



# Cakewalk<sup>®</sup> Next

## USER MANUAL

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To download Cakewalk Next®, please visit [www.cakewalk.com/next](http://www.cakewalk.com/next).

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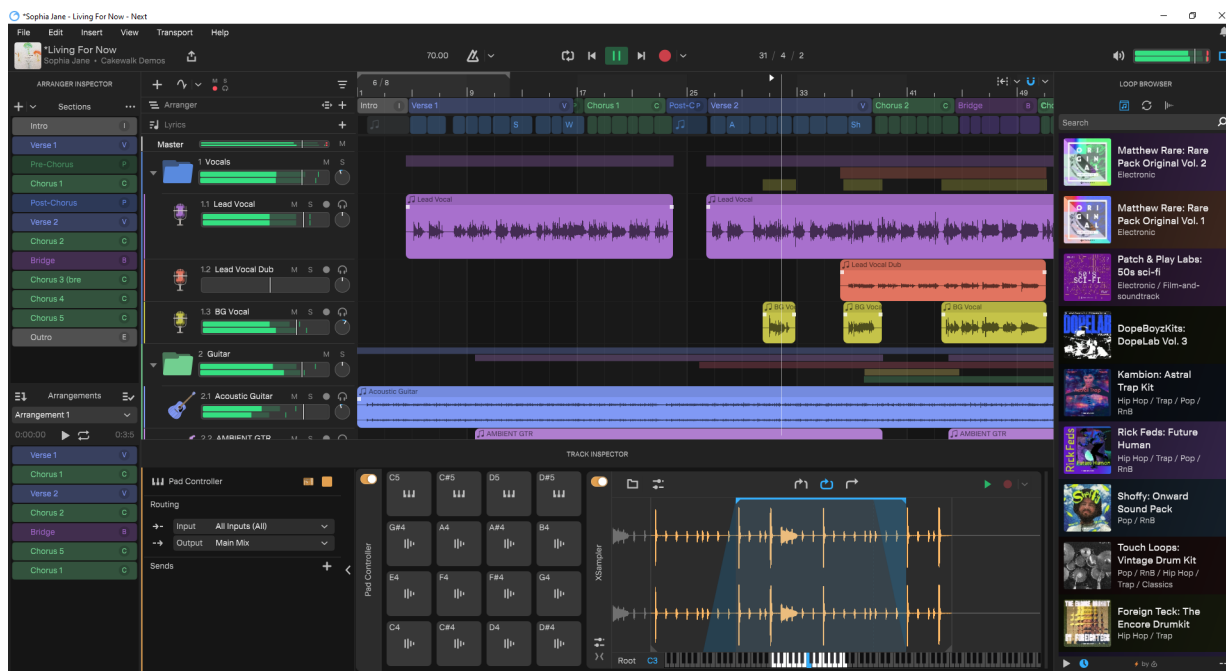
# Cakewalk Next® Introduction

## Welcome to Cakewalk Next®!


*Cakewalk Next*® is a cross-platform digital audio workstation (DAW) that offers cloud-based project sync and interchange.

Take an idea from the BandLab mobile app, then continue working on it on your desktop. Or export your desktop projects to your BandLab library and take advantage of all the benefits the BandLab platform offers, including:

- ▶ Continue working on your songs from anywhere using the free BandLab app for iOS and Android
- ▶ Check the mix in your car by connecting via Bluetooth to your car stereo
- ▶ Use Google Chromecast to stream songs to your HDTV or home audio hi-fi system
- ▶ Collaborate with other musicians privately or publicly on BandLab



To launch *Cakewalk Next*®, do *one* of the following:

- ▶ Double-click the *Next* shortcut on your desktop 
- ▶ Windows: Find *Next* in the Start Menu under **Next**
- ▶ Mac: Select the Launchpad icon on the Dock, then click the *Cakewalk Next*® app icon

To quickly learn the basics of using *Next*, see “[Quick Tutorials](#)” on page 257.

See:

“UI overview” on page 9

“Enabling input and output devices” on page 23

“Creating and saving projects” on page 24

“Inserting tracks” on page 28

“Using track templates” on page 32

“Scrolling and zooming” on page 37

“Installing Cakewalk Next®” on page 38

“Activating Cakewalk Next®” on page 38

“Support” on page 39

See also:

“Playback” on page 41

“Recording” on page 47

“Virtual MIDI Controller” on page 61

“Loop Browser” on page 63

“Inspectors” on page 77

“Editing” on page 113

“Mixing” on page 173

“Effects” on page 179

“Automation” on page 197

“Exporting” on page 227

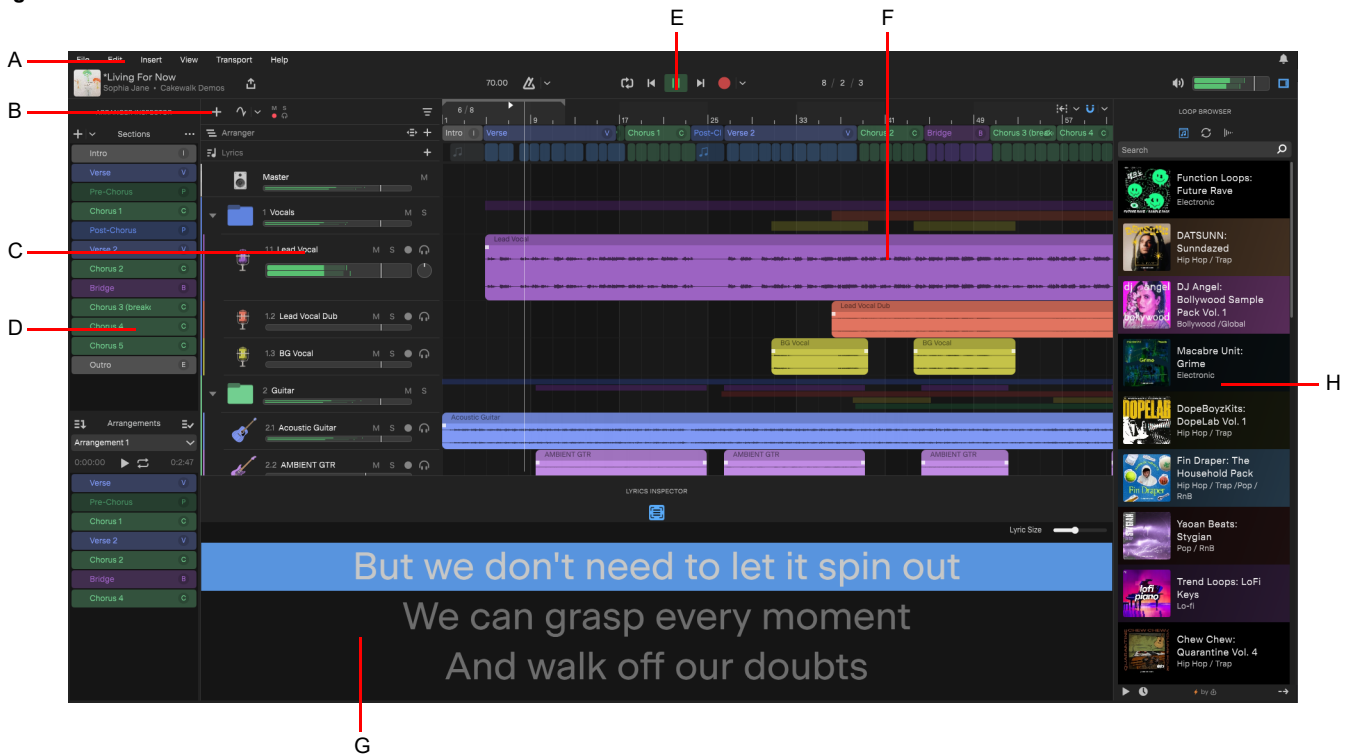
“Preferences” on page 233

“Menu commands” on page 245

“Keyboard shortcuts” on page 251

# UI overview

Figure 1. Cakewalk Next® UI.



A. Menu B. Insert track C. Tracks and buses D. Arranger inspector E. Main toolbar F. Clips pane G. Inspectors (track/clip/lyrics) H. Loop Browser

- ▶ **Menu.** The menu contains various commands for using *Next*. For details, see “[Menu commands](#)” on page 245.
- ▶ **Main toolbar.** The main toolbar provides convenient access to frequently used controls, including project information, tempo, metronome, transport, and monitor level. For details, see “[Main Toolbar / Transport](#)” on page 10.
- ▶ **Track, bus, and folder channel strips.** The Track pane shows a channel strip for each track, bus, and track folder. For details, see “[Track/Bus/Track Folder controls](#)” on page 13 and “[Track folders](#)” on page 17.
- ▶ **Clips pane.** The Clips pane shows the clips in your project on a timeline that helps you visualize how your project is organized. For details, see “[Clips pane](#)” on page 15 and “[Editing clips](#)” on page 120.
- ▶ **Time ruler.** Shows the project timeline in measures and beats, absolute time, or samples. For details, see “[Time ruler](#)” on page 16.
  - ▶ Click to set the playback position.
  - ▶ Double-click to start playback.
  - ▶ Drag to make a time selection.
  - ▶ Right-click to change the display format.
- ▶ **Inspectors.** Inspectors provide easy access to relevant settings and content.
  - ▶ **Loop Browser.** The Loop Browser lets you access and import a professionally curated selection of premium audio packs, loops, and one-shots right from within *Next*. Just drag & drop directly into tracks. For details, see “[Loop Browser](#)” on page 63.
  - ▶ **Track Inspector.** The Track Inspector lets you add effects and configure input echo, input, output, and sends for the selected track/bus/folder (see “[Track Inspector](#)” on page 78).
  - ▶ **Clip Inspector.** The Clip Inspector lets you edit instrument tracks with a Piano Roll interface (see “[Clip inspector / Piano Roll view](#)” on page 83).
  - ▶ **Arranger Inspector.** The Arranger Inspector shows all the arranger sections defined in the project’s timeline, and allows you to create unlimited different arrangements of the current project. Each arrangement can contain any combination of sections, in any order. For details, see “[Arranger](#)” on page 87 and “[Arranger Inspector](#)” on page 92.
  - ▶ **Lyrics Inspector.** The Lyrics Inspector can toggle between showing the Lyrics Editor (and Lyrics Scratch Pad) and Lyrics Prompter. For details, see “[Lyrics](#)” on page 207 and “[Lyrics Inspector](#)” on page 211.















## Main Toolbar / Transport

Figure 2. Main toolbar.



A. Project Information B. Export audio or publish to BandLab C. Tempo D. Metronome E. Loop playback F. Jump Back G. Play/Pause H. Jump Forward I. Record J. Now time K. Monitor Mute L. Main level and meter M. Show Loop Browser

The main toolbar contains the following controls:

- ▶ **Project Information.** Shows the project thumbnail image, title, author, and album. Click to open the Project Information Editor (see “Project Information” on page 26).
- ▶ **Share** . Export audio or publish to BandLab. For details, see “Exporting” on page 227.
- ▶ **Tempo.** The current tempo at the Now time. Double-click to change the current tempo. To use tap tempo, open the Metronome Options menu.
- ▶ **Metronome** . Enable/disable the metronome. Click the drop-down menu  to configure metronome settings and use tap tempo. For details, see “Using the metronome” on page 60.
- ▶ **Transport.** The toolbar contains common transport controls:
  - ▶ **Toggle Loop Playback** . Enable/disable playback looping (see “Looping” on page 42).
  - ▶ **Jump Back** . Rewind the playback position and seek to loop positions and the playback marker en route to the project start.
  - ▶ **Play/Pause** . Start/pause playback.
  - ▶ **Jump Forward** . Jump forward and seek to loop positions en route to the project end.
  - ▶ **Record** . Start/stop recording on any armed tracks (see “Recording” on page 47). Click the drop-down menu  to configure recording settings.
    - When punch recording is enabled, the Record button looks like  (see “Punch recording” on page 55).
- ▶ **Now Time.** Shows the current playback position. To change the time format, select one of the following menu options:
  - ▶ **View > Display Musical Time.** Measure:Beat:Tick
  - ▶ **View > Display Absolute Time.** Minute:Second:Millisecond
  - ▶ **View > Display Sample Time.** Sample
- ▶ **Monitor Mute** . Mute the main output.
- ▶ **Monitor Level and meter.** The overall volume level for all tracks in the project, ranging from -INF (silent) to +6 dB (maximum volume). Double-click to reset. The main meter sum pairs of output channels into a single stereo meter.
- ▶ **Show Loop Browser** . Show/hide the Loop Browser (see “Loop Browser” on page 63).
- ▶ **Notifications** . Show/hide notifications. The button shows a red circle  if there are any notifications.







See also:

“Menu commands” on page 245

## Track pane

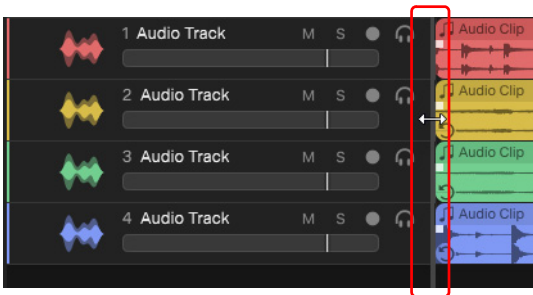
The Track pane contains the following items:

- ▶ **Insert track** . Open a menu that lets you select a track type to insert:
  - ▶ **Mic/Line In** . Record your voice or any sound using a microphone. Click the icon to create a blank track. Use the submenu to select any available track template.
  - ▶ **Instrument** . Play and record a virtual instrument using a MIDI device or your computer keyboard.
  - ▶ **Sampler** . Use MIDI to play back loops, one-shots, audio clips or local audio files.
  - ▶ **Pad Controller** . Use MIDI to trigger up to 16 sampler or instrument pads.
  - ▶ **Instrument Rack** . Use MIDI to trigger up to 16 layered instruments simultaneously within a single track.
  - ▶ **Bus** . Create a bus that can be used to process many tracks.
  - ▶ **Track Folder** . A track folder may contain other tracks, buses, and folders. Useful for project organization and mixing.
- ▶ **Show/Hide Automation Lanes** . Show/hide automation lanes in track strips. Select the visible automation parameter from each track's **Automation** menu. To arm automation for recording, click the **Show/Hide Automation Lanes** button  drop-down menu  and select **Capture automation changes during playback/record**. A red circle  indicates that automation recording is enabled, and all automatable controls show a small red circle. For details, see ["Automation"](#) on page 197.
- ▶ **Global MSR** . The global MSR toggle buttons indicate if any tracks are muted, soloed, armed for recording, or have monitoring enabled. The four toggle buttons allow you to toggle the on-state for the Mute/Solo/Arm/Monitor parameters.
  - ▶ Toggling off a global MSR button results in toggling off this state for all tracks
  - ▶ Toggling on a global MSR button results in restoring the on cached state for any such tracks
  - ▶ A global MSR button is disabled if there are no associated cache states to restore
  - ▶ To toggle off the Mute, Solo, Arm, or Monitor state and clear the associated cache, hold down the CTRL (Windows) / CMD (Mac) key and click the corresponding global MSR button
- ▶ **Track View Options** . The **Track View Options** menu contains the following:
  - ▶ **Arranger**. Show/hide the Arranger track, which allows you to create arbitrary song sections anywhere on the project timeline, then later string them together for seamless playback. For details, see ["Arranger"](#) on page 87.
  - ▶ **Lyrics**. Show/hide the Lyrics track, which allows you to edit the time ranges of lyric events. For details, see ["Lyrics"](#) on page 207.
  - ▶ **Fit Vertically**. Resize tracks vertically to fill the Track pane.
  - ▶ **Zoom to fit**. Zoom the selection horizontally.
  - ▶ **Track height presets**. Quickly resize all tracks vertically.
  - ▶ **Expand track folders**. Expand all track folders.
  - ▶ **Collapse track folders**. Collapse all track folders.
- ▶ **Meter (time signature)** . Specify the project's time signature (the number of beats per measure and the note value of each beat). For details, see ["Setting the project meter \(time signature\)"](#) on page 45.

- ▶ **Ripple Edit** . Ripple editing allows you to adjust the position of a clip in the Track view, and automatically adjust the start position of all subsequent clips to compensate for the change. For details, see [“Ripple editing”](#) on page 125). You can choose to ripple edit just the selection, or all tracks. Click the **Enable/Disable Ripple Editing** button  drop-down menu  to specify the ripple mode:
  - ▶ **Ripple Edit Selection** . Only selected tracks, or tracks included via range selection within the clips pane are affected.
  - ▶ **Ripple Edit All** . Any edit on any track affects all tracks, including Arranger and Lyric track data.
- ▶ **Snap to Grid** . The snap grid makes it easy to align clips and note events, select time ranges, set the loop region, and control automation envelope drawing. When drawing, moving, and resizing objects, the objects will snap to the nearest point on the snap grid. For details, see [“Using the Snap Grid”](#) on page 133).
- ▶ **Track, bus, and folder channel strip(s)**. Each track, bus, and track folder is represented by its own channel strip. For details, see [“Track/Bus/Track Folder controls”](#) on page 13 and [“Track folders”](#) on page 17.

## Resizing the Track pane

To resize the Track pane horizontally, drag the splitter bar that divides the Track pane and Clips pane.

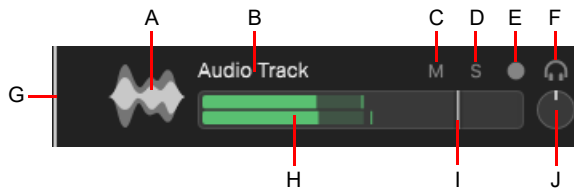




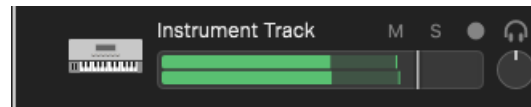
## Track/Bus/Track Folder controls

Each track/bus/folder contains the following controls.

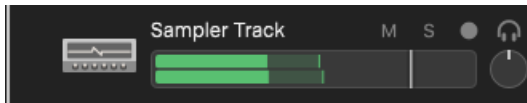
### Audio track:



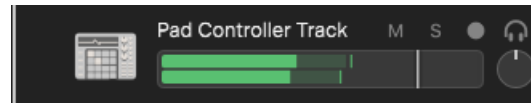
### Instrument track:



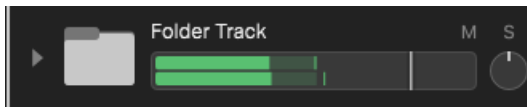
### Sampler track:



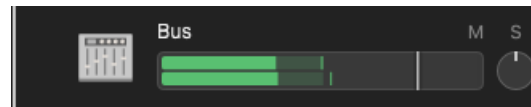
### Pad Controller track:



### Folder track:



### Bus:



A. Icon B. Name C. Mute D. Solo E. Record Arm F. Track Monitor G. Color H. Meter I. Volume J. Pan

▶ **Color.** Track colors make it easy to distinguish tracks. Inserted tracks cycle through 6 hard-coded colors. Right-click the color bar to change the track color.

▶ **Icon.** Default track icons are used to distinguish between different track types:



▶ = Audio track



▶ = Instrument track



▶ = Sampler track



▶ = Pad Controller track



▶ = Instrument Rack track







▶ = Folder track







▶ = Bus

▶ **Name.** The Name control lets you assign a descriptive name to each track. Double-click to edit.

▶ **Mute**  / . Mute the track so it is silenced during playback.

▶ **Solo**  / . Solo the track. Only soloed tracks are audible during playback if at least one track is soloed.

- ▶ **Record Arm** . Not available on buses and track folders. For details, see [“Arming tracks for recording”](#) on page 52.
  - ▶ By default, the focused track is auto armed, as indicated by a red hollow circle . This is useful for single track recording. For details, see [“Auto arm track for recording”](#) on page 52.
  - ▶ A solid circle  indicates a manually armed track, which useful for multitrack recording.
- ▶ **Track Monitor** . Enable/disable input monitoring, which allows you to hear plugin audio effects applied to the live signal.
- ▶ **Level meter.** Displays the playback level. Right-click to toggle between pre and post fader and pre/post FX):
  - ▶ **Input.** The signal is taken from before the channel volume fader and before effects.
  - ▶ **Pre Fader.** The signal is taken from before the channel volume fader and after effects.
  - ▶ **Post Fader.** The signal is taken from after the channel volume fader.
- ▶ **Volume.** The current volume level for the track, ranging from -INF (silent) to +6 dB (maximum volume). Double-click to reset.
- ▶ **Pan.** The stereo distribution of the output, ranging from -50 (hard left) to +50 (hard right). Double-click to reset.

See:

[“Inserting tracks”](#) on page 28

[“Grouping tracks with track folders”](#) on page 35

[“Importing audio”](#) on page 59

[“Editing tracks & track folders”](#) on page 114

[“Editing”](#) on page 113

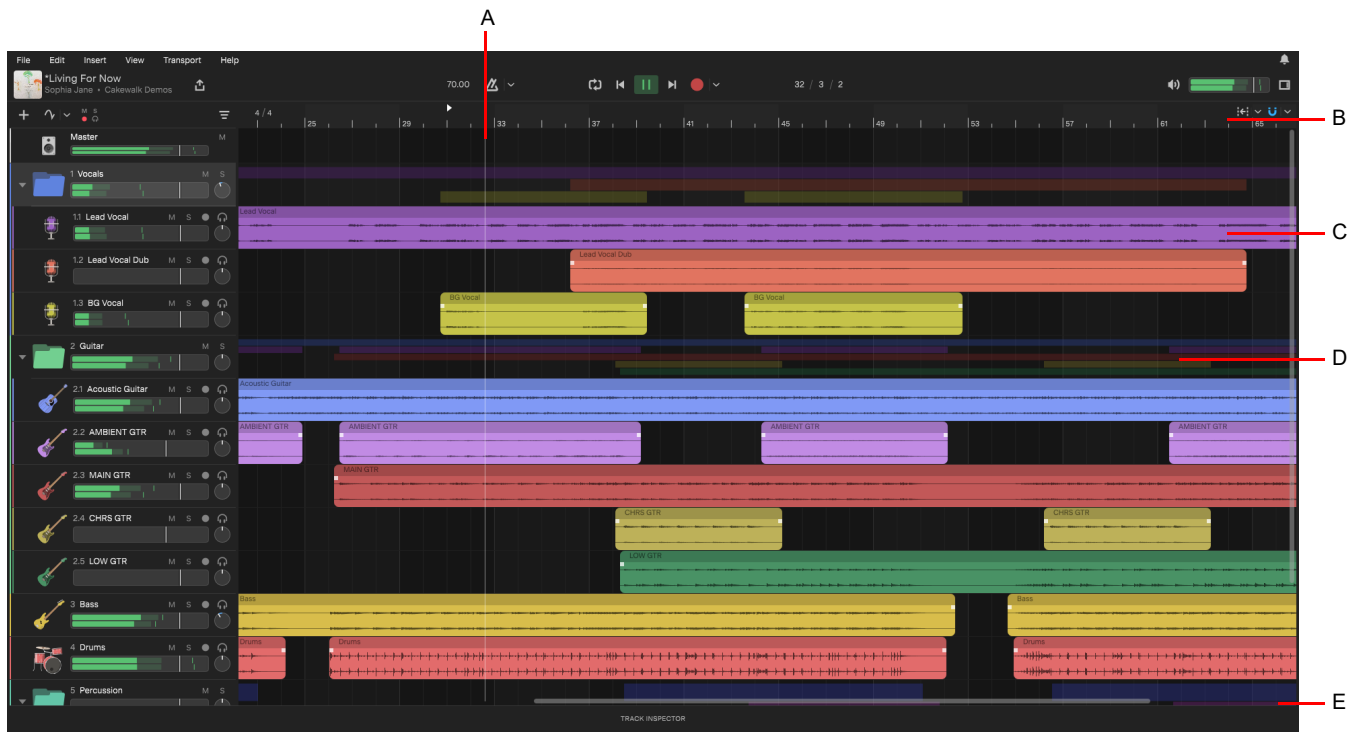
See also:

[“Track Inspector”](#) on page 78

[“Clip inspector / Piano Roll view”](#) on page 83

## Clips pane

The Clips pane contains the following elements.

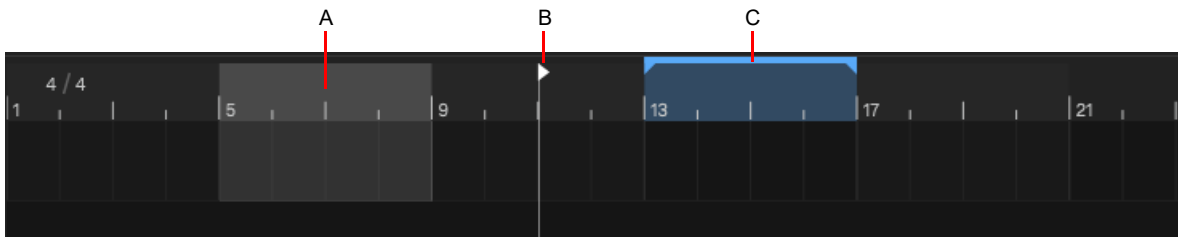


**A.** Now Time marker **B.** Time ruler **C.** Clip **D.** Composite folder clip **E.** Scroll bars

- ▶ **Now Time marker.** Shows the current playback position. To change the time format, select one of the following menu options:
  - ▶ **View > Display Musical Time.** Measure:Beat:Tick
  - ▶ **View > Display Absolute Time.** Minute:Second:Millisecond
  - ▶ **View > Display Sample Time.** Sample
- ▶ **Time ruler.** Shows the project timeline in measures and beats. Click to change the playback position.
- ▶ **Audio/MIDI clips.** Each recorded or imported audio/MIDI file appears as a separate clip. For details, see [“Editing clips”](#) on page 120.
- ▶ **Composite folder clips.** Each parent track folder shows a composite clip of its child clips.
- ▶ **Scroll bars.** Use the horizontal and vertical scroll bars to navigate the project. You can also use the mouse wheel to scroll horizontally.



## Time ruler

Figure 3. Time Ruler.



A. Time selection B. Playback start position C. Loop (and punch record) range

The Time ruler appears in the Clips pane and Clip Inspector's Piano Roll. It has several functions, including:

- ▶ **Showing the playback position.** During playback the vertical Now Time marker shows the current playback position.
- ▶ **Changing the Now time.** Click to set the playback position.
- ▶ **Starting playback.** Double-click to start playback.
- ▶ **Making a time selection.** Point the mouse pointer at the bottom 1/3 until the mouse pointer looks like , then drag left/right to make a time selection. The Time ruler follows the Snap to Grid settings, if enabled.
- ▶ **Zooming horizontally.** Point the mouse pointer in the middle 1/3 until the mouse pointer looks like , then drag up/down to zoom horizontally.
- ▶ **Setting the loop region.** Drag in the top 1/3 to set the loop region. Right-click to toggle loop on/off.
- ▶ **Setting the punch record region.** Drag in the top 1/3 to set the punch region. When punch recording is enabled, the blue loop markers turn red to indicate the punch region.

To change the time ruler format, select one of the following menu options:

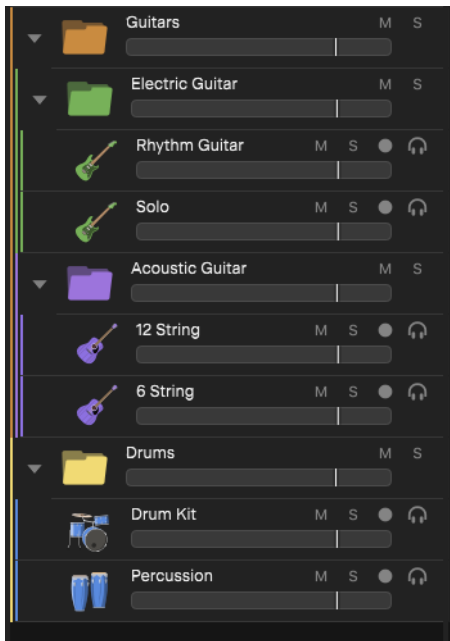
- ▶ **View > Display Musical Time.** Measure:Beat:Tick
- ▶ **View > Display Absolute Time.** Minute:Second:Millisecond
- ▶ **View > Display Sample Time.** Sample

See:

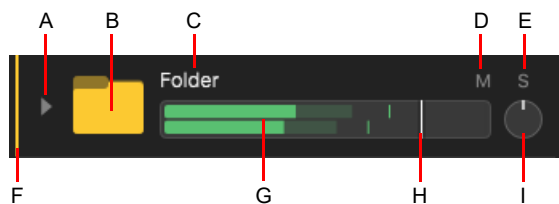
- ▶ [“Setting the playback position”](#) on page 42
- ▶ [“Setting the loop region”](#) on page 43
- ▶ [“Zooming”](#) on page 37
- ▶ [“Making a time selection”](#) on page 113

## Track folders

A track folder is a special track type that can contain multiple audio, bus, and instrument tracks, as well as other track folders. A track folder functions as a submix, or bus, for its child tracks. There is no limit to the number of tracks a track folder can contain, but when exporting to BandLab, each top-level track folder exports as a single audio file.



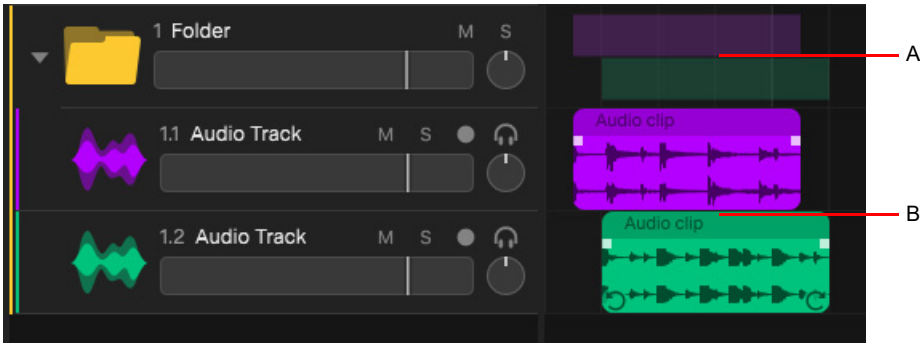
Each track folder contains the following controls.



**A.** Expand/collapse folder **B.** Icon **C.** Name **D.** Mute **E.** Solo **F.** Color **G.** Meter **H.** Volume **I.** Pan

- ▶ **Color.** Colors make it easy to distinguish track folders. Right-click the track header and select **Track Color** to change the track folder color. You can also change the track color in the Track Inspector.
- ▶ **Expand/Collapse.** Click the arrow button (▶ / ▼) to expand/collapse the folder.
- ▶ **Icon.** The track folder icon is used to distinguish between audio tracks, buses, instrument tracks, and folders.
- ▶ **Name.** The Name control lets you assign a descriptive name to each track folder. Double-click to edit.
- ▶ **Mute** **M** / **M**. Mute the track folder so it is silenced during playback.
- ▶ **Solo** **S** / **S**. Solo the track folder. Only soloed tracks/buses/folders are audible during playback if at least one track/bus/folder is soloed.
- ▶ **Volume.** The overall volume level for all tracks in the folder, ranging from -INF (silent) to +6 dB (maximum volume). Double-click to reset.
- ▶ **Pan.** The stereo distribution of the output, ranging from -50 (hard left) to +50 (hard right). Double-click to reset.

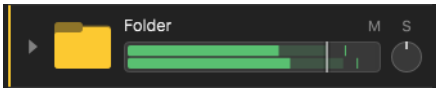
- ▶ **Level meter.** The meter displays the cumulative playback level for all tracks/buses in the folder. Right-click to select the meter mode:
  - ▶ **Input.** The signal is taken from before the channel volume fader and before effects.
  - ▶ **Pre Fader.** The signal is taken from before the channel volume fader and after effects.
  - ▶ **Post Fader.** The signal is taken from after the channel volume fader.



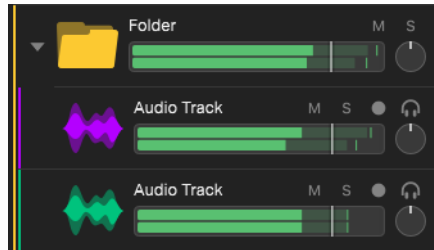
A. Composite folder clip B. Audio clips

A track folder shows a composite clip of any clips that are contained in the folder. A track folder can contain multiple tracks and subfolders. You can nest track folders up to 5 levels deep, and each folder can contain an unlimited number of tracks. Track indentation and color bars make it easy to see the relationship between folders and tracks.

**Folder collapsed:**



**Folder expanded:**



**Note:** Each top-level track folder only counts as a single track, regardless of how many child tracks and subfolders it contains. During export, each top-level track folder is mixed down to a single file/track.

When a track folder is expanded, its child track, bus, and folder channel strips are indented to show the hierarchy. Each parent track folder shows a composite clip of its child track(s)/bus(es)/folder(s). In the following example, the “Guitars” and “Drums” track folders are top-level folders, and therefore only count as two tracks.

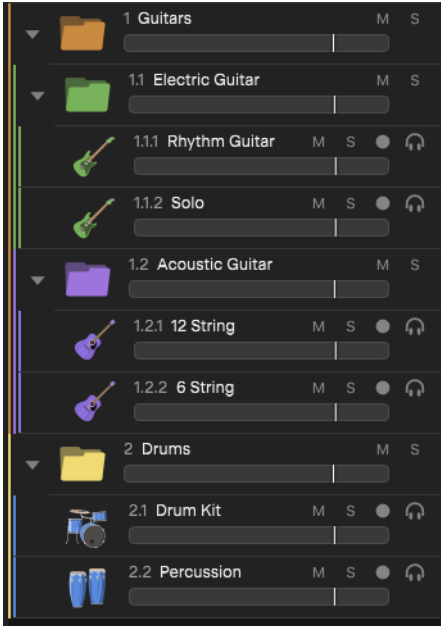
For details, see [“Grouping tracks with track folders”](#) on page 35.

## Track numbers

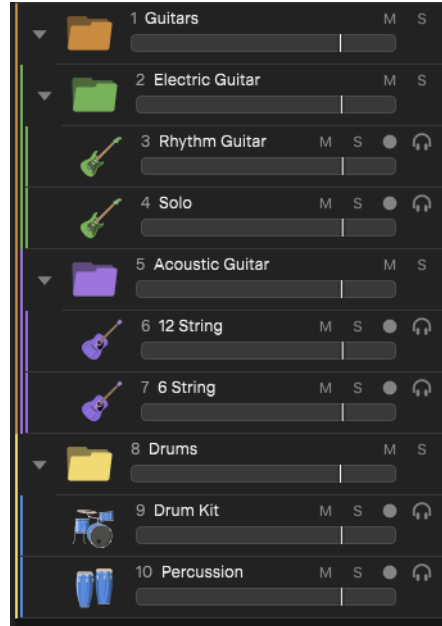
To show/hide track numbers, select **Edit > Preferences** and click **Display**, then select **Track Number Display**.

Track folders can affect how track numbers are shown. Track numbers can be either indexed or sequential. When sequential, each folder and track increases the counter. When indexed, tracks are numbered relative to their parent track folder. To specify the track number display mode, select **Edit > Preferences** and click **Display**, then select **Track Numbering Mode**.

Indexed track numbers:



Sequential track numbers:



**Note:** When exporting to BandLab, you can publish a maximum of 12 non-empty tracks or top-level track folders. If your project contains more than 12 tracks, the export button becomes disabled. Simply arrange your tracks into folders in order to reduce the overall file count and ensure the project will export in full. For details, see [“Publishing to BandLab”](#) on page 69.

See:

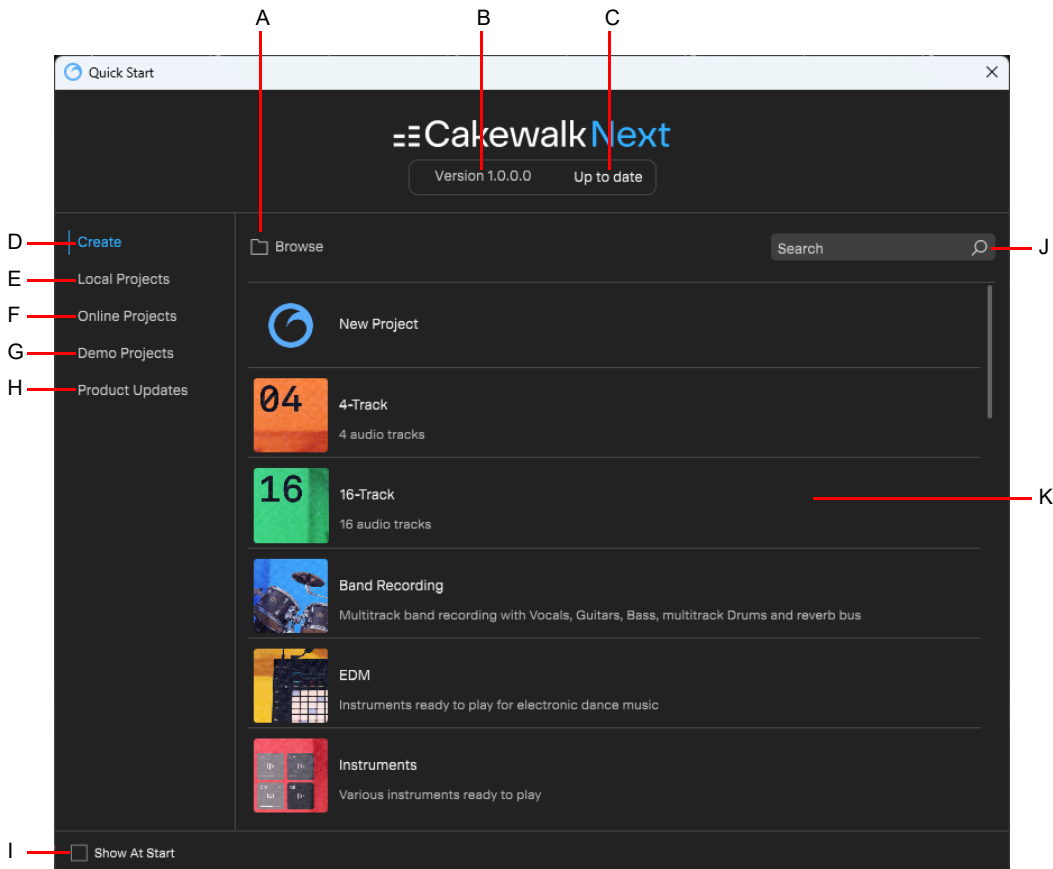
[“Inserting tracks”](#) on page 28

[“Grouping tracks with track folders”](#) on page 35

[“Editing tracks & track folders”](#) on page 114

## Quick Start screen

Figure 4. The Quick Start screen.



A. Browse B. Installed app version C. App updates D. Create E. Local Projects F. Online Projects G. Demo Projects H. Product Updates I. Show at start J. Search K. Content

You can perform the following tasks from the Quick Start screen:

- ▶ Open a recent project.
- ▶ Open an existing project.
- ▶ Start a new project.
- ▶ Create a new project from a template.
- ▶ Open demo projects.
- ▶ Update the app and download optional content.

### Showing the Quick Start screen

By default, the Quick Start screen appears automatically when you open *Next*. To change the startup behavior, go to **Edit > Preferences > Project** and disable the **Show Quick Start Screen at Launch** option.



## Quick Start screen overview

The Quick Start screen contains the following tabs:

- ▶ **Create.** Select a project template to get started. For details, see “[Project templates](#)” on page 151.
- ▶ **Local Projects.** Choose a recent song you’ve worked on. For details, see “[Opening a recent project](#)” on page 21 and “[Opening an existing project](#)” on page 21.
- ▶ **Online Projects.** Import a project from your online BandLab library. For details, see “[BandLab library import/export](#)” on page 67.
- ▶ **Demo Projects.** Preview, download, and open demo projects. For details, see “[Downloading demo projects](#)” on page 23.
- ▶ **Product Updates.** Update the app and install optional content. For details, see “[Checking for product updates](#)” on page 23.

To open a project or template, simply click on a list item.

## Starting a new project from a template

1. Use the **File > New Project** command to open the Quick Start screen’s **Create** page.
2. Click the template that you want to open.

## Opening a recent project


1. Use the **File > Open Project** command to open the Quick Start screen’s **Local Projects** page.
2. Click the project that you want to open.

 **Tip:** You can save a preview file that allows you to preview a project from the Quick Start screen’s **Recent** page by clicking the preview button on the project image. For details, see “[Creating a project preview file](#)” on page 24.

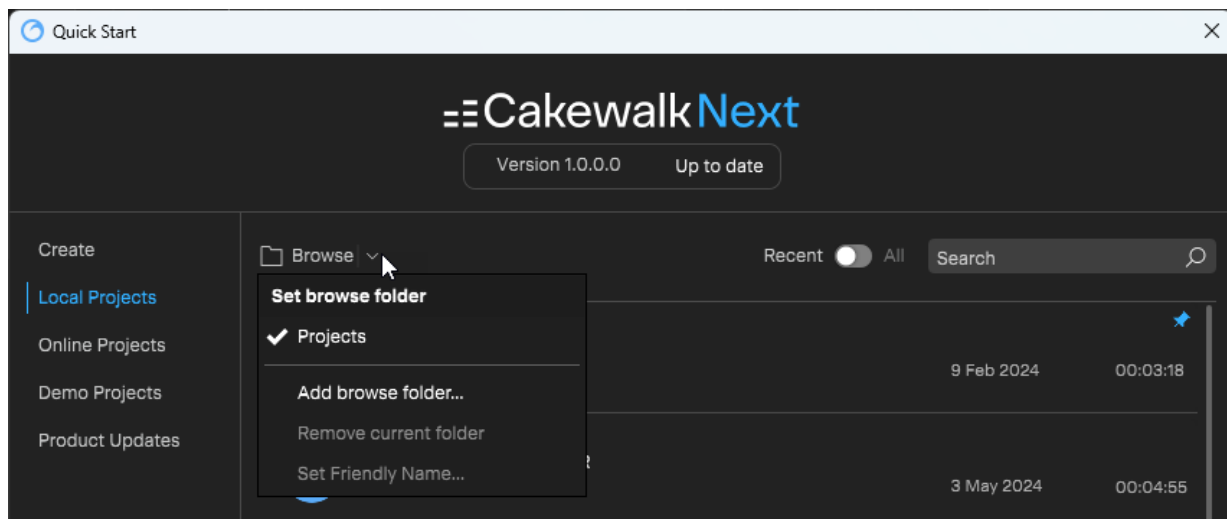
## Removing a project from the recent projects list

To remove a project from the **Recent** projects list on the **Local Projects** page, right-click the project and select **Remove recent item <project name>**.

## Opening an existing project

1. Use the **File > Open Project** command to open the Quick Start screen’s **Local Projects** page.
2. Do *one* of the following:
  - ▶ Click the **Recent/All** toggle to show all local projects, then click the desired project.
  - ▶ Click the **Browse** button  to open the **Open Project** dialog box, navigate to the project file you want to open, then click **Open**.

 **Note:** The default browse folder is `\Cakewalk\Next\Projects`, but you can specify other favorite folders. To add any user folders and select which to browse, click the **Browse** button  drop-down arrow and select **Add browse folder**. The **Browse** button tooltip shows the selected folder path.

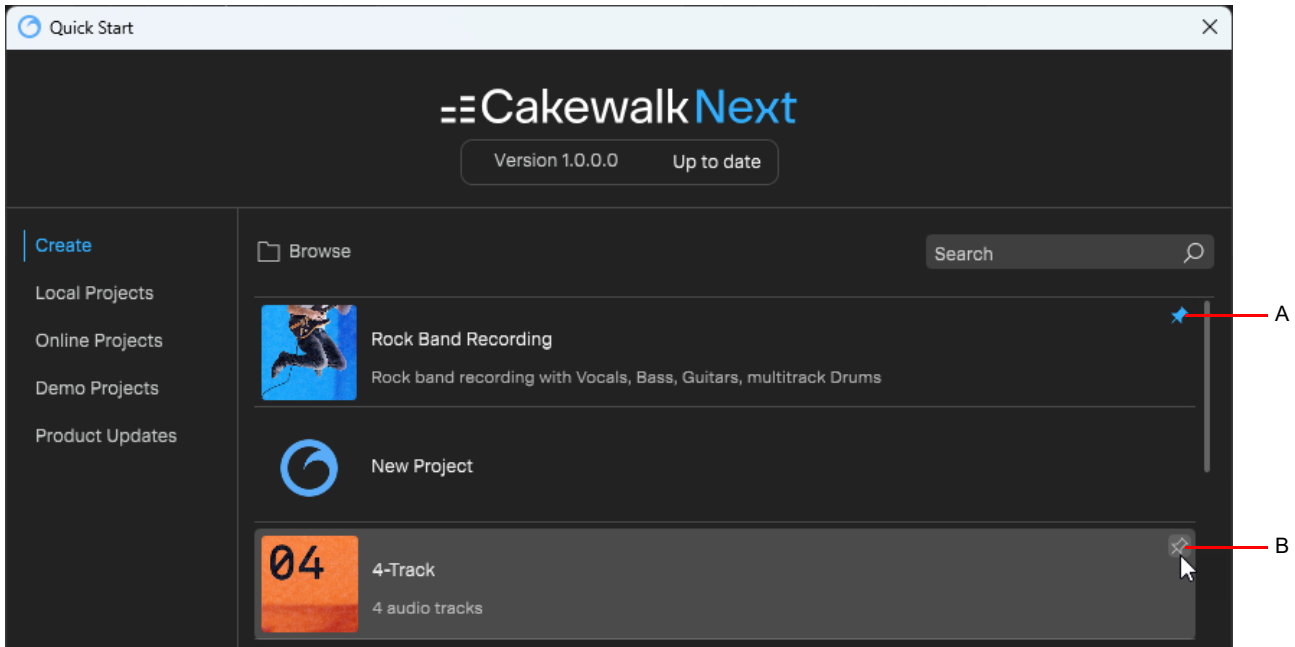


## Pinning a project or template

You can pin templates on the **Create** page and projects on the **Local Projects** page so they appear at the top of the list.

To pin or unpin an item, point to the project or template and click the pin icon .

Any pinned projects are shown first in the list, regardless of the project's modified date.



A. Pinned B. Unpinned

## Opening a project in Safe Mode

A poorly behaved 3rd party plugin can cause data corruption and prevent a project from loading successfully.

*Cakewalk Next*® has a special diagnostic mode called Safe Mode that allows you to skip loading individual plugins when opening a project.



You activate Safe Mode by holding down the SHIFT key while launching the app or opening a project.

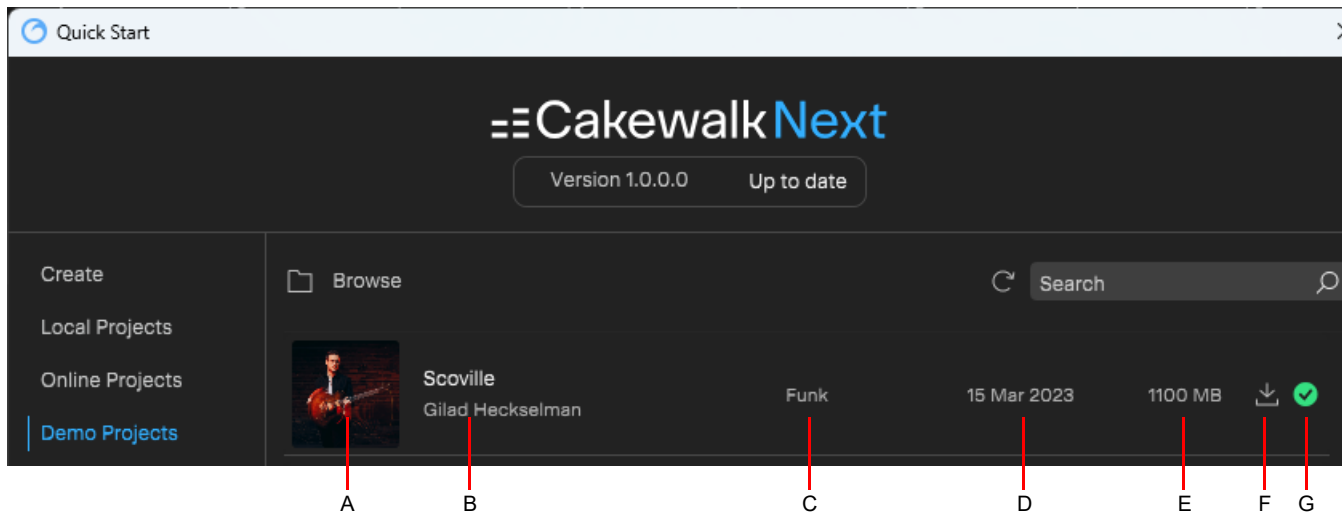
- ▶ When loading the app in Safe Mode, *Next* does not load the last project, even if **Open Most Recent Project at Launch** is enabled in the **Preferences** dialog box.
- ▶ When loading a project in Safe Mode, *Next* prompts to load or skip each plugin that is used in the project.

If you are unable to load a project that uses 3rd party plugins, hold down the SHIFT key while loading the project. *Cakewalk Next*® will prompt to load each individual plugin. Skip one plugin at a time until you identify and isolate any offending plugins. Remove the offending plugin(s) in the project, then resave the project.

## Downloading demo projects

To download demo projects:


1. Use the **File > Open Project** command to open the Quick Start screen.
2. Select the **Demo Projects** page.
3. Click the Download button  for the demo project that you want to download. Downloaded demo projects are indicated by a check mark .



**A.** Icon (click to preview project) **B.** Project and author name **C.** Genre **D.** Date published **E.** Project file size **F.** Download **G.** Downloaded indicator

## Checking for product updates

To check for product updates:

1. Select **Help > Check for Updates** to open the Quick Start screen's **Product Updates** page.
2. Click the Download button  to download any updates or optional content.

---

## Enabling input and output devices

When you start *Next* for the first time, it checks your computer to find all the audio and MIDI devices you have installed. If you have multiple devices, you need to tell *Next* exactly which devices you want it to use.

To configure your audio and MIDI hardware devices, go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Preferences** dialog box.

### Configuring the audio driver mode

To select an audio driver mode, select the **Audio** page, then click the **Audio Driver** drop-down menu.

### Enabling audio devices

To configure your audio hardware device, go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Preferences** dialog box, then select the **Audio** page.

### Enabling MIDI input device

To select your default MIDI input device, go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Preferences** dialog box, then select the **MIDI** page.

See also:

["Preferences"](#) on page 233

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## Creating and saving projects

### Creating a new project

To create a new project, do *one* of the following:

- ▶ Select **File > New Project**.
- ▶ Press CTRL+N (Windows) / CMD+N (Mac).

You can also open or import a project from your BandLab library. For details, see [“Importing from BandLab”](#) on page 72.

### Saving a project

To save the current project, do *one* of the following:


- ▶ Select **File > Save Project**.
- ▶ Press CTRL+S (Windows) / CMD+S (Mac).

You can also publish the current project to your BandLab library. For details, see [“Publishing to BandLab”](#) on page 69.

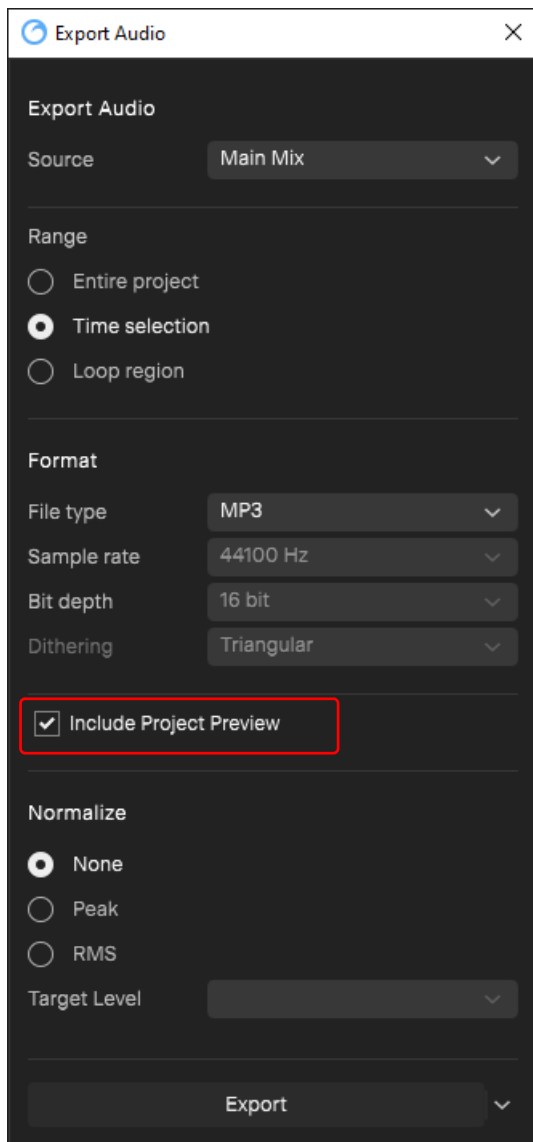
### Creating a project preview file

You can preview projects from the Quick Start screen's **Recent** page if you have exported a designated preview file. The preview file may be any supported audio file type (.wav, .mp3, etc), and can be the entire project or a specific time range.

To create a project preview file:

1. If you only want the preview to contain a specific time range, select the desired time range.
2. Do *one* of the following to open the **Export Audio** dialog box:
  - ▶ Select **File > Export Audio**
  - ▶ Click the **Share** button  and select **Export Audio**
  - ▶ Press CTRL+E (Windows) / CMD+E (Mac)
3. Under **Source**, select **Master**.
4. Under **Range**, select **Entire project** to export the entire project, or select **Time selection** to only export the selected time range.
5. Under **Format**, specify the desired settings.
6. Select **Include Project Preview**.
7. Click **Export**.

The preview file is exported to the project's \Audio folder.



To preview a recent project:

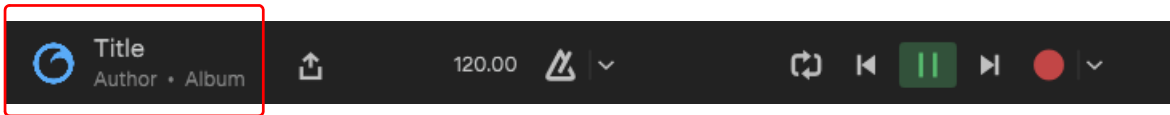
1. Use the **File > Open Project** command to open the Quick Start screen's **Recent** page.
2. Click the preview button on a project's image. A preview button only appears if the project has a designated preview file.

See also:

[“Exporting audio”](#) on page 228

## Project Information

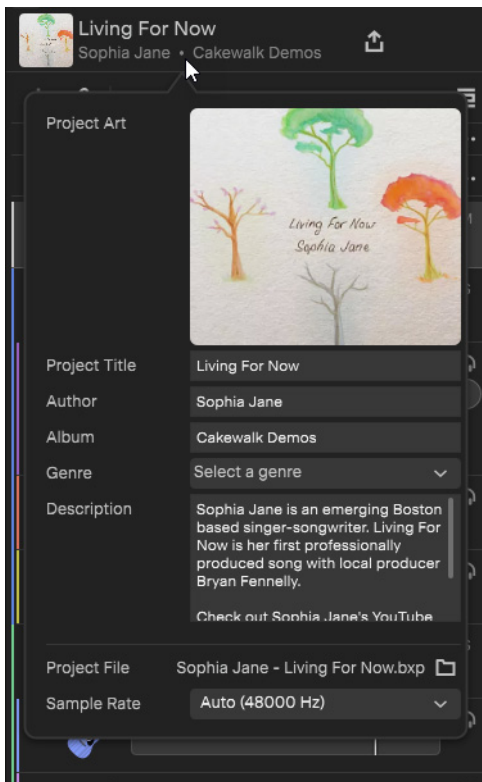
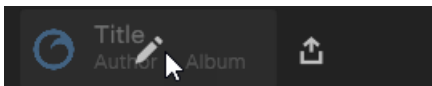
Figure 5. Main toolbar.




The Project Info editor allows you to view and edit project information. Project information is stored within the project and can be used with BandLab publishing, ID3 tagging, and general project information.


To show the Project Info editor, do *one* of the following:

- ▶ Select **View > Show Project Info Editor**
- ▶ Click the Project Info section in the main toolbar
- ▶ Press CTRL+SHIFT+I or ALT+P (Windows) / CMD+SHIFT+I (Mac).











The Project Info editor contains the following fields:

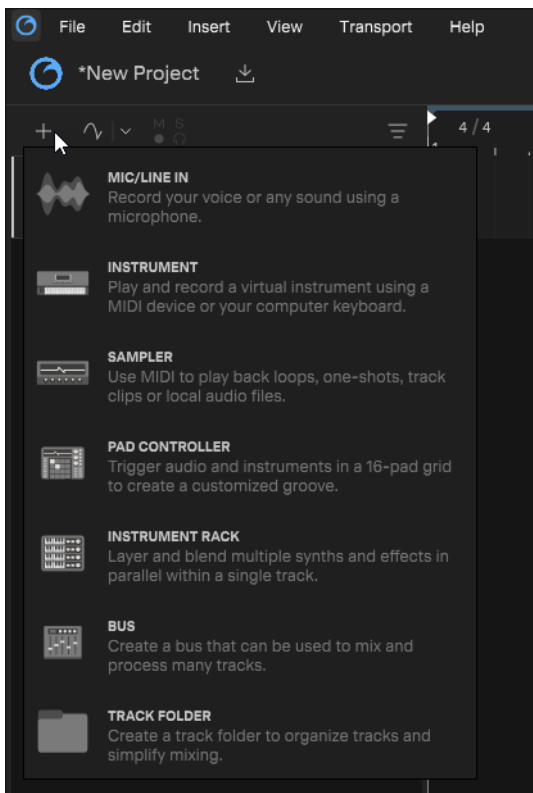
- ▶ **Project Art.** The project art is shown in the main toolbar and Quick Start screen, and also used when publishing a project to BandLab. To change the project art, hover over the art image and click the Edit button .
- ▶ **Project Title.** The song title, which can be different than the saved project file name.
- ▶ **Author.** The song's author.
- ▶ **Album.** Album name, if any.
- ▶ **Genre.** Specify the music genre.
- ▶ **Description.** Include any important information about the song.

- ▶ **Project File.** The name of the saved project file. Click the **Browse** button  to open the project folder.
- ▶ **Sample Rate.** Specify the project's fixed sample rate. Audio is recorded at the project sample rate, and imported audio is converted to the project sample rate if there is a mismatch. The default project sample is **Auto**, which adapts to the audio device sample rate. It is strongly recommended that you use the same sample rate for the project and audio device. Using different sample rates will cause real-time audio resampling, which may consume extra CPU. See also "[Specifying the recording format](#)" on page 48.

## Inserting tracks

To insert a new track, click the **Insert Track** button  and select the desired track type:



- ▶ **Mic/Line In**  Record your voice or any sound using a microphone. Click the icon to create a blank track. Use the submenu to select any available track template.
- ▶ **Instrument**  Play and record a virtual instrument using a MIDI device or your computer keyboard.
- ▶ **Sampler**  Use MIDI to play back loops, one-shots, audio clips or local audio files.
- ▶ **Pad Controller**  Use MIDI to trigger up to 16 sampler or instrument pads.
- ▶ **Instrument Rack**  Use MIDI to trigger up to 16 layered instruments simultaneously within a single track.
- ▶ **Bus**  Create a bus that can be used to process many tracks.
- ▶ **Track Folder**  A track folder may contain other tracks, buses, and folders. Useful for project organization and mixing.





## Inserting audio tracks



To insert an audio track, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Mic/Line In** .
- ▶ Select **Insert > Insert Audio Track**.
- ▶ Press CTRL+T (Windows) / CMD+T (Mac).
- ▶ Double-click the empty area below the last track strip (will insert either an audio track or an instrument track, depending on which was last inserted).

## Inserting instrument tracks

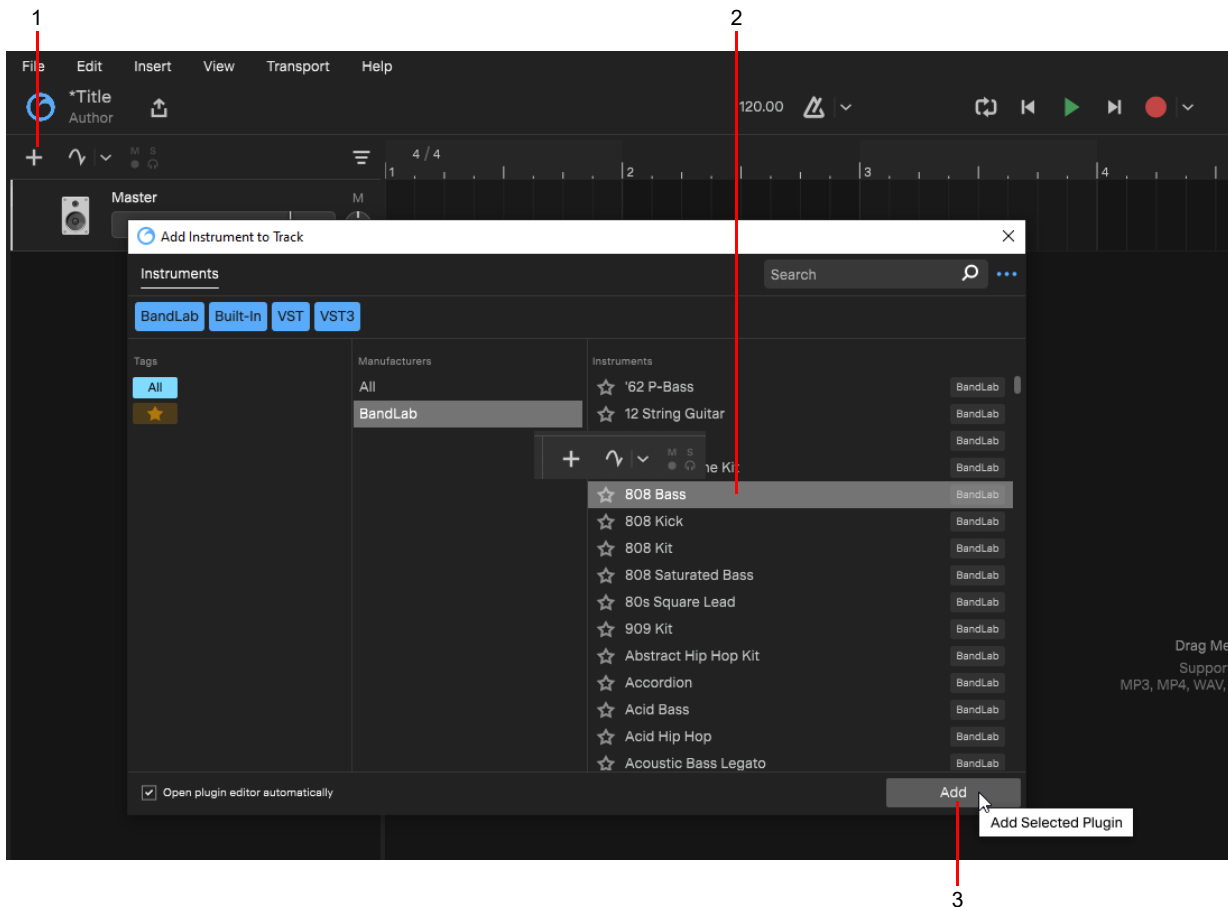
To insert an instrument track:

1. Do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Instrument** .
- ▶ Select **Insert > Insert Instrument Track**.
- ▶ Press CTRL+SHIFT+T (Windows) / CMD+SHIFT+T (Mac).

2. In the **Add Instrument to Track** dialog box, select the desired instrument

3. Click **Add**.



1. Click **Insert Track** button and select **Instrument** 2. Select instrument 3. Click **Add**

## Replacing an instrument

To replace an instrument with a different instrument:



1. Right-click the instrument's module header in the Track Inspector and select **Replace**.
2. Select the desired instrument, then click **Add**.

See also:

["Instruments"](#) on page 139

## Inserting Sampler tracks

To insert a Sampler track, do *one* of the following:


- ▶ Click the **Insert Track** button , then select **Sampler** .
- ▶ Select **Insert > Insert Sampler Track**.
- ▶ Press CTRL+SHIFT+X (Windows) / CMD+SHIFT+X (Mac).

See also:

["XSampler"](#) on page 142

## Inserting Pad Controller tracks

To insert a Pad Controller track, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Pad Controller** .
- ▶ Select **Insert > Insert Pad Controller Track**.
- ▶ Press CTRL+SHIFT+P (Windows) / CMD+SHIFT+P (Mac).

See also:

["Pad Controller"](#) on page 157

## Inserting Instrument Rack tracks

To insert an Instrument Rack track, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Instrument Rack** .
- ▶ Select **Insert > Insert Instrument Rack Track**.
- ▶ Press CTRL+SHIFT+R (Windows) / CMD+SHIFT+R (Mac).
- ▶ Select **Cakewalk > Instrument Rack** in the Plugin Browser.

See also:

[“Instrument Rack”](#) on page 163

## Inserting track folders

To insert a track folder track, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Track Folder** .
- ▶ Select **Insert > Insert Track Folder**.
- ▶ Press CTRL+SHIFT+G (Windows) / CMD+SHIFT+G (Mac).

See also:

[“Track folders”](#) on page 17

[“Grouping tracks with track folders”](#) on page 35

## Using track templates

A track template contains a description of track properties, including name, parameter settings and plugin configuration.

Track templates minimize setup time. You can create an unlimited number of track templates for quickly recalling your most often used track settings including the following:

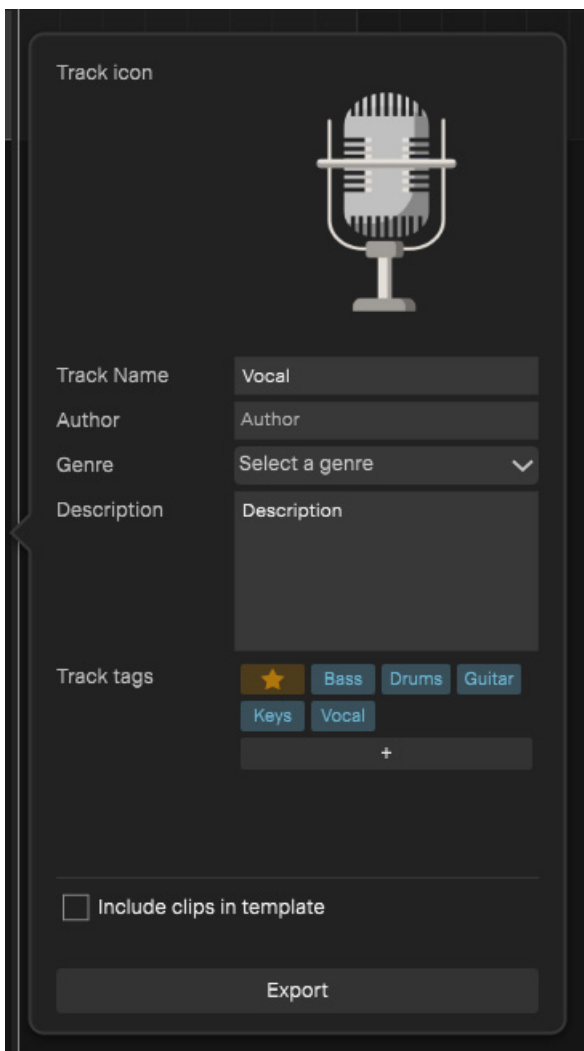
- ▶ Track type (Audio or Instrument)
- ▶ Track name
- ▶ Track color
- ▶ Track icon
- ▶ Volume and pan
- ▶ Mute and Solo state
- ▶ Effects and their settings

A track folder (see “Track folders” on page 17) can also be saved as a template, which is useful instantly inserting instrument ensembles or a multichannel drum recording configuration.


## Saving a track template

To create a track template:

1. Right-click the track that you want to save as a template and select **Export as Track Template**.
2. Enter a name, creator, and any tags for the template, then click **OK**.



The screenshot shows a dark-themed dialog box titled "Export as Track Template". At the top, it says "Track icon" and features a large microphone icon. Below this, there are several input fields: "Track Name" with the value "Vocal", "Author" with the value "Author", "Genre" with a dropdown menu showing "Select a genre", and "Description" with a text area containing "Description". Under "Track tags", there are several buttons: a yellow star icon, "Bass", "Drums", "Guitar", "Keys", and "Vocal". A plus sign button is also present. At the bottom, there is a checkbox labeled "Include clips in template" which is currently unchecked. A large "Export" button is at the very bottom.

 **Tip:** A track folder can also be saved as a template, which is useful instantly inserting instrument ensembles or a multichannel drum recording configuration.

## Inserting a track from a template

To insert a new track from a track template:

1. Click the **Insert** menu and select **Insert Track Template**.
2. On the pop-up menu, select the desired track template (templates are organized by their tag assignments), then click **Add**.

or:

Click the **Insert Track** button  and point to **Mic/Line In** , then select the desired template on the pop-up menu.



## Managing user track templates

To delete or rename a user track template, select **Insert > Insert Track Template > Manage My Track Templates**, then rename or delete the desired user track template(s), then either restart the app or select **Insert > Insert Track Template > Refresh Track Templates**.

## Inserting buses

Buses are useful for mixing together different audio tracks (in stereo) and applying effects to the mix. You can mix the tracks at different volume levels by adjusting each track's send level. Buses output to either other buses or to the main out.


To insert a bus, do *one* of the following:

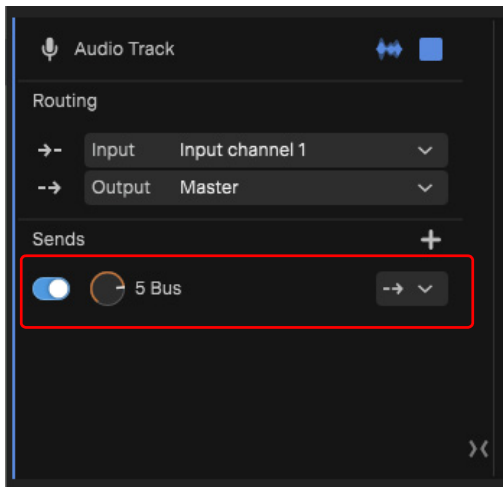
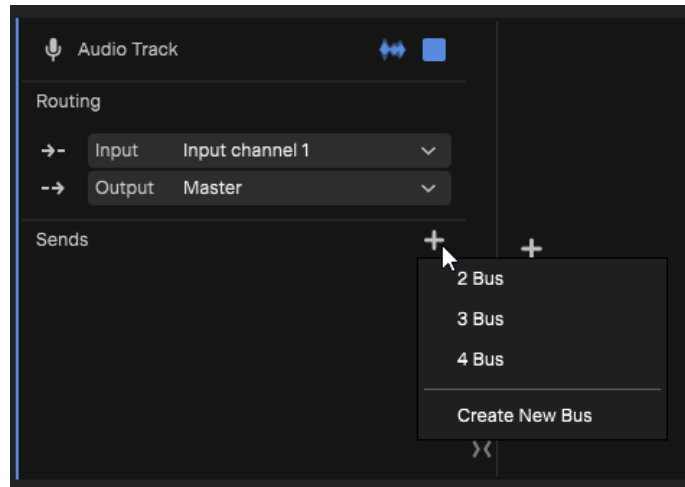
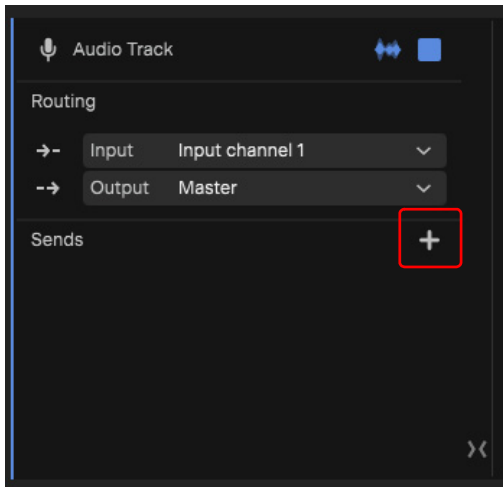
- ▶ Click the **Insert Track** button , then select **Bus** .
- ▶ Select **Insert > Insert Bus**.
- ▶ Press CTRL+ALT+T (Windows) / CMD+OPTION+T (Mac).

## Adding aux sends

Sends allow you to send audio data from tracks to buses.

To insert a send on a track:

1. Select the source track.
2. Open the Track Inspector.
3. Under **Sends**, click the **Add Send** button .
4. On the pop-up menu, select an existing bus or select **Create New Bus** to create a new bus.



See also:

["Aux sends"](#) on page 175

## Grouping tracks with track folders

You can add and remove audio tracks from track folders at any time. A common use is to group tracks by instrument type and to ensure a project does not exceed a total of 16 tracks or top-level track folders if you intend to publish to your BandLab library (see “Publishing to BandLab” on page 69).

### Inserting a new track folder

To insert a new track folder, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Track Folder** .
- ▶ Select **Insert > Insert Track Folder**.
- ▶ Press CTRL+SHIFT+G (Windows) / CMD+SHIFT+G (Mac).

### Placing tracks into a new track folder

To place tracks into a new track folder, select the tracks you want to group, then select **Edit > Move to Track Folder** or press CTRL+G (Windows) / CMD+G (Mac).

### Placing tracks into an existing track folder


To place tracks into an existing track folder, select the tracks you want to move to a folder, then drag any of the selected tracks into the folder.

### Removing tracks from a track folder

To remove tracks from a track folder, drag the tracks out of the folder.

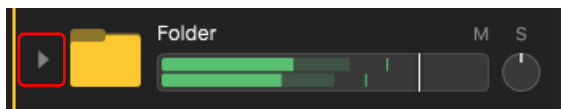
### Removing all tracks from a track folder

To remove all tracks from a track folder, select the track folder and go to **Edit > Remove From Folder**, or press CTRL+U (Windows) / CMD+U (Mac).

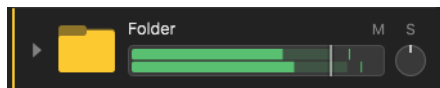
 **Note:** *If you delete a track folder, it will also delete everything inside the folder. Deleting a track folder will not ungroup its child tracks/buses/subfolders.*

## Expanding/collapsing a track folder

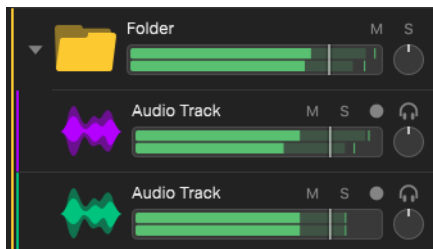
To expand/collapse a track folder, click the arrow button (▶ / ▼) to the left of the track icon.




Folder collapsed:



Folder expanded:



To expand/collapse all track folders, do one of the following:

- ▶ Click the **Track View Options**  button and select **Expand track folders** or **Collapse track folders**
- ▶ Select **View > Expand Track Folders** or **View > Collapse Track Folders**

See also:

["Resizing tracks"](#) on page 116



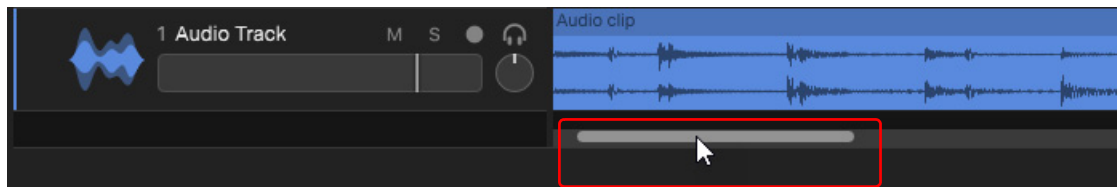
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## Scrolling and zooming

### Scrolling

To scroll horizontally, drag the horizontal scroll bar, or use the mouse wheel.


To scroll vertically, drag the vertical scroll bar, or hold down the SHIFT key while using the mouse wheel.

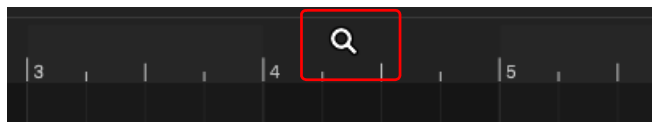



### Zooming

#### Zooming horizontally

To zoom in/out horizontally, do *one* of the following:

- ▶ Go to **View > Zoom In** or **View > Zoom Out**.
- ▶ Press ALT+LEFT/RIGHT (Windows) / CMD+LEFT/RIGHT (Mac).
- ▶ Point the mouse pointer at the top half until the mouse pointer looks like , then drag up/down.



- ▶ To zoom to the selection, press the F key, or click the **View Options** button  and select **Zoom to fit**.

#### Zooming vertically

You can zoom vertically in the Clips pane and the Clip Inspector's Piano Roll editor, whichever has focus. If the Clips pane has focus, zooming affects the selected track(s).

To zoom vertically, press CTRL+UP/DOWN (Windows) / CMD+UP/DOWN (Mac).

You can also resize individual tracks (see ["Resizing tracks"](#) on page 116).

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## Installing Cakewalk Next®

Visit [www.cakewalk.com/next](http://www.cakewalk.com/next) to download Cakewalk Next®.

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## Activating Cakewalk Next®

### What is activation?

*Cakewalk Next*® is provided to users free of cost by BandLab. The software is linked to your BandLab account by a process called activation. The first time you install *Next* it is automatically activated. From time to time, re-activation may be necessary. The reactivation window is typically once every 6 months and requires you to be logged in to your BandLab account.

### Why is activation required?

Activation ensures that you are running genuine *Next* software obtained from our servers and that you have a current version of *Next* that is actively supported by us. Running an updated version ensures a better user experience by getting the latest features and fixes to the software. Additionally, back end changes to the BandLab cloud may periodically require the software to be updated to remain compatible.

### Do I always need to be online to BandLab for Cakewalk Next® to work?

No. You only need to be online in order to update the software to the latest version or when activating it. Under normal circumstances, activation will require no manual user intervention going forward, beyond the initial sign-in. An Internet connection is required for performing activation as described above but not required for general *Next* usage.

### How to activate Cakewalk Next®

When starting *Next* for the first time, you will be presented with the **BandLab Sign In** dialog box.

*Cakewalk Next*® supports SSO (Single Sign-On) for activation, which allows you to log in via any service supported by BandLab as your sign-in authority. Google, Facebook, Apple ID, mobile phone and BandLab user/password credentials are currently supported.

SSO is only used for *Next* activation, and under normal circumstances you will only need to sign in once. *Cakewalk Next*® will attempt to refresh your activation status silently and automatically on occasion during start up. Use the SSO login as you have done with your BandLab account in the past. After signing in, *Next* will automatically activate itself.

Reactivation normally happens automatically if you are signed in to your BandLab account and connected to the internet. You may also manually refresh activation at any time by signing out (**Help > Sign Out**) then signing back in again (**Help > Sign In**).



Username or email

Password

[Forgot password?](#)

or continue with

[Not now](#)

Don't have an account? [Sign Up](#)

By continuing, you agree to BandLab's  
[Terms of Use](#) and [Privacy Policy](#)

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## Support

Visit [bnd.la/cakewalk-support](https://bnd.la/cakewalk-support) for app support.



# Playback

When you play your *Cakewalk Next®* project, you have full control over the tempo or speed of playback, which tracks are played, which audio devices are used to produce the sound, and what the tracks sound like. You can access all of the playback functions from the main toolbar.

See:

[“Using the transport”](#) on page 41

[“Looping”](#) on page 42


[“Setting the project tempo”](#) on page 44


[“Setting the project meter \(time signature\)”](#) on page 45

## Using the transport

### Starting playback


To start playback, do *one* of the following:

- ▶ Click the **Play** button .
- ▶ Press the SPACEBAR key.
- ▶ Select **Transport > Play/Pause**.
- ▶ Double-click in the time ruler.

 **Note:** *By default, playback always resumes at the last start location. To resume at the current now time, disable **Playback > Resume Playback at Last Start Position**.*

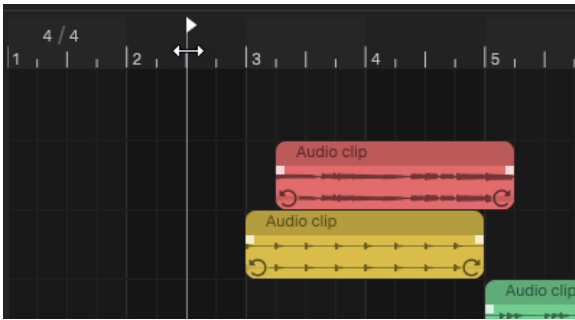
### Pausing playback

To pause playback, do *one* of the following:

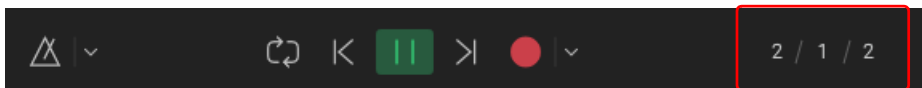
- ▶ Click the **Pause** button .
- ▶ Press the SPACEBAR key.
- ▶ Select **Transport > Play/Pause**.

## Setting the playback position


To move the Now Time marker, click in the time ruler or any empty area in the Clips pane.



You can also set the Now Time in the main toolbar. To do so, position the mouse pointer over the Bar, Beat, or Sub-beat value and drag up/down.




## Rewinding the playback position

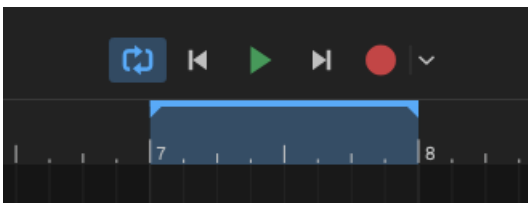
To rewind the playback position, click the **Jump Back** button  or press W. The playback position will seek to loop positions and the playback marker en route to the project start.

## Looping

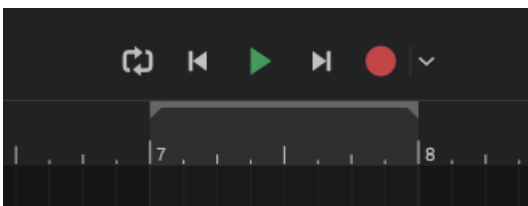
### Looping a time range


To enable/disable project looping, click the **Toggle Loop Playback** button .

When looping is enabled, the loop region is green:



When looping is disabled, the loop region is gray:



 **Tip:** You can also right-click the green/gray loop region to enable/disable looping.

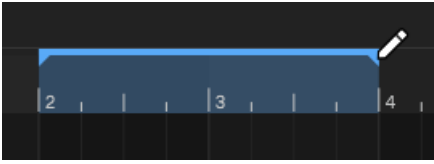
See also:

[“Loop recording”](#) on page 54

## Setting the loop region

To set the loop region, do *one* of the following:

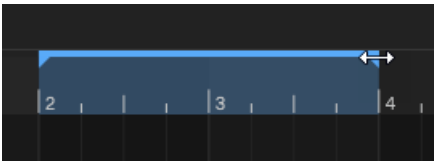
- ▶ Drag in the section immediately above the time ruler. This will automatically enable looping.



- ▶ Make a selection, then select **Transport > Loop Selection** or press SHIFT+L.

## Resizing the loop region

To resize the loop region, drag the loop start or end marker:

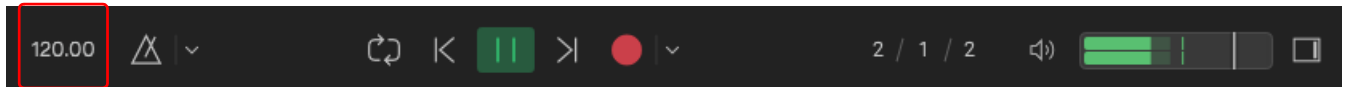


## Moving the loop region

To move the loop region, hold down the CTRL (Windows) / CMD (Mac) key and drag the blue loop range to the desired location.



## Setting the project tempo

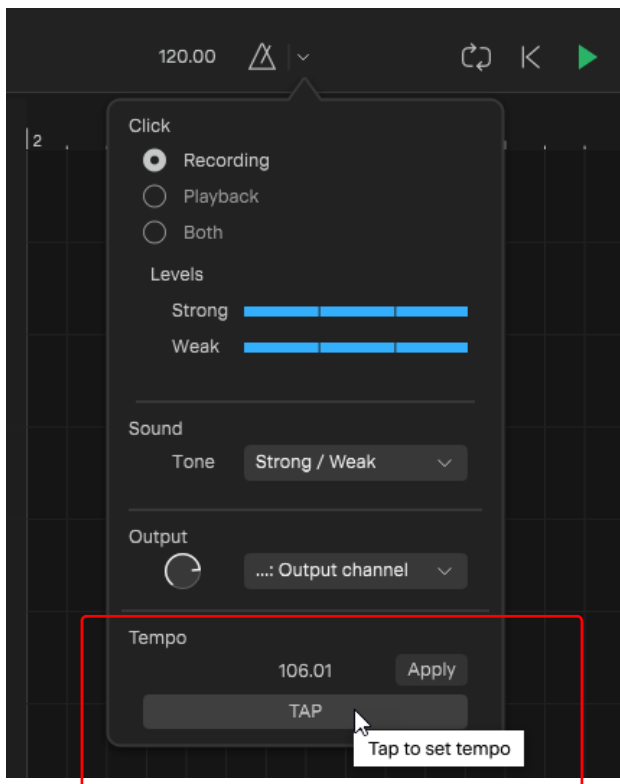


To set the project's tempo, do *one* of the following:

- ▶ Double-click the current tempo value and type the desired tempo.
- ▶ Position the mouse pointer over the tempo display and drag up/down.

### Using Tap Tempo

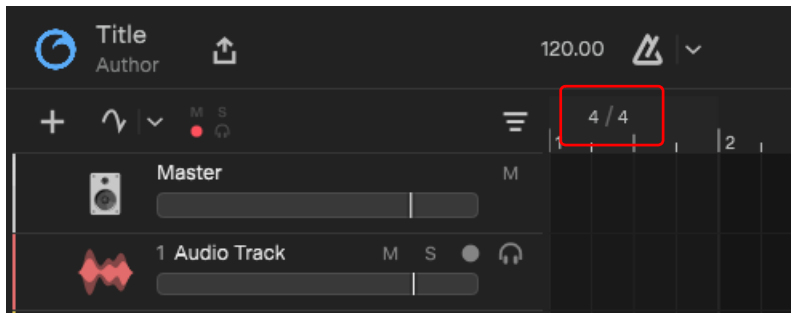
Open the Metronome Options drop-down menu to expose the Tap Tempo control, then click the **TAP** button repeatedly to tap the desired tempo. Click the **Apply** button to apply the tapped tempo, or press ESC to cancel a pending tempo change.



 **Tip:** After clicking the **TAP** button to give it focus, you can press the **ENTER** (Windows) / **RETURN** (Mac) key to tap the tempo.



## Setting the project meter (time signature)



The meter determines the following:

- ▶ Where the metronome accents are placed
- ▶ How the Now time is displayed
- ▶ How grid lines are displayed in the Clips pane and Piano Roll view

By default, a new *Next* project is in 4/4 time. The denominator (left number) indicates the type of note that equals 1 beat, and corresponds to the division of the whole note (for example, the number 4 indicates the note figure equivalent to  $\frac{1}{4}$  of the whole note, which is a quarter note). The numerator (right number) indicates the number of beats in a measure.

To set the project's time signature, double-click the denominator and numerator values and type the desired values.



# Recording

You can add sound or music to a *Cakewalk Next*® project in many different ways. You can record your own material using a MIDI-equipped instrument, use a microphone or another audio input to record digital audio information, or import sound or music data from an existing digital data file. With the Input monitoring feature, you can hear your audio instruments exactly how they sound in *Next*, including any plugin effects

To prepare for recording, you need to do the following:

- ▶ Specify the sample rate and bit depth
- ▶ Choose your input(s)
- ▶ Arm one or more tracks for recording
- ▶ Check your recording levels (audio only)
- ▶ Tune your instrument if necessary (audio only)
- ▶ Set the Now time to the point in the project where you want to start recording
- ▶ Enable the metronome, if necessary

See:

[“Specifying the recording format”](#) on page 48

[“Setting the sample rate for new projects”](#) on page 49

[“Setting the bit depth for new projects”](#) on page 49

[“Setting the file format for new projects”](#) on page 49

[“Choosing an input”](#) on page 51

[“Arming tracks for recording”](#) on page 52

[“Recording audio/MIDI”](#) on page 53

[“Loop recording”](#) on page 54

[“Punch recording”](#) on page 55

[“Importing audio”](#) on page 59

[“Using the metronome”](#) on page 60

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## Specifying the recording format

Each project has an audio sample rate and bit depth that determine the audio fidelity and how accurate the digital recording is to the original analog signal.

### Bit depth

The *bit depth* dictates the amplitude resolution of audio files, which affects the dynamic range:

- ▶ 16-bit audio has a maximum dynamic range of 96.3 dB and a resolution of 65,536 values
- ▶ 24-bit audio has a maximum dynamic range of 144.5 dB and a resolution of 16,777,216 values
- ▶ 32-bit floating point audio offers nearly infinite decibel levels (1,528 dB!) and a resolution of 4,294,967,296 values

Higher bit depths do not necessarily result in better audio quality or higher fidelity sound, but will have a lower noise floor. 24-bit files require 50% more disk space than 16-bit. 32-bit files require 33% more disk space than 24-bit and 100% more than 16-bit.

### Sample rate

The *sample rate* is the number of times the audio is captured per second, measured in Hertz (Hz). For example, a sampling rate of 44,100 Hz means that the audio signal is sampled 44,100 times per second.

The *Nyquist-Shannon theorem* states that in order to prevent any loss of information when digitally sampling a signal, you have to sample at a rate of at least twice the highest expected signal frequency. Otherwise the sound is not faithfully reproduced.

The human ear can only hear frequencies up to 20 kHz (20,000 Hz) at best, so the minimum sample rate must be at least 40 kHz in order to digitize this frequency. A sample rate of 44,100 Hz captures frequencies up to the 22 kHz range, while a sample rate of 48,000 Hz captures frequencies up to the 24 kHz range.

### What should my sample rate and bit depth be for recording?

For music production, 44.1kHz/24-bit or 48kHz/24-bit is a good choice and provides a good balance between sound quality, file size and processing power, and captures the entire audible frequency spectrum accurately.


Although a high sample rate along with a high bit depth will deliver the best audio quality, it is not always the best option. The higher the sample rate and bit depth, the more audio processing power and disk space are required. This will reduce the potential track count and number of real-time plugins, and may not make any noticeable sonic difference.

16-bit audio has a low noise floor and a decent amount of dynamic range, and is fine for most music production.

24-bit provides more dynamic range, and lets you record at more conservative levels to avoid exceeding the level of clipping (0 dBFS) while staying above the noise floor. The added headroom may also be beneficial when editing and mixing.

With 16-bit and 24-bit recording, it's important to set proper levels prior to recording in order to make sure the audio isn't peaking and distorting, while also staying above the noise floor. If the recording level is set too low, raising the track's volume will also increase all of the corresponding noise in the recording.

32-bit recording is generally reserved for ultra-high-dynamic-range recording, and is not meant for distribution. The main benefit of 32-bit float recording is improved flexibility in making level adjustments after recording is complete. There is so much headroom that it doesn't really matter much where levels are set while recording digitally. Any signal that clipped in the recording can be recovered later by reducing track levels. Signals that exceed 0 dBFS can be reduced to below 0 dBFS, undistorted, and any parts of the recording that had low gain can be raised with less chance of increasing the noise floor. This is mostly useful in an uncontrolled environment where you are not able to set proper recording levels prior to recording, such as live recordings, but is less critical when you are able to set proper recording levels ahead of time.

 **Note:** 32-bit float recording prevents you from clipping the digital recording, but it's still possible to clip the pre-amps. Most distributors use 24-bit or 16-bit files, so a 32-bit project will eventually need to be converted, which may result in some data being lost in the process unless you make adjustments to ensure that the audio signal doesn't get clipped when downsampling. This can be achieved by using a limiter or normalizing the audio file.

Ultimately, the ideal sample rate and bit depth depend on several factors, including

- ▶ Which sample rate(s) is supported by your audio device. Also, if you plan to perform creative audio manipulation that involves time stretching audio files past their recorded length, you may choose to record at a higher sample rate (if your audio interface allows for it).
- ▶ Your computer's processing power.
- ▶ The media destined to play your music. You typically want to record at the sample rate of your final destination format (if supported by your audio device).

See:

["Setting the file format for new projects"](#) on page 49

["Setting the bit depth for new projects"](#) on page 49

["Setting the sample rate for new projects"](#) on page 49

### Setting the file format for new projects

To set the file format for new projects:

1. Go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Settings** dialog box, then select the **Audio** page.
2. Under **Recording**, specify the desired **File Format** setting.

### Setting the bit depth for new projects

To set the bit depth for new projects:

1. Go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Settings** dialog box, then select the **Audio** page.
2. Under **Recording**, specify the desired **File Bit Depth** setting.

### Setting the sample rate for new projects

To set the sample rate for new projects:

1. Go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Settings** dialog box, then select the **Audio** page.
2. Under **Audio Device**, specify the desired **Sample Rate** value.

It is important to understand the difference between the audio device sample rate and the project sample rate.

- ▶ **Audio device sample rate.** The audio device sample rate is set in the **Preferences** dialog box under **Audio > Audio Device > Sample Rate**.
  - ▶ Recorded audio is always at the device sample rate. *Cakewalk Next*® does not sample rate convert after recording in order to preserve the recorded data.
  - ▶ When opening a project, the audio device sample rate is set to the project sample rate. Doing so prevents unnecessary real-time sample rate conversion, which may consume extra CPU.
- ▶ **Project sample rate.** The project sample rate is set in the Project Info Editor. The default project sample is **Auto**, which adapts to the audio device sample rate. It is strongly recommended that you use the same sample rate for the project and audio device. Using different sample rates will cause real-time audio resampling, which may consume extra CPU. When you create a new project, if you do not want to use the default audio device sample rate, you must choose a sample rate in the Project Info Editor before you start recording audio. For details, see ["Project Information"](#) on page 26.
  - ▶ The project sample rate is used when recording and importing audio files.
  - ▶ The project sample rate becomes fixed as soon as any audio clip is present in the project.
  - ▶ When you record or import the first audio clip, the project sample rate will be switched from **Auto** to whatever the current audio device sample rate was at that time. From then on the project sample rate is fixed.
  - ▶ Removing all audio clips from the project resets the project to **Auto** which means it will follow the device sample rate again.
  - ▶ The project sample rate can be changed at any time from the Project Info Editor. *Cakewalk Next*® will attempt to auto switch the device sample rate to the project sample rate when possible. Auto switch occurs both when changing the project sample rate as well as when loading a project.

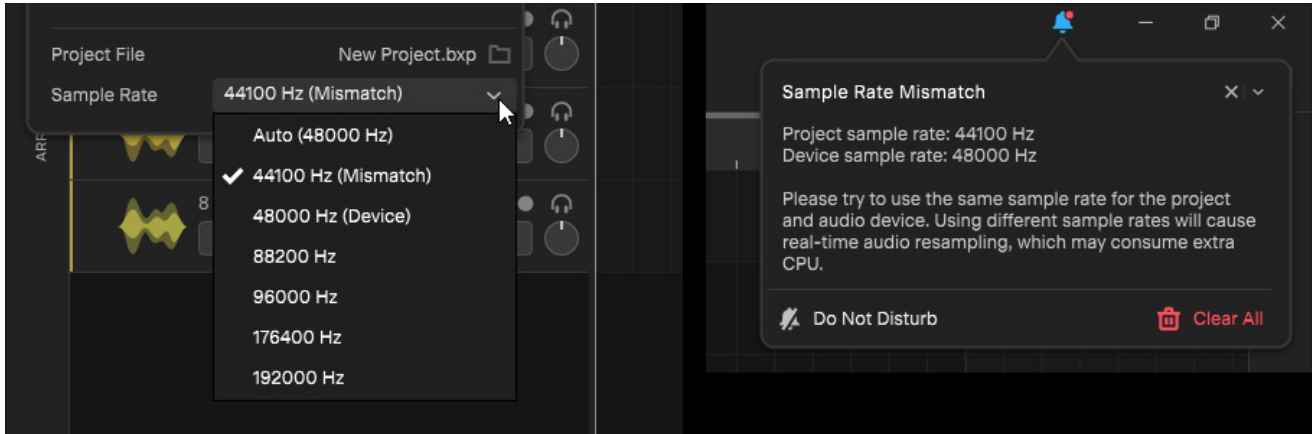
## Match the project sample rate and audio device sample rate

It is strongly recommended that you use the same sample rate for the project and audio device. Using different sample rates will cause real-time audio resampling, which may consume extra CPU. Real-time sample rate conversion ensures that projects can play back on virtually any audio device at the correct playback speed, even if the audio device doesn't support the current sample rate.

The default project sample is **Auto**, which adapts to the audio device sample rate.

If there is a mismatch, *Next* will attempt to automatically switch the device sample rate to match the project sample rate when possible. Auto switch occurs both when changing the project sample rate and when loading a project.

The sample rate pickers in the Project Info Editor and **Preferences > Audio** indicate if there is a mismatch between the audio device sample rate and project sample rate. A notification also appears if there is a mismatch.

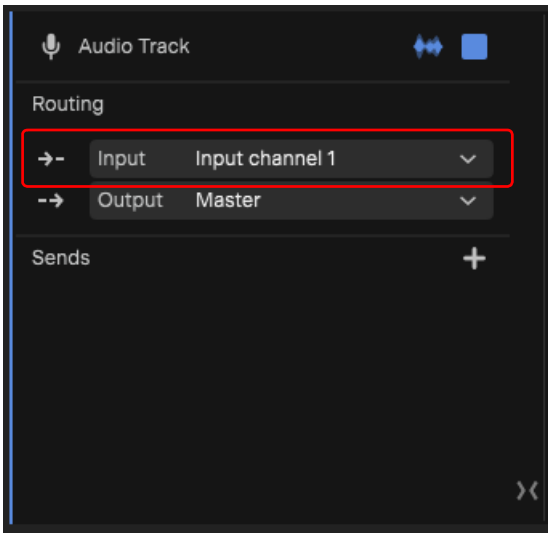


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## Choosing an input

To record into a track, you must choose an input for the music or sound to be recorded. The input for each track is displayed in the track's **Input** field in the Track Inspector.


1. Select the track you want to record on.
2. Open the Track Inspector.
3. In the Track Inspector, click the **Input** menu and select the desired input device.

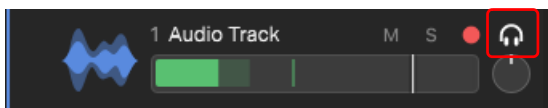



When you choose **All Input** as the input for an instrument track, *Next* merges material from all MIDI inputs and instruments. This means you don't have to worry about input, channel, or other MIDI settings.

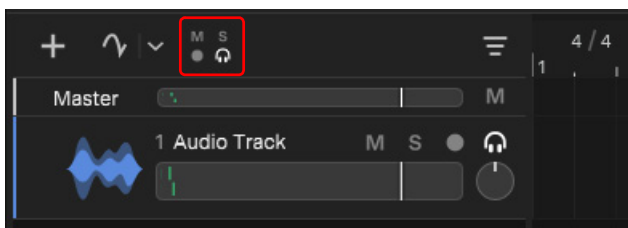
To record different MIDI channels into different tracks, specify the Input port/channel in each track's Track Inspector.

### Enabling track input monitoring

Input monitoring allows you to hear plugin audio effects applied to a live signal. To enable input monitoring on a track, click the track's **Track Monitor** button .



To disable monitoring on all tracks, click the global Monitor toggle button  in the track pane header. Click again to restore the previous monitor state.





See:

["Track Inspector"](#) on page 78

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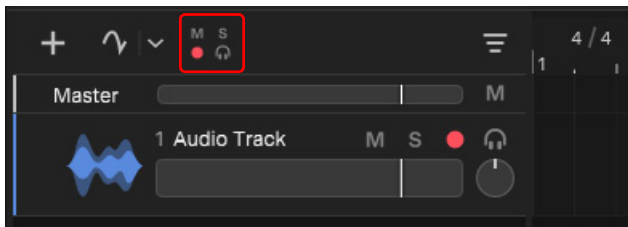
## Arming tracks for recording

*Cakewalk Next*® lets you record any number of tracks at one time. You indicate the tracks you want to record by arming the tracks. You can arm a single track or several tracks at one time. Each track records material received through its selected input.

To arm a track for recording, click its **Record Arm** button . A track's **Record Arm** button turns red  to indicate that the track is armed for recording.



**i Note:** You can arm and disarm tracks during playback and recording. This allows you to record to different tracks while the transport is rolling, without first having to stop playback in order to arm a track for recording.

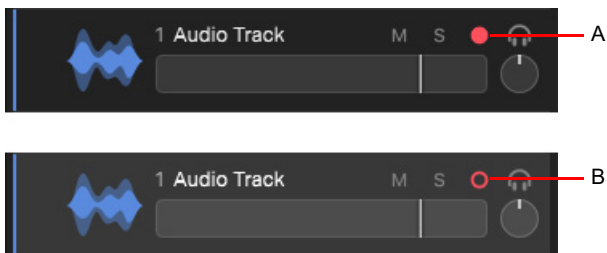
To disarm all tracks, click the global Record Arm toggle button  in the track pane header. Click again to restore the previous arm state.



### Auto arm track for recording


If you are only recording a single track at a time, there is no need to arm the track for recording. Simply selecting the track will auto arm it for recording. Only one track can be auto armed at a time.

If no tracks are explicitly armed for recording by engaging the track's **Record Arm** button , *Next* will auto arm the selected track. This allows you to quickly start recording a single track without having to arm the track. The auto armed track is indicated by a hollow red circle .



A. Explicitly armed B. Auto armed

While recording is in progress, auto arm is locked to the current track. Selecting a different track will not auto arm the new track. Auto arming will not occur if at least one track is explicitly armed for recording.

You can disarm the auto armed track by clicking its **Record Arm** button .

When a track is auto armed, its meter functions as follows:

- ▶ When idle, shows input meter
- ▶ When recording, shows input meter
- ▶ When playing back, shows post fader playback meter

### Enabling/disabling auto arming of tracks

To enable/disable auto arming of tracks, select **Edit > Preferences** and click **Audio**, then select **Auto-Arm Tracks**.





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## Recording audio/MIDI

After you have set your tempo and metronome, and armed one or more tracks, you are ready to start recording.

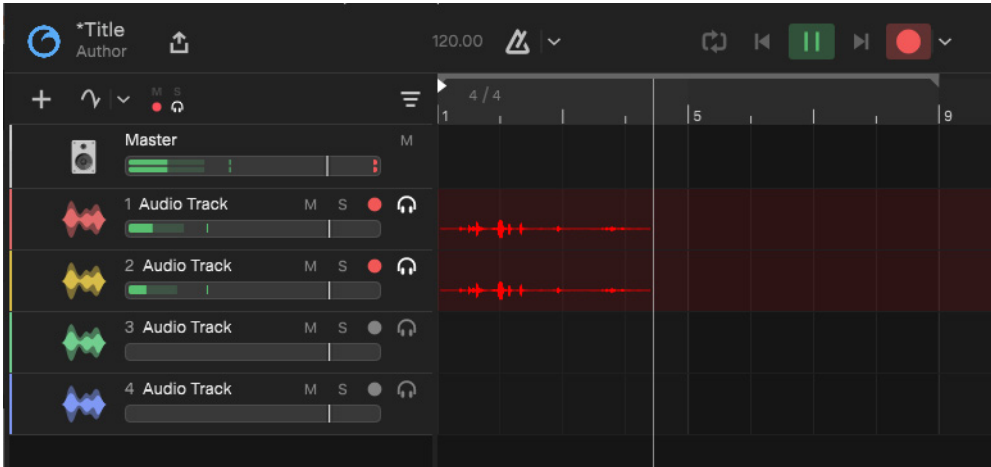
To start recording, do *one* of the following:

- ▶ Click the **Record** button . The button is red when enabled .
- ▶ Press R.



If the metronome count-in is enabled, it will play the count-in.

Play or perform the material you want to record.


During recording, the recorded signal is shown in red in the Clips pane:



To stop recording, do *one* of the following:

- ▶ Click the **Play/Pause** button .
- ▶ Select **Transport > Play/Pause**.
- ▶ Press SPACEBAR.
- ▶ Click the **Record** button . Recording stops, but playback continues.
- ▶ Select **Transport > Record**. Recording stops, but playback continues.
- ▶ Press R. Recording stops, but playback continues.

Listen to the new material. If you're not happy with the recording, select **Edit > Undo** to erase the new material. Select **Edit > Redo** command to restore the recording and toggle between Undo and Redo as many times as you like.

**Note:** When you are finished with recording, don't forget to disarm any armed tracks to prevent them from being accidentally overwritten. To disarm a track, click its red **Record Arm** button . You can also set a track's **Input** control to **None** to prevent any further input signal from reaching the track.

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## Loop recording

When recording a vocal or an instrumental section, you might want to record several different takes so that you can choose the one you like best. You might even want to record several takes to double a part or merge the best parts of each.

Normally, to record each take you would have to arm a track, start recording, perform the take, and then stop recording. You can record multiple takes more easily using loop recording. Loop recording lets you start recording and record as many takes as you like, all in a single step.


*Cakewalk Next*® loops between the loop start and loop end time, allowing you to record one take on each pass. *Cakewalk Next*® automatically places each take into a new, track. All takes/tracks are muted except for the last take.

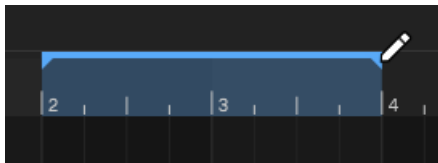
**i Note:** By default, all loop-recorded tracks are grouped in a track folder, but you can create ungrouped tracks by disabling **Transport > Loop Recording Creates Takes in Track Folder**.




The following rules apply when loop recording and **Transport > Loop Recording Creates Takes in Track Folder** is enabled:

- ▶ If a track is in a folder, multiple takes use the track's existing folder.
- ▶ If a folder already contains one or more takes for the track, the original track is left intact rather than overwriting it. As the latest take is always on top (i.e. tracks are ordered by most recent take first), subsequent takes will appear above it in the track order. It also means that you will always get a new take track when existing takes exist, even if the last take didn't loop more than once.
- ▶ When loop recording is finished, the group is always expanded.
- ▶ The original track is set to be the active track, so the user can start recording again.

### To use loop recording

1. Choose the input for the track(s) you want to record, and arm the track(s) for recording.
2. Click the **Toggle Loop Playback** button  to enable looping.
3. Set the loop start and end times (see **“Setting the loop region”** on page 43):
  - ▶ Drag in the section immediately above the time ruler.



- ▶ Make a selection, then select **Transport > Loop Selection** or press SHIFT+L.
4. Click the **Record** button  to start recording. The button is red when enabled .
5. Play or perform the material you want to record. At the end of the loop, *Next* will return to the start of the loop and you can record the next take.
6. Click the **Play/Pause** button  or press the SPACEBAR when you want to stop recording.

The takes are stored in separate tracks, with takes/tracks muted except for the last take.

See also:

**“Looping”** on page 42

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## Punch recording

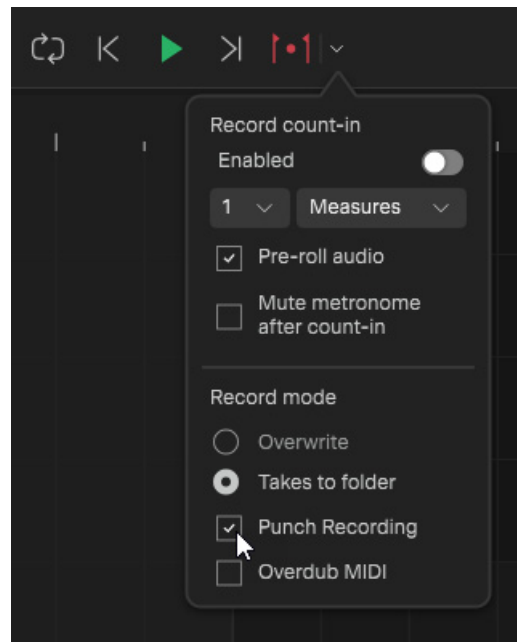
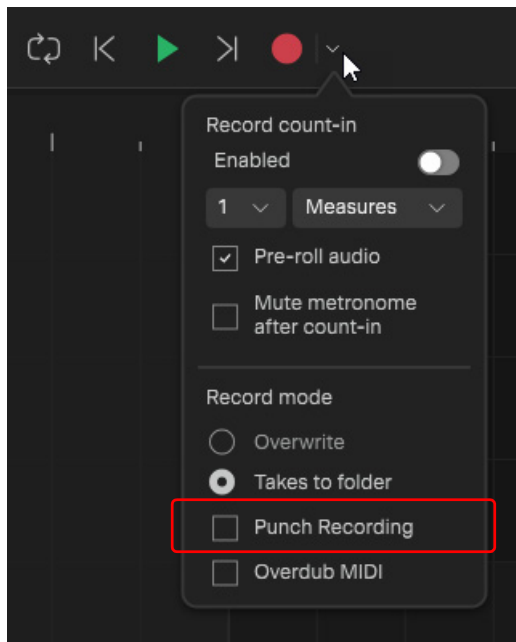
Punch recording allows you to record within a specific time range. Any previous recordings outside the punch region are not overwritten.


Suppose you are happy with most of a track but want to replace some sound or add new material in one small section—perhaps as small as a couple of notes. This is where punch recording comes in handy, because it lets you record new material only within a specified range of times.

For example, suppose you recorded a 32-bar keyboard solo but made some mistakes in the 24<sup>th</sup> and 25<sup>th</sup> bars. With punch recording, you can play the entire solo again, so you make sure you can get the feel you want. However, only the bars you want to correct are actually recorded. That way, you don't have to worry about introducing new mistakes elsewhere in the recording.

### To use punch recording

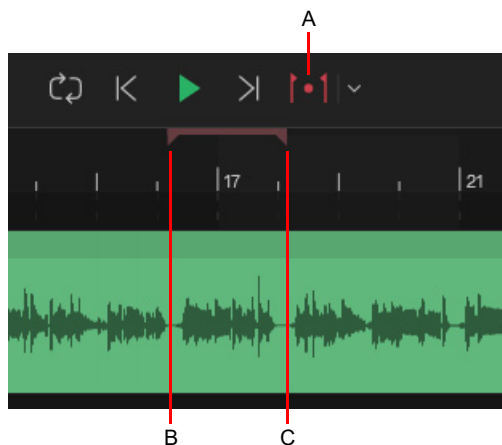
1. Choose the input(s) for the track(s) you want to record, and arm the track(s) for recording.
2. Do one of the following to enable/disable punch recording:
  - ▶ Click the **Transport** menu and select **Enable Punch Recording**.
  - ▶ Click the **Record** button  drop-down menu  to open the record settings panel, then select **Punch Recording**.



When punch record is enabled, the **Record** button displays a “record punch” icon , and the blue loop markers in the time ruler turn red to indicate the punch region.


3. Set the punch start and end times.

Punch recording utilizes the loop range markers to specify the punch record time range. When punch recording is enabled, the blue loop markers turn red to indicate the punch region. Drag the red marker handles to modify the punch region. To move the punch region, hold down the CTRL (Windows) / CMD (Mac) key and drag the red punch range to the desired location.

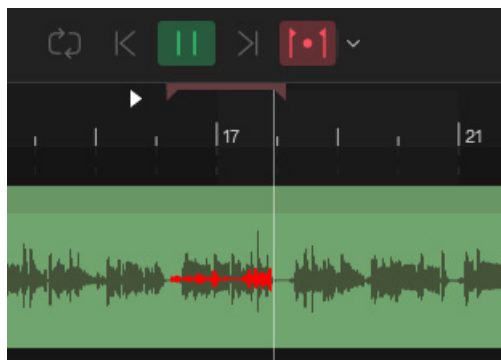



A. Punch Record button B. Punch In marker C. Punch Out marker

4. Set the Now time to a point where you want to start playback.

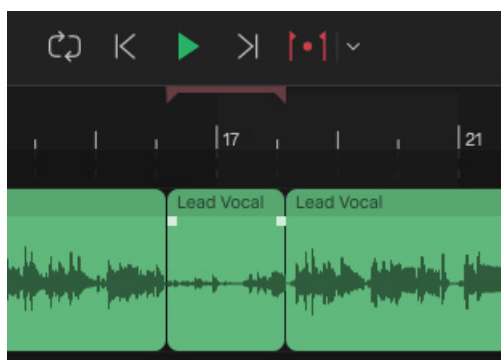
5. Click the Record button  or press R to start recording. If your metronome count-in is turned on, it will play the count-in measures or beats.

6. Play or perform the material you want to record.



7. Click the **Play/Pause** button  or press the SPACEBAR when you want to stop recording.

The material you play during the punch time is recorded in the chosen track, either replacing any existing material (**Overwrite** record mode) or blending with it (**Takes to folder** record mode). For details, see [“Record options”](#) on page 58.

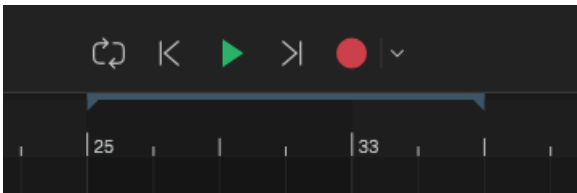


After you punch record, choosing **Edit > Undo** both discards any new material you recorded and restores the original material that had been deleted.

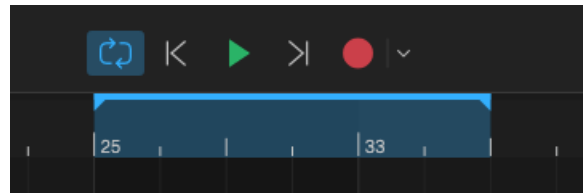
**Note:** When punch recording, Next saves the entire recording while the transport is rolling, but the recorded clip is cropped to only expose the punch region. By also recording the pre-roll and post-roll, you have more flexibility later when it comes to trimming the clip because you have access to audio data before and after the punch region instead of only silence.

You can combine loop (see “Loop recording” on page 54) and punch recording. The time ruler shows the loop/punch record region with draggable handles, and uses color coding to indicate if Loop Playback and Punch Record are enabled or disabled. When both looping and punch recording are enabled, recording occurs at loop start, and loop recording occurs per usual. When looping is enabled, the markers become brighter and the region is shaded.

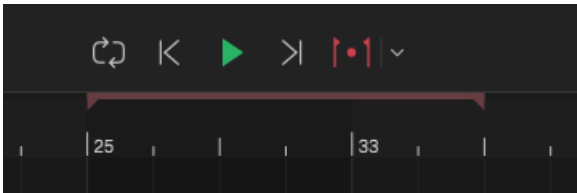
Loop Playback = OFF  and Punch Record = OFF :



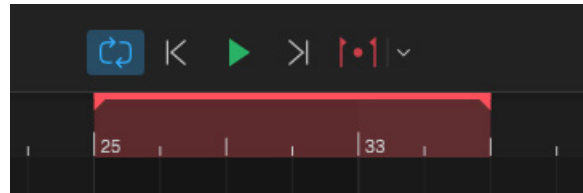
Loop Playback = ON  and Punch Record = OFF :



Loop Playback = OFF  and Punch Record = ON :

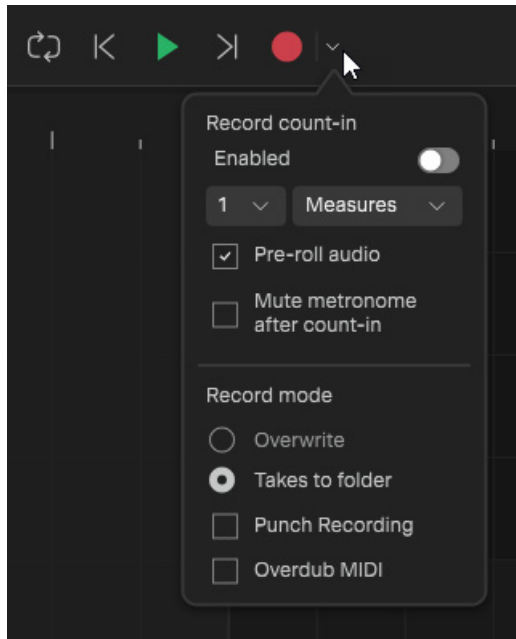


Loop Playback = ON  and Punch Record = ON :



## Record options

To configure recording settings, click the **Record** button  drop-down menu  to open the record settings panel:



- ▶ **Record Count-in.** Play the specified number of beats or measures of metronome clicks before recording begins. This can help you “get in the groove” before you start performing. When you create a new project, you should set the metronome to play during the count-in and while recording. If you are adding material to an existing project, you might only need the metronome for the count-in.
  - ▶ **Enabled.** Enable the record count-in and metronome, which is required in order to use the record count-in.
  - ▶ **Value.** Specify the number of beats or measures to use for the count-in. Enter the number of clicks for the count-in, then select **Beats** or **Measures**.
  - ▶ **Pre-Roll Audio.** Option to pre-roll project during count-in.
  - ▶ **Mute metronome after count-in.** Mute the metronome after the count-in has completed.
- ▶ **Record Mode.** Specify how recording affects existing material:
  - ▶ **Overwrite.** Recording replaces (overwrites) any existing material in the armed track(s). When loop recording, each pass overwrites the previous pass.
  - ▶ **Takes to folder.** When loop recording, each take is recorded onto a separate track, and all tracks are grouped in a new track folder. Only the most recent pass is audible, and older passes are muted.
  - ▶ **Punch Recording.** Enable/disable punch recording. Punch recording allows you to record new material only within a specified range of times, without overwriting the original recording outside the punch region. Punch recording is normally used to correct minor mistakes in an otherwise good performance. See “[Punch recording](#)” on page 55.
  - ▶ **Overdub MIDI.** When recording MIDI on instrument tracks, merge new material with existing material. Existing clips on the track are left unchanged and all newly recorded material is stored in new clips. While recording, you will be able to hear material from existing clips.

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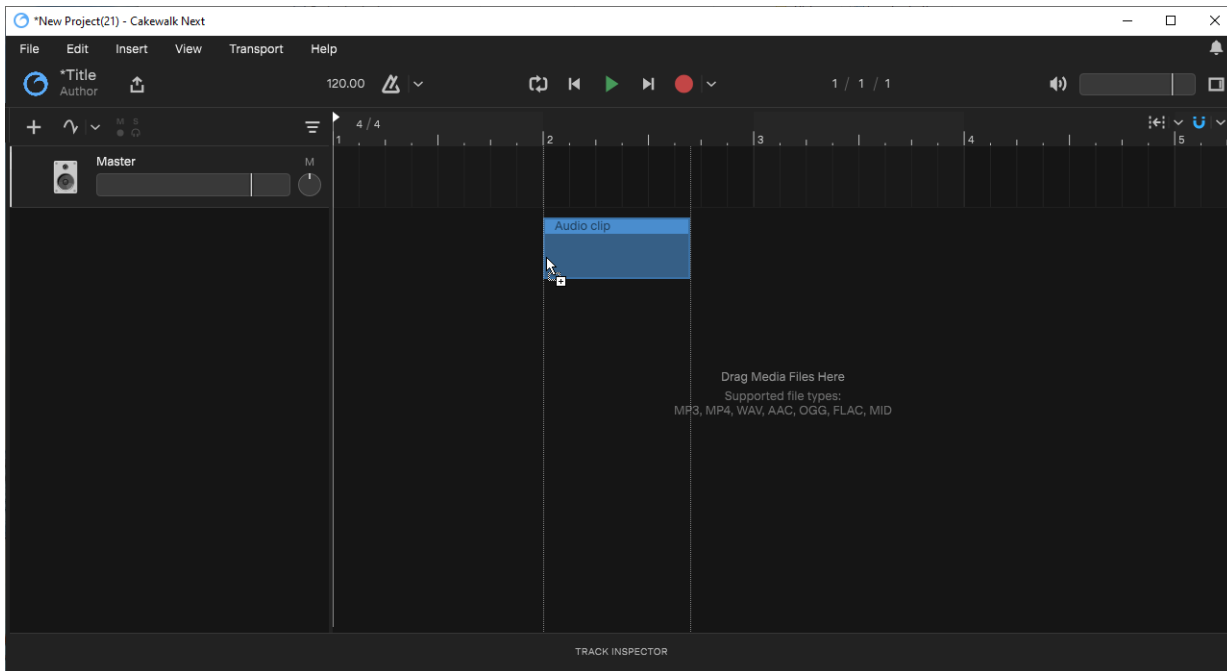
## Importing audio


While recording is perhaps the most common way of adding material to a *Next* project, you can also import audio files of the following formats:


- ▶ WAV
- ▶ AIF
- ▶ MP3
- ▶ MP4
- ▶ OGG
- ▶ FLAC

To import audio, drag the audio files, or folder of audio files, into the Clips pane.

Imported audio is converted to the project sample rate if there is a mismatch.



 **Tip:** To make it easier to align tracks when exporting individual tracks or stems from another DAW, export full length tracks, padded with silence at the start, if necessary, to ensure that all audio data is time aligned at import.

 **Note:** When exporting from Next, clips that do not start at time zero are automatically padded when exporting to BandLab.

You can also import audio loops and one-shots from the Loop Browser. For details, see [“Loop Browser”](#) on page 63 and [“Importing loops”](#) on page 65.

See also:


[“Importing from BandLab”](#) on page 72

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## Using the metronome

The metronome counts off each beat in a measure, so you can hear the tempo of your project. You can choose to have the metronome sound during recording, during playback, both, or turned off.

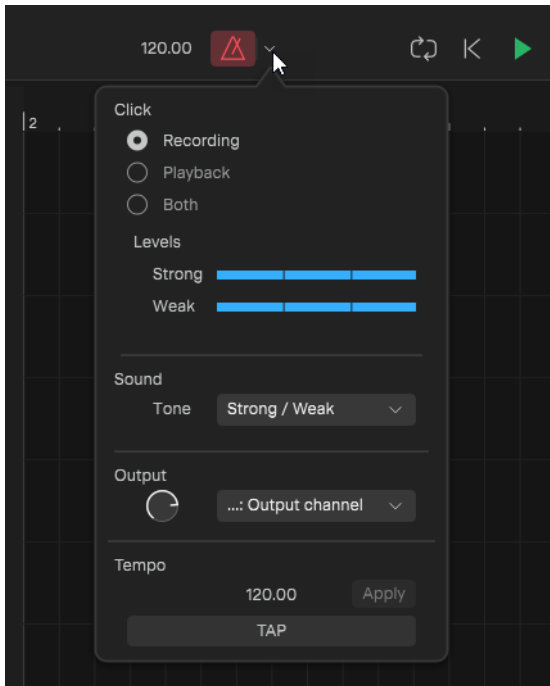
### Enabling/disabling the metronome




To enable/disable the metronome, click the **Metronome** button .

### Configuring metronome settings

To configure metronome settings, click the **Metronome** button  drop-down menu  to open the metronome settings panel:

**Figure 6.** *Metronome options.*



- ▶ **Click.** Specify when the metronome should be enabled:
  - ▶ **Recording.** Enable the metronome during recording. The metronome button is red when enabled .
  - ▶ **Playback.** Enable the metronome during playback. The metronome button is green when enabled .
  - ▶ **Both.** Enable the metronome during recording and playback. The metronome button is blue when enabled .
  - ▶ **Levels.** Specify the click levels for strong and weak beats:
    - **Strong.** Set the gain for the first beat of each measure.
    - **Weak.** Set the gain for all other beats.
  - ▶ **Sound.** Select the metronome sound.
  - ▶ **Output Level.** Adjust the metronome volume.
  - ▶ **Output.** Select the metronome output bus or hardware device.
  - ▶ **TAP.** Click the **TAP** button repeatedly to tap the desired tempo.
    - ▶ **Apply.** Click the **Apply** button to apply the tapped tempo, or press ESC to cancel a pending tempo change.

See:

[“Setting the project tempo”](#) on page 44



# Virtual MIDI Controller

The Virtual MIDI Controller allows you to easily record a MIDI performance using a mouse, computer keyboard or by tapping on a multi-touch-enabled monitor, without having to use a physical MIDI controller.

## Enabling Virtual MIDI Controller

To enable virtual MIDI input and show the Virtual MIDI Controller, do *one* of the following:


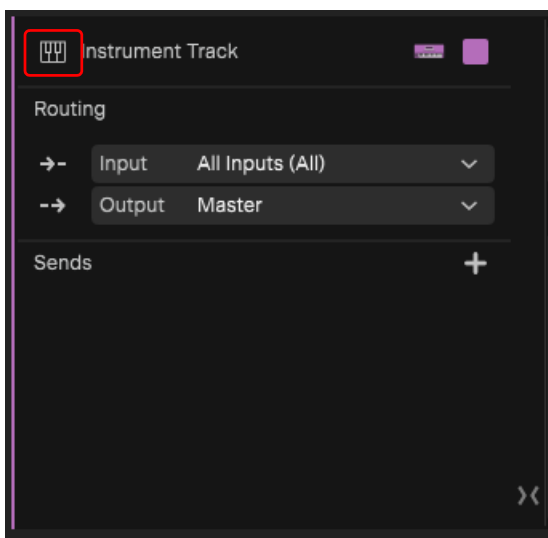
- ▶ Select **View > Show Virtual MIDI Controller**
- ▶ Press CTRL+M (Windows) / CMD+M (Mac)
- ▶ Click an instrument track's track type icon  in the track inspector

Figure 7. *Track Inspector.*



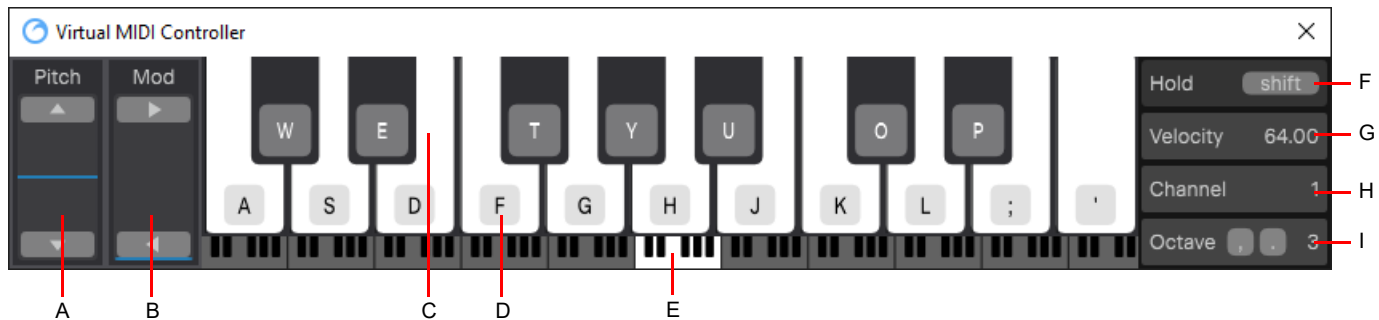
To enable QWERTY to MIDI input without showing the virtual keyboard, do *one* of the following:

- ▶ Select **View > Toggle QWERTY to MIDI Input**
- ▶ Press CTRL+ALT+M (Windows) / CTRL+CMD+OPTION+M (Mac)

## Playing the Virtual MIDI Controller with a computer keyboard

To play the polyphonic keyboard, click the on-screen keys or press the corresponding keys on your computer keyboard.

Figure 8. Virtual MIDI Controller.



A. Pitch Wheel B. Modulation C. Black/white keys D. Corresponding computer key E. Current octave F. Hold (Sustain pedal) G. Velocity H. Channel I. Octave

### Changing the octave

The leftmost white key (A) indicates the current octave (C0-C9). To change the octave, do *one* of the following:

- ▶ Drag the blue octave indicator left/right.
- ▶ Click the octave number and drag up/down.
- ▶ Press the COMMA (,) key to scroll down one octave, or the PERIOD (.) key to scroll up one octave.

### Enabling/disabling sustain

To enable sustain, do *one* of the following:

- ▶ Click the **Hold** button
- ▶ Press the SHIFT key

### Using the pitch wheel

To adjust the pitch wheel, do *one* of the following:

- ▶ Drag the **Pitch** control up/down
- ▶ Press the UP key to raise the pitch, and DOWN key to lower the pitch

### Adjusting modulation

To adjust modulation, do *one* of the following:

- ▶ Drag the **Mod** control up/down
- ▶ Press the LEFT key to decrease modulation, and RIGHT key to increase modulation

### Changing the velocity

To change the velocity, drag the **Velocity** control up/down.

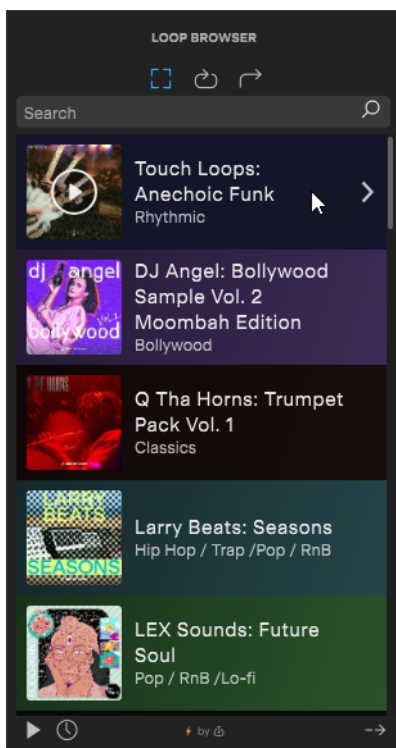
### Changing the MIDI channel

To change the MIDI channel, drag the **Channel** control up/down.

# Loop Browser

The Loop Browser lets you access and import a professionally curated selection of premium audio packs, loops, and one-shots right from within *Next*. Just drag & drop directly into tracks.

## BandLab Sounds



### Highlights

- ▶ Royalty-free loops & samples for personal or commercial use. No attribution needed. 100% free, with new samples added frequently.
- ▶ Unlimited access to thousands of samples from mainstream and underground genres.
- ▶ Hi-res audio quality. All samples are uncompressed (.wav).
- ▶ World-class content created by artists and professional sound designers.
- ▶ Preview loops through any bus or hardware output, at the project tempo or recorded tempo.

### Showing/hiding the Loop Browser

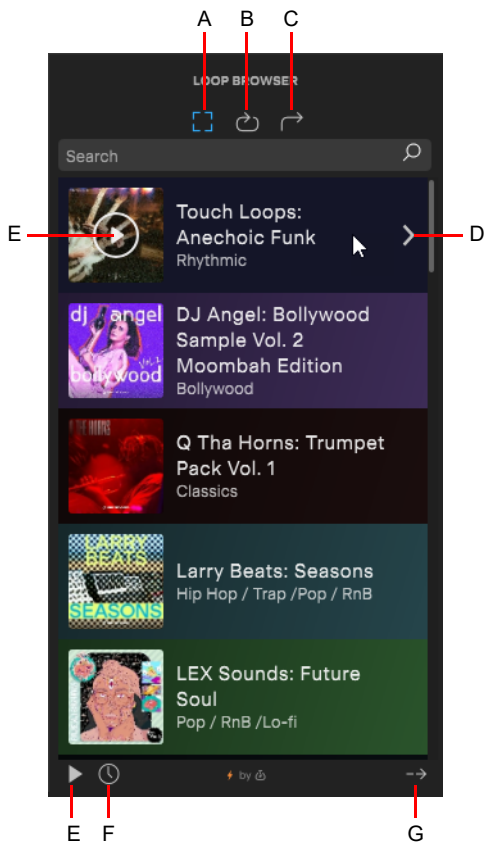
To show/hide the Loop Browser, do *one* of the following:

- ▶ Select **View > Show Loop Browser**
- ▶ Press B or F5

 **Note:** You must sign in to your BandLab account (**Help > Sign In**) in order to access content in the Loop Browser.







## Loop Browser interface

Figure 9. Loop Browser.



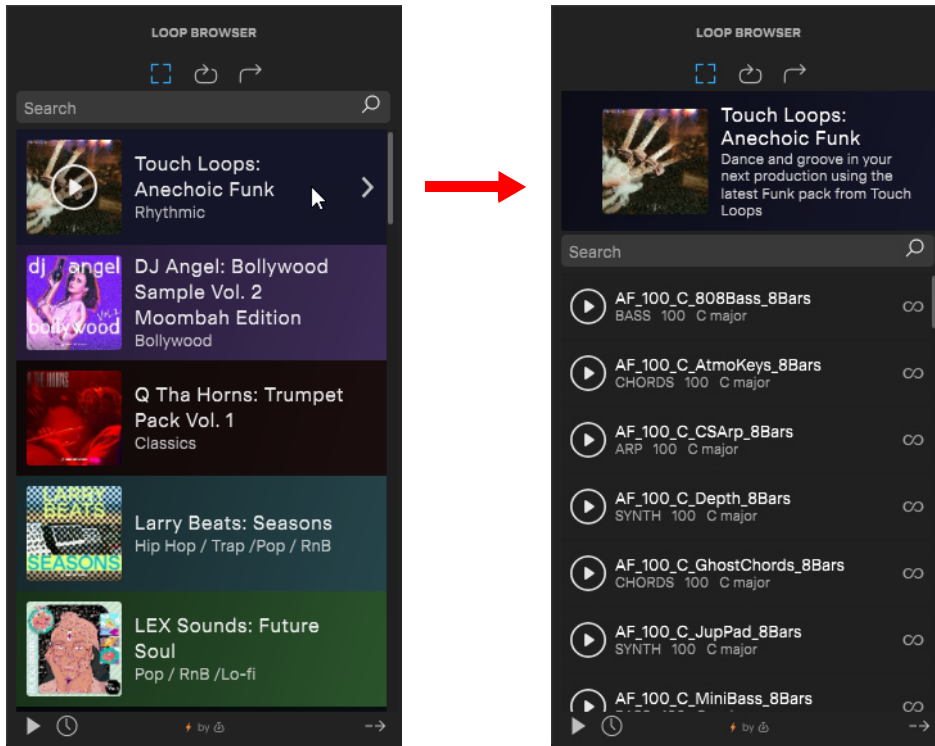
A. Show packs B. Show loops C. Show one-Shots D. Content (click to see the pack's content) E. Preview F. Preview at project tempo G. Preview output

The Loop Browser contains the following controls:

- ▶ **Content type.** Use the buttons at the top to select the type of content to show:
  - ▶ **Packs** . A pack is a curated collection of related loops and one-shots. Click a pack to view its collection of loops and one-shots.
  - ▶ **Loops** . Loops are short audio clips that are designed to be repeated over and over or “looped”, such as a drum groove. When imported into a project, the loop conforms to the project tempo and can be “rolled out” to created multiple repetitions. Loops are indicated by the  icon
  - ▶ **One-Shots** . One-shots are audio clips that are intended to play just once, such as a sound effect or a single drum hit. One-Shots are indicated by the  icon
- ▶ **Search filter.** The search filter allows you to only show content that includes a specific text string in the file name or pack name.
- ▶ **Content List pane.** The Content List pane shows all packs, or loops/one-shots in the selected pack.
- ▶ **Preview** . Play the currently selected pack, loop, or one-shot.

- ▶ **Preview at project tempo** . Preview at the project tempo instead of the recorded tempo.
- ▶ **Preview output** . Select the output device for previewing audio files.

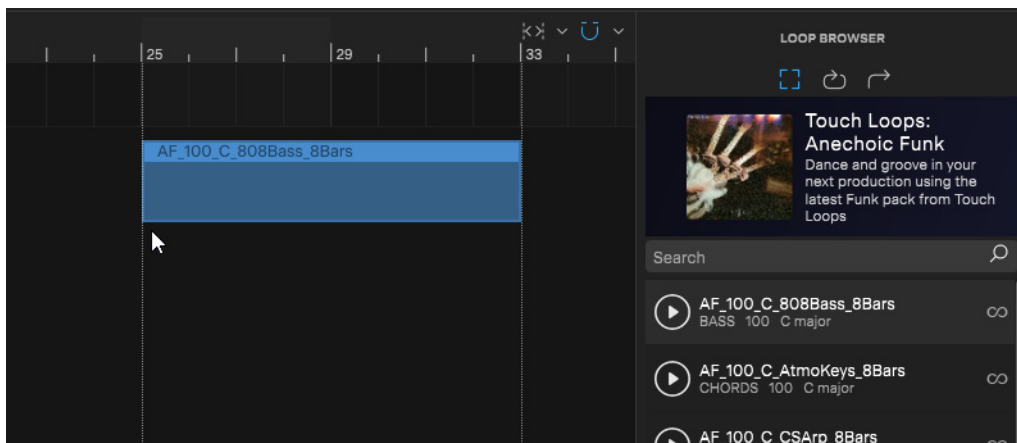
Figure 10. Click a pack to view its collection of loops and one-shots.



## Importing loops





To import a loop or one-shot, do *one* of the following:

- ▶ Drag from the Loop Browser to the Clips pane:
  - ▶ Drop on an existing track to import into the track.
  - ▶ Drop below the last track to import into a new track.
- ▶ Double-click a loop/one-shot to import at the Now Time in the selected track.



**Note:** Loops and one-shots are downloaded to the path you specify in the **Settings** dialog box under **Loop Cache Path** (go to **Edit > Preferences > Project - Folders Management**). For details, see “[Preferences](#)” on page 233 and “[Project settings](#)” on page 239.

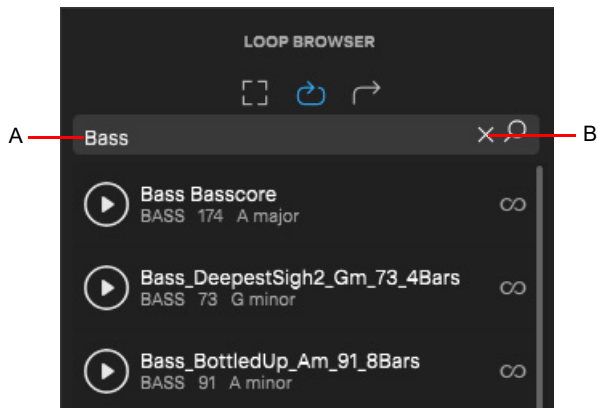
## Previewing loops

- ▶ To preview a pack, loop, or one-shot, click its preview button .
- ▶ To preview the selected loop, click the **Preview** button .
- ▶ By default, loops preview at their original recorded tempo. To preview at the current project tempo, click the **Preview at project tempo** button .
- ▶ You can preview loops through any bus or hardware output. To select the preview output, click the **Preview output** button .

## Finding loops

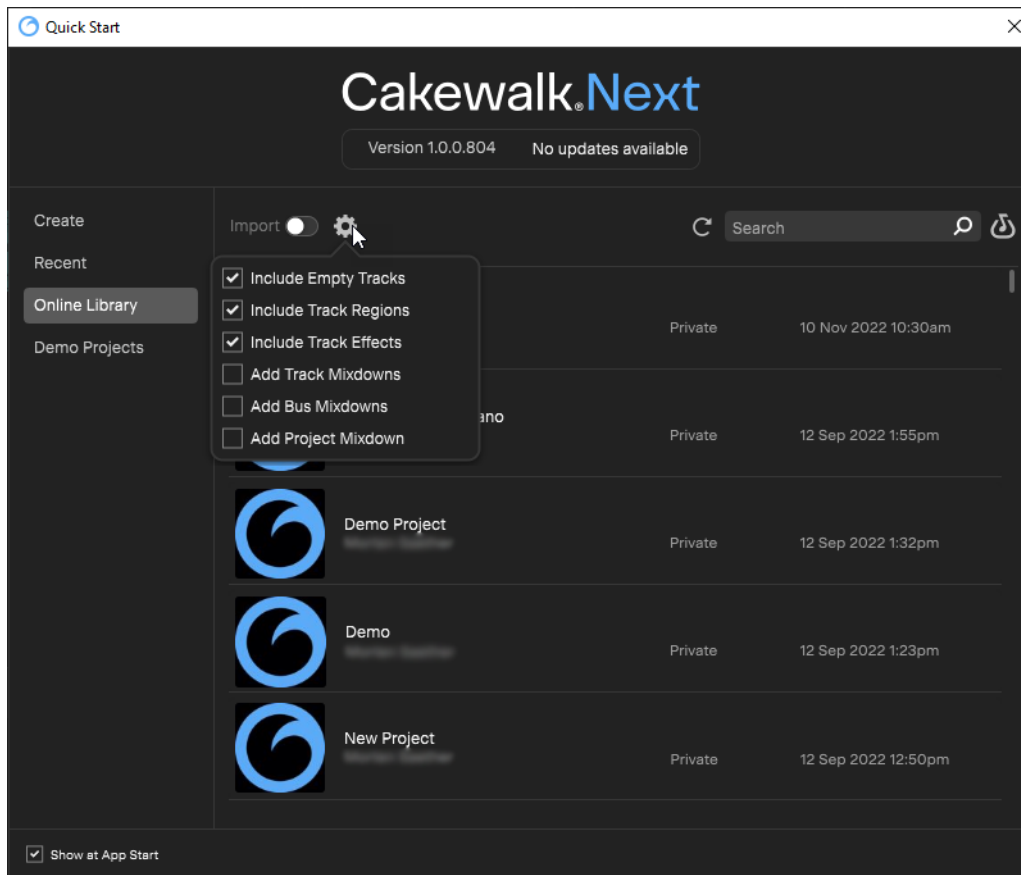
The search filter allows you to only show content that includes a specific text string in the file or pack name.

Figure 11. Search filter.



A. Search/filter box B. Clear current filter

# BandLab library import/export



*Cakewalk Next*® provides complete integration with your BandLab library, with support for downloads and uploads, tracking revision state, and setting song properties directly from within *Next*. You can export *Next* projects to BandLab as well as download projects from your BandLab library and open them in *Next*.

BandLab integration allows you to publish *Next* stems and mixes to the BandLab cloud, continue working on your songs using BandLab on mobile (iOS and Android) or web, and import your changes back to *Next*. This workflow presents many possibilities, including:

- ▶ Publish *Next* projects, stems and mixes to your BandLab library, and easily share audio on mobile and web
- ▶ Quickly open BandLab projects in *Next*
- ▶ Collaborate easily by sharing audio tracks via the BandLab cloud
- ▶ Bring projects started on mobile into *Next* for VST effects and advanced editing
- ▶ Fly in vocals or other parts for a *Next* project from iOS and Android
- ▶ Curate your music as playlists that you can play anywhere from your mobile device


- ▶ Quickly audition multiple mixes on different platforms (for example, check the mix in your car by connecting via Bluetooth to your car stereo)
- ▶ Publish your *Next* projects to BandLab, then embed the song on the *Next* User-submitted Songs forum at <https://discuss.cakewalk.com/index.php?forum/30-songs> (this is much more powerful than posting a stereo mix to your song, because if you additionally provide stems others can offer more constructive advice on your mixes)


For more information about the free BandLab social music service, visit [www.BandLab.com](http://www.BandLab.com).

## Publishing to your BandLab library

When publishing to BandLab, a project can be uploaded as a new project, or as a revision of the current BandLab project (see “[What is a revision?](#)” on page 68).

To publish the current project to your BandLab library, do *one* of the following:


- ▶ Click the **Share** button  and select **Publish to BandLab**
- ▶ Select **File > Publish to BandLab**
- ▶ Press CTRL+B (Windows) / CMD+B (Mac) to open the **Publish to BandLab** dialog box

Click the **Publish** button drop-down menu  to specify the combination of project assets you wish to upload to the BandLab project. Tracks and buses are mixed down prior to uploading to BandLab.

For details, see “[Publishing to BandLab](#)” on page 69.

## Importing from your BandLab library

To open a BandLab project, go to **File > Open Project** to open the Quick Start screen, then select the **Online Library** page. You may open as a new *Next* project or import into an existing project. Note that revisions are only tracked if you open as a new *Next*

project. Click the **Song Download Options** button  to select the types of assets from the BandLab project you wish to download and open.

For details, see “[Importing from BandLab](#)” on page 72.

## What is a revision?

A **Revision** is a revised edit of your project with a unique date/timestamp. A new revision is created every time you make a new BandLab project or save an edit of your existing BandLab project.

Revisions ensure that nothing is overwritten. All revisions are saved, and you can go back to an older version of your project at any time.

*Cakewalk Next*® projects opened from BandLab songs automatically inherit the song revision they were derived from. Subsequent uploads of the project by default are automatically linked to the last song revision.

Projects that originate from *Next* also follow the same rules. You may also create fresh BandLab songs from a revision by selecting **Upload as New Project** in the **Publish to BandLab** dialog box (**File > Publish to BandLab**).

## Collaborate with others

You can invite other people to collaborate on a project via the BandLab cloud. For details, see “[Inviting collaborators](#)” on page 75.

## Switching BandLab user accounts

If you have multiple BandLab user accounts and would like to sign in as a different user, select **Help > Sign Out**, then select **Help > Sign In** to sign in with a different account.

See:

“[Publishing to BandLab](#)” on page 69

“[Importing from BandLab](#)” on page 72

“[Inviting collaborators](#)” on page 75

See also:

“[Exporting](#)” on page 227



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## Publishing to BandLab

### Max duration and track limit

When publishing to BandLab, you can export a maximum duration of 15 minutes and up to 16 tracks or buses.

If the project or selection exceeds these limits, adjust the selection before publishing to BandLab.

### Public vs private projects


A BandLab project can be either public or private. When a project is marked as **Public**, anyone will be able to listen, comment and share the project. Mark a project as **Public** when you want to share your song with the BandLab community.


By default, all content is set to "Private", meaning that only you and any invited collaborators can access it, make adaptations of it and use it. When **Public** is enabled, other users can view your content or play it on BandLab by streaming, but they will not be able to download, adapt, synchronize or use that content.


### Publishing the current project to your BandLab library

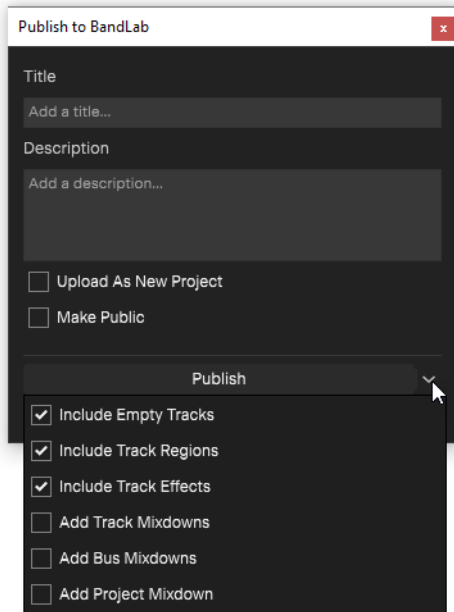
After you have recorded and arranged your tracks, you can publish the project to your BandLab library.

To publish the current project:

1. Do *one* of the following:
  - ▶ Click the **Share** button  and select **Publish to BandLab**
  - ▶ Select **File > Publish to BandLab**
  - ▶ Press CTRL+B (Windows) / CMD+B (Mac) to open the **Publish to BandLab** dialog box
2. In the **Publish to BandLab** dialog box, you can modify the following project settings:
  - ▶ **Title.** Specify the name of the project as you want it to appear in BandLab. By default, the name is inherited from the *Next* project name.
  - ▶ **Description.** Enter a brief description for the project/revision (up to 250 characters).
  - ▶ **Upload as New Project.** [Only available if the current project has already been published] Instead of uploading as a revision of the current project, upload as a new project. Different edited versions of BandLab songs are linked together by a revision control system. For details, see "[What is a revision?](#)" on page 68.

 **Note:** After the first export, subsequent exports from the same *Next* project will appear as revisions of the original BandLab project.

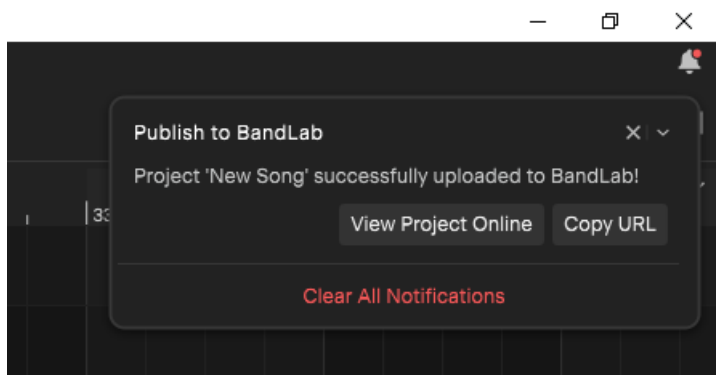
- ▶ **Make Public.** Share your song with the BandLab community. Anyone will be able to listen, comment and share this project. By default, all content is set to "Private", meaning that only you and any invited collaborators can access it, make adaptations of it and use it. When **Make Public** is enabled, other users to view your content or play it on BandLab by streaming, but they will not be able to download, adapt, synchronize or use that content. For details, see "[Public vs private projects](#)" on page 69.
- ▶ **Publish options** . Select the project assets you want to upload:
  - **Include Empty Tracks.** Upload empty tracks. The project must contain at least one non-empty track.
  - **Include Track Regions.** Upload individual clips instead of track mixdowns.
  - **Include Track Effects.** Upload track effects.
  - **Add Track Mixdown.** Publish individual audio tracks and Instrument track audio, up to a maximum of 16 tracks. All clips in a track are mixed down to a single region.
  - **Add Bus Mixdown.** Publish stereo bus outputs, up to a maximum of 16 buses.
  - **Add Project Mixdown.** Publish the entire mix as a single track. If you publish both individual tracks and a project mixdown, the project mixdown will be muted in order to prevent doubled audio.



### 3. Click **Publish**.


The project is exported to your BandLab library.

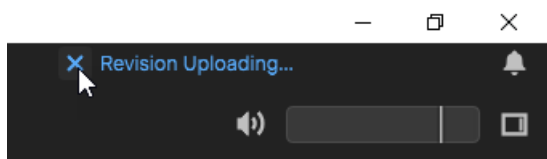
A toast notification appears after the export has been uploaded to the BandLab cloud.



**Note:** Projects will export as either 16-bit / 44.1kHz or 16-bit / 48kHz WAV files, depending on the project's settings. Higher settings will automatically downsample to the required format during export.

## Canceling an in-progress upload

To cancel an in-progress upload, click the  button in the progress indicator.



## Max duration and track limit

When publishing to BandLab, you can export a maximum duration of 15 minutes and up to 24 tracks or top-level track folders. Export is disabled if the project exceeds these limits.

You can group multiple audio tracks into a track folder in order to reduce the track count. Each track folder only counts as a single track. For details, see [“Track folders”](#) on page 17 and [“Grouping tracks with track folders”](#) on page 35.

See:

[“Importing from BandLab”](#) on page 72

[“Inviting collaborators”](#) on page 75

[“BandLab library import/export”](#) on page 67

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## Importing from BandLab

You can open a BandLab project as a new *Next* project, or import a BandLab project into the current *Next* project.

- ▶ **To open or import a BandLab project that has not been downloaded yet.** See “Opening or importing a project from your BandLab library” on page 72.
- ▶ **To open a BandLab project that has already been downloaded.** See “Opening a downloaded BandLab project” on page 74.

### Opening or importing a project from your BandLab library


You can load a project from your BandLab library, or import it into the current project.

To open or import a project from your BandLab library:

1. Go to **File > Open Project** to open the Quick Start screen, then select the **Online Library** page.  
If you are not already logged in to your BandLab account, you will be prompted to log in.

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BandLab Sign In ✕

  
**BandLab**





Username or email

Password

[Forgot password?](#)

**Log In**

or continue with




[Not now](#)

Don't have an account? [Sign Up](#)

By continuing, you agree to BandLab's  
[Terms of Use](#) and [Privacy Policy](#)

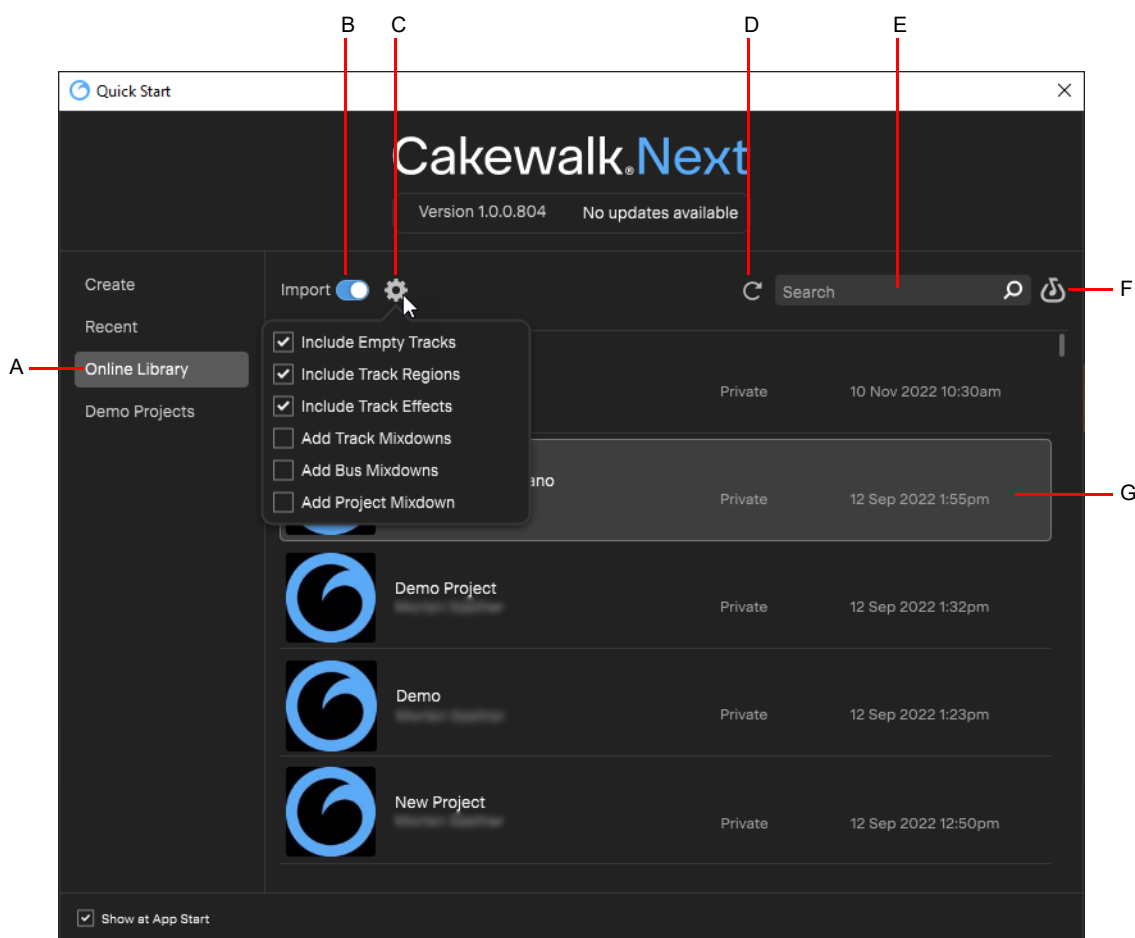
2. Select the project you want to open or import.

- Click the **Song Download Options** button  and, specify which assets to include when opening/importing the selected project:
  - Include Empty Tracks.** Include tracks that contain no data.
  - Include Track Regions.** Include individual clips instead of track mixdowns.
  - Include Track Effects.** Include track effects.
  - Add Track Mixdown.** Include individual track stems.

**Note:** *The BandLab server must generate individual track mixdowns. The timing for this is dependent on server availability. If the server is busy you may get a message notifying you that track mixdowns are not ready yet. You can choose to download without the mixdowns, or retry downloading the project again later.*


- Add Bus Mixdown.** Include individual bus stems.
  - Add Project Mixdown.** Include a stereo mixdown of the project. If you import both individual tracks and a project mixdown, the project mixdown will be muted in order to prevent doubled audio.
- Do *one* of the following:
    - To open the project as a new *Next* project, double-click the project.
    - To append the project to the current *Next* project, enable **Import**, then double-click the project.


**Figure 12.** Quick Start screen: Online Library page.





**A.** Show Online Library **B.** Import (enable to import; disable to load) **C.** Song Download Options **D.** Refresh project list **E.** Search **F.** View Selected Song Online **G.** Selected project is highlighted

The Quick Start screen **Online Library** page contains the following settings:

- ▶ **Projects.** List of all projects in your BandLab library.
- ▶ **Import.** Enable to import and append the selected project to the current *Next* project instead of opening as a new project.
- ▶ **Song Download Options**  Specify which assets to include when opening/importing the selected project:
  - ▶ **Include Empty Tracks.** Include tracks that contain no data.
  - ▶ **Include Track Regions.** Include individual clips instead of track mixdowns.
  - ▶ **Include Track Effects.** Include track effects.
  - ▶ **Add Track Mixdown.** Include individual track stems.


 **Note:** *The BandLab server must generate individual track mixdowns. The timing for this is dependent on server availability. If the server is busy you may get a message notifying you that track mixdowns are not ready yet. You can choose to download without the mixdowns, or retry downloading the project again later.*

- ▶ **Add Bus Mixdown.** Include individual bus stems.
- ▶ **Add Project Mixdown.** Include a stereo mixdown of the project.
- ▶ **Refresh**  Refresh the project list.
- ▶ **Search.** Search the project list.
- ▶ **View Selected Song Online**  View the project on [www.bandlab.com](http://www.bandlab.com), where you can view project history, view and invite collaborators, and open the project in BandLab Mix Editor.

## Opening a downloaded BandLab project

If you have already downloaded a BandLab project to your local file system (see “Opening or importing a project from your BandLab library” on page 72), you can open it as a new *Next* project without having to redownload the project.

To open a downloaded BandLab project as a new *Next* project, do *one* of the following:

1. Go to **File > Open Project** to open the Quick Start screen.
2. Click the **Browse** button  to open the **Open Project** dialog box.
3. Navigate to the `C:\Users\<user name>\Documents\BandLab\Downloads` folder.
4. Double-click the desired project folder.
5. Select the BandLab Interchange file (.blx) and click **Open**.

The BandLab Interchange file opens as a new untitled *Next* project that must be saved with a new file name.

See:

“Publishing to BandLab” on page 69


“Inviting collaborators” on page 75

“BandLab library import/export” on page 67


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## Inviting collaborators

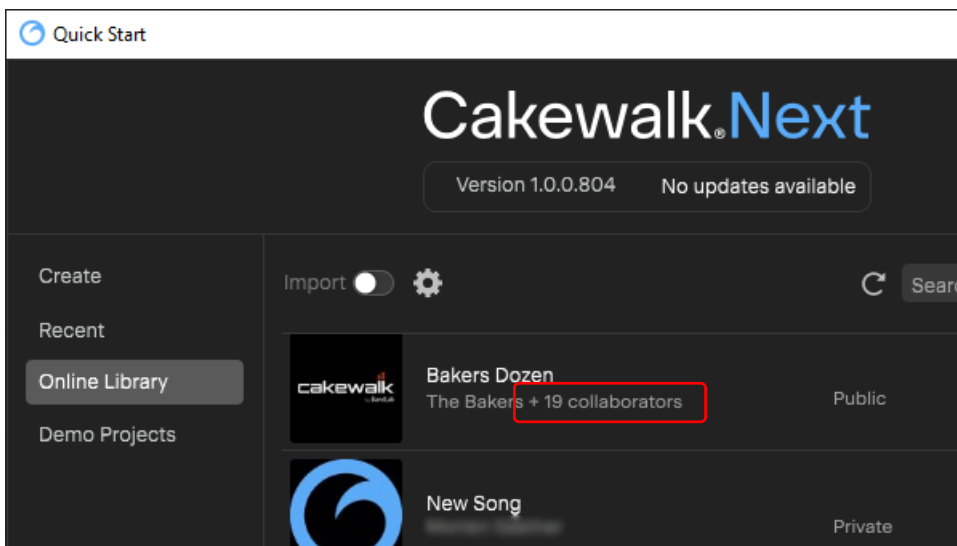
You can invite other people to collaborate on a project. To do so:

1. Go to **File > Open Project** to open the Quick Start screen, then select the **Online Library** page.
2. Select the project you would like to collaborate on, then click the **View Selected Song Online** button  to open the project in your web browser.
3. On the project web page, click **Project Details**.
4. Click the Options button **\*\*\*** and select **Invite Collaborators**.
5. Enter the person's BandLab username or email address, provide an optional message, then click **Send**.

When a collaborator makes any changes to the project, it is uploaded as a revision, so your original project is not be modified directly.

 **Note:** *Collaborators can access your project even when it's set to **Private**.*

You can also share the project URL with others. Anyone who has access to the link can join and edit the project. The number of collaborators is shown in the Quick Start screen **Online Library** page after the project author name.



See:

- “Publishing to BandLab” on page 69
- “Importing from BandLab” on page 72
- “BandLab library import/export” on page 67



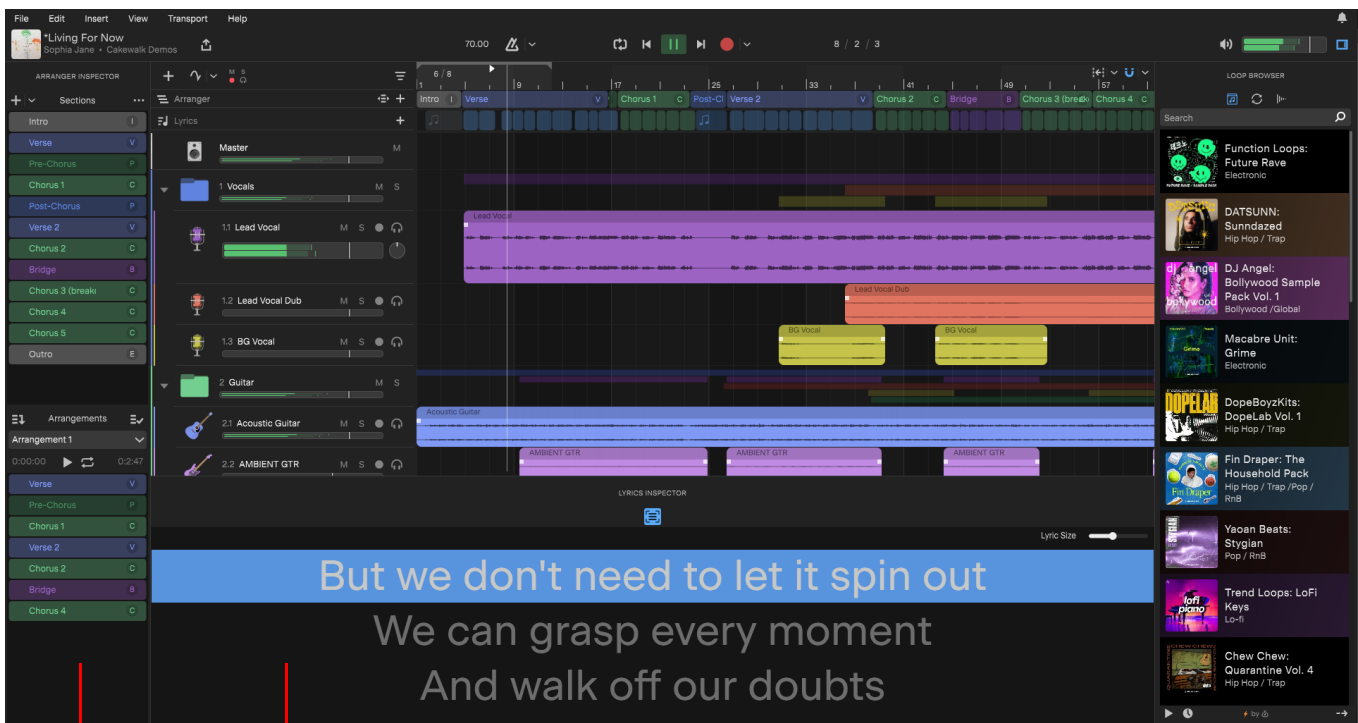


# Inspectors

When working on a project, you will frequently need to access track and clip parameters and mix controls. The Track Inspector and Clip Inspector provide easy access to relevant settings for the selected track.

The Inspectors appears below the Track view. There are two separate inspectors:

- ▶ **Track Inspector.** The Track Inspector lets you add effects and configure input echo, input, output, and sends for the selected track/bus/track folder. For details, see [“Track Inspector”](#) on page 78.
- ▶ **Clip Inspector / Piano Roll view.** The Clip Inspector lets you edit MIDI data in the selected instrument track. For details, see [“Clip inspector / Piano Roll view”](#) on page 83.
- ▶ **Arranger Inspector.** The Arranger Inspector shows all the arranger sections defined in the project’s timeline, and allows you to create unlimited different arrangements of the current project. Each arrangement can contain any combination of sections, in any order. For details, see [“Arranger”](#) on page 87 and [“Arranger Inspector”](#) on page 92.
- ▶ **Lyrics Inspector.** The Lyrics Inspector can toggle between showing the Lyrics Editor (and Lyrics Scratch Pad) and Lyrics Prompter. For details, see [“Lyrics”](#) on page 207 and [“Lyrics Inspector”](#) on page 211.



A

B

A. Arranger Inspector B. Lyrics Inspector (the Track Inspector and Clip Inspector also appear here)

See:

[“Track Inspector”](#) on page 78

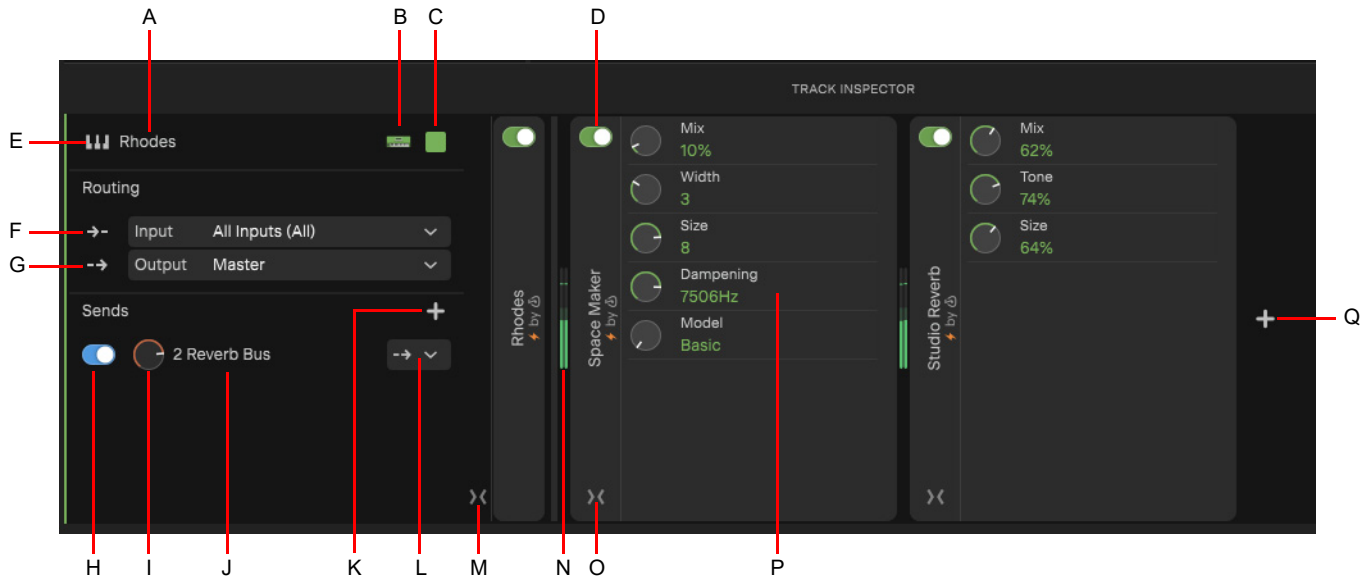
[“Clip inspector / Piano Roll view”](#) on page 83

## Track Inspector

The Track Inspector lets you add effects and configure input, output, and sends for the selected track/bus/track folder. To show/hide the Track Inspector, do *one* of the following:





- ▶ Select **View > Show Track Inspector**
- ▶ Press F3
- ▶ Double-click a track's icon









Figure 13. *Track Inspector.*






A. Track Name B. Icon C. Color D. Bypass Effect D. Output E. Track Type Icon F. Input G. Output H. Send Bypass I. Send Level J. Send Destination K. Add Send L. Pre Fader/Post Fader/Input M. Show/Hide Menu N. Effect input meter O. Show/Hide Effect Parameters P. Effect Parameters Q. Add Effect

The left side of the Track Inspector contains the following controls.

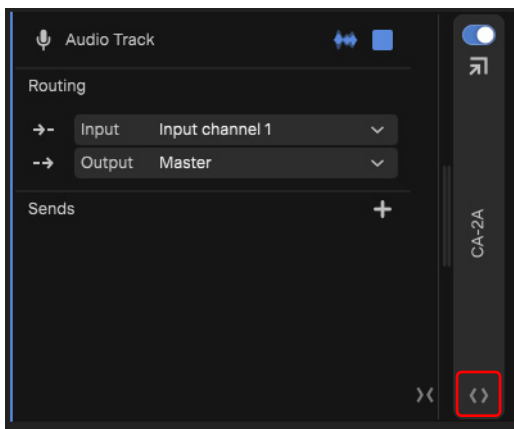
- ▶ **Track type icon.** Track type icons are used to distinguish between different track types. These icon are separate from the assignable per-track icons.
  - ▶  = Audio track
  - ▶  = Instrument track, including Sampler, Pad Controller, and Instrument Rack (click to open the Virtual MIDI Controller. For details, see ["Virtual MIDI Controller"](#) on page 61).
  - ▶  = Track folder
  - ▶  = Bus
- ▶ **Name.** The Name control lets you assign a descriptive name to each track. Double-click to edit.
- ▶ **Icon.** Assign a descriptive icon to identify the track content.
- ▶ **Color.** Track colors make it easy to distinguish tracks. Click to change the track color.

- ▶ **Routing.** The Routing sections lets you assign the input and output device.
  - ▶ **Input** . Select the input device to use for recording and input monitoring.
  - ▶ **Output** . Select the output device to use for playback.
- ▶ **Sends.** Click  to send the signal to an existing or new bus. Each send contains the following controls:
  - ▶ **Bypass.** Bypass the send.
  - ▶ **Name.** Name of the destination bus.
  - ▶ **Send level.** Controls volume of audio data sent by the send.
  - ▶ **Tap point.** Specify the send's tap point:
    - **Input** . The send signal goes to the bus prior to the track's effects.
    - **Pre Fader** . The send signal goes to the bus prior to the track's volume fader.
    - **Post Fader** . The send signal goes to the bus after the volume fader.
- ▶ **Show/Hide Menu**  / . Show/hide the left pane of the Track Inspector.

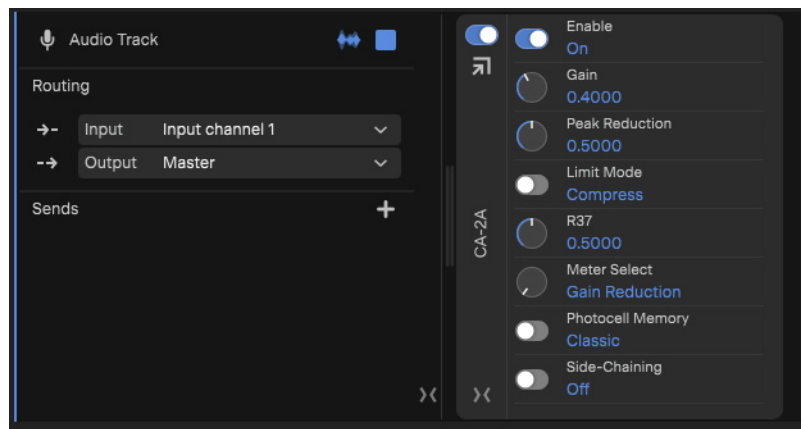
 **Note:** *Input and Input Monitoring controls are not available for track folders and buses.*

The right side of the Track Inspector shows effects and effect parameters. To show/hide effect parameters, hover over the plugin name and click an effect's expand/collapse button  /  or double-click the plugin name.

**Plugin module collapsed:**



**Plugin module expanded:**



See:

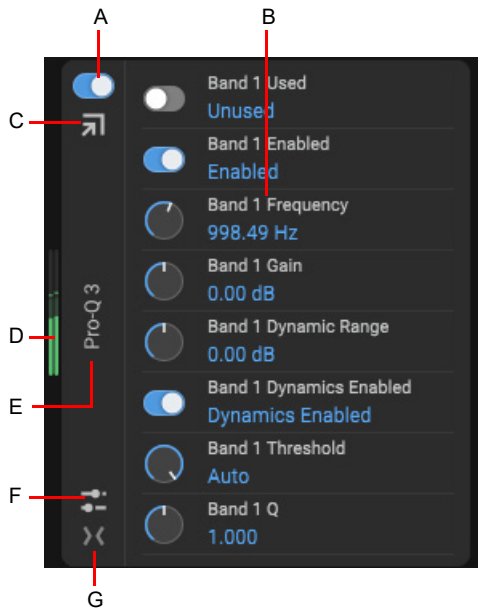
- “Enabling track input monitoring” on page 51
- “Choosing an input” on page 51
- “Inserting effects” on page 179
- “Replacing an instrument” on page 30

## Plugin Modules

Plugin modules are ergonomic representations of track plugins, presented to fit in the track Track Inspector.

Instruments and effects parameters are automatically allocated to module control slots and made available for track automation (see “Automating effects” on page 204). To map VST effect parameters to control slots, see “Mapping plugin parameters” on page 186.

Figure 14. Effect plugin module.



A. Bypass B. Effect parameters C. Open Plugin UI D. Input meter E. Effect name F. Parameter menu (add, reset, delete parameters) G. Expand/Collapse Effect Module

See:

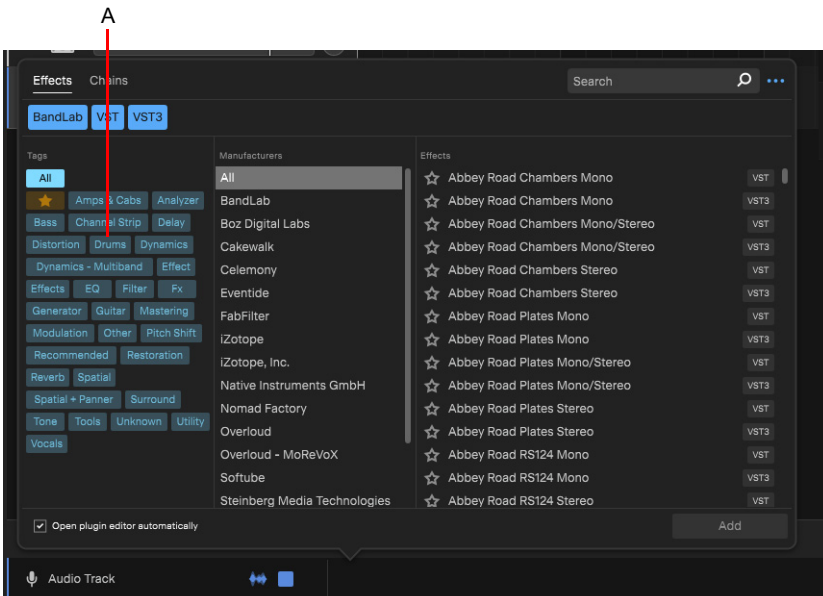
“Inserting effects” on page 179

“Opening an effect’s UI” on page 185

“Mapping plugin parameters” on page 186

# Tags

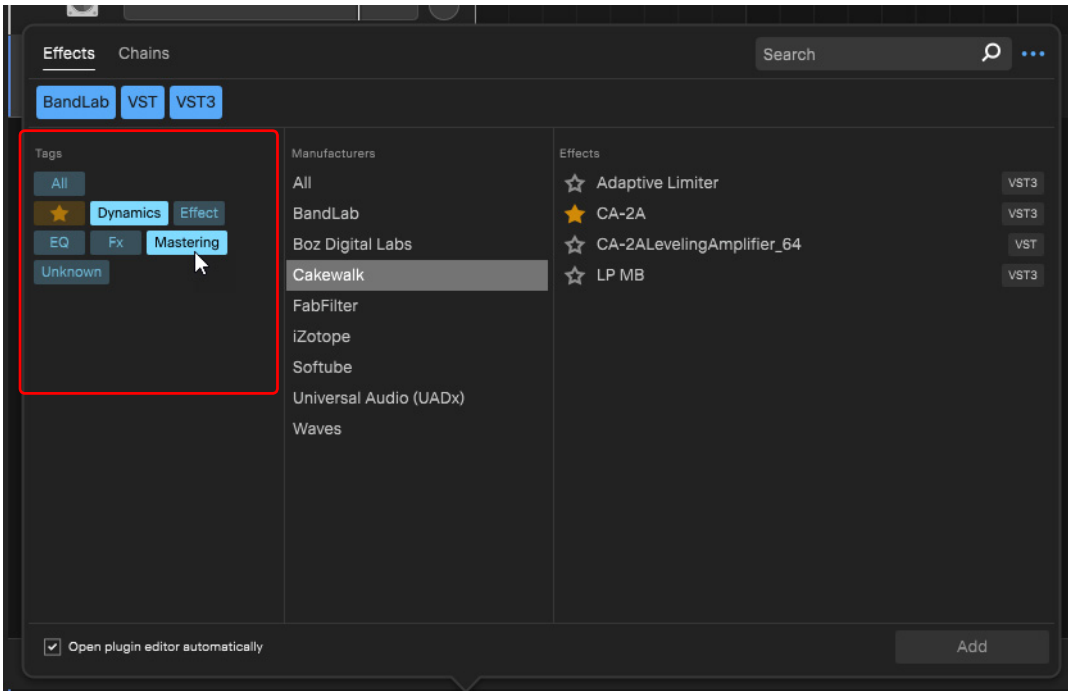
Tags make it easy to filter the list of audio effects, instrument, and chains based on categories.



A. Tags


## Filtering by tags

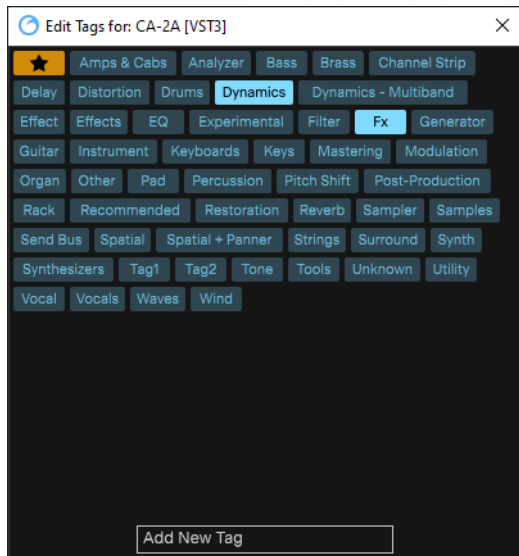
Tags are shown in the leftmost column in the plugin browser. To filter the list by tags, click one or more tags. Tags are highlighted when selected.



## Assigning tags to audio effects and instruments

To assign one or more tags to an audio effect, instrument, or template:

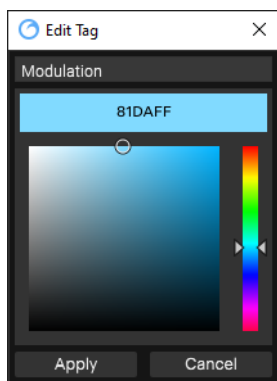
1. Open the Track Inspector and click the **Add Effect** button .
2. Right-click the name of the effect/instrument, then select the tag(s) that you want to assign.
  - ▶ To create a new tag, type in the **Add New Tag** text box and press ENTER.



## Editing a tag's name and color

To edit a tag's name and color:

1. Right-click the tag and select **Edit**.
2. Type a name or select a color.
3. Click **Apply**.



## Removing a tag

To delete a tag and remove it from any objects that may be using it, right-click the tag and select **Remove**.

See:

[“Filtering by tags”](#) on page 182.

[“Assigning tags to audio effects and instruments”](#) on page 82

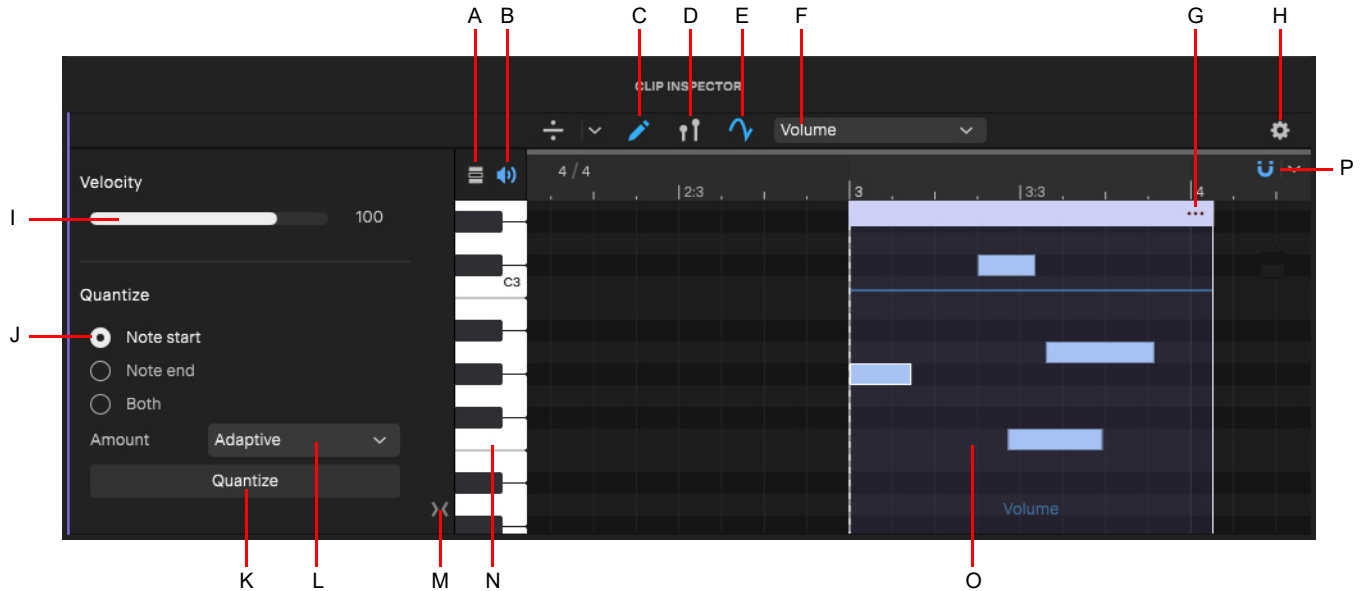
## Clip inspector / Piano Roll view

The Clip Inspector lets you edit MIDI data in the selected instrument track.

To show/hide the Clip Inspector, do *one* of the following:

- ▶ Select **View > Show Clip Inspector**
- ▶ Press F4
- ▶ Double-click a MIDI clip header


Figure 15. *Clip Inspector / Piano Roll.*









**A.** Show Only Active Notes / Show Full Note Range **B.** Toggle Note Audition **C.** Draw Tool **D.** Toggle MIDI Velocity Display **E.** Edit Clip Automation **F.** Automation Parameter **G.** Clip Channel Menu **H.** View Options **I.** Velocity **J.** What to Quantize **K.** Quantize **L.** Quantize Resolution **M.** Show/Hide Menu **N.** Piano Roll keys **O.** MIDI clip **P.** Snap to Grid

The right side of the Clip Inspector contains the Piano Roll editor, which lets you edit MIDI note events and controllers.

- ▶ **Draw Tool** . Enable/disable the Note Drawing tool. When enabled, you can drag to draw notes. When disabled, you must double-click to add notes. For details, see [“Drawing note events”](#) on page 127.
  - ▶ **Step Mode** . Step Mode allows you to quickly draw multiple notes with a specified duration. This is very useful when drawing repeated notes, such as cymbals. For details, see [“Step Draw Mode”](#) on page 128.
- ▶ **Toggle MIDI Velocity Display** . Show/hide the velocity graph, which shows a velocity stem for each note event.
- ▶ **Edit Clip Automation** . Show/hide clip automation in the Piano Roll editor. Use the **Automation** menu in the left pane to select the automation parameter. For details, see [“MIDI clip automation”](#) on page 205.
- ▶ **Automation parameter.** Select the MIDI clip automation parameter you want to see/edit in the Piano Roll editor. To hide the automation parameter again, click the **Edit Clip Automation** button .
- ▶ **Snap to Grid** . The Piano Roll editor’s Snap to Grid control is located in the bottom right corner (see [“Using the Snap Grid”](#) on page 133).

- ▶ **View Options** . The **View Options** menu contains the following:
  - ▶ **Note velocity color.** Specify how note velocity values affect note colors:
    - **Temperature.** Lower velocities register as blue and higher velocities register as red (like a typical heat map).
    - **Brightness.** Notes display their clip color plus a brightness value as a factor of velocity.
  - ▶ **Zoom to fit.** Zoom the selection horizontally.
  - ▶ **Note height presets.** Resize the note heights.

The left side of the Clip Inspector contains the following controls:

- ▶ **Velocity.** Adjust the velocity of the selected note(s). Velocity represents how fast the key was struck. For details, see [“Adjusting Note velocities”](#) on page 131.
- ▶ **Quantize.** Quantize adjusts the start time and duration of selected notes so that they line up with a fixed size grid.
  - ▶ **Note start.** Quantize the start position of selected notes.
  - ▶ **Note end.** Quantize the end position of selected notes.
  - ▶ **Both.** Quantize both the start and end positions of selected notes.
  - ▶ **Amount.** Select the desired quantize resolution to apply when you click the **Quantize** button.
  - ▶ **Quantize.** Apply the selected quantize resolution to the selected note(s). For details, see [“Quantizing notes”](#) on page 130.
- ▶ **Show Only Active Notes**  / **Show Full Note Range** . By default, the Piano Roll shows the full note range. Click to toggle between showing the full note range and only active notes. For details, see [“Showing only active notes”](#) on page 132.
- ▶ **Toggle Note Audition**  / . Audition notes while drawing, selecting, moving, transposing, and trimming notes.
- ▶ **Show/Hide Menu**  / . Show/hide the left pane of the Clip Inspector.



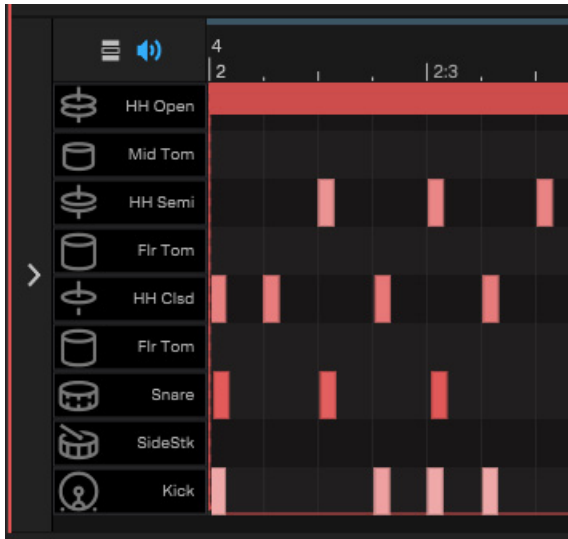
## Note names and icons

The Piano Roll editor automatically shows note names and icons when editing BandLab drum instruments and Pad Controller tracks.

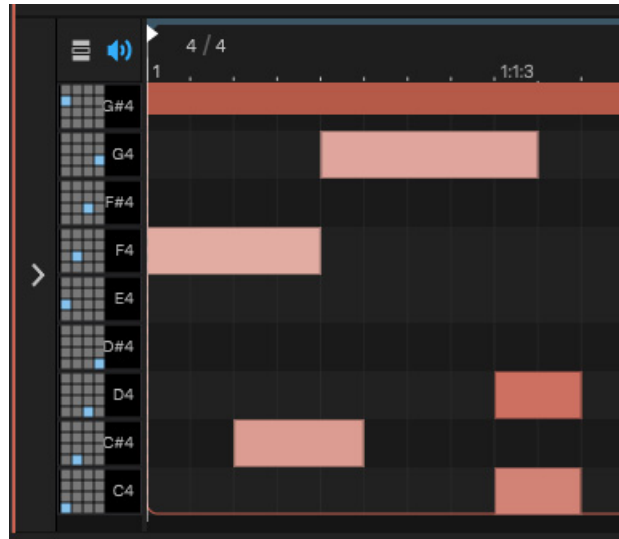
When displaying notes for a BandLab drum instrument track, only pitches that are assigned to a timber are shown.

When displaying notes for a Pad Controller track, only the 16 notes that correspond to the Pad Controller's assigned input note values are shown. For details, see ["Specifying a pad's MIDI input note"](#) on page 162.

**BandLab drum instrument:**



**Pad Controller:**



See also:

["Instruments"](#) on page 139

["Pad Controller"](#) on page 157

See:

["Editing MIDI notes in the Piano Roll"](#) on page 127

["MIDI clip automation"](#) on page 205



# Arranger

## Overview

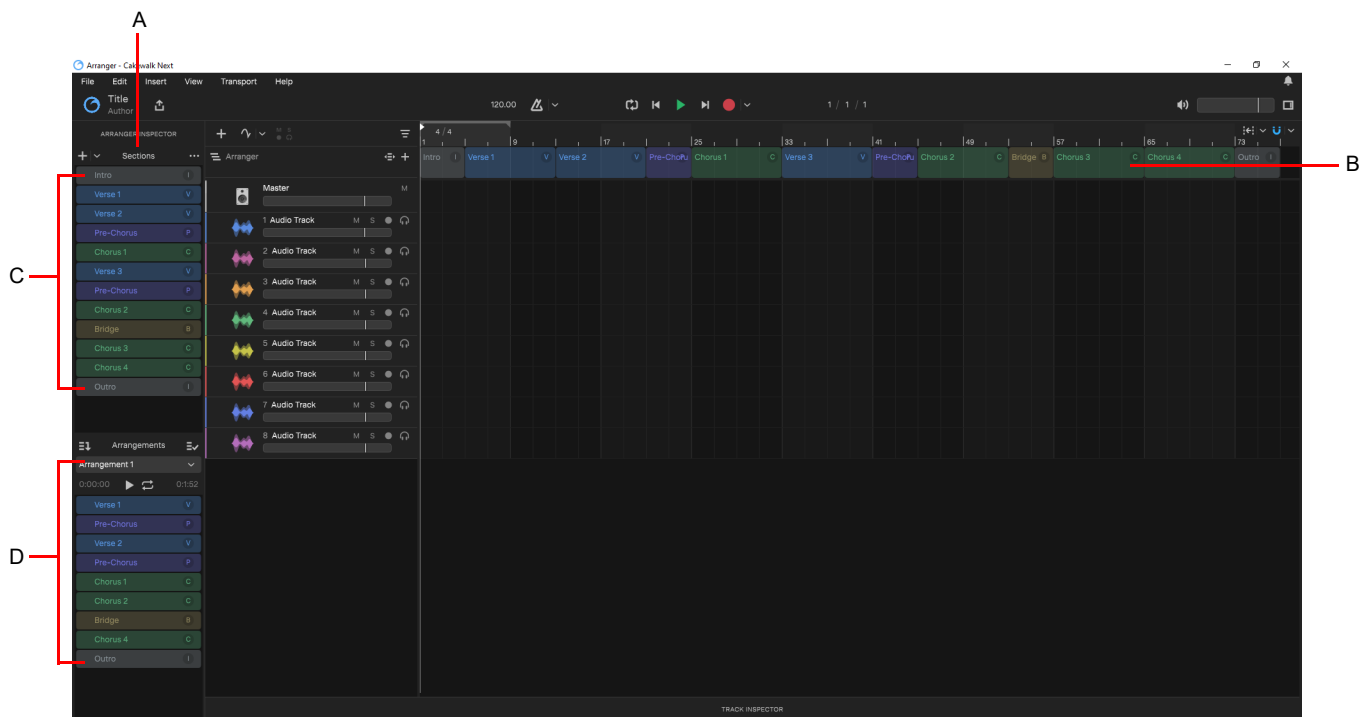
The Arranger track is an arrangement tool that provides several workflow benefits:

- ▶ Easily rearrange sections of the entire project as one unit instead of moving individual clips. For example, instantly swap the positions of the first and second chorus for all tracks, or copy the first verse in order to double its duration (see “Arranger track drag operations” on page 106).
- ▶ Experiment with different song structures in a non-destructive and non-linear manner. For example, does your song work best in AABA, ABAB, or ABAC song form? Define time range sections and sequence them in any order without destructively moving any clip data. You can even save multiple arrangements within each project (see “Creating arrangements” on page 107), and create Arranger templates that can be used in any project (see “Arranger templates” on page 110).
- ▶ Create a color coded overview of the song structure, and use the Arranger Inspector to quickly navigate around the project and jump to song sections (see “Navigating by Arranger sections” on page 109).
- ▶ Create arbitrary song sections anywhere on the project timeline, then later string them together for seamless playback (see “Defining sections of your song” on page 97 and “Creating arrangements” on page 107).
- ▶ Sections provide an additional way to perform time based selections and edits of the project.
- ▶ Create an unlimited number of arrangements per project, which can all be exported simultaneously (see “Exporting arrangements” on page 110).

Arranger functionality is distributed across two views:



- ▶ Arranger track (see “Arranger track” on page 89)
- ▶ Arranger Inspector (see “Arranger Inspector” on page 92)

Figure 16. Arranger track.



A. Arranger Inspector B. Arranger track(s)/timeline C. Sections D. Current arrangement

An arrangement is comprised of *Sections*, each spanning a unique time range. Other section properties include name and color, to clearly delineate regions of time and track content by musical function.

 **Note:** By default, clicking an Arranger section does not select any underlying track events. To enable automatic selection of track events when selecting sections, click the **Select Events with Sections** button  in the Arranger track header.

When enabled, clicking an Arranger section also selects underlying track events. Clicking again deselects track events, while retaining selection of the section. This behavior allows you to easily determine whether or not track events are included in section edit operations. Note that the selection highlight in the Clips pane indicates selected track events.

## Basic workflow

1. Create and edit sections either within the Arranger Inspector or Arranger track timeline (see “[Defining sections of your song](#)” on page 97).
2. Move, add, delete, trim and reorder sections (see “[Editing sections](#)” on page 103).
3. [Optional] Create arrangements (see “[Creating arrangements](#)” on page 107):
  - a) Create alternate orders of sections, called *arrangements*, without affecting track events.
  - b) Arrangement sections can be edited and previewed independently of project sections.
  - c) An arrangement can subsequently be rendered to the project timeline and/or exported (see “[Exporting arrangements](#)” on page 110).

See:

“[Arranger track](#)” on page 89

“[Arranger Inspector](#)” on page 92

“[Defining sections of your song](#)” on page 97

“[Section types](#)” on page 100

“[Editing sections](#)” on page 103

“[Creating arrangements](#)” on page 107

“[Navigating by Arranger sections](#)” on page 109

“[Exporting arrangements](#)” on page 110

“[Arranger templates](#)” on page 110

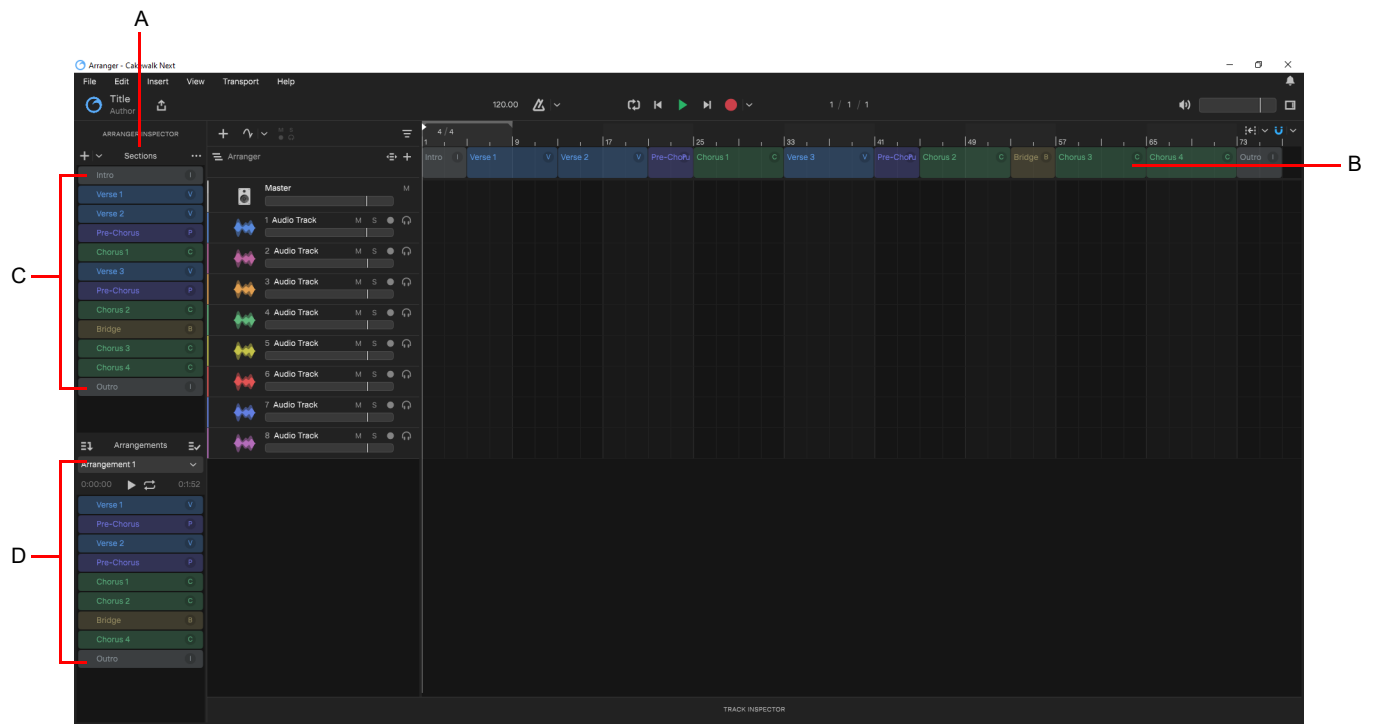
# Arranger track



A. Arranger track header B. Select Events with Sections C. Add Arranger Section D. Sections

The Arranger track allows you to define multiple sections, each with a unique time range (Verse, Chorus, etc.). You can then use the Arranger Inspector to create multiple arrangements that play back the sections in any desired order.


Figure 17. Arranger track.



A. Arranger Inspector B. Arranger track(s)/timeline C. Sections D. Current arrangement

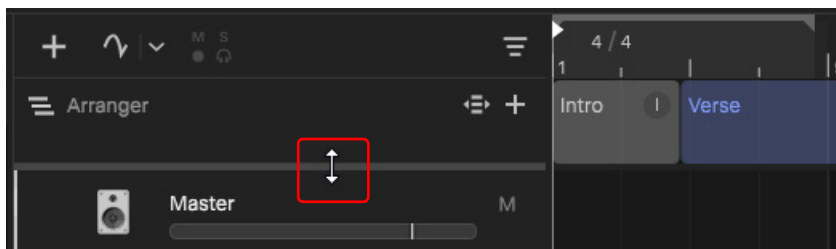
## Showing/hiding the Arranger track

To show or hide the Arranger track, do *one* of the following:

- ▶ Click the **Track View Options** button  and select **Arranger** under **Project Tracks**
- ▶ Select **View > Show Arranger Track**
- ▶ Press A

To resize the Arranger track, drag the splitter bar between the Arranger pane and the Track pane to change its height.

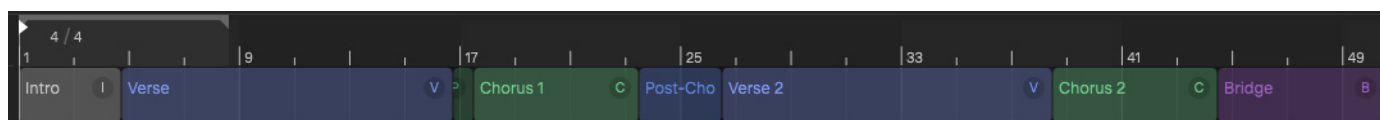
**Figure 18.** Drag the splitter bar vertically to resize the Arranger track.



The Arranger track is empty until you define one or more sections (see [“Defining sections of your song”](#) on page 97).

## Arranger timeline

**Figure 19.** Arranger track timeline.



The Arranger track timeline shows all defined sections. You can drag to create and rearrange sections, then freely move them along the timeline.

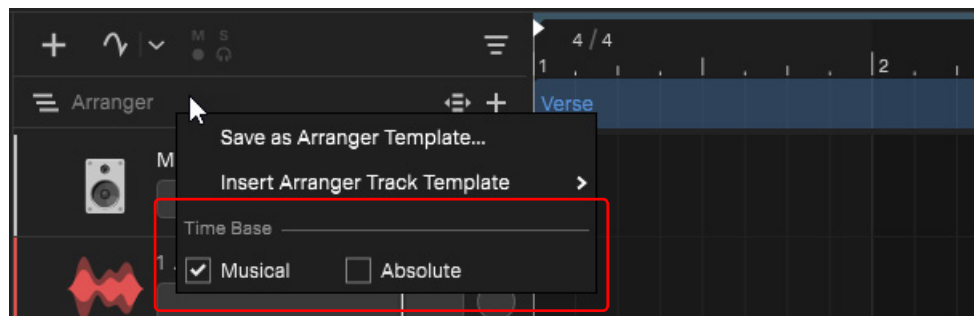
Any changes in the Arranger timeline are immediately reflected in the Arranger Inspector’s **Sections** list, and vice versa.

## Arranger track time base

The time base format for the Arranger track can be set to either **Musical** or **Absolute**. The time base format determines what happens to sections when you change the project tempo.

To specify the time base format, right-click the Arranger track header, then select *one* of the following:

- ▶ **Musical.** A section's M:B:T position stays constant, and its absolute position shifts.
- ▶ **Absolute.** A section's absolute position stays constant, and its M:B:T position shifts. The Arranger track tooltip shows time as H:M:S:F and samples.



See:

[“Arranger”](#) on page 87

[“Arranger track”](#) on page 89

[“Arranger Inspector”](#) on page 92

[“Defining sections of your song”](#) on page 97

[“Section types”](#) on page 100

[“Editing sections”](#) on page 103

[“Creating arrangements”](#) on page 107

[“Navigating by Arranger sections”](#) on page 109

[“Exporting arrangements”](#) on page 110

[“Arranger templates”](#) on page 110

# Arranger Inspector

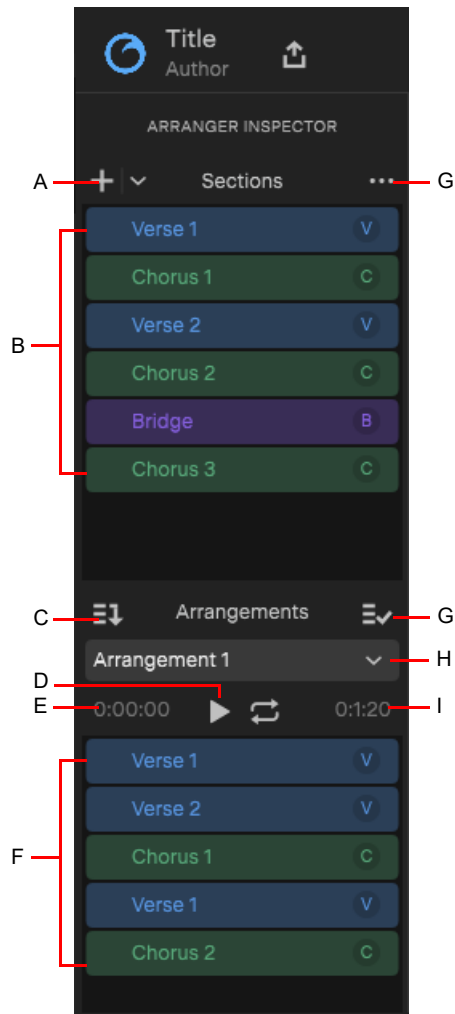
The Arranger Inspector manages a list of project sections, and facilitates quick reordering of sections without having to drag or zoom horizontally within the Clips pane.

## Showing/hiding the Arranger Inspector

To show/hide the Arranger Inspector, do *one* of the following:

- ▶ Select **View > Show Arranger Inspector**
- ▶ Double-click a section in the Arranger track timeline
- ▶ Press F6

Figure 20. Arranger Inspector.



A. Add section B. Sections C. Add all sections to current arrangement D. Preview current arrangement E. Elapsed time F. Current arrangement G. Commit current arrangement to project H. Arrangements menu (select and create new arrangements) I. Remaining time



## Sections

*Sections* are the building blocks that make up the song. Each section defines a time range in the project, such as Intro, Verse, Chorus, etc. An *arrangement* is an ordered set of sections. You can sort the sections in any order to define the playback order. To do so, drag the sections from the **Sections** area down to the **Arrangements** area.

The **Sections** area lists all the arranger sections defined in the project's timeline, from which a custom arrangement can be built. The order of the sections reflect the order in which they appear in the timeline.

The **Sections** list provides an additional way to edit time based selections of the project. Any operation performed in the **Sections** list is immediately reflected in the project/timeline, and vice versa.

To copy all sections to the current arrangement, click the **Add All Sections to Arrangement** button . If one or more sections are selected, only the selected sections will be copied.

### Add Section button

The **Add Section** button  inserts a new section.

- ▶ The new section duration is inherited from the last clicked section, or defaults to 1 measure.
- ▶ If no sections are selected, the new section is added at the end.
- ▶ If at least one section is selected, the new section is added at the beginning of the selection, and downstream sections move to make room. Any selected track events also move.

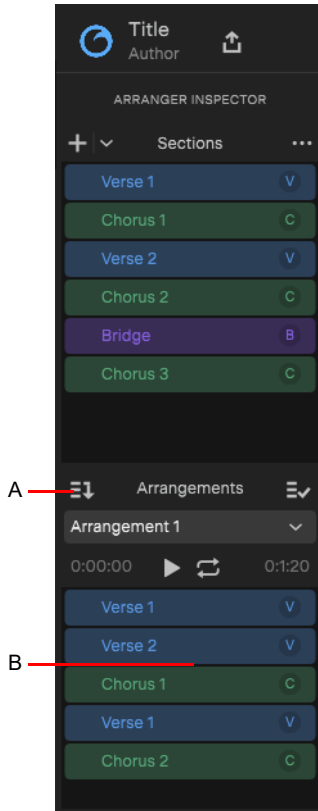
 **Tip:** Right-click the **Add Section** button  or click the **Select Section Type** drop-down menu to insert a section of a specific type (see "[Section types](#)" on page 100).

See also:

["Defining sections of your song"](#) on page 97

## Arrangements

Figure 21. Arranger Inspector.





A. Add all sections to the current arrangement B. Drag here


The **Arrangements** area allows you to sequence sections in a non-linear manner without destructively moving any clip data, regardless of which order they appear in the project's timeline.

The **Sections** list is a collection of project sections from which an arrangement can be built. To create an arrangement, drag sections from the **Sections** list or from the Arranger track. Any section can appear multiple times within an arrangement (or not at all).

To move sections in the list, drag them up or down.

To play the current arrangement, click the **Preview** button  (see "Previewing an arrangement" on page 108). The **Arrangements** list shows the order in which the sections are played back, from top to bottom.

To (destructively) render the current arrangement to the project's timeline, click the **Commit Arrangement to Project** button  (see "Committing an arrangement" on page 109).

**Note:** Operations performed in the **Arrangements** section have no effect on the linear project structure until you click the **Commit Arrangement to Project** button , at which time the Arranger track timeline and the **Sections** list in the Arranger Inspector inherit the structure of the arrangement.

### Add All Sections to Arrangement button

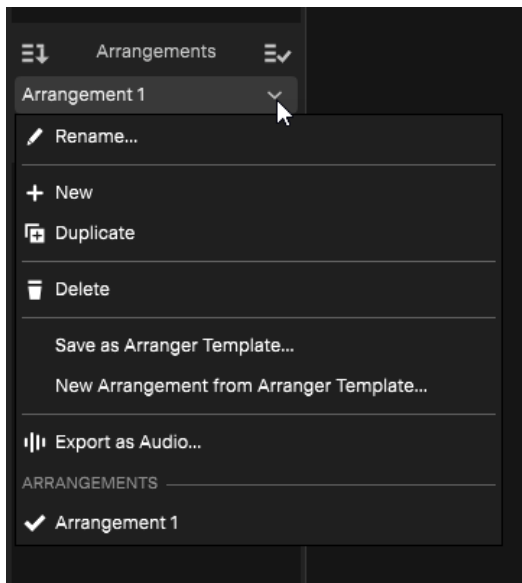
The **Add All Sections to Arrangement** button  copies all sections to the current arrangement.

If one or more sections are selected, only the selected sections will be copied.

## Arrangement menu

The Arrangements menu lets you create, select, duplicate, rename, and delete arrangements.

Figure 22. Arrangements menu.



See also:


[“Creating a new arrangement”](#) on page 107

[“Deleting an arrangement”](#) on page 108

[“Renaming an arrangement”](#) on page 108

[“Duplicating an arrangement”](#) on page 108

## Preview button

The **Preview** button  plays back the current Arrangement.

Arranger preview can only be started from the Arranger Inspector, not from the transport in the main toolbar.

To start preview from a specific section, click a section’s preview button in the Arranger Inspector.


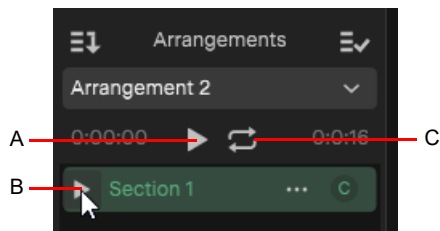
To enable/disable preview looping, click the **Loop Enable/Disable** button .

Figure 23. Arranger Preview buttons.





A. Arrangement preview B. Section preview C. Loop arrangement preview

See also:

[“Previewing an arrangement”](#) on page 108

## Commit Arrangement to Project button

The **Commit Arrangement to Project** button  renders the arrangement to the project's timeline and updates track content accordingly.

To insert a committed arrangement into the existing project at the Now Time, right-click the **Commit Arrangement to Project** button  and select **Insert Committed Arrangement**.

See also:

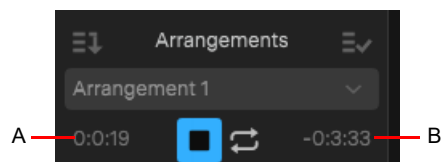
[“Committing an arrangement”](#) on page 109

## Elapsed / remaining time

The elapsed and remaining time is displayed in H:M:S time format for the current arrangement.

During preview, the first time value increments to show elapsed time. The second time value decrements to show time remaining.

**Figure 24.** *Arranger Inspector.*



**A.** *Elapsed time* **B.** *Remaining time*

See:

[“Arranger”](#) on page 87

[“Arranger track”](#) on page 89

[“Arranger Inspector”](#) on page 92

[“Defining sections of your song”](#) on page 97

[“Section types”](#) on page 100

[“Editing sections”](#) on page 103

[“Creating arrangements”](#) on page 107

[“Navigating by Arranger sections”](#) on page 109


[“Exporting arrangements”](#) on page 110

[“Arranger templates”](#) on page 110

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## Defining sections of your song

To use the Arranger track, you must first define time range sections such as Intro, Verse, Chorus, etc. Sections can be of any duration, but it is common to start/end them at measure boundaries.

 **Tip:** When drawing section in the Arranger timeline, enable *Snap to Grid* and set the snap resolution to **Measure**.

### Section behaviors


- ▶ Sections are presented above the Clips pane, immediately below the time ruler.
- ▶ Sections cannot overlap, but do not have to be contiguous.
- ▶ Changing the position of a section changes the relative positions of track content within the section, with ripple effect.
- ▶ Section position can also be changed without modifying track events.

### Adding a section

If the Arranger track is not visible, select **View > Show Arranger Track**, or press A.

If the Arranger Inspector is not visible, select **View > Show Arranger Inspector**, or press F6.

New sections can be created by any of the following means:

- ▶ Draw a range within the Arranger track timeline (below the time ruler).
  - ▶ Hold down the ALT (Windows) / OPTION (Mac) key to overwrite any downstream sections you draw over.
  - ▶ Hold down the SHIFT key to move over any downstream sections.
- ▶ Double-click a blank area in the Arranger track. The new section duration is inherited from the last clicked section.
  - ▶ To insert a new section that spans the gap between two existing sections, hold down the ALT (Windows) / OPTION (Mac) key and double-click the gap, or right-click the gap and select **Span Sections**.
- ▶ To insert a section at the mouse position, right-click the blank area in the Arranger track timeline and point to **Insert Section**, then select **Here** and select the desired section type.
- ▶ To insert a section at the Now Time, right-click the blank area in the Arranger track timeline and point to **Insert Section**, then select **At Now Time** and select the desired section type.
  - ▶ A new section appears at the Now Time position.
  - ▶ If there is space between the Now Time and the next section, the new section will be equal to the size of the previous selected section, or truncated to fit in the gap.
  - ▶ If there is no space between the Now Time and the next section, the new section will be equal to the size of the previous selected section, and downstream sections move to make room. Any selected track events also move.
  - ▶ If the Now Time position overlaps an existing section, the new section is added at the end.
- ▶ Click the **Add Section** button  in the Arranger Inspector or Arranger track header.
  - ▶ The new section duration is inherited from the last clicked section, or defaults to 1 measure.
  - ▶ If no sections are selected, the new section is added at the end.
  - ▶ If at least one section is selected, the new section is added at the beginning of the selection, and downstream sections move to make room. Any selected track events also move.

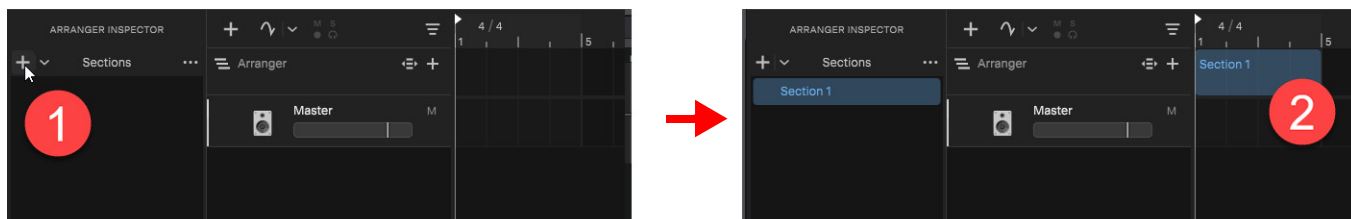
 **Tip:** Right-click the **Add Section** button  or click the **Select Section Type** drop-down menu to insert a section of a specific type (see “[Section types](#)” on page 100).


New sections are given a default name and color, which can be changed by right-clicking the section (see “[Renaming a section](#)” on page 103 and “[Changing the section color](#)” on page 103).



**Figure 25.** Adding a section in the Arranger track timeline adds it in the Arranger Inspector as well.



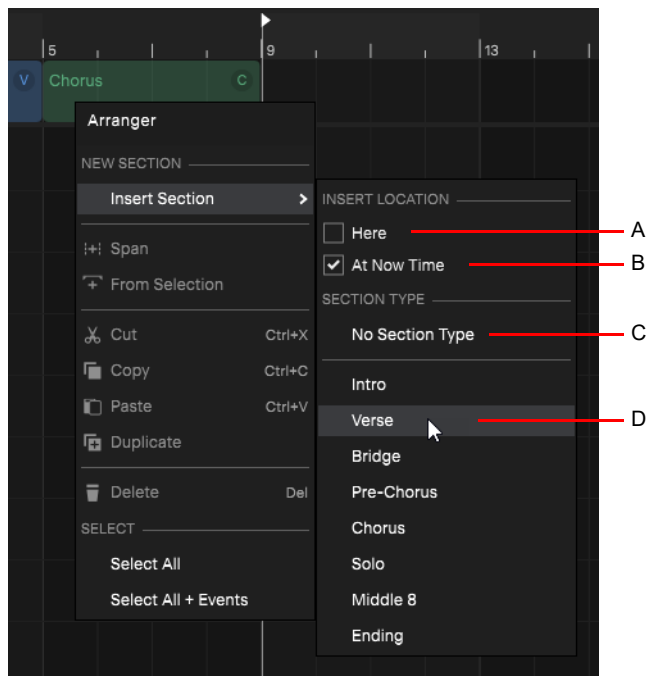
**Figure 26.** Adding a section in the Arranger Inspector adds it in the Arranger track timeline as well.



By default, drawing a section or clicking the **Add Section** button  creates a new unassigned section, which can then be assigned to a specific section type (see “Assigning a section type to a section” on page 100). However, you can also directly insert a section of a specific type. This can be done in the following ways:

- ▶ Right-click in the Arranger track and point to **Insert Section**, then select the desired section type from the submenu.
- ▶ Right-click the **Add Section** button  in the Arranger Inspector or Arranger track header and select the section type from the pop-up menu.
- ▶ Click the **Select Section Type** drop-down menu  in the Arranger Inspector.

**Figure 27.** Insert Section menu.



**A.** Insert the section at the location you clicked **B.** Insert the section at the Now Time **C.** Insert an unassigned section **D.** Section type to insert

For more information about section types, see “Section types” on page 100.

See:

[“Arranger”](#) on page 87

[“Arranger track”](#) on page 89

[“Arranger Inspector”](#) on page 92

[“Section types”](#) on page 100

[“Section types”](#) on page 100

[“Editing sections”](#) on page 103

[“Creating arrangements”](#) on page 107

[“Navigating by Arranger sections”](#) on page 109

[“Exporting arrangements”](#) on page 110

[“Arranger templates”](#) on page 110

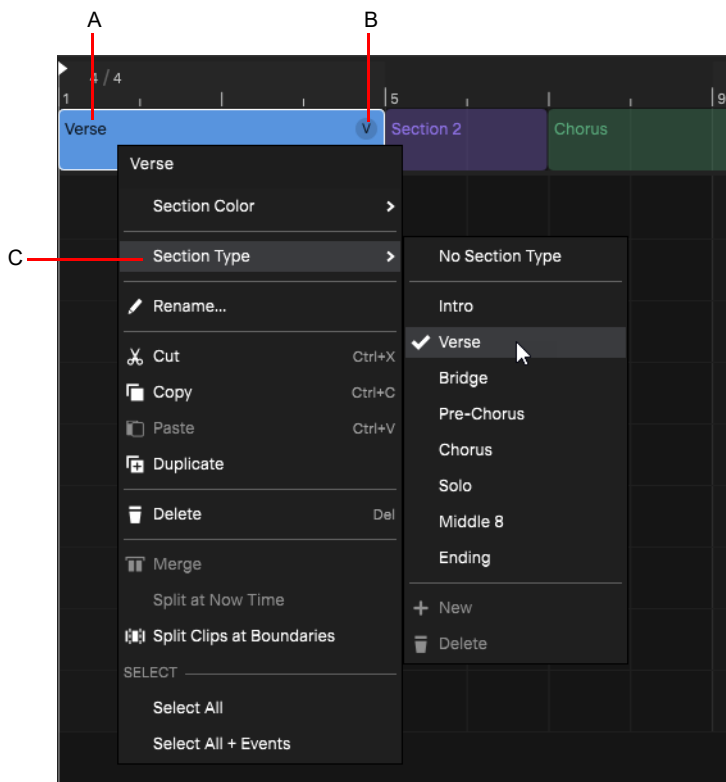
## Section types

Arranger sections can be assigned to an optional section type attribute, such as **Verse**, **Chorus**, **Bridge**, etc. *Cakewalk Next®* includes many common section types, and you can create your own custom section type presets (see “[Creating a new section type preset](#)” on page 101).

Section types provide the following benefits:

- ▶ By tagging sections with type attributes, you can use Arranger templates (see “[Arranger templates](#)” on page 110) to instantly create new arrangements from your existing sections (see “[To create a new arrangement from an Arranger template](#)” on page 111).
- ▶ Quickly assign consistent names and colors to sections that serve specific musical functions in a song.
- ▶ Directly insert new sections that automatically use appropriate names and colors.

**Figure 28.** Section types.



**A.** Section type name **B.** Section type abbreviation (indicates that the section has been assigned to a type) **C.** Section Type menu

To insert a section of a specific type, right-click the **Add Section** button  or click the **Select Section Type** drop-down menu in the Arranger Inspector.

### Assigning a section type to a section

To assign a section type to a section, right-click a section in the Arranger track or Arranger Inspector, point to **Section Type**, and select the desired section type.

The section inherits the name and color from the section type preset.

When a section is assigned to a type, the type abbreviation is shown in the top right corner of the section. This serves as a visual aide to help you identify which sections have been assigned to a type.



**Note:** If you have previously given the section a custom name, the original name is retained after assigning a section type. If you want to use the default style name, clear the current section name via the **Rename** command. A blank name will automatically use the stored style name. Should you want to use a blank section name, simply use a single space character as the name.

## Creating a new section type preset

To create a new section type preset:

1. Create a section that has the name, color, and default length that you want to save as a preset. The section name must be different than any existing factory or user section types.
2. Right-click the section and select **Section Type > New**.

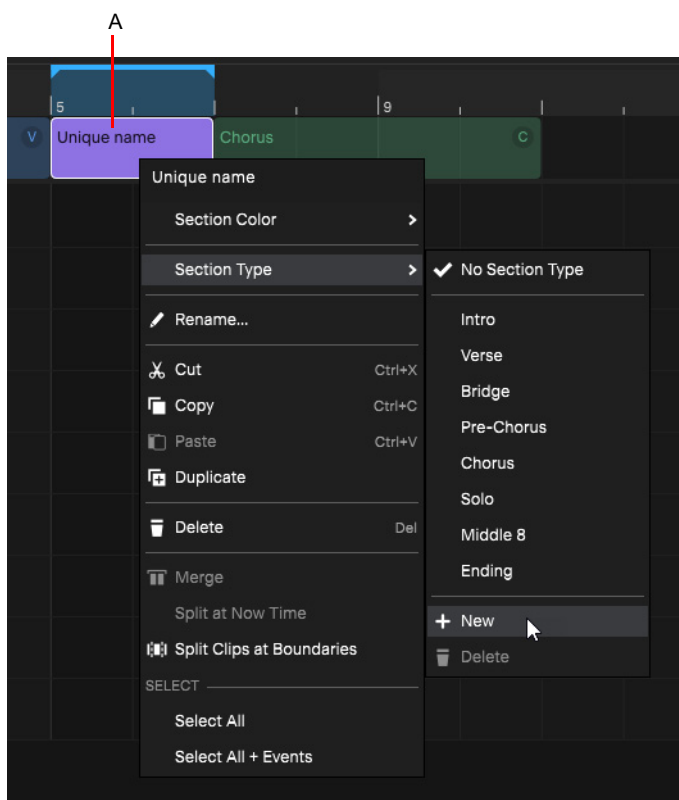
**Note:** In order to create a new section type, the selected section must have a unique name. The **New** command is disabled if:

- The selected section is assigned to a factory section type or an existing user section type
- The selected section has the same name as an existing section type. In order to create a new section type, the selected section must have a unique name.

A new section type preset is created and assigned to the section.

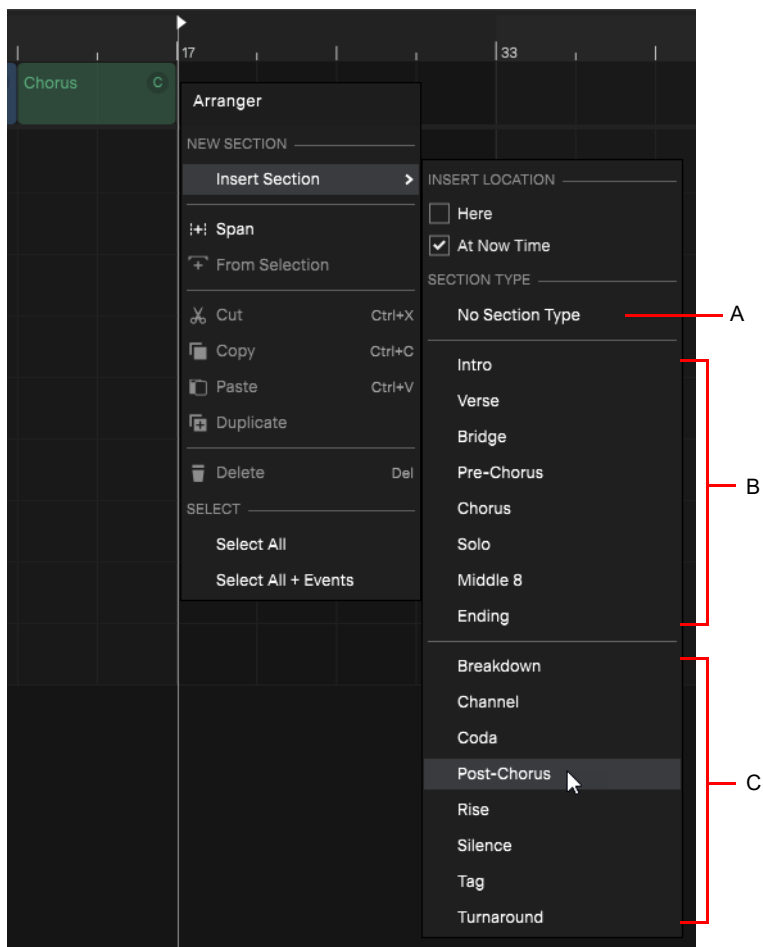
Section type presets are global, not per project.

**Figure 29.** Section Type menu.



A. Section that is used as the source for a new section type preset (the section name must be different than any existing section type presets)

Figure 30. Factory section types and user section types are listed separately in the Section Type submenu.



A. No section type (unassigned) B. Factory section types C. User section types

**Tip:** Custom user section types are stored in `userArrangerSectionTypes.json` in `%AppData%\Cakewalk\Cakewalk Core` in case you want to back up or copy your custom section presets to a different computer.

### To delete a user section type preset

**Note:** Factory section types cannot be deleted, only user section types.

Right-click a section that is assigned to the user section type that you want to delete, then select **Section Type > Delete**.

Section types are global. If a user section type is deleted, any sections that were assigned to the deleted type (in any project) will automatically be reassigned to **No Section Type**.

### Unassigning a section

Right-click the section that you want to unassign, then select **Section Type > No Section Type**.

Unassigned sections do not display an abbreviated name in the top right corner.

See:

“Arranger” on page 87

“Arranger track” on page 89

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## Editing sections

Arranger sections can be edited in the Arranger Inspectors **Sections** list, or in the Arranger track timeline.

If the Arranger track is not visible, click the **View** menu and select **Show Arranger Track**, or press A.

If the Arranger Inspector is not visible, click the **View** menu and select **Show Arranger Inspector**, or press F6.

### Renaming a section

To rename a section, do *one* of the following:


- ▶ Right-click the section and select **Rename**.
- ▶ Double-click the section in the Arranger Inspector.
- ▶ Select the section and press F2.

See also:

[“Section types”](#) on page 100

### Changing the section color

To change a section’s color, right-click the section and select a color on the pop-up menu.

 **Tip:** You can select multiple sections to change their color simultaneously. To select discontinuous sections, hold down the CTRL key and click the sections you want to select/deselect. To select a range of sections, click the first section, then hold down the SHIFT key and click the last section (see [“Selecting multiple sections”](#) on page 103).

### Resizing a section

To resize a section, drag the left or right section edge.


Abutting sections will move over if extending the section duration.

To overwrite abutting sections, hold down the ALT (Windows) / OPTION (Mac) key while resizing a section.

To move downstream sections when events are selected, hold down the SHIFT key while resizing a section.

### Selecting a section

To select a single section, click the section in the Arranger track timeline or Arranger Inspector **Sections** list.

 **By default, clicking an Arranger section also selects underlying track events. Clicking again deselects track events, while retaining selection of the section. This behavior allows you to easily determine whether or not track events are included in section edit operations. Note that the selection highlight in the Clips pane indicates selected track events.**

### Selecting multiple sections

To select discontinuous sections, hold down the CTRL key and click the sections you want to select/deselect.

To select a range of sections, do *one* of the following:

- ▶ Drag with the right mouse button to lasso select in the Arranger track timeline.
- ▶ Click the first section, then hold down the SHIFT key and click the last section.
- ▶ Drag in the time ruler to make a selection.

## Selecting all sections

To select all sections, without selecting the underlying track events, right-click any blank area in the Arranger track and select **Select All**.

Only the sections themselves are selected. Track events associated with the sections are not selected.

## Selecting all sections and underlying track events

To select all sections along with any underlying track events, right-click any blank area in the Arranger track and select **Select All + Events**.


*Cakewalk Next*® selects all sections and track events across all tracks, within the bounds of the sections.


Track events not associated with selected sections are not affected.

## Deleting a section

To delete a section, do *one* of the following:

- ▶ Right-click the section and select **Delete**.
- ▶ Click the section, then press the DELETE key.

 **Note:** *When deleting a section, you will also delete any selected track events. Click the section to toggle between selecting only the section or section+events.*

 **Caution:** *An arrangement section is an instance of a project section. Deleting a project section will also remove **all** instances of that section from **all** arrangements.*


## Copying/duplicating a section

To copy/duplicate a section, do *one* of the following:

- ▶ Hold down the CTRL (Windows) / OPTION (Mac) key and drag a section.
- ▶ Right-click the section and select **Duplicate**.


## Splitting a section


To split a section, position the Now Time at the location where you want to split the section, then right-click the section and select **Split at Now Time**.

 **Note:** *You can also split clips at section boundaries. To do so, make a selection, then right-click and select **Split Clips at Boundaries**.*

## Merging multiple sections


To merge multiple sections, select two or more contiguous sections you want to merge (or drag in the time ruler to make a time selection), then right-click a selected section and select **Merge**.

 **Note:** You can use standard CTRL and SHIFT modifiers to select multiple sections.

 **Tip:** When merging multiple sections, the merged section will inherit its name and color from the section you right-click.

## Moving a section

To move a section, drag the section to the desired location (see “[Arranger track drag operations](#)” on page 106).

 *When moving a section, you will also move any selected track events. Click the section to toggle between selecting only the section and section+track events.*

## Swapping two sections

To swap two sections, drag a section onto the middle of another section.

## Moving a section after another section

To move a section after another section, drag the section onto the end of another section.

To copy instead of move, hold down the CTRL (Windows) / OPTION (Mac) key.

## Moving a section before another section

To move a section before another section, drag the section onto the beginning of another section.

To copy instead of move, hold down the CTRL (Windows) / OPTION (Mac) key.

## Overwriting an existing section

To overwrite an existing section, hold down the ALT (Windows) / CTRL (Mac) key and drag a section onto another section.

## Replacing an existing section

To replace an existing section, hold down ALT+SHIFT (Windows) / CTRL+SHIFT (Mac) and drag a section onto another section.

## Moving a section to the middle of another section (and split target section)

To move a section to the middle of another section (and split target section), hold down the SHIFT key and drag a section onto the middle of another section.

To copy instead of move, hold down CTRL+SHIFT (Windows) / OPTION+SHIFT (Mac).

## Arranger track drag operations

You can arrange sections in a variety of ways by using modifier keys. Some operations behave differently depending on whether you drop at the start, middle, or end on an existing section. The tooltip shows the current operation.

Default	CTRL (Windows) / OPTION (Mac)	ALT (Windows) / CTRL (Mac)	SHIFT	CTRL+SHIFT (Windows) / CMD+SHIFT (Mac)	ALT+SHIFT (Windows) / CTRL+SHIFT (Mac)
Move to the middle of existing section: Swap	Make a copy of section:	Disables ripple for operation; overwrites if dropping into an existing section	Split destination section at drop point and move everything over	Split destination section at drop point, insert copy at drop point and move everything else over	Replace an existing section
Move to end of existing section: insert after existing section	Drag to middle of existing section: insert copy at beginning or end				
Move to beginning of existing section: insert before existing section	Drag to end of existing section: insert copy after existing section				
	Drag to beginning of existing section: insert copy before existing section				

Table 1. Arranger track drag operations

Default	CTRL (Windows) / OPTION (Mac)	ALT (Windows) / CTRL (Mac)	SHIFT	CTRL+SHIFT (Windows) / OPTION+SHIFT (Mac)	ALT+SHIFT (Windows) / CTRL+SHIFT (Mac)
Move	Insert Copy Before	Overwrite	Split and Insert	Split and Insert Copy	Replace
Move Before	Insert Copy After				
Swap					
Move After					

Table 2. Arranger track drag operations

## Arranger Inspector drag operations

Default	CTRL (Windows) / CMD (Mac)	ALT (Windows) / CTRL (Mac)
Move directly on top of existing section: Swap	Make a copy of section	Disables Ripple for operation (flips replace/ swap behavior)
Move above existing section: Insert before with ripple	Drag to middle of existing: insert copy at beginning or end	
Move below existing section: Insert after with ripple	Drag to end of existing: insert copy at end	
	Drag to beginning: insert copy at beginning	

Table 3. Arranger Inspector drag operations

To cancel a drag operation, press the ESC key.

See:

[“Arranger”](#) on page 87

[“Arranger track”](#) on page 89

[“Arranger Inspector”](#) on page 92

[“Defining sections of your song”](#) on page 97

[“Creating arrangements”](#) on page 107

[“Navigating by Arranger sections”](#) on page 109

[“Exporting arrangements”](#) on page 110

[“Arranger templates”](#) on page 110

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## Creating arrangements

An arrangement describes the overall structure of the song.

Sections can be sequenced in any order to create arrangements, without affecting project data. The sections don't have to live on the project timeline in any specific location or order, because the arrangement determines in which order they are played back.

The Arranger Inspector allows you to create unlimited different arrangements of the current project. Each arrangement can contain any combination of sections, in any order. All arrangements are saved within the project.

If the Arranger Inspector is not visible, select **View > Show Arranger Inspector** or press F6.

### Creating a new arrangement

To create a new arrangement:


1. Click the Arrangements menu and select **New**.
2. Drag sections from the **Sections** list down to the **Arrangements** list. You can also drag sections directly from the Arranger track.

### Creating a new arrangement based on an existing arrangement

You can quickly create a new arrangement by selecting sections in an existing arrangement. To do so, select the desired sections in the Arranger Inspector's Arrangements pane, then right-click in the Arrangements pane and select **New Arrangement From Selection**.

### Adding a section to the current arrangement


To add a section to the current arrangement, do *one* of the following:

- ▶ Drag the section(s) from the **Sections** area or from the Arranger track timeline down to the **Arrangements** area.
- ▶ In the **Sections** area, select the section(s) you want to add to the current arrangement, then click the **Add Selected Sections to Arrangement** button .

To move sections in the **Arrangements** list, drag them up or down.

### Adding all sections to the current arrangement

To add all sections to the current arrangement:

1. Make sure either no sections are selected, or all sections are selected.
2. Click the **Add All Sections to Arrangement** button .


If one or more sections are selected, only the selected sections will be copied.

### Removing a section from the current arrangement

To remove a section from the current arrangement, do *one* of the following:

- ▶ Select the section in the **Arrangements** list and press the DELETE key.
- ▶ Right-click the section in the **Arrangements** list and select **Remove**.

The **Remove** command removes the section from the arrangement, but does not delete it from the **Sections** list or from the Arranger track timeline.

 **Tip:** To remove all instances of a specific section from the current arrangement, click the section in the Arranger Inspector's **Sections** list. This selects all the instances of the section in the current arrangement. Next, right-click any of the selected instances of the section in the **Arrangements** list and select **Remove**.

### Removing all sections from the current arrangement

To remove all sections from the current arrangement, right-click an empty area in the **Arrangements** list and select **Remove All Arrangement Sections**.

Only the sections themselves are removed. Track events associated with the sections are not affected.


## Selecting all sections in the current arrangement

To select all sections in the current arrangement, right-click an empty area in the **Arrangements** list and select **Select All Arrangement Sections**.

Only the sections themselves are selected. Track events associated with the sections are not selected.

**Note:** Clicking a section in the **Arrangements** list only sets the Now Time. The sections is not selected in the Arranger track timeline, and no track events are selected.

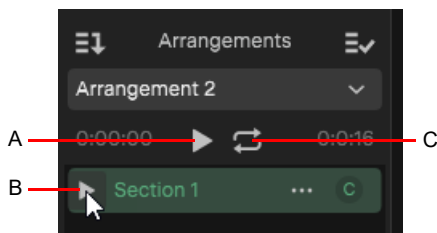
## Previewing an arrangement

To preview the current arrangement, click the **Preview** button  in the Arranger Inspector. *Cakewalk Next*® plays back the **Arrangements** list instead of the project's linear timeline.

To start preview from a specific section, click a section's preview button in the Arranger Inspector. *Cakewalk Next*® plays the current section to the end, then jumps to the next section until the end of the arrangement is reached.

To enable/disable preview looping, click the **Loop Enable/Disable** button .

Figure 31. Arranger Preview buttons.



A. Arrangement preview B. Section preview C. Loop arrangement preview

To preview only a single section, click the section's preview button in the Arranger Inspector **Sections** list.

To start preview from somewhere within a section, position the Now Time where you would like preview to start from, then hold down the CTRL key and click a preview button. If the Now Time is within the section, then preview will start from the Now time. If the Now Time lies outside the preview section time region, preview will start from the beginning of the section as normal.

## Deleting an arrangement

To delete an arrangement:

1. Select the arrangement you want to delete.
2. Click the Arrangements menu and select **Delete**.

The arrangement is removed from the menu and all sections in the **Arrangements** list are removed. No track events or Arranger track sections are affected.

## Renaming an arrangement

To rename an arrangement:

1. Select the arrangement you want to rename.
2. Click the Arrangements menu and select **Rename**.

or

Double-click on the name displayed in the closed Arrangements menu.

## Duplicating an arrangement

To duplicate an arrangement:

1. Select the arrangement you want to duplicate.
2. Click the Arrangements menu and select **Duplicate**.



## Committing an arrangement

When you have configured an arrangement the way you like, and you are certain that you do not want to edit it any further, you can convert it to a linear project.

To commit an arrangement to the project's timeline, select the arrangement, then click the **Commit Arrangement to Project** button




The selected arrangement is converted into a linear project, updating track content and section display in the timeline accordingly.

**Caution:** *Rendering an arrangement may potentially remove events from the project, so only use **Commit Arrangement to Project** when you no longer need to edit the arrangement. If in doubt, save a backup copy of the project before rendering the arrangement.*

**Note:** *Some generative VST instruments (EZkeys, EZdrummer, Jamstix, etc.) have their own internal timeline. If you sequence parts within the VSTi to play based on the original project timeline, the VSTi will play back using its internal timeline as a reference, and will not be aware of your new song structure after committing an arrangement.*

## Inserting an arrangement at the Now Time

You can insert a committed arrangement into the existing project at the Now Time. To do so, right-click the **Commit Arrangement to Project** button  and select **Insert Committed Arrangement**.

Sections for the inserted arrangement are added to the Arranger track.

Any existing events after the Now Time will be shifted over to make room for the inserted arrangement.

See:

[“Arranger”](#) on page 87

[“Arranger track”](#) on page 89

[“Arranger Inspector”](#) on page 92

[“Defining sections of your song”](#) on page 97

[“Editing sections”](#) on page 103

[“Navigating by Arranger sections”](#) on page 109

[“Exporting arrangements”](#) on page 110

[“Arranger templates”](#) on page 110

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## Navigating by Arranger sections

To locate the Now Time to the start of a section, click the section in the Arranger Inspector.

See:

[“Arranger”](#) on page 87

[“Arranger”](#) on page 87

[“Arranger track”](#) on page 89

[“Arranger Inspector”](#) on page 92

[“Defining sections of your song”](#) on page 97

[“Editing sections”](#) on page 103

[“Creating arrangements”](#) on page 107

[“Exporting arrangements”](#) on page 110

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## Exporting arrangements

You can export one or more arrangements without first having to render it to the timeline. To do so, click the Arrangements menu and select **Export as Audio**.

See:

“Arranger” on page 87

“Arranger track” on page 89

“Arranger Inspector” on page 92

“Defining sections of your song” on page 97

“Editing sections” on page 103

“Creating arrangements” on page 107

“Navigating by Arranger sections” on page 109

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## Arranger templates

Arranger templates are pre-defined song forms that store the order in which sections are arranged. You can think of an Arranger template as a map of an entire song.

Arranger templates are global and can be used in several ways:

- ▶ **Create a new arrangement track from a template.** The template is applied to the Arranger track, which creates new sections. This is useful when starting a new song and you want to quickly create all Arranger sections for a typical song form that you can fill in with music.
- ▶ **Create a new arrangement.** If your project already contains existing sections, you can use Arranger templates to create new arrangements from the existing sections. This allows you to preview your existing sections with different song forms. Sections that exist in the template but not in the project can be optionally created at the end of the project in the active Arranger track.


Arranger templates store the following information:

- ▶ Section order
- ▶ Section types
- ▶ Section names
- ▶ Section durations
- ▶ Section colors

Cakewalk Next® includes many common Arranger templates, and you can create your own custom templates that can be used in any project. Arranger templates can be created from an existing Arranger track or from an existing arrangement.

### To save the current arrangement as a template

1. In the Arranger track timeline or Arranger Inspector’s Section list, arrange sections in the desired order.  
[Optional] To get the most benefit from Arranger templates, assign a section type to each section (see “Assigning a section type to a section” on page 100). This will allow templates to map their saved sections to existing sections.
2. Do *one* of the following:
  - ▶ In the Arranger Inspector, click the Sections menu and select **Save as Arranger Template**.
  - ▶ In the Track view, right-click the Arranger track name and select **Save as Arranger Template**.

 **Note:** *Gaps between sections are not saved in Arranger templates.*

### To save an arrangement as a template

1. In the Arranger Inspector’s Arrangements list, arrange sections in the desired order.
2. Click the Arrangements menu and select **Save as Arranger Template**.

## To insert a template into the current arrangement

To insert an Arranger template into the current arrangement, do *one* of the following:


- ▶ In the Arranger Inspector, click the **Templates and Time Base** button  and select **Insert Arranger Track Template**.
- ▶ Right-click the Arranger track header and select **Insert Arranger Track Template**.

## To create a new arrangement from an Arranger template

To create a new arrangement from an Arranger template, do *one* of the following:

- ▶ In the Arranger Inspector, click the Arrangements menu and select **New Arrangement from Template**.

Cakewalk Next® will try to match the sections in the project with the types specified within the template, and create a new arrangement from them.

 **Note:** *When creating a new arrangement from a template, Cakewalk Next® attempts to automatically map sections that are stored in the template to sections that already exist in the project. The mapping is based on section names and types.*

*If the template contains types that don't exist in the project, it will try to find a section with the same name as that type. If there is no match, you will have the option of creating new blank sections of that type in the active Arranger track, or simply skipping sections of that type.*

## Deleting Arranger templates

To delete an Arranger template, navigate to `\Cakewalk\Next\Templates\Arranger` and delete the desired Arranger template (.arr) file.

## Arranger template location and naming convention

Next includes many Arranger templates that are based on common song forms such as **AB**, **AABA**, **ABC**, etc., where **A** typically refers to the **Verse**, **B** refers to the **Chorus**, and **C** refers to the **Bridge**.

By default, Arranger templates are stored in `\Cakewalk\Next\Templates\Arranger`.

See:

[“Arranger track”](#) on page 89



# Editing

See:

“[Selecting](#)” on page 113

“[Editing tracks & track folders](#)” on page 114

“[Editing clips](#)” on page 120

“[Ripple editing](#)” on page 125

“[Editing MIDI notes in the Piano Roll](#)” on page 127

“[Using the Snap Grid](#)” on page 133

“[Aim assist](#)” on page 134

See also:

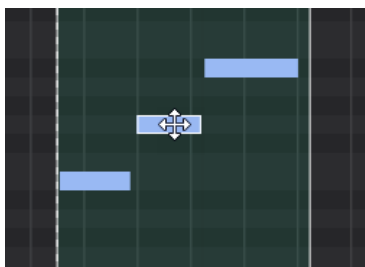
“[Stem separation](#)” on page 135

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## Selecting

### Selecting a single event

To select a single event, click on the event.



### Selecting all events

To select all tracks/clips/events, select **Edit > Select All** or press CTRL+A (Windows) / CMD+A (Mac).

### Making a time selection

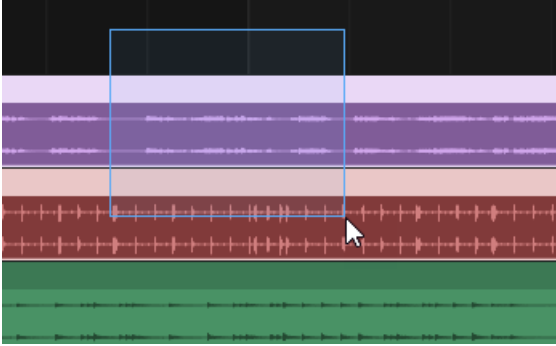
To make a time selection, drag in the Clips pane or bottom half of the time ruler.



## Lasso selecting

To lasso select, do *one* of the following:

- ▶ Hold down the ALT (Windows) / OPTION (Mac) key and drag
- ▶ Drag with the right mouse button
- ▶ Drag from below the last track



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## Editing tracks & track folders

### Adjusting level and panning

To adjust a track, bus, or track folder's playback level and pan, drag the **Volume** and **Pan** sliders.

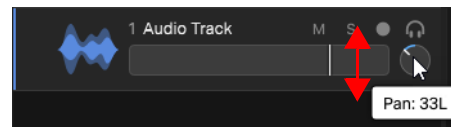
To reset a slider to its default value, double-click the slider, or hold down the ALT (Windows) / OPTION (Mac) key and click the slider.

To adjust with fine resolution, hold down the SHIFT key and drag a slider.

Volume slider:





Pan knob:

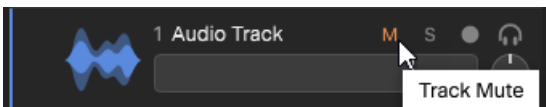



See also:

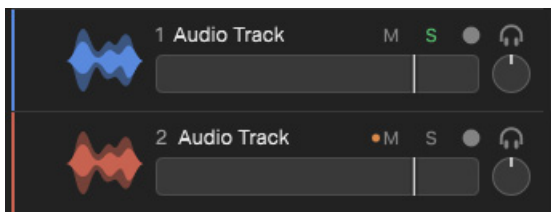
["Quick grouping"](#) on page 178


### Muting/Unmuting a track/bus/track folder

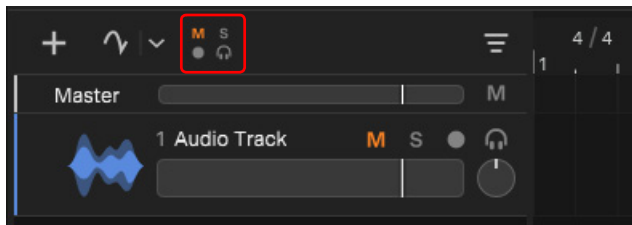
To mute/unmute a track, bus, or track folder, click its **Mute** button  / .





A track can become muted as a result of soloing another track. When soloing a track, all other non-soloed tracks become temporarily “soft” muted. This is indicated by a small orange dot next to the Mute button .

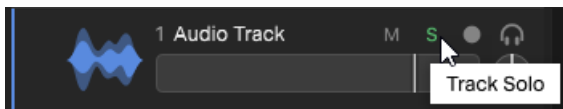



To unmute all tracks, click the global Mute toggle button  in the track pane header. Click again to restore the previous mute state.

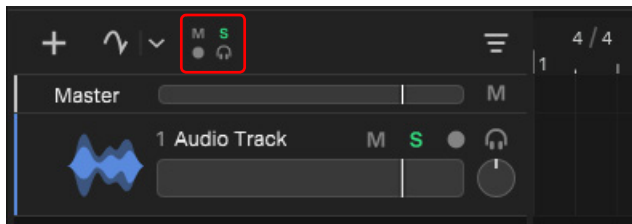


### Soloing/Unsoloing a track/bus/track folder

To solo/unsolo a track, bus, or track folder, click its Solo button  / .

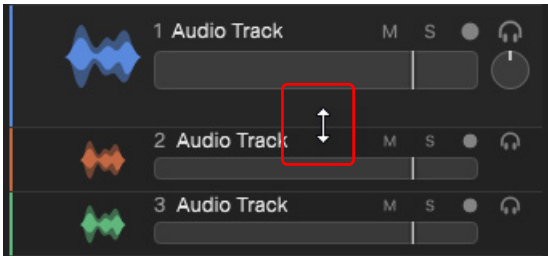



To unsolo all tracks, click the global Solo toggle button  in the track pane header. Click again to restore the previous solo state.



## Resizing tracks

- ▶ To resize a track vertically, drag the bottom of the track strip up/down.



- ▶ To resize multiple tracks, select the track(s) you want to resize, then do *one* of the following:
  - ▶ Drag the bottom of any selected track strip up/down.
  - ▶ Press CTRL+UP/DOWN (Windows) / CMD+UP/DOWN (Mac).
- ▶ To resize all tracks, do *one* of the following:
  - ▶ Select **View > Track Heights** and select the desired height.
  - ▶ Click the **Track View Options** button  and select the desired setting under **Resize Tracks**.
  - ▶ Press SHIFT+F to fit all tracks vertically.

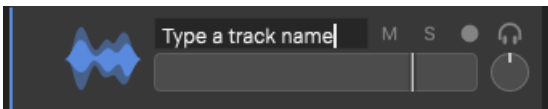
## Duplicating tracks

To duplicate one or more tracks, select the track(s), then do *one* of the following:

- ▶ Select **Edit > Duplicate**.
- ▶ Press CTRL+D (Windows) / CMD+D (Mac).

## Renaming a track/bus/track folder

To rename a track, double-click the current name, type a new name, then press ENTER.

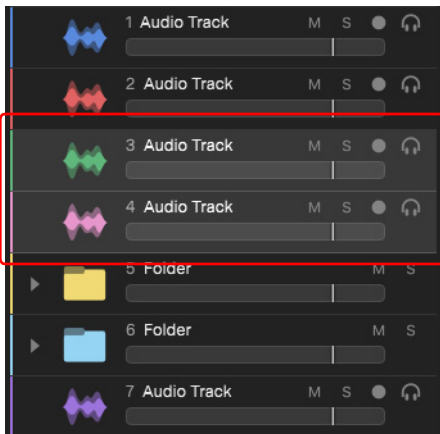


To show/hide track numbers, select **Edit > Preferences** and click **Display**, then select **Track Number Display**.



## Selecting a track/bus/track folder

To select a track, bus, or track folder, click any empty area in the channel strip background. Selected tracks are highlighted.



To modify a selection, hold down the CTRL (Windows) / CMD (Mac) key while making the selection.

To extend a selection, hold down the SHIFT key while making the selection.

## Deleting a track/bus/track folder

Select the track(s), bus(s), and/or track folder(s) you want to delete, then go to **Edit > Delete** or press DELETE.

See also:

["Selecting a track/bus/track folder"](#) on page 117

## Grouping/ungrouping tracks in track folders

You can add and remove audio tracks from track folders at any time. A common use is to group tracks by instrument type and to ensure a project does not exceed a total of 24 tracks or top-level track folders if you intend to export the project to your BandLab library.

- ▶ **To place tracks into a new track folder, do one of the following:**
  - ▶ Select the tracks you want to group, then press CTRL+G (Windows) / CMD+G (Mac), or go to **Edit > Move to Track Folder**.
- ▶ **To place tracks into an existing track folder:**
  - ▶ Select the tracks you want to move to a track folder, then drag any of the selected tracks into the folder.
- ▶ **To remove all tracks from a track folder:**
  - ▶ Select the track folder and press CTRL+U (Windows) / CMD+U (Mac), or go to **Edit > Remove From Folder**.
- ▶ **To remove tracks from a track folder, do one of the following:**
  - ▶ Drag the tracks out of the folder.

**Note:** *If you delete a track folder, it will also delete everything inside the folder. Deleting a track folder will not ungroup its child tracks/subfolders.*

See also:

["Track folders"](#) on page 17

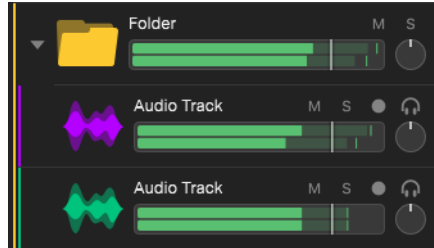
## Expanding/collapsing track folders

To expand or collapse a track folder, click the arrow button (▶ / ▼). A track folder can only be expanded if it contains at least one track or nested track folder.

Folder collapsed:

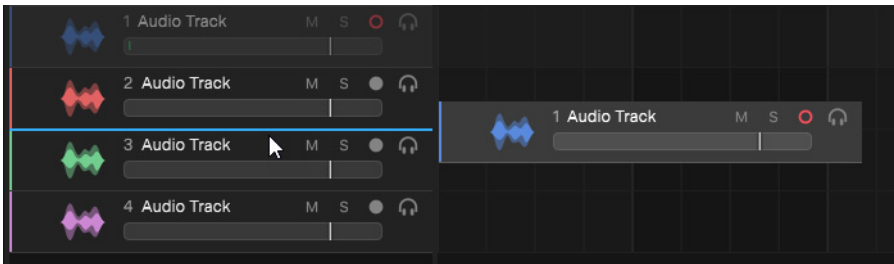


Folder expanded:



## Sorting tracks

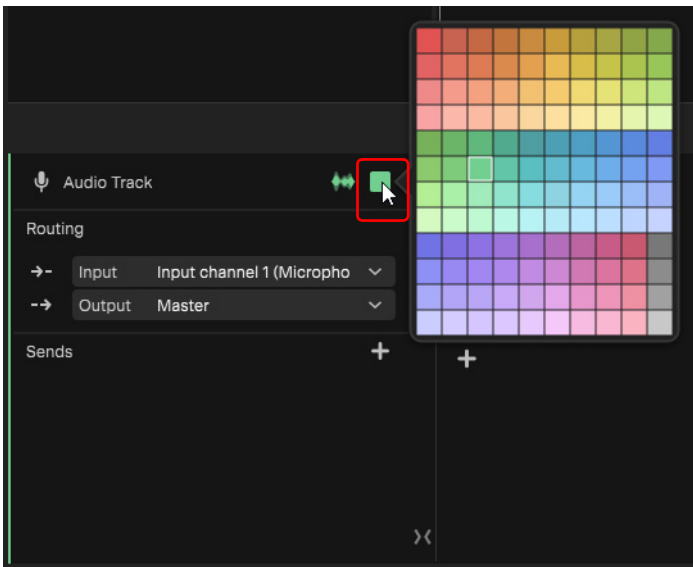
To rearrange one or more selected tracks, buses, or track folders, drag any selected track/bus/track folder vertically. A bold horizontal line indicates a valid drop location.



## Changing track color

To change the color of the selected track(s), do one of the following:

- ▶ Click the color button in the Track Inspector.
- ▶ Right-click the track and select **Track Color**.



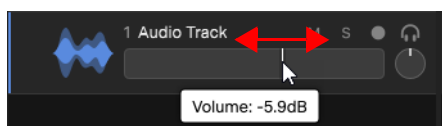
Inserted tracks, buses, and track folders cycle through the color palette.

## Adjusting sliders and knobs

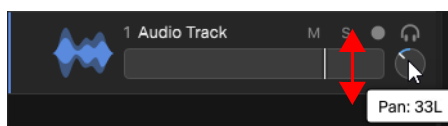
There are several ways to adjust sliders and knobs:

- ▶ Click and drag sliders horizontally
- ▶ Click and drag knobs vertically
- ▶ Hover over sliders/knobs and rotate the mouse wheel
- ▶ Double-click a slider/knob to reset its default value
- ▶ Hold down the SHIFT key and drag a slider/knob to adjust with fine resolution

Slider:



Knob:



See also:

[“Quick grouping”](#) on page 178


## Bouncing tracks

The **Edit > Bounce Tracks in Place** command lets you mix down tracks that may be too complex for your machine to actually play in real time. If you require more CPU processing for real-time effects, use **Bounce Tracks in Place** to premix some of your tracks with real-time effects applied, saving CPU time during playback.

To bounce tracks:

1. Select the tracks that you want to mix down/bounce.
2. Select **Edit > Bounce Tracks in Place**.

Tracks are bounced in place, in their entirety. All clips in the track are combined into a single clip, with empty space between clips is filled with silence in the new clip. Effects, mix settings and automation are applied during the bounce, then cleared from the track.

 **Note:** When bouncing an Instrument (MIDI) track, the Instrument track is converted to an audio track.

See also:

[“Bouncing audio”](#) on page 192

[“Bouncing clips”](#) on page 124

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## Editing clips

### Selecting a clip

To select a clip, click the clip header.

When selected, a clip header becomes brighter and the content colors invert.

Not selected:



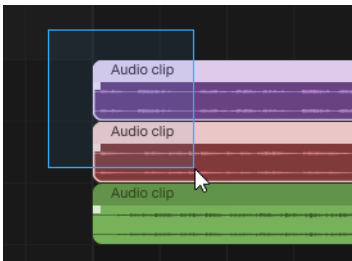
Selected:



### Lasso selection

To lasso select clips, do *one* of the following:

- ▶ Hold down the ALT (Windows) / OPTION (Mac) key and drag
- ▶ Drag with the right mouse button
- ▶ Drag from below the last track



### Moving a clip

To move a clip, point to the clip header so the mouse cursor changes to a hand, then drag the clip to the desired location:

- ▶ To move a clip to a different start time, drag the clip horizontally.
- ▶ To move a clip to another track, drag the clip vertically.

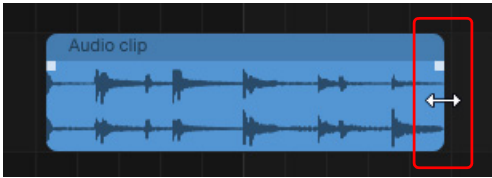


**Tip:** Hold down the *SHIFT* key to constrain vertical or horizontal movement, depending on the direction you first move.

## Trimming a clip

To trim a clip's duration, point to the left or right clip edge until the mouse cursor changes to a double arrow, then drag the clip edge to a new location.

Only visible data will be audible during playback. Trimming is nondestructive, so you can drag a clip edge to reveal any hidden data. You cannot extend a clip beyond its original duration.



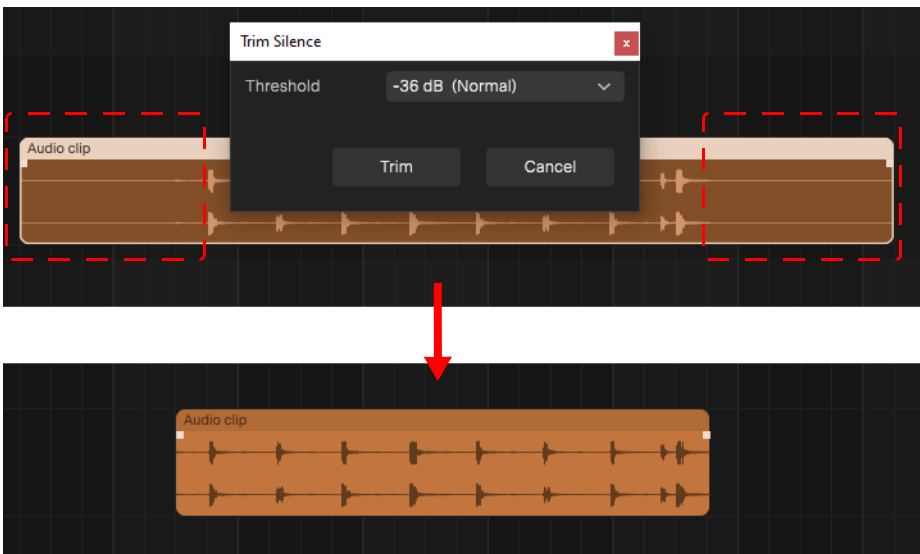
**Note:** You can also trim MIDI clips in the Clip Inspector's Piano Roll editor.

## Trimming silence from a clip

To trim silence from both the beginning and end of the selected clip(s):

1. Right-click the clip and select **Process > Trim Silence** to open the **Trim Silence** dialog box.
2. Select the desired **Threshold** level, or double-click to type a custom value.
3. Click **Trim**.

Audio that falls below the threshold level is trimmed from the beginning and end of the clip(s).



## Splitting a clip

To split a clip, do *one* of the following:

- ▶ To split all selected clips at the Now time (if no clips are selected, all clips will be split):
  - ▶ Press S
  - ▶ Select **Edit > Split**
  - ▶ Right-click any selected clip header and select **Split**
- ▶ To split a single clip at the mouse position, hold down the ALT (Windows) / CMD (Mac) key and point to the clip header so the mouse cursor changes to scissors, then click the clip header.
- ▶ To split all selected clips at the mouse position, hold down ALT+SHIFT (Windows) / CMD+SHIFT (Mac) and point to the clip header so the mouse cursor changes to scissors, then click the clip header.



Splitting is non-destructive, so you can drag a clip's edge at any time to reveal the trimmed content.

After splitting a clip, the left portion of the clip is selected by default. To specify the default split behavior, go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Preferences** dialog box, then select the **Display** page and select the desired setting in the **Clip Selection After Split** drop-down menu.


**Note:** To recombine multiple split clips, do one of the following:

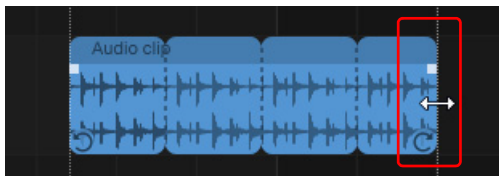
- Delete one of the clips, then “unroll” the remaining clip to reveal the trimmed content.
- Select the clips that you want to combine, then right-click any selected clip header and select **Bounce to New Clip**.

## Looping a clip

To loop a clip:


1. Do *one* of the following:
  - ▶ Right-click the clip and select **Loop/Unloop Clip**.
  - ▶ Select the clip and press CTRL+L (Windows) / CMD+L (Mac).
2. Drag the clip edge to create repetitions.

Loop enabled clips are identified by a loop icon  in the bottom corners, and the start of each repetition is indicated by indentations in the clip and a dotted vertical line.

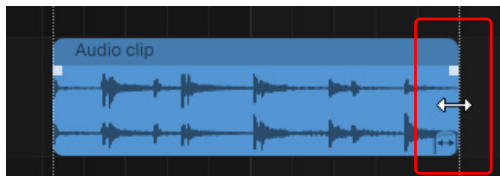


## Stretching a clip

- ▶ To stretch a clip, hold down the CTRL (Windows) / CMD (Mac) key and drag the clip edge.

Stretch enabled clips are identified by a stretch icon  in the bottom right corner.

To reset a stretched clip to 0% stretching, right-click the clip header and select **Reset Stretch**.



## Fading an audio clip

- ▶ To create a fade in, click the fade handle in the top left portion of the waveform, then drag to the right.



- ▶ To create a fade out, click the fade handle in the top right portion of the waveform, then drag to the left.



## Renaming a clip

To rename a clip, right-click the clip and select **Rename**.



## Deleting a clip

To delete a clip, select the clip, then press DELETE, or select **Edit > Delete**.

## Duplicating clips

To duplicate one or more clips, select the clip(s), then do *one* of the following:

- ▶ Select **Edit > Duplicate**.
- ▶ Press CTRL+D (Windows) / CMD+D (Mac).

## Inserting an empty MIDI clip

To insert an empty MIDI clip on an Instrument track, do *one* of the following:

- ▶ Double-click an empty area in the Clips pane
- ▶ Right-click an empty area in the Clips pane and select **Insert Empty MIDI Clip** on the context menu

## Bouncing clips

You can consolidate multiple clips into a single clip. To do so, make a time selection that spans the clips you want to combine, then right-click one of the selected clip headers and select **Bounce to New Clip**.

You can also bounce tracks in place. To do so, select the tracks that you want to bounce, then select **Edit > Bounce Tracks in Place**. This creates one clip per track that spans from the start of the project to the end of each track. For details, see “[Bouncing tracks](#)” on page 119.

## Specifying a clip’s time base

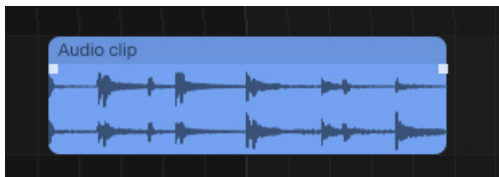
The time base format for each clip can be set to either musical time or absolute time. The time base format determines what happens to clips when you change the project tempo:

- ▶ **Musical.** A clip’s M:B:T position stays constant, and its absolute position shifts.
- ▶ **Absolute.** A clip’s absolute position stays constant, and its M:B:T position shifts.

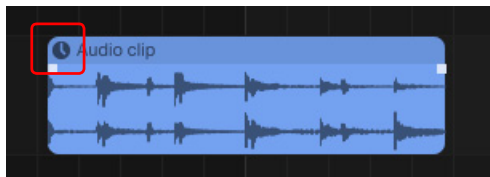
By default, clips are set to musical time. To toggle between musical and absolute time, right-click a clip header and select **Set to Absolute Time** or **Set to Musical Time**.

When a clip is set to absolute time, a small clock icon  appears in the top left corner of the clip.

**Musical time:**



**Absolute time:**



See also:

“[Stem separation](#)” on page 135





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## Ripple editing

*Ripple editing* means to adjust the position of a clip in the Track view, and automatically adjust the start position of all subsequent clips to compensate for the change.

Ripple editing is a convenient way to arrange clips and maintain sync relationships without leaving unintended gaps between the clips.



### Ripple edit modes

You can choose to ripple edit just the selection, or all tracks plus Arranger track and Lyric track data. Click the **Ripple Options** button  drop-down menu  to specify the ripple edit mode:

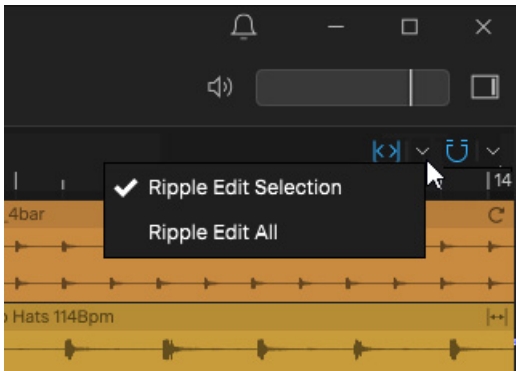
- ▶ **Ripple Edit Selection** . Affects all clips that are downstream from the selected clip(s). Only selected tracks, or tracks included via range selection within the clips pane are affected.
- ▶ **Ripple Edit All** . In addition to downstream clips in all tracks, also affects Arranger and Lyric track data.


### Enabling/disabling ripple editing

To enable/disable ripple editing, do *one* of the following:

- ▶ Click the **Enable/Disable Ripple** button . Click the drop-down menu  to specify the ripple edit mode:
  - ▶ **Ripple Edit Selection**. Affects all clips that are downstream from the selected clip(s). Only selected tracks, or tracks included via range selection within the clips pane are affected.
  - ▶ **Ripple Edit All**. In addition to downstream clips in all tracks, also affects Arranger and Lyric track data.
- ▶ Select **Edit > Enable Ripple Edit**.
- ▶ Press CTRL+R.

**Figure 32.** *Enable/Disable Ripple Edit button and menu.*



 **Caution:** Use caution when ripple editing, and make sure you don't unintentionally move track data that is off screen. It is good practice to check the results often when editing multiple tracks.

## What works with ripple editing?



The following operations in the Track view support ripple editing:

- ▶ Moving clips
- ▶ Stretching/trimming the right edge of a clip
- ▶ Delete, cut, and paste
- ▶ Import audio/MIDI
- ▶ Delete empty space

 **Note:** Automation envelopes follow when ripple editing clips.

## Deleting empty space (close a gap)

To delete empty space and shift downstream data:

1. Click the **Enable/Disable Ripple Editing Lanes** button  drop-down menu  and select **Ripple Edit Selection** or **Ripple Edit All**.
2. Drag in the time ruler or Clips pane to select the time range you want to delete, then go to **Edit > Delete** or press the DELETE key.



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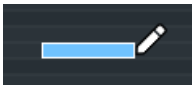
## Editing MIDI notes in the Piano Roll

You can edit the selected instrument track's MIDI notes in the Clip Inspector's Piano Roll editor (see [“Clip inspector / Piano Roll view”](#) on page 83).

### Drawing note events

To create new note events, do *one* of the following:

- ▶ If the Note drawing tool  is disabled, double-click to insert new note events.
- ▶ If the Note drawing tool  is enabled, click or drag to draw new note events. While drawing, you can drag in any direction to change the note duration or pitch.



Note drawing obeys the current Snap to Grid  setting (see [“Using the Snap Grid”](#) on page 133).



**i** **Note:** *When using BandLab instruments, the piano keys in the Piano Roll editor indicate the valid note range for the current instrument. Keys that are out of range are dimmed.*



When drawing notes, use the SHIFT modifier to constrain the pitch to the row in which the drag operation originated.

The SHIFT modifier may be applied before or during the draw operation:

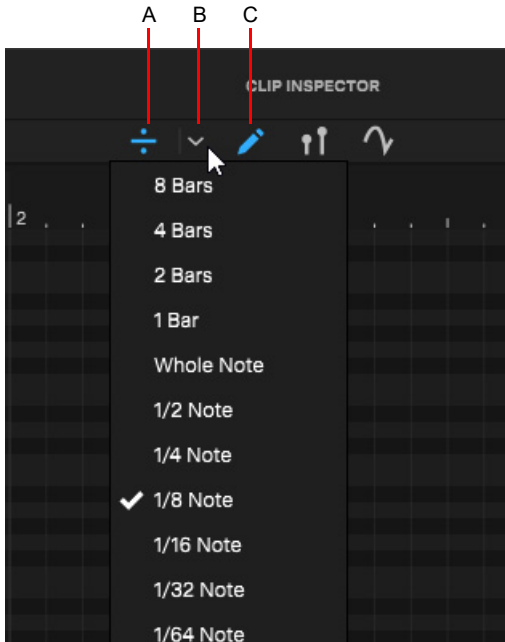
- ▶ If SHIFT is pressed after drawing has started, it will clamp the pitch
- ▶ If SHIFT is pressed before drawing, it will invoke the existing lasso select behavior:
  - ▶ SHIFT + lasso selects the notes, replacing the existing selection
  - ▶ CTRL (Windows) / CMD (Mac) + lasso selects the notes, adding to the existing selection

## Step Draw Mode

The Draw tool  has an optional Step Mode , which allows you to quickly draw multiple notes with a specified duration. This is very useful when drawing repeated notes, such as cymbals.

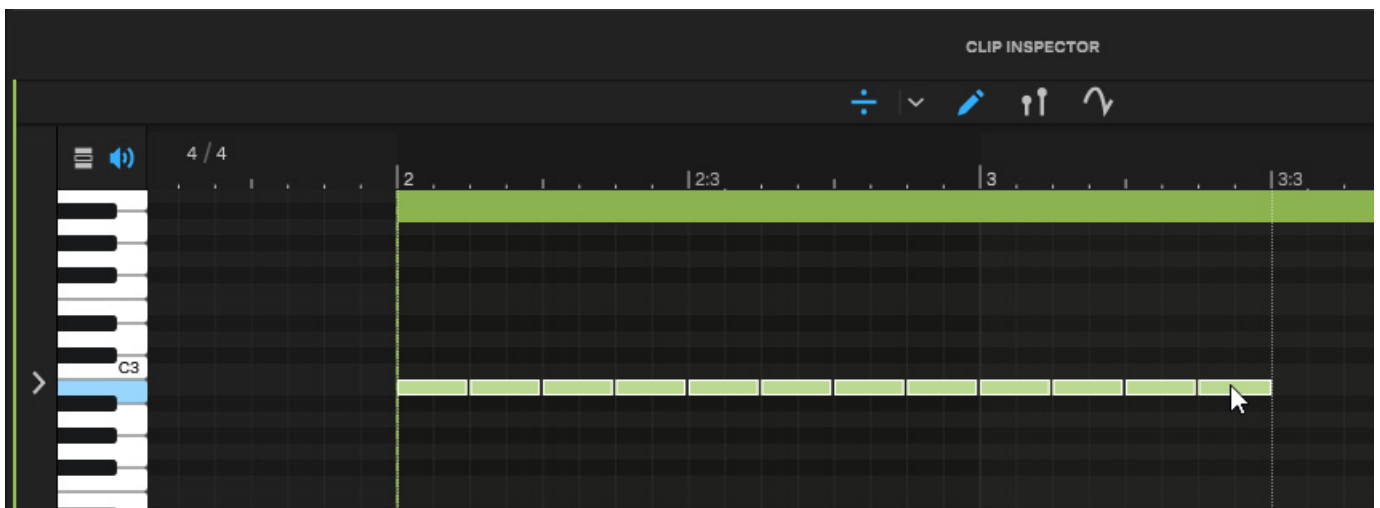
Step Mode is only available when the Draw tool  is enabled. To enable/disable Step Mode, click the **Step Mode** button . To specify the step duration, click the Step Mode button drop-down menu.

**Note:** *The Step Mode note duration automatically follows the last custom note duration. If you manually adjust a note length while Step Mode is engaged, the Step Mode note duration value updates to reflect that value, and any subsequent step note drawing will follow the last edited note duration.*




A. Enable/disable Step Mode B. Step duration menu C. Draw tool (must be enabled)

Drag left or right to draw notes with the specified duration. While drawing, you can move the mouse up or down to draw different pitches, or hold down the SHIFT key to constrain the pitch.



## Note audition

To audition notes while drawing, selecting, moving, transposing, and trimming notes, click the **Toggle Note Audition** button .

## Selecting notes

- ▶ To select a note event, click the note
- ▶ To select multiple notes, hold down the CTRL (Windows) / CMD (Mac) key and click each note that you want to select
- ▶ To make a lasso selection, hold down the CTRL (Windows) / CMD (Mac) key and drag from an empty location

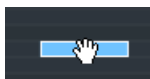
You can also select notes by clicking or dragging vertically on the Piano Roll keyboard. If a clip is selected, only corresponding notes in the currently selected clip(s) will be selected. If no clip is selected, all corresponding notes in the track will be selected.

- ▶ To select all notes of a single pitch, click the corresponding piano key
- ▶ To select all notes of several adjacent pitches, drag across the corresponding piano keys, or hold down the SHIFT key and click to extend the selection
- ▶ To add to the selection, hold the SHIFT key while clicking on a piano key
- ▶ To toggle the selection, hold the CTRL (Windows) / CMD (Mac) key while clicking on a piano key

 **Tip:** To clear the note selection, press the ESCAPE key.

## Moving notes

- ▶ To move a note event, click anywhere in the middle of a note and drag to the desired location. You can also use the arrow keys to move any selected notes.
- ▶ To move all selected notes, drag any selected note (see “Selecting” on page 113).

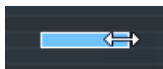



## Transposing notes

- ▶ To transpose all selected notes up/down chromatically, press the UP/DOWN ARROW keys.
- ▶ To transpose all selected notes up/down by octaves, hold down the SHIFT key and press the UP/DOWN ARROW keys.

## Resizing notes

To resize a note event, drag the left or right edge of the note.



To resize note heights, click the **View Options**  button and select a note height preset, or hold down CTRL+SHIFT and use the mouse wheel.

## Splitting notes

To split the selected note(s) into equal subdivisions, right-click and select **Split Notes** or press SHIFT+S.

The default subdivision is 2, unless Step Mode is enabled, in which case the notes will be split at the Step Mode intervals.

## Merging notes

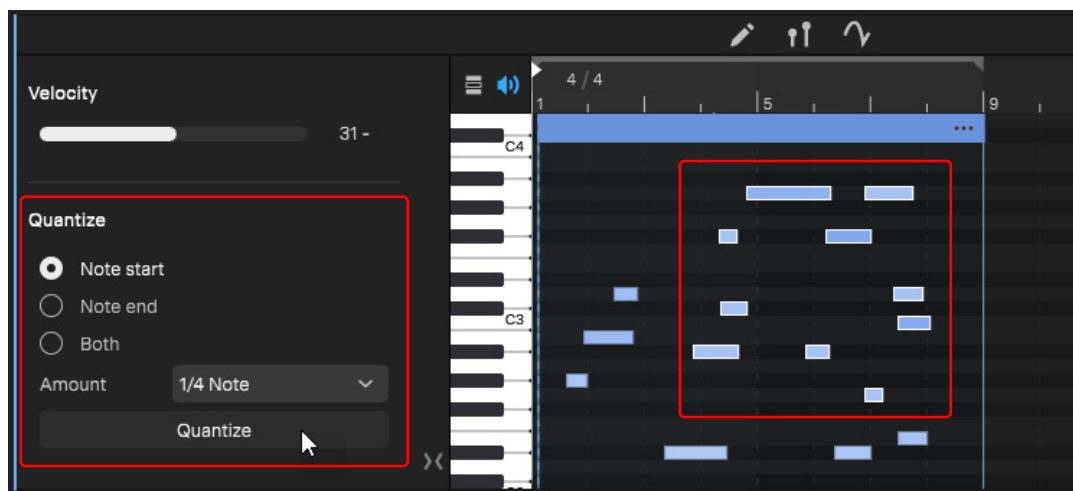
To merge the selected notes, right-click and select **Merge Notes** or press SHIFT+ALT+M (Windows) / SHIFT+OPTION+M (Mac).

Notes must be the same pitch in order to be merged.

## Quantizing notes

To quantize notes:

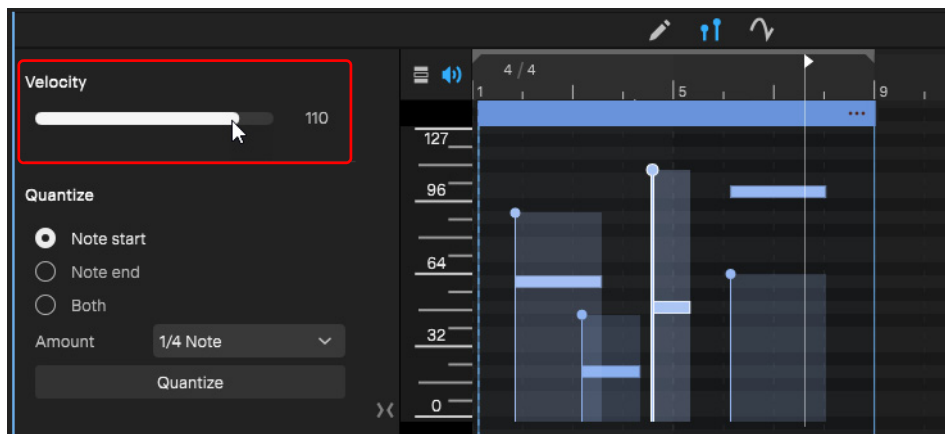
1. Select the notes you want to quantize.
2. On the left side of the Clip Inspector, specify the desired quantize settings, then click the **Quantize** button.




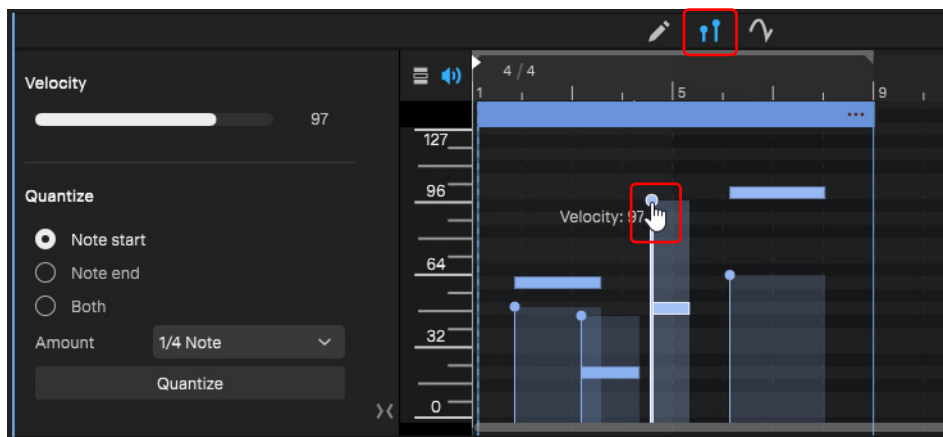
## Adjusting Note velocities

There are two ways to adjust note velocities:

- ▶ Select the note(s) you want to adjust, then drag the Velocity slider.



- ▶ Click the **Toggle MIDI Velocity Display** button  (or right-click in the Piano Roll and select **Toggle MIDI Velocity Display**) to show velocity handles for all note events, then drag the desired handle(s) up/down.



## Deleting notes

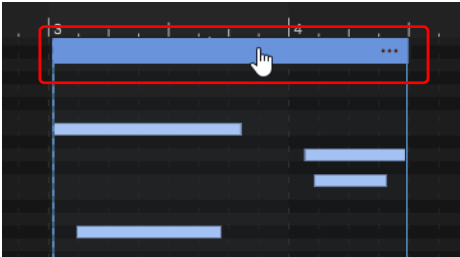
To delete notes, do *one* of the following:

- ▶ Select the note(s) that you want to delete, then press the DELETE key, or right-click and select **Delete**
- ▶ Double-click a note


## Editing clips in the Piano Roll

The Piano Roll shows a clip header for each clip, which allows you perform basic clip editing directly in the Piano Roll:

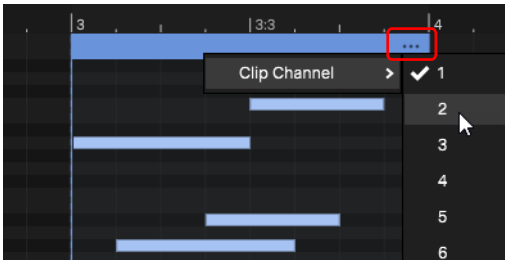
- ▶ Click the header to select all events in the clip.
- ▶ Drag the header to move the clip.
- ▶ Drag the left or right header edge to trim the clip.
- ▶ Double-click the header to fit the clip horizontally.
- ▶ Double-click the clip name to rename the clip.




## Specifying a clip's MIDI channel

To specify a MIDI clip's channel, click the clip's menu button  in the Clip Inspector / Piano Roll, point to **Clip Channel** and select the desired channel (1–16).

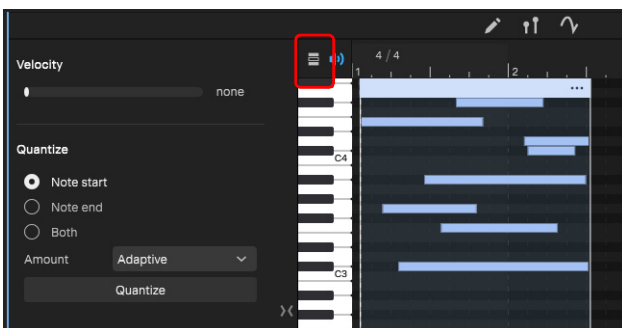
**Figure 33.** Click a MIDI clip's menu button to specify the MIDI channel.



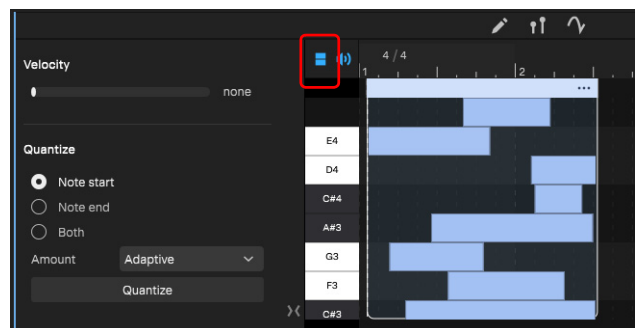
## Showing only active notes

By default, the Piano Roll shows the full note range. To only show active notes, click the **Show Only Active Notes** button .

### Show Full Note Range:



### Show Only Active Notes:



Click the button  again to toggle between the full note range and active notes.

See also:

["Note names and icons"](#) on page 85



## Using the Snap Grid


Figure 34. Snap to Grid control.



Cakewalk Next® lets you define a snap grid that makes it easier to align clips and note events, select time ranges, set the loop region, and control automation envelope drawing. When drawing, moving, and resizing objects, the objects will snap to the nearest point on the snap grid.

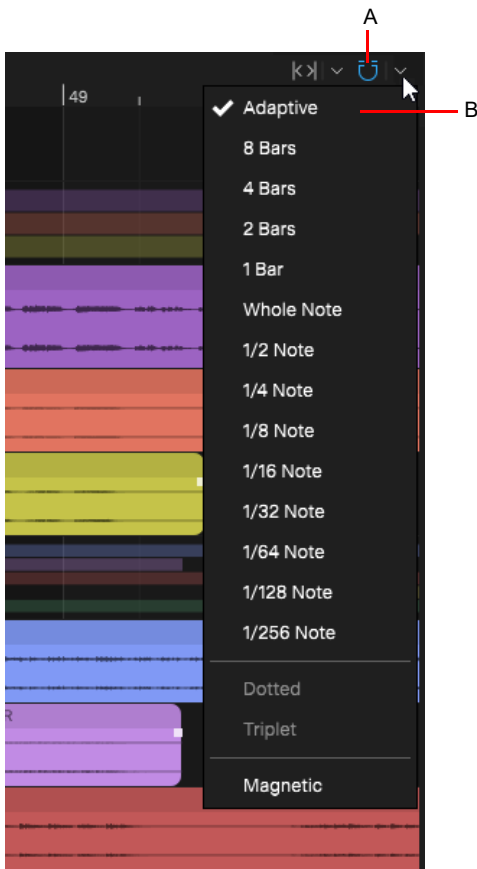
You can set the snap resolution to an interval of bars, notes, or automatically adjust the resolution depending on the horizontal zoom level. The Clips pane and Piano Roll view have independent snap settings that allow you to align edits to specific note or measure boundaries.

### Enabling/disabling the Snap Grid

To enable/disable snapping, click the **Snap** button  in the Clips pane or Piano Roll editor.



When snap is enabled, the vertical grid lines are solid. When snap is disabled, the vertical grid lines are dotted.

Figure 35. Snap to Grid menu.



A. Snap enable/disable B. Snap resolution


## Setting the snap resolution

To change the snap resolution, click the **Snap Options** button  to the right of the **Snap** button: . The following snap settings are available:

- ▶ **Adaptive.** The snap resolution is dynamically determined by the horizontal zoom level. The snap grid is optimized to show relevant snap locations.
- ▶ **<Bar resolution>.** Specify the snap resolution as a number of bars/measures (8, 4, 2, and 1).
- ▶ **<Note resolution>.** Specify the snap resolution as a note duration (whole note – 1/256th note).
- ▶ **Dotted.** Increase the size of the selected resolution by half of its original value (150%).
- ▶ **Triplet.** Reduce the size of the selected resolution to 2/3 of its original value (three bars/notes fit in the space of two).
- ▶ **Magnetic.** Enable magnetic snapping. While dragging the boundary of an object, you can move the boundary freely until the boundary gets within a certain number of ticks from the snap target. The closer the object gets to the snap target, the more strongly the object is pulled toward the target.

## Overriding snap

To momentarily override the snap grid, hold down the ALT (Windows) / CTRL (Mac) key.

 **Note:** If the Clips pane or Piano Roll view is zoomed out a certain amount, the time boundary around the snap target will appear to be quite small, and you might think that the snap grid is not functioning. If this is the case, zoom in closer to enhance your editing experience.

---

## Aim assist

Aim Assist is a vertical line that shows the mouse pointer's horizontal position in the Clips pane and Piano Roll editor. Aim Assist is a helpful guide when editing, making it easy to align the mouse pointer with events on different tracks.

When Snap to Grid is enabled, the Aim Assist line snaps to the nearest snap boundary.

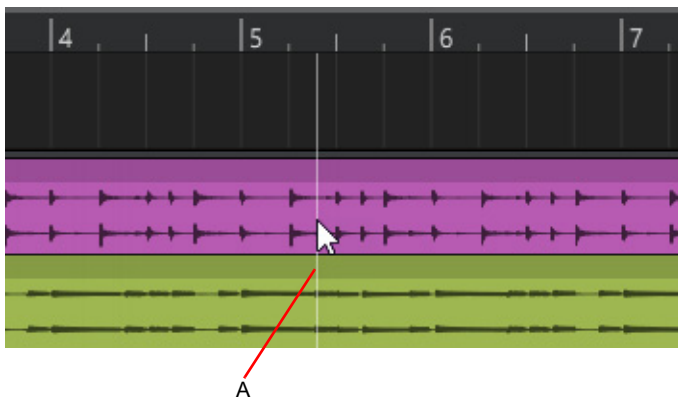
### Enabling/disabling Aim Assist

To enable/disable the vertical Aim Assist line, do *one* of the following:

- ▶ Select **View > Aim Assist**
- ▶ Press X

The vertical Aim Assist line is shown or hidden.

**Figure 36.** The Aim Assist line is a helpful guide when editing in the Clips pane.



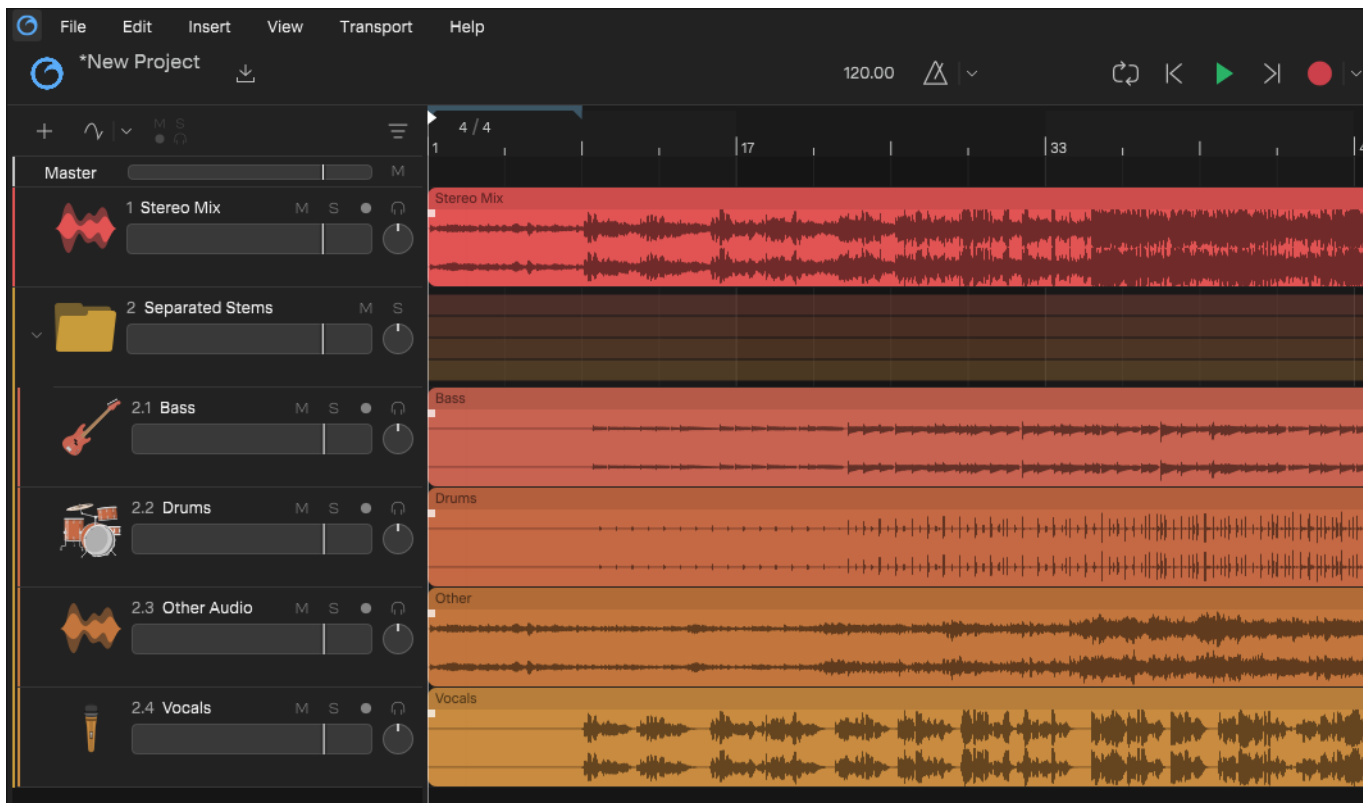
**A.** Vertical Aim Assist line

# Stem separation

Use the integrated AI-powered stem separation tool to separate a mix into four separate tracks (known as audio stems):

- ▶ Vocals
- ▶ Bass
- ▶ Drums
- ▶ Other Instruments (guitar, piano, strings, etc.).

Stem separation makes it possible to remix songs, solo and manipulate individual instrument tracks, create backing tracks without vocals or guitars, dissect songs and learn individual parts, etc.



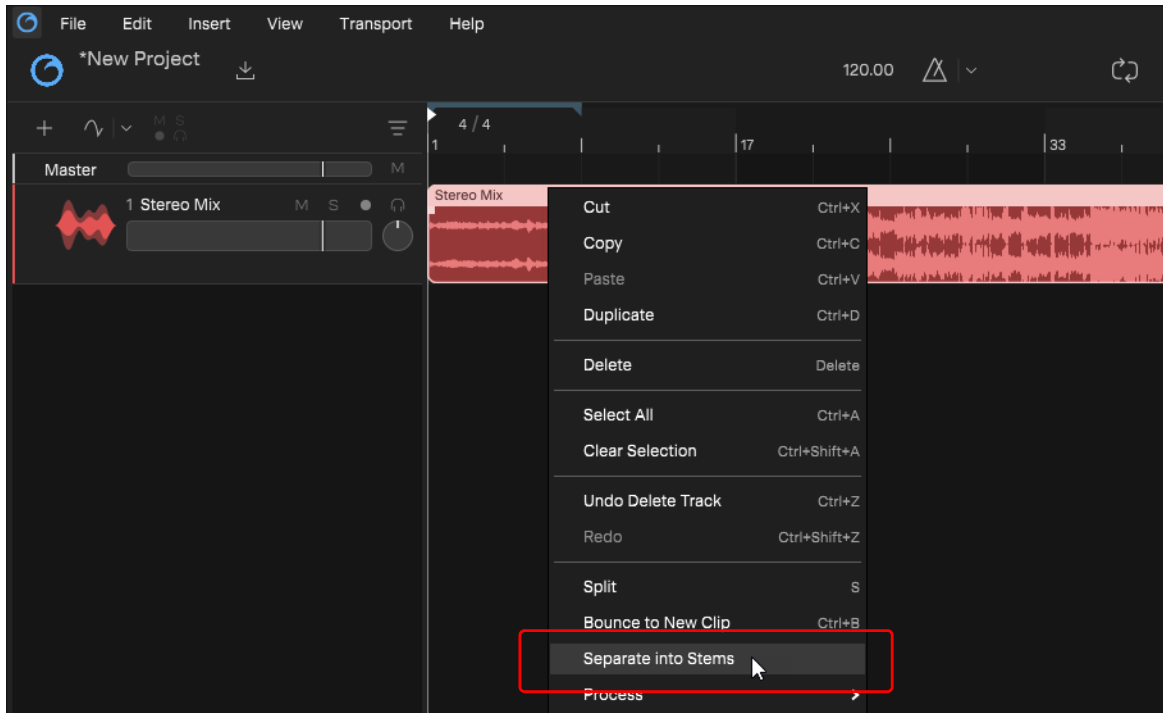
**Note:** Stem separation is processed on the BandLab server, so your computer must be online and you must be signed in to your BandLab account in order to use this feature.

## Separating stems from a mix

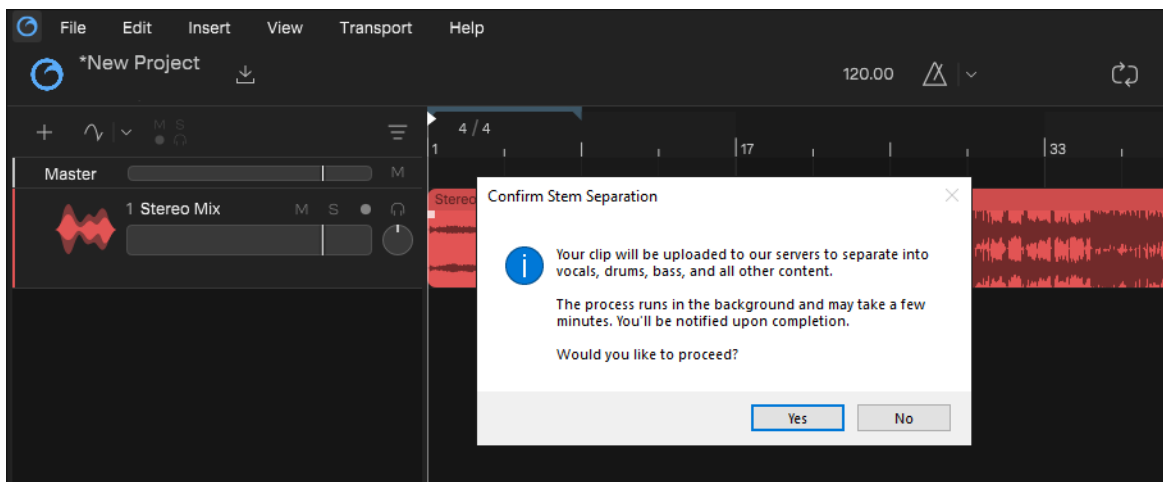
1. Import a song that you would like to separate into individual stems.



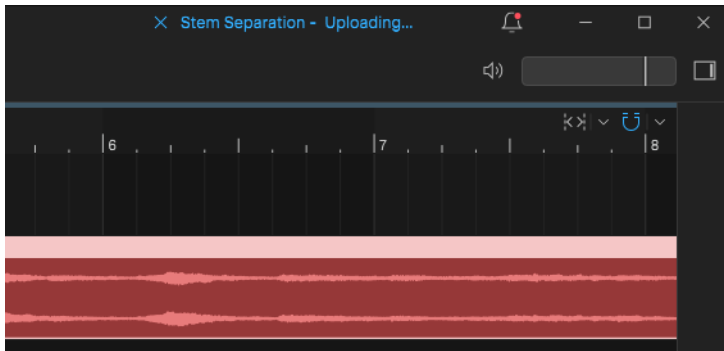
2. Right-click the imported audio clip and select **Separate into Stems**.



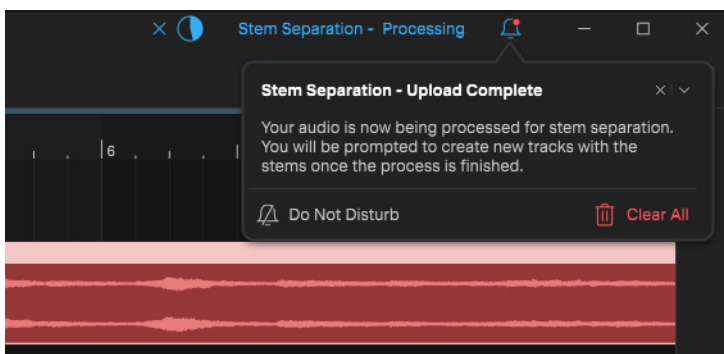
3. Click **Yes** to confirm.



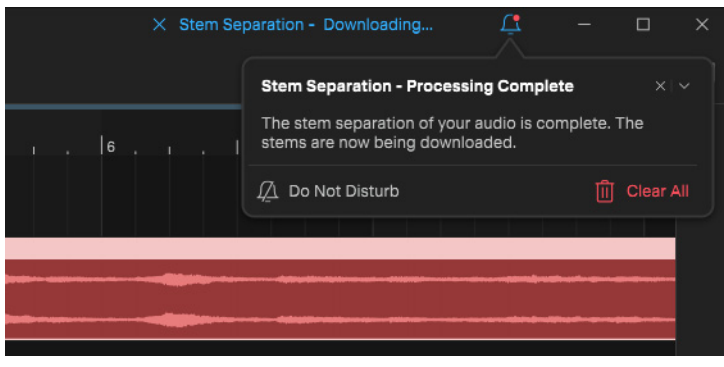
- i) Next uploads the audio file to the BandLab server for processing. Stem separation happens in the background and may take a few minutes. You can continue to use Next during this time, and you will be notified when stem separation is complete.



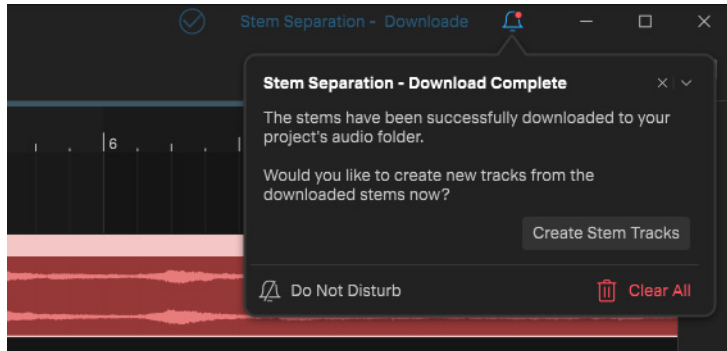
- ii) The online AI-powered stem separation tool analyzes the audio mix and separates the mix into separate stems.



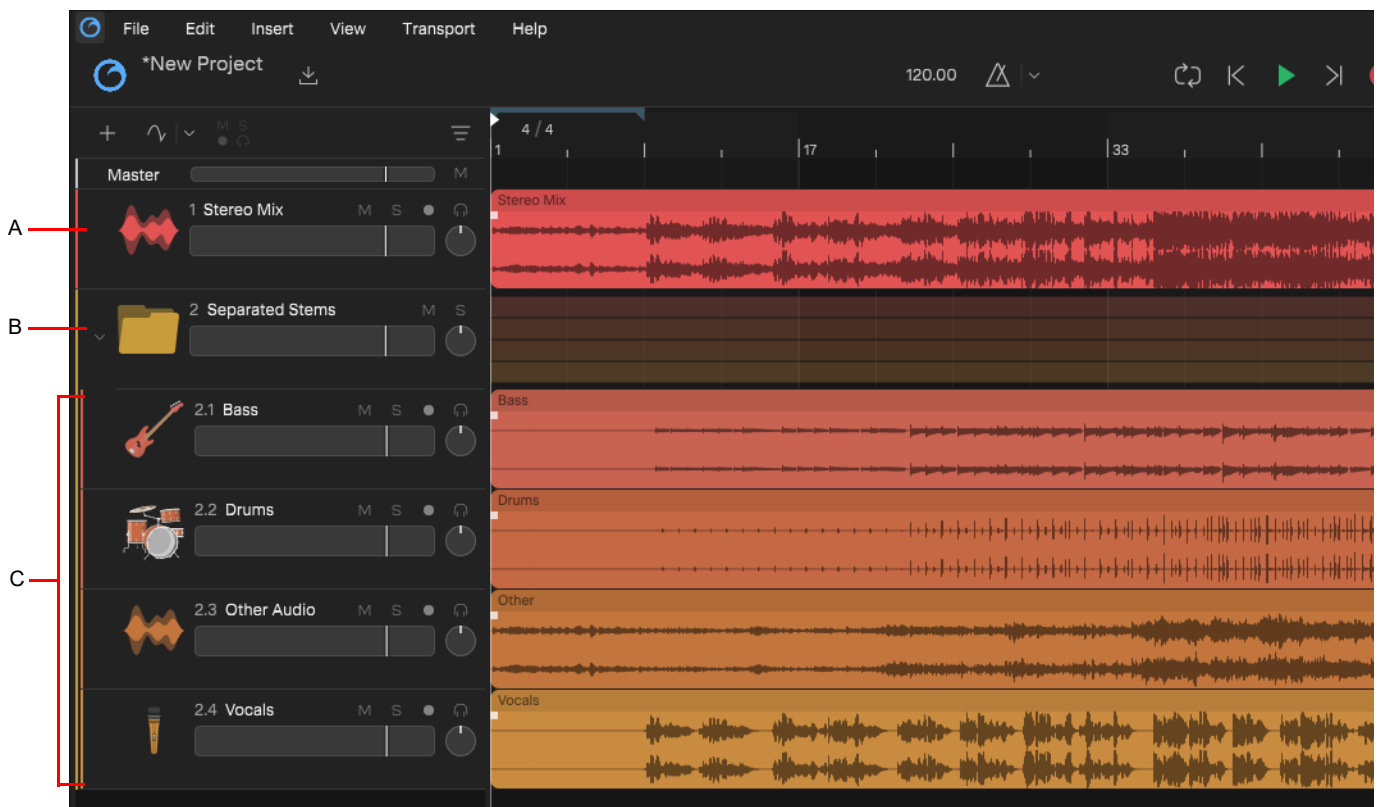
- iii) When processing is complete, the separated stems are downloaded to your computer.



4. When the stems have been downloaded, click **Create Stem Tracks** to import the stems into the current project.



The stem tracks are created inside a new track folder named **Separated Stems**. You can now mute or remove the original audio track if it is no longer needed.



**A.** Original stereo mix **B.** Track folder that contains the separated stem tracks **C.** Stem tracks

See:

[“Importing audio”](#) on page 59

[“Editing clips”](#) on page 120

[“Mixing”](#) on page 173

# Instruments

*Cakewalk Next*® seamlessly integrates VST and BandLab software instruments.

Instruments can be played in various ways:



- ▶ From an external MIDI controller (see [“Playing an instrument from a MIDI controller”](#) on page 141).
- ▶ From *Next*’s virtual on-screen keyboard controller (see [“Virtual MIDI Controller”](#) on page 61).
- ▶ By interacting with the soft synth’s UI (see [“Opening an instrument’s plugin editor”](#) on page 140).
- ▶ By playing back recorded MIDI data (see [“Playing an instrument with recorded MIDI data”](#) on page 141).

See:


- [“Inserting an instrument”](#) on page 139
- [“Replacing an instrument”](#) on page 140
- [“Opening an instrument’s plugin editor”](#) on page 140
- [“Playing an instrument”](#) on page 141
  - [“Triggering an instrument in real-time”](#) on page 141
- [“Converting an Instrument track to audio”](#) on page 141
- [“XSampler”](#) on page 142
- [“Pad Controller”](#) on page 157
- [“Instrument Rack”](#) on page 163

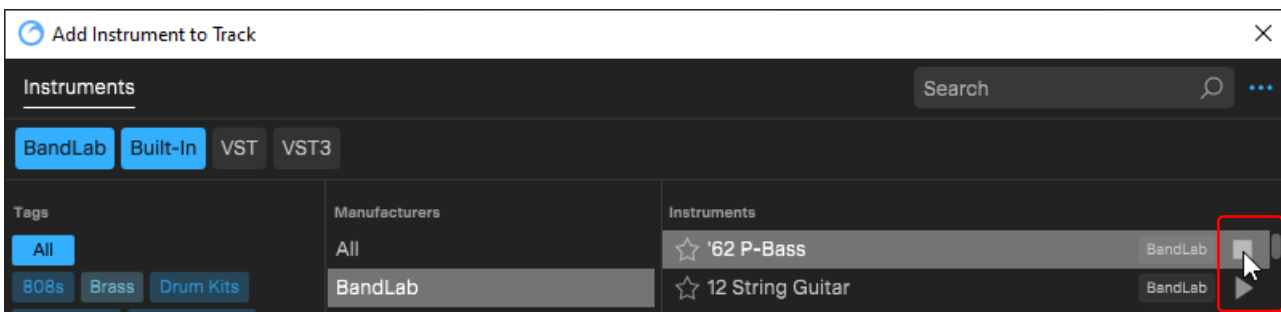
## Inserting an instrument

To insert an instrument:

1. Do *one* of the following:
  - ▶ Click the **Insert Track** button , then select **Instrument** .
  - ▶ Select **Insert > Insert Instrument Track**.
  - ▶ Press CTRL+SHIFT+T (Windows) / CMD+SHIFT+T (Mac).
2. In the **Instrument Browser** dialog box, select the desired instrument.
3. Click **Add**.

## Previewing BandLab instruments



You can preview BandLab instruments from within the Plugin Browser before inserting an instrument. To do so, click the **Preview**  button to the right of the instrument name.



## Opening an instrument's plugin editor

To show a VST plugin's native UI, click the **Show plugin window** button  above the plugin name in the Track Inspector.



 **Note:** BandLab instruments do not have any UI, so they do not expose the **Show plugin window** button .

## Replacing an instrument

To replace an instrument with a different instrument:

1. Right-click the instrument's module header in the Track Inspector and select **Replace**.
2. Select the desired instrument, then click **Add**.



## Playing an instrument

There are several ways to play a software instrument:

- ▶ Play back MIDI notes from the Piano Roll view and use the soft synth as a playback device.
- ▶ Play the instrument in real-time from a MIDI controller or keyboard.

### Triggering an instrument in real-time

There are several ways to trigger an instrument in real-time while recording:

- ▶ From an external MIDI controller (see [“Playing an instrument from a MIDI controller”](#) on page 141).
- ▶ From *Next*’s virtual on-screen keyboard controller (see [“Virtual MIDI Controller”](#) on page 61).
- ▶ By interacting with the soft synth’s UI (see [“Opening an instrument’s plugin editor”](#) on page 140).
- ▶ By playing back recorded MIDI data (see [“Playing an instrument with recorded MIDI data”](#) on page 141).

### Playing an instrument with recorded MIDI data

1. Insert the desired instrument as an Instrument track.
2. Record or import some MIDI data into the Instrument track.
3. Play back the project.

When you play back the recorded MIDI data, you should hear the instrument through your audio device outputs.

You can add effects to each of the synth tracks. You can also add MIDI effects to your soft synth MIDI tracks.

### Playing an instrument from a MIDI controller

When an instrument track has focus, you can play the instrument with an external MIDI controller.

1. Make sure your MIDI controller is set to local off.
2. Insert the desired instrument as an Instrument track.
3. In the Track Inspector, select the MIDI input device and channel that your MIDI controller is transmitting on.
4. Make sure that the Instrument track has the focus, and play your MIDI controller.

### Converting an Instrument track to audio

When your project sounds the way you want it to, it’s extremely easy to convert your Instrument tracks to audio for further processing if you prefer to work with audio data instead of MIDI events.

To convert an instrument track to a new audio track:

1. Select the instrument track(s) that you don’t want to convert to audio.
2. Click the **Edit** menu and select **Bounce Tracks in Place**.

See:

[“XSampler”](#) on page 142

[“Pad Controller”](#) on page 157

[“Instrument Rack”](#) on page 163

See also:

[“Inserting instrument tracks”](#) on page 29

[“Replacing an instrument”](#) on page 30

[“Assigning tags to audio effects and instruments”](#) on page 82

[“VST plugin scanner”](#) on page 189

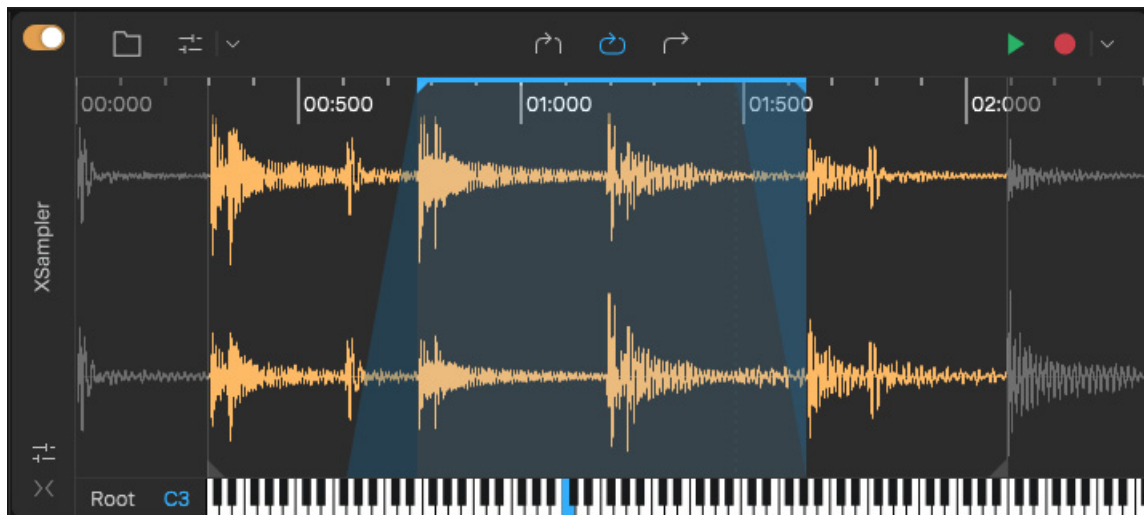
[“Plugin Manager”](#) on page 195

[“Converting MIDI to audio”](#) on page 192

## XSampler

*XSampler* is a simple sampler that lets you import or record audio, perform basic processing, and play it like an instrument with up to 16 voices. Instantly convert a single audio file into a playable or triggable sound that can be played back at different pitches and speeds.

Figure 37. *XSampler*.



There are many ways to get audio into XSampler: (see [“Adding a sample”](#) on page 150):

- ▶ Import audio from the file system
- ▶ Record directly into XSampler
- ▶ Drag loops and one-shots from the Loop Browser
- ▶ Drag audio clips from any track

After audio has been added, you can loop, trim, crossfade, change playback behavior and modulation or filtering options to create interesting musical ideas. For details, see [“Editing the sample”](#) on page 154.

Highlights:

- ▶ Multiple trigger modes
- ▶ Up to 16 voices
- ▶ Amplitude envelope generator (EG)
- ▶ Filter
- ▶ Pitch adjustment
- ▶ Key mapping

See:

[“Inserting XSampler”](#) on page 143

[“UI overview”](#) on page 144

[“Control panel”](#) on page 148

[“Adding a sample”](#) on page 150

[“Importing a sample”](#) on page 150

[“Recording a sample”](#) on page 151

“Triggering the sample” on page 152

“Editing the sample” on page 154

“Setting the root note” on page 153

“Setting the sample playback mode” on page 153

“Trimming the sample” on page 154

“Looping the sample” on page 155



“Crossfading a looped sample” on page 156

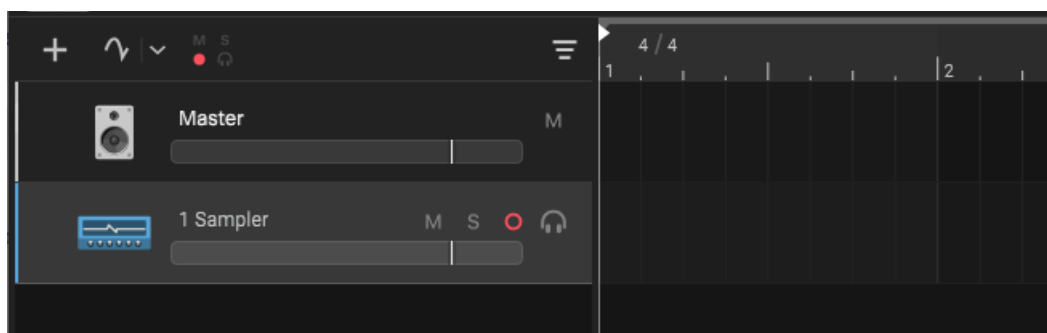
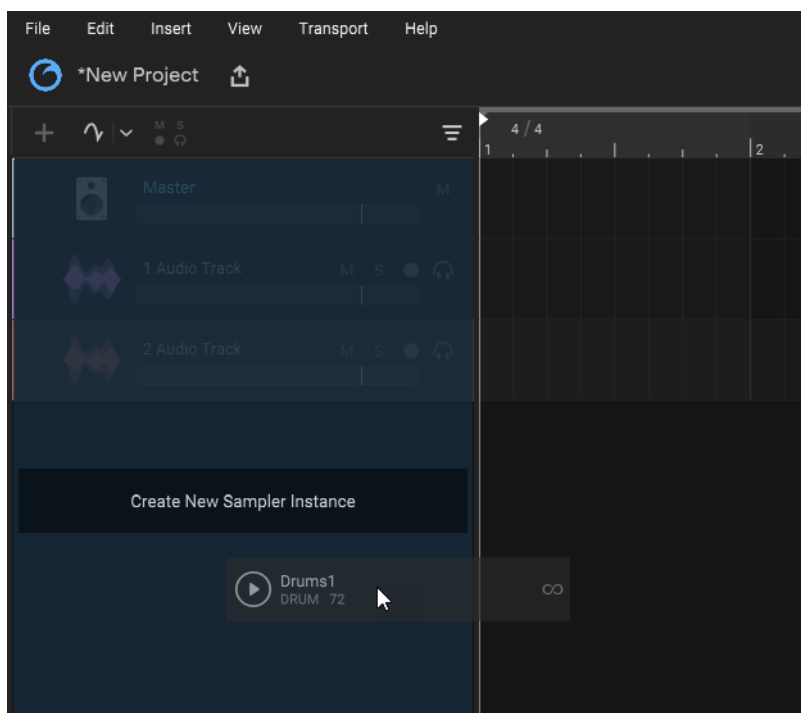
“Normalizing the sample” on page 156

“Reversing the sample” on page 156

## Inserting XSampler

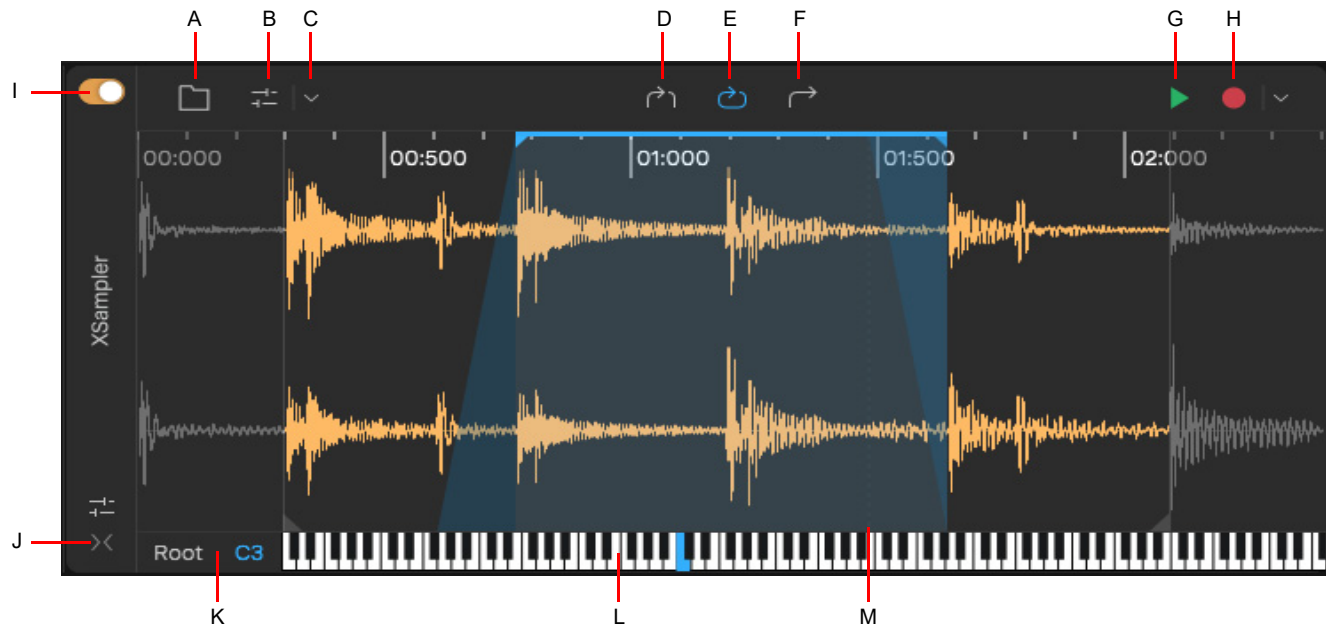
To quickly create an XSampler instrument, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Sampler** .
- ▶ Select **Insert > Insert Sampler Track**.
- ▶ Press CTRL+SHIFT+X (Windows) / CMD+SHIFT+X (Mac).
- ▶ Drag an audio clip/file to the track header pane.
- ▶ Select **Cakewalk > XSampler** in the Plugin Browser.



## UI overview

To show the XSampler interface, open the Track Inspector for the Sampler track (Tip: double-click the Sampler track icon).












**A.** Browse audio **B.** Show/hide advanced settings **C.** Menu **D.** Gate mode **E.** Loop mode **F.** One-Shot mode **G.** Preview **H.** Record **I.** Bypass  
**J.** Expand/Collapse **K.** Root key **L.** Keyboard **M.** Crossfade handle

XSampler contains the following primary views:

- ▶ “Toolbar” on page 145
- ▶ “Waveform panel” on page 146
- ▶ “Keyboard view” on page 147
- ▶ “Control panel” on page 148

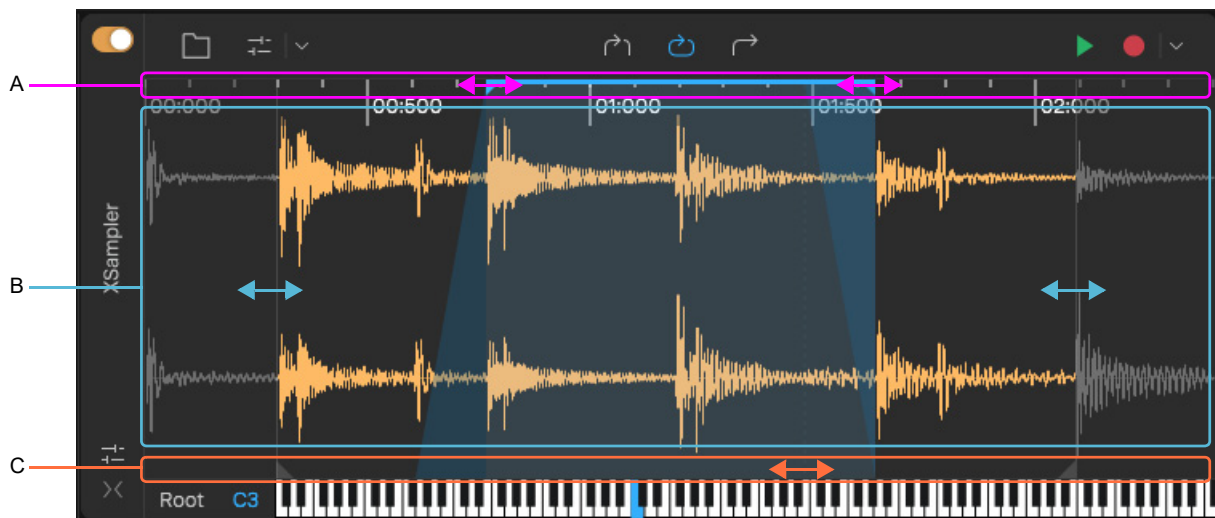
## Toolbar

The main toolbar contains the following controls:

- ▶ **Browse Audio** . Import an audio file from any folder. Supported formats include WAV, FLAC, OGG, MP3, M4A, AIF, AU, and WMA. You can also drag audio files directly into the Waveform panel.
- ▶ **Show/Hide Controls** . Show/hide the Control panel, which contains additional parameters that let you process the sample. For details, see [“Control panel”](#) on page 148.
- ▶ **Menu** . Click the menu button to show the following commands:
  - ▶ **Normalize Sample**. Normalize the audio sample using either peak or RMS normalization. For details, see [“Normalizing audio”](#) on page 193.
  - ▶ **Reverse Sample**. Reverse the audio sample, making it play backwards. For details, see [“Reversing audio”](#) on page 194.
- ▶ **Playback modes**. Select the sample’s playback mode:
  - ▶ **Gate** . The sample plays through its entirety or until a note off is received, at which point amplitude decreases steadily to -inf over the duration specified by the amplitude EG **Release** time.
  - ▶ **Loop** . The sample plays through until it reaches the loop end marker, at which point it seeks to the loop start marker, repeating until a note off event at a volume level specified by the **Sustain** level. When a note off occurs, volume decreases to -inf for the duration specified by the amplitude EG **Release** time. For details, see [“Looping the sample”](#) on page 155.
  - ▶ **One-Shot** . The sample plays from start to end whether a key is held or not, following only the **Attack** portion of the amplitude EG. If you retrigger the sample while it is already playing, it will play again from the beginning, and the previous instance will decrease to -inf for the duration specified by the amplitude EG **Release** time. One-Shot mode is suitable for single drum sounds or sound effects where you always want the entire sound to play.
- ▶ **Preview** . Preview the sample at its root note value (Tip: Use when adjusting the loop boundaries in Loop mode).
- ▶ **Record** . Record audio directly into XSampler from any audio input. To select the audio input source, click the drop-down menu  to open the Record Input menu. For details, see [“Recording a sample”](#) on page 151.

## Waveform panel

The waveform panel shows the audio waveform of the sample and allows you to graphically set the sample start and end points, set loop points, and set the loop crossfade length.



A. Loop drag zone B. Trim drag zone C. Crossfade drag zone

The Waveform panel is divided into three zones:

- ▶ **Top.** Drag to adjust the loop region in Loop mode. For details, see [“Looping the sample”](#) on page 155.
  - ▶ Right-click the time ruler to select the time format (**Absolute Time** or **Samples**).
- ▶ **Middle.** Drag the waveform edges to trim the sample. For details, see [“Trimming the sample”](#) on page 154.
  - ▶ Drag vertically to zoom.
  - ▶ Drag horizontally to scroll.
- ▶ **Bottom.** Drag the crossfade handle in Loop mode. For details, see [“Crossfading a looped sample”](#) on page 156.

As you move the pointer across the Waveform panel, it changes to indicate that you can move a marker.

You can also drag audio directly into the Waveform panel to import an audio clip or file.

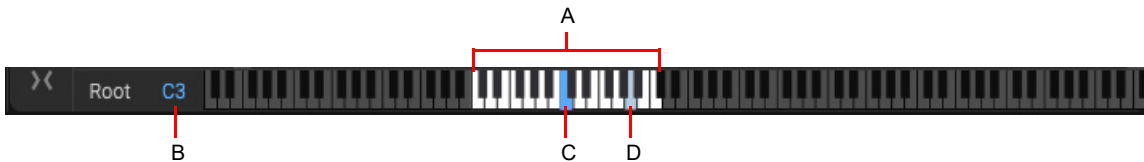
## Keyboard view

The Keyboard view provides the following capabilities:

- ▶ **Highlights playable key range.**
- ▶ **Play notes.** Click the keys will trigger the sample at the corresponding pitch. MIDI input keys are highlighted.
- ▶ **Set root key.** The root key is blue. To change the root key, hold down the CTRL (Windows) / CMD (Mac) key and click a key. You can also drag the **Root** parameter up/down.



If the **Stretch Mode** parameter in the Controls panel is set to **Original** or **n Bars**, the sample can be pitch shifted +/- 1 octave. Keys below the root key will play the sample at a lower pitch and slower speed. Keys above the root key will play the sample at a higher pitch and faster speed. The keyboard highlights the valid key range (blue root one +/- 1 octave). To transpose the key range, change the root note.



**A.** Key range **B.** Root key (drag up/down to adjust) **C.** Root key (hold down CTRL (Windows) / CMD (Mac) and click to set) **D.** Triggered key

See:

[“Triggering the sample”](#) on page 152

[“Key mapping”](#) on page 152

[“Setting the root note”](#) on page 153

## Control panel

The Control panel provides access to a number of sound shaping parameters, such as pitch, filter, and an amplitude generator (EG). Use these parameters to quickly change the sound of the sample.

The waveform display is still available in a smaller format, but the keyboard is hidden.

Figure 38. XSampler Control panel.



The Control panel contains the following:

- ▶ **Waveform preview.** The small waveform preview lets you perform the same functions as in the large waveform display. For details, see “[Waveform panel](#)” on page 146.
- ▶ **Amp Envelope section.** You have full control over the ADSR sections, which allow hold-sustain performance of the sample:
  - ▶ **Attack.** The time it takes for the sample to reach its target level after being triggered (0.00 milliseconds – 20.0 seconds).
  - ▶ **Decay.** The time it takes for the sample to reach its sustain level after the attack phase (1.00 milliseconds – 60.0 seconds).
  - ▶ **Sustain.** The level at which the sample will play while being held (-Inf dB – 0 dB).
  - ▶ **Release.** The time it takes for the sample level to fade after note release (1.00 milliseconds – 60.0 seconds).
  - ▶ **Mono.** Limits the number of simultaneous voices to one.
- ▶ **Mix section:**
  - ▶ **Gain.** Set the overall output volume level (-Inf dB – 6 dB).
  - ▶ **Pan.** Set the overall panorama position in the stereo field (100L – 100R).
  - ▶ **Audio Type.** Select the type that best matches the sampler’s audio material for optimized audio processing:
    - **Drums.**
    - **Vocals.**
    - **Music.**
- ▶ **Pitch section:**
  - ▶ **Shift.** Tune the sample pitch in semitone steps (-12 steps – 12 steps).
  - ▶ **Fine.** Fine tune the sample pitch in cents (-50 cents – 50 cents). One cent is 1/100th of a semitone.




▶ **Filter section:**

- ▶ **Cutoff Frequency.** Controls the filter cutoff frequency (20Hz – 20.0kHz).
- ▶ **Resonance.** Amount of signal emphasis relative to the cutoff frequency (0.10 – 10.00). Higher settings boost frequencies in the immediate vicinity of the cutoff frequency.
- ▶ **Filter Type.** Select a filter type to enable cutoff and resonance:
  - **None.** No filter is applied.
  - **LowPass.** Passes lower frequencies and attenuates content above the cutoff frequency.
  - **BandPass.** Passes a select range of frequencies that surround the cutoff frequency, and attenuates the portions above and below that band.
  - **HighPass.** Passes higher frequencies and attenuates content below the cutoff frequency.

▶ **Time Stretch section:**

- ▶ **Stretch Mode.** Specify the sample playback speed/duration:
  - **None.** The sample duration changes according to pitch. Keys below the root key will play the sample at a lower pitch and slower speed. Keys above the root key will play the sample at a higher pitch and faster speed.
  - **Original.** The sample plays at its original speed for all note pitches.
  - **n bars.** The sample duration matches the bars value relative to the current tempo.

 **Note:** If the **Stretch Mode** parameter is set to **Original** or **n Bars**, the sample can be pitch shifted +/- 1 octave, as indicated by the highlighted keyboard keys.

 **Note:** The parameters in the Control panel can be adjusted over time by using automation. For details, see “Automation” on page 197.

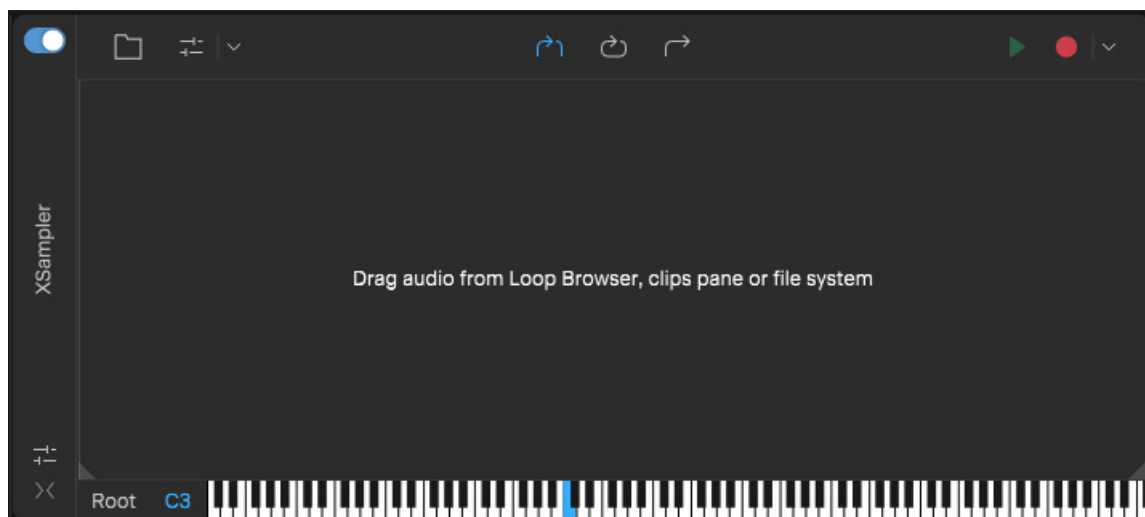
## Adding a sample

There are many ways to get audio into XSampler:


- ▶ Import audio from the file system (see “Importing a sample” on page 150)
- ▶ Drag loops and one-shots from the Loop Browser
- ▶ Drag audio clips from any track
- ▶ Record directly into XSampler (see “Recording a sample” on page 151)

### Importing a sample

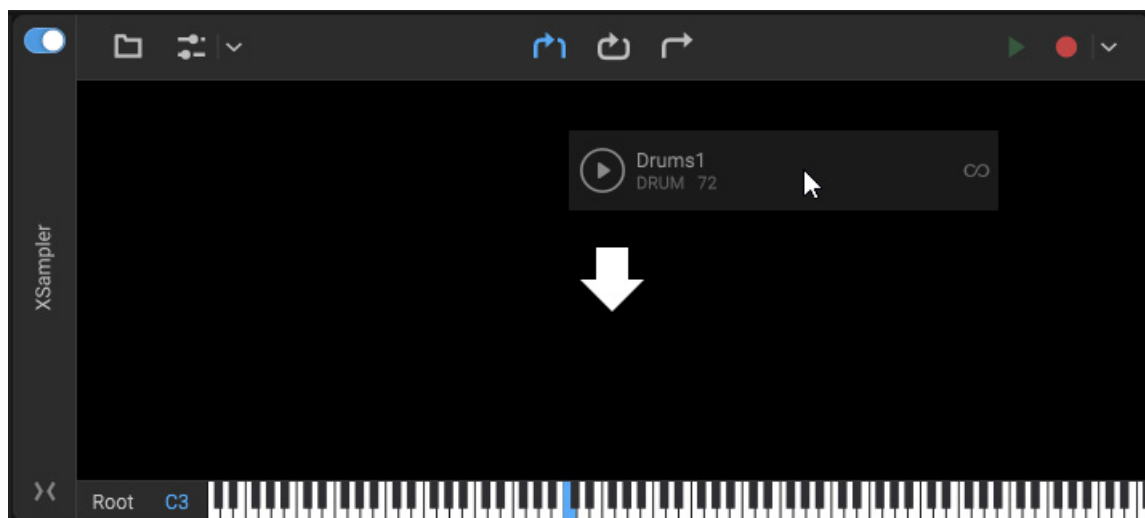
When you add a Sampler track, the sampler is initially empty, ready for you to import or record audio.



To import an audio file, do *one* of the following:

- ▶ Click the **Browse Audio**  button, then select the audio file that you want to import. Supported formats include WAV, FLAC, OGG, MP3, M4A, AIF, AU, and WMA. The button tooltip shows the imported audio file's full folder path.
- ▶ Drag a loop or one-shot from the Loop Browser to XSampler.
- ▶ Drag a clip from an audio track to XSampler.





The imported file is automatically copied to the project's `\Audio` folder.



**Note:** Each instance of XSampler can only store a single sample, so if you import or record another sample, it will overwrite the previous sample. You can select **Edit > Undo** to revert to the previous sample.

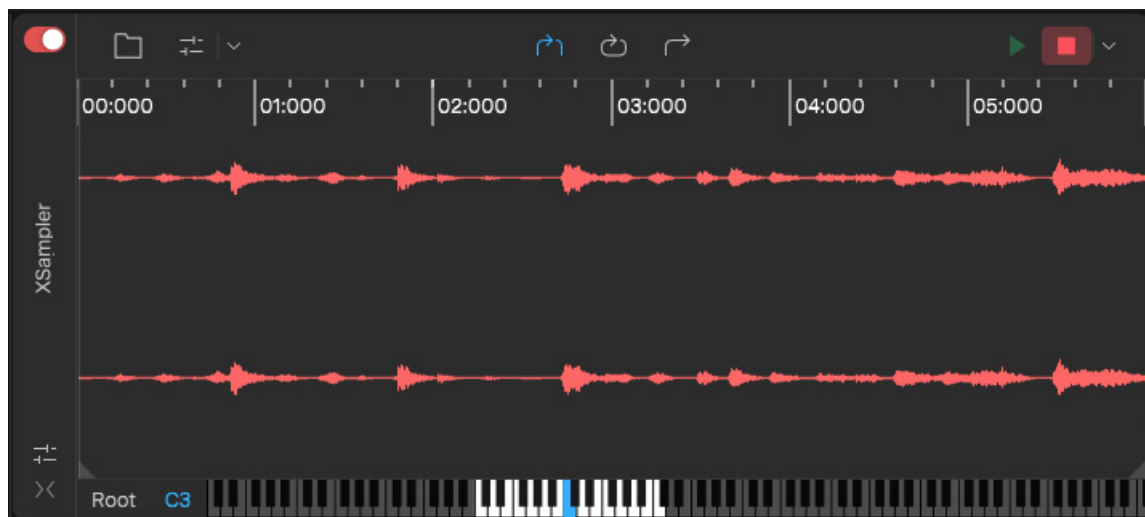
## Recording a sample

In addition to loading existing audio files, you can directly record your own samples into XSampler.

1. Click XSampler's **Record** button  drop-down menu  to open the Record Input menu, then select the desired audio input source. The first input is selected by default (mono).
2. Click XSampler's **Record** button  to start recording. During recording, the waveform appears in real-time.
3. Click the **Record** button  again to stop recording.

You can now play back the sample.

You may need to edit the start and end points of the recorded sample. For details, see ["Editing the sample"](#) on page 154 and ["Trimming the sample"](#) on page 154.



## Triggering the sample

There are several ways to trigger XSampler:

- ▶ Click the XSampler keyboard keys (see “[Keyboard view](#)” on page 147)
- ▶ Use an external MIDI controller as the Sampler track’s input (see “[Playing an instrument from a MIDI controller](#)” on page 141)
- ▶ Use the Virtual MIDI Controller while the XSampler track has focus (see “[Virtual MIDI Controller](#)” on page 61)
- ▶ Play back MIDI notes from the Piano Roll view (see “[Editing MIDI notes in the Piano Roll](#)” on page 127 and “[Clip inspector / Piano Roll view](#)” on page 83)

There are three primary settings that determine how a sample behaves when triggered:

- ▶ **Sample Playback Mode.** The sample playback mode determines whether sample playback stops on key release or plays through the entirety of the sample (see “[Setting the sample playback mode](#)” on page 153)
- ▶ **Root key.** The root key specifies which key plays the sample at its original pitch and speed (see “[Setting the root note](#)” on page 153).
- ▶ **Stretch Mode.** If the **Stretch Mode** control is set to **Original** or **n Bars**, the sample can be pitch shifted +/- 1 octave from the root key. The keyboard highlights the valid key range. To transpose the valid key range, you must change the root note.

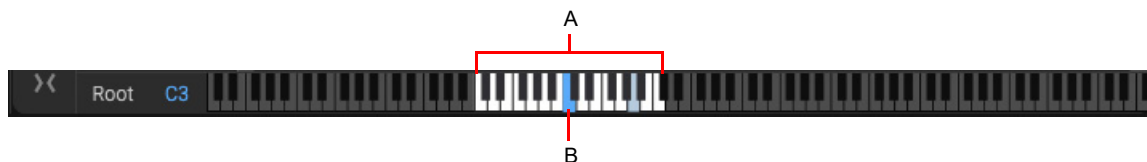
### Key mapping

The sample is mapped to keys above and below the defined root key. Keys below the root key will play the sample at a lower pitch, and keys above the root key will play the sample at a higher pitch.

By default, XSampler automatically maps the sample across the entire MIDI note range (0–127) and sets the root note to C3.



If the **Stretch Mode** parameter in the Controls panel is set to **Original** or **n Bars**, the sample can be pitch shifted +/- 1 octave from the root key. Any incoming MIDI note events within this range will trigger the assigned sample. The keyboard highlights the valid key range (blue root one +/- 1 octave). To transpose the valid key range, you must change the root note (see “[Setting the root note](#)” on page 153).



**A.** Key range **B.** Root key

See:

“[Keyboard view](#)” on page 147

“[Setting the root note](#)” on page 153

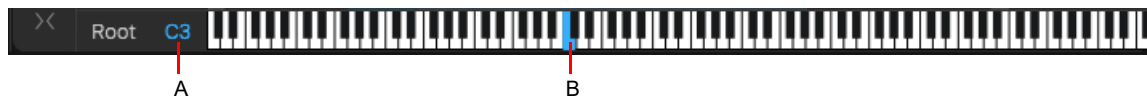
“[Control panel](#)” on page 148

## Setting the root note

The sample is mapped to keys above and below the defined root key. The root key defines which keyboard note value is used to play the sample at the original pitch. Keys below the root key will play the sample at a lower pitch, and keys above the root key will play the sample at a higher pitch.

To change the root key, do *one* of the following:

- ▶ To the left of the keyboard, drag the **Root** value up/down
- ▶ Hold down the CTRL (Windows) / CMD (Mac) key and click the desired keyboard key






A. Root key (drag up/down to adjust) B. Root key (hold down CTRL (Windows) / CMD (Mac) and click to set)

**Note:** You can only click highlighted keys. If the desired root key is outside the current key range, hold down the CTRL (Windows) / CMD (Mac) key and drag the blue root key to the desired key.

## Setting the sample playback mode

The sample playback mode determines whether sample playback stops on key release or plays through the entirety of the sample.


To specify the sample playback mode, select one of the following modes in the main toolbar:


- ▶ **Gate** . The sample plays through its entirety or until a note off is received, at which point amplitude decreases steadily to -inf over the duration specified by the amplitude EG **Release** time.
- ▶ **Loop** . The sample plays through until it reaches the loop end marker, at which point it seeks to the loop start marker, repeating until a note off event at a volume level specified by the **Sustain** level. When a note off occurs, volume decreases to -inf for the duration specified by the amplitude EG **Release** time. For details, see [“Looping the sample”](#) on page 155.
- ▶ **One-Shot** . The sample plays from start to end whether a key is held or not, following only the **Attack** portion of the amplitude EG. If you retrigger the sample while it is already playing, it will play again from the beginning, and the previous instance will decrease to -inf for the duration specified by the amplitude EG **Release** time. One-Shot mode is suitable for single drum sounds or sound effects where you always want the entire sound to play.

## Editing the sample

You can use the Waveform panel to set the trim start and end points, set loop points, and set the crossfade duration.

Use the Control panel to apply pitch shifting, ADSR envelope and filters.

You can use the Control panel to change the sound of the sample by applying various processing effects, including filters, pitch shifting, and ADSR amplitude envelope. To access these settings, click the **Show/Hide Controls**  button to show the Control panel. For details, see [“Control panel”](#) on page 148.

 **Tip:** You can modulate parameters over time by using automation. For details, see [“Automation”](#) on page 197.

See:

[“Trimming the sample”](#) on page 154

[“Looping the sample”](#) on page 155

[“Crossfading a looped sample”](#) on page 156

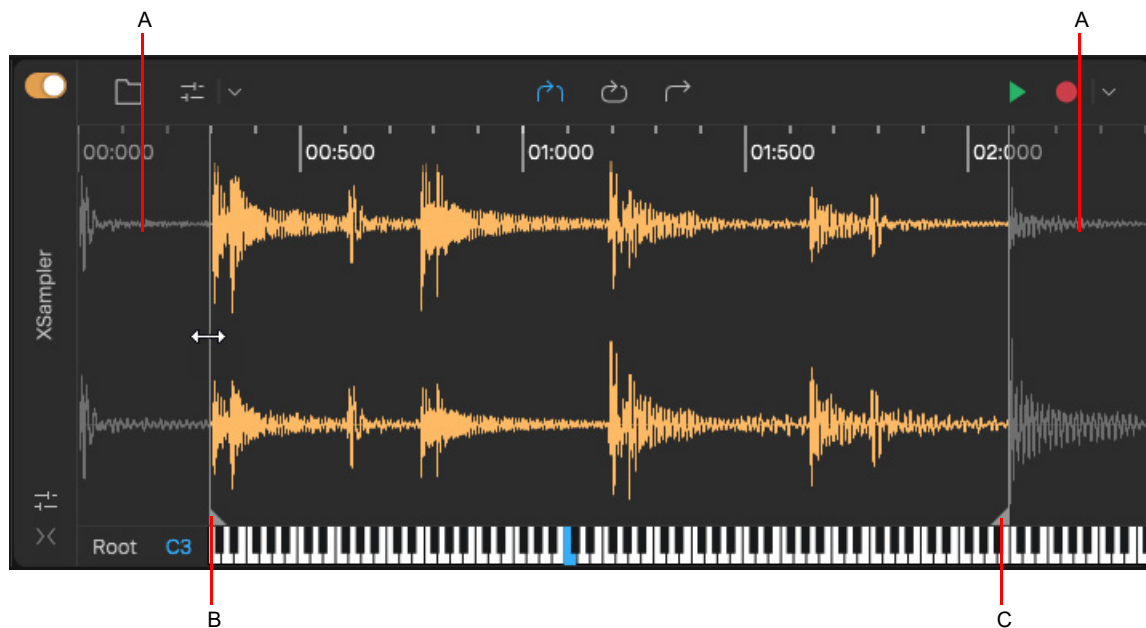
[“Normalizing the sample”](#) on page 156

[“Reversing the sample”](#) on page 156

[“Waveform panel”](#) on page 146


### Trimming the sample

To trim the start or end of the sample, drag the left or right edge of the waveform. The trimmed area is dimmed, and will not be audible during playback.



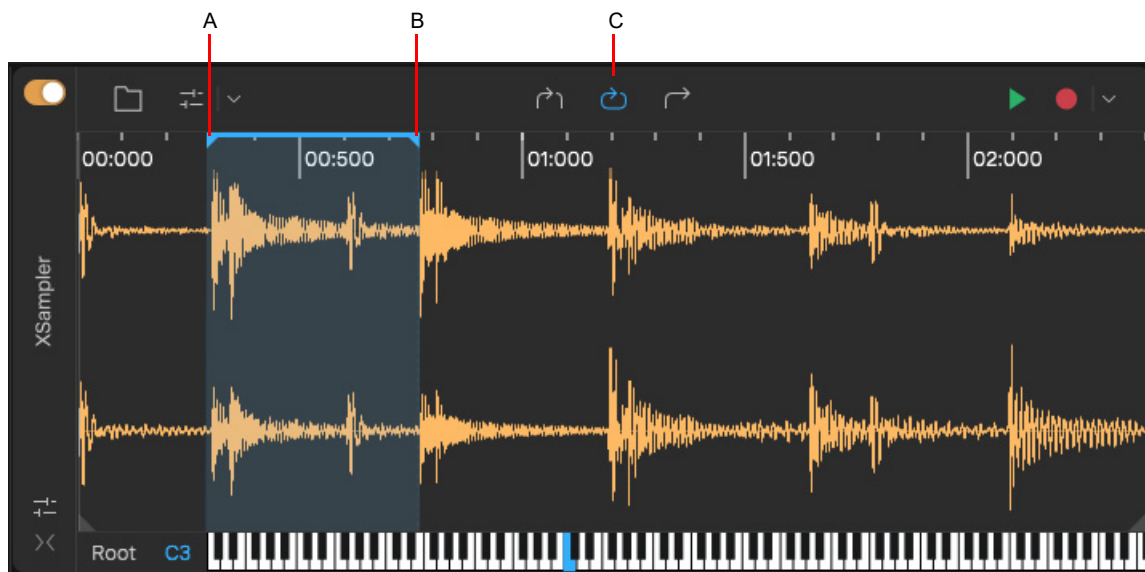
*A. Trimmed region B. Trim start C. Trim end*

## Looping the sample

To loop a sample, set its playback mode to **Loop** . The loop region is indicated by a blue bar above the waveform.

To adjust the loop region, drag in the loop zone, or drag the loop start and loop end handles. To move the entire loop region, hold down the



To move the loop region, hold down the CTRL (Windows) / CMD (Mac) key and drag the blue loop range to the desired location.




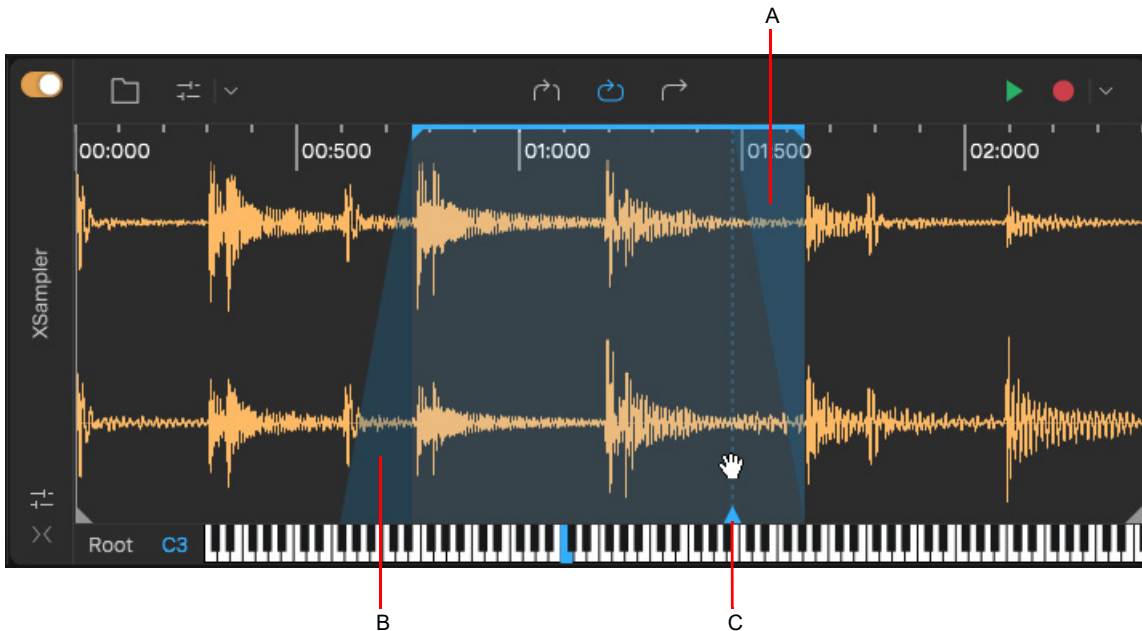
A. Loop start B. Loop end C. Loop enable/disable

 **Tip:** To make sure the sample loops smoothly, click the **Preview**  button so you can hear the results while you adjust the loop start and loop end points.

## Crossfading a looped sample


When a sample's playback mode is set to **Loop** , you can adjust the crossfade length between the loop start and loop end. To do so, drag the crossfade handle  left/right.

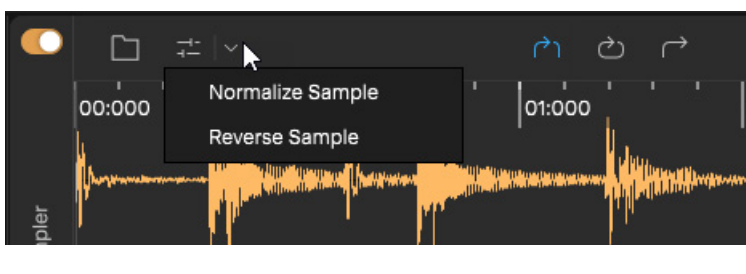
 **Note:** The crossfade handle cannot be moved if the loop region starts at the beginning of the sample.




A. Fade out B. Fade in C. Crossfade handle

## Normalizing the sample

To normalize the audio sample, click the menu button  and select **Normalize Sample**. For details, see [“Normalizing audio”](#) on page 193.



## Reversing the sample

To reverse the audio sample so plays backwards, click the menu button  and select **Reverse Sample**. For details, see [“Reversing audio”](#) on page 194.

See:

[“Instruments”](#) on page 139

[“XSampler”](#) on page 142



## Pad Controller



Figure 39. Pad Controller.



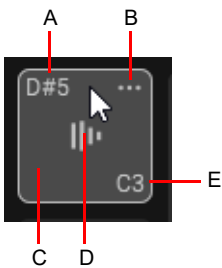
*Pad Controller* consists of 16 trigger pads that can trigger audio samples or instruments. Each pad can contain a single sample or instrument. You can drag existing audio files to a pad, or record new audio directly to a pad. Pads can be triggered via a MIDI controller, by clicking, or from notes in an Instrument track.

### Inserting Pad Controller

To insert *Pad Controller*, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Pad Controller** .
- ▶ Select **Insert > Insert Pad Controller Track**.
- ▶ Press CTRL+SHIFT+P (Windows) / CMD+SHIFT+P (Mac).
- ▶ Select **Cakewalk > Pad Controller** in the Plugin Browser.

### UI overview





**A.** Input note **B.** Options menu **C.** Click empty background to give focus to the pad **D.** Audio or Instrument icon (click to trigger pad) **E.** Output/root note

Each pad contains the following:

- ▶ **Input note (top left).** Input: Which MIDI note the pad responds to. This is the note that triggers the pad. The 16 pads can be triggered via MIDI. The 16 pads are assigned to 16 consecutive MIDI pitches. Drag the slider to set the pitch range for all 16 pads. The default range is C3 – D#4.
- ▶ **Output note (bottom right).** Which MIDI note the pad transmits when triggered. Click to give focus (XSampler); Want to default to root note of sample
- ▶ **Icon/Trigger.** Click to trigger sample; drag audio to pad or record in-place

► **Options menu** .

- **Browse Audio.** Import an audio file into the pad. The audio sample is loaded into an instance of XSampler. For details, see [“Importing audio to a pad”](#) on page 159.
  - **Insert Empty XSampler.** Add an empty instance of XSampler, which you can record into or import audio into.
  - **Browse Instruments.** Assign an instrument to the pad. For details, see [“Assigning an instrument to a pad”](#) on page 160.
  - **Delete.** Clear the pad so it becomes empty. For details, see [“Clearing a pad”](#) on page 162.
- **Icon.** Indicates if a pad contains an audio sample  or an instrument . Click the icon to trigger the pad. The pad is empty if it has no icon.

See:

- [“Adding content to a pad”](#) on page 158
- [“Importing audio to a pad”](#) on page 159
- [“Recording audio to a pad”](#) on page 160
- [“Assigning an instrument to a pad”](#) on page 160
- [“Triggering a pad”](#) on page 161
- [“Stopping a pad from playing”](#) on page 161
- [“Specifying a pad’s MIDI input note”](#) on page 162
- [“Specifying a pad’s root \(output\) note”](#) on page 162
- [“Clearing a pad”](#) on page 162

## Adding content to a pad

Each pad can be assigned to an audio file or instrument. There are several ways add content to a pad:

- Import audio from the file system (see [“Importing audio to a pad”](#) on page 159)
- Drag loops and one-shots from the Loop Browser
- Drag audio clips from any track
- Record directly into a pad (see [“Recording audio to a pad”](#) on page 160)
- Insert an instrument (see [“Assigning an instrument to a pad”](#) on page 160)

See:

- [“Importing audio to a pad”](#) on page 159
- [“Recording audio to a pad”](#) on page 160
- [“Assigning an instrument to a pad”](#) on page 160

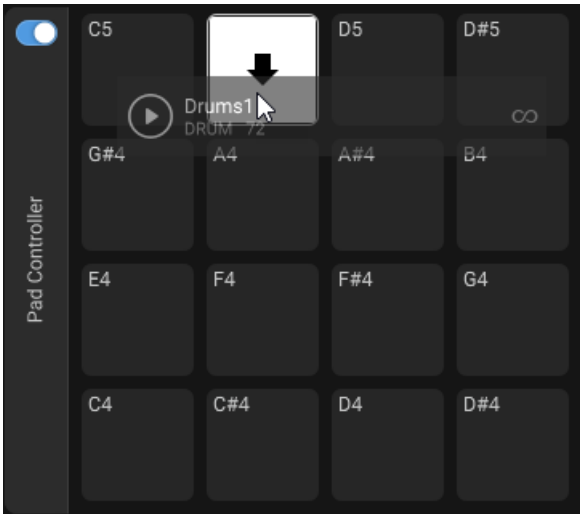
## Importing audio to a pad

There are several ways import audio to a pad:

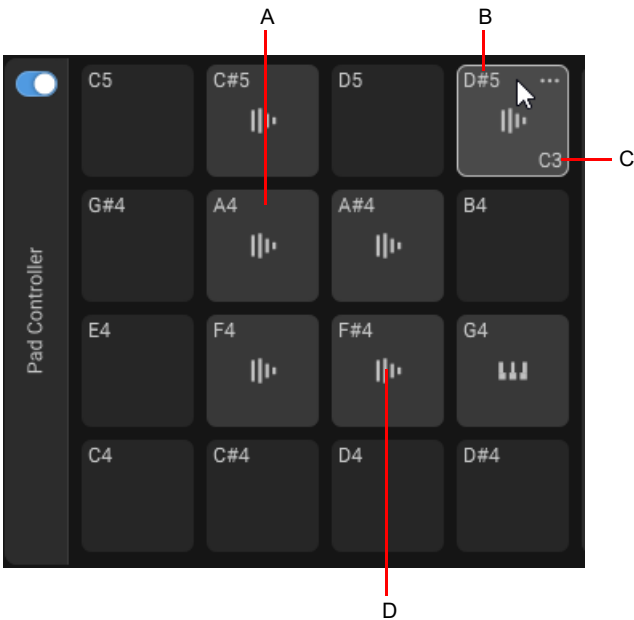
- ▶ Drag loops and one-shots from the Loop Browser to the pad
- ▶ Drag audio clips from any track to the pad
- ▶ Click the pad's Options button **⋮** and select **Browse Audio**.

The audio sample is loaded into a new instance of XSampler (see “XSampler” on page 142).

To show the imported audio in XSampler for a specific pad, click anywhere on the pad's empty background to give it focus. The focused pad is outlined.








Pads that contain audio content are indicated by an audio icon



**A.** Click a pad's empty background to give focus to the pad (the focused pad is highlighted) **B.** Trigger pitch **C.** Root key **D.** Waveform icon indicates that the pad contains audio

## Recording audio to a pad

To record audio to a pad:

1. Click the pad's Options button  and select **Insert Empty XSampler** to insert an empty instance of XSampler.
2. Click XSampler's **Record** button  drop-down menu  to open the Record Input menu, then select the desired audio input.
3. Click XSampler's **Record** button  to start recording.
4. Click the **Record** button  again to stop recording.



See also:

[“XSampler”](#) on page 142

[“Recording a sample”](#) on page 151

## Assigning an instrument to a pad

To assign an instrument to a pad, click the pad's Options button  and select **Browse Instruments**, then select the desired instrument.

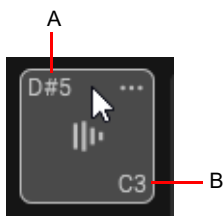
Pads that contain an instrument content are indicated by an instrument icon

See also:

[“Inserting an instrument”](#) on page 139

## Triggering a pad

Each pad has an input note and an output note. The input note in the top left corner is the MIDI note that triggers the pad. The output note in the bottom right corner is the MIDI note the pad transmits when triggered. For details, see “[Specifying a pad’s MIDI input note](#)” on page 162 and “[Specifying a pad’s root \(output\) note](#)” on page 162.

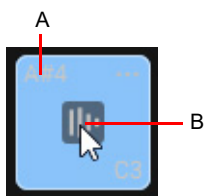


**A.** Input/Trigger note **B.** Output/root note

There are several ways to trigger a pad:

- ▶ Click the pad’s icon
- ▶ From an external MIDI controller (see “[Playing an instrument from a MIDI controller](#)” on page 141).
- ▶ From *Nex*’s virtual on-screen keyboard controller (see “[Virtual MIDI Controller](#)” on page 61).
- ▶ By playing back recorded MIDI data on the Pad Controller track (see “[Playing an instrument with recorded MIDI data](#)” on page 141).

A pad becomes highlighted when triggered.



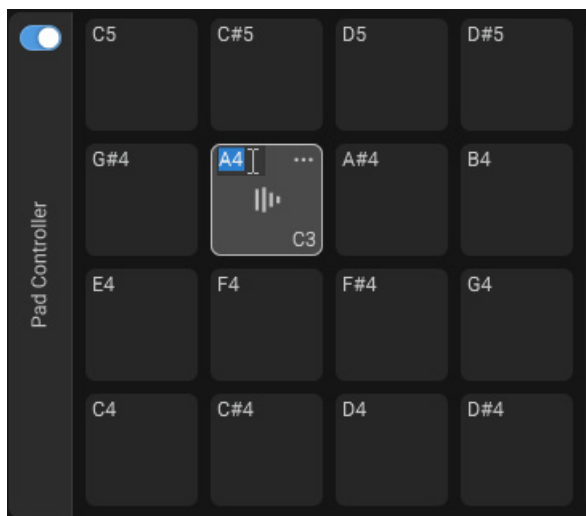
**A.** Input/Trigger note (double-click to edit) **A.** Click the icon to trigger the pad

## Stopping a pad from playing

To stop a pad from playing/previewing, click any empty area on the pad.

## Specifying a pad's MIDI input note

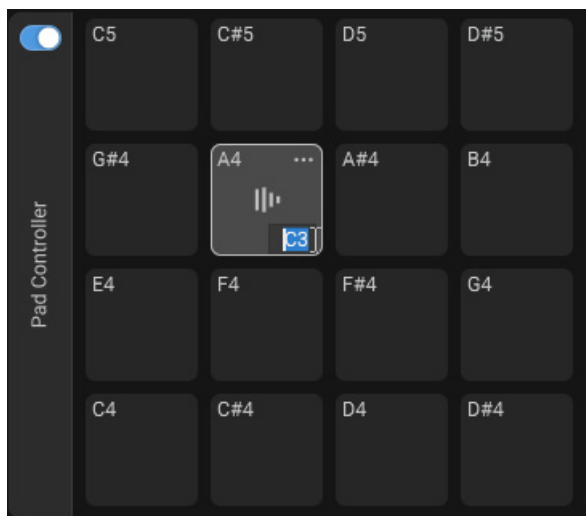
The 16 pads can be triggered via MIDI. By default, the 16 pads are assigned to 16 consecutive MIDI pitches (C4 – D#5). To change a pad's input note, double-click the pad's input note label.




**Note:** When editing a pad Controller track in the Piano Roll editor, the editor only shows the 16 notes that correspond to the Pad Controller's input notes. For details, see [“Clip inspector / Piano Roll view”](#) on page 83 and [“Note names and icons”](#) on page 85.

## Specifying a pad's root (output) note

A pad's root/output note determines which MIDI note the pad triggers. To change a pad's output/ note, double-click the pad's output note label.



## Clearing a pad

To clear all content from a pad, click the pad's Options button  and select **Clear Pad**.

See:

[“Instruments”](#) on page 139

[“XSampler”](#) on page 142

## Instrument Rack

Figure 40. Instrument Rack.



Instrument Rack is a multi-instrument container, similar to Pad Controller, which allows you to layer multiple virtual instruments so they can be played simultaneously in parallel within a single track. Key capabilities include:

- ▶ Up to 16 instruments can be added to each instance of Instrument Rack
- ▶ Adjust volume and pan per instrument
- ▶ Specify the MIDI input channel per instrument
- ▶ Isolate or overlap note ranges and velocity ranges
- ▶ Add affects to each individual instrument and master effects for the entire rack

See:

[“Inserting Instrument Rack”](#) on page 163

[“UI overview”](#) on page 164

[“Inserting an instrument in the rack”](#) on page 167

[“Specifying the MIDI input channel”](#) on page 168



[“Adjusting the velocity range”](#) on page 169

[“Adjusting the note range”](#) on page 170

[“Adding effects”](#) on page 171

### Inserting Instrument Rack

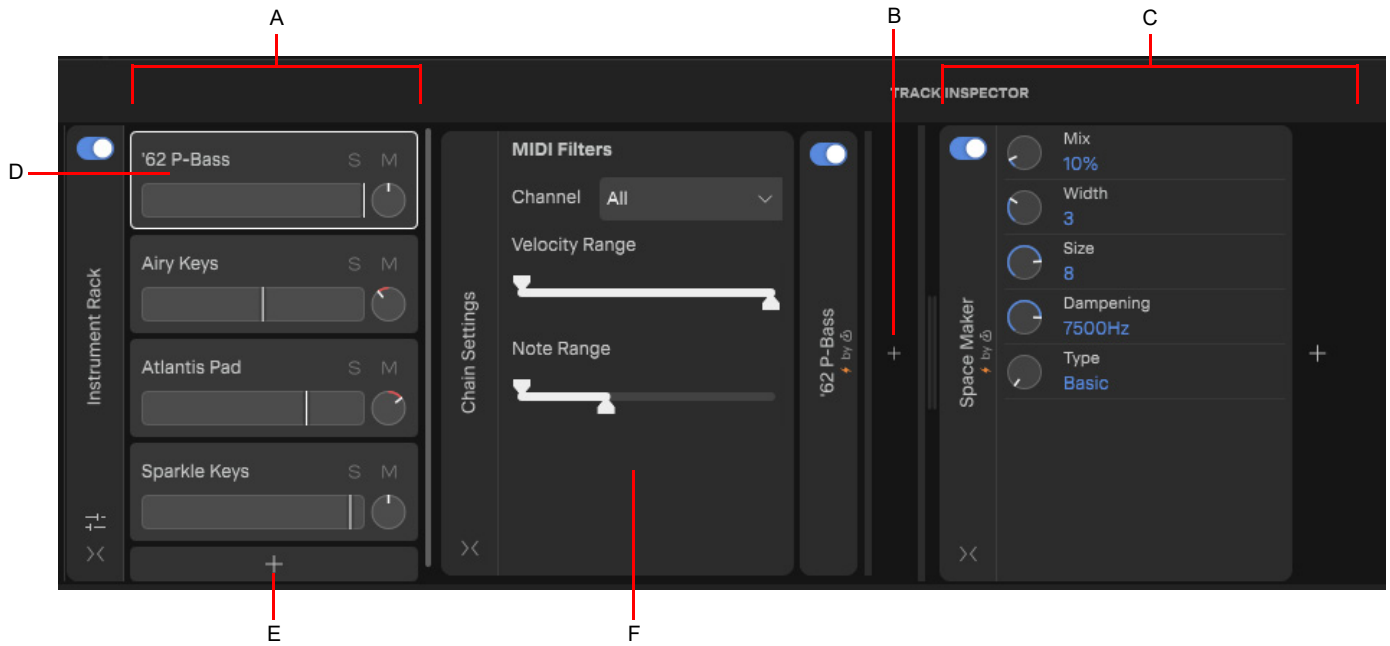
To insert Instrument Rack, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Instrument Rack** .
- ▶ Select **Insert > Insert Instrument Rack Track**.
- ▶ Press CTRL+SHIFT+R (Windows) / CMD+SHIFT+R (Mac).
- ▶ Select **Cakewalk > Instrument Rack** in the Plugin Browser.

## UI overview

To show the Instrument Rack interface, open the Track Inspector for the Instrument Rack track (Tip: double-click the Instrument Rack track icon).

Figure 41. *Instrument Rack.*



**A.** Instrument Rack **B.** Add slot effects **C.** Rack master effects **D.** Selected rack item **E.** Add instrument to rack **F.** Chain Settings module for selected instrument/slot

Instrument Rack contains the following primary modules:

- ▶ “Rack” on page 165
- ▶ “Chain Settings” on page 166



## Rack

Each instrument slot contains the following controls:

- ▶ **Instrument name.** Name of the inserted instrument.
- ▶ **Chain Solo.** Solo the instrument within the Instrument Rack chain.
- ▶ **Chain Mute.** Mute the instrument
- ▶ **Chain Volume.** Set the instrument's output volume level (-Inf dB – 6 dB). To specify if the level is pre- or post-fader (track volume), right-click the slider and select **Pre Fader** or **Post Fader**.
- ▶ **Pan.** Set the instrument's panorama position in the stereo field (100L – 100R).



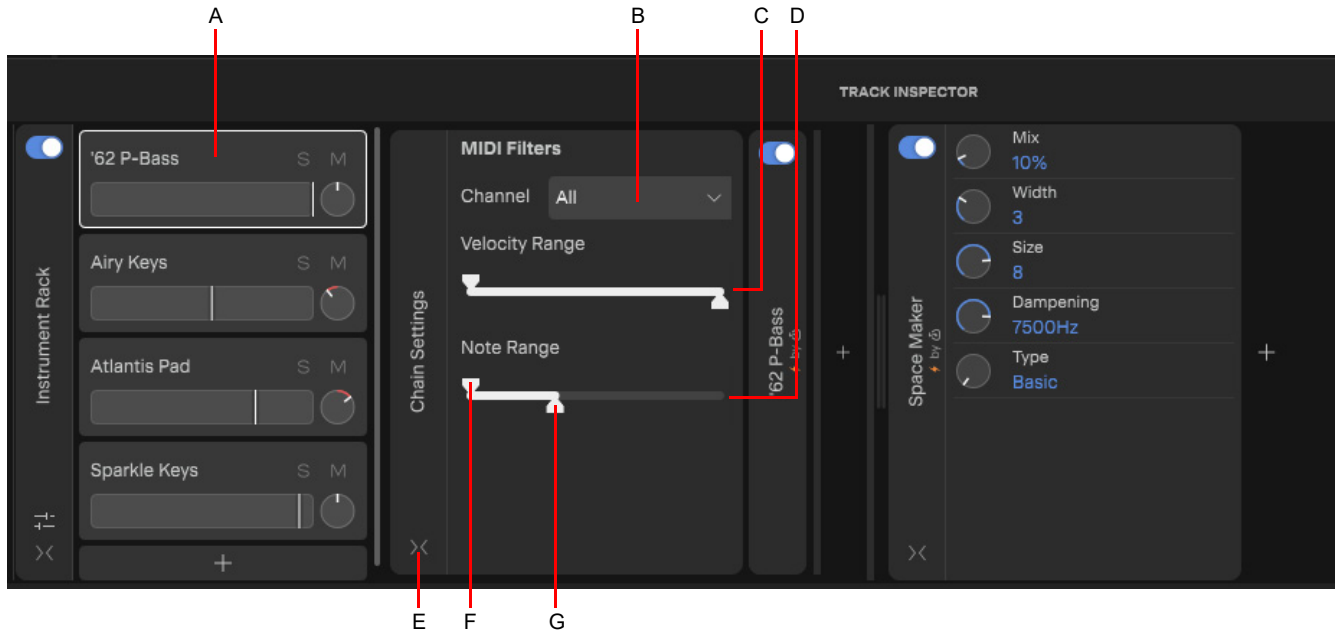
A. Instrument name B. Solo C. Mute D. Volume E. Pan F. Add instrument to rack

## Chain Settings

The Chain Settings module shows MIDI input filter settings for the selected instrument slot:

▶ **MIDI Filters:**

- ▶ **Channel.** MIDI input channel (All, 1–16).
- ▶ **Velocity Range.** Drag the Low and High handles horizontally to specify the MIDI note velocity range.
- ▶ **Note Range.** Drag the Low and High handles horizontally to specify the MIDI note range.

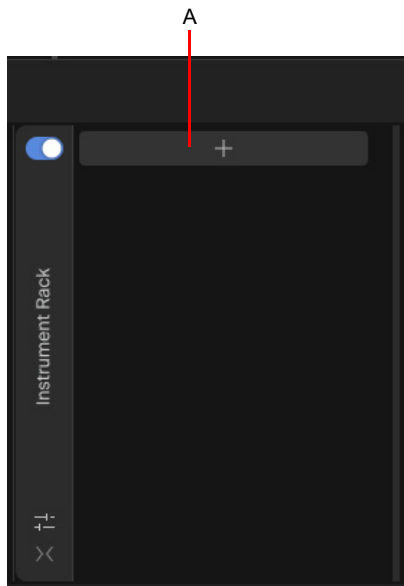


A. Selected instrument B. MIDI input channel C. Velocity Range D. Note Range E. Expand/collapse chain settings F. Low handle G. High handle


## Inserting an instrument in the rack

To insert an instrument in the rack, click the + button in the Instrument Rack module.

You can add up to 16 instruments in a rack. An instrument slot may contain any AU, VST, BandLab or Cakewalk instrument, excluding instances of Instrument Rack and Pad Controller



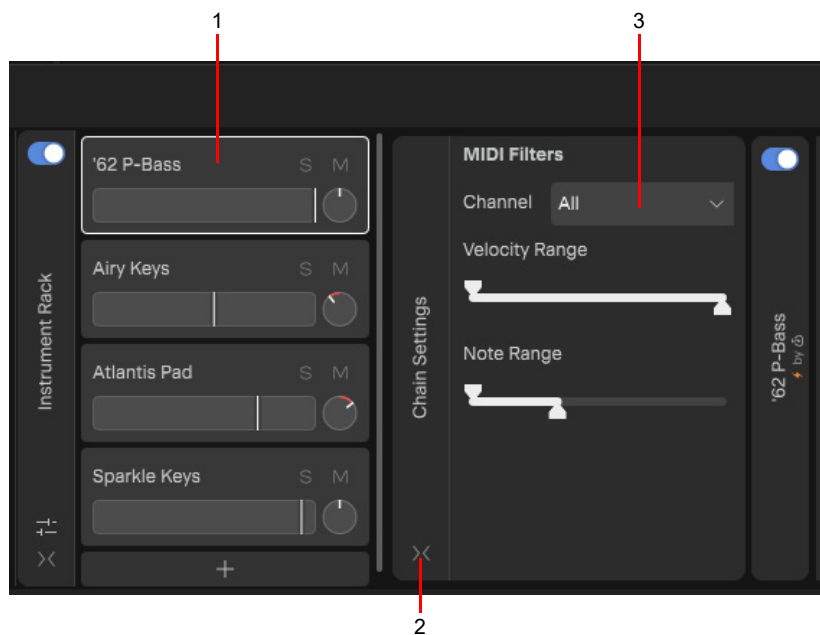
A. Add instrument to rack

 **Tip:** To replace an instrument in the rack, right-click the instrument name and select **Browse Instruments**.

## Specifying the MIDI input channel

To specify an instrument slot's MIDI input channel:

1. Select the instrument slot in the rack.
2. Expand the Chain Settings module.
3. Click the **Channel** drop-down menu and select the desired MIDI input channel (All, 1–16).




1. Select instrument slot 2. Expand Chain Settings module 3. Select MIDI input channel

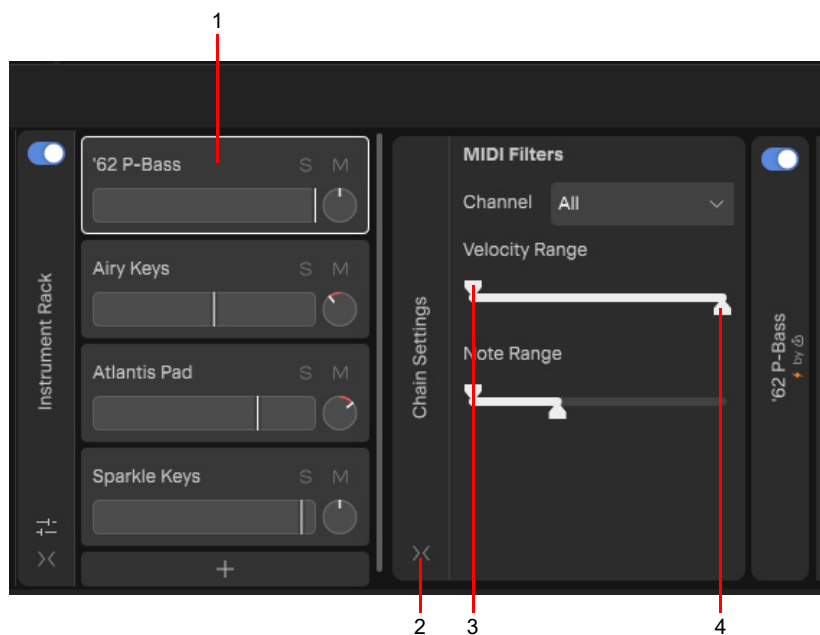
## Adjusting the velocity range

Velocity zones allow you to trigger specific instruments depending on the velocity of incoming MIDI notes. For example, trigger a fingered bass instrument when playing softly, and trigger a slap bass instrument when playing loudly. This is achieved by assigning each instrument in the rack to a unique velocity range.

To set an instrument slot's note velocity range:

1. Select the instrument slot in the rack.
2. Expand the Chain Settings module.
3. Under **Velocity Range**, drag the Low handle to set the lowest velocity value.
4. Drag the High handle to set the highest velocity value.

 **Tip:** To shift the current velocity range, hold down the **SHIFT** key and drag the range control left/right.




1. Select instrument slot 2. Expand Chain Settings module 3. Drag Low handle 4. Drag High handle

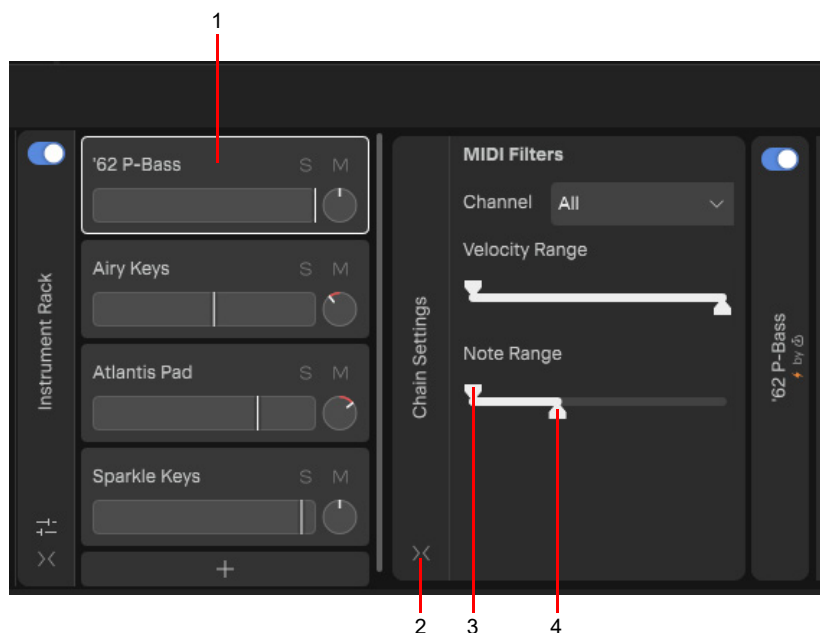
## Adjusting the note range

By adjusting the note range for each instrument in the rack, you can layer/blend different instruments that share the same note range, or isolate instruments by assigning unique note ranges to each instrument. For example, trigger a bass with the lowest octave, trigger a piano with the middle octaves, and trigger strings with the top octave.

To set an instrument slot's note velocity range:

1. Select the instrument slot in the rack.
2. Expand the Chain Settings module.
3. Under **Note Range**, drag the Low handle to set the lowest note value.
4. Drag the High handle to set the highest note value.


 **Tip:** To shift the current note range, hold down the **SHIFT** key and drag the range control left/right.




1. Select instrument slot 2. Expand Chain Settings module 3. Drag Low handle 4. Drag High handle

## Adding effects

You can add effects to individual instrument slots or master effects to the entire Instrument Rack.

To add an effect to only the selected instrument slot, click the small **Add Effect**  button in the Track Inspector. Slot effects are only shown for the selected slot.

To add an effect to the entire Instrument Rack, click the large rightmost **Add Effect**  button in the Track Inspector. Master rack effects are always shown, regardless of which instrument slot is selected.



**A.** Selected instrument **B.** Add effects to selected instrument slot **C.** Add master effects to entire Instrument Rack

See also:

[“Effects”](#) on page 179

See:

[“Instruments”](#) on page 139

[“Instrument Rack”](#) on page 163





# Mixing

*Cakewalk Next*® lets you mix your projects with tremendous control and flexibility, with support for track folders, buses, sends, VST plugins, metering, and automation. Track view and Track Inspector contain all the controls you need to mix your project.

See:

[“Adjusting levels”](#) on page 174

[“Aux sends”](#) on page 175

[“Quick grouping”](#) on page 178

[“Effects”](#) on page 179

[“Inserting effects”](#) on page 179

[“Inserting BandLab effect chains”](#) on page 180

[“Opening an effect’s UI”](#) on page 185

[“Mapping plugin parameters”](#) on page 186

[“Bypassing effects”](#) on page 188

[“Replacing effects”](#) on page 188

[“Removing effects”](#) on page 188

[“VST plugin scanner”](#) on page 189

[“Converting MIDI to audio”](#) on page 192

[“Bouncing audio”](#) on page 192

[“Normalizing audio”](#) on page 193

[“Reversing audio”](#) on page 194

[“Plugin Management”](#) on page 195

See also:

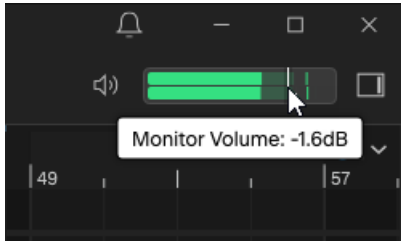
[“Automation”](#) on page 197

[“Stem separation”](#) on page 135

## Adjusting levels

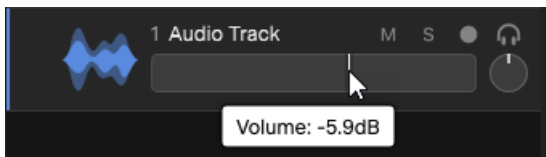
### Adjusting the monitor level

To adjust the monitor level, drag the **Monitor Level** knob in the main toolbar.



### Adjusting track levels

To adjust a track, bus, or track folder's playback level, drag its **Volume** slider.



To reset a slider to its default value, double-click the slider, or hold down the ALT (Windows) / OPTION (Mac) key and click the slider. To adjust with fine resolution, hold down the SHIFT key and drag a slider.

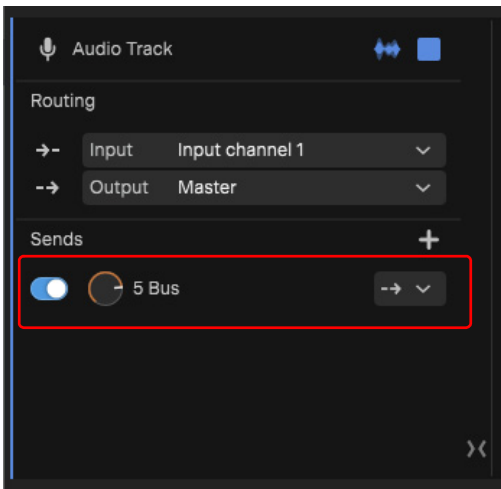
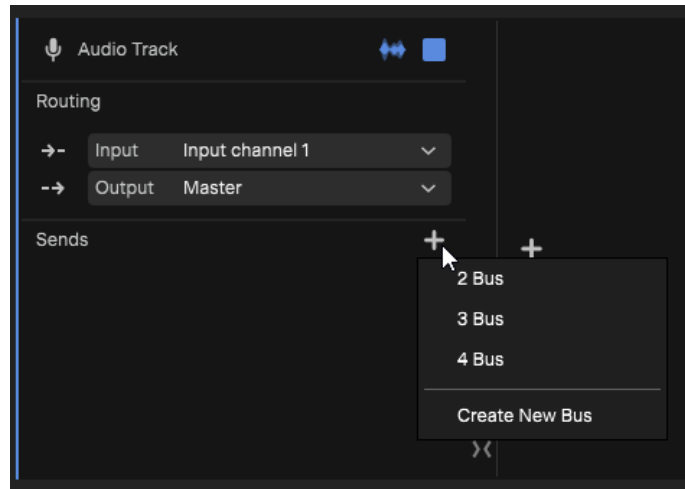
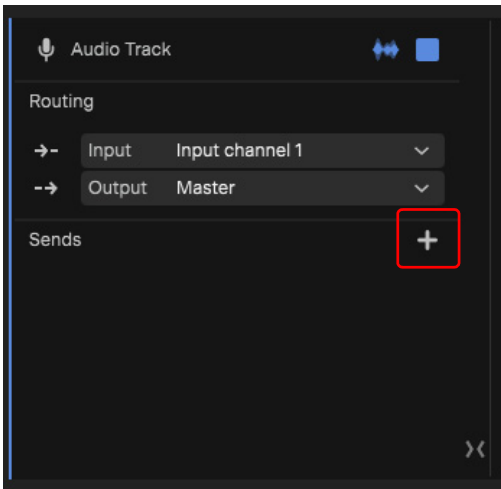
## Aux sends

Aux sends allow you to process multiple tracks with the same effects, such as reverb. Instead of inserting the same effect on all tracks, you can insert a single instance of the effect on a bus, then send multiple tracks to that bus.

A track can contain multiple sends, and each send can be tapped before or after the track's volume control. Each track's audio passes through the track's send level on its way to the bus.

### Inserting a send

To add a new aux send, click the **Add Send** button **+** in the track's Track Inspector, then select an existing bus or select **Create New Bus** to create a new bus.



Each send contains the following controls:




- ▶ **Bypass.** Bypass the send.
- ▶ **Name.** Name of the destination bus.
- ▶ **Send level.** Controls volume of audio data sent by the send.
- ▶ **Tap point.** Specify the send's tap point:
  - ▶ **Input** . The send signal goes to the bus prior to the track's effects.
  - ▶ **Pre Fader** . The send signal goes to the bus prior to the track's volume fader.
  - ▶ **Post Fader** . The send signal goes to the bus after the volume fader.




Figure 42. Send controls.

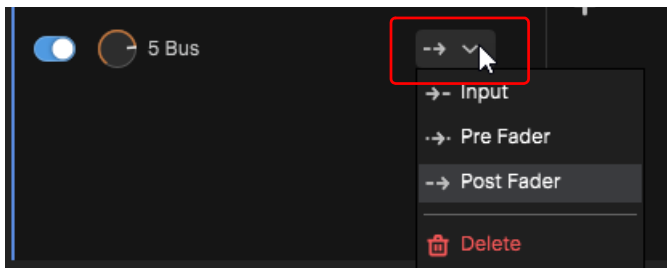


A. Bypass B. Send level C. Send destination D. Tap point (Input, Pre Fader, or Post Fader)


### Specifying a send's tap point

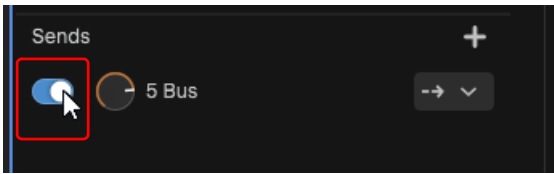
A send can be tapped before or after the track's volume control. Each track's audio passes through the track's send level on its way to the bus. To specify the tap point, click the tap point menu and select one of the following:

- ▶ **Input** . The send signal goes to the bus prior to the track's effects.
- ▶ **Pre Fader** . The send signal goes to the bus prior to the track's volume fader.
- ▶ **Post Fader** . The send signal goes to the bus after the volume fader.

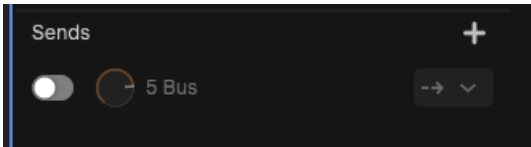


## Bypassing a send

To bypass/unbypass a send, click its **Bypass** button .

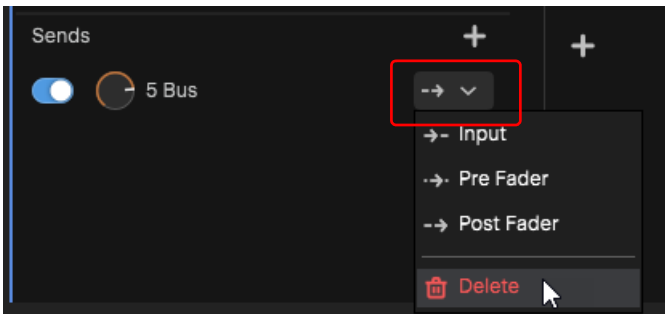


When bypassed, the send is dimmed.



## Deleting a send

To delete a send, click the tap point menu (Input/Pre Fader/Post Fader) and select **Delete Send**.



---

## Quick grouping


By default, adjusting a control only affects that specific control. Quick Groups allow you to effortlessly adjust identical controls across multiple selected tracks or buses.

The following controls can be adjusted via a Quick Group:

- ▶ Volume
- ▶ Pan
- ▶ Mute
- ▶ Solo
- ▶ Record Arm
- ▶ Track Monitor
- ▶ Effect module bypass

To use Quick Groups, do *one* of the following:

- ▶ **To adjust identical controls by a relative amount.** Select the tracks you want to adjust, then hold down the CTRL (Windows) / CMD (Mac) key and adjust a control in any selected track. Cakewalk Next® automatically applies the same delta value to all other selected tracks. Button states will invert.
- ▶ **To adjust identical controls by an absolute amount.** Select the tracks you want to adjust, then hold down CTRL+ALT (Windows) / CMD+OPTION (Mac) and adjust a control in any selected track. Cakewalk Next® automatically applies the same value to all other selected tracks.

 **Note:** *Quick Groups do not work between tracks and buses.*

---

## Effects


You can add audio effects to tracks, track folders, and buses. Effects are processed in real-time, preserving your track's original data.

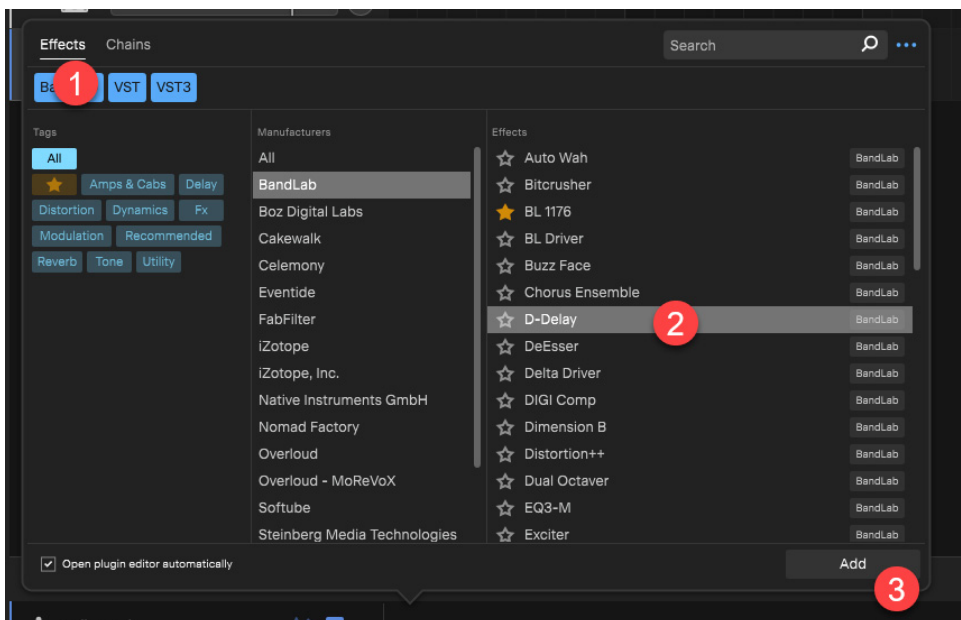
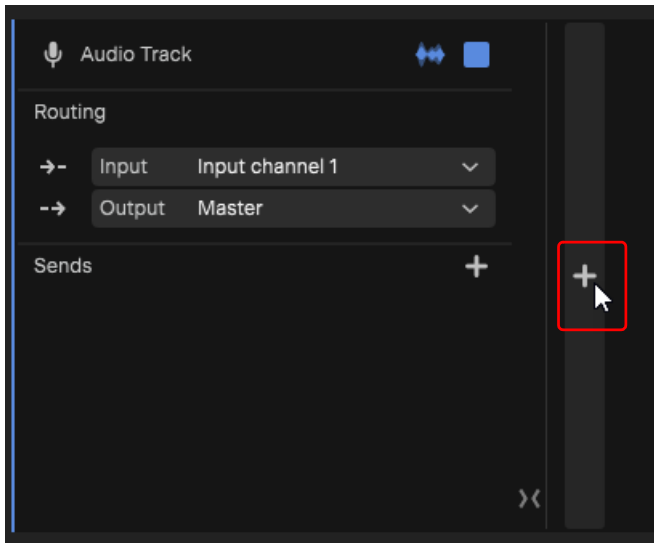
### Inserting effects

You can insert BandLab, VST, VST3, and AudioUnit (Mac only) effects on any track, bus, or track folder.

#### Adding an effect

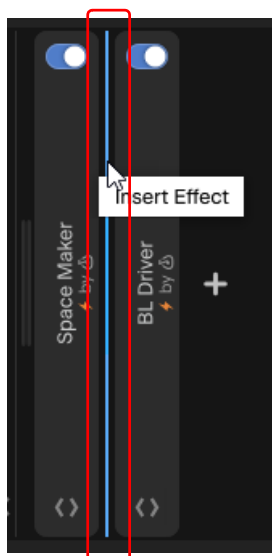
To add an effect at the end of the effect chain:

1. Select the target track/bus/track folder.
2. Open the Track Inspector and click the **Add Effect** button .
3. Make sure **Effects** is selected.
4. Select the desired effect and click **Add**.




## Inserting an effect before an existing effect

To insert an effect before an existing effect, position the mouse pointer to the left of the effect module until you see a blue vertical line, then click and select the desired effect.



## Inserting BandLab effect chains

You can insert a complete BandLab effect chains from a preset. To insert effect chains:

1. Select the target track/bus/track folder.
2. Open the Track Inspector and click the **Add Effect** button .
3. Select **Chains**
4. Select the desired BandLab effect chain and click **Add**.

See also:

[“Saving a track template”](#) on page 32



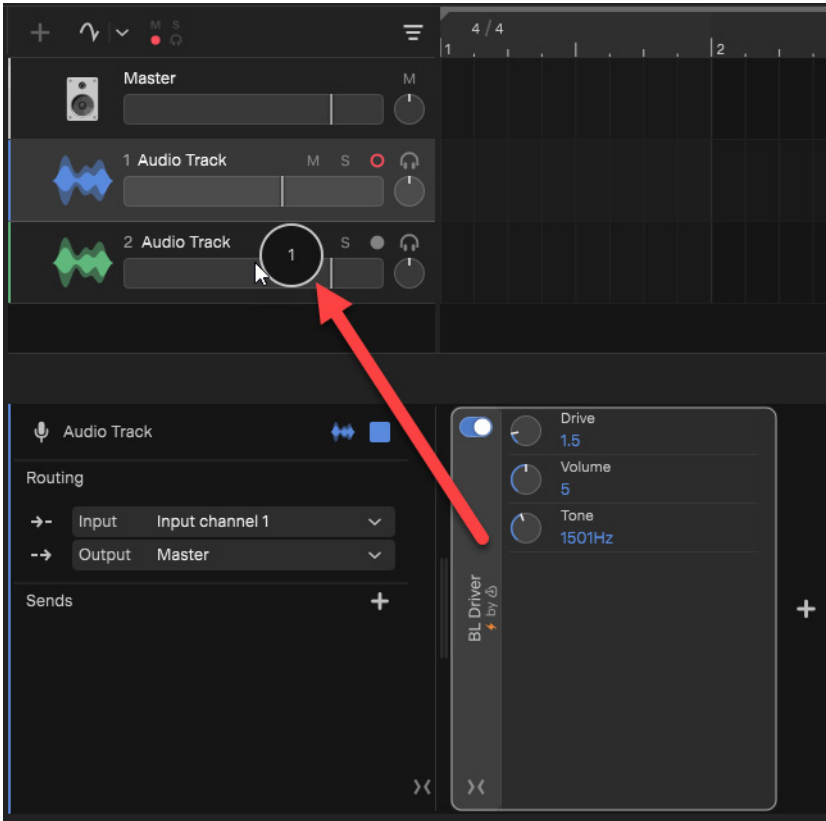
## Copying and pasting effects between tracks

You can copy effects from one track and paste them to another track:

1. In the Track Inspector, select the effect(s) that you want to copy, then go to **Edit > Copy** or press CTRL+C (Windows) / CMD+C (Mac).
2. Select the track that you want to paste the effects into, then go to **Edit > Paste Plugins** or press CTRL+V (Windows) / CMD+V (Mac).

You can also drag and drop effects between tracks:

1. In the Track Inspector, select the effect(s) that you want to copy.
2. Hold down the CTRL (Windows) / OPTION (Mac) key, then drag the selected effect(s) to the desired track strip header. The mouse cursor indicates how many effects are copied.

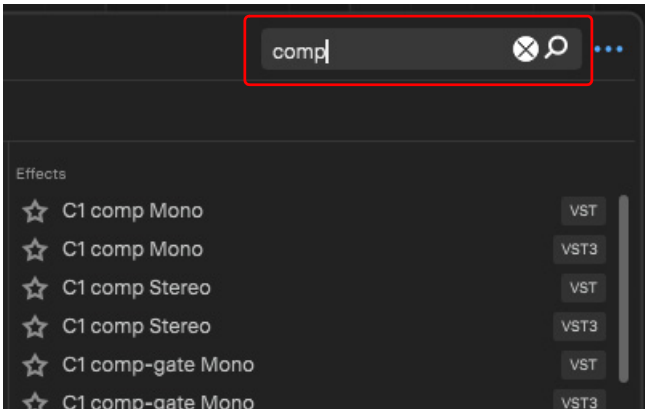


## Filtering the plugin list

You can filter the plugin list in various ways to quickly find a specific plugin.

### Filtering by name

To filter the effect/instrument/template list by items that match a specific name, type a name in the **Search** box.

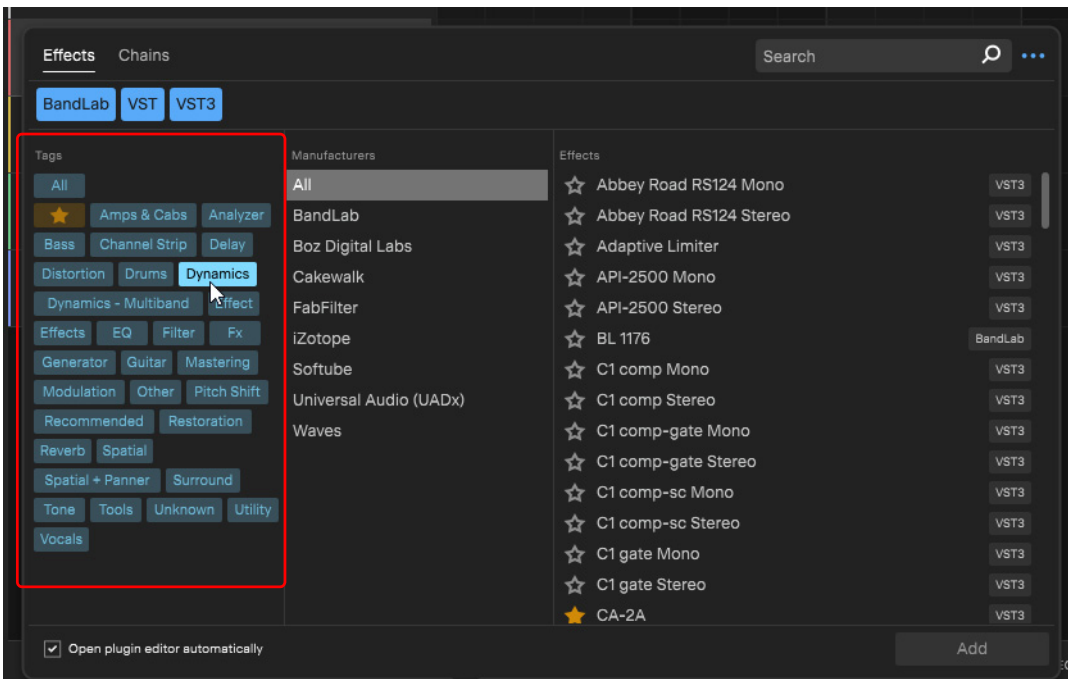


To clear the search filter, click the **Clear Search Terms** button .

### Filtering by tags

Tags make it easy to filter the list of audio effects, instrument, and templates based on categories.

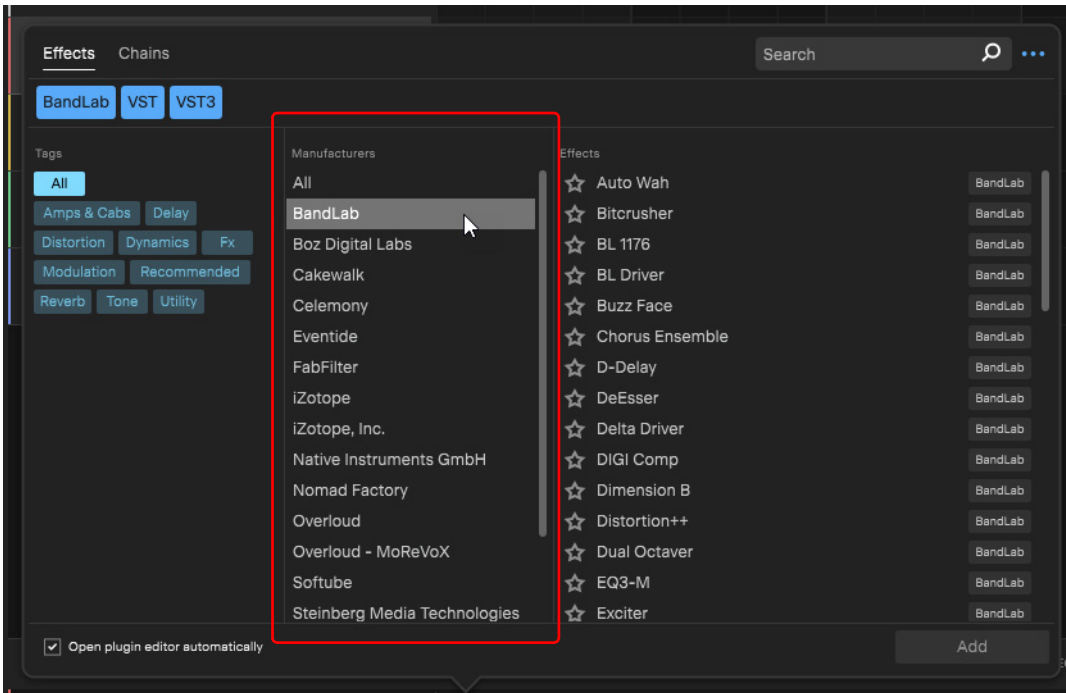
To filter the list by tags, click one or more tags.



For more details, see [“Tags”](#) on page 81.

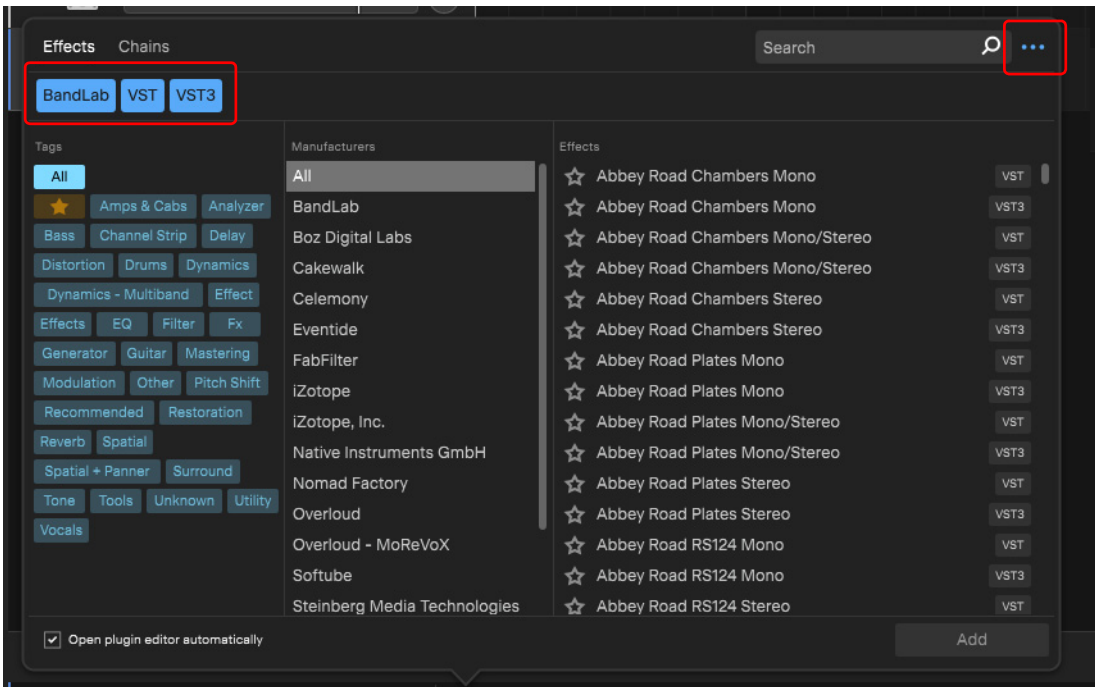
## Filtering by manufacturer

To filter the effect/instrument/preset list by manufacturer, select the desired manufacturer.



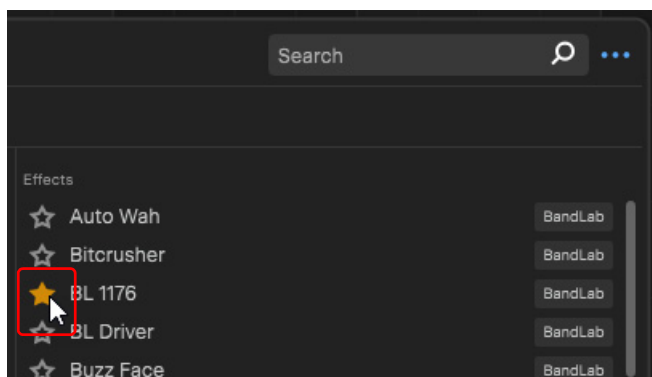
## Filtering by plugin type

To filter by plugin type, click the **Show/Hide Filter Formats** button , then elect the plugin type(s) that you want to see (AudioUnit (Mac only), BandLab, VST, VST3)

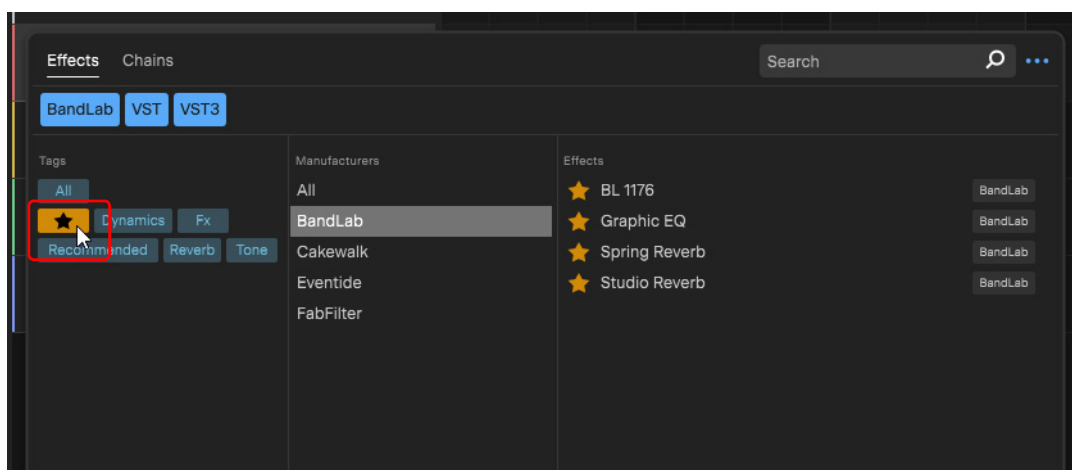


## Filtering by favorites

To tag an effect/instrument/preset as a favorite, click its star icon:



To only show favorite effects, instruments, or templates, click the **Show only favorites** button  in the Tags panel.




See:

[“Tags”](#) on page 81

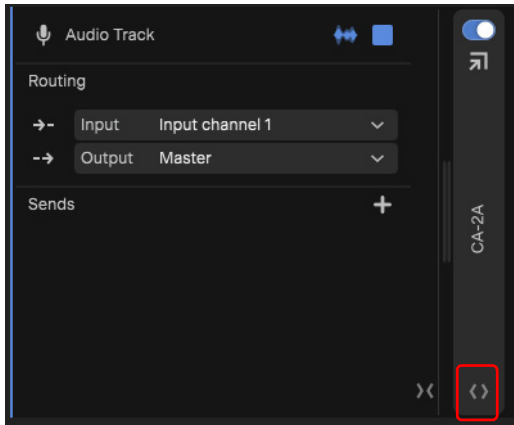
[“Filtering by tags”](#) on page 182

## Opening an effect's UI

### Expanding/collapsing an effect module

To show a plugin's small plugin module in the Track Inspector, hover over the plugin name and click the effect's expand/collapse button  or double-click the plugin name:

Plugin module collapsed:



Plugin module expanded:

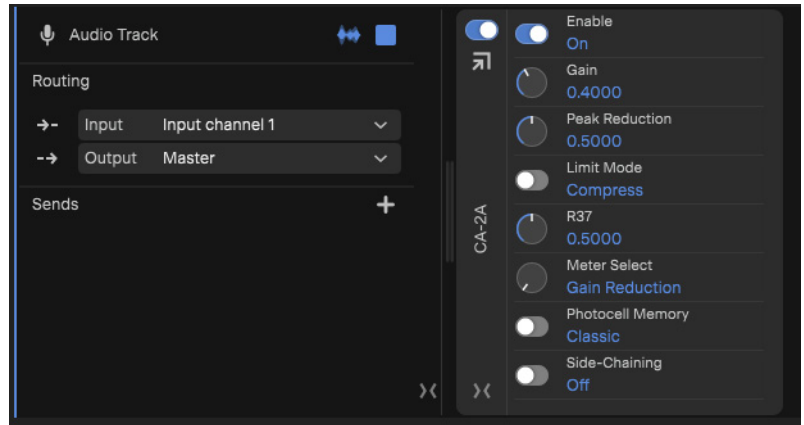
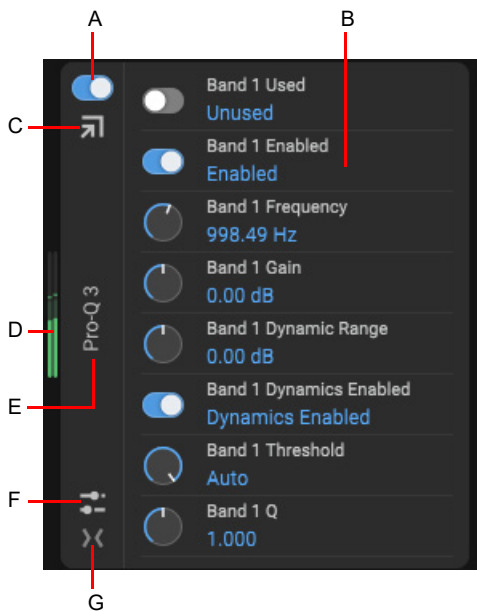


Figure 43. Effect module.



A. Bypass B. Effect parameters C. Show Plugin Editor D. Input meter E. Effect name F. Add Parameters G. Expand/collapse

**Note:** If an effect module contains many parameters, you may need to resize the Track Inspector to make it taller or scroll the module vertically in order to see all parameters. You can use the mouse wheel to scroll, but be aware that parameter values will change if the mouse pointer is over a slider when you use the mouse wheel.

## Opening a plugin's editor

To show a plugin's native UI, click the **Show plugin editor** button  above the plugin name in the Track Inspector.



## Mapping plugin parameters


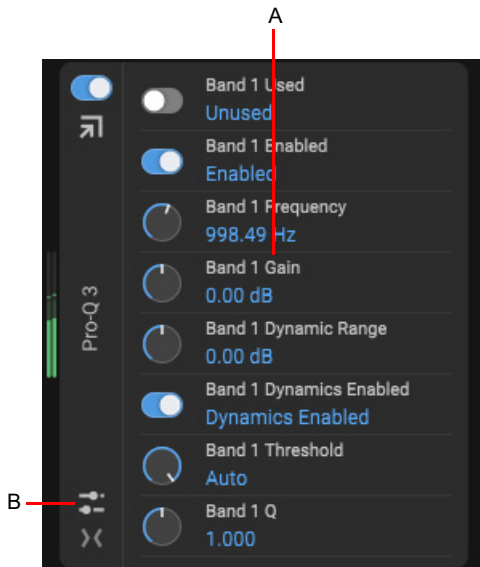

The right side of the Track Inspector shows effect plugin modules. Click the effect's expand/collapse button  to show the effect's mapped automatable parameters.


Figure 44. Effect module.

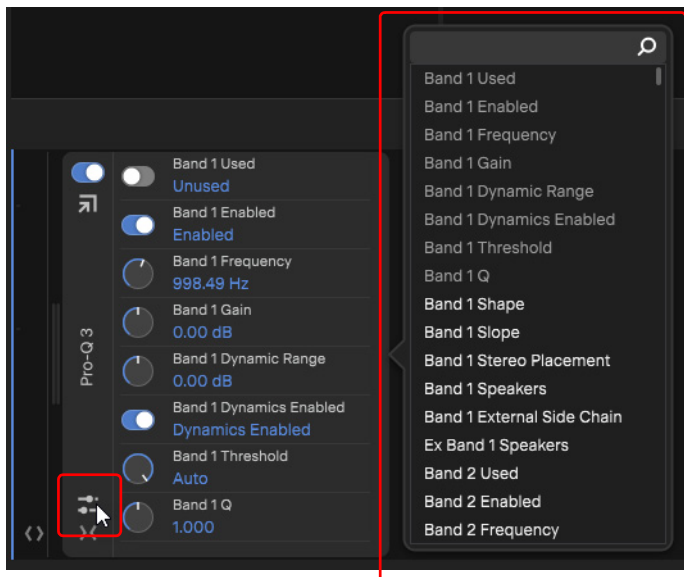




A. Mapped parameters B. Parameter menu (add, reset, delete parameters)

- ▶ **To map additional parameters from the plugin's editor.** Click the **Parameters** button  and select **Learn Parameters**. The plugin's UI opens and prompts you to move any parameters that you want to map to the plugin module. The controls you touch in the plugin's UI are added to the plugin module, and also become available in the parent track's Automation menu. The effect module pulses with a green outline while in mapping mode.



- ▶ **To map additional parameters from a parameter list.** Click the **Parameters** button  and select **Add Parameter**, then select the desired parameter(s).



- ▶ **To reset the parameters to the default list.** Click the **Parameters** button  and select **Reset Parameters**.
- ▶ **To remove a mapped parameter.** Right-click the parameter in the effect module and select **Remove Parameter**.
- ▶ **To remove all mapped parameters.** Click the **Parameters** button  and select **Delete All Parameters**.
- ▶ **To replace a mapped parameter with another parameter.** Right-click the parameter in the effect module and select **Replace Parameter from Plugin Editor** or **Replace Parameter from Parameter List**.

## Bypassing effects

To bypass an effect, click the effect's **Bypass** button  in the Track Inspector. When an effect is bypass, its module is dimmed.



To bypass multiple effects simultaneously, select the effect modules that you want to bypass, then hold down the CTRL (Windows / CMD (Mac) key and click a selected effect's Bypass button.

## Replacing effects

To replace an effect with another effect:

1. In the Track Inspector, right-click the name of the effect you want to replace and select **Replace**.
2. Select the new effect.
3. Click **Add**.

## Removing effects

To remove an effect, select the effect in the Track Inspector, then press the DELETE key, or right-click the effect name and select **Delete**.

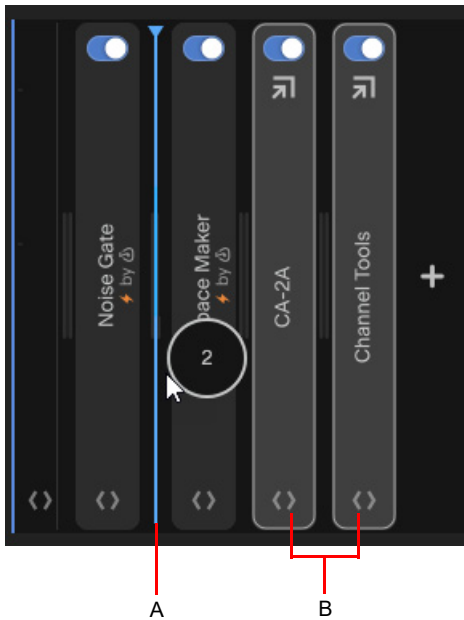
See also:

[“Opening a project in Safe Mode”](#) on page 22



## Reordering effects

To reorder effects in the Track Inspector, select the effect(s) you want to move, then drag the selected effect(s) to the desired location. A vertical line indicates a valid drop location.



A. Drop location B. Selected effects

## VST plugin scanner

When you install or update VST plugins, *Next* needs to scan your VST folder(s) to detect any changes. To automatically scan your VST folder when *Next* starts, go to **Edit > Preferences > Plugins** and enable **Scan for Plugins on Startup**.

To manually perform a scan, click **Scan Now**.

**Note:** If a plugin crashes during scanning or takes a long time to scan, it becomes quarantined and will be skipped by future scans. To manually rescan quarantined plugins, go to **Edit > Preferences > Plugins**, then click **Plugin Scan Mode** and select **Scan Quarantine Plugins**, then finally click **Start Plugin Scan**. To see a list of all quarantined plugins, click **Open** under **Open Plugin Quarantine Manager**. For details, see “[Plugin Management](#)” on page 195.

To add a new VST plugin folder to be scanned, click the folder button  under **Custom VST Plugin Locations** and navigate to the desired folder.

To remove a folder from the scan list, click the delete button  next to the displayed folder path.

See:

[“Plugins settings”](#) on page 237

See also:

[“Automating effects”](#) on page 204

[“Aux sends”](#) on page 175

[“\[Mac only\] Using Intel x86 plugins on an Apple Silicon Mac \(M1/M2\)”](#) on page 190

## [Mac only] Using Intel x86 plugins on an Apple Silicon Mac (M1/M2)

In order to use Intel x86 architecture plugins on an M-series Mac, you must run *Next* using Rosetta mode.

Rosetta is a translation layer that emulates the Intel x86 architecture on a Silicon platform, which allows a Mac with Apple silicon (M1/M2) to use plugins built for Macs with an Intel processor.

Rosetta is not needed if all of your plugins are already updated to support Apple Silicon.

**Note:** When using Rosetta mode, *Next* uses a different plugin catalog named `PluginCatalog_x86_64.xml` to ensure that native Apple Universal/Silicon arm64 plugins are not mixed in the same catalog. The normal native catalog is named `PluginCatalog.xml`.

### Installing Rosetta

Rosetta 2 is available only for Mac computers with Apple silicon, but does not come pre-installed. The system will prompt you to install Rosetta the first time you open an app that needs Rosetta. Click **Install**, then enter your user name and password to allow installation to proceed.

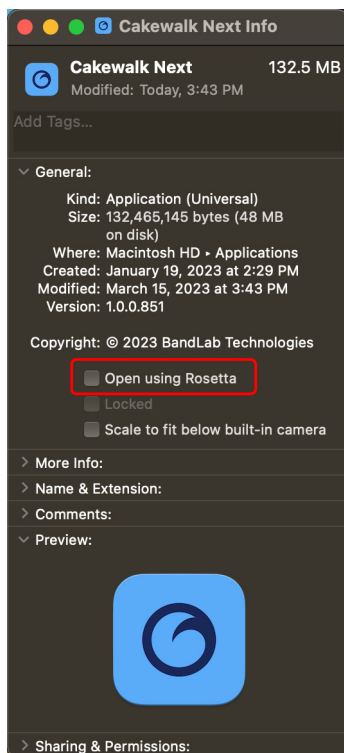
To install Rosetta manually:

1. From the Finder menu bar, select **Go > Go to Folder**.
2. Type `/System/Library/CoreServices/Rosetta2 Updater. app`, then click **Go**.
3. Double-click **Rosetta 2 Updater**, then follow the prompts to install Rosetta.

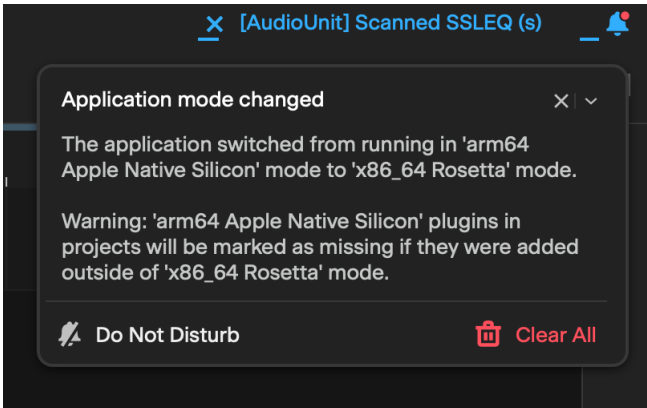
### Running Cakewalk Next in Rosetta mode

To switch *Next* to Rosetta mode:

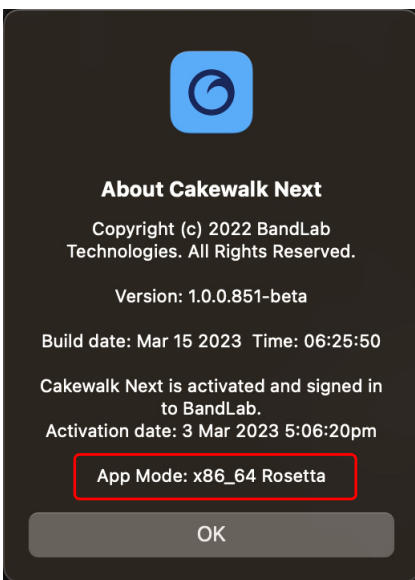
1. Exit *Next* if it is running.
2. Open the Finder and find the *Cakewalk Next*® app in your Applications folder.
3. Right-click the *Cakewalk Next*® app icon and select **Get Info**.
4. In the Info window, select **Open using Rosetta**.
5. Close the Info window.
6. Restart *Next* and rescan for all plugins.



Cakewalk Next® will open in Rosetta mode at next launch, and show a confirmation notification.



You can always confirm the current app mode from the Next's About box:



---

## Converting MIDI to audio

Instrument tracks contain MIDI clips. If you want to edit the data as audio (or simply reclaim CPU processing power used by the instrument), you can convert Instrument tracks to audio tracks. To do so, select the Instrument track(s) and go to **Edit > Bounce Tracks in Place**. Any effects will be applied and removed from the new audio track.

---

## Bouncing audio

Individual clips in the same track can be combined into a single clip by bouncing the clips. You can bounce entire tracks or a time range.

Bouncing tracks can also be useful if you require more CPU time for your real-time effects. You can premix some of your tracks with real-time effects applied, saving CPU time during playback.

### Bouncing tracks in place

To bounce entire tracks, select the track(s) that you want to bounce, then select **Edit > Bounce Tracks in Place**.

The clips are combined into a single clip. Empty space between clips is filled with silence in the new clip.

Any automation and effects are applied to the bounced audio, then removed from the track(s).

 **Note:** *When bouncing an Instrument (MIDI) track, the Instrument track is converted to an audio track.*

### Bouncing tracks to new individual tracks

To bounce entire tracks to new individual tracks, select the track(s) that you want to bounce, then select **Edit > Bounce to New Tracks**.

Any automation and effects are applied to the bounced audio, then removed from the track(s).

**Bounce to New Tracks** respect time selections and only bounce those regions to new tracks.

Bouncing an Instrument (MIDI) track renders the audio and creates a new audio track.

Bouncing a track folder will mixdown all tracks within the group, creating a new bounced track outside the track folder.


Bouncing a bus creates a mixed track of everything that routes through the bus, including bus effects and automation.

Bounced tracks are automatically given the `(Bounced)` suffix.

### Bouncing clips

To bounce a time range, make a time selection that spans one or more tracks, then right-click and select **Bounce to New Clip**.

The clips are combined into a single clip. Empty space between clips is filled with silence in the new clip.

 **Note:** *Like any clips, trimmed clips can be combined with other clips using the **Bounce to New Clip** command. When a trimmed clip is combined with another clip, any trimmed data (audio clips or MIDI events that are cropped from view) is overwritten.*

---

## Normalizing audio

To normalize audio is to change its overall volume by a fixed amount in order to reach a target perceived amplitude or volume level while preserving the dynamic range.

### Why Normalize?

Normalizing audio is not always necessary, so you should decide on a track-by-track basis whether or not the process is required.

There are two primary reasons to normalize audio:

- ▶ **Increase levels.** If you have a very quiet audio file, you may want to make it as loud as possible without changing its dynamic range. If a track was recorded too low (and re-recording the track at a more appropriate level is not an option) and you can't use the volume fader to make the track loud enough in the mix, normalizing can salvage an otherwise unusable take.
- ▶ **Match levels.** Create consistent levels across multiple tracks, or multiple clips on the same track, before or during mixing.

You can also apply normalization when exporting audio (see “Exporting audio” on page 228). This is especially useful when distributing your music to various streaming platforms that apply loudness normalization, such as Apple Music, Spotify, Amazon Music, SoundCloud, Tidal, YouTube, etc.

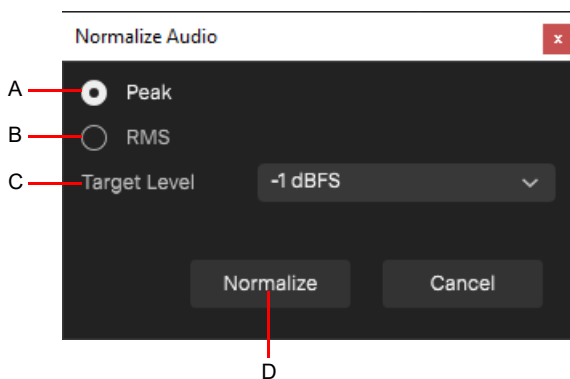
There are a few things to be aware of before normalizing audio:

- ▶ Normalizing raises the signal level, but also raises the noise floor.
- ▶ Louder tracks leave less headroom before clipping occurs when processed with EQ and effects.
- ▶ The sum of all audio signals played together cannot exceed the waveform amplitude limit. Even though no individual clip is clipped, the combination may cause distortion.
- ▶ Audio normalization is a destructive process. Normalizing is not recommended for simply making waveforms bigger since it permanently alters audio files.

### Types of normalization

There are different ways of measuring the volume of audio. The results will vary depending on which method you use. Cakewalk Next® provides two types of audio normalization:

- ▶ **Peak normalization.** Peak normalization detects the maximum (peak) level in the selected track or clip, then raises or lowers the entire signal by the same fixed amount to reach the specified target level, without affecting the dynamic range. Peak normalization does not account for the apparent loudness of the content, and tends to work well on shorter clips and single-shot samples such as drum hits.
- ▶ **RMS (Root Mean Square) normalization.** RMS normalization measures the average level of all peaks in the selected audio, then brings the average loudness to the specified target level. RMS normalization tends to work best on long audio files that have varying peaks.



A. Peak B. RMS C. Target Level D. Normalize

- ▶ **Peak.** Normalize to the highest peak.
- ▶ **RMS.** Normalize to the average loudness level.

- ▶ **Target Level.** Specify the normalization target level. Double-click to type a custom value. It is generally not a good idea to normalize to 0 dBFS peak in a multi-track recording. It's good practice to reserve at least 3–6 dB of headroom to allow for further audio processing that may increase the level.
- ▶ **Normalize.** Apply normalization.

## Normalizing clips


To normalize clips:

1. Select individual clips or make a time selection that spans one or more tracks.
2. Right-click and select **Process > Normalize** or press CTRL+SHIFT+N (Windows / CMD+SHIFT+N (Mac) to open the **Normalize Audio** dialog box.
3. Specify the normalization method (Peak or RMS) and target level (double-click to type a custom value).
4. Click **Normalize**.

When normalizing a time range, selected clips on the same track are combined into a single clip. Empty space between clips is filled with silence in the new clip.

When normalizing multiple fully selected clips, the individual clips are retained.

It's always a good idea to listen to the processed audio. You can use the **Edit > Undo** command if you don't like the results, and then try a different setting in the Normalize dialog box.

 **Note:** *If the selection contains any loud signals, Normalize Audio may not seem to have any effect. This is because the volume increase is determined by the loudest audio in the selection. If an audio clip contains segments that are too quiet and others that are loud, you should probably split off the quiet segments into separate clips and then normalize those.*

## Normalizing tracks

To normalize an entire track(s):

1. Select the track(s) that you want to normalize.
2. Select **Edit > Normalize Audio Tracks** or press CTRL+ALT+N (Windows / CMD+OPTION+N (Mac) to open the **Normalize Audio** dialog box.
3. Specify the normalization method (Peak or RMS) and target level (double-click to type a custom value).
4. Click **Normalize**.


The clips are combined into a single clip for each track. Empty space between clips is filled with silence in the new clip.

---

## Reversing audio

By reversing audio data, you can make it play backwards. You may want to do this to obtain unusual sounds for special effects.

To reverse audio, select a clip or time range that contains audio, then right-click and select **Process > Reverse**.

 **Note:** *When you reverse a time range, the selection is bounce to a new clip and the sample order is reversed within the bounds of the selection.*

*When you reverse multiple fully selected clips, the individual clips are retained and the samples inside each clip are reversed.*







# Plugin Management

## Plugin Manager

The Plugin Manager lets you manage audio effects, instrument, and templates.

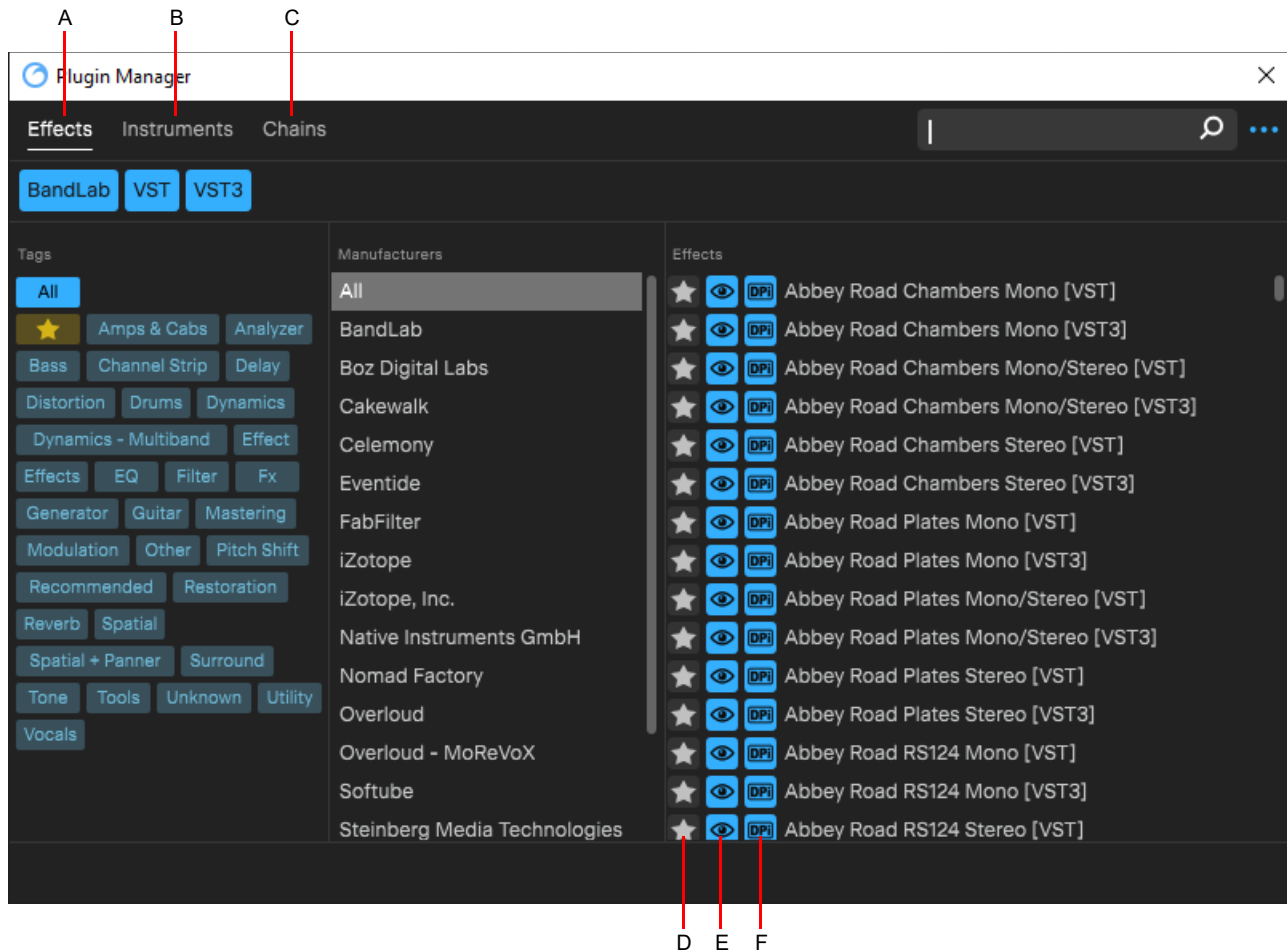
To open the Plugin Manager, go to **Edit > Preferences > Plugins** and click **Open** under **Open Plugin Manager**.

For each plugin, you can specify the following:

- ▶ **Favorites** . To tag a plugin as a favorite, click the **Toggle Plugin Favorite Status**  button. For details, see [“Filtering by favorites”](#) on page 184.
- ▶ **Visibility in Browser** . To show/hide the plugin in the Plugin Browser, click the **Toggle Plugin Visibility in Browser**  button.
- ▶ **DPI Awareness**  (Windows only). *Cakewalk Next*® supports per-plugin DPI awareness in Windows 10 and above, which ensures that DPI-aware plugins will render correctly whenever the DPI changes. Non-DPI Aware plugins may become blurry whenever the DPI changes to a scale factor greater than 100% (96 DPI). To enable/disable DPI awareness, click the **Toggle Plugin DPI Awareness**  button.
- ▶ **Tags**. To assign tags, right-click the plugin. For details, see [“Filtering by tags”](#) on page 182 and [“Assigning tags to audio effects and instruments”](#) on page 82.

To show the Plugin Manager, go to **Edit > Preferences > Plugins** and click **Open** under **Open Plugin Manager**.

Figure 45. *Plugin Manager*.



A. Show audio effects B. Show instruments C. Show Effect Chains D. Toggle plugin favorite status E. Toggle plugin visibility in Browser F. Toggle plugin DPI awareness

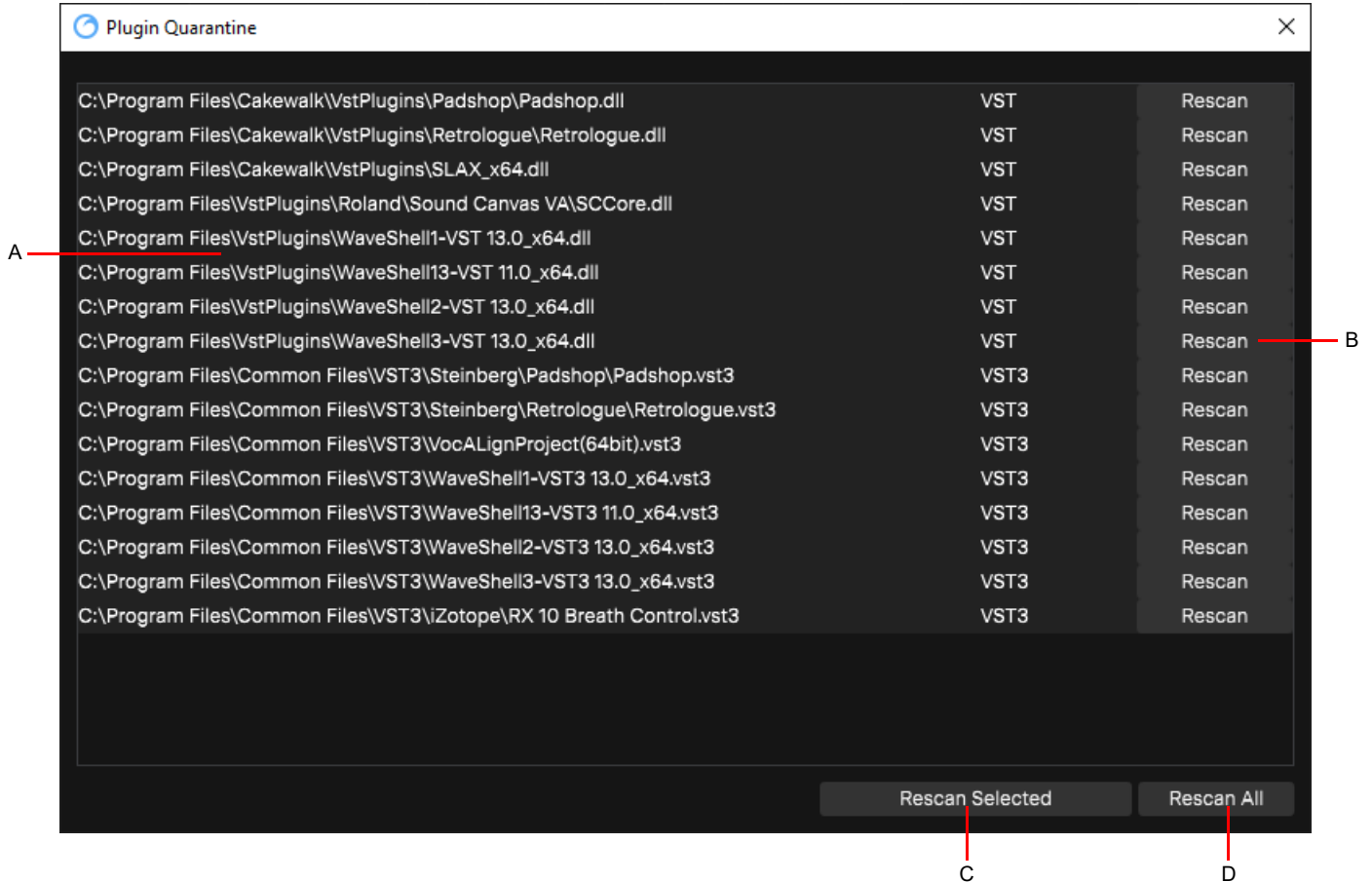
## Plugin Quarantine Manager

If a plugin crashes during scanning or takes a long time to scan, it becomes quarantined and will be skipped by future scans.

The Plugin Quarantine Manager lets you rescan quarantined plugins.

To open the Plugin Quarantine Manager, go to **Edit > Preferences > Plugins** and click **Open** under **Open Plugin Quarantine Manager**.

Figure 46. *Plugin Quarantine Manager.*



A. Quarantined plugins B. Rescan plugin C. Rescan selected plugins D. Rescan all plugins

To rescan a single quarantined plugin, click its **Rescan** button.

To rescan the selected quarantined plugins, click **Rescan Selected**.

To rescan all quarantined plugins, click **Rescan All**.

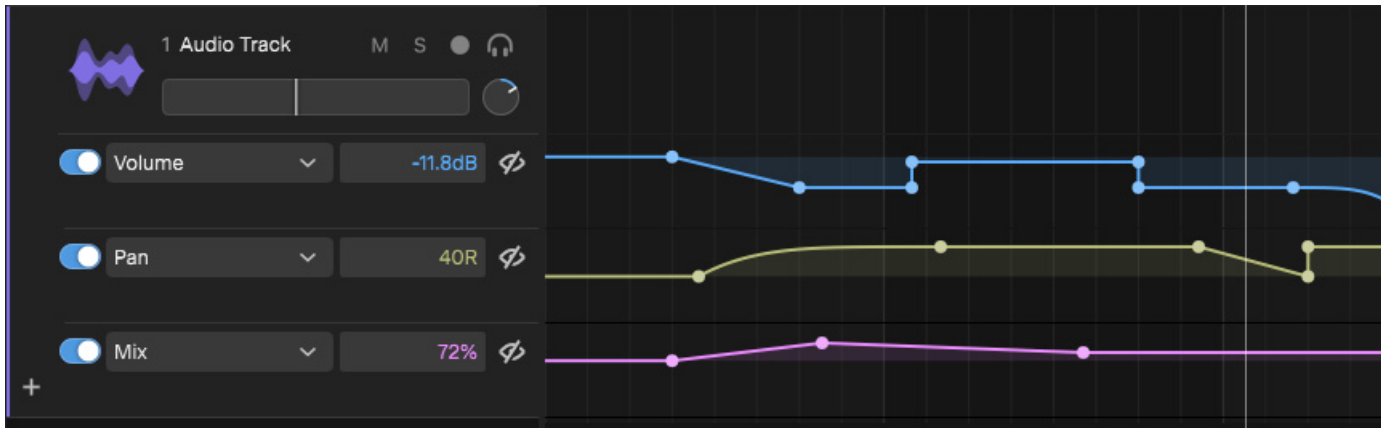
See also:

[“VST plugin scanner”](#) on page 189



# Automation

Automation means to record the movement of a fader, knob, or other control so that the next time you play your project, that control moves automatically. This allows you to dynamically change parameters over the course of a project's timeline.



The following parameters can be automated:

- ▶ Track/bus/track folder Volume, Pan, and Mute
- ▶ Effect/plugin parameters
- ▶ MIDI controllers

**Note:** *Track and effect automation is track based, and is performed in the Track view. MIDI automation is clip based, and is performed in the Clip Editor's Piano Roll editor.*

You can record fader moves and parameter changes with a mouse in real time, or edit automation envelopes graphically.

Below are some examples of when you may want to use automation:

- ▶ If you want a track to slowly fade in or out, automate the tracks Volume control.
- ▶ If a particular plugin is only required during a specific section in a song, automate the plugin's Bypass parameter during the parts of the track where the plugin is not required.
- ▶ If you want a certain sound to pan across speakers at given points during a song, “record” the panning movements.

See:

“[Creating and editing automation envelopes](#)” on page 199

“[Showing/hiding automation lanes](#)” on page 199

“[Adding a new automation lane](#)” on page 200

“[Hiding an automation lane](#)” on page 200

“[Deleting an automation lane](#)” on page 200

“[Reassigning an automation lane to a different parameter](#)” on page 200

“[Copying/pasting automation between lanes](#)” on page 201

“[Drawing automation](#)” on page 201

"Recording automation" on page 202

"Bypassing automation" on page 203

"Resetting an automation envelope" on page 203

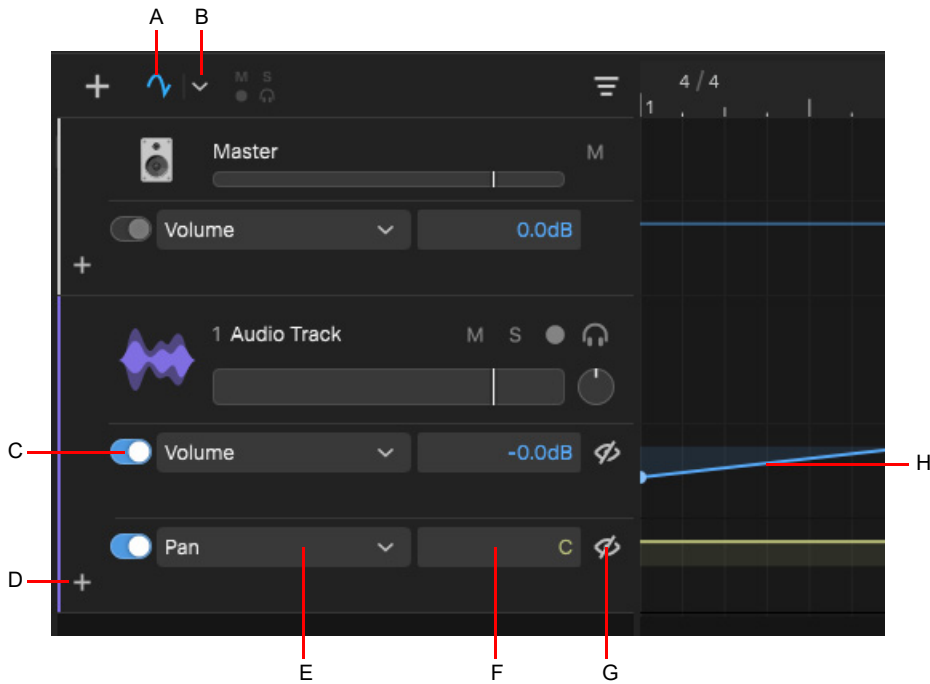
"Deleting automation" on page 203

"Automating effects" on page 204

"MIDI clip automation" on page 205


## Creating and editing automation envelopes

Automation envelopes are shown in separate automation lanes below the track strip.



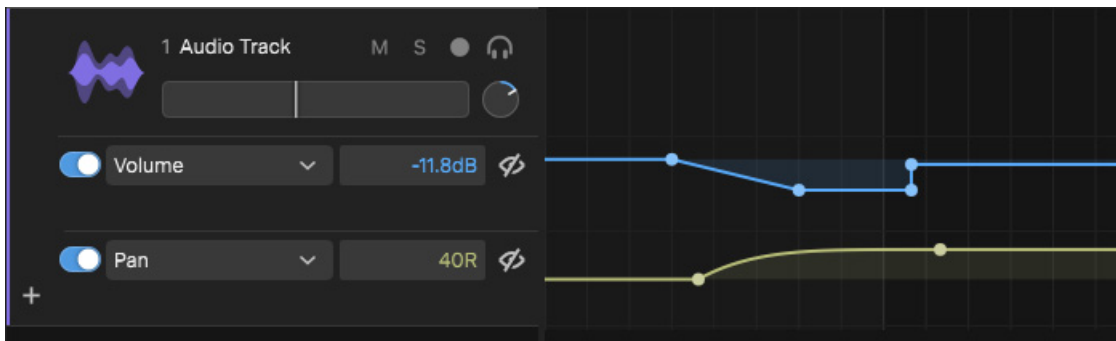
**A.** Show/Hide Automation Lanes **B.** Automation options **C.** Bypass automation **D.** Add Automation Lane **E.** Automation parameter **F.** Parameter value **G.** Hide Automation Lane **H.** Automation envelope

### Showing/hiding automation lanes

To show/hide automation lanes on all tracks, click the **Show/Hide Automation Lanes** button .

By default, each track strip shows a single automation lane at a time. To show multiple automation parameters simultaneously, add additional automation lanes (see [“Adding a new automation lane”](#) on page 200). Each lane can be assigned to any automatable parameter (see [“Reassigning an automation lane to a different parameter”](#) on page 200).


In the following examples, the Volume and Pan parameters are shown in separate automation lanes:

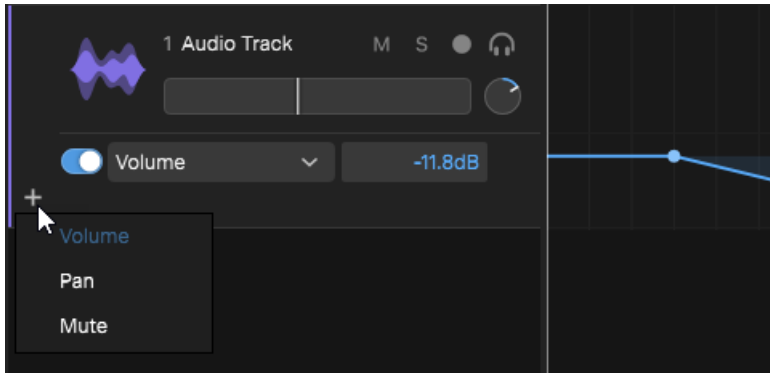


Automation envelopes are color coded as follows:



- ▶ Volume = Blue
- ▶ Pan = Yellow
- ▶ Mute = Orange
- ▶ Effect/plugin parameters = Purple

## Adding a new automation lane

To create a new automation lane, click the **Add Automation Lane** button  below the last lane, then select the desired parameter. Colored text in the automation menu indicates that automation exists for that parameter, even if the lane is not visible.



## Showing only active automation lanes

To only show automation lanes on tracks that already contain automation, click the **Show/Hide Automation Lanes** button  drop-down menu  and select **Show lanes with active automation**.

## Hiding an automation lane

To hide a single automation lane without deleting its envelope, click the lane's **Hide Automation Lane** button .

To reshown a hidden lane, do *one* of the following:

- ▶ Add a new automation lane and select the hidden parameter (see “[Adding a new automation lane](#)” on page 200). All existing envelopes appear color coded in the automation menu.
- ▶ Reassign an existing automation lane to the hidden parameter (see “[Reassigning an automation lane to a different parameter](#)” on page 200).

## Deleting an automation lane

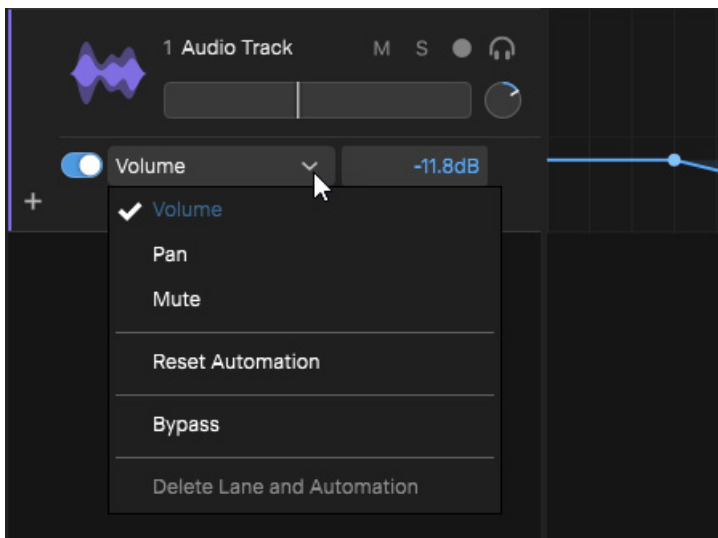
To delete an automation lane and its envelope, click the lane's menu and select **Delete Lane and Automation**.

See also:

“[Deleting automation](#)” on page 203

## Reassigning an automation lane to a different parameter

To reassign an existing automation lane to a different parameter, click the lane's Automation menu and select the desired parameter.



**Note:** The previously assigned automation envelope is not deleted from the track; it is simply not shown in an automation lane. Existing envelopes are color coded in the automation menu. You can show hidden envelopes at any time by adding a new automation lane or reassigning an existing automation lane.

## Copying/pasting automation between lanes

You can copy automation data in a lane and paste into any lane:

1. In the Track view, make a time selection in an automation lane to select the automation data that you want to copy.
2. Go to **Edit > Copy** or press CTRL+C (Windows) / CMD+C (Mac) to copy the automation data to the clipboard.
3. Click in any automation lane where you want to paste the clipboard content.
4. Go to **Edit > Paste Automations** or press CTRL+V (Windows) / CMD+V (Mac) to paste the automation data.

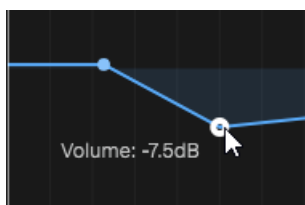
See also:

“Adding a new automation lane” on page 200

“MIDI clip automation” on page 205

## Drawing automation

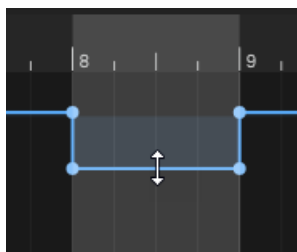
- ▶ **To modify the shape of an automation envelope.** Click anywhere on the envelope to create a new node, then drag the node to create a ramp. To adjust a node with finer control, hold down the SHIFT key while dragging the node up/down.



- ▶ **To create a slow or fast curve.** Right-click an envelope line and select **Slow Curve** or **Fast Curve**.
- ▶ **To adjust the slope of an automation curve.** Hold down the CTRL (Windows) / CMD (Mac) key and drag the slope up/down.





- ▶ **To convert a slope to a line.** Right-click the slope and select one of the following options:
  - ▶ **Linear.** Resets the curve so it's a straight line.
  - ▶ **Flatten Left.** Sets the right hand node value to the value of the left hand node, making it a horizontal shelf.
  - ▶ **Flatten Right.** Sets the left hand node value to the value of the right hand node, making it a horizontal shelf.
- ▶ **To create a shelf.** Make a time selection (see “Making a time selection” on page 113), then hold down the CTRL (Windows) / CMD (Mac) key and drag the selected envelope range up/down.




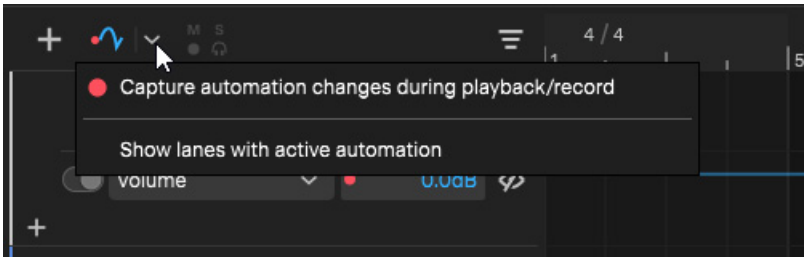
## Recording automation

To record automation:

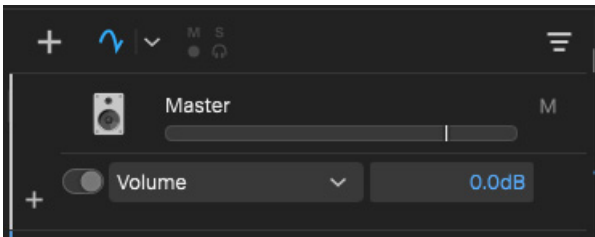
1. Do *one* of the following:

- ▶ To arm a single control for recording, double-click the control. The controls show a small red circle when armed.
- ▶ To arm all controls for recording, click the **Show/Hide Automation Lanes** button  drop-down menu  and select

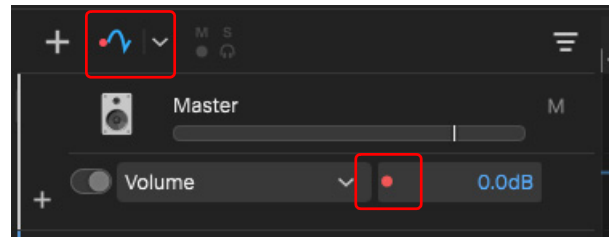
**Capture automation changes during playback/record.** A red circle  indicates that automation recording is enabled, and all automatable controls show a small red circle.



Automation recording disabled:



Automation recording enabled:





2. Do *one* of the following:

- ▶ If you want to record automation in real-time, start playback.
- ▶ If you want to adjust automation at only a specific location on the timeline, position the playhead at the desired location.


3. Adjust the desired automatable fader/knob/button.



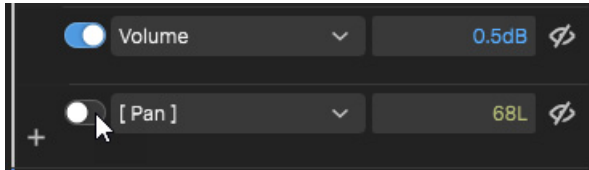
4. When you are finished with recording automation, stop playback, then click the **Show/Hide Automation** button  drop-down menu  again and disable **Capture automation changes during playback/record.**

## Bypassing automation

To bypass/unbypass an automation lane/envelope, do *one* of the following:

- ▶ Click the automation lane's **Bypass** button .
- ▶ Click the automation lane's drop-down menu and select **Bypass**.
- ▶ Right-click the envelope and select **Bypass Automation**.

When an automation envelope is bypassed, the parameter name appears in brackets and the envelope is dimmed.



## Resetting an automation envelope

To reset an automation envelope (delete all nodes), do *one* of the following:

- ▶ Click the **Automation** menu and select **Reset Automation**.
- ▶ Right-click the automation envelope and select **Reset Automation**.

## Deleting automation

To delete an automation lane and its automation envelope, click the **Automation** menu and select **Delete Lane and Automation**.

To delete a single automation envelope node, right-click the node and select **Delete Node**.

To delete multiple automation envelope nodes, make a time selection that spans the nodes that you want to delete, then right-click the automation envelope and select **Delete Nodes**, or press DELETE.

See also:

[“Deleting an automation lane”](#) on page 200

## Automating effects

Automating effect parameters is similar to automating track parameters (see “Creating and editing automation envelopes” on page 199 and “Recording effect automation” on page 204).

### Recording effect automation

Effect parameters are armed for automation recording the same way you arm track parameters (see “Recording automation” on page 202). Once armed, you can adjust an effect’s parameter from any of the following locations:

- ▶ The parent track’s automation control or automation lanes
- ▶ The Track Inspector’s plugin module
- ▶ The plugin’s editor

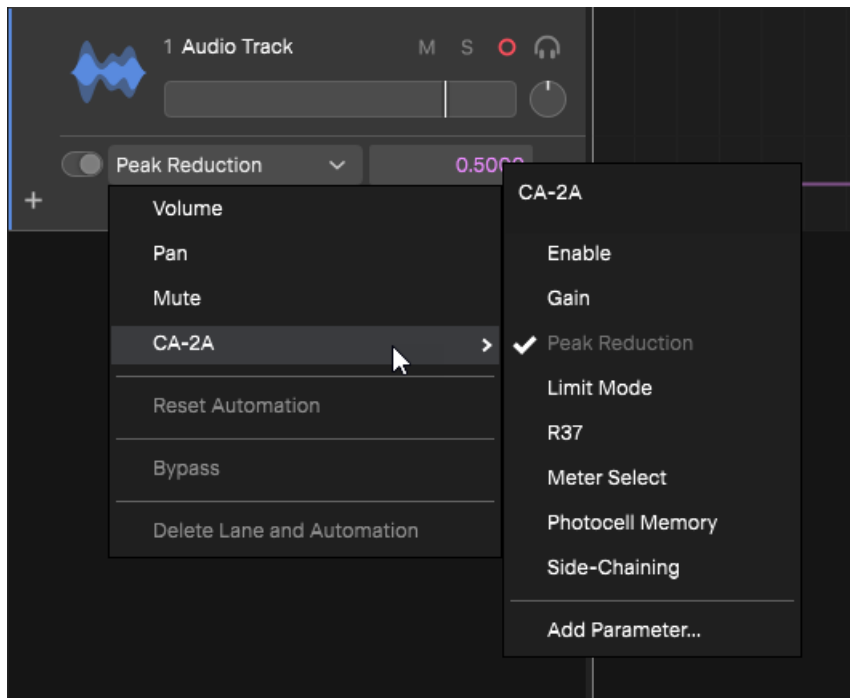
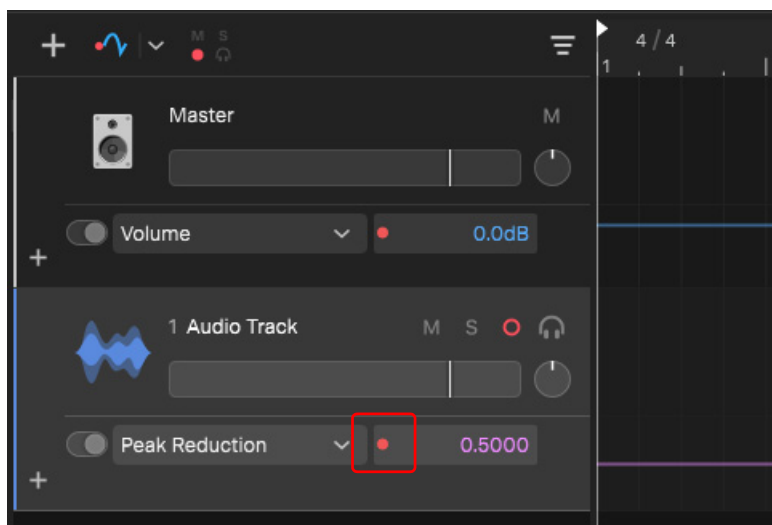


Figure 47. Plugin parameter is armed for automation recording.






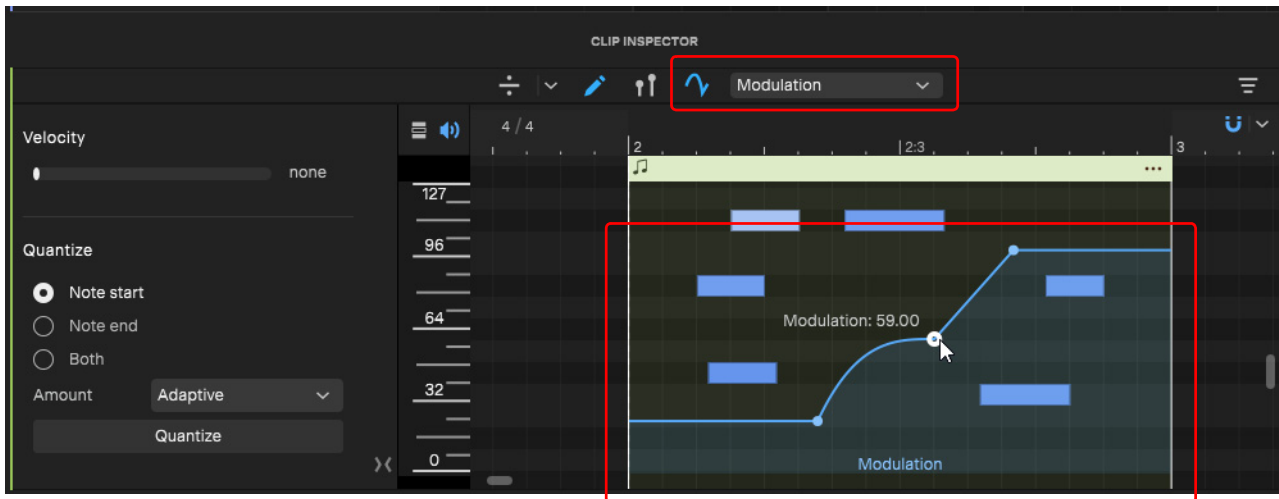
## MIDI clip automation

You can draw MIDI controller events in the Clip Inspector's Piano Roll editor.

**Note:** MIDI automation is clip based. If the selected instrument track is empty, double-click in the Clips pane to create a new empty MIDI clip that can contain the MIDI automation.

To show/hide MIDI automation, click the **Edit Clip Automation** button .

To select the MIDI controller you want to edit, click the **Automation** menu and select the desired controller. If automation exists for a parameter, the parameter name is highlighted in the menu.



MIDI automation envelopes can be edited the same way as track automation envelopes. For details, see [“Drawing automation”](#) on page 201.



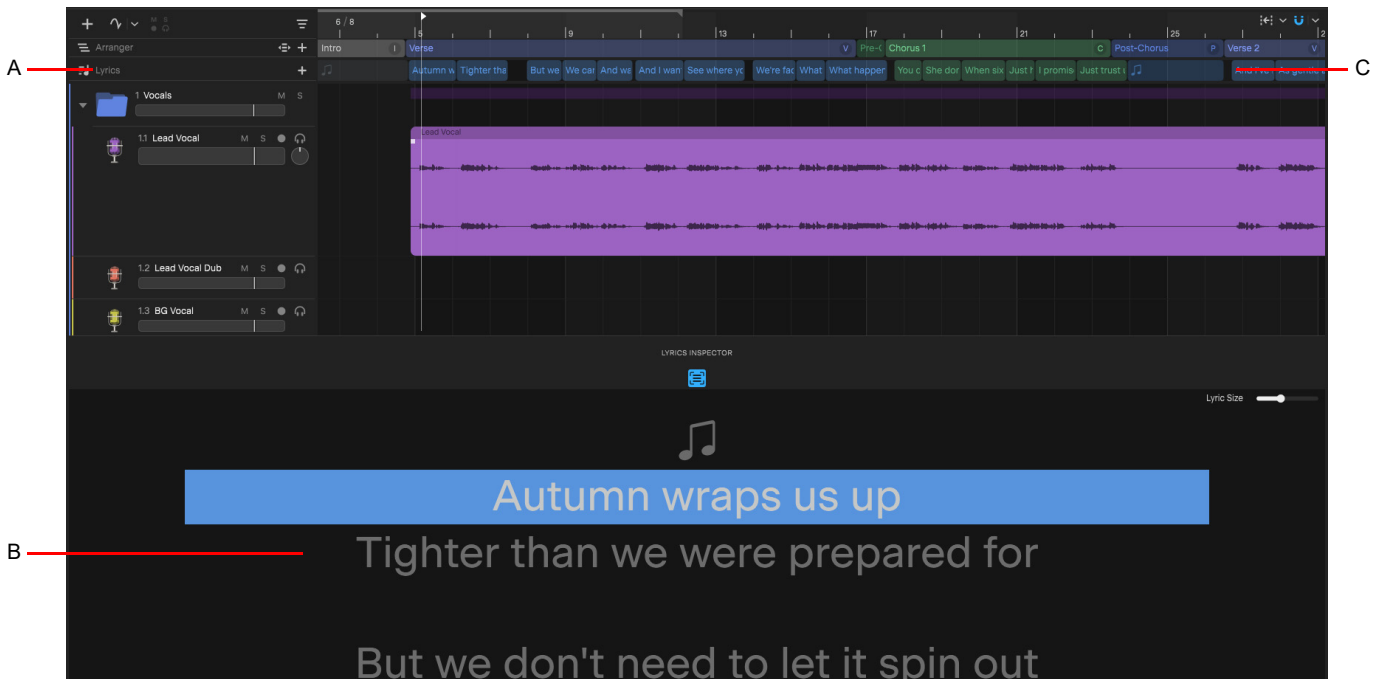
# Lyrics

The Lyrics track allows you to create lyrics that are perfectly in sync with the music. Large scrolling lyrics can be shown in the Lyrics Inspector's teleprompter.

You can edit lyrics directly in the Lyrics track timeline, or in the dedicated Lyrics Inspector editor.

The Lyrics features consist of the following elements:

- ▶ **Lyrics track.** The Lyrics track shows all lyric lines on a horizontal timeline above regular tracks. You can freely edit lyric lines directly in the Lyrics track. For details, see “[Lyrics track](#)” on page 209.
- ▶ **Lyrics Inspector.** The Lyrics Inspector can toggle between showing the Lyrics Editor (and Lyrics Scratch Pad) and Lyrics Prompter. For details, see “[Lyrics Inspector](#)” on page 211.
  - ▶ **Lyrics Editor.** Use the Lyrics Editor to edit lyrics text and color, or rearrange lyric lines in a vertical list. For details, see “[Lyrics Editor](#)” on page 212.
  - **Lyrics Scratch Pad.** Use the Lyrics Scratch Pad to type lyric ideas and notes that are not visible in the Lyrics track. You can quickly apply selected text in the Lyrics Scratch Pad to existing or new lyric lines in the Lyrics tracks. For details, see “[Lyrics Scratch Pad](#)” on page 214.
  - ▶ **Lyrics Prompter.** See large scrolling lyrics synchronized with the music during playback. Use as a guide during vocal recording. For details, see “[Lyrics Prompter](#)” on page 215.



A. Lyrics track B. Lyrics Inspector C. Lyric lines

## Basic workflows

There are two basic workflows for authoring lyrics:

- ▶ **Line-by-line authoring.** Type one lyric line at a time.
- ▶ **Sync existing text.** Select a single or multiple existing text lines in the Lyrics Scratch Pad, then automatically create new lyric lines or apply the selected text to existing lyric lines.

For details, see [“Time-syncing lyrics”](#) on page 220.

See:

[“Adding lyrics”](#) on page 216

[“Editing lyrics”](#) on page 217

[“Time-syncing lyrics”](#) on page 220

[“Lyrics track”](#) on page 209

[“Lyrics Inspector”](#) on page 211

[“Lyrics Editor”](#) on page 212

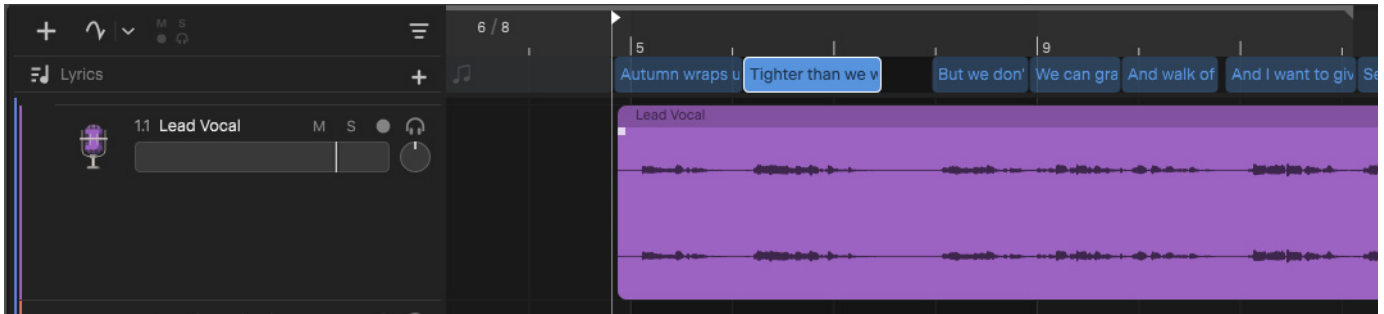
[“Lyrics Scratch Pad”](#) on page 214

[“Lyrics Prompter”](#) on page 215

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## Lyrics track

The Lyrics track allows you to create multiple lyric lines and easily edit the time range of each lyric line.



### Showing/hiding the Lyrics track

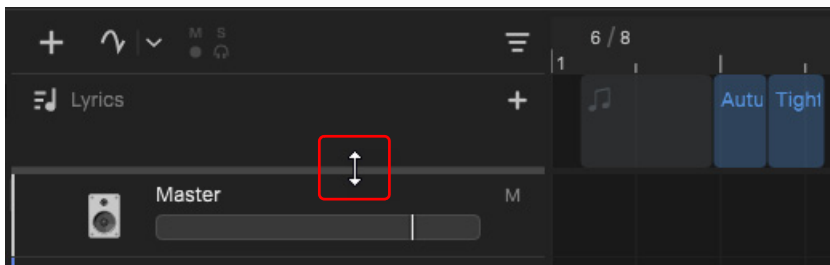
To show or hide the Lyrics track, do *one* of the following:

- ▶ Click the **Track View Options** button  and select **Lyrics** under **Project Tracks**.
- ▶ Select **View > Show Lyrics Track**
- ▶ Press ALT+L (Windows) / OPTION+L (Mac)

The Lyrics track is shown directly under the Arranger track (if visible), above regular tracks.

To resize the Lyrics track, drag the splitter bar between the Lyrics pane and the Track pane to change its height.

**Figure 48.** Drag the splitter bar vertically to resize the Lyrics track.



The Lyrics track is empty until you define one or more lyric lines (see [“Adding lyrics”](#) on page 216).

### Lyrics track timeline

The Lyrics track timeline shows all defined lyric lines.

You can edit lyric lines directly in the timeline, including resize, move, split, merge, duplicate, copy/paste, and delete. Drag to create and rearrange lyric lines, then freely move them along the timeline. For details, see [“Editing lyrics”](#) on page 217.

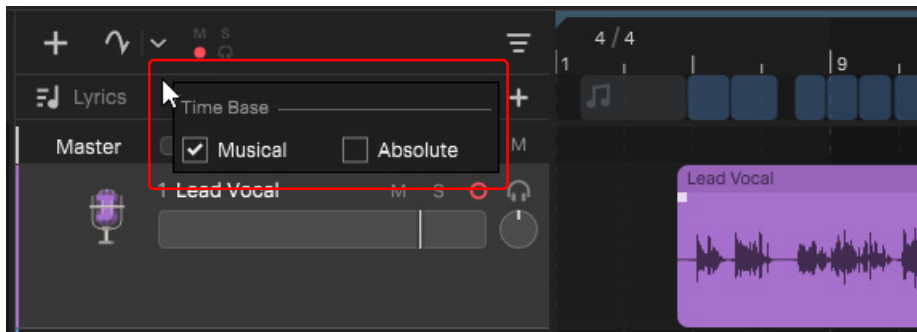
Any changes in the Lyrics track timeline are immediately reflected in the Lyrics Inspector, and vice versa.

## Lyrics track time base

The time base format for the Lyrics track can be set to either **Musical** or **Absolute**. The time base format determines what happens to lyric lines when you change the project tempo.

To specify the time base format, right-click the Lyrics track header, then select *one* of the following:

- ▶ **Musical.** A lyric line's M:B:T position stays constant, and its absolute position shifts.
- ▶ **Absolute.** A lyric line's absolute position stays constant, and its M:B:T position shifts. The Lyrics track tooltip shows time as H:M:S:F and samples.



See:

- “Lyrics Inspector” on page 211
- “Lyrics Editor” on page 212
- “Lyrics Scratch Pad” on page 214
- “Lyrics Prompter” on page 215
- “Adding lyrics” on page 216
- “Editing lyrics” on page 217
- “Time-syncing lyrics” on page 220
- “Lyrics” on page 207

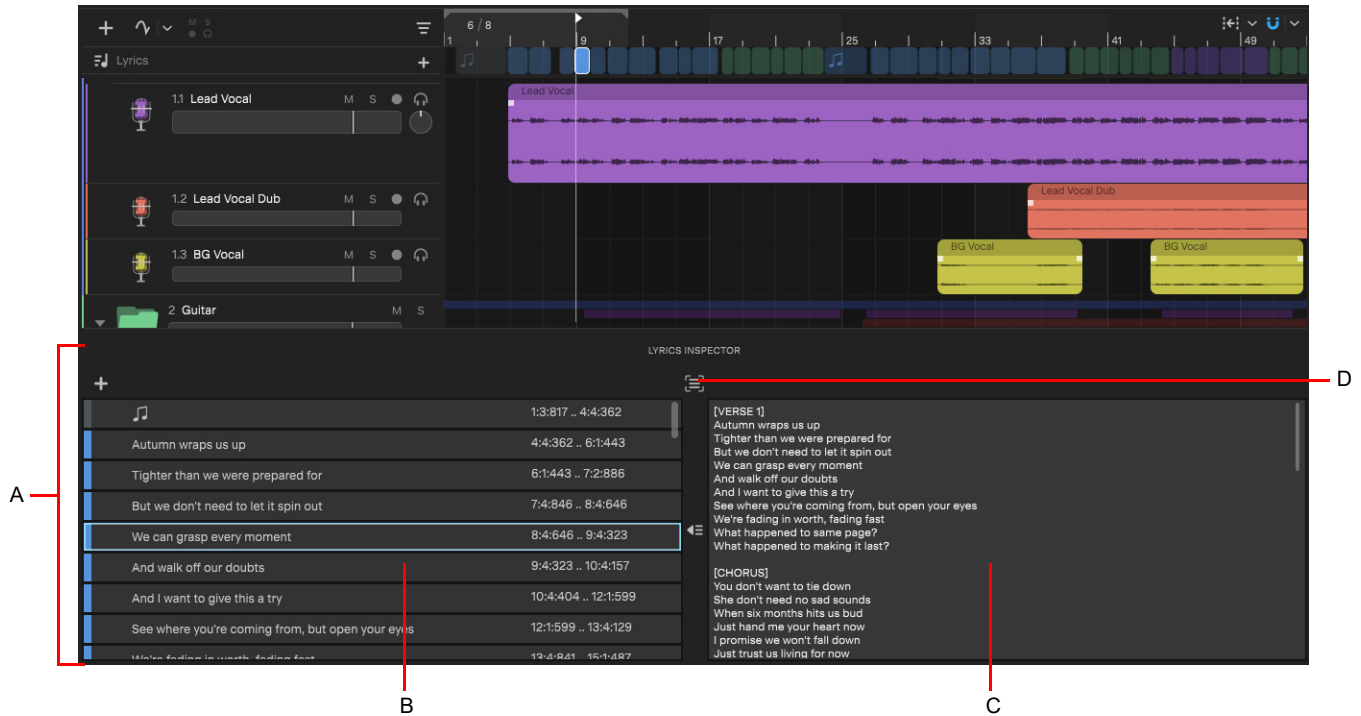
## Lyrics Inspector

The Lyrics Inspector consists of the Lyrics Editor (see “Lyrics Editor” on page 212), Lyrics Scratch Pad (see “Lyrics Scratch Pad” on page 214), and Lyrics Prompter (see “Lyrics Prompter” on page 215).

### Showing/hiding the Lyrics Inspector

To show/hide the Lyrics Inspector, do *one* of the following:

- ▶ Select **View > Show Lyrics Inspector**
- ▶ Double-click a lyric line in the Lyrics track timeline
- ▶ Press F7



**A.** Lyrics Inspector **B.** Lyrics Editor **C.** Lyrics Scratch Pad **D.** Toggle Prompter Mode

To toggle between the Lyrics Editor and Lyrics Prompter, click the **Toggle Prompter Mode** button .

See:

- “Lyrics track” on page 209
- “Lyrics Editor” on page 212
- “Lyrics Scratch Pad” on page 214
- “Lyrics Prompter” on page 215
- “Adding lyrics” on page 216
- “Editing lyrics” on page 217
- “Time-syncing lyrics” on page 220
- “Lyrics” on page 207

## Lyrics Editor

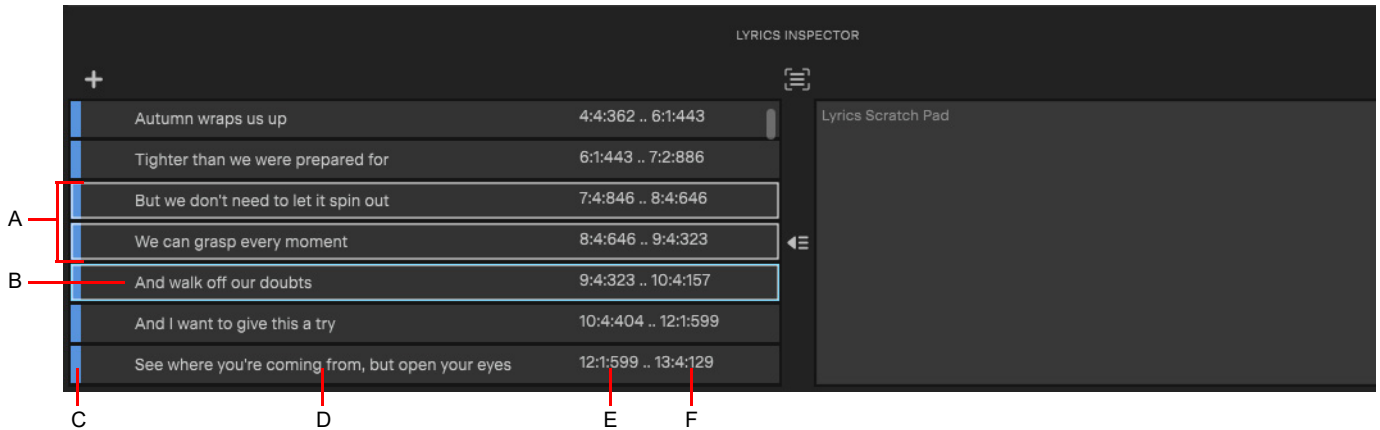
The Lyrics Editor functions much like a standard text editor, and allows you to change text, add, duplicate, rearrange, delete, and change the color of lyric lines.

Changes you make in the Lyrics Editor are reflected in the Lyrics track, and vice versa. The Lyrics Editor facilitates quick editing without having to drag or zoom horizontally within the Clips pane.

### Showing/hiding the Lyrics Editor


To show/hide the Lyrics Editor, select **View > Show Lyrics Inspector** and make sure the **Toggle Prompter Mode** button  is not selected.

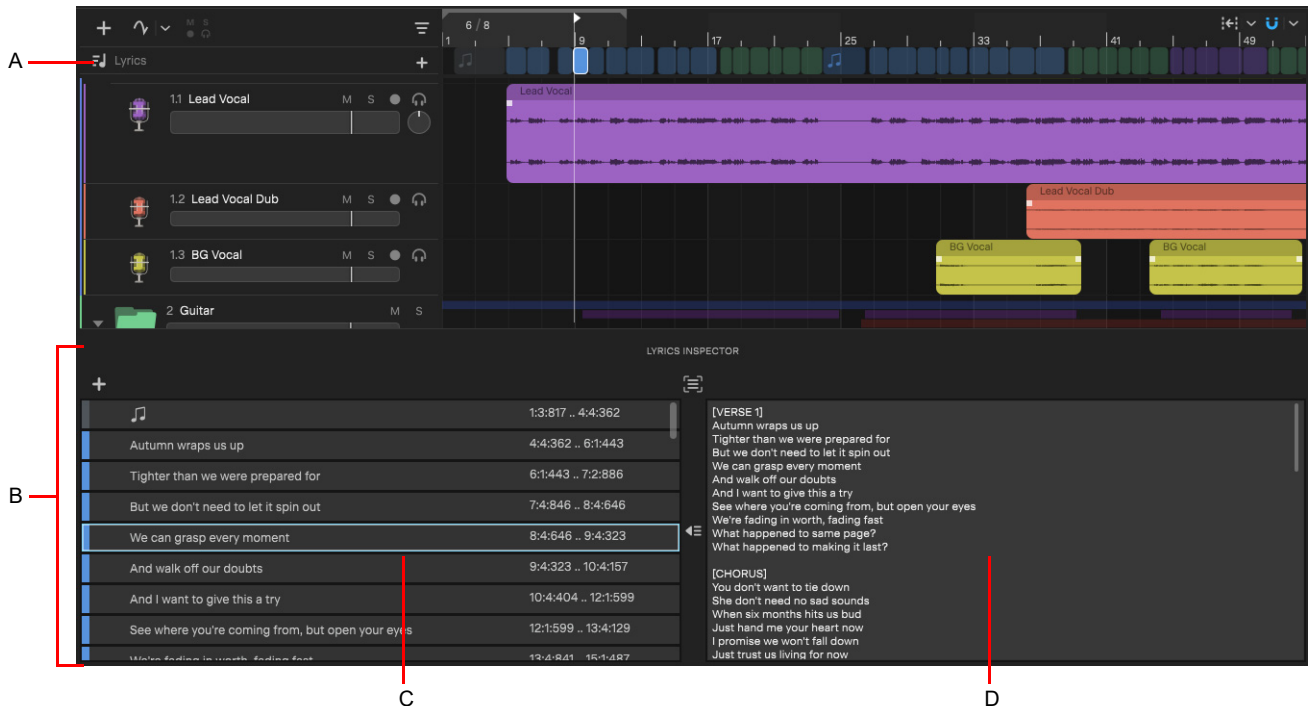
Each lyric line is shown on a separate line, and displays the lyric line's color, text, start time, and end time.



A. Selected lyric lines B. Focused lyric line C. Color D. Lyric text E. Start time F. End time

The Lyrics Editor also features a teleprompter mode, in which enlarged lyric text scrolls and highlights in sync with the position of the

Now Time. To toggle between the Lyrics Editor and Lyrics Prompter, click the **Toggle Prompter Mode** button  or press ALT+F7 (Windows) / OPTION+F7 (Mac). For details, see ["Lyrics Prompter"](#) on page 215.



A. Lyrics track B. Lyrics Inspector C. Lyrics Editor D. Lyrics Scratch Pad



## Add a New Lyric Line button

The **Add a New Lyric Line** button  inserts a new lyric line.

- ▶ The new lyric line duration is inherited from the last clicked lyric line
- ▶ During playback, a new empty lyric line is inserted at the Now time, without opening a text editor. The Snap to Grid setting is obeyed.
- ▶ When idle, the new lyric line is added at the end and presents a text editor.

## Lyrics Editor keyboard shortcuts

The following keyboard shortcuts can be used to navigate and edit lyric lines in the Lyrics Editor:

Command	Windows	Mac
Edit the focused lyric line (press ENTER (Windows) / (RETURN (Mac) to save changes or ESC to cancel)	CTRL+ENTER	CMD+RETURN
While editing text, insert a new line at the caret position	SHIFT+ENTER	SHIFT+RETURN
Insert new lyric line immediately after the focused lyric line If no lyric line is focused, insert at the end If there are no existing lyric lines, insert at the Now time	ENTER	RETURN
Insert a new lyric line immediately before the focused lyric line, shifting subsequent lyric lines to make room If no lyric line is focused, insert at the end If there are no existing lyric lines, insert at the Now time	INSERT	INSERT or Fn+RETURN
Moves focus down one lyric line	DOWN or TAB	DOWN or TAB
Moves focus up one lyric line	UP or SHIFT+TAB	UP or SHIFT+TAB
Delete the focused or selected lyric lines	DELETE	DELETE

**Table 4.** *Lyrics Editor keyboard shortcuts*

See also:

[“Adding lyrics”](#) on page 216

See:

[“Lyrics track”](#) on page 209

[“Lyrics Inspector”](#) on page 211

[“Lyrics Scratch Pad”](#) on page 214

[“Lyrics Prompter”](#) on page 215

[“Editing lyrics”](#) on page 217

[“Time-syncing lyrics”](#) on page 220

[“Lyrics”](#) on page 207

## Lyrics Scratch Pad

The Lyrics Scratch Pad is a free form text editor that allows you to store lyric ideas and other notes/reminders without cluttering the actual Lyrics track. Text in the Lyrics Scratch Pad does not appear in the Lyrics track timeline or Lyrics Prompter, but you can easily copy text from the Lyrics Scratch Pad into the Lyrics track. For details, see [“Add Selection as Lyric Lines button”](#) on page 214 and [“Line-by-line authoring in the Lyrics Inspector”](#) on page 224.

### Showing/hiding the Lyrics Scratch Pad


To show/hide the Lyrics Scratch Pad, select **View > Show Lyrics Inspector**.

The Lyrics Scratch Pad appears in a re-sizable pane to the right of the Lyrics Editor.

### Resizing the Lyrics Scratch Pad

To resize the Lyrics Scratch Pad, drag the vertical splitter bar.


### Add Selection as Lyric Lines button

The **Add Selection as Lyric Lines** button  allows you to copy selected text in the Lyrics Scratch Pad into selected lyric lines.

- ▶ If any lyric lines are selected, the selected Lyrics Scratch Pad text will copy into the selected lyric lines and replace any existing text.
- ▶ If no lyric lines are selected, the selected Lyrics Scratch Pad text will copy as new lyric lines.
- ▶ If there are more Lyrics Scratch Pad lines selected than lyric lines, the text is distributed evenly across selected lyric lines and any overflow text is copied as multiple lines in the last selected lyric line.
- ▶ If more lyric lines than Lyrics Scratch Pad lines are selected, no text is copied.

### Context menu

The Lyrics Scratch Pad contains the following context menu commands:

- ▶ **Add Selection as Lyric Lines.** Copy selected Lyrics Scratch Pad text as new lyric lines at the end.
- ▶ **Insert Selection Into Selected Lyric Lines.** Copy selected Lyrics Scratch Pad text into selected lyric lines. Same as the **Add Selection as Lyric Lines** button .

See:

[“Lyrics track”](#) on page 209

[“Lyrics Inspector”](#) on page 211

[“Lyrics Editor”](#) on page 212

[“Lyrics Prompter”](#) on page 215

[“Adding lyrics”](#) on page 216

[“Editing lyrics”](#) on page 217

[“Time-syncing lyrics”](#) on page 220

[“Lyrics”](#) on page 207


## Lyrics Prompter

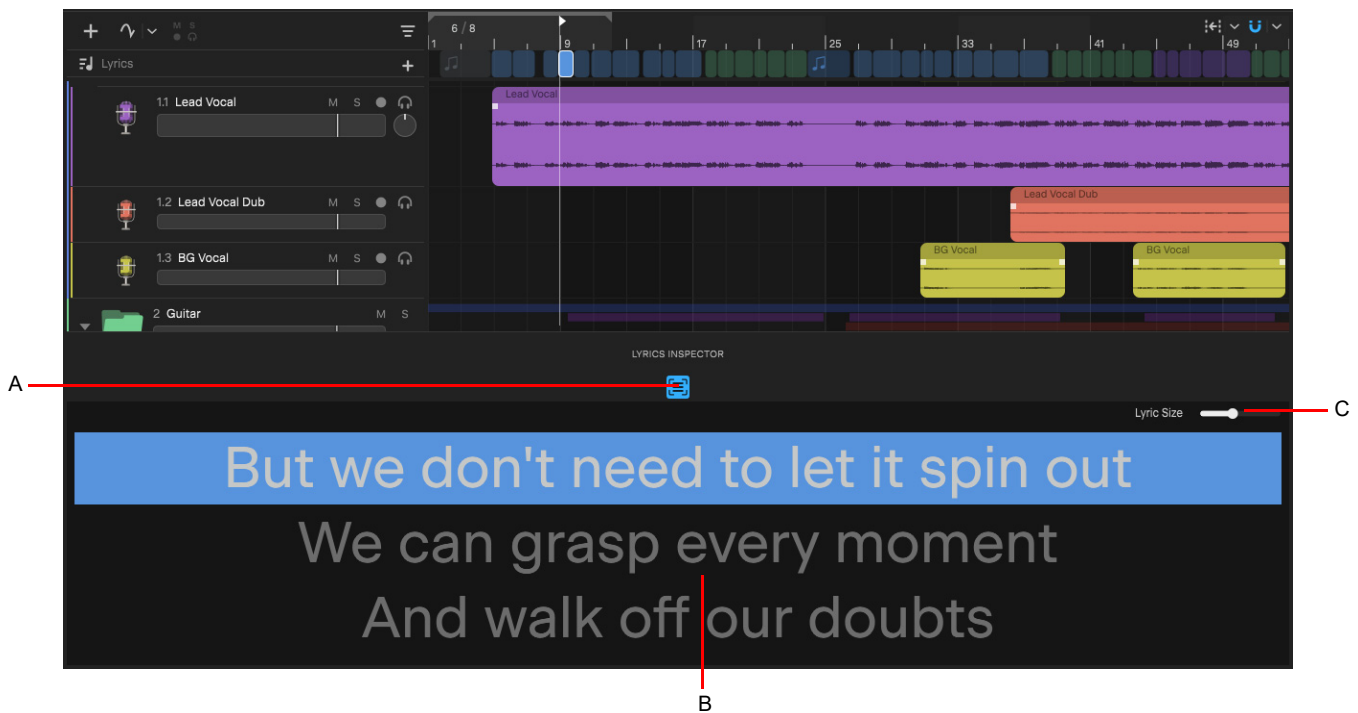
The Lyrics Prompter functions like a karaoke line-by-line teleprompter, in which enlarged lyric text scrolls and highlights in sync with the position of the Now Time during playback.

**Note:** The Lyrics Prompter shows only the lyrics that have been added to the project, not text that lives in the Lyrics Scratch Pad.

### Showing/hiding the Lyrics Prompter

To show/hide the Lyrics Prompter, first open the Lyrics Inspector (see “Showing/hiding the Lyrics Inspector” on page 211), then do one of the following:

- ▶ Click the **Toggle Prompter Mode** button 
- ▶ Select **View > Show Lyrics Prompter**
- ▶ Press ALT+F7 (Windows) / OPTION+F7 (Mac)



A. Toggle Prompter Mode B. Lyric Prompter C. Lyric Size

### Adjusting the text size

To adjust the text size in the Lyrics Prompter, drag the **Lyric Size** slider.

See:

- “Lyrics track” on page 209
- “Lyrics Inspector” on page 211
- “Lyrics Editor” on page 212
- “Lyrics Scratch Pad” on page 214
- “Adding lyrics” on page 216
- “Editing lyrics” on page 217
- “Time-syncing lyrics” on page 220
- “Lyrics” on page 207

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## Adding lyrics

Lyric lines can be added in the Lyrics track timeline or the Lyrics Inspector.

### Lyric lines

A lyric *line* can be a single word, a sentence, or even an entire paragraph. It's up to you to decide how granular you want the lyrics to be highlighted in the Lyrics Prompter during playback. A single lyric line can also contain multiple lines of text.



In general, a lyric line typically contain a complete sentence/phrase, which makes it easy to arrange and edit lyrics.

Each lyric line contains the following properties:

- ▶ Text (if a lyric line contains no text, it is considered an “interlude” event and shows as music notes)
- ▶ Color
- ▶ Start time
- ▶ End time

### Adding a lyric line

To add a new lyric line, do *one* of the following:

- ▶ Double-click or drag in the Lyrics track timeline.
- ▶ In the Lyrics track header, click the **Add a New Lyric Line** button .
- ▶ In the Lyrics Inspector's editor, click the **Add a New Lyric Line** button  or double-click an empty area.
- ▶ Select text in the Lyrics Scratch Pad, then right-click and select **Add Selection as Lyric Lines**.
- ▶ To insert a new lyric line between two existing lyric lines, select an existing lyric line in the Lyrics Editor, then press ENTER (Windows) / RETURN (Mac) to insert a new lyric line after the selected lyric line. Any subsequent lyric lines are shifted to make room for the new lyric line.

See also:

[“Changing lyric text”](#) on page 217

### Adding an interlude (no lyrics) event

By default, a new lyric line contain no text and is considered an “interlude” event, as indicated by its music notes.

See:

[“Lyrics track”](#) on page 209

[“Lyrics Inspector”](#) on page 211

[“Lyrics Editor”](#) on page 212

[“Lyrics Scratch Pad”](#) on page 214

[“Lyrics Prompter”](#) on page 215

[“Editing lyrics”](#) on page 217

[“Time-syncing lyrics”](#) on page 220

[“Lyrics”](#) on page 207

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## Editing lyrics

Lyric lines can be edited in the Lyrics track timeline or in the Lyrics Inspector.

See also:

[“Lyrics Editor keyboard shortcuts”](#) on page 213

### Changing lyric text

To change existing lyric text:

1. Do *one* of the following:
  - ▶ Right-click the lyric line and select **Change Lyric Text**.
  - ▶ Double-click the lyric line in the Lyrics Inspector.
  - ▶ Select the lyric line and press F2.
2. Type or paste text into the text cell, then press ENTER (Windows) / RETURN (Mac).

### Selecting a lyric line

To select a single lyric line, click the lyric line in the Lyrics track timeline or Lyrics Inspector editor.

### Selecting multiple lyric lines

To select discontinuous lyric lines, hold down the CTRL key and click the lyric lines you want to select/deselect.


To select all lyric lines, right-click any blank area in the Lyrics track and select **Select All**.

To select a range of lyric line, do *one* of the following:

- ▶ Drag with the right mouse button to lasso select in the Lyrics track timeline.
- ▶ Click the first lyric line, then hold down the SHIFT key and click the last lyric line.
- ▶ Drag in the time ruler to make a selection.

### Changing the lyric line color

To change a lyric line's color, right-click the lyric line and point to **Section Color**, then select a color.

 **Tip:** You can select multiple lyric lines to change their color simultaneously. To select discontinuous lyric lines, hold down the CTRL key and click the lyric lines you want to select/deselect. To select a range of lyric lines, click the first lyric line, then hold down the SHIFT key and click the last lyric line (see [“Selecting multiple lyric lines”](#) on page 217).

### Deleting a lyric line

To delete a lyric line, do *one* of the following:

- ▶ Right-click the lyric line and select **Delete**.
- ▶ Click the lyric line, then press the DELETE key.

### Copying/duplicating a lyric line

To copy/duplicate a lyric line, do *one* of the following:


- ▶ Hold down the CTRL (Windows) / OPTION (Mac) key and drag the lyric line.
- ▶ Right-click the lyric line and select **Duplicate**.
- ▶ Select the lyric line and press CTRL+D (Windows) / CMD+D (Mac).

### Splitting a lyric line

To split a lyric line, position the Now Time at the location where you want to split the lyric line, then right-click the lyric line and select **Split at Now Time**.

## Merging multiple lyric lines

To merge multiple lyric line, select two or more contiguous lyric lines that you want to merge (or drag in the time ruler to make a time selection), then right-click a selected lyric line and select **Merge**.

 **Note:** You can use standard CTRL and SHIFT modifiers to select multiple lyric lines.

## Moving a lyric line

To move a lyric line, drag the lyric line to the desired location.


## Resizing a lyric line


To resize a lyric line, drag its left or right edge.

Abutting lyric lines will move over if extending the lyric line duration.

To overwrite abutting lyric lines, hold down the ALT (Windows) / CTRL (Mac) key while resizing a lyric line.

To move downstream lyric lines, hold down the SHIFT key while resizing a lyric line.

 **Note:** Empty space between lyric lines results in a paragraph break in the Lyrics Prompter.

 **Tip:** Use the vocal track audio waveform as a guide when dragging the start and end of lyric lines to the proper positions.

## Adding a blank space between lyric lines

For improved legibility in the Lyrics Prompter, you may want to add a blank line to separate different song sections (verse, chorus, etc.). There are two ways to separate lyric lines with a blank line:

- ▶ Make sure there is empty space/gap between two adjacent lyric lines in the Lyric track timeline. Simply resize one or more adjacent lyric lines to create a gap.
- ▶ Create a multi-line lyric line, and add a blank line at the top or bottom. To create multiple lines, press SHIFT+ENTER (Windows) / SHIFT+RETURN (Mac) while editing the text.

## Swapping two lyric lines

To swap two lyric line, drag a lyric line onto the middle of another lyric line.

## Moving a lyric line after another lyric line

To move a lyric line after another lyric line, drag the lyric line onto the end of another lyric line.

To copy instead of move, hold down the CTRL (Windows) / OPTION (Mac) key.

## Moving a lyric line before another lyric line

To move a lyric line before another lyric line, drag the lyric line onto the beginning of another lyric line.

To copy instead of move, hold down the CTRL (Windows) / OPTION (Mac) key.

## Overwriting an existing lyric line

To overwrite an existing lyric line, hold down the ALT (Windows) / CTRL (Mac) key and drag a lyric line onto another lyric line.

## Replacing an existing lyric line

To replace an existing lyric line, hold down ALT+SHIFT (Windows) / CTRL+SHIFT (Mac) and drag a lyric line onto another lyric line.

## Moving a lyric line to the middle of another lyric line (and split target lyric line)

To move a lyric line to the middle of another lyric line (and split target lyric line), hold down the SHIFT key and drag a lyric line onto the middle of another lyric line.

To copy instead of move, hold down CTRL+SHIFT (Windows) / OPTION+SHIFT (Mac).

See also:

[“Time-syncing lyrics”](#) on page 220

See:

[“Lyrics track”](#) on page 209

[“Lyrics Inspector”](#) on page 211

[“Lyrics Editor”](#) on page 212

[“Lyrics Scratch Pad”](#) on page 214

[“Lyrics Prompter”](#) on page 215

[“Adding lyrics”](#) on page 216

[“Lyrics”](#) on page 207

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## Time-syncing lyrics

Time-syncing lyrics means that the lyrics occur at the same time as the corresponding vocal is heard during playback. There are different ways to synchronize lyrics with the music. The two most common workflows are:

- ▶ **Automatically populate lyrics with text from the Lyrics Scratch Pad.** You can create new lyric lines or replace existing selected lyric lines with selected text from the Lyrics Scratch Pad. This is the fastest method. For details, see “[Syncing existing text](#)” on page 220.
- ▶ **Manually type and align each lyric line, one line at a time.** Manually type the lyric text, one line at a time, and move to the correct position. This is the slowest method, but provides the most control. For details, see “[Line-by-line authoring](#)” on page 224.

### Recommended workflow

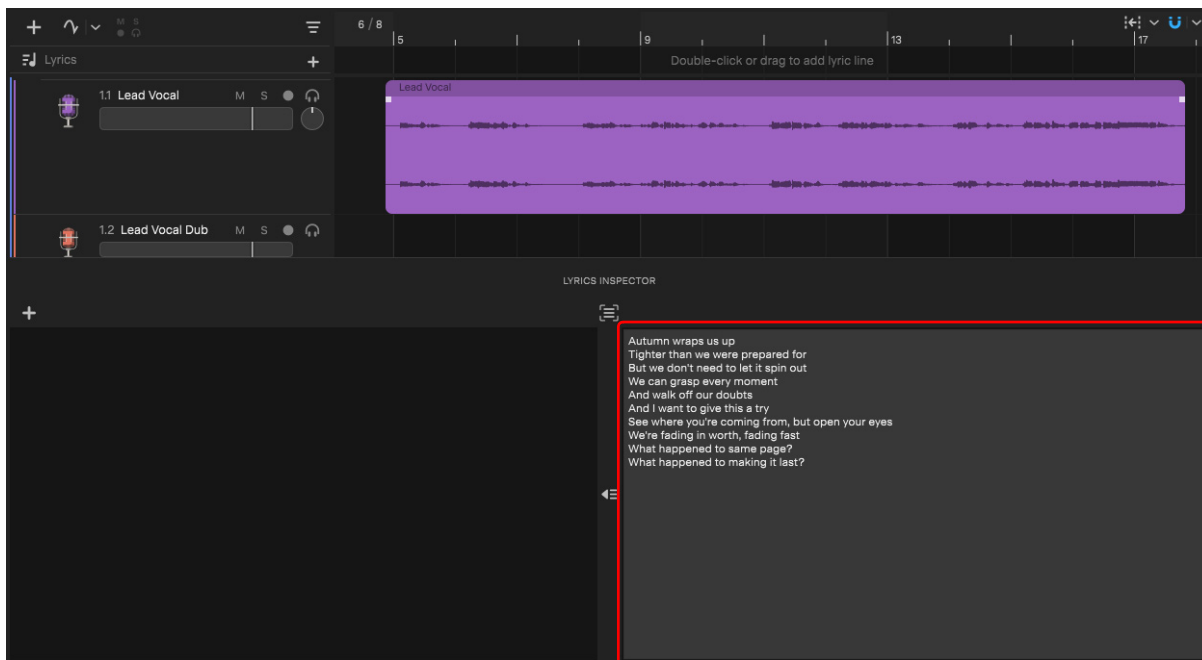
1. Type or paste all the lyric text into the Lyrics Scratch Pad
2. Add empty placeholder lyric lines during playback
3. Apply the Lyrics Scratch Pad text to the selected lyric lines

You can mix and match workflows as needed. The following describes each workflow in greater detail.


### Syncing existing text

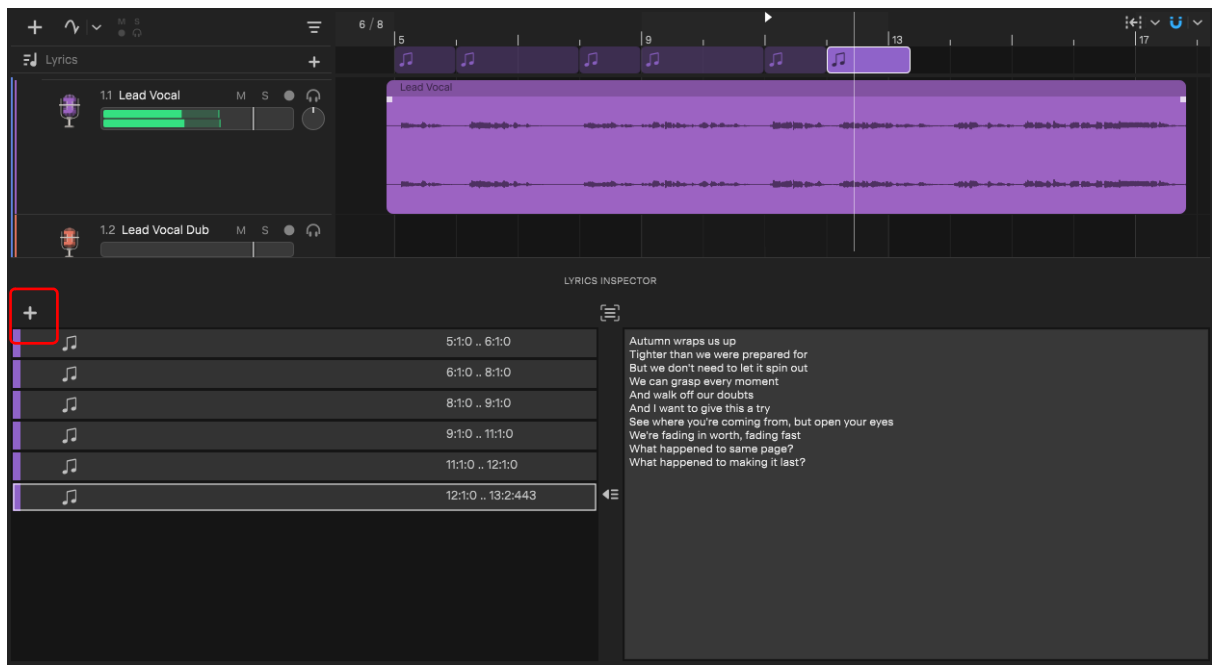
You can quickly bulk add text from the Lyrics Scratch Pad to existing lyric lines:

1. Open the Lyrics Inspector.
2. Type or paste all the lyrics into the Lyrics Scratch Pad. Format the text so each line only contains the text that you want to appear in each unique lyric line (each line in the teleprompter). One line should typically contain a single sentence/phrase.

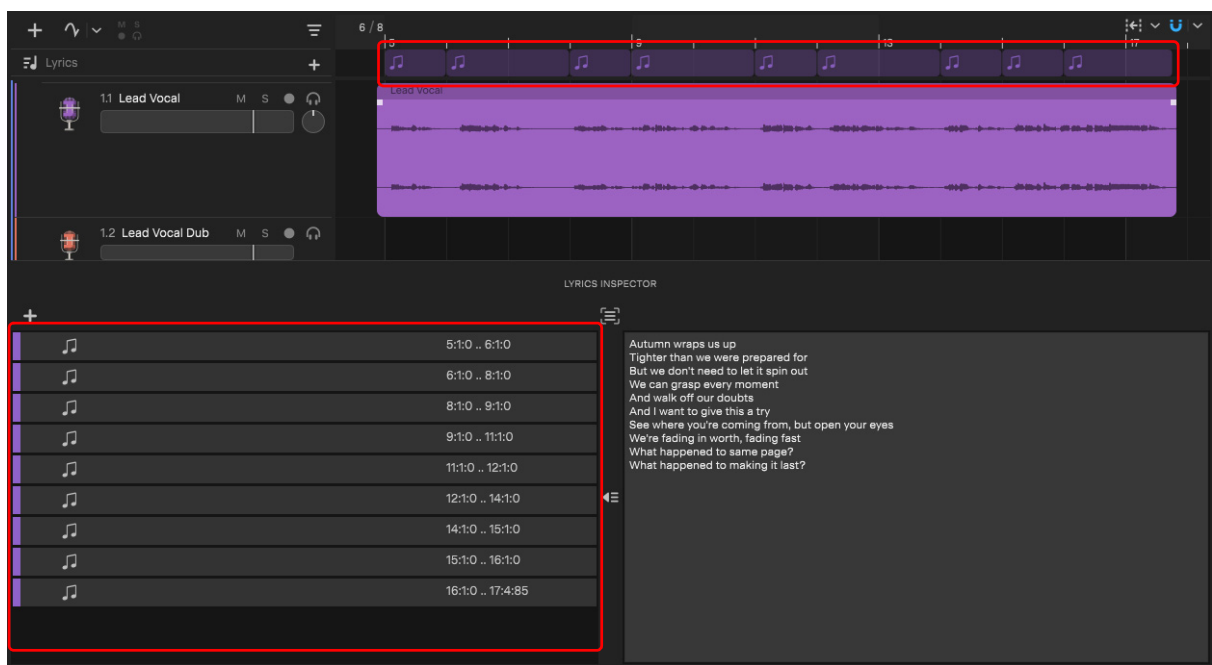




- Start playback from the beginning of the song. While listening to the vocal track, click the **Add a New Lyric Line** button  whenever you want a new lyric line to occur, such as the start of each sung vocal phrase. Please note that the The Snap to Grid setting is obeyed. There should be exactly one lyric line for each line in the Lyrics Scratch Pad. You can also perform this step manually by dragging in the Lyrics track timeline.



- After the last empty lyric line has been added, stop playback. The Lyrics track now contains empty ("interlude") placeholder lyric lines, ready to be populated with text from the Lyrics Scratch Pad.

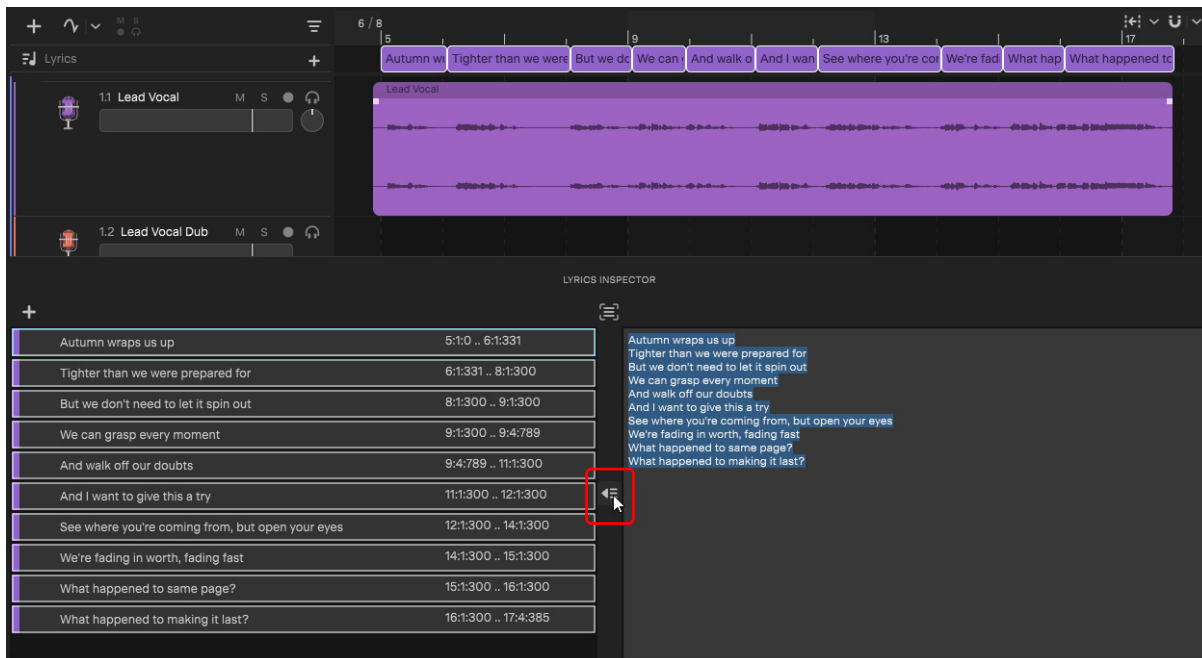


- Select all the empty lyrics lyric lines (Tip: press CTRL+A (Windows) / CMD+A (mac) to select all).

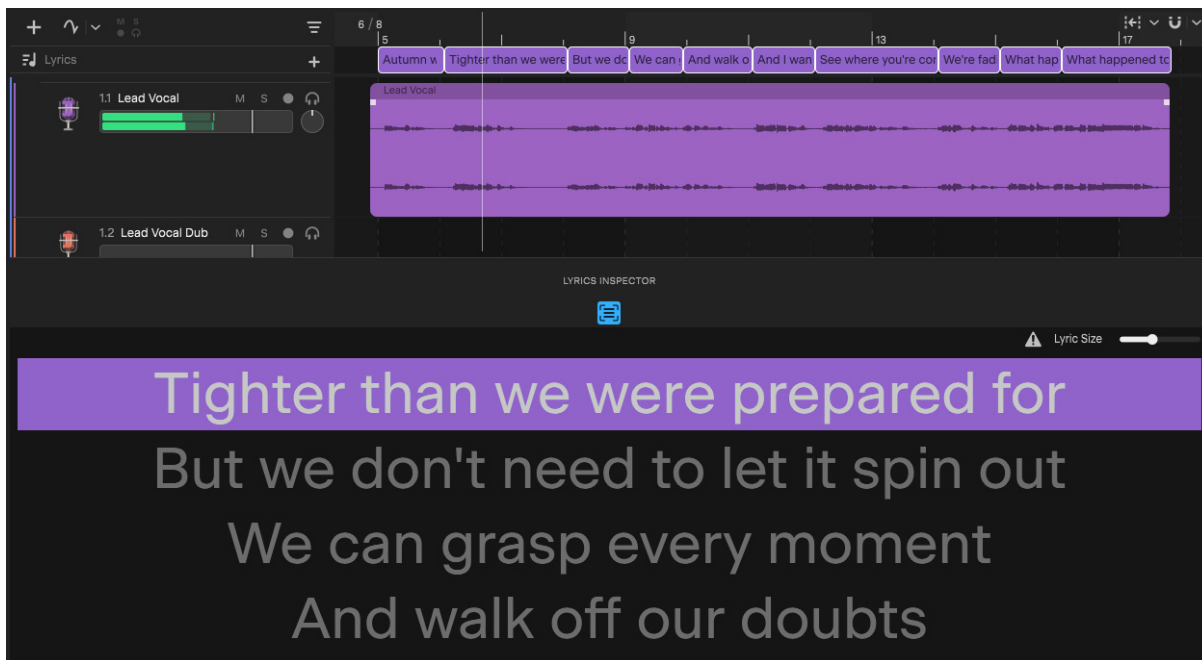
6. Select the Lyrics Scratch Pad text that you want to apply.

**Important:** The number of selected lyric lines must equal or be less than the number of selected Lyrics Scratch Pad lines. For details, see [“Add Selection as Lyric Lines button”](#) on page 214.

7. Click the **Add Selection as Lyric Lines** button .



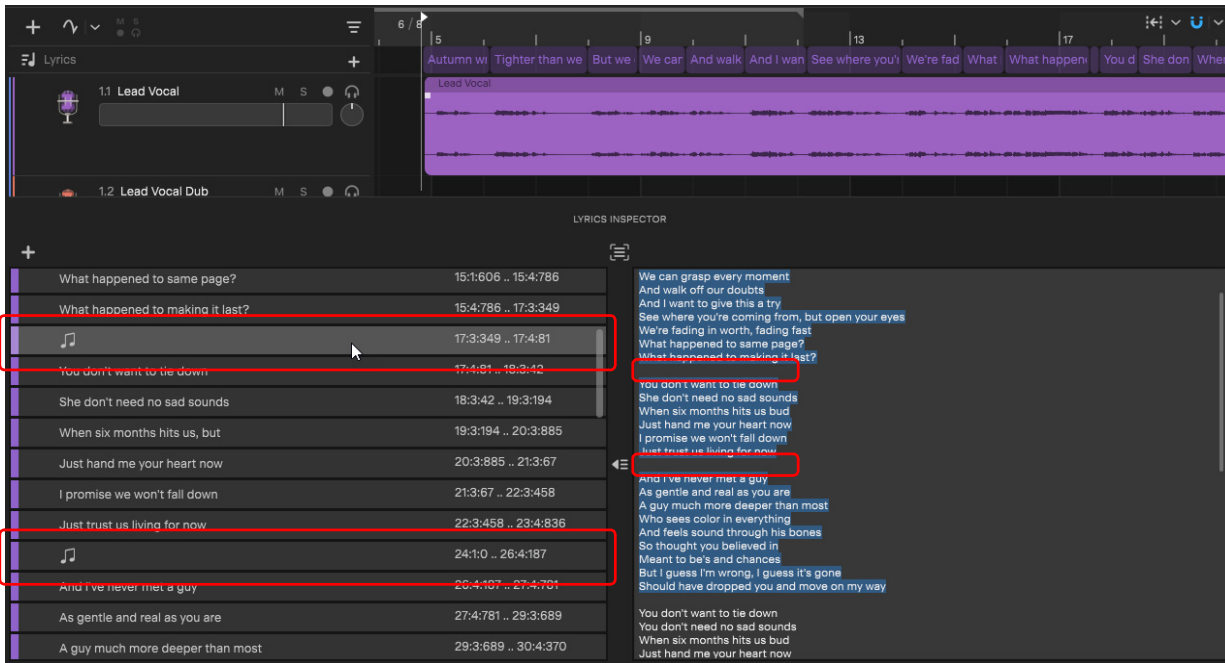
The selected Lyrics Scratch Pad text is applied to the selected lyric lines. The lyrics are now synchronized with the music.



If you need to fine-tune the duration or start time of any lyric lines, simply drag or resize the lyric lines in the Lyric track timeline. For details, see “Moving a lyric line” on page 218 and “Resizing a lyric line” on page 218.

**Note:**


- ▶ Lines with no text become “interlude” events, spanning the range between lyric lines.
- ▶ Empty space between lyric lines results in a paragraph break in the Lyrics Prompter.

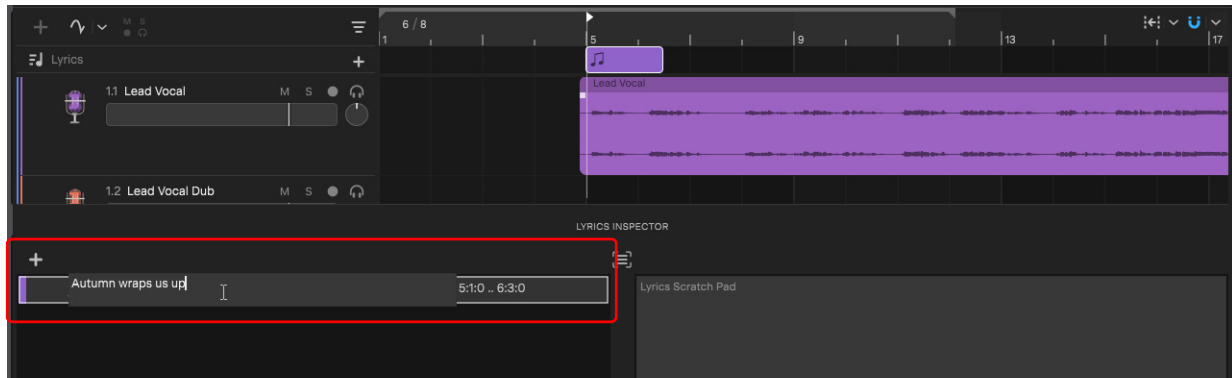


## Line-by-line authoring

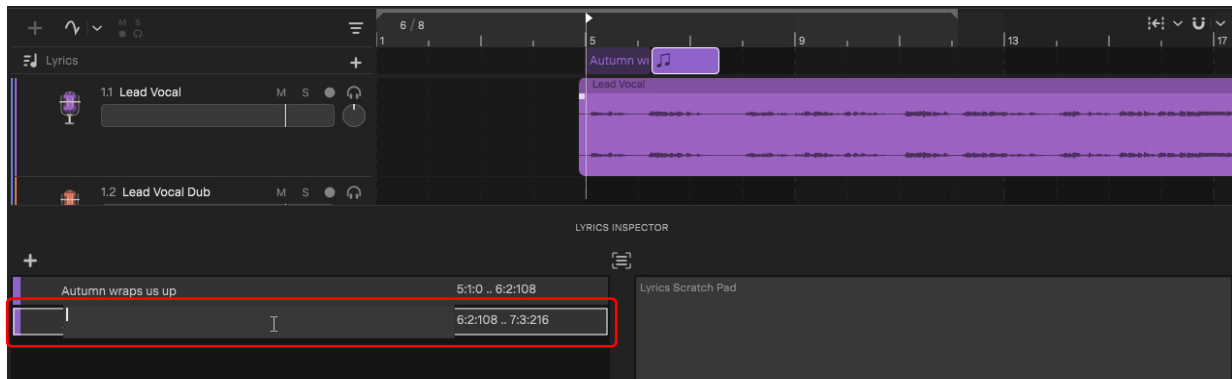
You can manually add one lyric line at a time.


### Line-by-line authoring in the Lyrics Inspector

1. Open the Lyrics Inspector.
2. Click the **Add a New Lyric Line** button  to insert a new lyric line. The new lyric line immediately presents a text editor. If the editor is closed, select the lyric line and press CTRL+ENTER (Windows) / CMD+RETURN (Mac) to show the text editor.
3. Type the lyric text. Note that multiple lines of text can be added to a single lyric line by pressing SHIFT+ENTER (Windows / SHIFT+RETURN (Mac).



4. Press ENTER (Windows) / RETURN (Mac) to save the lyric line and close its text editor.
5. Press ENTER (Windows) / RETURN (Mac) again to add another lyric line immediately following the previous lyric line. Continue in this fashion to enter multiple lines.



 **Note:** The default duration for new lyric lines is inherited from the last selected lyric line.

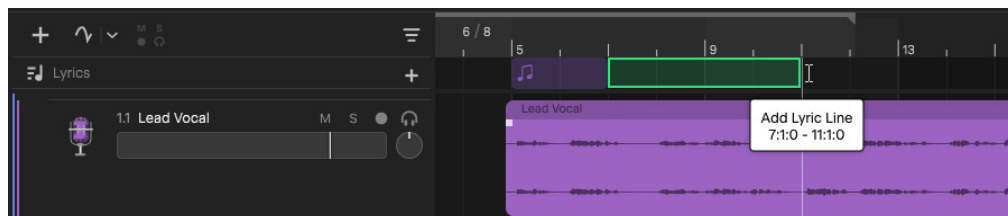
See also:

["Lyrics Editor keyboard shortcuts"](#) on page 213.

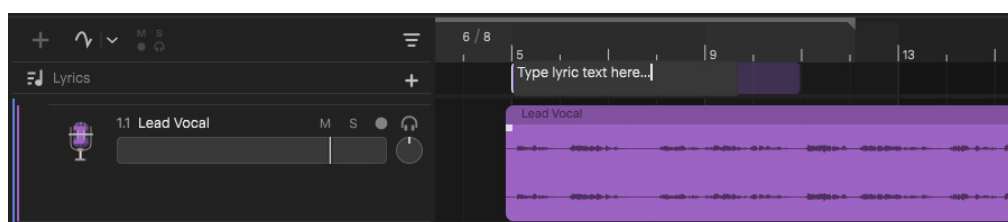
## Line-by-line authoring in the Lyric track timeline


You can manually add, move and resize lyric lines in the Lyric track timeline.

1. Show the Lyrics track.
2. Double-click or drag in the Lyric track timeline to add a new lyric line.



3. To change the lyric text, right-click the lyric line and select **Change Lyric Text**.
4. Type the lyric text, then press ENTER (Windows) / RETURN (Mac) to save the lyric line and close its text editor.  
Continue in this fashion to enter multiple lines.



 **Tip:** Use the vocal track audio waveform as a guide when adding, moving, and resizing lyric lines.

See:

- “Lyrics track” on page 209
- “Lyrics Inspector” on page 211
- “Lyrics Editor” on page 212
- “Lyrics Scratch Pad” on page 214
- “Lyrics Prompter” on page 215
- “Adding lyrics” on page 216
- “Editing lyrics” on page 217
- “Lyrics” on page 207



# Exporting

You can export a project in a variety of audio file formats in order to publish and share your music.

See:

[“Exporting audio”](#) on page 228

[“Publishing to BandLab”](#) on page 69

[“Exporting MIDI”](#) on page 230

[“Transferring projects between Cakewalk Sonar and Next”](#) on page 231

See also:

[“Exporting arrangements”](#) on page 110


[“BandLab library import/export”](#) on page 67

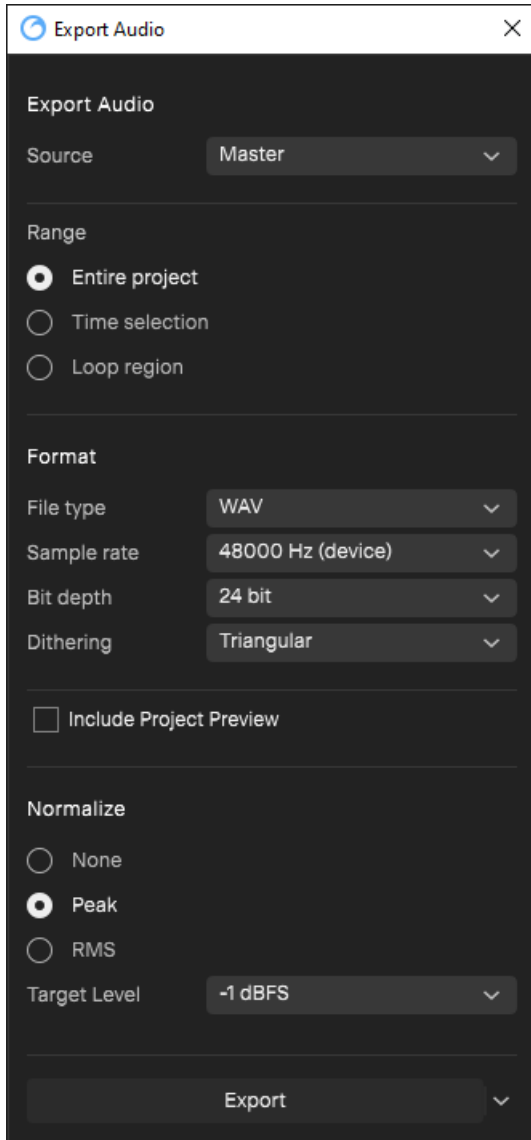
[“Creating a project preview file”](#) on page 24

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## Exporting audio

To export audio, do *one* of the following:

- ▶ Select **File > Export Audio**
- ▶ Click the **Share** button  and select **Export Audio**
- ▶ Press CTRL+E (Windows) / CMD+E (Mac) to open the **Export Audio** dialog box



The **Export Audio** dialog box contains the following options.

### Source

The **Source** menu lets you specify what to export:

- ▶ **Master.** Export the project as a single audio file.
- ▶ **All Tracks.** Export all tracks as separate files. The track name is appended to the file name.
- ▶ **All Selected Tracks.** Export only the selected tracks as separate files.
- ▶ **<list of buses>.** Select a bus to export.
- ▶ **<List of tracks>.** Select a track to export.



## Range

The **Range** section lets you specify the time range to export:

- ▶ **Entire project.** Export the full duration of the project.
- ▶ **Time selection.** Export only the selected time range.
- ▶ **Loop region.** Export only the active loop region.

## Format

The **Format** section lets you specify the file type, sample rate, and bit depth:

- ▶ **File type.** Select from one of the following export formats:
  - ▶ **WAV.** The standard digital audio format used under Windows for burning CDs, with a file extension of .wav.
  - ▶ **AIFF.** Audio Interchange File Format, co-developed by Apple Inc., is most commonly used on Apple Macintosh computer systems. The file extension is .aif.
  - ▶ **FLAC.** FLAC stands for Free Lossless Audio Codec, which is somewhat similar to MP3, but lossless. Audio in a FLAC file is compressed without any loss in quality. The file extension is .flac.
  - ▶ **Ogg-Vorbis.** The Ogg Vorbis Audio format is an increasingly popular royalty-free format for compressed audio files. The file extension is .oga.
  - ▶ **MP3.** Highly compressed digital audio designed for quick downloads via the internet, with the file extension .mp3.
- ▶ **Sample Rate.** Select the sample rate that you want your exported audio to use (22,050 Hz – 192,000 Hz).
- ▶ **Bit Depth.** Select the bit depth that you want your exported audio to use (8 – 32).
- ▶ **Dithering.** Whenever an audio signal is converted from a higher-bit resolution to a lower resolution, it is necessary to apply dither to avoid introducing undesirable quantization noise or harmonic distortion into the signal. Select one of the following dithering options:
  - ▶ **None.** No dithering is applied.
  - ▶ **Rectangular.** Essentially white noise, no noise shaping. Advantages: least CPU-intensive, lowest signal-to-noise ratio, preferable to shaped dither when successive dithering can occur (e.g. bouncing, freezing). Disadvantages: suffers from intermodulation distortion.
  - ▶ **Triangular.** Higher level than rectangular, no noise shaping. Advantages: low CPU-intensive dither, superior to Rectangular as it does not suffer from modulation noise effects. Preferable to shaped (Pow-r) dither when successive dithering can occur (e.g. bouncing, freezing).
- ▶ **Include Project Preview.** Save a project preview file that allows you to preview the project in the Quick Start screen without having to open the project. For details, see [“Creating a project preview file”](#) on page 24.

## Normalize

Raise or lower the overall volume in order to reach a target perceived amplitude or volume level. For details, see [“Normalizing audio”](#) on page 193.

- ▶ **None.** Do not normalize.
- ▶ **Peak.** Normalize to the highest peak.
- ▶ **RMS.** Normalize to the average loudness level.
- ▶ **Target Level.** Specify the normalization target level. It is generally not a good idea to normalize to 0 dBFS peak in a multi-track recording. It's good practice to reserve at least 3–6 dB of headroom to allow for further audio processing that may increase the level.

 **Note:** *Normalize raises the noise floor. That is, while it increases the volume of the signal, it also boosts the noise it contains.*

*If the project contains any loud signals, Normalize may not seem to have any effect. This is because the volume increase is determined by the loudest audio in the project.*

## Additional Options

Click the **Export** button drop-down menu  to access the following options:

- ▶ **Bypass affects and mixer settings (stems only).** Exclude effects, volume, pan, and automation from the export.
- ▶ **Include effects tails.** Add extra time to account to effect “tails”. Effect tails are the reverberations or signal delay that continue after the source has stopped. If your project uses track or clip plugin effects (reverb, delay, etc.) that result in effect tails, you will need to extend the duration of the exported clips in order to properly accommodate the effect tails. Otherwise, the exported clips will end prematurely, before the effect tail is finished.
- ▶ **Make mono.** Convert the stereo signal to mono.

## Export button

Click the **Export** button to export audio based on the selected settings.

See also:

[“Publishing to BandLab”](#) on page 69



**Tip:** *Export tips when mastering:*

- *When sending your mix to a mastering engineer, export your mix at the sample rate you recorded at, without dither applied, at a bit depth of 32.*
- *When mastering a song yourself, reduce the sample rate based on the destination formatting requirements. If you plan to upload your music to streaming services, export your song at a bit depth of 24 and apply dither.*

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## Exporting MIDI

To export a MIDI clip, right-click the MIDI clip header and select **Export to File**.


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## Transferring projects between Cakewalk Sonar and Next

You can exchange projects between Cakewalk Next and Cakewalk Sonar by exporting projects as Cakewalk Interchange Format (CXF).

### Cakewalk Interchange Format

The Cakewalk Interchange Format (CXF) is a Cakewalk cross platform inter-app project file format, used to exchange projects between Sonar and Next. CXF files exported from either application can be opened or imported in both apps.

 **Important:** CXF is a transitory format only used for exchange. It is not intended for archival storage or backing up since the format can change at any time.

### What is stored in a CXF file?

CXF supports a subset of project data used by Sonar and Next, so app-specific feature settings and view-specific states will not be restored.


The following data will be exported and imported:

- ▶ Tracks
  - ▶ Audio
  - ▶ MIDI
  - ▶ Instrument tracks
    - Simple Instrument tracks (Sonar)
    - Multi Instrument tracks (each track will represent a unique instance of the synth when opened)
    - Split instrument tracks (not supported)
  - ▶ Bus tracks (Next)
  - ▶ Patchpoints (Sonar; converted to buses)
  - ▶ Aux tracks (Sonar; limited support - treated like patch points and converted to buses) The aux track itself will not route to the patchpoint.
- ▶ Track data:
  - ▶ Audio/MIDI clips.
  - ▶ Overlapping clips or take lanes are flattened prior to export.
  - ▶ Clip effects are rendered into the clips prior to export.
  - ▶ Automation envelopes
- ▶ Track/Bus parameters
  - ▶ Volume
  - ▶ Pan
  - ▶ Mute
  - ▶ Solo
  - ▶ Input Gain (Sonar only)
  - ▶ Input Pan (Sonar only)
- ▶ Track/Bus routing
  - ▶ Outputs
  - ▶ Hardware outputs are not preserved since they are not cross platform. Any hardware outs are automatically assigned to the first hardware output.
  - ▶ Sends to buses and patch points.

- ▶ Plugins in track and bus effects racks. On opening a CXF file, any missing plugins will be listed. **Note:** when moving a project between Windows and Mac any plugins used must be installed on both platforms in the same format to successfully load them.
  - ▶ VST2
  - ▶ VST3
  - ▶ DX
  - ▶ AU plugins (only available in Next Mac)
  - ▶ DX plugins (only available in Sonar)
  - ▶ ProChannel (not supported)
  - ▶ FX Chains (not supported)
- ▶ Plugin settings are stored within the CXF and will be restored if the plugin is available.
- ▶ Instruments and instrument settings are stored within the CXF.

### Exporting a project in CXF format

To export a project to Cakewalk Interchange Format, do *one* of the following:


- ▶ Go to **File > Export to CXF**.
- ▶ Click the **Share** button  in the main toolbar and select **Export Cakewalk Interchange Format**.

CXF files have a `.cxf` file extension.

When the export is complete, a notification appears with a link to open the export folder.

### Opening a project in CXF format

To open a project in Cakewalk Interchange Format:

1. Use the **File > Open Project** command to open the Quick Start screen's **Recent** page.
2. Click the **Browse** button  to open the **Open Project** dialog box.
3. Navigate to the `.cxf` project file you want to open, then click **Open**.

Opening a CXF file creates a new project, which must then be saved in Next's native project file format (`.cnp`).

### Importing a project in CXF format

To import a project in Cakewalk Interchange Format into an existing Next project, drag a `.cxf` file to the track area.

An imported CXF file merges its data into the existing project file.

# Preferences

You can specify various options and preferences in the **Preferences** dialog box. Some options are global while others are per project.

To open the **Preferences** dialog box, go to **Edit > Preferences** or press P or CTRL+, (Windows) / CMD+, (Mac).

Settings and options are organized into the following sections:

“[Audio settings](#)” on page 234

“[MIDI settings](#)” on page 236

“[Plugins settings](#)” on page 237

“[Project settings](#)” on page 239

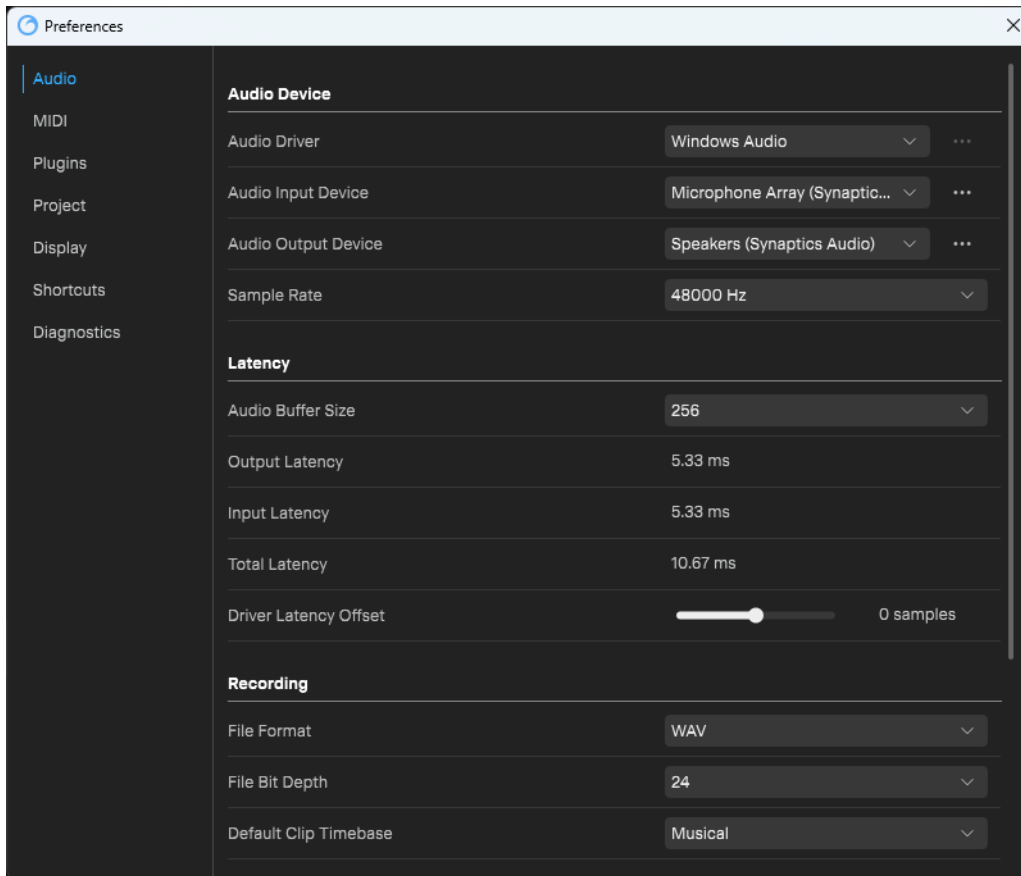
“[Display settings](#)” on page 240

“[Shortcuts settings](#)” on page 242

“[Diagnostics settings](#)” on page 243

## Audio settings

The **Audio** page lets you configure your audio hardware device and latency setting.



The **Audio** section lets you configure audio device settings.


The **Audio** section contains the following settings:

### Audio Device

- ▶ **Audio Driver.** Specify the desired audio driver mode. The following options are available:
  - ▶ CoreAudio (Mac only)
  - ▶ Windows Audio (Windows only)
  - ▶ Windows Audio (Exclusive Mode) (Windows only)
  - ▶ Windows Audio (Low Latency Mode) (Windows only)
  - ▶ DirectSound
  - ▶ ASIO
- ▶ **Audio Input Device.** Specify the desired audio recording device. Click **Setup** to select input channels.
- ▶ **Audio Output Device.** Specify the desired audio playback device. Click **Setup** to select output channels.
- ▶ **Sample Rate.** Specify the sampling rate for the audio device. Consult your audio hardware documentation for supported sampling rates. For details, see [“Specifying the recording format”](#) on page 48.

## Latency

- ▶ **Audio Buffer Size.** Set the mixing latency.
- ▶ **Output Latency.** Shows the output latency at the current buffer size.
- ▶ **Input Latency.** Shows the input latency at the current buffer size.
- ▶ **Total Latency.** Shows the total latency at the current buffer size.
- ▶ **Driver Latency Offset.** Specify the latency compensation while recording.

 **Important:** Any manual latency tweaks will potentially be different for different buffer sizes or sample rates because it depends on the driver. You should only use manual latency if you see that recorded audio through a loopback test not lining up with the original source.

## Recording

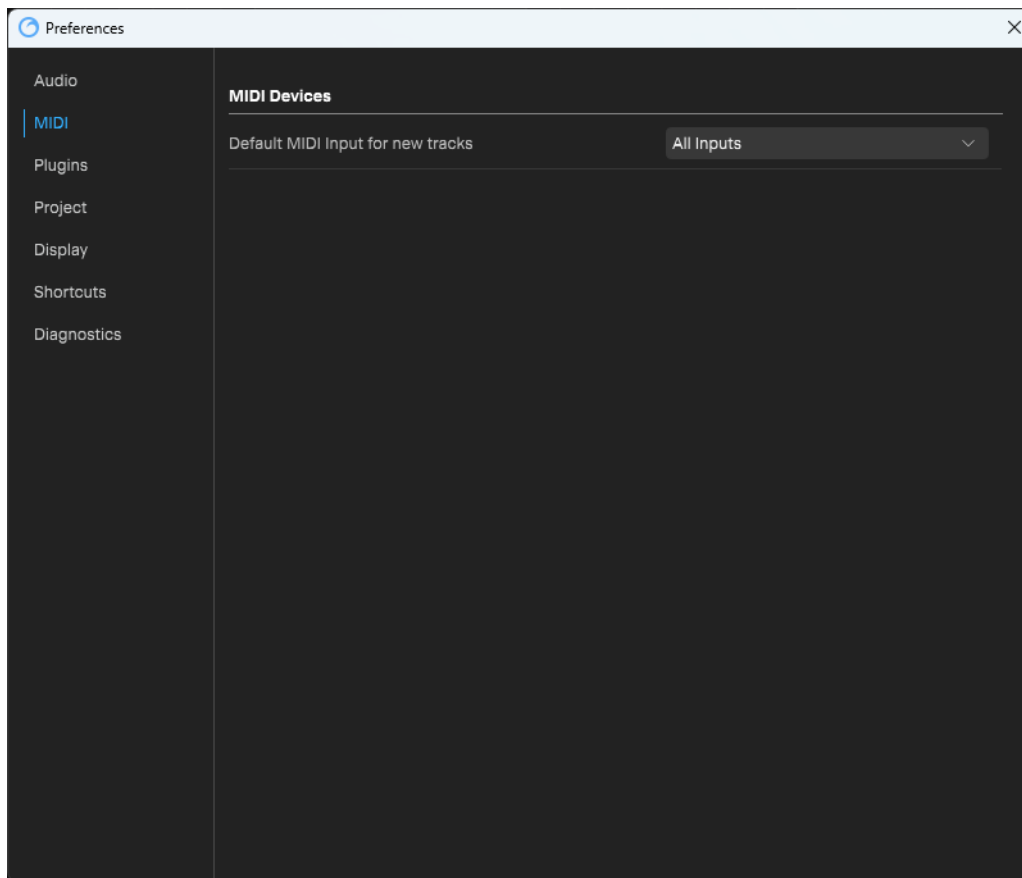
- ▶ **File Format.** Specify the recording file format:
  - ▶ **WAV.** The standard digital audio format used under Windows for burning CDs, with a file extension of .wav.
  - ▶ **AIFF.** Audio Interchange File Format, co-developed by Apple Inc., is most commonly used on Apple Macintosh computer systems. The file extension is .aif.
  - ▶ **FLAC.** FLAC stands for Free Lossless Audio Codec, which is somewhat similar to MP3, but lossless. Audio in a FLAC file is compressed without any loss in quality. The file extension is .flac.
- ▶ **File Bit Depth.** Specify the recording bit depth (16, 24, or 32). For details, see “[Specifying the recording format](#)” on page 48.
- ▶ **Default Clip Time Base.** The time base format determines what happens to clips when you change the project tempo:
  - ▶ **Absolute.** A clip’s absolute position stays constant, and its M:B:T position shifts. This is the default for non-looped audio clips.
  - ▶ **Musical.** A clip’s M:B:T position stays constant, and its absolute position shifts.
- ▶ **Auto-Arm Tracks.** Automatically arm the selected track for recording. For details, see “[Auto arm track for recording](#)” on page 52.

## Audio Engine

- ▶ **Use Multiple Cores.** If you have a multiprocessor computer, select this option if you want *Next* to distribute audio processing across multiple cores.
- ▶ **Stop playback if audio drops out.** Stop playback if audio drops out.
- ▶ **Suspend audio engine when app loses focus.** Allow other apps to access audio device drivers when *Next* does not have focus. The audio engine will only suspend if nothing is playing, and will not suspend when recording.

## MIDI settings

The **MIDI** page lets you select your MIDI input device.



The **MIDI** section contains the following settings:

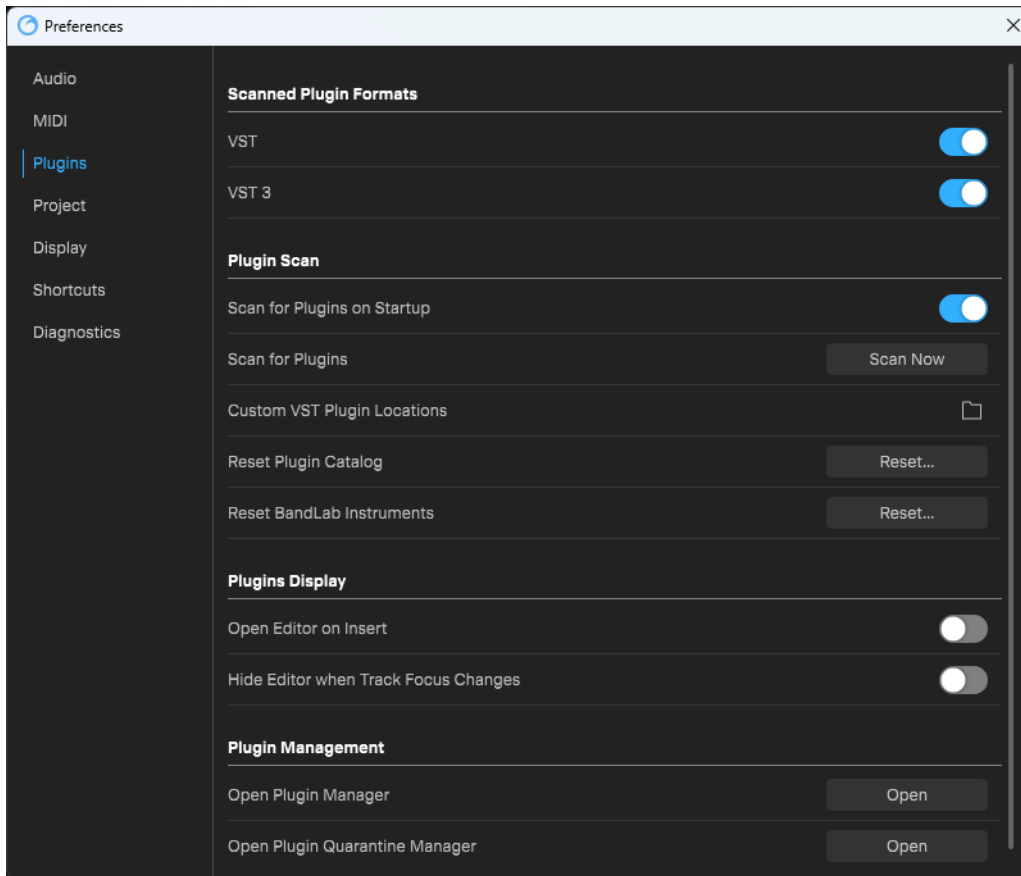
### MIDI Devices

- ▶ **Default MIDI Input for new tracks.** Specify the desired MIDI input device. The default settings is **All Inputs**, which allows you to use any available MIDI device.



## Plugins settings

The **Plugins** page lets you configure VST plugin settings and scan for VST plugins.



The **Plugins** section contains the following settings:

### Scanned Plugin Formats

- ▶ **VST.** Enable VST2 plugins.
- ▶ **VST3.** Enable VST3 plugins.
- ▶ **AudioUnit (Mac only).** Enable AudioUnit plugins.

### Plugin Scan

- ▶ **Scan for Plugins on Startup.** Automatically scan for new plugins when *Next* starts. Scanning occurs in the background.
- ▶ **Scan for Plugins.** Click **Scan Now** to scan for new plugins. For details, see "[VST plugin scanner](#)" on page 189.
- ▶ **Custom VST Plugin Locations.** Add a new VST plugin folder to be scanned.
- ▶ **Reset Plugin Catalog.** Remove all scanning records and settings from all your plugins. Use only if you want to completely start over.

## Plugins Display

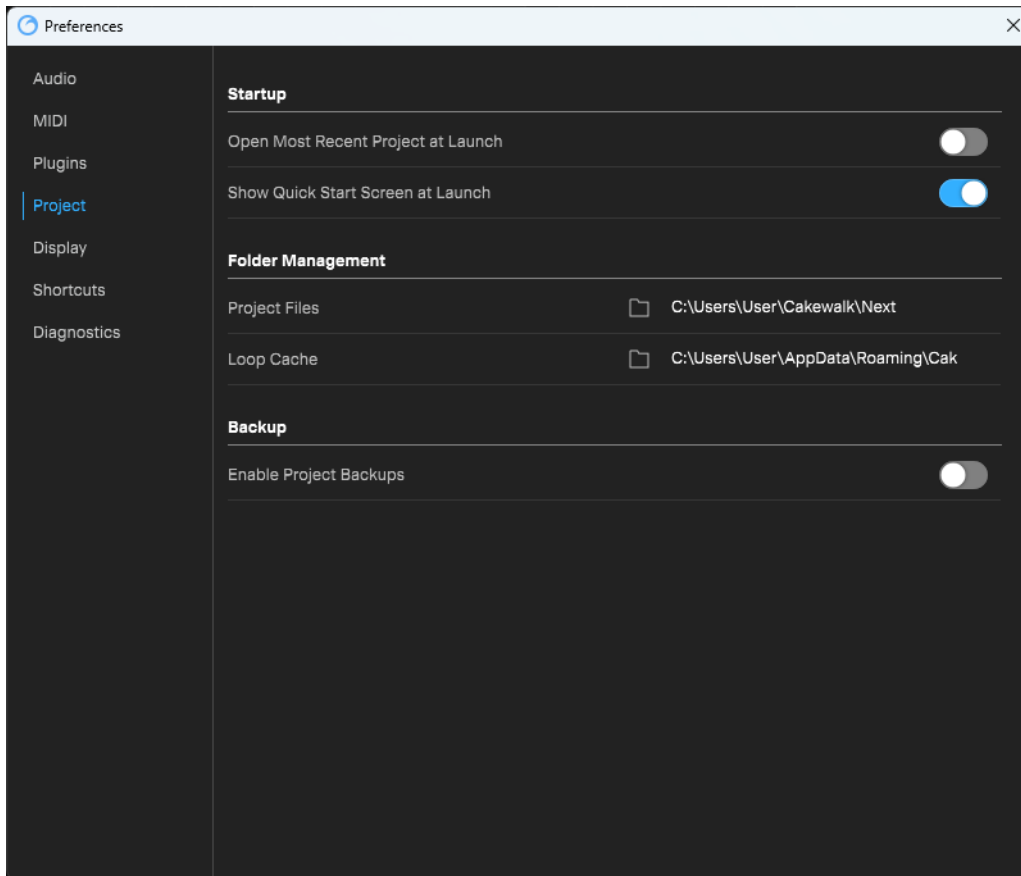
- ▶ **Open Editor on Insert.** After inserting a VST plugin, immediately open its UI editor.
- ▶ **Hide Editor when Track Focus Changes.** When changing track focus, automatically close any VST plugin editor that doesn't belong to the focused track.

## Plugin Management

- ▶ **Open Plugin Manager.** Open the Plugin manager, which lets you manage audio effects, instrument, and templates (toggle plugin favorite status, visibility in Browser, DPI awareness, and assign tags). For details, see "[Plugin Management](#)" on page 195.
- ▶ **Open Plugin Quarantine Manager.** Open the Plugin Quarantine Manager, which lets you rescan quarantined plugins. For details, see "[Plugin Quarantine Manager](#)" on page 196.

## Project settings

The **Project** page lets you specify if a project should load on app startup, and specify default folder locations.



The **Project** section contains the following settings:

### Startup

- ▶ **Open Most Recent Project at Launch.** Open the last opened project when *Next* starts.
- ▶ **Show Quick Start Screen at Launch.** Show the Quick Start screen when *Next* starts.

**i** **Note:** *If Next crashes due to an unexpected issue, it will automatically skip loading the last project to prevent potential crashes or hangs on load.*

### Folders Management

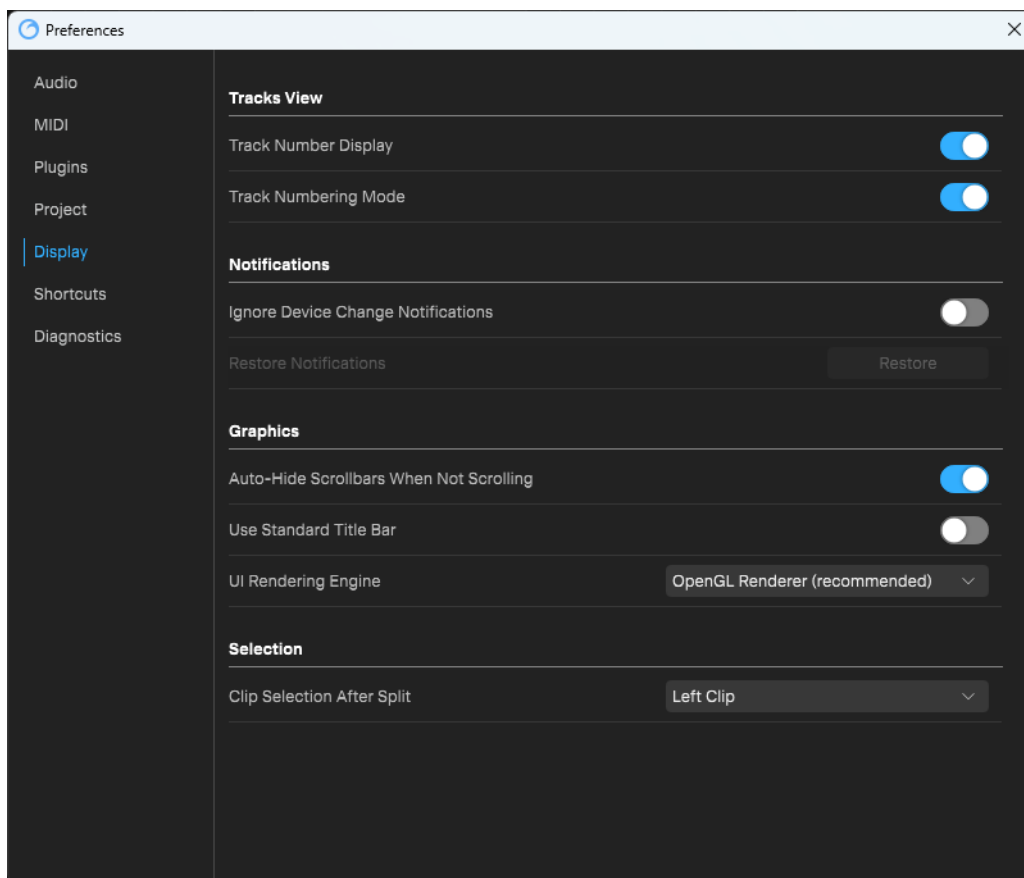
- ▶ **Project Files.** The default path for saving *Next* projects.
- ▶ **Loop Cache.** The default path for downloading loops from the Loop Browser.

### Backup

- ▶ **Enable Project Backups.** Save a backup copy of the project whenever you save the project. Up to ten backups are saved to a `\Backups` subfolder inside the project folder.

## Display settings

The **Display** page lets you configure various display settings.



The **View** section contains the following settings:

### Tracks View

- ▶ **Track Number Display.** Show/hide track numbers.
- ▶ **Track Numbering Mode.** Track folders affect how track numbers are shown. Track numbers can be either indexed or sequential. For details, see [“Track numbers”](#) on page 19.
  - ▶ **Off (Indexed).** Tracks are numbered relative to their parent track folder.
  - ▶ **On (Sequential).** Each track folder and track increases the counter.

### Notifications

- ▶ **Ignore Device Change Notifications.** Don't show notifications when input and output devices are added.
- ▶ **Restore Notifications.** Restore all notifications that have been suppressed.

## Graphics

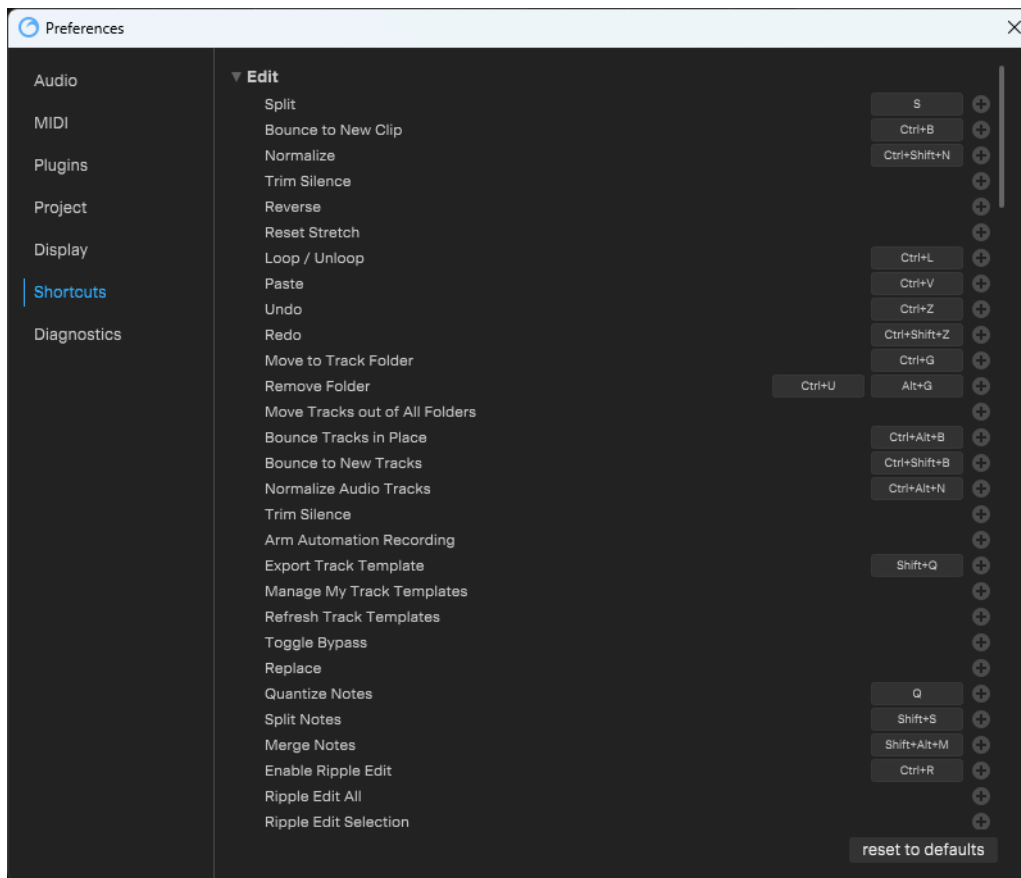
- ▶ **Auto-Hide Scrollbars When Not scrolling.** Automatically hide scrollbars when not scrolling.
- ▶ **Use Standard Title Bar (Windows only).** Enable the standard Windows title bar.
- ▶ **UI Rendering Engine.** Specify the default graphics rendering engine that should be used to draw text and images on the screen:
  - ▶ **Software Renderer.** CPU rendering.
  - ▶ **OpenGL Renderer.** Hardware-accelerated GPU rendering of 2D and 3D vector graphics.
  - ▶ **CoreGraphics Renderer (Mac only).** Apple’s vector-drawing framework.

## Selection

- ▶ **Clip Selection After Split.** Specify what is selected after a clip is split into two parts:
  - ▶ **None.** Neither clip is selected.
  - ▶ **Left Clip (default).** Only the left clip is selected.
  - ▶ **Right Clip.** Only the right clip is selected.
  - ▶ **Both Clips.** Both the left and right clips are selected.


## Shortcuts settings

The **Shortcuts** page lets you assign custom keyboard shortcuts.



The **Shortcuts** section shows current keyboard shortcut assignments and lets you assign custom shortcuts.

### Adding a shortcut

To add a new shortcut, click a command's corresponding  button, press the new shortcut, then click **OK**.

### Changing a shortcut


To change an existing shortcut, click the shortcut and select **Change this key-mapping**.

### Removing a shortcut

To remove an existing shortcut, click the shortcut and select **Remove this key-mapping**.

### Resetting shortcuts

To reset all shortcuts to their default assignments, click **Reset to defaults**.

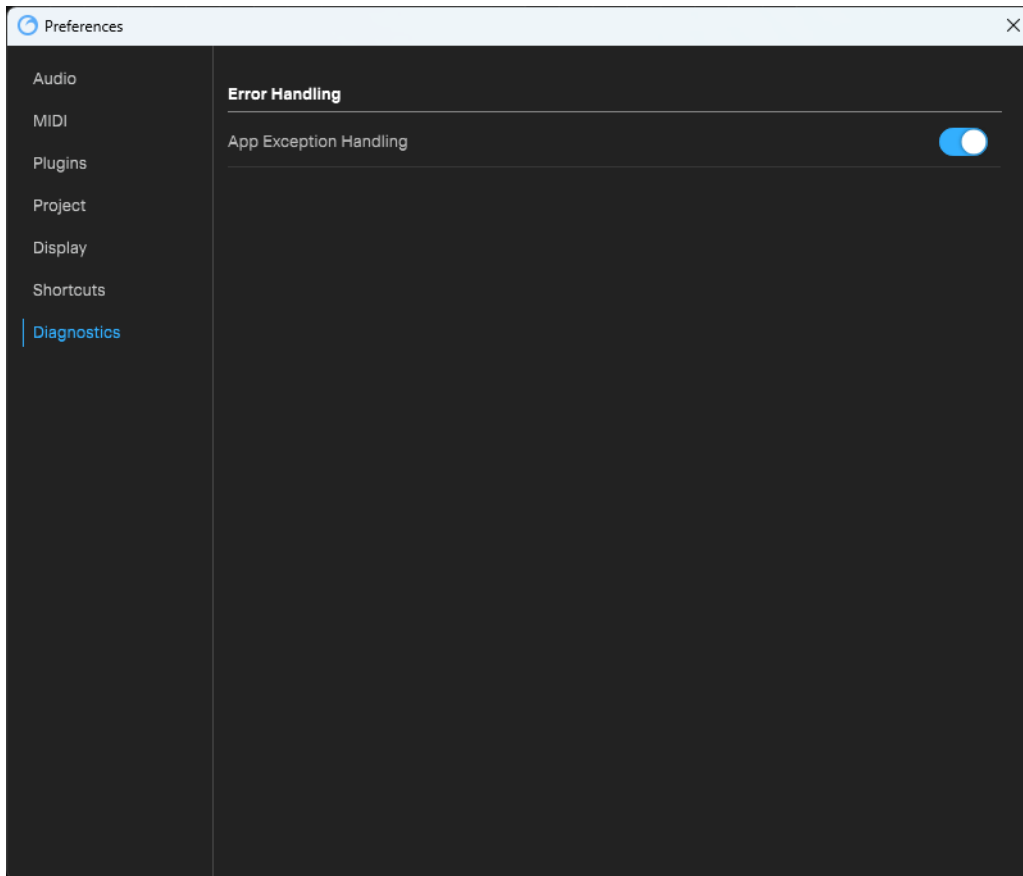
 **Tip:** To quickly open the list of shortcuts, select **Help > Keyboard Shortcuts**.

See:

["Keyboard shortcuts"](#) on page 251.

## Diagnostics settings

The **Diagnostics** page lets enable tools that can assist in detecting potential issues.



The **Diagnostics** section shows various error diagnostic settings.

### Error Handling

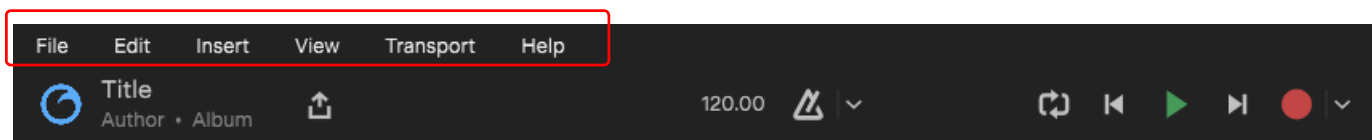
- ▶ **App Exception Handling.** Show a prompt and save a crash diagnostic dump file if an app crash occurs. If disabled, crashes are handled by the operating system.





# Menu commands

The main app menu contains the following commands.



See:

[“File menu”](#) on page 245

[“Edit menu”](#) on page 246

[“Insert menu”](#) on page 246

[“View menu”](#) on page 247

[“Transport menu”](#) on page 248

[“Help menu”](#) on page 249

## File menu

Command	Description
New Project	Create a new project.
Open Project	Open an existing project.
Open Recent Project >	Open a recently loaded project.
Save Project	Save the current project.
Save Project As	Save the current project with a new name.
Save As Project Template	Save the current project as a template.
Publish to BandLab	Publish the project to your BandLab library. Export is not possible if the project exceeds 12 tracks. For details, see <a href="#">“Publishing to BandLab”</a> on page 69.
Export Audio	Export the current project as a WAV file.
Exit	Close <i>Next</i> .

**Table 5.** *File menu commands*

## Edit menu

Command	Description
Undo	Reverse the last action.
Redo	Reverse the most recent Undo command.
Cut	Remove the selected objects and put them on the Clipboard.
Split	Split all clips at the playback position.
Copy	Copy the selected objects to the Clipboard.
Paste	Place the contents of the Clipboard into the current project location.
Delete	Delete the selected clip or track/bus/track folder.
Duplicate	Duplicate the selected event(s).
Select All	Select all tracks, clips, events, or plugins, depending on which view has focus.
Clear Selection	Clear the selection.
Move to Track Folder	Move the selected tracks/buses into a new track folder.
Remove Folder	Remove the selected track folder and move the contained tracks up one level.
Move Tracks out of All Folders	Move the selected tracks to the root level.
Bounce to New Tracks	Bounce/consolidate multiple selected tracks to new tracks.
Bounce Tracks in Place	Bounce the selected track(s) in place, in their entirety. For details, see <a href="#">"Bouncing audio"</a> on page 192.
Normalize Audio Tracks	Normalize all audio clips on the selected tracks. For details, see <a href="#">"Normalizing audio"</a> on page 193.
Enable Ripple Edit	Enable/disable ripple editing. For details, see <a href="#">"Ripple editing"</a> on page 125.
Preferences	Configure various app settings. For details, see <a href="#">"Preferences"</a> on page 233.

**Table 6.** *Edit menu commands*

## Insert menu

Command	Description
Insert Audio Track	Insert a new audio track. For details, see <a href="#">"Inserting tracks"</a> on page 28.
Insert Instrument Track	Insert a new instrument track. For details, see <a href="#">"Inserting instrument tracks"</a> on page 29.
Insert Sampler Track	Insert a new sampler track. For details, see <a href="#">"Pad Controller"</a> on page 157.
Insert Pad Controller Tracks	Insert a new Pad Controller track. For details, see <a href="#">"XSampler"</a> on page 142.
Insert Track Folder	Insert a new track folder. For details, see <a href="#">"Grouping tracks with track folders"</a> on page 35.
Insert Bus	Inset a new bus. For details, see <a href="#">"Inserting buses"</a> on page 33.
Insert Track Template	Insert a new track from a track template. For details, see <a href="#">"Inserting a track from a template"</a> on page 33.
Insert Audio/MIDI File	Insert an audio or MIDI file.

**Table 7.** *Insert menu commands*

## View menu

Command	Description
Show Track Inspector	Show/hide the Track Inspector.
Show Clip Inspector	Show/hide the Clip Inspector.
Show Loop Browser	Show/hide the Loop Browser.
Show Arranger Inspector	Show/hide the Arranger Inspector.
Show Lyrics Inspectors	Show/hide the Lyrics Inspector.
Show Lyrics Prompter	Toggle between showing the Lyrics Prompter and Lyrics Editor.
Show Arranger Track	Show/hide the Arranger track.
Show Lyrics Track	Show/hide the Lyrics track.
Track Heights	Restore last user defined height / Fit tracks to view / Collapse track heights.
Expand Track Folders	Expand all track folders.
Collapse Track Folders	Collapse all track folders.
Show Project Info Editor	Show the Project Information editor.
Show Virtual MIDI Controller	Open the Virtual MIDI Controller.
Toggle QWERTY to MIDI Input	Enable/disable QWERTY MIDI input without opening the Virtual MIDI Controller.
Show Aim Assist	Show/hide the Aim Assist line, which is a vertical line that shows the mouse pointer's horizontal position in the Clips pane, and vertical and horizontal position in the Piano Roll editor.
Time Ruler Format>	
Musical Time	Display Measure:Beat:Tick time in the transport toolbar and time ruler.
Absolute Time	Display absolute time in the transport toolbar and time ruler.
Samples	Display sample time in the transport toolbar and time ruler.
Playback Options>	
Smooth Scroll	During playback, keep the playhead stationary and scroll the Clips pane and Piano Roll editor.
Follow Playhead - Tracks View	Scroll the Clips pane when the playhead reaches the right edge.
Follow Playhead - Piano Roll View	Scroll the Piano Roll view when the playhead reaches the right edge.

**Table 8.** *View menu commands*

## Transport menu

Command	Description
Play/Pause	Start/pause playback.
Play/Pause (no rewind)	Start/pause playback from current position (never rewind to the last start position, and don't move the start position marker).
Jump Back	Rewind the playback position and seek to loop positions and the playback marker en route to the project start.
Go to Start	Go to the beginning of the project.
Jump Forward	Jump forward and seek to loop positions en route to the project end.
Go to End	Go to the end of the project.
Record	Start/stop recording on any armed tracks.
Toggle Loop Playback	Enable/disable playback looping.
Loop Selection	Set the current time range selection as the loop range, and enable looping.
Loop Recording Creates Takes in Track Folder	When loop recording, place all takes in a track folder.
Mute Previous Takes During Loop Recording	When loop recording, mute previous loop passes.
Enable Punch Recording	Enable/disable punch recording.
MIDI Recording Overdub	When recording MIDI on instrument tracks, merge new material with existing material. Existing clips on the track are left unchanged and all newly recorded material is stored in new clips. While recording, you will be able to hear material from existing clips.
Toggle Metronome	Enable/disable the metronome.
Resume Playback at Last Start Position	When playback starts, jump to the previous playback start location. The start location is indicated by a small green play icon above the time ruler. The start location updates when you click in the Clips pane.
Stop Playback on Engine Dropout	Stop playback if there is an audio engine dropout.

**Table 9.** *Transport menu commands*

## Help menu

Command	Description
Help	Open the online documentation.
Report a Problem	Report bugs via an online form in your default web browser.
Keyboard Shortcuts	Show a list of keyboard shortcuts.
Check for Updates	Check for software updates.
View Release Notes	Show the release notes.
Sign In / Sign Out	<p><i>Cakewalk Next</i>® needs to be re-activated every 6 months in order to unlock all available features, such as saving and exporting. This normally happens automatically if you are signed in to your BandLab account and connected to the internet.</p> <p><i>Cakewalk Next</i>® supports SSO (Single Sign-On) for activation, which allows you to log in via any service supported by BandLab as your sign-in authority. Google, Facebook, Apple ID, mobile phone and BandLab user/password credentials are currently supported.</p> <p>SSO is only used for <i>Cakewalk Next</i>® activation, and under normal circumstances you will only need to sign in once. <i>Cakewalk Next</i>® will attempt to refresh your activation status silently and automatically on occasion during start up. Use the SSO login as you have done with your BandLab account in the past.</p>
About Cakewalk Next	Open the <b>About Cakewalk Next</b> dialog box.

**Table 10.** *Help menu commands*



# Keyboard shortcuts

**Note:** A *plus sign* (+) indicates that both keys must be held down at the same time. For example, CTRL+A.

**Note:** Keyboard shortcuts are based on the US keyboard layout. Other languages may use different layouts. Shortcuts are denoted by the key, not by the character they produce. Many keys produce different characters on non-US keyboards.

Figure 49. US keyboard layout.

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	( 9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	 \ ~
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" ,	Enter ↵	
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ↑		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

To customize keyboard shortcut assignments, go to **Help > Keyboard Shortcuts**., or go to **Edit > Preferences > Commands**. For details, see [“Shortcuts settings”](#) on page 242.

See:

- [“File / Project”](#) on page 252
- [“Track Creation”](#) on page 252
- [“General Editing”](#) on page 252
- [“Bounce Operations”](#) on page 253
- [“Clip Property”](#) on page 253
- [“Track Property”](#) on page 253
- [“Transport”](#) on page 253
- [“Zooming”](#) on page 254
- [“Piano Roll”](#) on page 254
- [“Modifiers”](#) on page 255
- [“Keyboard navigation”](#) on page 255

See also:

- [“Lyrics Editor keyboard shortcuts”](#) on page 213

## File / Project

Command	Windows	Mac
Create New Project	CTRL+N	CMD+N
Open Project	CTRL+O	CMD+O
Open BandLab Project	CTRL+ALT+O	CMD+OPTION+O
Open or Import BandLab Project	CTRL+ALT+0	CMD+OPTION+0
Save Project	CTRL+S	CMD+S
Save Project As	CTRL+SHIFT+S	CMD+SHIFT+S
Publish to BandLab	CTRL+B	CMD+B
Export Audio	CTRL+E	CMD+E
Preferences	CTRL+, (COMMA)	CMD+, (COMMA)
Exit	CTRL+Q	CMD+Q
Show Project Information	CTRL+SHIFT+I	CMD+SHIFT+I

**Table 11.** *File / Project shortcuts*

## Track Creation

Command	Windows	Mac
Insert Audio Track	CTRL+T	CMD+T
Insert Instrument Track	CTRL+SHIFT+T	CMD+SHIFT+T
Insert Sampler Track	CTRL+SHIFT+X	CMD+SHIFT+X
Insert Pad Controller Track	CTRL+SHIFT+P	CMD+SHIFT+P
Insert Track Folder	CTRL+SHIFT+G	CMD+SHIFT+G
Insert Bus	CTRL+ALT+T	CMD+OPTION+T
Move to Track Folder	CTRL+G	CMD+G
Remove From Folder	CTRL+U	CMD+U

**Table 12.** *Track creation shortcuts*

## General Editing

Command	Windows	Mac
Undo	CTRL+Z	CMD+Z
Redo	CTRL+SHIFT+Z	CMD+SHIFT+Z
Cut	CTRL+X	CMD+X
Split	S	S
Copy	CTRL+C	CMD+C
Paste	CTRL+V	CMD+V
Delete	DELETE	DELETE
Duplicate	CTRL+D	CMD+D
Select All	CTRL+A	CMD+A
Enable/disable ripple editing	CTRL+R	CMD+R

**Table 13.** *General editing shortcuts*



## Bounce Operations

Command	Windows	Mac
Bounce Tracks in Place	CTRL+ALT+B	CMD+OPTION+B
Bounce Selected Clip(s)	CTRL+B	CMD+B
Normalize Audio Tracks	CTRL+ALT+N	CMD+OPTION+N
Normalize Selected Audio Clips	CTRL+SHIFT+N	CMD+SHIFT+N
Bounce to New Tracks	CTRL+SHIFT+B	CMD+SHIFT+B

**Table 14.** *Bounce operation shortcuts*

## Clip Property

Command	Windows	Mac
Toggle Loop	CTRL+L	CMD+L

**Table 15.** *Clip property shortcuts*

## Track Property

Command	Windows	Mac
Solo	ALT+S	OPTION+S
Mute	ALT+M	OPTION+M
Arm	ALT+A	OPTION+A

**Table 16.** *Track property shortcuts*

## Transport

Command	Shortcut
Play/Pause	SPACEBAR
Jump Back	W
Go to Start	SHIFT+W
Jump Forward	E
Go to End	SHIFT+E
Record	R
Toggle Metronome	K
Toggle Loop Playback	L
Set loop range to selected time range or clips	SHIFT+L
Move Playhead Forward on Grid	RIGHT
Move Playhead Backward on Grid	LEFT

**Table 17.** *Transport shortcuts*

## Zooming

Command	Windows	Mac
Zoom In Horizontally	CTRL+RIGHT	CMD+RIGHT
Zoom Out Horizontally	CTRL+LEFT	CMD+LEFT
Zoom In Vertically	CTRL+UP	CMD+UP
Zoom Out Vertically	CTRL+DOWN	CMD+DOWN
Zoom to Selection	F	F
Expand/Collapse Tracks	ALT+H	OPTION+H
Fit Tracks Vertically	SHIFT+F	SHIFT+F

**Table 18.** *Zooming shortcuts*

## Piano Roll

Command	Windows	Mac
Draw Tool	D	D
Toggle Midi Velocity Display	ALT+V	OPTION+V
Split Selected Note(s)	SHIFT+S	SHIFT+S
Merge Selected Notes	SHIFT+ALT+M	SHIFT+OPTION+M

**Table 19.** *Piano Roll shortcuts*

## Misc

Command	Windows	Mac
Show/hide Track Inspector	F3	F3
Show/Hide Clip Inspector	F4	F4
Show/Hide Loop Browser	B or F5	B or F5
Dock/float Loop Browser	CTRL+ALT+B	CMD+OPTION+B
Show/Hide Arranger Inspector	F6	F6
Show/Hide Lyrics Inspector	F7	F7
Show Lyrics Prompter	ALT+F7	OPTION+F7
Show/Hide Arranger Track	A	A
Show/Hide Lyrics Track	ALT+L	OPTION+L
Show/hide Virtual MIDI Controller	CTRL+M	CMD+M
Toggle QWERTY to MIDI Input	CTRL+ALT+M	CMD+OPTION+M
Aim Assist	X	X

**Table 20.** *General editing shortcuts*

## Modifiers

Command	Windows	Mac
Snap override	ALT	CTRL
Drag copy	CTRL	OPTION
Constrain clip drag vertically or horizontally	SHIFT	SHIFT
Stretch clip	CTRL+drag clip edge	CMD+drag clip edge
Split a single clip at the mouse position	ALT+left click clip header	CMD+left click clip header
Split all selected clips at the mouse position	ALT+SHIFT+left click clip header	CMD+SHIFT+left click clip header
Show crossfades for audio clips	ALT+SHIFT	OPTION+SHIFT
Edit the slope of an automation curve	CTRL+drag up/down	CMD+drag up/down
Adjust automation node with finer control	SHIFT+drag up/down	SHIFT+drag up/down
Drag move loop range	CTRL+drag selection range left/right	CMD+drag selection range left/right
Parameter Quick Grouping (relative)	CTRL	CMD
Parameter Quick Grouping (absolute)	CTRL+ALT	CMD+OPTION
Allow mouse events to fall through the Piano Roll clip handle and act on the time ruler below	CTRL	CMD

**Table 21.** *Modifier keys*

## Keyboard navigation

You can use a keyboard to navigate between tracks and adjust track parameters, without using a mouse.

When a track strip has focus, use the TAB key to navigate to the next control, or SHIFT+TAB to navigate to the previous control. Press the ENTER (Windows) / RETURN (Mac) key to toggle any focused button, and use the UP/DOWN Arrow keys to adjust any focused slider.



# Quick Tutorials

If you want to get up and running quickly, please use the following short tutorials that are tailored to learning specific tasks in *Next*.

See:

[“Configuring your audio and MIDI device\(s\)”](#) on page 257

[“Creating a project”](#) on page 257

[“Adding a track”](#) on page 258

[“Inserting and playing a software instrument / Playing the on-screen virtual keyboard”](#) on page 259

[“Recording”](#) on page 260

[“Adding automation”](#) on page 261

[“Adding effects”](#) on page 262

[“Exporting a project”](#) on page 263

[“Creating track folders”](#) on page 263

---

## Configuring your audio and MIDI device(s)

To configure your audio and MIDI hardware devices, go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Settings** dialog box.

### Configuring the audio driver mode

To select an audio driver mode, select the **Audio** page, then click the **Audio Driver** drop-down menu.

### Enabling audio devices

To configure your audio hardware device, go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Settings** dialog box, then select the **Audio** page.

### Enabling MIDI input device

To select your MIDI input device, go to **Edit > Preferences** or press CTRL+, (Windows) / CMD+, (Mac) to open the **Settings** dialog box, then select the **MIDI** page.

For details, see [“Enabling input and output devices”](#) on page 23.

---

## Creating a project

To create a new project, do *one* of the following:


- ▶ Select **File > New Project**.
- ▶ Press CTRL+N (Windows) / CMD+N (Mac).








You can also open or import a project from your BandLab library. For details, see [“Importing from BandLab”](#) on page 72.

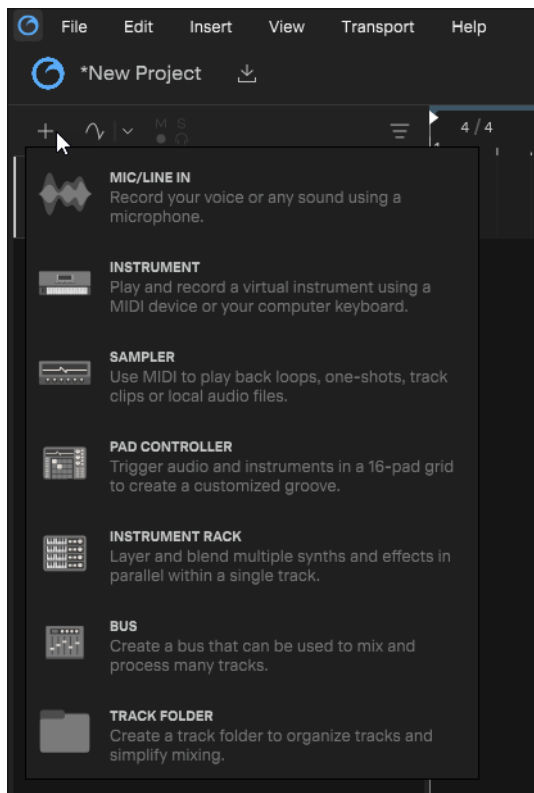
For details, see [“Creating and saving projects”](#) on page 24.

---

## Adding a track

To insert a new track, click the **Insert Track** button  and select the desired track type:


- ▶ **Mic/Line In**  Record your voice or any sound using a microphone. Click the icon to create a blank track. Use the submenu to select any available track template.
- ▶ **Instrument**  Play and record a virtual instrument using a MIDI device or your computer keyboard.
- ▶ **Sampler**  Use MIDI to play back loops, one-shots, audio clips or local audio files.
- ▶ **Pad Controller**  Use MIDI to trigger up to 16 sampler or instrument pads.
- ▶ **Instrument Rack**  Use MIDI to trigger up to 16 layered instruments simultaneously within a single track.
- ▶ **Bus**  Create a bus that can be used to process many tracks.
- ▶ **Track Folder**  A track folder may contain other tracks, buses, and folders. Useful for project organization and mixing.



For details, see [“Inserting tracks”](#) on page 28.

## Inserting and playing a software instrument / Playing the on-screen virtual keyboard

To enable virtual MIDI input and show the Virtual MIDI Controller, do *one* of the following:



- ▶ Click an instrument track's track type icon  in the track inspector
- ▶ Select **View > Show Virtual MIDI Controller**
- ▶ Press CTRL+M (Windows) / CMD+M (Mac)

To enable QWERTY to MIDI input without showing the virtual keyboard, do *one* of the following:

- ▶ Select **View > Toggle QWERTY to MIDI Input**
- ▶ Press CTRL+ALT+M (Windows) / CTRL+CMD+OPTION+M (Mac)

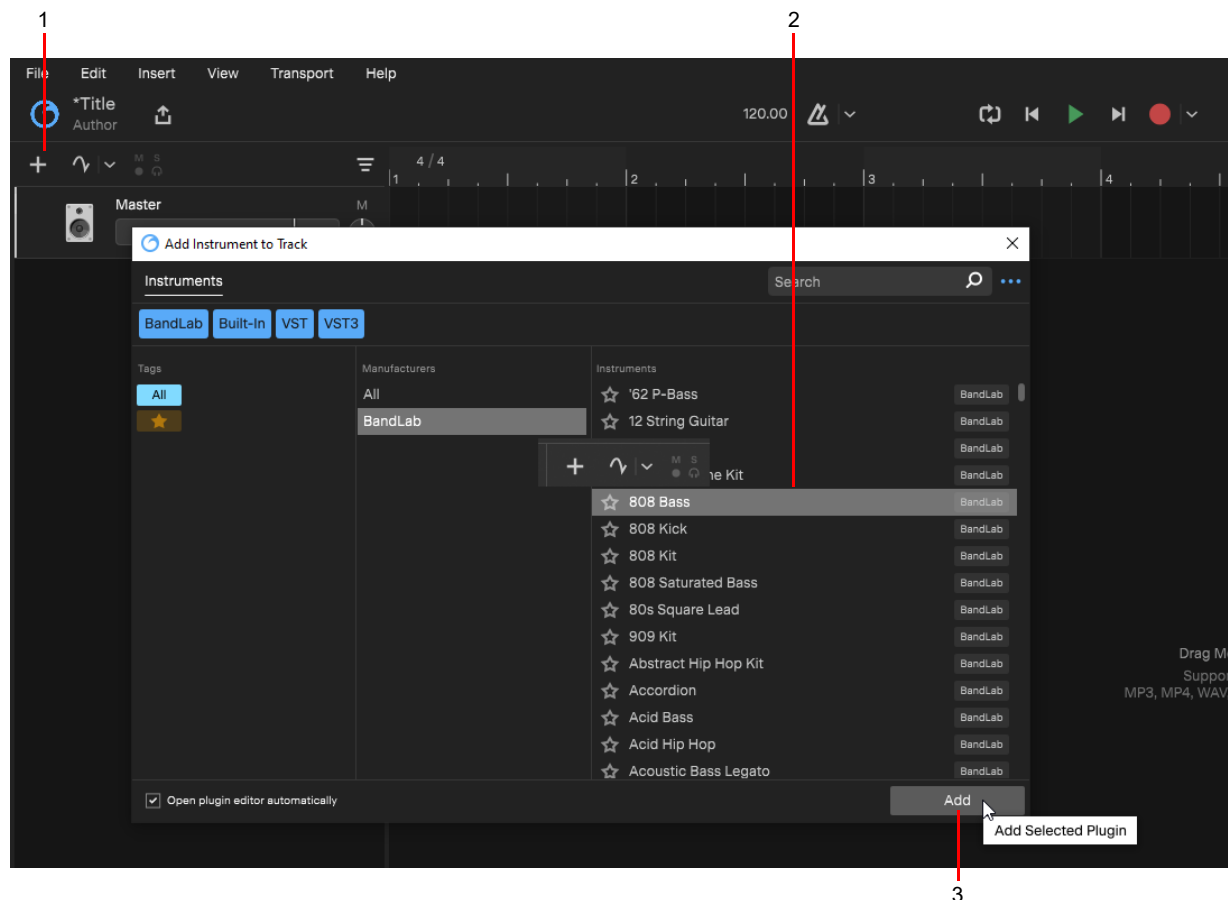
To insert an instrument track:

1. Do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Instrument** .
- ▶ Select **Insert > Insert Instrument Track**.
- ▶ Press CTRL+SHIFT+T (Windows) / CMD+SHIFT+T (Mac).

2. In the **Instrument Browser** dialog box, select the desired instrument

3. Click **Add**.



1. Click **Insert Track** button and select **Instrument** 2. Select instrument 3. Click **Add**



## Playing the Virtual MIDI Controller with a computer keyboard

To play the polyphonic keyboard, click the on-screen keys or press the corresponding keys on your computer keyboard.



For details, see “Virtual MIDI Controller” on page 61.

---

## Recording

To arm a track for recording, click its **Record Arm** button . A track's **Record Arm** button turns red  to indicate that the track is armed for recording.

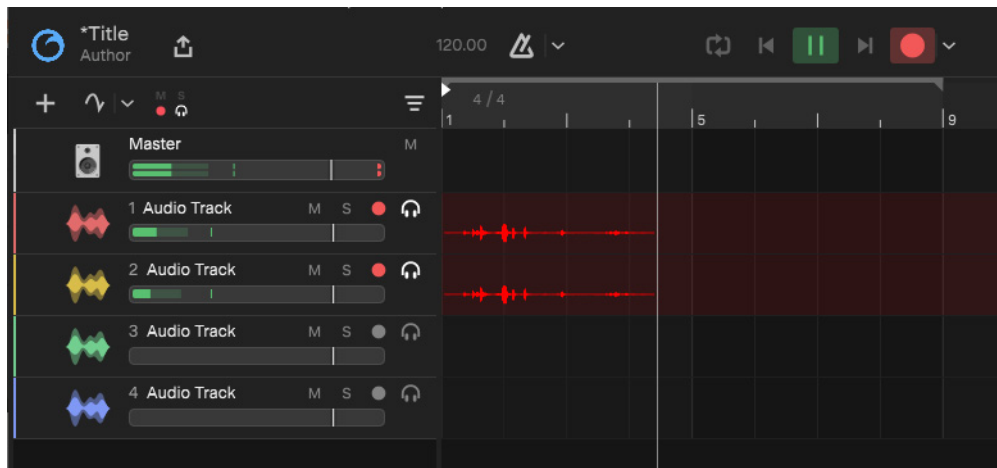
To start recording, do *one* of the following:

- ▶ Click the **Record** button . The button is red when enabled .
- ▶ Press R.



If the metronome count-in is enabled, it will play the count-in.

Play or perform the material you want to record.

During recording, the recorded signal is shown in red in the Clips pane:



To stop recording, do *one* of the following:

- ▶ Click the **Play/Pause** button .
- ▶ Select **Transport > Play/Pause**.
- ▶ Press SPACEBAR.
- ▶ Click the **Record** button . Recording stops, but playback continues.
- ▶ Select **Transport > Record**. Recording stops, but playback continues.
- ▶ Press R. Recording stops, but playback continues.

Listen to the new material. If you're not happy with the recording, select **Edit > Undo** to erase the new material. Select **Edit > Redo** command to restore the recording and toggle between Undo and Redo as many times as you like.

For details, see “Recording” on page 47.



## Adding automation



To show/hide automation on all tracks, click the **Show/Hide Automation** button .


To create a new automation envelope, click a track's **Automation** menu and select the desired parameter.

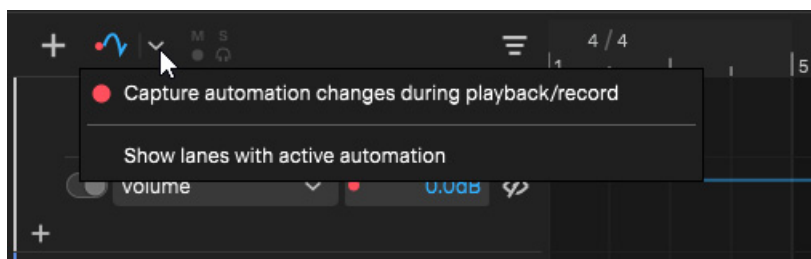
### Recording automation

To record automation:

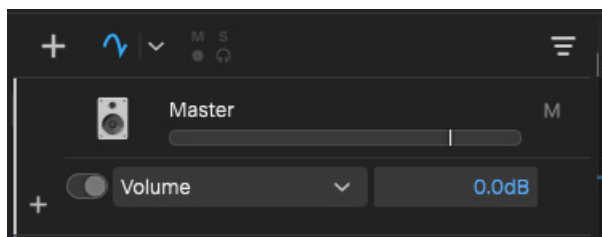
1. Do *one* of the following:

- ▶ To arm a single control for recording, double-click the control. The controls show a small red circle when armed.
- ▶ To arm all controls for recording, click the **Show/Hide Automation Lanes** button  drop-down menu  and select

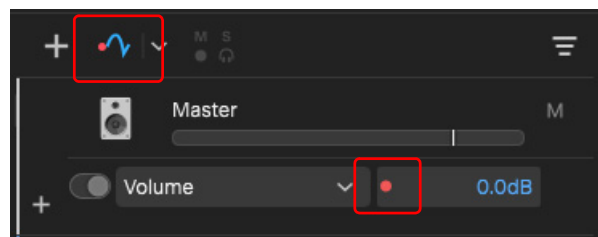
**Capture automation changes during playback/record.** A red circle  indicates that automation recording is enabled, and all automatable controls show a small red circle.



Automation recording disabled:



Automation recording enabled:





2. Do *one* of the following:

- ▶ If you want to record automation in real-time, start playback.
- ▶ If you want to adjust automation at only a specific location on the timeline, position the playhead at the desired location.

3. Adjust the desired automatable fader/knob/button.




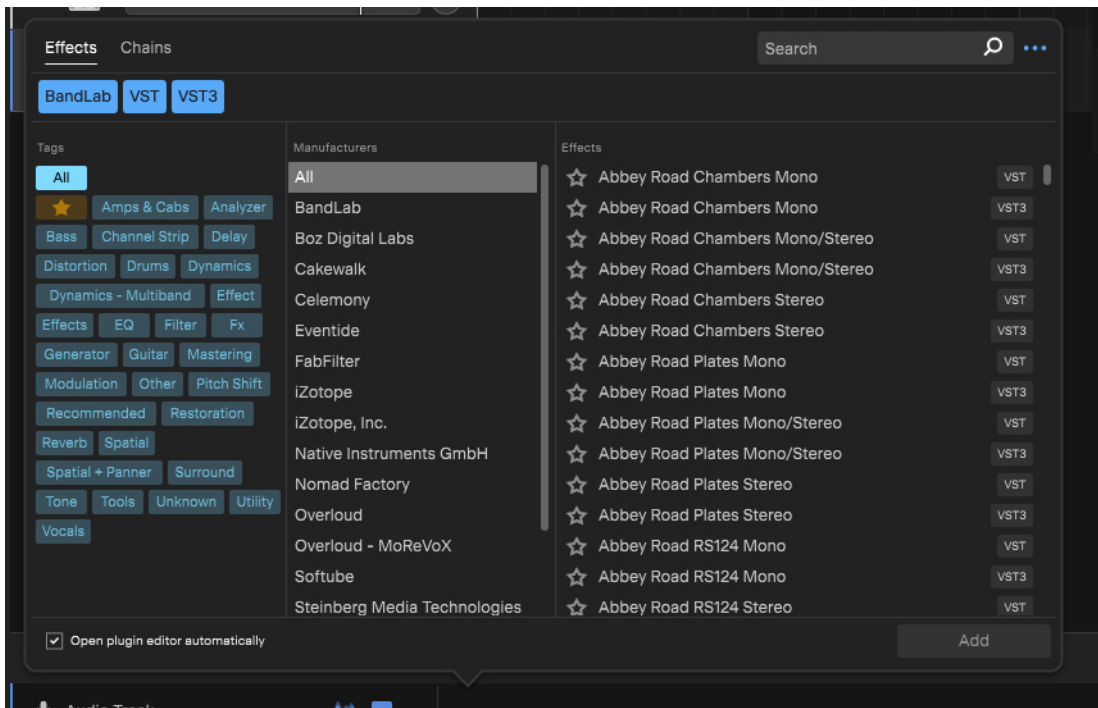
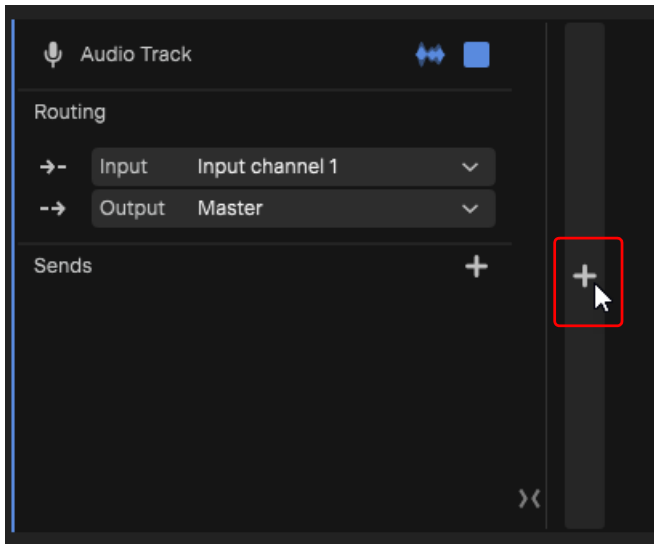
4. When you are finished with recording automation, stop playback, then click the **Show/Hide Automation** button  drop-down menu  again and disable **Capture automation changes during playback/record.**

For details, see [“Automation”](#) on page 197.

## Adding effects

To add an effect at the end of the effect chain:

1. Select the target track/bus/track folder.
2. Open the Track Inspector and click the **Add Effect** button .
3. Make sure **Effects** is selected.
4. Select the desired effect and click **Add**.



For details, see [“Effects”](#) on page 179.

---

## Exporting a project

To export audio, select **File > Export Audio** or press CTRL+E (Windows) / CMD+E (Mac) to open the **Export Audio** dialog box.


For details, see [“Exporting”](#) on page 227.

---

## Creating track folders

### Inserting a new track folder

To insert a new track folder, do *one* of the following:

- ▶ Click the **Insert Track** button , then select **Track Folder** .
- ▶ Select **Insert > Insert Track Folder**.
- ▶ Press CTRL+SHIFT+G (Windows) / CMD+SHIFT+G (Mac).

### Placing tracks into a new track folder

To place tracks into a new track folder, select the tracks you want to group, then select **Edit > Move to Track Folder** or press CTRL+G (Windows) / CMD+G (Mac).

For details, see [“Track folders”](#) on page 17 and [“Grouping tracks with track folders”](#) on page 35.

See:

[“Configuring your audio and MIDI device\(s\)”](#) on page 257

[“Creating a project”](#) on page 257

[“Adding a track”](#) on page 258

[“Inserting and playing a software instrument / Playing the on-screen virtual keyboard”](#) on page 259

[“Recording”](#) on page 260

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