

# Bitbox 1.2 User's Manual



Welcome to bitbox. Bitbox is a very useful tool for capturing and playing back samples. This manual will walk you through all of the features of bitbox. If you want to start playing right away, please consult the **Quick Start Guide** found in the box. The Quick Start Guide and this manual are also available on the [1010music.com Support page](https://1010music.com/support)

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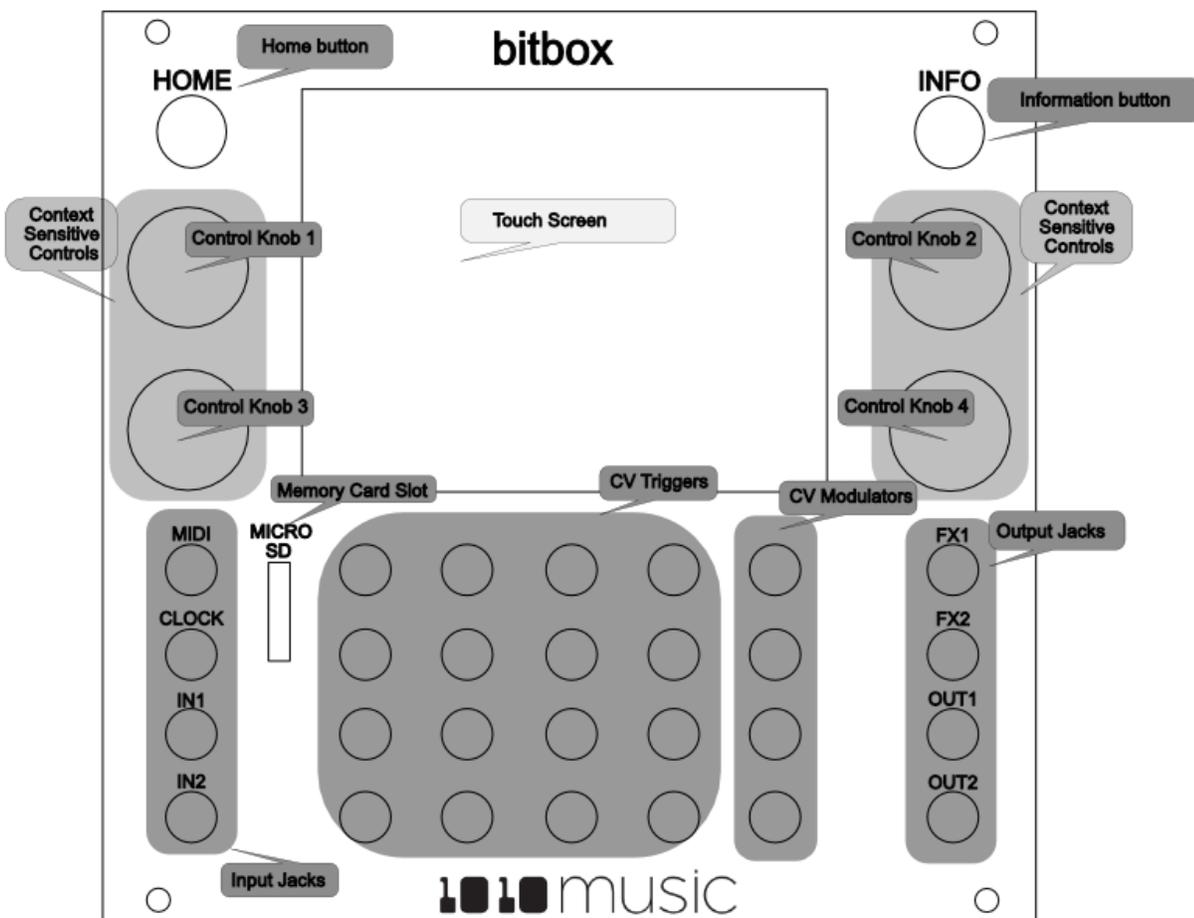
## Overview

Bitbox is a 26HP Eurorack module. This manual documents the functionality available in version 1.2 of bitbox. If you have an earlier version of the bitbox firmware, you can upgrade for free. See [Error! Reference source not found.](#) for the steps to upgrade. To determine which version of the firmware you are running, press the **Home** button until you see the **Menu** screen shown on the right. The number in the lower right corner is the current version. The screen shot shows version 1.2.3.



Figure 1: Menu Screen

The diagram below identifies the components of bitbox. This manual will refer to the controls and inputs of the module using the labels shown.



Bitbox is equipped with a touchscreen. You can touch cells in the grid on the screen to select them, and touch on-screen buttons to take an action.

The **INFO** and **HOME** buttons at the top of the front panel of bitbox are used to navigate the screens. Press **INFO** to view the information screen for the current selection. In some cases, you can press **INFO** more than

once to get to deeper information. The **HOME** button generally takes you back a screen. If you get lost, you can press **HOME** until you get back to the **Main** screen.

The **Control Knobs** are used to cycle through options on the screen. When there are several parameters on the screen, use the **Control Knob** closest to a parameter to set its value.

A counter in the top left corner of the screen tracks the number of measures and beats (e.g. **60 : 3**) that have played since the clock started. Reset the measure counter by powering down the module or stopping the clock input for a few seconds.

## The MicroSD Card

Bitbox uses a microSD card to store clips and clip parameter information. A microSD card must be inserted into the microSD slot on the front panel of the bitbox during operation of the module. A microSD card loaded with sample clips is included with bitbox. Insert the microSD card with the notched edge down.

## Getting Started with Clips

When you first start bitbox, you will see the **Main** screen. Each square or cell represents a clip that can be played back. Clips can be loaded from the microSD card or recorded from inputs. The microSD card provided with the module has several preset banks of clips to get you started.

The pink square indicates which cell is selected. You can change the selection two ways: by touching the cell or by turning any of the **Control Knobs**.

60 : 3				
2 Mass	2 Sand	2 Sine	2 Mk13	
4 Mass	4 Sand	4 Sine	4 Mk13	
5 Mass	5 Sand	5 Sine	5 Mk13	
1 Mass	1 Sand	1 Sine	1 Mk13	

Figure 2: Main Screen

### Momentarily Play a Clip

You can manually start a clip playing by touching a cell to play the corresponding clip. The light grey colored cells in the grid hold clips. The name of the clip appears in the cell after it is loaded. Blank cells are empty.

You can also manually play a clip from the **Clip Info** screen. Touch a cell to select a clip, and then press the **INFO** button to display the **Clip Info** screen. Touch the onscreen **Play** button to start playback of the clip.

### Trigger a Clip via Control Voltage Signal

You can use an external signal to trigger the playback of a clip. Plug a trigger source into one of the **CV Trigger** jacks. The **CV Trigger** jacks are mapped to the clip cells on the touchscreen. The clip that corresponds to the used **CV Trigger** jack will now be triggered by the **CV Trigger** input.

### Trigger a Clip via MIDI input

You can use a MIDI input to trigger playback of a clip. Plug a MIDI controller source into the **MIDI** input jack then use the connected MIDI device to trigger notes.

#### Note:

- The **MIDI** input uses a Tip Ring Sleeve (TRS) connection compatible with the Arturia BeatStep Pro. Be sure to use a TRS cable.

- Bitbox responds to **MIDI** inputs on MIDI Channel 10, which is the default channel for the drum part on the BeatStep Pro.
- **MIDI** inputs for notes 36 to 51 are mapped to the clips in the grid as shown in the diagram on the right. The modulators are assigned notes 52 to 55.

48	49	50	51	55
44	45	46	47	54
40	41	42	43	53
36	37	38	39	52

Figure 3: MIDI Clip Mapping

## Set Clip Parameters

To see a selected clip’s parameters, press the **INFO** button. Cells with text in them already have a clip loaded. When you press **INFO** with a loaded cell selected, you will see the **Clip Info** screen shown to the right. Press the **INFO** button again to see four more parameters. Continue to press the **INFO** button to toggle between the parameters on page 1 and page 2 of the **Clip Info** screen.

On the **Clip Info** screen you can see the waveform for the clip, adjust the clip parameters, manage samples and slice clips. The graph in the middle of the screen is a visual representation of the waveform for the selected clip. The waveform will scroll across the screen as the clip plays, with the current play position represented by the pink vertical bar on the screen.

Set the values for the following parameters by turning the **Control Knob** closest to the parameter on the screen:

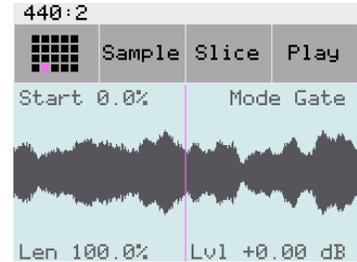


Figure 4: Clip Info Page 1

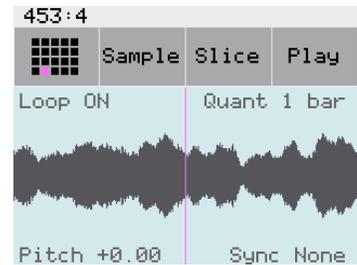


Figure 5: Clip Info Page 2

**Start** Together with **Len**, controls what portion of the sample will play. **Start** is expressed as a percentage of the entire sample length and designates the position in the clip where playback will begin. **Start** is only used when Quantization is not active, i.e. when the **Quant** parameter is set to “none”.

**Len** Together with **Start**, controls what portion of the sample will play. **Len** is expressed in percentage of the entire sample length and designates what percentage of the clip after the **Start** position will be played. The **Len** parameter also controls the loop length. See the **Loop** parameter below. **Len** is only used when Quantization is not active, i.e. when the **Quant** parameter is set to “none”.

**Mode** This parameter determines how the sample will playback with four different settings:

**Trigger** Activate the clip by touching the cell, through a **CV Trigger**, or through **MIDI** note on. Bitbox will start playback of the clip according to the **Quant**

setting (see **Error! Reference source not found.**) and play through to completion. The release has no effect.

**Gate** Begin the clip playback in the same manner as **Trigger** mode. But in **Gate** mode, playback will stop when you release the touch, the **CV Trigger** gate goes low, or the **MIDI** note is released.

**Toggle** Begin the clip playback in the same manner as **Trigger** mode. When another trigger event happens, the playback will stop.

**Repeat** Begin the cell playback in the same manner as **Trigger** mode. The playback will restart at the **Quant** interval while the cell is held down or activated. Releasing or deactivating the cell allows playback to continue to completion of the clip.

**Lvl** This parameter sets the level or gain for the cell and ranges from -96dB to +12dB. At the default value of 0dB the volume remains unchanged.

**Loop** With **Loop** set to **ON**, playback will continue to repeat the portion of the sample specified by the **Start** and **Len** parameters.

**Pitch** This parameter adjusts the tone and the playback speed of the clip or slice. It is expressed in semitones and ranges from -24 semitones (down two octaves) to +24 semitones (up two octaves).

**Quant** This parameter enables you to quantize when the playback starts and stops. It has the following values available:

- None - always start and stop immediately
- 1/16 - quantize to the next sixteenth note time
- 1/8 - eighth note
- 1/4 - quarter note
- 1/2 - half note
- 1 bar - a whole note assuming 4/4 time
- 2 bars
- 4 bars
- 8 bars

Example: With the **Quant** time set to 1 bar, samples will start when the next bar or measure begins after the clip is played. The full clip is played from the beginning. You can see the current bar and beat in the upper left of most screens (e.g. **440 : 2** in Figure 4: Clip Info Page 1).

**Sync** Sync is only enabled when quantizing is enabled (the **Quant** parameter is not **None**.) The Sync feature prevents timing drift that can occur when the length of a clip does not align

exactly with the tempo of playback. Even slight differences between clip length and tempo can cause significant drift over time. Select a value that will control the size of the musical unit to which the clip will be synchronized. Choose small settings for rhythmic or percussion clips. Choose large settings for sustained tones or drones. It has the following values available:

- None – do not synchronize
- 1/16 - quantize to the next sixteenth note time
- 1/8 - eighth note
- 1/4 - quarter note
- 1/2 - half note
- 1 bar - a whole note assuming 4/4 time
- Slice – Quantize to clip slices. See Slice Clips below for more information

**Slice** Slice is only enabled when the clip is set to Atomic Mode. In Atomic Mode, this parameter specifies which slice of the clip will be played. Choose a number from 1 to the number of slices defined in the clip. See Playback in Atomic Mode below for more information.

## Managing Clips and Presets

When you first turn on bitbox, it loads the set of clips that have been assigned to Preset 1 by default. There are 4 additional presets preloaded on the microSD card. These presets only contain a fraction of the clips that are available on the microSD card. You can use the microSD card to load your own clips into bitbox, as well as record new ones. Bitbox also enables you to customize and create your own presets.

### Work with Presets and Save Your Work

Bitbox stores multiple configurations of clips and parameter settings as presets.

You can save up to 12 different banks of presets. When you first start using bitbox, you are using **Preset 1**. The microSD card that comes with bitbox has 5 presets pre-populated. Presets 1 through 4 contain percussion samples, and Preset 5 contains a set of continuous loops. Presets 6 through 12 are empty.

To switch to a different preset, press the **HOME** button repeatedly until you get to the **Menu** screen shown on the right. Touch the **Presets** button. This will lead to the **Presets** screen shown to the right.

Press the number of the preset you would like to load. You will then be taken to the **Main** screen. This will load the following information that was previously saved for this preset:

- For each clip cell** the sample assignment and all parameters
- For each modulation cell** the parameters and destination cell
- For each track** all track parameters

Presets are automatically saved on the microSD card as you work. If you change to

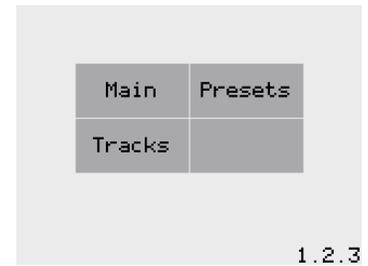


Figure 6: Menu Screen

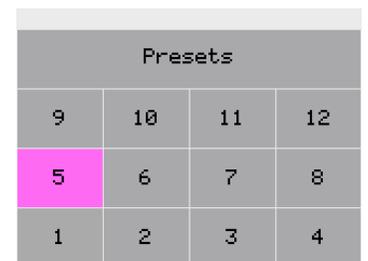


Figure 7: Presets Screen

a different card, you will have a different set of presets. When you switch to a different preset, all previous settings will be replaced with the settings of the newly selected preset, which may be blank.

### NOTE

- Presets are saved automatically in the background. You don't need to worry about saving your changes whenever you adjust something.
- It can take up to 10 seconds for the most current state to be written to the microSD card.

## Load or Delete a Clip

You can load new clips from the microSD card into cells in a preset. You can load a clip into an empty cell or load a clip into an occupied cell to replace it. From the **Clip Info** screen, press the **Sample** button in the top menu to manage the sample that is loaded into this clip cell. The **Sample** submenu is now displayed and the clip parameters are no longer visible. Use the **Sample** submenu buttons as follows:

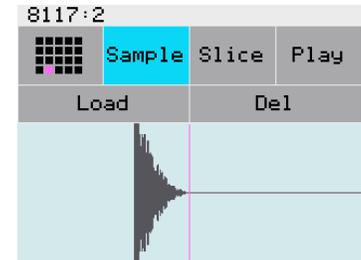


Figure 8: Sample Submenu

- |             |   |
|-------------|---|
| <b>Load</b> | Displays a list of samples available on the microSD card. See Load Clip Files from a MicroSD Card below for the full process.   |
| <b>Del</b>  | Delete this sample from this cell. The file on the microSD card remains. This particular cell will now be empty. Pressing this button will return you to the <b>Main</b> screen. If you mistakenly delete a sample you can reload it from the microSD card. |

Press the **Sample** button again to hide the **Sample** submenu.

## Load Clip Files from a MicroSD Card

You can use the microSD card to load clips into bitbox. You can load clips that came preloaded on the microSD card, or you can add your own clips from other sources.

1. Use your laptop or other device to load clips in WAV format into the root folder of a microSD card.
2. Insert the microSD card into the **MICRO SD** slot, notched edge down.
3. Press **HOME** until you get to the **Main** screen.

4. **To load a sample into an empty clip cell**, touch an empty, light colored cell in the grid on the touchscreen to select it. Press the **INFO** button to display the **Clip Info** screen and then touch the on-screen **Load** button.

**To load a sample into a cell that currently has a sample**, touch the target cell to select it, and then press the **INFO** button to display the **Clip Info** screen. Touch the **Sample** button, and then touch the **Load** button.

A list of clips and file folders on the microSD card will be displayed, as shown in the **Sample File List** screen on the right.

5. Use any of the **Control Knobs** to select a WAV file or a folder from the list that appears on the touchscreen. (To cancel, press the **HOME** button.)



Figure 9: Sample File List

6. Touch **Load** again. If you loaded a file, you will see the **Main** screen with the selected clip loaded into the selected cell. If you loaded a folder, you will see the list of files in the folder. Use the backwards arrow **<-** to go back to the previous folder or select a file and touch **Load** to load the clip.

## Record a Clip

You can use the **IN1** and **IN2** input jacks to record new clips in mono or stereo.

1. Press **HOME** until you get to the **Main** screen.
2. Touch an empty, light colored cell in the grid on the touchscreen to select it. You can delete a clip (see Load or Delete a Clip above) to create an empty cell if needed.
3. Press the **INFO** button to display the **Record** screen shown to the right.
4. Plug the recording source into the **IN1** or **IN2** jack.
5. The source will play through the corresponding output jack, **OUT1** or **OUT2**, if the Monitor setting is **ON**.
6. Turn the **Control Knob** closest to each of the following parameters to select a value:

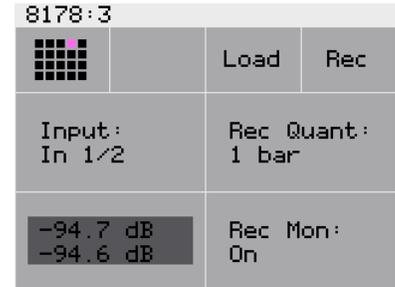


Figure 10: Record Screen

**Input** This parameter lets you select stereo or mono recording. The available values are:

- **In 1/2** Record in Stereo from input jacks **IN1** and **IN2**.
- **In 1** Record mono from input jack **IN1**.
- **In 2** Record mono from input jack **IN2**.

**Rec Quant** This parameter lets you quantize the recording starting and stopping for making loops.

The available values are:

- **None** - always start and stop immediately
- **1/16** - quantize to the next sixteenth note time
- **1/8** - eighth note
- **1/4** - quarter note
- **1/2** - half note
- **1 bar** - a whole note assuming 4/4 time
- **2 bars**
- **4 bars**
- **8 bars**

**Rec Mon** The monitoring parameter controls whether the input signals in **IN1** and **IN2** are played out through **Out1** and **Out2**. The available options are:

- **Off** Inputs are never played through the outputs.
- **Auto** Inputs play through the outputs while recording or the recording screen is visible.
- **On** Inputs always play through the outputs.

The lower left corner displays the levels of each of the input signals. For best results leave some room (a few dB) between your loudest level and the max allowed, which is 0dB. If a red bar appears to the right of the level, the signal is clipping and the level should be lowered for best quality.

7. Touch the onscreen **Rec** button. Bitbox will start recording. The timing of the recording can be synchronized with other modules by using the **Rec Quant** parameter setting with a **MIDI** or **CLOCK** input. (See Synchronize Clips with CLOCKS or MIDI Inputs below.) The **Recording** screen displays a running clock of measures and beats and time duration of the recording. There may be a delay between you touch **Rec** and when the recording starts due to quantization.
8. Touch the on-screen **Stop** button. The recording will end. There may be a delay between when you touch **Stop** and when the recording ends due to quantization. When the recording has stopped, the main screen is displayed with the new clip listed in the selected cell. The clip name will be **RC** with a numeric suffix.

## Synchronizing Playback with Slicing, CV Modulators and Clocks

Bitbox provides several different ways to synchronize playback of clips with internal and external signals. Slicing allows you to identify the start of slices within a clip so that playback can be synchronized to those slices. CV Modulators allow playback of a row of clips or individual clips to be synchronized or modulated by a control voltage input. Clocks allow playback to be synchronized with signals from external modules.

### Slice Clips

Slicing clips is useful when you want to divide a clip into parts or slices that can be played independently. Slicing is especially useful with Atomic mode.

Slices can be defined automatically or manually or via a combination of both.

From the **Clip Info** screen, touch **Slice**. The **Clip Info** screen displays the Slice submenu as shown on the right. In this mode, the Slice submenu is displayed and the sound wave shows the position of the slices. By default there are no slices.

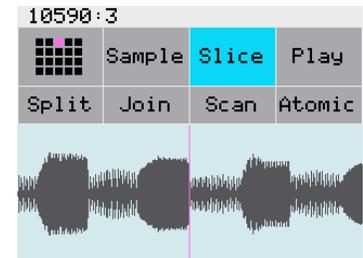


Figure 11: Slice Submenu - No Slices

**Automatically Slice:** Touch **Scan**. Bitbox will search the audio file and identify places where it recommends there should be breaks based on the waveform. The slices appear as blue lines with handles at the bottom as shown in Figure 12 below.

**Join Slices:**

To join two slices together slide the waveform so the pink line is between the two slices to be merged, and then touch **Join**. The blue slice bar to the right of the pink line will be removed, thus joining the two slices on either side of the pink line. The following screen shots show the same clip before and after a join.

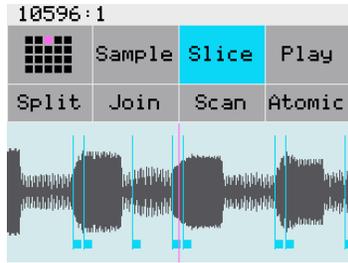


Figure 12: Slice Submenu - With Slices

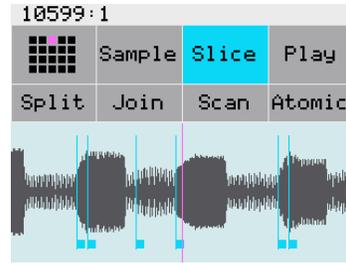


Figure 13: Slice Submenu - After Join

**Manually Add Slices:** To manually add a slice, slide the waveform so the pink line is at the point where the slice will start, and then touch **Split**. A new blue slice bar will appear at the point selected.

**Playback in Atomic Mode**

Atomic mode allows you to play back the individual slices of the clip. To set the clip to play in atomic mode, touch **Slice** and then **Atomic** from the **Clip Info** screen. The **Atomic** menu option is highlighted blue when enabled. Disable atomic mode by touching **Atomic** again.

To configure which slice will be played, press the **Info** button twice to go back to page 1 of the **Clip Info** screen. A **Slice** parameter now replaces the **Start** parameter. Select a number to indicate which slice should be played when the clip playback is initiated.

You can do even more with slices in atomic mode with CV Modulators.

**Use CV Modulators**

Control Voltage (CV) modulators enable use of an external input to trigger a row of clips simultaneously, or to adjust playback parameters of a single destination cell. The dark gray cells on the rightmost column of the **Main** screen are **CV Modulator** cells. These **CV Modulator** cells work with the paired **CV Modulator** input jacks below the screen. To configure modulation, select a dark gray cell and press **INFO** to display the **Mod Cell** screen shown below. The modulator parameters vary based on the value selected for **Mod**.

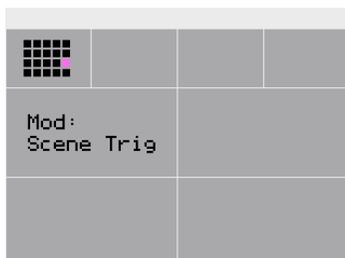


Figure 15: Mod Cell - Scene Trig

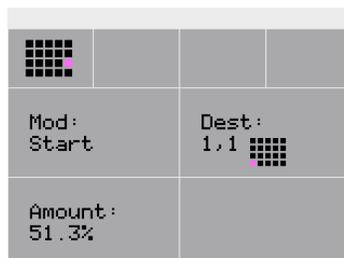


Figure 16: Mod Cell - Start

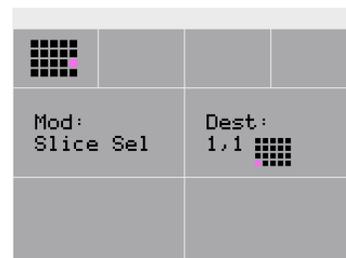


Figure 14: Mod Cell - Slice Sel

Use the **Control Knobs** to adjust the parameters on the **Mod Cell** screen:

- Mod** Selects the type of modulation to be applied. The values include:
- Scene Trig** Triggering this modulation with the **CV Modulator** input will trigger the entire row of cells at once. This is similar to the Scene Triggers in Ableton Live.
  - Pitch** The **CV Modulator** input will modulate the pitch of the destination cell specified in the **Dest** parameter. The voltage range of -5 to +5 volts is continuously mapped to playback speed adjustments from stopped at -5 volts, original playback speed at 0 volts, to double the playback speed at +5 volts. This emulates the effect of modifying the speed on a turntable.
  - Start** The **CV Modulator** input will control the initial play position in the sample for the destination cell.
  - Length** The **CV Modulator** input will control the playback length for the destination cell.
  - Ptch 1V/Oct** The **CV Modulator** input will modulate the pitch of the destination cell, such that one volt change of Control Voltage will correspond to one octave of pitch. For example, a +1 volt signal will transpose the pitch up one octave, and a -2 volt signal will transpose the pitch down two octaves.
  - Slice Sel** The **CV Modulator** input will select which slice of the clip in the destination cell will play. The voltage range from 0 to +5 volts is mapped to slices in such a way that one semitone of voltage corresponds to one slice. For example, 0 volts maps to slice 1, and 1 volt maps to slice 13. Negative voltage values will be ignored. This setting takes effect immediately and will change currently playing notes. This setting only applies to **Atomic Mode**.
  - Slice Next** The **CV Modulator** input behaves similarly to Slice Sel modulation, but with the exception that you will only switch to a different slice at the beginning of the next note. This setting only applies to **Atomic Mode**.
  - Slice Inc** The **CV Modulator** will advance playback incrementally through the list of slices for the clip. Whenever the CV signal goes high, the next slice is selected. When it reaches the last slice, it will loop back around to the first slice. This setting takes effect at the beginning of the next note. This setting only applies to **Atomic Mode**.

**Slice Dec** The **CV Modulator** will advance playback through the list of slices for the clip in reverse order. Whenever the CV signal goes high, the previous slice is selected. When it reaches the first slice, it will loop back around to the last slice. This setting takes effect at the beginning of the next note. This setting only applies to **Atomic Mode**.

**Dest** This parameter specifies the destination cell that is the target of the modulation for all modulation types except **Scene Trig**. It is expressed in Row, Column format as shown to the right. Note that 1,1 is in the lower left corner, and 4,4 is in the upper right.

4,1	4,2	4,3	4,4	
3,1	3,2	3,3	3,4	
2,1	2,2	2,3	2,4	
1,1	1,2	1,3	1,4	

Figure 17: Cell Numbering

**Amount** This parameter controls the amount of impact the **CV Modulator** input will have on playback. This parameter only applies to **Pitch, Start** and **Length** modulation.

### Synchronize Clips with CLOCKS or MIDI Inputs

To synchronize the playback of clips with a clock signal, a MIDI clock source or the internal clock, follow these steps:

1. Use the **Clip Info** screen to set the **Trigger** and other parameters for the cell. Bitbox synchronizes clips when **Quant** is set to something other than **None**, such as **Quant: 1 bar**.
2. Plug a clock source into the **CLOCK** jack or a MIDI clock source into the **MIDI** jack. You should hear all clips play synchronized with the **CLOCK** input or **MIDI** signal, according to the parameters set up for each clip.

Note:

- The Clock input must use 4 pulses per quarter (PPQs), or a pulse per 16<sup>th</sup> note.
- If **MIDI** and **CLOCK** inputs are used together, Bitbox will select the highest priority clock based on the following order of priority: 1.) **CLOCK** Input; 2.) **MIDI** Input; 3.) Internal Clock.

### Working with Tracks

Tracks are used to control the level, output, and exclusive playback of vertical columns of clips.

To access the **Track Properties** screen, press the **HOME** button repeatedly to return to the **Menu** screen and press **Tracks**. You will see the **Track Selection** screen shown to the right.

Select the active **Track** by touching the column on the screen. The pink column indicates the selected **Track**. A **Track** is a vertical column of clip cells on the

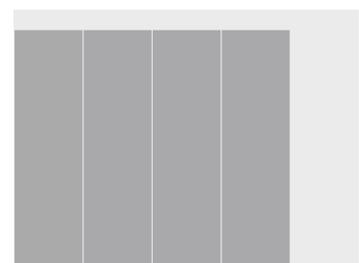


Figure 18: Track Selection

Exclusive: ON		Level: +0.00 dB	
		Output: Out 1/2	

Figure 19: Track Info

**Main** screen. The cells in each **Track** share certain parameters. To adjust these parameters, press the **INFO** button to see the **Track Info** screen for the selected track as shown on the right.

Turn the **Control Knob** next to each of the following **Track** parameters to select a setting:

- Exclusive** This mode ensures that only one cell in a **Track** can play back at the same time. If this is set to **ON**, when you start a second cell on a track, the first one will stop. When this mode is **ON**, tracks behave like they do in Ableton Live.
- Level** This gain control affects all of the clips in this **Track**.
- Output** This parameter determines which output the clips in this **Track** will play through. The available options are:
- |                |   |
|----------------|---|
| <b>Out 1/2</b> | Plays clips in stereo to output jacks <b>OUT1</b> and <b>OUT2</b> |
| <b>FX 1</b>    | Plays in mono to output jack <b>FX1</b>                           |
| <b>FX 2</b>    | Plays in mono to output jack <b>FX2</b>                           |

Note:

- The **FX** outputs are a convenient way to use other Eurorack modules to apply different effects to different **Tracks**.

## Export a Set to Ableton Live

Bitbox creates files compatible with Ableton Live. Follow these steps to export them:

1. Press **HOME** until you see the **Menu** screen containing three buttons: **Main**, **Presets** and **Tracks**.
2. Touch the on-screen **Preset** button. You will see a 4x3 grid of numbers 1 through 12 representing the presets.
3. Touch one of the on-screen **Preset** number buttons to load the **Preset**. You will now see the **Main** screen with the selected preset loaded. This will ensure that your files are saved to the microSD card.
4. Remove the microSD card and connect it to your computer.
5. Double click or open the **SE000001.als** and similar files to open your set in Ableton Live.
6. For best results, use the **Save As** option as well as the **Collect and Save** menu item to migrate the relevant WAV files onto your machine and into the customary Ableton directory structure.

## Switch to a New MicroSD Card While Operating Bitbox

You can switch to a different microSD card while operating bitbox. Simply remove the current card and insert the new one, then follow the steps in Work with Presets and Save Your Work above to select a Preset from the new card.

## Updating and Swapping Firmware, Audio Files and Presets

Bitbox and fxbox owners can update the module's firmware to get the latest features and other updates. This process can also be used to run bitbox firmware on fxbox hardware and vice versa. The firmware can be updated with the factory image, which includes the original presets, or just the firmware itself. You can also choose individual presets to copy over to your microSD Card.

### Install New Firmware

Here are the steps required:

1. Download the desired firmware onto your computer. You can choose to download either fxbox or bitbox firmware, but only one set of firmware can run at a time. You can find the latest firmware images on [1010music.com](http://1010music.com) under **Support**.
2. Unpack the zip file. Some browsers do this automatically for you.
3. If you want to replace the Presets with the factory image, copy the full contents of the zip file onto a microSD card. If you do not want to overwrite your presets, copy only the **MATRIX.BIN** file to the microSD card.
4. Place the microSD card in the **MICRO SD** slot of your bitbox or fxbox.
5. While powering up the unit, hold the **Home** and **Info** buttons. When you see the message about upgrading the firmware, you can let go.
6. When the upgrade finishes in about 15 seconds, the unit will restart with the new software.

### Reset Bitbox Presets to Factory Settings

If you want to reset one or more of the bitbox presets to the original factory settings, you can copy individual preset files onto your microSD card.

1. Download the bitbox firmware onto your computer. You can find the latest firmware images on [1010music.com](http://1010music.com) under **Support**.
2. Unpack the zip file. Some browsers do this automatically for you.
3. Find the SE\*\*\*\*\*.xml file in the unpacked folder that has the same number as the number of the preset you want to restore, for example SE000003.xml is Preset 3. Copy the .xml file onto the microSD card to replace the file on the card.
4. Insert the microSD card into the **MICRO SD** slot of your module.
5. Push the **HOME** button to return to the **Menu** screen if needed.
6. Touch the **Presets** menu option to display the **Presets** selection screen.
7. Select any preset to load the updated presets.

## Technical Specifications

- 26 HP
- +12V: 350mA
- -12V: 0mA
- 5V: 0mA

## Demonstration Videos and Latest Docs

You can find video demonstrations of bitbox on our website at <http://1010music.com/support-2>. You can also look there for updated versions of this user manual.

## Contact Us

Are you loving bitbox? Have questions? You can contact us through our website at <http://1010music.com/contact-us>.