Lesson 12

Mixing Sound in Fairlight

By now, you've probably heard that sound is half of the video experience. Yet, somehow, sound often gets the least amount of attention when it comes to independent filmmakers. In the words of George Lucas, "Filmmakers should focus on making sure the soundtracks are really the best they can possibly be. Because in terms of an investment, sound is where you get the most bang for your buck." The Fairlight page in DaVinci Resolve is designed specifically for realizing cinematic-quality sound in your productions. Most importantly, since it is built into your editing application, you can refine the edit, visual effects, color, and sound mix, right up until the time of your final delivery. That integration is what makes DaVinci Resolve a game changer for filmmakers.

In this lesson, you'll navigate the Fairlight page, edit sound effects and narration, record a voiceover, and clean up some background hum using FairlightFX.

Time

This lesson takes approximately 70 minutes to complete.

Goals

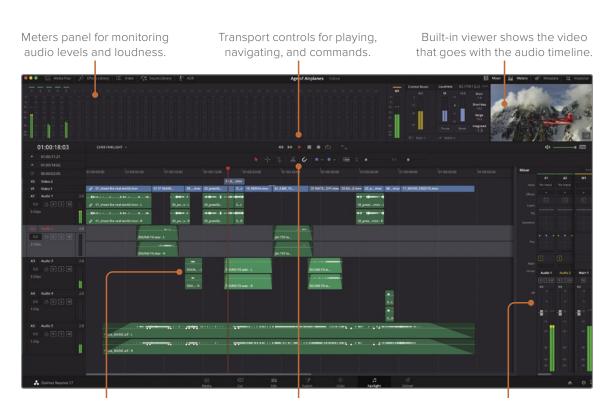
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Exploring the Fairlight Interface

Let's talk about workflow. You are almost finished with your edit, and your project is now more or less complete. At some point, you must move on to audio finishing. Traditionally, all audio postproduction was completed separately from editing using stand-alone audio software. As a result, media conversions and duplication of work were necessary just to share the edited timeline with an audio-post application. You are about to experience how that workflow is accelerated by DaVinci Resolve.

- 1 Open the Age of Airplanes project, if necessary.
- Choose Workspace > Reset UI Layout to return to the default dual viewer layout.
- 3 Select the Rough Cuts bin and then choose File > Import > Timeline.
- 4 In the File browser window that opens, navigate to the R17 Beginners Guide lesson folder, select the Lesson 12 folder, and import the CH12 FAIRLIGHT (Resolve).drt.
 - The CH12 FAIRLIGHT (Resolve) timeline is added to the Rough Cuts bin and is loaded into the timeline window.
 - This timeline is slightly different from the one you used in the previous lesson. It has all the volume changes you made, along with the completed keyframing and fade-up on the music track, but it also has a few more sound effects split onto different tracks.
- 5 At the bottom of the DaVinci Resolve interface, click the Fairlight button.
 - That is the one and only workflow step required to move from editing to audio post!
 - While the interface may appear to be a single large timeline, the Fairlight page is divided into four sections.

Your current timeline—with the same color-coded tracks, markers, and audio levels that you were viewing in the edit page—is now available in the Fairlight page. It looks different because the Fairlight page is optimized for multichannel audio recording, editing, mixing, and sweetening. As you can see, the default layout is streamlined to focus on the audio timeline.



Timeline that shows each audio track with individual channels.

Toolbar for commonly used tools and recording in a timeline.

A track-based mixer for adjusting levels of entire tracks.

- 6 Press Shift-Z to fit all the timeline clips horizontally in the page, if necessary.
- 7 Drag the playhead to the start of the timeline or press the Home key.
- 8 Press the Spacebar to play your project.

Like the cut page, the playhead remains in its current position and the timeline tracks scroll under it.

TIP You can have the playhead move like the edit page timeline using the Timeline View Options menu.

- 9 Press the K key to pause, and then press L twice to fast forward.
- 10 Press J to play backward.
- In the transport controls above the timeline, click the Stop button, or press the Spacebar again, to stop playback.



You'll notice that, unlike the edit page, each track shows the number of channels it contains. Let's expand the tracks vertically so you can more clearly see the two channels on the Audio 1 track.

12 In the timeline header, select the track you want to expand vertically—in this case, Audio 1.



When zooming a Fairlight timeline, the focus remains on the playhead for horizontal zooming and the selected track for vertical zooming.

13 Expand the Audio 1 track vertically in the timeline window by holding down Shift and scrolling your middle mouse wheel.



NOTE If you do not have a three-button mouse (and it is strongly recommended to have one when using DaVinci Resolve), use the vertical and horizontal scale sliders in the toolbar to scale the tracks in the timeline.

Other standard transport controls such as Play, Rewind, and Fast Forward are also included in the strip of transport controls, along with audio-specific transport controls such as Loop and Record.

Previewing Video

In a traditional audio-post workflow, an audio editor will need a separate reference video to use as a guide when building the soundtrack. In Resolve, you do not need a reference video because the Fairlight page includes a handy viewer that shows the timeline's video. You can also show and hide each cut on the video tracks or a filmstrip video scroller that scrolls along the bottom of the timeline.

- 1 In the toolbar, click the timeline view Options button.
- Click the Video Tracks button to hide the edited video tracks at the top of the timeline.



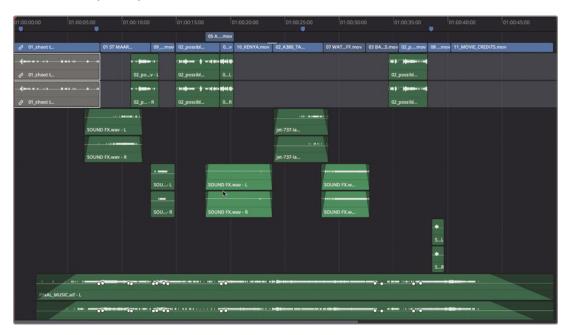
- 3 Below the Video Tracks button, click the Video Scroller button to show the video filmstrip along the bottom of the timeline.
- 4 Play the timeline to watch the filmstrip scroll along with the audio and then stop playing.
 - We'll return to the more traditional video tracks view.
- 5 In the toolbar, click the timeline view Options button.
- 6 Click the Video Tracks button to show the edited video tracks and then click the Video Scroller button to hide the filmstrip.

The video tracks and all the edits appear above the audio tracks in the Fairlight timeline. If you have a Blackmagic DeckLink card or UltraStudio, you can also view the video on a second video display.

Renaming and Color Coding Tracks

Track organization becomes extremely important as you expand the number of audio tracks and need to navigate through them quickly. Instead of trying to remember the track number that you used for different types of tracks, you can rename tracks to describe their contents. For this project, you'll use capital letters to name individual tracks. Using capital letters in track names is common practice in audio postproduction because they are easier to read in both the track headers and the audio mixer.

1 Hold down the Shift key and scroll the middle mouse wheel to scale down the Audio 1 track vertically until you are able to see all five audio tracks in the timeline.



Dealing with a handful of tracks is easy, but imagine that you have 50 tracks or more in your project. Suddenly, you'll want more than a vague track number to identify each track.

Fortunately, DaVinci Resolve allows you to name the audio tracks in the header.

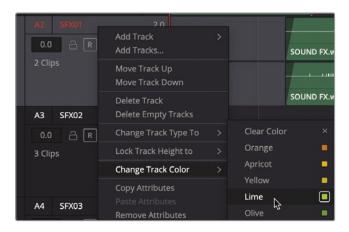
2 On the A1 track header, double-click the name Audio 1. Type **SYNC**.



This is the track that contains your sync sound interview. The next two tracks contain sound effects, and the last two are for music.

3 Press Tab to jump to the next track name.

- 4 Change the names of Audio 2 to **SFX 01**. Press Tab and change Audio 3 to **SFX 02**. Press Tab and change Audio 4 to **SFX 03**.
- 5 Press Tab and change the Audio 5 track to **MUSIC**.
 - As you did in the edit page, you can also better organize tracks by color coding the new tracks in the Fairlight page.
- 6 Right-click the SFX 01 track header and choose Change Track Color > Lime.



- 7 Do the same for SFX 02 and SFX 03.
- 8 On the MUSIC track, right-click the header and choose Change Track Color > Yellow.



Now, the similar sound-element tracks are color coded to match, thereby making it easier to parse a large timeline. Again, when you're working with only a few tracks, naming and color coding them may seem like overkill, but when your track list starts to grow, you will be glad you started the process in an organized fashion.

Viewing the Index

Communication is essential in postproduction because one person seldom does all the work. As a result, it's important to keep a list of the audio tasks you must complete for your project. Even when you plan to do all the editing and audio mixing yourself, most projects develop too many details to keep in your head, so making a list is critical.

Among the items in the list, you should include the basic decisions about where music, sound effects, and additional voice over (VO) should be placed. Those choices are documented in a *spotting list* that is typically created when the director, the sound editor, and the composer watch the program together and identify, or spot, where sound effects and music are needed.

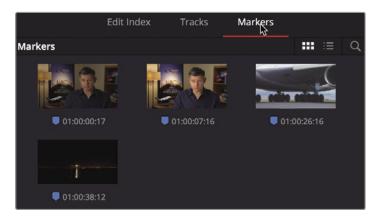
Even when you are one person doing everything, you will still need that spotting list of all the audio elements you'll want to add. The Index panel takes much of the work out of creating a spotting list by leveraging those markers you added on the edit page along with any new markers you add in the Fairlight page.

1 In the upper left of the Interface toolbar, click the Index button.



The Index is divided into three tabs. The first tab is a duplicate of the Edit Index, and the Tracks tab lists all the tracks in the current timeline. The third tab shows the markers added to the timeline.

2 In the Index, click the Markers tab.



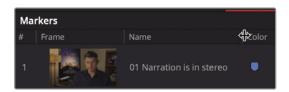
The Markers index shows a thumbnail and timecode location for each timeline marker. It also displays any text typed into the name and notes fields in a list view.

3 At the top of the Index window, click the List View button to view the Index as a list.

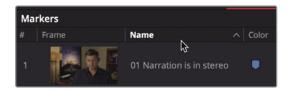


In list view, you can use marker information in the columns to help create your spotting list by customizing the columns to show only the information you need.

- 4 Right-click any one of the column headings and deselect Start TC, End TC, Duration, and Notes to hide those columns in the Index.
- 5 Drag the right edge of the Name column heading until you can see the entire name of the marker.



6 Click the Name column header to sort the markers in the order they are numbered, 1 through 4.



Now that the marker spotting list is set up, you can use it as a guide for your upcoming work on the soundtrack.

TIP You can sort markers in ascending or descending order based on any selected column header.

To move the timeline playhead to a marker, you can use the thumbnail frame in the marker list.

7 Double-click the thumbnail frame for the first marker in the list.

TIP In the Fairlight page, when the timeline is active, press the Shift-Up Arrow and Down Arrow keys to move the playhead from marker to marker just as you would in the edit page.

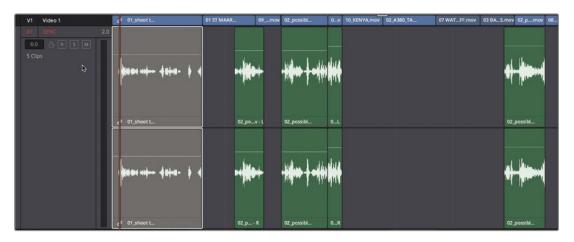
The playhead jumps to the marker position in the timeline. The note attached to this marker states that the Sync narration is stereo. Although it isn't unusual to find editors cutting dialogue in stereo, spoken word tracks are most often mixed in mono.

Changing Track Formats

Whatever spoken word tracks you have in your project, whether they be dialogue, interview, or voiceover, they are probably the primary audio in your timeline. So, it is essential to spend extra time finessing those clips to create a polished soundtrack.

The first step in editing spoken words is to evaluate those recordings. You can learn a lot about a track's recording methods just by looking at the audio clips in the Fairlight timeline. Let's take a closer look at the A1 SYNC track.

- 1 In the timeline header, select the A1 SYNC track.
- 2 Expand the SYNC track vertically in the timeline window by holding down Shift and scrolling your middle mouse wheel.

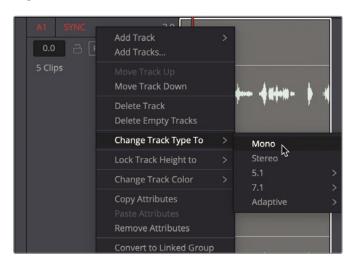


These clips on the SYNC track have two waveforms because they are in two-channel stereo clips on a stereo track.

3 On the A1 SYNC track, click the Solo button and play the track. The left and right channels sound identical.

It is typical for narration or dialogue to be recorded as mono clips. When looking at the A1 SYNC waveforms, you may notice both channels are displaying the same exact waveform. They are the same size and the same shape. Without even playing the clips, the waveform display shows that these clips have the same sound on both channels. You can assume that the channels are identical and that these clips are mono recordings. Listening to the clips, you cannot hear any discernable difference in the left and right channels, confirming that they are indeed the same on both channels. The quickest way to turn these clips into mono clips is to convert the entire timeline track to mono.

4 Right-click the A1 SYNC track header and choose Change Track Type To > Mono.



After you convert the track type, three key indicators let you know the track was changed. The label to the right of the track name now reads 1.0 to indicate a mono track. The meter to the right of the track header shows a single volume meter instead of two meters. Lastly, the clips on the track show only one waveform.

The clips themselves are not modified, however. If you edit or copy one of these clips onto a stereo track, both channels will reappear. Because a mono timeline track can contain only one channel of audio, the left channel (the upper channel as seen in the timeline) is used by default when stereo clips are edited onto mono tracks. Since both channels on these clips were identical, converting the track was the quickest way to make all the clips on the A1 SYNC track mono.

Trimming Clips in Fairlight

The next step when cleaning up a spoken word track usually is to refine them using a trimming method like one you used in the edit page. However, the trimming behavior in the Fairlight page is more akin to trimming with the Selection tool on the edit page, and not the Trim tool. You can extend or shorten clips without worrying about pushing tracks out of sync because Fairlight never ripple trims clips.

1 In the Index, double-click the thumbnail frame for the second marker.

The playhead jumps to the end of the first timeline clip on the SYNC track. The marker note in the Index describes the last word of the clip is cutting off too early.

Let's first play over the clip to hear the narration.