![zplane]

![peel — open your sound]

PEEL

Open Your Sound

User Manual

Version 1.1.2 / 13 December 2022

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1 Introduction

Get inside your audio with PEEL. Visualize your recordings, identify, and select parts of the signal. Solo, mute, or route the sonic parts for external processing. PEEL opens up new creative options in audio and music production: Use it to visually identify and track down problems in your mix. Use it to mute or solo a single instrument in a recording. Or use PEEL to grab the snare drum only from a drum loop and send it to external effects. Get creative with your audio recordings in a whole new way with PEEL.

1.1 Key Features

- Spectral processing audio plug-in
- Visually identify single instruments in a mix
- Mute problematic instruments
- Solo performances you wish to emphasize
- Route selected audio to external processing
- See your entire mix visually to help identify mix problems
- VST/VST3/AU/AAX formats.
- macOS version has native compatibility with both Intel and M1 processors

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 **[⚙]** and **[Processing]**.

Selectable menu options will be written in bold font between quotes, such as **"Mute inverted output"** and **"InvOut"**.

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

1.3 Installation

In order to download the PEEL installer, you need to register your copy 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 PEEL 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 PEEL 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 right-clicking on it and clicking **"Eject"** from the context menu

1.4 Registration & Activation

PEEL 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 PEEL. You will receive your unlock key by registering PEEL at the zplane website.

1.4.1 Registering Your Product

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

1. Click the **[REGISTER]** button in the menu bar:
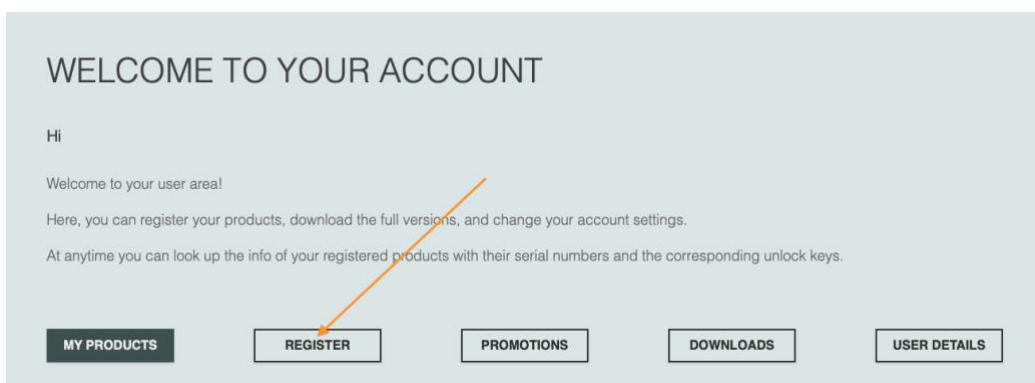
Figure 1: The Account page

2. In the area provided **(1)**, paste in your PEEL serial number and click the **[REGISTER]** button **(2)** to the right:
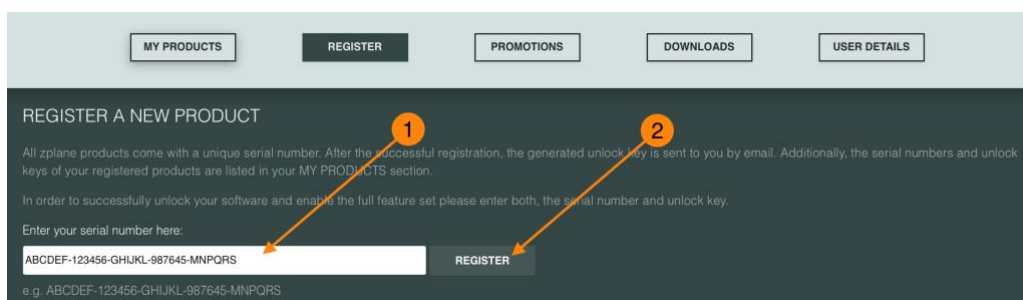
Figure 2: The Product Registration page

3. Your PEEL 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 Your Product

Activation of PEEL is done within PEEL itself. You must therefore first load PEEL as a plug-in within any host program you have. Once you've loaded PEEL:

1. Open the PEEL interface so you can see the plug-in—most hosts will automatically show the plug-in interface as soon as the plug-in is loaded. You will immediately see the Activation screen:
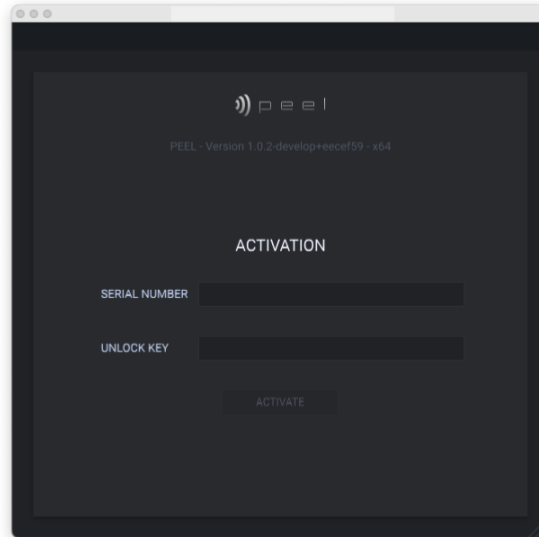
Figure 3: Activation screen

2. Paste your Serial Number **(1)** and Unlock Key **(2)** into the spaces provided, then click the **[ACTIVATE]** button **(3)**:
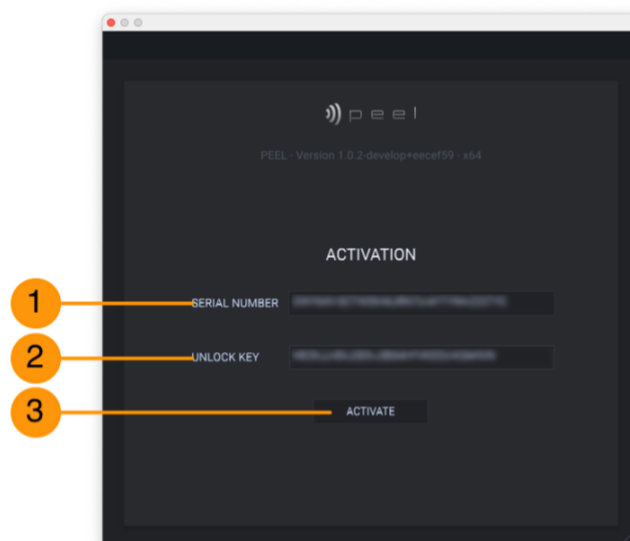
Figure 4: Serial Number and Unlock Key entry areas

3. PEEL will then be activated and will switch to the Main View:
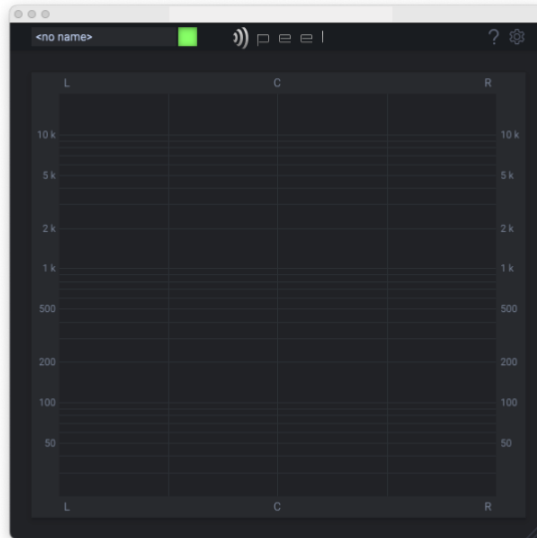
Figure 5: Main View of PEEL

2 The PEEL Interface

The PEEL interface is simple and segregated into three main parts: The [Main View](#), the [Settings Page](#), and the [Help Page](#).

2.1 Main View

The Main View provides access to everything you need to use PEEL. It consists of a large Soundfield **(1)** for visualizing the audio signals and specifying the areas to isolate. Around the Soundfield are additional controls for adjusting the color **(2)** and accessing the Help and Settings pages **(3)**.

Figure 6: The PEEL Main View

2.1.1 Soundfield Display

Figure 7: Soundfield Display with Audio

The Soundfield Display **(1)** provides a visual representation of what you hear in the track that PEEL is processing. It displays glowing circles on an X/Y plane. The vertical position of a circle corresponds to an audible frequency while the horizontal position of the circle corresponds to where you hear that frequency in the stereo panorama; the size of the circle indicates the amplitude or loudness of that frequency.

2.1.2 Focus Frame
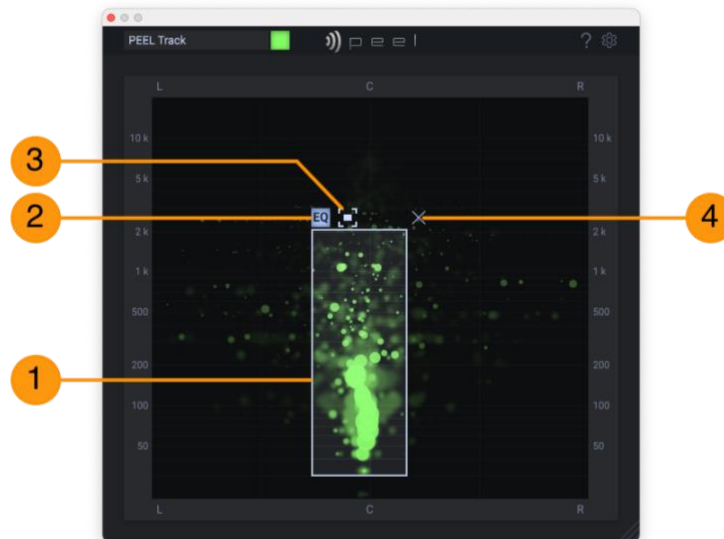
Figure 8: Selecting an alternative key

The most interesting control in PEEL is the Focus Frame **(1)**, for this provides quick and intuitive access to PEEL's core audio-separation functionality. The Focus Frame selects range of frequencies *and stereo panorama position* and splits the output audio into two parts: all the audio inside the Focus Frame vs. all of the audio outside the Focus Frame. These two audio streams are then sent to two independent output streams which can be processed differently in the host application.

To create a Focus Frame when none exists, simply drag a rectangle across the Soundfield. One corner of the rectangle will be placed where you initially press the mouse button and the opposite corner will be placed where you release the mouse button.

When a Focus Frame exists, you can change it by either:

- **Positioning the mouse inside or outside the Frame and dragging**: this repositions the Frame within the Soundfield.

- **Positioning the mouse on an edge or corner of the Focus Frame and dragging**: this will alter the shape of the Focus Frame so that it captures a different amount of frequencies or stereo positions in the Soundfield.

To temporarily disable the Focus Frame function without deleting it, click the **[EQ]** button **(2)** to turn it off. Clicking the **[EQ]** button again will re-enable it.

To remove/delete the Focus Frame, click the **[X]** button **(4)** in the upper-right corner of the Focus Frame.

The last control for the Focus Frame is the Invert Output **[⚬]** button **(3)** which swaps or inverts the outputs of PEEL. Normally, the audio within the Focus Frame is output from PEEL's first stereo pair while the audio outside the Focus Frame is output from the second stereo pair—you can learn more about output routing later in this manual. If you click the **[⚬]** button to enable it, now the audio outside the Focus Frame will be sent out the first stereo pair while the audio within is sent to the second stereo pair.
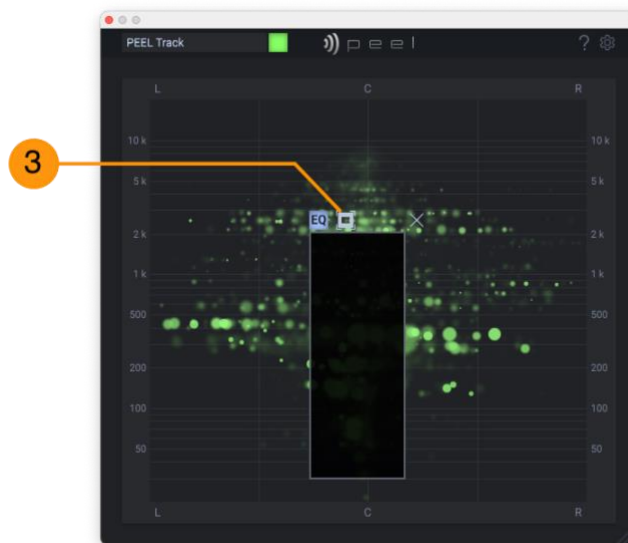
Figure 9: The Invert Output button enabled

NOTE: In situations where only the first stereo pair of PEEL is being used/heard in the DAW, the **[⚬]** button provides a quick way to mask out the sound within the Focus Frame instead of having to manage the multiple audio outputs of PEEL and re-route them in your DAW.

2.1.3 Color Palette

By default, PEEL attempts to set the color of the [Soundfield Display](#) to the color of the host track in your DAW.
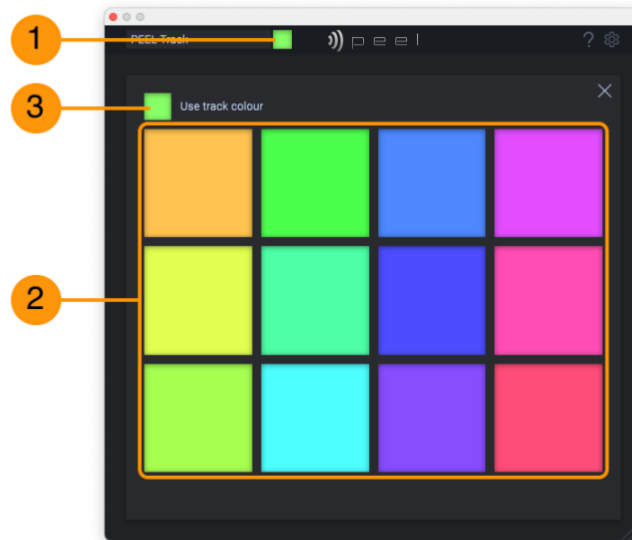
Figure 10: The Color Palette

However, if your DAW doesn't communicate track color to PEEL or you simply wish to override the color selection, you can click on the Color Palette button **(1)** and select a new color from the palette **(2)** to use for the Soundfield Display. The color selection is unique for each instance of PEEL you use. To switch back to the color provided by the DAW, click the **[Use track colour]** button **(3)**.

> **NOTE:** The AudioUnit plug-in format does not communicate track color from the host to the plug-in.

2.1.4 Instance Name

Each instance of PEEL can have a name assigned to it. This can be helpful if you're viewing multiple PEEL windows at the same time while adjusting a mix. Simply click in the Instance Name field **(1)** and type in whatever name is helpful for you.

Figure 11: The Instance Name field

2.2 Settings Page

The Settings Page is opened via the "gear" **[⚙]** button **(1)** in the header. It provides access to the authorization mechanism as well as settings that affect the behavior of PEEL.
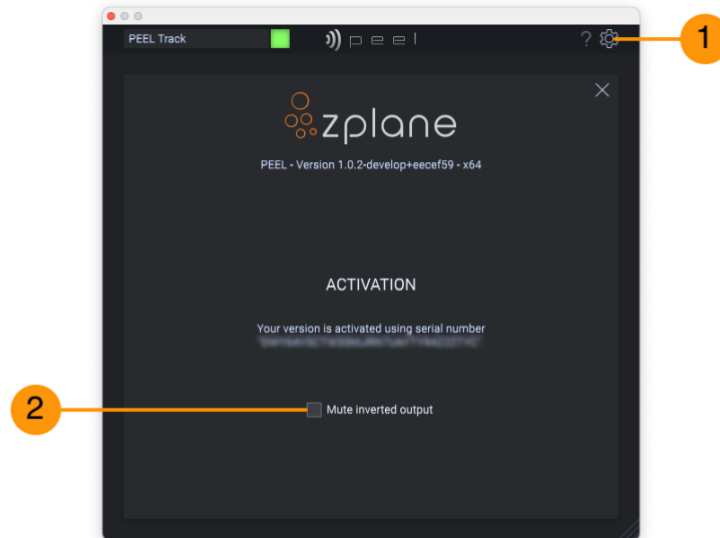
Figure 12: The Settings Page

2.2.1 Activation Info

The first section of the Settings page shows the serial number that was used to activate your copy of PEEL. For more information on registering and activating PEEL, please see the Registration and Activation sections at the start of the manual.
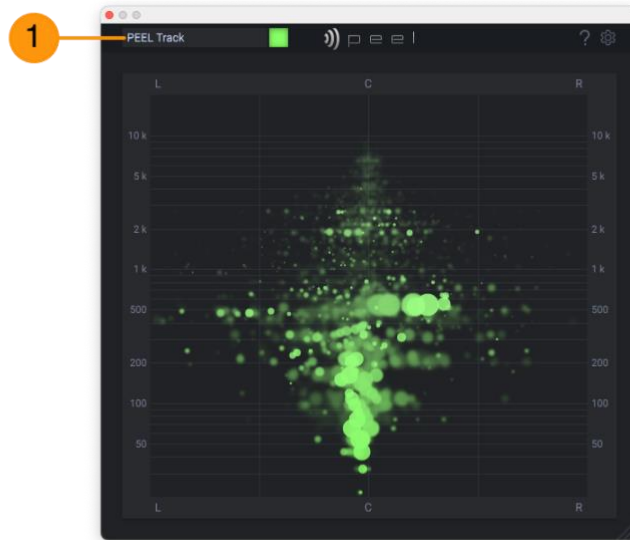
2.2.2 Mute Inverted Output

PEEL has two stereo outputs: the normal output and the inverted output. When you use the Focus Frame, audio inside the Focus Frame will go to one of these outputs while the audio outside the Focus Frame will go to the other. This is what allows you to route a portion of the audio to a separate track in your DAW for unique processing.

However, some DAWs can't handle PEEL's two stereo outputs correctly or mix the two outputs together by default. When PEEL's two outputs are mixed together, you get the original audio back—it will sound like PEEL doesn't work when you use the Focus Frame.

If you're not interested in applying alternative processing to the audio being routed to the secondary output or have a DAW that doesn't allow you to access the two outputs, you can enable the box in front of **"Mute inverted output" (2)** to silence the secondary output. PEEL will then only output one output allowing you

to hear what is inside the Focus Frame (while the **[ ]** button is off) or outside the Focus Frame (while the **[ ]** button is on).

> **NOTE:** This setting is unique for each instance of PEEL rather than being a global setting.

2.3 Help Page

By clicking the **[?]** button **(1)** in the upper-right corner of PEEL, you will gain access to the Help Page which provides access to numerous tutorial videos **(2)**. Click on any of these videos to launch the videos in your default web browser.
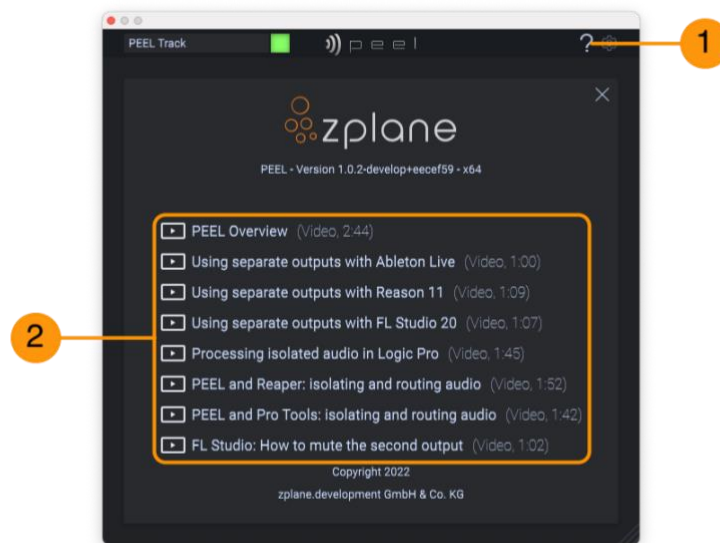

Figure 13: The Help Page

3 Using PEEL

There are a few primary uses for PEEL:

1. [Isolating or masking sounds](#) based on their frequency range and stereo position

2. [Applying unique effect processing](#) to only a specific portion of audio based on its frequency range and stereo position

3. [Visualizing](#) the frequency and stereo content of audio to assist in mixing.

The following sections provide detailed directions on how to perform these various tasks.

But before diving into those details, you should understand how PEEL works in terms of audio routing.

3.1 PEEL Input and Output Routing

PEEL is an audio effect that is designed to be loaded as an *insert* on a track in your DAW. However, unlike most insert effects which just have a stereo input and a stereo output, PEEL is unique in that it has one stereo input and *two stereo outputs.*

The reason PEEL has two stereo outputs is to allow PEEL to split the incoming audio into two separate parts. When using the Focus Frame, you will end up separating the incoming audio into sounds within the Focus Frame and sounds outside the Focus Frame. PEEL outputs these two unique audio streams to its two stereo outputs so that you can treat the two streams differently in your DAW.

In order to take advantage of this behavior, *your DAW <u>must</u> be able to access and route these two stereo outputs in some way.*

Unfortunately, not all DAWs are created equal—some DAWs will allow easy access to PEEL's two outputs while other DAWs have a complicated process for accessing the outputs...and some simply cannot provide access at all.

The exact method for accessing the outputs of PEEL will differ depending on your DAW, but examples for some popular DAWs are provided below. If your DAW is not listed here, you will need to consult the documentation or user forums to find out if and how your DAW can correctly access and route PEEL's outputs. In the case where you DAW cannot access the outputs, you can enable the **"Mute inverted output"** option in the Settings to still achieve some functionality from PEEL.

3.1.1 Routing in Ableton Live

Ableton Live has exceptional routing abilities and makes accessing PEEL's secondary output easy.
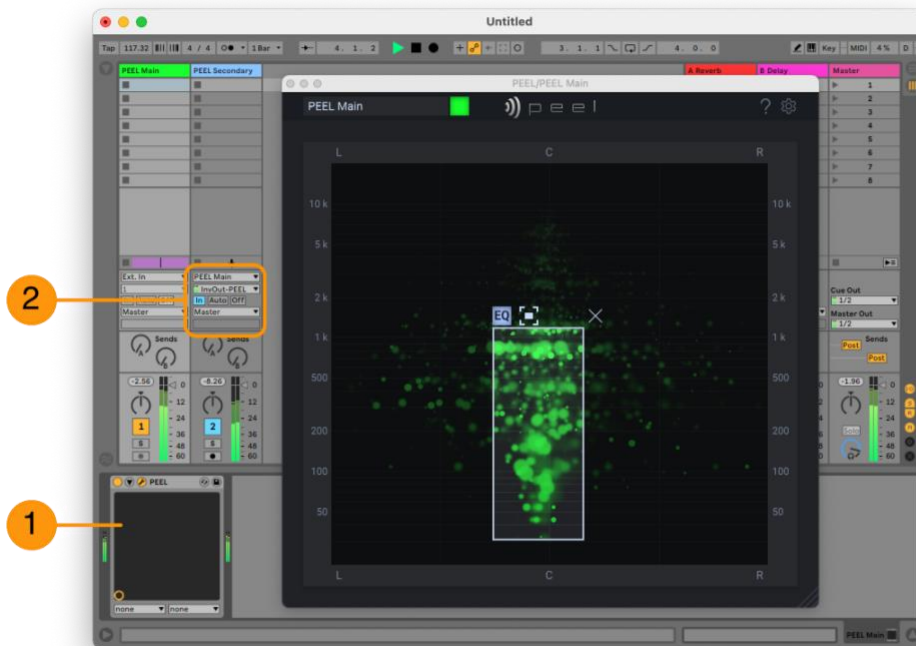
Figure 14: How to configure a second track to receive PEEL's Inverted output

When you load PEEL into the first track in Ableton Live **(1)**, PEEL's first output will be routed to the output of the track while the second output will have no destination. You will therefore need to create a new track and assign PEEL's secondary output to the input of that track as shown **(2)**.

3.1.2 Routing in Reaper

In Reaper, you will insert PEEL on the track with audio **(1)**. You will then create a second track but create a new send on the first track **(2)**. From the send configuration, you will select channels **"3/4"** of the first track to send to the second track (3). This setup looks like this:

Figure 15: Setting up the second output in Reaper

3.1.3 Routing in Pro Tools

To set up PEEL's secondary output in Pro Tools, you need to first insert PEEL on a track **(1)**. You then create a second audio track and 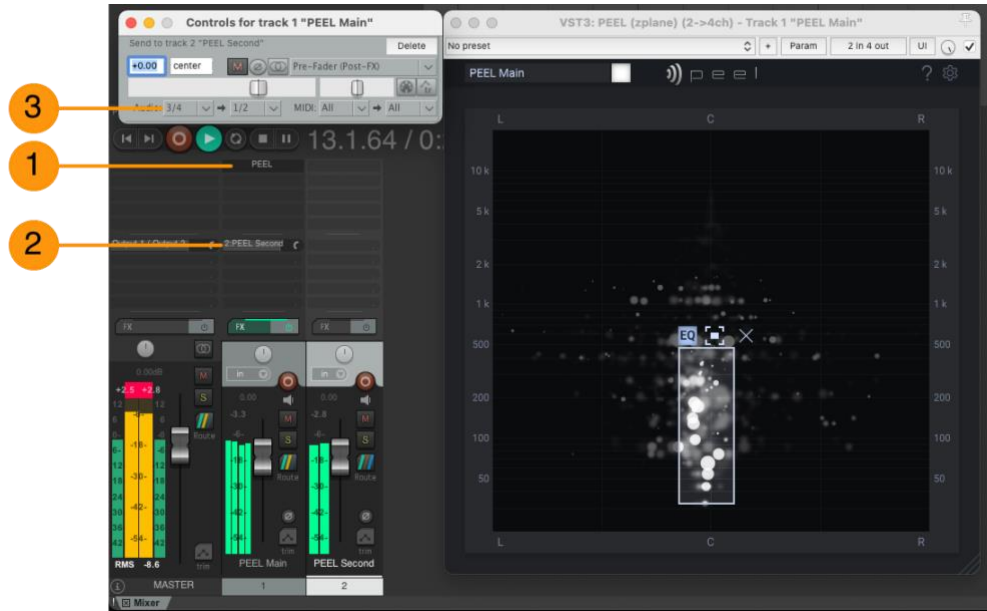then select the PEEL **"InvOut"** from the Input menu for that track **(2)**. Lastly, you enable the input monitor on the second track to hear the output **(3).** The full setup looks as follows:
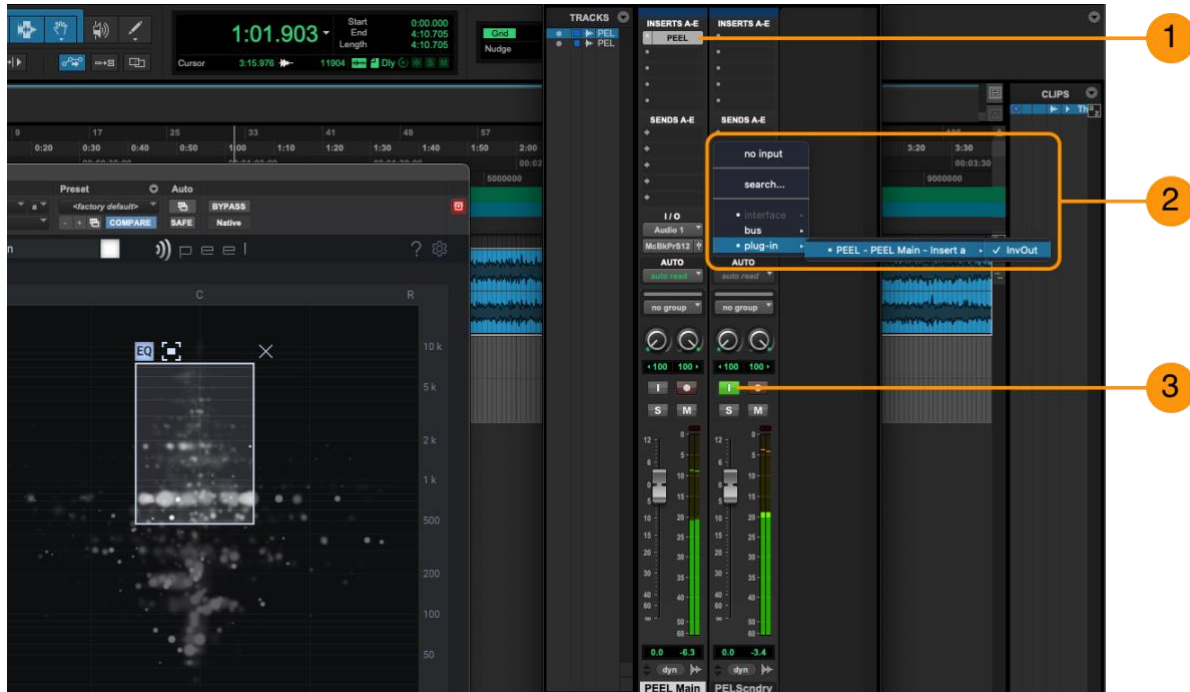
Figure 16: Setting up the secondary output in Pro Tools

3.1.4 Routing in FL Studio

FL Studio is one of the DAWs which, by default, takes both of PEEL's stereo outputs and mixes them together. Because of this, setting the [Focus Frame](#) in PEEL will appear to do nothing—you will not hear any isolation or masking. You have two choices on how to proceed depending on what you intend to achieve:

- If you wish to just isolate a sound, you can enable the [“Mute inverted output” option](#) in the PEEL Settings.

- If you want to do separate processing of audio, then you need to reconfigure the InvOut destination following the [“Using separate outputs with FL Studio 20” video](#) in the Help page. The final setup will look something like this:

Figure 17: Configuring PEEL VST Outputs in FL Studio

Begin by clicking the **[⚙]** button at the top of the PEEL VST frame **(1)** and then clicking the second button in the header that appears **(2)**. On the new display that appears, click the 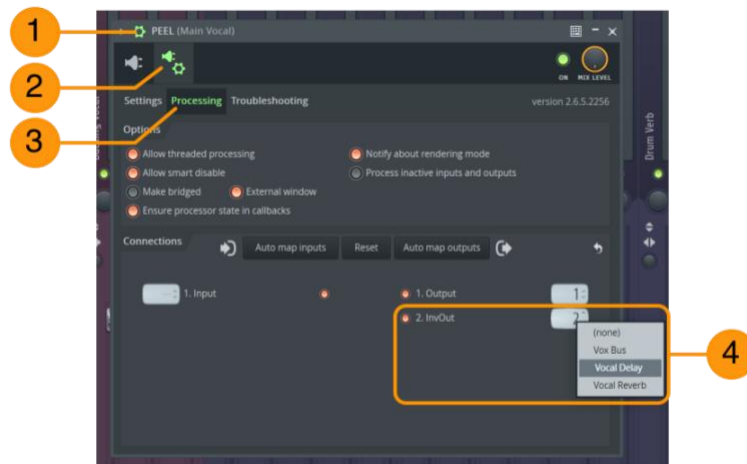**[Processing]** tab **(3)**. In the lower-right area of this window, you will see the two outputs from PEEL listed as **"1. Output"** and **"2. InvOut"** where you'll need to ensure the second output is enabled but routed to a different channel in the display on the right—you can right-click this display to bring up a list of channel names **(4)**.

3.1.5 Using PEEL in Logic Pro & Studio One

Unfortunately, Logic Pro and Studio One two DAWs that don't allow any access to the secondary output of PEEL—you will only hear the first stereo output. While this still allows for easy isolation or masking of sounds, it makes the process of selective effect processing a bit more difficult. The basic workaround for this is two create duplicate tracks each with an instance of PEEL, but engage the **[⚬]** **button** of the Focus Frame in the second track. There is a video tutorial on this process in the PEEL Help Page—though the video uses Logic Pro as an example, the same principle applies to Studio One.

3.2 Isolating Sounds

You can use PEEL to simply isolate or mask a portion of audio from a track. This can be useful if you want to use only a portion of audio in your song (like extracting a bassline from a music loop) or if you want to block out a portion (like blocking that bassline and leaving only the other instruments in place).

To do this, you do not need to set up the secondary outputs as described above. Rather, you'll want to use just one of PEEL's outputs. In many cases, this means simply loading PEEL as an insert on a track and then creating a Focus Frame. You'll then hear only the audio inside the Focus Frame, or you can enable the [▪] button to mask the audio inside the Focus Frame.

If you do the above but find that you're not hearing any change in audio, this means your DAW is mixing both of PEEL's outputs together, and the fastest solutions is to open the PEEL Settings and enable the "Mute inverted output" option.

3.3 Splitting Audio for Individual Processing

If you want to apply unique processing to only a portion of the audio, this is where PEEL's secondary output comes into play. You will therefore first need to set up the secondary output routing in your DAW so that PEEL is outputting to two tracks. There are examples of how to do this in popular DAWs in the PEEL Input and Output Routing section, as well as workarounds for when the DAW doesn't directly support accessing the secondary output.

Once you have configured your DAW so that you have PEEL's main output on one track and the secondary "inverted" output on another track, you can then create a Focus Frame in PEEL and the audio coming in to PEEL will now be split to the two output tracks. The audio inside the Focus Frame will output to the first track and the audio outside the frame will output to the second track.

It is common to use the Focus Frame to isolate a sound that you want to process, such as focusing on a snare drum in a drum loop. By putting the Focus Frame around the snare drum, the snare drum will then be heard on the first track while the rest of the audio goes to the second track. You can then apply additional effects on the snare drum by either loading more insert effects on the first track and/or using effect sends on the first track to send the snare to some global effects. In this example, the second track would have no additional effects applied to it so that the remainder of the drums stay in their original form. Of course, if you wanted to, you could apply separate effects to the second track if appropriate.

3.4 Visualizing Audio

The Soundfield display in PEEL can serve as a visual reference when mixing, even without taking advantage of the Focus Frame feature. It can be quite powerful to just load PEEL onto your master track to gain a visualization of the mix. You can also load instances of PEEL onto individual tracks to see how they might be contributing to the overall mix.
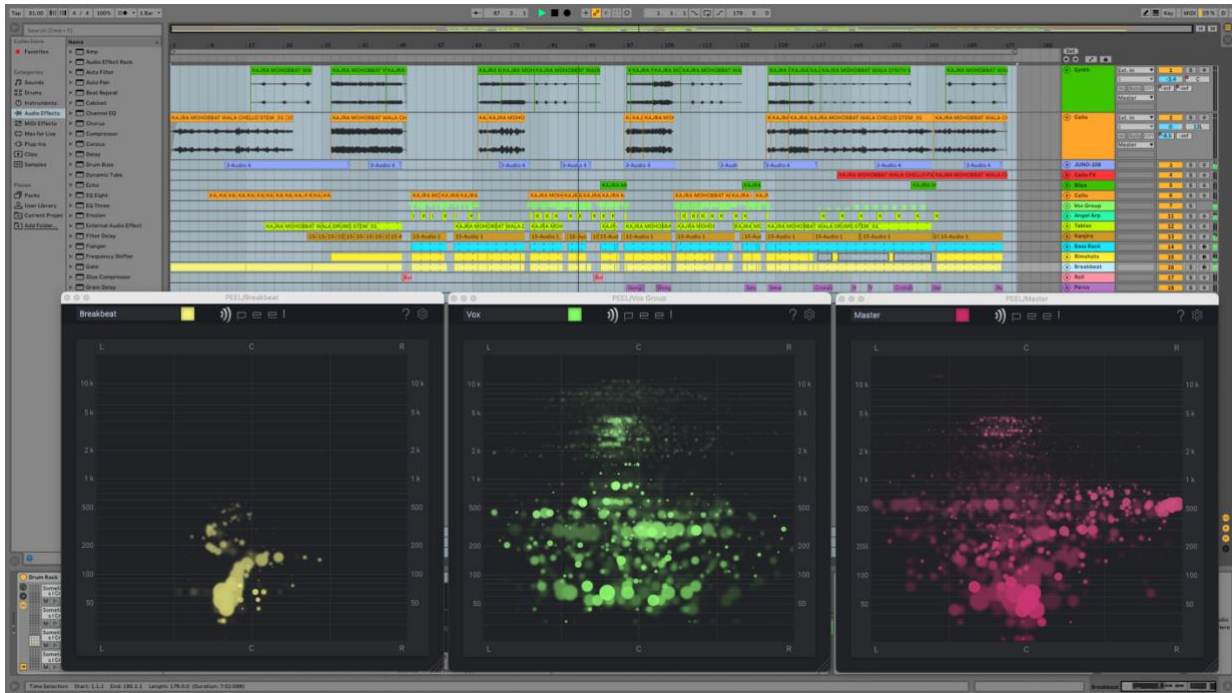

Figure 18: Three instances of PEEL visualizing parts of the mix

In the example above, three instances of PEEL are visualizing various parts of the mix. The first instance on the left is visualizing the breakbeat and one thing that can be seen here is that the bass drum is not centered in the stereo field—the yellow circles at the bottom of the Soundfield are showing up slightly to the left of center. It might be desirable to fix this by adjusting the pan on this part.

The middle instance is loaded on the vocal group and we can see that this part contains a lot of stereo content in the bass frequencies. That is, the green circles in the lower area of the Soundfield are spread out rather than being clustered around the center. This could be problematic if the goal is to have this song pressed to vinyl where stereo bass frequencies could cause the needle to jump out of the groove. This amount of bass frequencies might also muddy the overall mix.

The instance of PEEL on the right is loaded on the master tack and, if our goal was to put this song on vinyl, it shows that it might be advantageous to create a more mono/centered version of the mix in the bass frequencies. Furthermore, this song might also be helped by boosting the treble content as the upper portion of the Soundfield is rather sparse and empty—this mix might be too "dark" or "dull" in its current state.

4 Technical Specifications

Operating Systems	• macOS 11, 12 & 13 • Windows 10 & 11
CPU Architecture	• Windows: Intel 32- and 64-bit • macOS: Intel & M1 64-bit
Audio Formats	• 1-8 channels (I/O) • 32kHz - 192kHz sample rate
Plug-in Formats	• VST2 • VST3 • AU (macOS only) • AAX
Audio Latency	• 92ms @44.1kHz

5 Feedback & 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 (hardware, operating system, host software)

- The exact version number of the plugin (see the "About" box by clicking on Help **[?]** button located at the upper-right of the PEEL 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

Please use the following contact methods:

✎ :   zplane.development GmbH & Co. KG
         Grunewaldstr. 83
         D-10823 Berlin
         Germany

∅ :   products.zplane.de/support

@ :   support@zplane.de