applied. This produce feature is also used when mixing down all the tracks in the Mix room, including a video track, and then combining them into a single video file with the mixed audio.

To produce a video file, do this:

1. Select the video file in the library you want to produce, click **Produce** in the AudioDirector quick bar above the timeline, and then select **Produce Video**. The Produce Video window opens.
2. Set the **File information** as follows:

- **File name:** enter in a new file name for the file.
- **Location:** click on  to set the location of the folder where the produced video is saved.



Note: if you have a CyberLink Cloud subscription you can select the **Upload a copy to CyberLink Cloud** option if you also want the program to upload the produced file to your CyberLink Cloud storage space after production.

3. Use the **Video profile settings** to set the quality of the produce file as follows:
 - **Video format:** select the format you want for the newly produced video file from the drop-down. See [Supported Formats](#) for information on the supported video file formats.
 - **Video profile:** select the video profile, or video quality, of the produced file from the drop-down.



Note: when outputting video in the H.264 and H.265 formats, video profiles with resolutions as high as 2K and 4K (64-bit version only) are available if the original video file is compatible.

4. Use the **Audio profile settings** to set the quality of the produce file as follows:
 - **Audio codec:** select the audio used on the audio portion of the file from the drop-down.

- **Bitrate:** if required, set the bitrate for the video's audio by selecting it from the drop-down.
 - **Sample rate:** set the sample rate of the video's audio by selecting it from the drop-down.
 - **Bit depth:** set the bit depth of the video's audio by selecting it from the drop-down.
 - **Channels:** set the number of channels the video's audio will have. Depending on the video file format and audio codec specified, you can produce it with up to 5.1 channels, if required.
5. Click on **Produce**. The file is saved to the folder location specified and is also available in the media library.



*Note: if you selected to upload a copy of the produced file to CyberLink Cloud, AudioDirector will ask you if you want to convert it before uploading. Click **Yes** to convert it to an .MP4 file that is playable on a portable device, or **No** if you want to upload the original produced file.*

Chapter 11:

Sharing and Backing Up Audio

You can share the sound clips you create with other users by uploading them to DirectorZone. If you have a CyberLink Cloud subscription you can back up all your sound clips by storing them on CyberLink Cloud.

The sound clips are first converted to 44100Hz, 16bit .MP3 stereo audio files before they are uploaded. The sound clips you upload to DirectorZone are shared with other users, who can download and use them in their own audio creations.



Note: *the maximum length allowed of sound clips shared on DirectorZone is 30 seconds. There is no length limitation on sound clips uploaded to CyberLink Cloud.*

To share and back up your sound clips, do this:

1. Select it in the library and then click and then click **Upload** in the CyberLink AudioDirector quick bar above the timeline.
2. In the upload window, enter the information as follows:
 - **Destination:** select where you want to upload the sound clip.
 - **Title:** name of the sound clip as it will display once uploaded.
 - **Style:** select the style or category for the sound clip.
 - **Tags:** enter some keyword search tags that will help users find the sound clip when searching.



Note: *separate each tag you enter with a comma. If you want to use two words as the tag, just put quotes around them, e.g. "dollar bill".*

- **Collection:** enter the name of the collection you want the sound clip added to.
 - **Description:** enter a short description of your sound clip.
3. Click **Next** to proceed.
 4. If required, confirm the copyright disclaimer, and then click **Next** to proceed with the upload.

5. Click on **Close** to close the upload window.

Chapter 12:


Creating CDs

Once you are done editing, restoring, and mixing your media files, you can use them to create CDs that are burned in the audio CD format.








Note: you can add both audio and video files to the CD, however just the video file's audio is burned to the disc.

To create a CD, do this:

1. Click the **Create CD** button to open the Create CD room.
2. Add tracks to the CD by dragging media from the media library to the CD track list view window. You can preview them in the media library before adding them by clicking  beside the file.




Note: if you added a media file by mistake, select it and then click  to remove it. Click  if you want to remove all the media files on the CD.

3. Use the  and  buttons to order the tracks on the CD to your preference.
4. If required, click on  to edit the track information for each added media file. When editing the CD-Text, you can add the song title, artist, album, and writer information, and more. If adding the **Album** title and the **Artist** name, and they are the same for each track, select the **Apply album information to all tracks** and **Apply artist information to all tracks** options so you don't need to add them for each track.



Note: this track information will only be visible on disc players that support CD-Text reading.

5. Before burning the CD, click on  to edit the CD properties as follows:
 - **Normalize volume in all tracks of the CD:** select this option to set the volume of all of the audio tracks on the CD to the same level.

- **Insert audio gap between tracks:** select this option if you want to include gaps of silence between each track on the CD. You can specify the length of the gap in the field provided.
6. If required, use the playback controls at the bottom of the window to preview the entire CD before burning it to a disc.
 7. When you are ready, put a blank CD in your burning drive, and then click the **Burn Now** button.
 8. In the Burn Settings window, set the following options:
 - **Recording drive:** select the burning drive CyberLink AudioDirector will use to burn the tracks to the CD.
 - **Recording speed:** set the recording speed used when burning the CD. If you encounter errors during the burning process, try lowering the burning speed.
 - **Number of copies:** in the field provided, enter the number of CDs you want CyberLink AudioDirector to burn for you in succession.



*Note: if the disc you want to use is not blank and is rewritable, click the **Erase Disc** option to erase it. To erase a disc, select the **Quick erase** option to erase the disc index contained on the disc, or the **Full erase** option to erase all of the content the disc contains. Next, click **Erase** to erase the disc.*

9. Click **Burn** to finish creating your CD and burn it to a disc.


Chapter 13:

AudioDirector Preferences

Use the CyberLink AudioDirector preferences to select a UI language, set the default profile settings for audio files, and more.

To configure your preferences in CyberLink AudioDirector, click the  button.

General Preferences

Click the  button to open the Preferences window, and then select the **General** tab. The available options are as follows:

Internet

- **Automatically check for software updates:** select to periodically check for updates or new versions of AudioDirector automatically.

Language

- **Use system default language (if supported):** select this option for the language display to be the same as the language of your operating system. This feature is only available if your operating system's language is one of the supported user defined languages.
- **User defined:** select this option and then select the language from the drop-down list that you want to use.

Editing

- **Snap to reference:** select this option if you want the timeline slider and clips to snap to reference points during the editing and mixing process. The reference points include timeline markers and other clips on the timeline.


Timebase display

- use this option to set the default timebase display used. The timebase display sets the value used at the top of the AudioDirector timeline. **Timecode** displays the audio by playback time, while **Bar/Beats** displays it by tempo, or beats per minute. Click the **Tempo** button to manually set the tempo used in the timeline. See the instructions in [Determining Tempo](#) for more information on using this feature.

Messages

- Click the **Reset** button to reset the all the "Never show again" confirmation dialogs back to the default settings. All of the confirmation dialogs will display again once selected.


File Preferences

Click the  button to open the Preferences window, and then select the **File** tab. The available options are as follows:

File default profile settings:

- **Sample rate:** select the sample rate from the drop-down that CyberLink AudioDirector will use by default when producing audio.
- **Bit depth:** select the default bit depth from the drop-down that CyberLink AudioDirector will use when producing audio.
- **Channels:** select the default number of channels you want in the audio files produced by CyberLink AudioDirector.



Project Preferences

Click the  button to open the Preferences window, and then select the **Project** tab. The available options are as follows:


Project default profile settings:

- **Sample rate:** select the default sample rate from the drop-down of the audio in newly created projects.
- **Bit depth:** select the default bit depth from the drop-down of the audio in newly created projects.
- **Channels:** select the default number of channels of the audio in newly created projects.

Default project folder:

- **Project folder:** set the folder where CyberLink AudioDirector project files are saved by default. To change this folder, click  and then select a new folder.
- **Working folder:** set the folder that CyberLink AudioDirector uses to store the working files it creates when editing, mixing, and adding effects to your audio. To change this folder, click  and then select a new folder.

DirectorZone Preferences

Click the  button to open the Preferences window, and then select the **DirectorZone** tab. The available options are as follows:

Sign in:

- enter in your **E-mail address** and **Password**, and then click the **Sign in** button to sign in to DirectorZone. If you do not have a DirectorZone account, click on the **Get an Account** link.
- **Auto sign in to DirectorZone:** select this option to automatically sign in to DirectorZone when the program is opened.




*Note: you can sign out from DirectorZone at any time by returning to this tab, and then clicking the **Sign out** button.*

Privacy rules:

- **Allow DirectorZone to gather editing information:** select this option to allow DirectorZone to collect information about how you edited the sound clips you are uploading to DirectorZone.


Audio Settings Preferences

Click the  button to open the Preferences window, and then select the **Audio Setting** tab. The available options are as follows:

Audio hardware settings

- **Default input:** from the drop-down select the audio hardware device, such as a microphone, that you want to use by default when recording audio in CyberLink AudioDirector.
- **Default output:** from the drop-down, select the connected audio device you want the audio to be outputted to during playback.


Hardware Acceleration Preferences


Click the  button to open the Preferences window, and then select the **Hardware Acceleration** tab. The available options are as follows:

Hardware acceleration:

- **Enable hardware acceleration for video decoding:** if your computer supports NVIDIA CUDA/AMD Accelerated Parallel Processing/Intel Core Processor Family technology, select this option to use hardware acceleration to decode the video during the editing process and when previewing videos.

CyberLink Cloud Preferences

Click the  button to open the Preferences window, and then select the **CyberLink Cloud** tab. The available options are as follows:

- **Back up and restore your preferences:** if you have a CyberLink Cloud subscription you can click **Back up to CyberLink Cloud** to back up program preferences to CyberLink Cloud. Click **Restore from CyberLink Cloud** to replace your current program preferences with the ones you previously backed up on CyberLink Cloud.
- **Download folder:** click the  button to change the folder where CyberLink Cloud sound clips, projects, and media are stored when downloaded.
- **Clear CyberLink Cloud cache:** click the **Clear Offline Cache** button to free up some disk space by emptying the temp files stored when downloading content from CyberLink Cloud.
- **Sign out from CyberLink Cloud service:** if you are currently signed in to CyberLink Cloud, click the button to sign yourself out.



Note: click the **Account Information** link in the bottom right corner of the preferences windows if you want to know your CyberLink Cloud subscription expiry date, how much storage space you have, and more.

Chapter 14:

AudioDirector Hotkeys

The following is a list of the hotkeys available in CyberLink AudioDirector for your convenience:

Hotkey	Description
File/Project Features	
Ctrl+N	New project
Ctrl+O	Open project
Ctrl+S	Save project
Ctrl+Shift+S	Save project as
Ctrl+Q	Import media
Space bar / Num 0	Play/Pause
Num 1	Fast forward
Num 2	Rewind
F12 / Num 3	Start/Stop recording
, / Enter	Jump to beginning
.	Jump to end
* (then number and Tab keys)	Jump to inputted timecode in Start field
Ctrl+Shift+L / Num 4	Toggle play once/repeat
Num 7	Enable/Disable metronome
Ctrl+C	Copy
Ctrl+V	Paste
Ctrl+X	Cut
Ctrl+Y	Redo
Ctrl+Z	Undo

Hotkey	Description
Delete	Remove
Alt+C	Open AudioDirector preferences
F1	Open help
Esc	Exit countdown timer
Alt+F4	Close AudioDirector
Mix Room	
Ctrl+Shift+W	New workspace (Mix room only)
Ctrl+T	Split audio at timeline slider position on selected track
Shift+S	Enable/Disable solo on selected track
Shift+M	Enable/Disable mute on selected track
Alt+L / Num 5	Enable/Disable loop recording
Ctrl+K	Enable/Disable pre and post roll
Ctrl+M	Display/Hide mixer panel

Chapter 15:

Licensing and Copyright Information

This section contains the AudioDirector licensing and copyright information.

Dolby Laboratories

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. Confidential unpublished works. Copyright 2003-2005 Dolby Laboratories. All rights reserved.



Chapter 16:

Technical Support

If you require technical support, then this chapter can help. It includes all the information you need to find the answers you are looking for. You may also find answers quickly by contacting your local distributor/dealer.

Before Contacting Technical Support

Before contacting CyberLink technical support, please take advantage of one or more of the following free support options:

- consult the user's guide or the online help installed with your program.
- refer to the Knowledge Base at the following link on the CyberLink web site: <https://www.cyberlink.com/support/search-product-result.do>
- check the [Help Resources](#) page in this document.

When contacting technical support by e-mail or phone, please have the following information ready:

- registered **product key** (your product key can be found on the software disc envelope, the box cover, or in the e-mail received after you purchased CyberLink products on the CyberLink store).
- the product name, version and build number, which generally can be found by clicking on the product name image on the user interface.
- the version of Windows installed on your system.
- list of hardware devices on your system (capture card, sound card, VGA card) and their specifications. For fastest results, please generate and attach your system info using the DxDiag.txt.



Note: here are the steps to generate the system info DxDiag.txt file: Click Windows (start) button, and then search for "dxdiag". Click **Save All Information** button to save the DxDiag.txt file.

- the wording of any warning messages that were displayed (you may want to write this down or take a screen capture).

- a detailed description of the problem and under what circumstances it occurred.

Web Support

Solutions to your problems are available 24 hours a day at no cost on the CyberLink web site:



Note: you must first register as a member before using CyberLink web support.

CyberLink provides a wide range of web support options, including FAQs, in the following languages:

Language	Web Support URL
English	https://www.cyberlink.com/cs-help
Traditional Chinese	https://tw.cyberlink.com/cs-help
Japanese	https://jp.cyberlink.com/cs-help
Spanish	https://es.cyberlink.com/cs-help
Korean	https://kr.cyberlink.com/cs-help
Simplified Chinese	https://cn.cyberlink.com/cs-help
German	https://de.cyberlink.com/cs-help
French	https://fr.cyberlink.com/cs-help
Italian	https://it.cyberlink.com/cs-help

Help Resources

The following is a list of help resources that may assist you when using any of CyberLink's products.

- Access CyberLink's **Knowledge base** and **FAQ** (frequently asked questions):
<https://www.cyberlink.com/cs-resource>
- View **video tutorials** for your software:
<https://directorzone.cyberlink.com/tutorial/>

- Ask questions and get answers from our users on the **CyberLink Community Forum**: <https://forum.cyberlink.com/forum/forums/list/ENU.page>



Note: *CyberLink's user community forum is only available in English and German.*

Index

3

360 videos 18

4

4K/2K 115

5

5.1 8, 26

7

7.1 8, 26

A

Ambience

adding 48

extracting 48

presets 48

Ambience match 47

Attack time 68

Attenuate

ratio 92

visual repair 82

Audio

adding markers 12

attenuate 82

background noise 47

boosting 38

channels 35

converting 35, 113

creating 95

cropping 10

CyberLink Cloud 117

downloading 27

dubbing 109

editing 35

effects 53

exporting 113

fading 39

importing 26

input 123

inserting noise 46

inserting silence 45

length 42, 107

level meter 20

master track 97

mixer panel 99

mixing 98

mixing down 113

noise reduction 84

normalizing 36, 103

output 123

output preview 21

panning 51, 108

pitch 43

playback controls 16

producing 113

recording 29

remixing 107

removing clicks 88

Audio

- removing vocals 69
- repairing 71
- restoring 71
- reversing 46
- saving 113
- sharing 117
- speed 42
- supported formats, export 113
- supported formats, import 26
- trimming 41
- TrueTheater surround 35
- uploading 114, 117
- volume 50

AudioDirector

- Live 2
- patches 2
- upgrading 2

Auto remix 107

Automated Dialogue Alignment 109

B

Background noise

- adding 48

Bar/Beat 7

Base frequency 91

Bit depth 35

Boost 38

C

CDs

- creating 119

Change speed 42

Channels

- editing 10
- normalizing 36
- overview 8
- panning 108
- setting number of 35

Chorus effect 60

Click removal 88

Clipping removal 87

Codec

- preview 21

Color label 101

Compressor 54

Controls

- playback 16
- zoom 13

Convert 113

- audio 35

Create

- audio mix 95
- CDs 119
- discs 5

Crop 10

Crossfade 104

CyberLink Cloud

- account information 124
- backing up sound clips 117
- downloading sound clips 28
- overview 2
- pack project materials 33
- preferences 124
- projects 34
- signing out 124
- uploading audio 114

D

- Decay 61
- Delay depth
 - chorus effect 61
 - flanger 59
 - phaser 58
- Delays
 - adding 54
- DirectorZone
 - downloading sound clips 27
 - overview 2
 - preferences 123
 - shaing sound clips 117
- Discs
 - creating 119
- DJ scratch 105
- Dry-wet mix
 - auto denoise 85
 - chrous effect 61
 - delays 55
 - flanger 59
 - noise reduction 86
 - phaser 58
 - reverb 56
- Dubbing 109
- Dynamic range control 53

E

- Echo 56
 - adding 61
- Edit

- audio 5, 35
 - tools 36
- Effects 24
 - applying 53
 - chorus 60
 - echo 61
 - flanger 58
 - importing 70
 - noise gate 68
 - phaser 57
 - VST 70
- Equalizer 62, 64
- Expander 54
- Export 113
 - projects 33
 - to CyberLink Cloud 33

F

- Fades 39
- Feedback
 - delays 55
 - echo 62
 - flanger 59
 - phaser 58
- Filter bandwidth 91
- Flanger 58
- Frequency smoothing 92

G

- Gate 54
- Groups 98

H

- Hardware acceleration
 - preferences 124
- Harmonic slope 91
- Harmonics 91
- Help 130
- Hiss removal 92
- Hold time 68
- Hotkeys 126
- Hum removal 88

I

- Import
 - audio 26
 - effects 70
 - supported formats 26
 - video 26
- Initial delay time
 - chorus effect 61
 - echo 62
 - flanger 59
- Insert 95

L

- Language
 - changing 121
- Levels 20
- Library 6
 - sorting 6

- Limiter 54
- Loop recording 31
- Loopback recording 30

M

- Markers
 - timeline 12
- Master track 97
- Master volume 50
- Media
 - editing 35
 - importing 26
 - playback controls 16
 - sorting 6
- Meter 20
- Metronome 13
- Microphone 30
- Mix 95
 - audio 5
 - master track 97
 - timeline 8
- Mix down 113
- Mixer panel 99
- Modulation rate
 - chorus effect 61
 - flanger 59
 - phaser 58
- Mono 8

N

- New features 1
- Noise

- Noise
 - inserting 46
 - reducing 84
- Noise gate 68
- Noise level threshold 92
- Normalize
 - across tracks 103
 - audio channels 36
 - volume on CD 119

O

- Output
 - preview 21
- Output gain 53
- Overwrite 95

P

- Panning 51, 108
- Phase diff 59
- Phaser 57
- Phone 67
- Pitch
 - bender 44
 - shifting 43
 - vocals 63
- Playback 16
- Plosive removal 93
- Plug-ins 70
- PowerDirector 113
- Preferences 121
- Produce 113
 - audio 113

- preview 21
 - video 115
- Projects 33
 - CyberLink Cloud 34
 - exporting 33

Q

- Quick bar 15

R

- Radio 66
- Range selection 10
- Record 29
 - loopback 30
 - settings 30
 - what you hear 30
- Recording
 - loop 31
 - multiple takes 31
- Release time 68
- Remix 107
- Restore 71
- Reverb 56
- Reverse 46
- Room size 56
- Room width 56

S

- Sample rate 35
- Save

- Save
 - projects 33
- Shape 59
- Share 117
- Silence 45
- Slider 8
- Smart repeat 105
- Smart transition 104
- Solo 101
- Sort 6
- Sound clips
 - CyberLink Cloud 28
 - DirectorZone 27
 - library 29
- Sparkle 56
- Spectral frequency view 12
- Speed 42
- Split 95
- Stage count 58
- Stereo 8
- Stereo expander 65
- Surround sound panner 108
- System requirements 4

T

- Technical support 129
- Tempo
 - determining 13
- Tempo transition 105
- Temporal smoothing 92
- Threshold
 - noise gate 68
 - noise level 92

- Timbre 63
- Timecode 7
- Timeline
 - adding tracks 97
 - markers 12
 - master track 97
 - mix audio 8
 - overview 7
 - slider 8
- Track
 - color 101
 - label 101
- Tracks
 - adding 97
 - grouping 98
 - normalizing 103
 - panner 103
- Transitions 104
- Trim 41
 - range 10
- TrueTheater surround 35

U

- UI language 121

V

- Videos
 - 360 18
 - decoding 124
 - dubbing audio 109
 - editing audio 35
 - importing 26

Videos

- only audio 97
- only video 97
- playback controls 17
- producing 115

Views

- spectral frequency 12
- waveform 11

Visual repair 71

Vocals

- changing 63
- pitch 63
- removing 69
- transforming 63

Voices count 61

Volume 24

- master 50
- normalizing 119

VST effects 70

W

Waveform view 11

Web support 130

What you hear 30

Z

Zoom 13