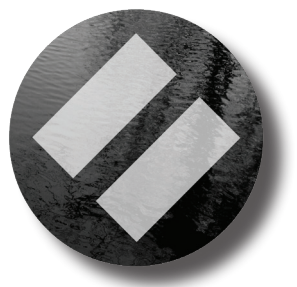




# SIRENAUDIO



## Feedback 2

Quickstart Guide (January 2015).

# System Requirements

## Windows System Requirements

Windows XP, Vista, 7, or Windows 8 machine with 4 GB RAM. An ASIO-compatible sound card is recommended for optimum audio performance. Windows users should thoroughly test the demo version on their computer.

Windows users will need the latest version of Java installed, which can be downloaded here:

<https://java.com/en/download/>

If you do not have an ASIO-compatible soundcard please try the free ASIO4All audio driver available here:

<http://www.asio4all.com/>

## Macintosh System Requirements

Mac PPC or Intel machine running OS X 10.4.11 or later, and 4 GB RAM.

Mac users will need to have Java SE 6 installed which can be downloaded here:

<http://support.apple.com/kb/dl1572>

## Support

If there are any issues with performance, please send an email to: [support@sirenaudio.co.uk](mailto:support@sirenaudio.co.uk) outlining the nature of the problem and what (if anything) you were doing at the time the problem occurred.

## Installation

SirenAudio software does not use an installer. Once the software is downloaded and has been authorised it is ready to use. By using the application you agree to the license agreement. The license agreement is included in the downloaded folder.

## About Feedback

The Feedback application allows you to create dense drones, textures, and loops quickly. The application takes its name from the feedback of a delay which is regulated by a compressor. This results in a delay that loops and stays at a constant volume.

## Demo Version

The demo version of Feedback has no internal record capabilities. You can save presets with the demo version, however you cannot restore them.

The demo application will close after 20 minutes.

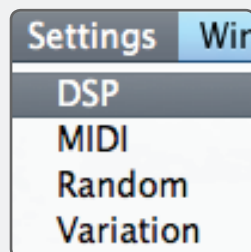
# Configuring an Audio Driver

## Step 1 : DSP Status Window

When the application is first run, or when you change audio interfaces, you will need to choose an audio driver from the driver menu in the *DSP Status* window.

To view the *DSP Status* window, click on the Settings application menu, then pick *DSP* from the list.

### The Settings Menu



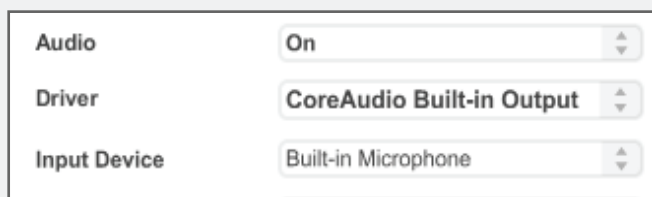
When clicked, the *DSP* menu item shows the *DSP Status* window.

## Step 2 : Choosing an Audio driver

You will now see the *DSP Status* window. There are various options that you can configure in this window, but the one we're interested in is the second item - the *Driver* menu.

Click on the driver menu to reveal a list of audio drivers. If you are using the application with a particular audio interface, choose this device's driver from the list.

### The Driver Menu



The *Driver* menu is the second item in the '*DSP Status*' options, and when clicked shows you a list of available audio drivers.

### A list of available Drivers



Here is a list of the drivers that I can use with the application on my Macintosh computer.

Your list will likely have different audio driver options.

## Step 3 : Setting Vector Sizes and Sampling Rate

The Feedback application sets the I/O and Signal Vector sizes automatically to 512 samples. These are the recommended settings and it may be that values of less than 512 samples will cause problems with the audio.

Feedback has been tested primarily with a sampling rate of 44.1kHz, or 44100Hz as shown in the menu opposite. This is the recommended sampling rate, and higher values may cause degradation of the audio.

### Vector and SR options



The values shown above are the recommended settings for the Feedback application.

### \* Note for Windows Users

For Windows users an ASIO-compatible audio interface is recommended. If you are experiencing any problems with existing audio drivers, please try the Asio-4-All driver to see if this solves them. The Asio-4-All driver is a free audio driver available from : <http://www.asio4all.com/>

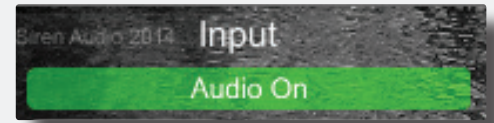
# Turning Audio On / Audio Files

## Step 4 : Turn Audio On

The audio toggle is turned on by default. However, whenever a driver is changed you will need to turn the audio off and then on again. This can be done in the DSP Settings window, however there is a control in the main interface for this purpose.

Turn the audio off and on again to activate audio in the application.

### Audio On / Off Toggle



*The Audio On / Off Toggle is located in the top left corner of the Feedback application's main window.*

## Step 5 : Load and Play an Audio File

There are two types of audio that the application uses as a source. The first is an external input. This can be any device that is connected to your audio interface, such as a microphone, guitar, or synthesiser.

The second type of audio is from an audio file that is loaded in to the application. Since not every user will have access to an external sound source to use with the application, I will demonstrate how to use the application with an audio file, which is also later relevant to using an external input (Steps 6-9).

### File and Folder Loading Options



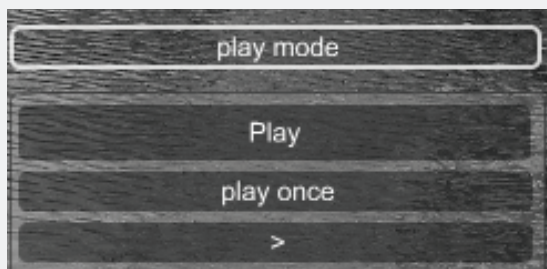
*The File and Folder loading options are located above the application's waveform display, in the main window.*

The Feedback application accepts Wave (.wav), and AIFF (.aif / .aiff) audio files. You cannot use any type of compressed audio files with the application.

Click on the File button to open a dialog. From the dialog, locate an audio file on your computer and then load it in to the application.

Once the audio file is loaded it will be displayed in the waveform display directly below the file and folder buttons. From the File Playback Mode menu, click Play to play and hear the audio file, then click stop.

### File Playback Mode



*The file playback mode display is located to the right of the waveform display at the top of the application. There are various other ways of playing an audio file that are explained in more detail in the manual.*

### Filename Menu and Waveform



*When an audio file is loaded, its waveform is visible in the waveform display, and its name is shown in the Filename menu. When a folder of files has been loaded you can use the menu to select them.*

# Preview / Recording

## Step 6 : The Preview Toggle

The preview toggle is like a mute switch for the audio input. When the preview toggle is on, you will be able to hear the sound specified for the input. When it is off, the audio will be sent to the location specified in the send to menu (Step 7). While the audio file is playing, click on the preview toggle to turn it off and on to hear how it sounds.

The preview toggle can be used to allow audio to be sent directly to the delays without hearing it first. This is a useful option to have in Live situations.

## Step 7 : The Send To Menu

The Send To menu allows you to send the input audio to different areas of the application. By default this is set to send the audio to the delay banks.

In order to record audio in to the delay banks there are two controls which need to be activated...

## Step 8 : Playing and Recording

Now play the audio file from the playback mode menu. You will see and hear audio playing on the Sample Input Channel. With the Sample Send to Menu set to Delays you can now record in to the delay banks.

To record in to the delay banks click on the Record Enable button directly below the send to menu in the left column of the application, then finally click on one of the delay bank's recording toggles. Both the Record Enable and Delay Bank Record toggles will turn red when recording.

After the length of the delay time has elapsed, you will hear audio from the delay bank, which will be visible within the delay bank's gain controller (located on the far right of the delay bank). You can keep recording to quickly layer the input audio within the chosen delay bank.

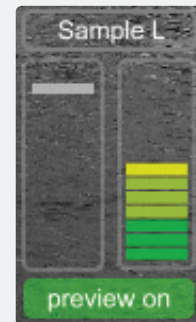
## Step 9 : Clearing Delay Banks

It is likely that you will want to experiment with recording and clearing audio from the delay banks. To clear audio from a delay bank, click the clear bank button below the delay bank's record toggle. This will remove all audio from the delay bank. You can now revert to Step 8 to record more audio in to the delay banks.

Some useful shortcuts for this process are...

[**1,2,3,4,5**] = Toggle recording for individual delay banks  
[**Command / Control + 1 2 3 4 5**] = Clear individual delay banks  
[**Command / Control + R**] = Toggle record for all delay banks.  
[**Command / Control + Delete**] = Clear all delay banks.  
[**Space**] = Toggle record enable.

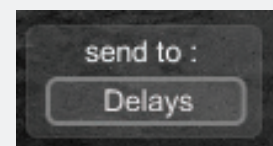
### Sample Input Channel



The sample input is located in the left column of the application.

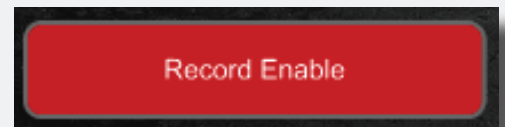
By default the left channel of the audio file is selected, and the preview toggle is on.

### Sample Send To Menu

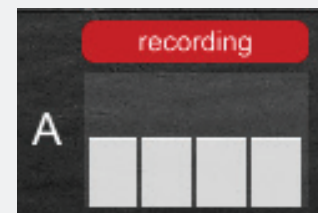


Make sure the send to menu is set to Delays before proceeding to Step 8.

### Record Enable Toggle



### Delay Bank Record Toggle



When recording, both the Record Enable, and Delay Bank record toggles should turn red.

### Delay Bank Clear Button



By clicking the delay bank's clear button, all audio will be cleared from that delay bank.

# External Input and Typical Sounds

## Using the External Input

You can also use the external input in the same way as the audio sample has been used in steps 6 to 9. Both preview toggles, and *send to* menus work in the same way. It is also possible use both external inputs on separate channels, or the sample and external input together. This allows the application to use two input sources at the same time, which could be interesting in a live performance scenario.

## How to get the best from the Application

There is no specific way to use the application, however it is useful to consider the types of sounds the application can create and how they can be used in conjunction with each other. In general there are three types of sounds...

**Textural Sounds / Drones** : These sounds are created with short random delay times from around 100-400 milliseconds. They are best created with sounds that do not have transients (such as drum hits) within them. Typically the record enable toggle can be used as a gate if you are using harmonic sounds that start abruptly. This will allow you to manually remove the amplitude attack phase of the sound by waiting until it is over, before enabling the record enable toggle. Imagine you are playing a note on a guitar or piano, but only start recording in to the delay bank after you have played the start of the note. With this method you can quickly build dense drones with the application.

**Loops** : This type of sound is best created by longer delay times based on measures (1/2 bar - 4 bars) that are relative to the global BPM. These can be predefined manually, or can be created using the Random Settings function accessible from the Settings application menu. It is also possible to use longer delay times (greater than 500 milliseconds) to generate delays that retain more of a rhythmical feel, but still overlap randomly.

**Pitched Delay Sounds** : If you feel like taking a trip to outer space, experiment with the Random Settings window and use the interpolation setting to set the amount of time it takes for the delay to reach it's new delay time destination. This produces a classic pitched delay effect, where shorter delay times increase the pitch, and longer ones decrease it. It is also possible to control each bank's delay times with a MIDI controller accessible from the MIDI window's *Delay Time and Random Trigger* window.

The application is not intended to replace typical hardware based loopers. It functions best as a sound generation tool that can be used in conjunction with a live performer, or as a studio tool allowing you to create dense drones and loops to be used as elements in a composition. Typically the developer uses it to create drones which are then recorded and used to complement other sounds within a DAW environment.

This document is a quick guide for you to start making sounds. To learn more about the application, please read the manual where all parameters are explained in detail.