

deCoda



deCoda

Song Deconstruction & Practice

User Manual

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1 Introduction

deCoda is an easy-to-use app for music transcription, instrument learning, and practicing. The main idea of **deCoda** is to minimize the time needed to get you started with learning your song and playing your instrument. Using **deCoda** is as simple as loading your favourite song and letting **deCoda** help you figure it out. In a snap, **deCoda** tells you the key, tempo, chords, where the verses and choruses are, and more. You can slow things down or speed them up, transpose the key, and add a metronome. If you need to focus in on an instrument, the <u>Focus</u> mode allows you to highlight that instrument; you can then invert it to remove the instrument so you can practice your instrument with the rest of the song.

deCoda LE is a special version with limited functionality. Depending on your serial number, **deCoda** will be activated as either the full **deCoda** version or the **deCoda** LE version. The manual is written for the **deCoda** full version, but many things will also apply for **deCoda** LE. Chapters that apply to **deCoda** LE—at least partly—will be marked with ^(LE); These chapters might include features that are not available in **deCoda** LE, however.

deCoda currently has three sections accessible via the "burger menu" in the the top-left corner: <u>Current Project</u>, <u>Project History</u> and <u>Settings</u>; this manual is stuctured accordingly. A fourth chapter will give some additional information.

1.1 Key Features

- Find Key, tempo, and chords with the help of advanced algorithms created by zplane.development
- Learn to play songs in sections with flexible looping options
- Automatic song structure detection helps you find intro, verse, chorus, etc.
- Transpose parts or the entire track to a key that suits you better
- Change tempo without changing the pitch to ease practice
- Use the Focus to isolate or mask a certain instrument
- View the notes of the song on a piano roll display and transcribe
- Export MIDI parts that you have traced from the audio.



1.2 Naming Conventions

In this documentation, the names of on-screen buttons, sliders, and indicators will be written in bold font between brackets, such as **[FX]** and **[▶]**.

Selectable menu options will be written in bold font between quotes, such as **"Sect"** and **"4Bars"**.

References to pointers in images will be written in bold font between parenthesis, such as **(1)** and **(2)**.



1.3 Installation

In order to download the *deCoda* installer, you need to register your *deCoda* serial number with zplane. After the successful registration, the installers will be available in the download section of your personal account. Find below a step-by-step description of the installation procedure:

1.3.1 Windows

- Download the *deCoda* Windows Installer application (.exe)
- Double-click on the file to launch the Installer
- Click [Next] in the installer window
- Read the End User License Agreement and, if you agree, click **[Next]**, otherwise, click **[CANCEL]** to abort installation
- Follow the instructions of the installer to complete the installation—you can choose which variants of the plug-in you wish to install and which to omit during the installation process

1.3.2 macOS

- Download the *deCoda* macOS Installer disk image (.dmg)
- Double-click on the downloaded .dmg to mount it, then double-click the installer file (.pkg) contained within
- Click **[Continue]** in the installer window
- Read the End User License Agreement and, if you agree, click **[Next]**, otherwise click **[CANCEL]** to abort installation
- Follow the instructions of the installer installation—you can choose which variants of the plug-in you wish to install and which to omit during the installation process
- When installation is complete, you can unmount the disk image by rightclicking on it and clicking **"Eject"** from the context menu



1.4 Registration & Activation

deCoda is protected by both a *serial number* and a corresponding *unlock key*. The serial number will be sent to you by e-mail upon purchasing **deCoda**. You will receive your unlock key by registering **deCoda** at the zplane website.

1.4.1 Registering deCoda

In order to receive your unlock key, please <u>log in to your account at the zplane</u> <u>website</u>—please <u>create a new account</u> there if you don't have one already. After logging in:

1. Click the [REGISTER] button in the menu bar:



Figure 1: The Account page

 In the area provided (1), paste in your *deCoda* serial number and click the [REGISTER] button (2) to the right:



Figure 2: The Product Registration page

3. Your *deCoda* unlock key will then be shown.

Note: You can recall any of your serial numbers and unlock keys anytime in the future by logging in to your account and clicking the **[MY PRODUCTS]** button in the menu. This will display the serial numbers and unlock keys for all the zplane products you have registered in your account.



1.4.2 Activating deCoda

Activation of *deCoda* is done within *deCoda* itself the first time it is run:

1. Launch *deCoda* and you will immediately see the Activation screen:



Figure 3: Activation screen

2. Paste your Serial Number and Unlock Key into the spaces provided **(1)** and *deCoda* will then be activated:



Figure 4: Serial Number and Unlock Key entry areas

3. After successful activation, you can click **[Continue]** to proceed loading *deCoda*.



2 The Main Menu (LE)

In the upper-left corner of the *deCoda* window is the Main Menu (1) which is represented by three horizontal lines $[\Xi]$, sometimes known as a "burger menu".

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Figure 5: Accessing the Main Menu

Clicking [\equiv] will open the menu which contains the following options: "**Current Project**" (1), "**Project History**" (2), "**Open**" (3), and "**Settings**" (4). These options open different screens, each of which will be detailed in the following chapters of this user manual.



Figure 6: *deCoda* Main Menu

2.1 Current Project

The Current Project screen is where you will spend most of your time while using *deCoda*; this is the view that shows the currently loaded song. This view is built around the Loop View in the center which represents the currently selected loop as <u>waveform</u> or as <u>piano roll</u> depending on the View Selector **(A)**.

Around the Loop View there is the <u>Project Overview</u> on the top **(B)**, the sidebar on the left **(C)** and the <u>Play Bar</u> on the bottom **(D)**.



Figure 7: The Current Project screen showing the Waveform

2.2 Project History

The Project History contains a catalog of all projects you've opened before. The projects are ordered and grouped by the time they were last opened.

At the top of the project history screen there is a search field **(1)** that allows you to search for a specific project. You can enter a song title, artist name, or album here.

A click on a project selects it. You can pre-listen the selected project by clicking on the [▶] button (2). You can also remove the selected project from the library by clicking on the [∶] button (3) in the upper-right corner of the *deCoda* window and clicking [**Remove**] from the menu that appears.

A double-click on a project opens it and switches to the Current Project view.





Figure 8: The Project History shows previous projects

2.3 Open Project

Clicking this option will allow you to load a new song into *deCoda* via a standard file open dialog box. The end result is the same as dragging a song into *deCoda* with the mouse. Once the song is loaded, the view will switch to the Current Project.

3 Project Navigation (LE)

3.1 Project Overview

The Project Overview shows the waveform representation of the loaded song. The sections of the song are represented by alternating colored areas and the section label. The currently selected loop is represented by a thick frame around the loop bounds.



Figure 9: Project Overview with bar lines and Bookmarks

It is expandable/collapsible using the arrow button under the right left corner of the Overview. When expanded, it additionally shows bar lines and <u>Bookmarks</u>.

3.2 Step Size

Navigation in *deCoda* is done in a musically meaningful way where you navigate to bars and beats instead of to a time position in minutes and seconds. *deCoda* automatically tracks the tempo of the song even if it is not absolutely steady. This way, you can navigate songs musically that have slight, natural variations in tempo.

NOTE: While *deCoda* does adapt to slight variations in tempo, it currently doesn't handle abrupt or significant tempo changes or changes in time signature.

All navigation operations manipulate the currently selected loop bounds (from here referred to as "the loop").

Most navigation operations use a *Step Size*, which can be either **"Sect"** (referring to "Section"), **"4Bars"**, **"Bar"** or **"Beat"**. The currently selected Step Size is displayed and changed with a wheel control in the middle of the right sidebar.

Figure 10: The Step Size control

You can change the Step Size by dragging or scrolling the Step Size Wheel (4) in the right sidebar. Clicking the [,] button (5) below the step size wheel applies the step size to the loop length.

3.3 Navigating with the Computer Keyboard

As one of the primary uses of *deCoda* is to practice your instrument along with a song, *deCoda* features extensive keyboard control. Most features can be accessed or triggered by simple keypresses while you keep your instrument in your hands. While there are default keyboard assignments, you can also customize keyboard controls in the <u>Settings</u> page.

3.4 Navigating with the Mouse

However, you can also use your mouse to navigate through the song. In the Loop View, click on the big arrow icons **(1)** to move the loop or click on the small arrow icons **(2)** on the bottom to reduce or expand the loop. The loop can also be moved by dragging the Loop View **(3)** to the left or right.



Figure 11: Navigation Controls

- Move left/right: Shifts the loop start left or right according to the step size. The loop length is not modified. The only exception is when the step size is set to "Sect" and exactly one section was selected—in this case, moving left or right selects the next section to the left or right.
- 2. **Reduce/expand loop left/right:** Reduces or expands the loop on the left or right according to the step size.
- 3. **Increase/decrease step size:** Increases or decreases the currently selected step size.

4. **Apply step size to loop length:** Sets the end of the loop so that the loop length is exactly 1 step size unit.

3.5 Ways to Perform Navigation Operations

In Project Overview you can use the mouse to adjust the loop bounds or move the position of the currently selected loop. Adjustment steps size for the mouse operation here is usually **"1 Bar"** unless you've selected beat in the step size selector. In that case the adjustment step size switches to beats.

By double-clicking a section, the whole section is selected. If the steps size is set to **"Sect"** and a complete section is selected, clicking on another section will select the whole other section. Otherwise, the current Loop Size will be preserved.

While playing back, clicking on the Loop View or inside the current loop frame on the Project Overview sets the play cursor to the clicked position.

3.6 Navigating with Touch Gestures

If you are using *deCoda* on a device with a touch screen, most navigation interactions will be the same as the mouse interactions described in the previous section. There are also additional touch gestures available on the Loop View as described below:

- **Drag left or right:** Move the loop continuously.
- **Swipe left or right:** Move the loop according to the step size (the same as clicking the big left or right arrows).
- Swipe left or right with 2 fingers: Expand or reduce the loop on the right according to the step size.
- **Swipe up or down:** Change the step size and automatically apply the new step size to the loop length.
- **Horizontal pinch:** Change the step size and automatically apply the new step size to the loop length.
- **Drag up or down (piano roll view only):** Vertically shift the range of visible notes.
- Vertical pinch (piano roll view only): Vertically zoom the range of visible notes.



3.7 Quick Zoom

At any time you can quickly zoom to a specific bar by double-clicking in the loop view. The loop will be set to the bar you clicked on. If you don't change the length of the loop, you can again double-click in the loop view to reset the loop bounds to what they were set before.

3.8 Time Display

When hovering with the mouse over the bar number area the time position for the loop/temporary loop start and end will be displayed as well as the playback start position.

4 Playback Controls (LE)

There are various controls in the Play Bar which affect the song playback.

Fміn () D N 0ct 1/4 1/2 3/4 1 80 врм ()



- Playback key: *deCoda* automatically detects the song key. You can transpose song playback up or down to adjust for your voice range, guitar tuning, etc. by dragging this control up and down or clicking the small [∧] and [∨] buttons. Clicking the [ゥ] button will revert the transposition back to the song's original key.
- 2. **Play Loop / Play to End:** The default playback mode in *deCoda* is to always loop the selected loop area. This mode is indicated by the [▶] icon on the Play button.

However, you can switch to *Play to End* mode and playback will start at the selected loop and then proceed to the end of the song. This can be set by right-clicking or long-pressing on the Play button and selecting the [▶·] button.

- 3. **Octave up:** Enable this button to quickly transpose playback up by one octave. This is intended to help with identifying the pitch of low bass notes which might not be audible well on small speakers.
- 4. **Playback speed (bpm):** Use this control to slow down the playback speed in order to better hear what's going on or practice complex parts until your speed develops. Drag up and down on the control to adjust the tempo or click the small up and down buttons. The tempo shown here is the average tempo of the song in case it has varying tempo.

You can also use the **[1/4]**, **[1/2]**, and **[3/4]** buttons to quickly divide the original tempo to one quarter, one half, and three-quarters the original speed, respectively. Clicking the **[1]** button will return playback to normal speed.

4.1 Temporary Loop and Playback Start Position

Normally, the loop you see is the loop you hear. But there may be times when you want to temporarily loop a small section of the loop you see. This can be done by clicking and dragging in the bar number area to create a span of temporary loop markers.



The temporary loop has a pause pop-up at the end of the loop. By clicking the pause button, a time drop-down will become available and pausing will be activated. When activated the temporary loop will be played and then paused for the selected time. This will give you time to listen and then try to figure it out on your instrument. The temporary loop can be reset by clicking the [\Box] on the pause menu or somewhere on the bar number area again.

Instead of setting a temporary loop you can also set only the playback start position by clicking on the bar number area without dragging.

As soon as you change the visible loop (e.g. navigating to the next section, etc) the temporary loop or the temporary playback start position is reset automatically.

Note that the metronome count-in is disabled when a temporary loop or the playback start position is set (see section <u>Metronome</u>).

5 Metronome (LE)

deCoda automatically detects the position of bars and beats. This aids not only with navigation in a musically meaningful way but also enables **deCoda** to play metronome clicks.

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Figure 13: Metronome Settings

NOTE: This can be especially helpful if you slow down the playback e.g. to hear single notes of a fast passage. Hearing the metronome clicks can give you the context of the musical time grid that might be lost otherwise with really slow playback speeds.

The metronome settings can be accessed by right-clicking or long-pressing on the metronome button.



Figure 14: Metronome Settings

- **Metronome grid:** The metronome grid can be set to **[1/4]** for quarter notes, **[1/8]** for eighth notes, or **[1/16]** for sixteenth notes.
- Count-in: To give you some time to get your hands on your instrument after pressing Play, you can set a Count-in of one [•] or two [••] bars. The Count-in will be played only once when starting the playback. However, if you want the count-in to be repeated with every iteration of the loop, enable the [c] button.

NOTE: The count-in is disabled when a temporary loop or the playback start position is set (see <u>this section</u>).

6 Mixer (LE)



Figure 15: Metronome Settings

The Mixer lets you control:

- the level and mute state of **song** playback, audio **input**, **note** and **chord** synthesizer and **click** (metronome).
- the balance of **song** playback and other sounds.

It can be accessed by clicking on the mixer symbol below the fader at the top portion of the right sidebar. The fader controls the balance of song playback and other sounds and is always visible.

The audio **input** channel also has a button to turn a FX plug-in on and off.

The **note** synthesizer channel controls the playback volume of the notes that you draw in the piano roll as well as synthesizer notes being played when scrubbing in piano roll.

The **chord** synthesizer channels controls the playback volume of the chord synthesizer. Chord preview in the chord editing dialog overrides a muted **chord** synthesizer channel.



7 Input Audio FX (LE)

deCoda lets you add one insert effect (VST, VST3 or AU) to your input audio channel. In case you have installed AmpliTube, **deCoda** automatically chooses AmpliTube to be the default plug-in. As a **deCoda** customer, you get a special version of AmpliTube that contains some extra amp models exclusively selected by us for free.

For more information about AmpliTube, look here: https://www.ikmultimedia.com/products/amplitube5/

The **[FX]** button sits below the Mixer button in the right sidebar. Clicking the **[FX]** button opens the plug-in interface with some additional controls at the top.



Figure 16: AmpliTube loaded as the Input Audio FX

If you want to choose a different default plug-in, you can do so in the Settings. In case you want to change the plug-in for the specific song project you're working on, you can click the cog wheel button and choose a different plug-in.

7.1 Input Audio FX Preset Management

The preset drop-down menu allows you to choose an effect preset directly by clicking on it. Double-clicking lets you rename the preset. The arrow buttons on the left and right of the drop-down menu cycle through all saved presets for the plug-in.

You may save the plug-in settings in your own presets by clicking **[SAVE]**. The new preset is called **"New Preset"** and may be renamed to your liking. **[DELETE]** removes the currently-chosen preset. The delete operation is not undoable, so double-check your selection before clicking it.



8 Project Sidebar (LE)

Click on the [11] button to open the Project Sidebar. The Project Sidebar gives you general information about the current song, let's you toggle the display of chords, and lets you edit Bookmarks and Sections.



Figure 17: Project Sidebar

Sometimes the automatic detection of song sections, beat grid, and chords doesn't produce the desired result. If this occurs, you can correct them manually. This can be done in the Project Sidebar. Click on the [11] button to open the Project Sidebar.

8.1 Editing Sections (LE)

Sections can be editing in the Project Sidebar by selecting the [Sections] tab.

8.1.1 Renaming a Section

To rename a section, double-click on a section in the list and enter the new name.

8.1.2 Creating a Section

A new section can be created by setting the loop bounds to represent the new section and then clicking **[Create new Section]**. Everything within the loop bounds will become a new section, and any left-over parts will become individual sections, too.

BOOKMARKS	SECTIONS
A	
A2	
A3	
Create ne	w Section

Figure 18: Project Sidebar

8.1.3 Removing (Merging) Sections

Because all sections in *deCoda* are contiguous, individual sections can't be explicitly deleted (for this would leave a "sectionless" area in the song). If you wish to remove a section, you must actually "merge" it with a neighboring section. You can do this by selecting the section to be removed and the section before or after it, then clicking **[Create new section]**. This creates a new section that replaces the two previously selected sections, effectively removing one of the sections.

NOTE: The automatically detected sections are named A, B, C, etc. If a section is named A2, this means it is similar to section A—it is the second occurrence of a similar song section.

8.2 Editing the Song Key and Beat Grid (LE)

In the Project Sidebar click on **[Edit Key & Time]**. This switches the Sidebar to the edit page that lets you correct the detected song key and the beat grid.

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Edit Beat Grid Reset Key & Time						
Edit Key & Time						

Figure 19: Key & Time settings

NOTE: The beat grid is defined by the time signature, the position of the downbeats, and the tempo.

- **Key:** Set the song key by selecting the root pitch and the key type (major or minor).
- **Time:** Set the time signature numerator and denominator.
- **Downbeat:** Sometimes the time signature and the tempo are detected correctly, but the downbeat (the start of a bar) is off by a few beats. You can shift the downbeat by clicking on the left and right arrows in the edit page of the project sidebar.
- **Tempo:** The tempo can't be set directly. See below.

8.2.1 Correcting the Detected Tempo

Sometimes the song's tempo isn't detected correctly. You can correct it by performing the following steps:

1. Make sure that the time signature is set correctly.



- 2. Set the loop so that it contains a full bar with some space before and after it.
- 3. Click on **[Edit Beat Grid]** to enter the edit mode.
- 4. Click and drag inside the loop view to select exactly one bar.
- 5. Press play to hear the bar looped to make sure you set the bar boundaries correctly.
- 6. Click and drag again until the selected loop contains exactly one bar.
- 7. Click on the icon above the selected loop to confirm.

The beat grid will now be recalculated based on the bar you just selected. You can always cancel the editing process by clicking on **[Edit Beat Grid]** again.

You can also reset the key and the beat grid to their initial state. To do this, click on **[Reset Key & Time]** in the edit page of the Project Sidebar.

8.3 Editing Chords

The automatically detected chords are shown in the top portion of the loop view in what is called the *Chord Bar*.

NOTE: The chords shown in *deCoda* are purely informational. They don't change how the song is played back but are merely an annotation. If they are not relevant to you, you can hide them by setting the **"Show chords"** setting in the project sidebar to **"Off"**.

• **Move a chord:** Long-press a chord and drag it left or right to the desired position.



Figure 20: Controls for moving chords



- **Remove a chord:** Long-press a chord and drag it up or down until a red cross is shown.
- Add a chord: Long-press or right-click on the Chord Bar where no other chord is shown. Select the root pitch and the chord type in the resulting pop-up menu and click [Create].
- Edit a chord: Tap or right-click a chord. Click the chord drop-down menu and choose a new chord. Most probable options are marked blue. When choosing a new root in the first column, the current chord type will be reset and you have to choose a chord type again from the second or third columns. In case you want to keep the current chord type when changing the root, hold SHIFT while choosing the new root.

After altering a chord a revert [⁵] sign will show up beside the chord dropdown menu. Clicking it reverts any changes since opening the chord editing dialog.

When hovering or clicking in the chord drop-down you will hear a preview of the selected chord. This can be disabled in the settings.

- When you click the loudspeaker symbol or press SPACE on your keyboard, the song will be played back in a loop around the selected chord with the synthesizer chord preview added. You can now try different chords to find the best match.
- You can leave the chord dialog by either clicking the **[x]** or clicking somewhere outside the chord dialog.







8.3.1 Edit Multiple Chords at Once

You can apply a change to other similar chords i.e. chords with the same root pitch and chord type.

NOTE: Editing multiple chords at once can come in handy if *deCoda* erroneously detects something like "A major" in multiple places where you would actually expect "A minor".

To do this, begin with the same steps as editing a single chord. Now you can select from the combo box on the right:

- This chord only: Don't change other chords.
- All in loop: Change all similar chords that are visible in the loop.
- All in section: Change all similar chords in the section the selected chord belongs to.
- All in same sections: Change all similar chords in the section the selected chord belongs to and all similar sections.
- **Everywhere:** Change all similar chords in whole song.



8.4 Bookmarks (LE)

Bookmarks are useful to mark a section you want to quickly find sometime later.

They can be created for the currently selected loop area by simply clicking the button in the bottom bar.

All bookmarks are displayed as icons in the expanded Project Overview. You can recall a bookmark by clicking on the icon.

If there is more than one bookmark starting at the same time position, all bookmarks at this time position are represented by a single icon. You can recall those bookmarks by clicking on the icon multiple times.



Figure 22: Chords dialog

9 Waveform View (LE)

The waveform view simply shows the waveform of the audio file. The position of e.g. kick and snare drum hits is especially well visible in this view. This can be helpful when to identify the beat positions while editing the beat grid to give you a clue of where exactly a bar might begin.

The waveform view can be enabled by clicking on the [++] button in the right sidebar.

You can scrub through the audio by long-pressing and dragging in the loop view.



10Piano Roll View

The Piano Roll view shows the pitch content of the audio file drawn on a piano roll-like display. On the left is a piano keyboard. Each horizontal row represents a piano key (a semitone pitch).

The Piano Roll view can be enabled by clicking on the $[\blacksquare]$ button on the right sidebar.

You can scrub through the audio by long-pressing and dragging in the loop view.

You can drag the loop view up and down to shift the range of notes displayed. Dragging the piano keyboard also allows for shifting the range, but additionally you can drag it left and right to zoom out and in. This behavior is also available when dragging the loop view while pressing the (*Ctrl/Cmd*) key.

10.1 Interpreting the Display

Technically, this view is a spectrogram that indicates the volume level of each frequency over time. The sound of instrument playing a note consists of multiple frequencies being heard at once. Each frequency will be represented by a continuous horizontal line. The lowest line corresponds to the fundamental frequency. It defines the pitch of the note. All other lines correspond to harmonic frequencies, also referred to as overtones.

NOTE: A vocal will not result in straight horizontal lines most of the times. This is because a vocalist will—naturally or intentionally—have a great deal of variability in pitch, e.g. when singing a vibrato or a slide to the next note. Unlike a vocal, a piano will result in straight lines because its physical construction doesn't allow for anything other than one fixed pitch per key.

If you set the loop to 8 bars or less, *deCoda* will try to figure out which of the horizontal lines may be fundamental frequencies of a vocal or an instrument. It will display those lines in blue. This can help you to identify the instrument you're looking for more easily.

10.2 Note Editing

While *deCoda* isn't yet able to automatically generate sheet music for the loaded song, it provides you with tools that make it easy to figure out for yourself which notes are played. In the piano roll view you can place notes on the grid in a very similar way as in many other music software tools like e.g. digital audio workstations. Later on you can <u>export</u> the notes as MIDI file.



To enable the note editing mode, switch to the piano roll view and click on the [] icon on the right sidebar.

- Add a note: Click in the piano-roll to add a note of the length as the current quantization length. Long-press on the loop view at the position where you want to start the note. Then drag to the right to the position where you want to end it.
- Move a note: Simply drag it to the desired position.
- **Change the note length:** Drag the right end of the note to the desired end position.
- Remove a note: Simply click on it.

While you edit notes, you will hear a "frozen" version of the song audio at the current mouse position. You will also hear the note you're currently editing. This gives you some feedback whether the note is matching what is really going on in the song at that moment.

If Snap is enabled the start and end positions of a note will always snap to a grid. The spacing of this grid can be set on the toolbar at the bottom of the loop view. You can set it to note lengths between 1/2 and 1/32. Additionally, the grid can be set to triplets. Snapping can be toggled with the Snap button. For toggling the snapping on the fly you can also use the (*Alt*) key.

^ozplane

11Focus

Focus is a powerful feature of *deCoda* for both learning/transcribing parts and practicing them on your own instrument. Figuring out what notes are played by a particular instrument can be difficult when many other instruments are playing at the same time. Focus therefore makes it easier to mask out all but a very specific portion of the music, kind of like a spotlight shining on a darkened stage.

Focus includes a unique visual representation of what you're hearing while playing back the song: It displays glowing circles on an X/Y plane which represent audible components in the music. The vertical positions of the circles correspond to the frequencies of the components; bass frequencies are visualized at the bottom and higher frequencies are at the top. The horizontal positions of the circles correspond to the sounds' locations in the stereo field from left to center to right.

To use Focus, first click on the [[=]] icon on the bottom bar to enable it, then simply select an area in the plane by dragging a rectangle over it. What you hear will then be filtered so that everything outside the selected area will sound quieter.

If you click on the [□] icon again, the behavior of Focus is inverted such that the audio inside the selected area is attenuated while the audio outside the area plays.

Clicking the [I] icon a third time disables Focus restoring full audio playback.

While the focus is enabled—normally or inverted—you can collapse the focus pane by clicking on the [>] icon on the top-left corner of the focus pane. You can also resize the rectangle by dragging on the edges or corners, or move the rectangle by clicking inside the rectangle and dragging it to a new location.

There is also an important interplay between Focus and the <u>piano roll view</u>. If you set the loop to 4 bars or less, some pitch lines in the piano roll will be displayed in blue as described in the section <u>Interpreting the display</u>. In this case, the Focus selection will be applied to what is displayed in the piano roll view. This is done because the blue lines representing the potential pitches will be more accurate when there's less "distraction" by other sounds which have been filtered out with Focus. To help you make the connection between what is displayed in the piano roll and what is selected with Focus, you'll see a light gray box in the focus window. It represents the range of notes visible in the piano roll view, but mapped to their corresponding frequencies.



12Export (LE)

After you've done some work on your *deCoda* project, you may want to export it. The export options can be accessed by clicking the **[:]** icon in the top right corner of the *deCoda* window and offers several options:

- **Export the whole project** (LE): Writes the whole project into a single file. It includes the audio file (if enabled in the <u>settings</u>) and all annotations like sections, chords, beat grid and notes. The exported project can be imported again in the same way as loading an audio file.
- **Export the loop as audio file:** Saves the currently selected loop as WAV file. It is exported exactly as you hear it when playing it back, i.e. including changed tempo and key and including the focus selection.
- **Export notes as MIDI file:** Saves the notes you added in the [piano roll view] as MIDI file. You can choose to include the whole song or only the currently selected loop in the resulting file. The exported MIDI file will also contain the song tempo as well as all included sections as markers.
- **Export chords as MIDI file:** Saves the chords as MIDI file. You can choose to include the whole song or only the currently selected loop in the resulting file. The exported MIDI file will also contain the song tempo as well as all included sections as markers.
- **Export lead sheet:** Saves the chord progression as lead sheet either as plain text file or as ChordPro compatible text file. In case you have ChordPro installed you can choose to directly call ChordPro to generate a PDF.

NOTE: For more information about ChordPro, look here:

https://chordpro.org/



13Help (LE)

deCoda features a help system that can quickly give you information about most user interface elements. There's also an interactive tutorial as well as a list of tutorial videos.

13.1 Tooltip Help

deCoda features a help system that can quickly give you information about most user interface elements. There's also an interactive tutorial as well as a list of tutorial videos.

13.2 Tutorials

The tutorials can be accessed via the help mode as described <u>above</u>. In help mode, click on **[Show Tutorials]** in the top middle of the screen. This opens the welcome screen. There you'll have access to a list of tutorial videos.

Below the video list there is a **[First steps]** button. Clicking on it starts an interactive tutorial that guides you through the basic usage of **deCoda**.



14Settings (LE)

The settings screen is grouped in collapsible sections.

14.1 General

14.1.1 Show tutorial screen on startup

If you disabled the startup screen, enable this to bring it back.

14.1.2 Follow play cursor on zoom step size change

If disabled, applying the step size to the loop length only modifies the loop end. If enabled and playing back, the loop will be shifted after applying the step size to ensure it contains the play cursor.

14.1.3 Restart playback on loop start change

Set the play cursor to the loop start if the loop start changes.

14.1.4 Restore all parameters upon reloading a bookmark

If disabled, only restores the loop bounds. If enabled, restores all settings listed under *Update all parameters of selected bookmark*.

14.1.5 Update all parameters of selected bookmark

When the current loop matches a bookmark, store all changes to the following settings in the bookmark:

- Tempo and key
- Focus settings
- Metronome settings
- Step size
- Waveform or piano roll view
- Visibility of chords

14.1.6 Auto-Prelisten while editing chords

When enabled a synthesizer plays the selected chord shortly when hovering or clicking in the chord drop-down menu.

14.1.7 Colour theme

Choose between a light and dark user interface theme. *deCoda* must be restarted after changing this.

14.1.8 Chord Bar

Changes the appearance of the chords during playback.

- S: No change. Display as marker labels.
- M: Display chords in a scrolling banner-like style better suited for for playing along.
- L: Same as M, but bigger.

14.1.9 Playback tuning frequency

deCoda automatically detects the tuning frequency the song was recorded in and changes the pitch of the whole song to match the tuning frequency set here. This prevents an out-of-tune sound while playing along if e.g. your guitar is tuned just a tad higher or lower than the song.

14.1.10 Note level when scrubbing

Attenuate the note synthesizer when scrubbing (long-press on the loop view to freeze playback at that position). This might help to better hear the original notes in relation to the synthesized ones while editing notes.

14.2 Plug-in Settings

14.2.1 Plug-in search path

Search path for the plug-ins. By default the standard paths for VST/VST3 and AU (Mac only) plug-ins are set. You can add a new path by clicking on **[Add]** and choosing a directory from the dialog window. You can remove a path by selecting it and then clicking **[Del]**. Use the **[Scan]** button to scan the paths for newly-installed plug-ins.

14.2.2 Default input plug-in

The default plug-in for the audio input. This is the initial plug-in that is selected when you load a new song into *deCoda*. If installed AmpliTube is chosen by default.

14.2.3 Pin plug-in window on top

Select if the plug-in windows should be floating on top the *deCoda* UI or not. You can also set this at the top left of the plug-in window.

14.3 Default Apps

14.3.1 Default App to open MIDI files

Set the app to open MIDI files. This is used when you export a MIDI file by selecting "MIDI - Loop & Open" from the <u>export</u> menu.

14.3.2 Path to ChordPro

Path to the ChordPro executable. In case ChordPro is installed in the default path, this is filled automatically.

14.4 Project Library Settings

14.4.1 **Project library location**

Change the location on disk where *deCoda* stores your projects. If you change it, you have two options:

- **Change:** Just point *deCoda* to the new folder. If it is empty, create a new empty library there. If it contains an already existing library, use it.
- **Change & move:** Move the current library to the new folder.

14.4.2 Store original audio files in project library

Copy the original audio file into the library when you initially load a new song into *deCoda*.

14.4.3 Embed original audio file in exported projects

When <u>exporting</u> a project, include the original audio file in the resulting project file. It is **your own responsibility** to make sure you don't infringe a copyright!



14.5 Audio

Select which audio device and output channel *deCoda* should use. Click on **[Test]** to play a test tone to check if your setup works correctly.

If **"Use system default audio devices"** is enabled, *deCoda* uses the input and output devices which are set in your operating system. It will automatically follow changes to the system device, such as when you unplug your headphones to switch to your laptop speakers.

If you experience crackling noise or audio drop-outs during playback, try increasing the **"Buffer size"** value.

14.6 Keyboard Shortcuts

Here all available commands are listed that can be triggered using a keyboard shortcut.

14.6.1 Add a shortcut

Click **[Add]** to the right of the command to which you want to add a keyboard shortcut, then press the desired key or key combination and click **[OK]**.

14.6.2 Change a shortcut

Click on the shortcut you want to change and select **[Change]** in the resulting popup menu. Then press the desired key or key combination and click **[OK]**.

14.6.3 Remove a shortcut

Click on the shortcut you want to remove and select **[Remove]** in the resulting pop-up menu.



15Demo Restrictions

The demo version of *deCoda* enables you to try out almost all the features. There are just two restrictions:

- *deCoda* closes after 5 minutes of audio playback.
- Export options are disabled.



16Technical Specifications

Operating Systems	 macOS 10.15 and higher
	• Windows 10 & 11
CPU Architecture	Windows: Intel 32- and 64-bit
	• macOS: Intel & M1 64-bit
Supported Audio	WAV
File Formats	• AIFF
	• MP3
	 M4A (macOS only)
Supported Plug-in	• VST2
Formats	• VST3
	• AU (macOS only)



17Feedback & Support

Our website products.zplane.de always provides the latest information and news about our products. Any issues you encounter may either be addressed in the FAQ section of the appropriate product or reported directly to us via post or email. Before contacting us directly, please ensure you are using the latest version of the product. Please also make sure that your issue is not covered in the manual, the forum, the FAQ or elsewhere on our website.

If you cannot find answers using the methods above and need to contact us directly, please provide the following details to enable us to help you as fast as possible:

- Your registration information (such as the name of your User Account or your login e-mail)
- Your system specifications (computer hardware, operating system, audio interface,)
- The exact version number of the software (see the "About" box by clicking on Help [?] button located at the upper-right of the *deCoda* interface)
- Include a detailed description of your problem with a step-by-step description of what led up to it so we can try to reproduce the issue
- If you are having problems using a specific plug-in in *deCoda*, please also detail the plug-in name and version

Please use the following contact methods:

- zplane.development GmbH & Co. KG Grunewaldstr. 83
 D-10823 Berlin Germany
- Ø: products.zplane.de/support
- @: <u>support@zplane.de</u>