

Blackbox 1.3 Release Notes

Multi-Sampling Overview

Multi-sampling is a useful tool for improving the sound quality when playing samples pitch shifted, and when you want to map a number of different WAV files to different keys on the keyboard.

If you have a number of samples of a single instrument at various pitches with root notes defined for each WAV file, you can map these samples together to reduce the amount of pitch shifting required to play a broad range of notes. There are several folders of samples like this in the \Symplesound folder included with the 1.3 firmware update. To load one of these sample banks into a pad, select a blank pad and push **INFO** to display the Recording and Loading screen. Touch **Load** in the top right corner, and navigate to a file within the folder you want to load, then touch **File** and **Load All**. Blackbox will now load all of these files into this pad and map the files to notes across the keyboard based on the root notes defined in the WAV files. Now, use the KEYS screen or an external MIDI controller to play notes for that pad, and blackbox will play the various samples as appropriate.

You can also use multi-sampling to map multiple waves across the keyboard. This can be useful if you have a folder full of drum sounds that you want to trigger with a keyboard. If you follow the steps above and load a folder where the files do not have root note mappings, it will load the files in alphabetical order, map the first file to note C2, and then each subsequent file to the next note above that. If you load the folder \SoundtrackLoops\SL Acoustic kit, you can see this in action. This folder has 16 drum samples which get mapped to notes C2 through D#3.

You can use blackbox to map the files to specific notes if you want. Open the files as individual samples on blackbox and edit the **Root Note** on the **Misc** tab of the Parameters screen. Save the WAV file with the root note information. After you have done this for all of the files in the folder, use **File-> Load All** to load them all into a pad and you will hear that the notes are mapped accordingly.

Because a multi-sample pad uses multiple samples, it is not possible to set start, length, loop start or loop end points for these pads. Therefore, it doesn't make sense to enable looping for these pads either. As a result, the POS and MISC tabs of the parameter page are not used when multiple samples are loaded in a pad.

Note:

- Multi-sampling can quickly use a lot of samples. In order to prevent potential issues, blackbox limits you to loading 80 wav files at a time. If you hit that limit, it won't load any more wav files until you free up some slots by clearing out a pad. 64 per pad.
- If you change the pad mode of a multi-sample pad to something other than sample, it will load only the first sample in the folder and work with that. You will need to reload the files to change back to multi-sample mode.

MIDI CC Overview

If you are using a MIDI controller with your blackbox, you can use a broad range of MIDI controls to modulate some of the pad parameters, such as Filter and Pitch, and some of the FX parameters, such as Reverb Decay and Delay Feedback.

To configure a parameter to use a MIDI Controller for modulation:

1. Connect a MIDI controller to blackbox.
2. Navigate to the parameter page for the pad or FX parameter you want to modulate.
3. Touch one of the three black boxes below the parameter you want to modulate. This brings up the Modulation Source screen.
4. Touch Learn in the top right corner to enable MIDI CC learning mode.
5. Move the MIDI control, such as a knob or slider, that you want to use with this parameter. When blackbox has learned the mapping, the Learn button will turn from blue to grey, and the Source will change to MIDI CC.
6. Turn the top right knob to adjust the Amount of modulation you want to allow with this controller.
7. Now play the pad and use the controller and you will hear the modulation.

To remove MIDI CC modulation from a parameter:

1. Go to the parameter screen for that parameter.
2. Touch the box below the parameter that says "CC".
3. On the modulation parameters screen, turn the top left knob to set the Source to none.

Note:

- Different parameters work differently with MIDI inputs. For example, for the Filter parameter, the values are bi-polar with 0 at the middle of the range for the control. But with the Start parameter, the values only move in one direction.
- You can map the same MIDI control to more than one parameter on more than one pad.
- MIDI CC controls use the on-screen parameter value as a starting point. It then maps the range of the controller to values from the starting point to the value of Starting Point +/- the Modulation Amount parameter. For example, if the Filter parameter is set to 20%, and you set the Modulation Amount to 15%, then the lowest value of the control will map to 5% (20% - 15%), and the highest value of the control will map to 35% (20% + 15%).