

# Bluebox

## V1.0.5

### User Manual



1010music

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<b>Welcome</b>	<b>5</b>
<b>Setup</b>	<b>6</b>
MicroSD Card for Storage	6
Power	6
Standard Power Outlet:	6
USB Power Outlet:	6
Input Connections	7
Sleep Mode	7
Put Bluebox in Sleep Mode:	7
Wake Bluebox Up from Sleep Mode:	7
Output Connections	8
Meter Bridge Layout	8
Set the Meter Bridge Layout:	8
Mapping of Inputs to Tracks	9
Map Inputs To Tracks:	9
Track Labels	9
Rename a Track:	9
Gain	10
Adjust the Gain to Balance your Inputs:	10
<b>Controls Overview</b>	<b>11</b>
<b>Control Modes</b>	<b>12</b>
MIXER Mode vs TRACK Mode	13
When to Use MIXER Mode	13
When to Use TRACK Mode	13
<b>Display Overview</b>	<b>14</b>

---

<b>PROJ Mode</b>	<b>15</b>
Save Changes to the Current Project:	16
Load a Different Project:	16
Create a New Project:	17
Rename a Project:	17
Select a Tempo and Set up the Metronome:	18
<b>MIXER Mode</b>	<b>19</b>
Control One Setting for Multiple Tracks:	21
Arm the Main Output for Recording or Mute the Main Output:	22
<b>TRACK Mode</b>	<b>23</b>
Change Settings for a Single Track:	24
<b>MAIN Mode</b>	<b>25</b>
Adjust Output Levels:	25
Mute an Output:	25
Configure Signal Routing and Compression Settings:	26
<b>EQ Mode</b>	<b>29</b>
Adjust the EQ for a Track or the Main Mix:	30
<b>FX Mode</b>	<b>32</b>
FX View Modes	32
Adjust Reverb and Delay Effects Settings:	33
<b>EDIT Mode</b>	<b>36</b>
Make a WAV File Stop Playing:	37
Play a WAV file for a Track:	37
Add a File to a Project:	38
Remove a WAV file from a Project:	39
Rename a WAV File:	39
Delete a WAV file from a Project:	40
Playback a Recording of the Main Output:	40

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<b>TOOLS Mode</b>	<b>41</b>
Adjust the Screen Brightness:	41
See How Much Space is Available on the microSD Card:	41
See What Firmware Version You Are Using:	41
<b>Record and Play WAV Files</b>	<b>42</b>
Record One or More Tracks:	42
Record the Main Mix:	43
Play a WAV file for a Track:	43
<b>MicroSD File Management</b>	<b>44</b>
Copy a Project or Make a Backup on Your Computer:	44
<b>MIDI Controller Mapping</b>	<b>45</b>
Control Bluebox Settings with a MIDI Controller:	45
<b>MIDI Clock Synchronization</b>	<b>46</b>
Setup Bluebox to Follow a MIDI Clock:	46
Setup Bluebox to Send a MIDI Clock:	46
<b>Update Firmware</b>	<b>47</b>
Update the Bluebox Firmware:	47
<b>Common Tasks</b>	<b>48</b>
How to Balance Levels for the Main Mix:	48
How to Mute a Track:	48
How to Mute an Output:	48
How to Adjust a Track's Sends to Out 2 and CUE/Phones:	49
How to Adjust a Track's Sends to FX1 and FX2:	49
How to Use Headphones to Monitor the Main Output:	49
How to Send a Dry Track Signal to an External Device for Processing:	50
<b>Learn More</b>	<b>50</b>
<b>Stay in touch</b>	<b>50</b>

## WELCOME

Welcome to the Bluebox User Manual. If you want to get up and running quickly with bluebox, the [Quick Start Guide](#) will walk you through basic setup and the primary features. The [Quick Start Guide](#) was included in the package with your bluebox, and you can find it on our Bluebox Support page at:

[1010music.com/blueboxdocs](https://1010music.com/blueboxdocs)

If you are ready for more detail, you are in the right place. We will go into more detail about set up options, explain the features available in each of the different modes, and help you find all the available options. We will cover how to tweak your mix, how to route your signals to the different outputs and the effects, how to refine your sound using EQ and FX, and how to record tracks and the main output. We will also review how to play back the WAV files you have recorded or stored on your microSD card, and how to select the Active WAV file for each track. Along the way we will see how to save your settings into different project files, configure the metronome, adjust the tempo and use MIDI controllers with bluebox.

If you still have questions after reading this manual, join our forum at [forum.1010music.com](https://forum.1010music.com). You can specifically get bluebox support at:

<https://forum.1010music.com/forum/products/bluebox-compact-digital-mixer-recorder/support-bluebox>

Our support team and other users are out there to help you and to exchange ideas about how to get the most out of bluebox. Registered forum users can also get the latest firmware with new features and bug fixes in the downloads section of the forum. Registration is free, but you will need to provide an email address.

Before you get started, you may want to check for firmware updates for your bluebox. You can learn how to do that in the [Update Firmware](#) section near the end of this document.

## SETUP

By now you have probably already plugged in your bluebox and pushed a few buttons. Let's make sure you have everything ready so you can follow along with the user manual.

Bluebox stores all of your project settings and WAV files to microSD. Your bluebox ships with a microSD card. Before you can use bluebox, you will need to insert the microSD card, connect the bluebox to power, and connect the inputs and outputs. After that, you can setup your tracks, and adjust the gain to balance the levels of your inputs.

### MicroSD Card for Storage

Take the microSD card out of its plastic case, A in the figure to the right. Insert the microSD card, with the text facing up and the notched edge to the right, into the MICRO SD slot on the front panel. The card reader is spring loaded. Push the card in to remove it when needed later. Leave it in for now.



**Front Panel**

### Power

Bluebox needs to be connected to a 2 amp power source. You can plug it into a standard power outlet or a USB power supply. Either way, you will insert the square end of the USB Power cord, B, into the POWER connection on the back panel. The connection is snug to ensure that the device stays plugged in during use.

Standard Power Outlet:

If you are plugging directly into a standard power outlet, slide the appropriate two or three prong connector, E, onto the USB power supply, D. Then connect the flatter end of the USB power cord, B, into the USB connection on the power supply. Bluebox will turn on as soon as the power is connected.

USB Power Outlet:

If you are using your own USB power supply, plug the flatter end of the USB power cord into a 2 amp USB power supply, such as a USB outlet or a USB battery.



**What's in the Box**



**Back Panel**

**NOTE:**

- ▶ Not all USB power supplies are created equal. Make sure your power supply can provide 2 amps of power. The USB power supply included with bluebox will do this.
- ▶ Not all USB Type B cables are the same. Some are made only for data, while others are designed to carry power. Bluebox comes with a USB Type B power cable. If you want to replace it with a longer cable, be sure it is rated to carry power.
- ▶ You can take the microSD card out and reinsert while bluebox is powered up.

## Sleep Mode

When you are done using bluebox, you can simply unplug it to turn it fully off, or you can put it into sleep mode.

### Put Bluebox in Sleep Mode:

1. Press and hold the B button for 3 seconds. The screen will go dark and all sound will stop. The power usage will be reduced but the unit is still on.

### Wake Bluebox Up from Sleep Mode:

1. Push the A or B button or any of the square white Control Mode buttons.

## Input Connections

To use bluebox to mix signals from other devices, you will need to connect them to bluebox's input jacks. Bluebox can receive both standard audio line level and Eurorack level inputs in each of the 6 stereo 3.5 mm TRS jacks. Use 3.5 mm **TRS** cables for the connections. You can use a splitter to connect two separate mono signals to one stereo input if desired. Later we will see how to map these to separate tracks.

**NOTE:**

- ▶ Bluebox has AC coupled inputs. You cannot use them to record Control Voltage. Check out the **1010music blackbox** if you want to do this.
- ▶ The bluebox outputs are DC Coupled.
- ▶ If you are only receiving input on the left channel, check your input cables. TR cables will work, but the audio will be in the left channel only. Use TRS cables to get a full stereo signal.

## Output Connections

Use 3.5 mm TRS patch cords to connect bluebox's stereo outputs to your speakers. You can also plug headphones directly into the PHONES output. Here are a few things to note about the bluebox outputs:

### NOTE:

- ▶ Effects signals are only routed to the Main output on Out 1.
- ▶ Out 2 is useful for sending out the dry signal for selected tracks, for example for external effects processing.
- ▶ The PHONES or CUE output can be used either to hear the dry signal for a selected subset of tracks, or it can be configured to duplicate the Main signal.
- ▶ You can adjust the volume and track routing for each of the outputs independently. We will cover that later when we take about MAIN control mode.

## Meter Bridge Layout

You can configure bluebox to display meters for 4, 6, 8, 10 or 12 tracks. If you keep the track count low the meters will be bigger, making them easier to see and easier to control with the touch screen. You can choose to display the meters in one row or two. In Double Row mode, the knob mapping is more intuitive, but some people prefer Single Row mode to see all the meters side by side.

### Set the Meter Bridge Layout:

1. Push the white MIXER button, a in the figure, to enter MIXER Control Mode.
2. Push the B button, b in the figure, to bring up the Mixer Configuration screen.
3. Touch the option in the list to select the number of tracks you want bluebox to display in the meter bridge.
4. Touch the option at the bottom of the screen to select Single Row or Double Row display mode for the meter bridge.



### MIXER Configuration

## Mapping of Inputs to Tracks

You might have an instrument connected to input 1, but want it to be track 5. You might also want to split the stereo signal from input 3 to be controlled as two mono tracks on tracks 7 and 8 so you can adjust their settings independently.

### Map Inputs To Tracks:

1. Push the white TRACK button, a in the figure, to enter TRACK Control Mode.
2. Push the round black B button, b in the figure, to bring up the Track Configuration screen.
3. Touch a track in the meter bridge at the top of the screen to select it.
4. In the bottom grid, the active inputs for this track are highlighted blue. Touch the inputs to toggle them on and off.



**TRACK  
Configuration**

### NOTE:

- ▶ Each input can only be mapped to one track. If you try to map an input to a second track, the mapping to the first track will be removed.
- ▶ You cannot map signals from two different input numbers to the same track. E.g. you cannot map 2L and 3R to the same track.
- ▶ You can split the left and right inputs from one input number to two different track numbers as mono tracks.

## Track Labels

To help you keep track of what you have plugged into each of the inputs, you can name your tracks. If you are using twelve tracks in Single Row mode, only one character will be displayed in the track meter header. If you are using fewer tracks and Double Row mode, more characters are displayed.

### Rename a Track:

1. Push TRACK and then push B. You will see the Track configuration screen.
2. Touch a track meter to select the track. The selected track meter is highlighted pink.

3. Touch the track label in the middle of the screen to bring up the text keyboard where you can enter a new name.
4. Touch the ABC or 123 button at the bottom of the screen to toggle between the numeric and alphabetic keyboard. Touch the back arrow ← to backspace. Touch the caret ^ to toggle the letter case. Turn a knob to change the position of the cursor.
5. Touch Enter to save your change.

**Text Keyboard**

## Gain

Gain adjusts the level of an incoming signal before it is sent to any outputs or other signal paths. Use the gain to normalize the audio levels coming from Eurorack, pro audio, or consumer level gear. When connecting a new input, it is a good idea to adjust the gain first to get a good initial level. This can also help avoid clipping if your source signal is too high, as seen by a red bar at the top of the meter. Later you can use Volume to control the relative level of each input throughout your mix.

### Adjust the Gain to Balance your Inputs:

1. Make some sound by sending a signal from your sources.
2. Push MIXER and you will see the meters move with the incoming signal.
3. Touch Gain at the bottom of the screen. If you don't see the Gain option at the bottom of the screen, touch MIXER again to toggle the control panel.
4. Four of the tracks are highlighted in the meter bridge at the top of the screen. The knobs are controlling the highlighted tracks. Touch a different group or push A to select another group. Turn a knob to adjust the gain for a track. You can also touch a slider and move your finger up and down or left and right to control the level for that meter.

**MIXER Gain Control**

At this point, when you send a signal to the input you should be able to hear it through the equipment connected to the bluebox output. You should see the meters on the meter bridge moving in response to the incoming signal. If you see the track meters moving but don't hear anything from the outputs, skip ahead and read how to control the output levels in the [MAIN Mode](#) section below. Next we will get acquainted with the general control scheme for bluebox.

## CONTROLS OVERVIEW

By now you probably want to get started using your bluebox. Buttons labeled A and B don't really tell what they do and they seem to be different on different screens. The following general ideas can help you find your way around the controls:

	General Controls Behavior
White Buttons	Select a control mode. Push again to access additional screens for a control mode. The button for the current control mode is brighter than the others.
Touch	Select tracks or control panels, adjust levels and toggle settings. Touch a meter or on screen knob and slide your finger up and down or left and right to make an adjustment.
Knobs	Turn a hardware knob to adjust a parameter or make a selection in a list. In configuration lists, the top knobs select a parameter and the bottom knobs change the value.
A Button	Change the knob focus when there are multiple banks of controls. In the EDIT screen, pushing A toggles the active playback state for a WAV file.
B Button	Access configuration options for the current control mode, when available.
REC, STOP and PLAY	Controls playback and recording of tracks and the Main Mix. You can play a WAV file that has been mapped to a track when the track is not armed for recording. Push Rec + Play to Start Recording the Armed Tracks. This will also record the Main Mix when armed.

We will address the specifics about how the knobs and buttons work for each control mode as we review them. REC, STOP and PLAY work the same in all control modes.

## CONTROL MODES

As you have seen during setup, the white square buttons are used to select a Control Mode. How do you know which Control Mode to use? Here's a brief outline to help guide you to the correct control mode.

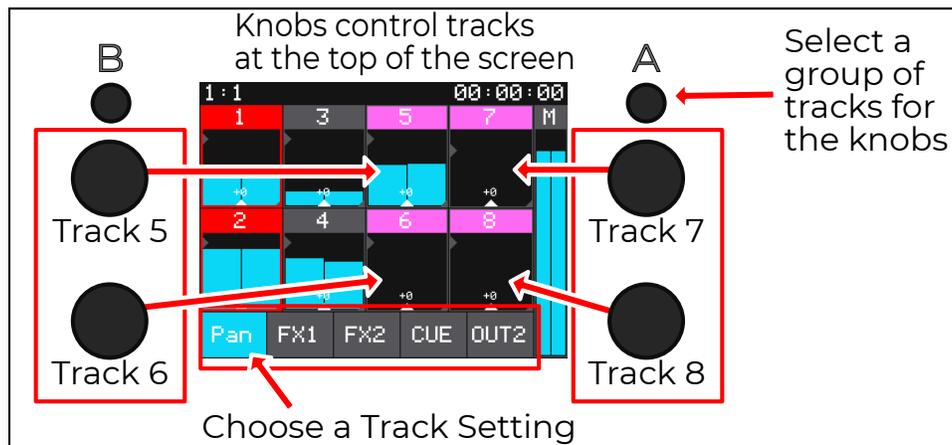
Control Mode	When to Use It
MIXER	Use MIXER when you want to focus on one control option from the bottom of the screen across many tracks at the top of the screen. Here, the knobs control the top part of the screen. You can adjust the mix, configure track sends, and arm tracks for recording here. You can access the Meter Configuration screen from here by pressing B.
TRACK	Use TRACK when you want to focus on one track at a time and adjust multiple settings for that track. Here, the knobs control the bottom part of the screen. You can adjust the mix, configure track sends, and arm tracks for recording here. You can access the Track Configuration screen here by pressing B.
MAIN	You can adjust the level and mute each of the three outputs here. You can access the Output Configuration screen by pressing B from here.
EQ	Here you can adjust the four band equalizer for each track.
FX	Adjust the settings for the delay and reverb effects here. These are global settings that apply to all signals sent to the effects by the tracks.
EDIT	See the list of WAV files associated with each track. These could be files recorded for this track or files chosen from the microSD card. You can set a WAV file to be Active to playback when you push PLAY. The Active WAV will not play if the track is armed for recording. Each track can have zero or one Active WAV files.  This is also where you can toggle MIDI Learn mode on and off.
PROJ	Use this mode to save your settings to a project file. A project saves the state of the track configuration, meter configuration, and all controls. It also retains the mapping of the WAV files. Create new projects to store different sets of settings and WAV files.
TOOLS	Keep track of your available space on your microSD card here. You can also adjust the screen brightness and see which version of the bluebox firmware you are running.

## MIXER Mode vs TRACK Mode

MIXER and TRACK mode both allow you to control the same settings, but they let you approach them from different perspectives. When should you use each one?

### When to Use MIXER Mode

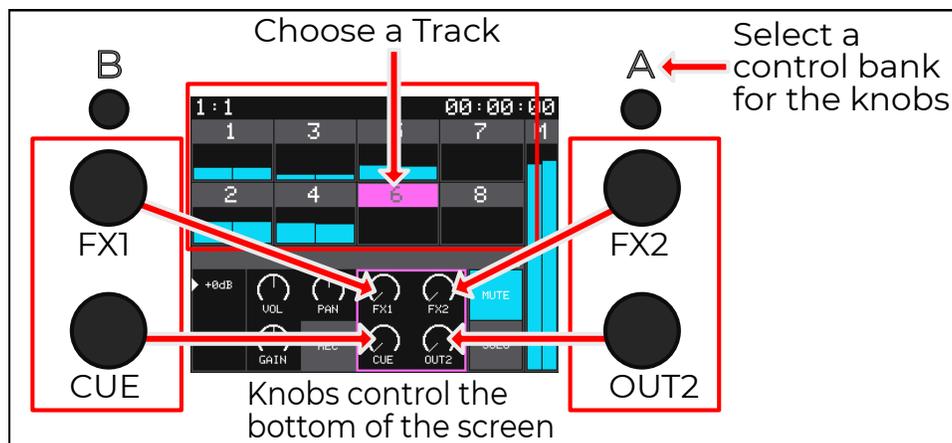
Use MIXER mode when you want to focus on one setting and control it for multiple tracks. In this mode, each knob controls the selected setting for a different track. Select a setting to control from the bottom of the screen, and use the knobs to adjust the different tracks at the top of the screen.



**MIXER Mode Controls**

### When to Use TRACK Mode

Use TRACK mode when you want to narrow your focus to one track and control various settings for that track all at once. In this mode, each knob controls a different setting for the selected track.



**TRACK Mode Controls**

## DISPLAY OVERVIEW

Let's give some names to the elements on the screen so we can talk about them. Now is also a good time to talk about the color conventions that bluebox uses to show the state of different tracks.

The top bar of the screen displays timing information and warnings. The numbers in the top left display the play clock time in the format **bars : beats**. The numbers in the top right display the time in the format **hours : minutes : seconds**. The space in between these two is usually blank. When the microSD card is almost full, red text will appear here displaying the amount of space remaining on the card. Consider cleaning up some files or getting an additional microSD card if you need to continue to record.



**MIXER Mode  
with Storage  
Warning**

The MIXER, TRACK, MAIN, EQ AND FX Control modes display the Meter Bridge and the Main Output Level meter. The Meter Bridge shows the current level of the corresponding input for each track. Generally, this is the level that is being sent to the Main output at Out 1, after gain and volume settings are applied. In MIXER mode, the meters show the signal being controlled at the time.

The text across the top of each meter is the track name. The pink track or tracks are currently selected. Tap a track to change the selection. As you change settings, track highlight colors and track name text colors indicate different states:

<u>Green Highlight:</u>	Solo mode.
<u>Red Highlight:</u>	Armed for recording.
<u>Gray Text &amp; Meter:</u>	Muted
<u>Pink Highlight:</u>	Selected to work with the knobs
<u>Light Blue Frame:</u>	MIDI Learn mode is enabled. Controls with blue frames can be mapped to a MIDI control. To toggle MIDI Learn mode on or off, push EDIT, and then touch LEARN.

In MIXER control mode, there are a few triangular indicators along the edges of the meters. The currently active indicator is white, and the others are gray. The indicator moves as you change the level, and the current numeric setting is displayed on the meter. The number disappears a few seconds after you stop changing the setting.

The bar along the right of the screen with the label M is the Main Output Level meter. This meter represents the level of the output to Out 1. In MIXER control mode you can touch the Main Output Level meter to mute it or arm it for recording.

Each of these first five control modes has a different set of controls along the bottom of the display. MIXER, EQ and FX control modes have multiple control options that can be accessed by pushing the control mode button repeatedly to cycle through the options.

## PROJ MODE

After you have spent some time setting up bluebox, you can save your work to the project. You can have as many projects as can fit on the microSD card, and then you can get another microSD card, or archive files to your computer to make more room. I suggest you create a new project to use as you explore bluebox.

### NOTE:

- ▶ Bluebox does not automatically save your changes. When you change projects or unplug bluebox, any unsaved changes will be lost.

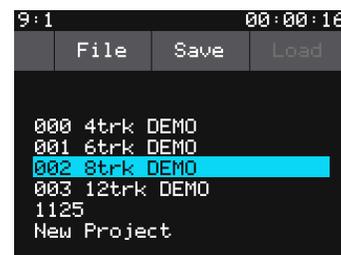
When you push PROJ, you see a list of projects on the current microSD card. There are a few demonstration projects on the included microSD card. These projects show the different meter bridge layouts. Here's how to use the controls in PROJ mode:

Control	Control Behavior in PROJ Mode
Knobs	Scroll through the list of files and select a file.
Touch	Touch menu options.
PROJ button	No additional functions in PROJ mode.
A button	Not used in PROJ mode.
B button	Opens the Project Configuration screen, where you can set the tempo and configure metronome options..

### Save Changes to the Current Project:

Be sure you to save changes so you don't lose your work.

1. Push PROJ. Bluebox will show you a list of projects on the microSD card.
2. Touch Save in the top menu to save your changes. The XML files on the microSD card for this project will be updated to have the current settings. This includes all settings and the list of files for the project.



### **PROJ Mode**

### Load a Different Project:

Loading a project replaces all of the settings on bluebox with those saved in the project, including the list of WAV files for the project.

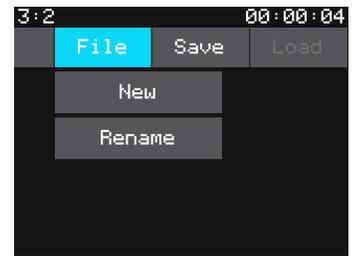
1. Push PROJ and you will see the list of projects on the microSD card.
2. Turn a knob to select project to load.
3. Touch Load in the menu bar at the top of the screen. Bluebox will update the settings and WAV file list with the information saved in the selected project.

#### **NOTE:**

- ▶ The Load menu option is disabled if the current project is selected. If you want to revert to the saved version of the project, load a different project and then reload the desired project.
- ▶ The Save menu option is disabled if there are no new changes to save.

### Create a New Project:

1. Push PROJ.
2. Touch File and then New in the menu bar.
3. Use the on-screen text keyboard to enter a name for your new project if desired. Touch Clear at the top of the screen if you want to start with a blank name. Turn a knob to change the cursor position. Touch <- to backspace. Touch 123 or ABC to change between text and number entry. Touch the ^ to toggle between upper and lower case letters.
4. Touch Enter when you are done typing the new name. Bluebox will create the new project with default settings and load it.



**PROJ File Menu**

### Rename a Project:

1. Push PROJ.
2. Touch File and then Rename in the menu bar.
3. Use the on-screen text keyboard to enter a new name for your new project. Touch Clear at the top of the screen if you want to start with a blank name. Turn a knob to change the cursor position. Touch <- to backspace. Touch 123 or ABC to change between text and number entry. Touch the ^ to toggle between upper and lower case letters.
4. Touch Enter when you are done typing the new name. Bluebox will rename the project. The project folder on the microSD card will be updated to match.

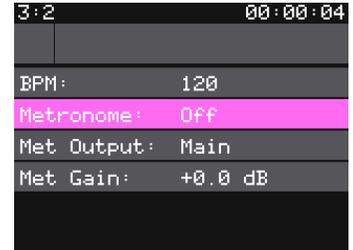
#### **NOTE:**

- ▶ Renaming a project does not save the changes to the project.

Select a Tempo and Set up the Metronome:

Bluebox uses the tempo for some synchronized effects, the clock display, the metronome and synchronizing with external MIDI devices.

1. Push PROJ.
2. Push the B button to bring up the Project Configuration Screen.
3. Turn a top knob or touch a setting to select it.
4. Turn a bottom knob to change the value for the selected setting.



**Project Configuration**

Here are the available tempo and metronome settings:

Setting	Description
BPM	The tempo used for the project. See the MIDI section below for information about how this works with external MIDI devices.
Metronome	You can turn the metronome off, or you can turn it on only when recording, or whenever you push PLAY. Note that the metronome will not be recorded.
Met Output	Choose which output the metronome will play through. Options are Main (Out 1), CUE (Phones), Out 2.
Met Gain	Adjust the level of the metronome. Value can be -96.0 dB through + 20.0 dB.

## MIXER MODE

Do you want to control one setting for multiple tracks at once? MIXER mode is the place to do that. MIXER mode and TRACK mode allow you to control the following settings for each track:

Control Option	Description
Vol	The track level going to the Main output connected to OUT1
Gain	Trim the input to balance the incoming signals
Solo	Disables the output to Main for all other tracks. Tracks in Solo mode have a green outline.
Mute	Disables the output to Main for the muted tracks or the main output. The track label and meter bars are gray for muted tracks.
Rec	Arms the selected track or the Main output for recording. Armed tracks have a red outline.
Pan	Adjust how much of the signal is sent to the left and right channels of the sends for this track
FX1	Control the level of the track audio sent to FX1 (Delay)
FX2	Control the level of the track audio sent to FX2 (Reverb)
CUE	The track level going to the output connected to PHONES
OUT2	The track level going to the output connected to OUT2

### NOTE:

- ▶ You can also arm the Main Output for recording and mute the Main Output in MIXER mode.

When you push the MIXER button, the meter bridge fills most of the screen, the Main output meter is along the right, and the Control Options buttons are along the bottom of the screen. As mentioned earlier, the knobs and buttons do different things in different modes. Here's how they work in MIXER mode:

Control	Control Behavior in MIXER Mode
Knobs	Adjust selected setting for different tracks
Touch	Touch and drag to adjust a level. Tap to change knob focus or toggle state of a meter.
MIXER button	Toggle between two control option panels at bottom of screen.
A button	Change knob focus to the next bank of meters.
B button	Open the Mixer Configuration Screen. See the SETUP section above to learn more about this.

### Control One Setting for Multiple Tracks:

To control one setting for multiple tracks, you will need to select a control option in MIXER mode, and select a bank of tracks to map to the knobs. Then use knobs or touch to adjust the levels or toggle the settings.

1. Push the MIXER button to enter MIXER mode. The MIXER screen shows the meter bridge and a set of control options along the bottom of the screen. When you first push MIXER, the main set of control options appear.
2. Push MIXER again to toggle between the main and secondary control options panel across the bottom of the screen.
3. Touch a control option to select it. The selected option button has a blue background.
4. Turn a knob to adjust one of the meters with a pink header. The triangle shaped indicator for that setting will move along the edge of the meter to show the relative value of the setting. The numeric value of the setting will appear briefly and disappear a few seconds after you stop changing the value.



**MIXER Vol Control**



**MIXER Solo Control**

5. Push the A button or tap a meter that is not pink to select a different group of meters to control with the knobs.
6. Touch and hold a meter and then drag your finger left and right or up and down to adjust the level of that meter. You can drag outside of the frame of the meter after the initial touch.
7. If you are controlling the Solo, Mute, or Rec setting, tap a meter to toggle its state for that setting. The color of the frame or of the header text will change to show the current state of the meter.

You can use this process to:

- Adjust the volume
- Adjust the gain
- Solo one or more tracks
- Mute tracks
- Arm tracks for recording
- Pan tracks between left and right channels
- Control the sends to FX1 and FX2 for various tracks
- Control the sends to the headphones (CUE) and Out2 for various tracks

**NOTE:**

- ▶ You can use touch and drag to change the value of a meter that is not pink without changing the knob mapping.
- ▶ As you move between control modes, the track selection will remain the same.
- ▶ When you leave MIXER mode and then come back, bluebox will remember which control options panel was open and go back to that.

Arm the Main Output for Recording or Mute the Main Output:

1. Push the MIXER button to bring up MIXER mode. If you don't see Rec in the control panel, push MIXER again.
2. Touch the on screen Rec control option button.
3. Touch the M meter along the right side of the screen to arm the Main output for recording. Touch the M meter again to disarm it.
4. Touch the Mute button on the bottom of the screen.
5. Touch the M meter along the right side of the screen to toggle the mute state of Out 1.

## TRACK MODE

TRACK control mode is the place to go to focus on one track at a time. When you push the TRACK button, the meter bridge gets a little shorter to make room for the two banks of control knobs at the bottom of the display. These control knobs show the current levels of the control options for the track selected in the meter bridge at the top of the screen.

Here's how the controls work in TRACK mode:

Control	Control Behavior in TRACK Mode
Knobs	Adjust different settings for the selected track.
Touch	Touch and drag an on-screen knob to adjust a level. Tap to change knob focus or toggle state of a meter.
TRACK button	Not used in TRACK mode.
A button	Change knob focus to the next bank of control knobs on the screen.
B button	Open the Track Configuration Screen. See the SETUP section above to learn more about this.

### Change Settings for a Single Track:

To change settings for a track you will first select a track in TRACK mode. Then you use the knobs and touch gestures to change the levels and toggle the states of the settings. You can switch which bank of controls have the knob focus.

1. Push TRACK and then touch a track in the meter bridge to select it. The controls on the bottom half of the screen are now controlling only the selected track.
2. Turn the knobs to adjust the four controls within the pink frame and change the settings for the selected track. The meter in the lower left displays the main output level of the current track.
3. Push A to toggle the knob focus to the other set of controls, or tap a control panel to give it focus.
4. Touch and hold a knob on the screen and then drag your finger to change the value of that knob. Slide your finger up and down or left and right to adjust the value.
5. Tap the REC, MUTE or SOLO button to toggle the state for the current track.



**TRACK Mode**

You can use this process to:

- Adjust the volume
- Adjust the gain
- Solo a track
- Mute a track
- Arm a track for recording
- Pan a track between left and right channels
- Control the sends to FX1 and FX2 for a track
- Control the sends to the headphones (CUE) and Out2 for a track

## MAIN MODE

MAIN mode is all about controlling the output levels. From here you can also access the Main Configuration screen where you can choose options like pre- or post-fader sends, and tweak the Compressor.

Here's is how the controls work in MAIN mode.

Control	Control Behavior in MAIN Mode
Knobs	Top left - Adjust the CUE (Phones) Output Level Bottom left - Adjust the level for Out 2 Top right - Adjust the level for the Main output (Out 1) Bottom right - Adjust the level for the Main output (Out 1)
Touch	Touch and drag a meter to adjust a level. Tap to toggle the mute state of an output.
MAIN button	Not used in MAIN mode.
A button	Not used in MAIN mode.
B button	Open the Main Configuration Screen.

### Adjust Output Levels:

1. Push MAIN to select Main mode.
2. Turn a knob to adjust the level of the corresponding output.
3. Touch a meter and then drag your finger left and right or up and down to adjust the level for that meter.

### Mute an Output:

1. Push MAIN to select Main mode.
2. Touch the MUTE button under the heading for the output you want to mute. Touch the button again to unmute it.



**MAIN Mode**

Configure Signal Routing and Compression Settings:

Use the controls on the Main configuration screen to adjust the signal routing and the compressor settings.

1. Push MAIN to enter Main mode.
2. Push B to bring up the Main Configuration screen.
3. Turn one of the top knobs to select which setting you want to change.
4. Turn one of the bottom knobs to select a value for that setting.

4:4	00:00:07
CUE Source:	Main
CUE Mix:	Post Fader
OUT2 Mix:	Pre Fader
FX1 Mix:	Pre Fader
FX2 Mix:	Pre Fader
Compressor:	ON

**MAIN Configuration**

1:1	00:00:00
Compressor:	ON
Attack:	1 ms
Release:	250 ms
Thresh:	-20.0 dB
Ratio:	4
Exp Ratio:	2

**MAIN Configuration  
- Scroll for More  
Settings****NOTE:**

- ▶ A compressor allows the overall output level to sound higher by pushing down the level of the highest highs and boosting the lower levels. As a result, the average level of the audio signal is higher than it would otherwise be. You can adjust the Compressor parameters to control the compression.
- ▶ The Threshold, Ratio, Exp Ratio and Mode are the most important compressor parameters. Take a look at these first if you are not getting the results you want.

Here are the signal routing and compressor settings available on the Main Configuration Screen:

Option	Description	Range of Values
CUE Source	Choose which signal to send to the PHONES output.	Custom: the CUE mix Main: the Main mix
CUE Mix OUT2 Mix FX1 Mix FX2 Mix	Controls whether the tracks send their signals to the corresponding outputs before or after the track Vol level is applied. The Gain is always applied.	Pre-Fader Post-Fader
Compressor	Turn this On to apply the compressor to the main output. The compressor is not applied to Out2. It is applied to CUE/Out3 if CUE Source is Main.	On or Off
Attack	This controls how long it takes for the compressor to reach its full extent after the threshold is crossed.	0 to 1000 ms
Release	This controls how long it takes for the compressor to dial down once the input falls back under the threshold.	0 to 1000 ms
Thresh	This is the most important parameter of the compressor. The compressor will start to attenuate a signal when it exceeds this Threshold level. The amount of attenuation is governed by the Ratio Parameter.	-48.0 dB to +0.0 dB
Ratio	When mode is Peak or RMS, this is the ratio between the input and output signal when the compression is active. A ratio of 1 means no compression. A ratio of 100 means only 1/100th of the input signal is sent to the output.	1 to 100
Exp Ratio	When mode is Expander, this is the ratio between the input and output signal when the expander is active. A ratio of 1 means no expansion. A ratio of 100 means the signal sent to the output is 100 times the input signal.	1 to 100
AutoMkup	Turn this on if you want the compressor to automatically compensate the output level when the threshold and ratio settings change.	On or Off
Knee	This adjusts whether the compressor kicks in all at once or more gradually. At 0.0 dB the compressor will be off below the threshold and fully applied as soon as the threshold is reached. The knee value is the range above and below the threshold where the compressor ramps up. The compressor starts to be gradually at applied at Threshold - Knee and is fully applied at Threshold + Knee, with a gradual transition between the two.	+0.0 dB to +18.0 dB

Here are the rest of the Main Configuration screen settings:

Option	Description	Range of Values
Lookahead	Increase this number to give the compressor more time to identify the peaks and respond to them. When this is zero, the compressor can only respond after the peak has occurred.	0 to 10 ms
AutoRel	When this is on, the Release time will be automatically determined based on the incoming signal. The Release setting is not used when AutoRel is On.	On or Off
Mode	<p>Use Peak mode when you want the compressor to be able to respond quickly to even short peaks to ensure the output signal does not exceed the threshold.</p> <p>Use RMS mode when you can allow the signal to exceed the threshold for short amounts of time, in order to get a more musical sounding output.</p> <p>Use Expander mode when you want to further accentuate the highs, doing essentially the opposite of a compressor. The Exp Ratio value will be used to increase the output level when the input exceeds the threshold.</p>	Peak, RMS or Expander
Wet/Dry	The ratio of wet (compressed) vs dry signal that is sent to the output. 100% means the full compressed signal is sent. 0% means only the dry signal is sent.	0.0% to 100.0%
Gain	Adjust this makeup gain to makeup for differences in volume caused by the compressor.	-36.0 dB to +36.0 dB

## EQ MODE

If it's time to adjust the frequency response for each track, it's time to use EQ Mode. With bluebox, you can adjust the frequency response for each of 4 nodes per track. You can also adjust the EQ for the overall output by selecting the Main output meter on the right..

Here's how the Controls are used in EQ mode:

Control	Control Behavior in EQ Mode
Knobs	Adjust a value for the selected node and track. Top left - Gain Bottom left - Q - sometimes shape or bandwidth based on EQ Type. Top right - Frequency Bottom right - Equalization type
Touch	Touch and drag in the grid to move the selected node for the selected track
EQ button	Hide or bring back the meter bridge.
A button	Select the next node in the EQ graph
B button	Not used in EQ mode.

Each track and the main mix has a 4 band equalizer. In EQ mode, you will see a graph that represents the frequency response for the current selection. In this graph, the x axis represents frequency and the y axis represents the gain that will be applied at that frequency. The resulting graph is called the frequency response. As you change parameters for each of the four filter bands, the shape of the graph will change to show the impact of all of the bands applied together. The gain in this context is the amount of boosting or attenuation will be applied to the signal level at various frequencies.

You can touch the grid to move the filter point for each band. The filter point will also move in the grid as you turn the knobs to adjust each of the parameters for that filter band. Push the A button to select a different filter to control. The filter point for the selected filter is pink. Set the filter type to None for the filter bands that are not used.

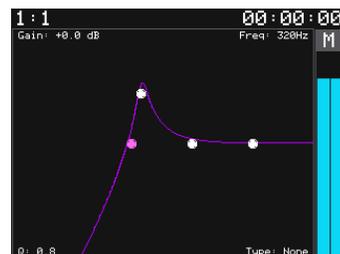
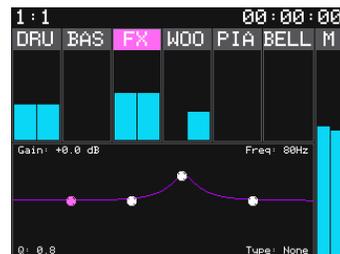
Each of the four knobs controls the EQ parameter displayed in the corresponding corner of the EQ grid for the selected filter band.

In EQ mode, you can push the EQ button to toggle the EQ grid in and out of full screen mode to select a different track or have more precision when using touch to control the grid.

### Adjust the EQ for a Track or the Main Mix:

You will need to choose a track or the main mix, and then choose a filter band to adjust. Then select an EQ type for that filter band and adjust the corresponding settings.

1. Push EQ to bring up the EQ screen.
2. If the meter bridge is hidden, push EQ again to bring it back and reduce the size of the EQ Control Grid.
3. Touch the meter you want to control. You can select a track meter or the Main output meter.
4. Push A to change which filter band you are controlling for the selected track. The filter point on the grid for the selected filter band is pink.
5. Turn the bottom right knob to choose the Type of equalization to be used for this filter band. The selected value is displayed in the lower right corner of the grid. The options are:
  - None
  - L Cut = Low cut filter
  - L Shelf = Low Shelf
  - Param = Parametric
  - H Shelf = High Shelf
  - H Cut = High cut filter
6. Turn the other three knobs to adjust their values. The numbers in the respective corners display the current value and the shape of the frequency response graph will change accordingly.
7. Tap a spot in the grid to quickly move a filter point on the grid to that spot and reshape the filter based on the corresponding frequency and gain there.
8. Touch the selected filter point and drag it to make more gradual changes.
9. Push EQ to hide the meter bridge and use the EQ grid in full screen mode. Push EQ again to bring the meter bridge back.



#### **NOTE:**

- ▶ You cannot select a different filter band in the EQ Grid Control by touching the grid. You have to push the A button to select a different filter band.

Here are some more details about the different EQ Modes and parameters:

EQ Mode	Description
<p>L Cut = Low Cut (high pass) Filter</p>	<p>Pass frequencies above the cutoff frequency, and progressively attenuate frequencies below the cutoff frequency.</p> <p>Gain parameter is not used here.</p> <p>Frequency is the lowest frequency that will pass through the filter for this band. Anything below this is cut out.</p> <p>Q controls the level of boosting or attenuation at and around the cut off frequency. Values above 1 boost the level of the audio signal at the cutoff frequency. Values below 1 attenuate the level of the audio signal at the cutoff frequency.</p>
<p>L Shelf = Low Shelf Filter</p>	<p>Cut or boost frequencies below the cutoff frequency. Above the cutoff, signal will not be altered and will pass normally.</p> <p>Gain controls the amount of boosting or attenuation that happens near and below the selected frequency.</p> <p>This filter impacts the audio signal near and below the selected frequency.</p> <p>Q controls the shape of the gain adjustments made at the selected frequency. Set to 1 or lower to have a shelf shape to the frequency response. Values above 1 cause gradually sharper rises and drops on either side of the selected frequency.</p>
<p>Param = Parametric Filter</p>	<p>Boost or attenuate the gain for a series of bands around the selected center frequency.</p> <p>Gain is the amount of attenuation or boosting that is applied at the selected frequency.</p> <p>Frequency is the center frequency of the affected band.</p> <p>Q controls the width and shape of the band affected.</p>
<p>H Shelf = High Shelf Filter</p>	<p>Cut or boost frequencies above the cutoff frequency. Below the cutoff, signal will not be altered and will pass normally.</p> <p>Gain controls the amount of boosting or attenuation that happens near and above the selected frequency.</p> <p>This filter impacts the audio signal near and above the selected frequency.</p> <p>Q controls the shape of the gain adjustments made at the selected frequency. Set to 1 or lower to have a shelf shape to the frequency response. Values above 1 cause gradually sharper rises and drops on either side of the selected frequency.</p>
<p>H Cut = High Cut (lows pass) Filter</p>	<p>Pass frequencies below the cutoff frequency, and progressively attenuate frequencies above the cutoff frequency.</p> <p>Gain parameter is not used here.</p> <p>Frequency is the highest frequency that will pass through the filter. Anything above this is cut out.</p> <p>Q controls the level of boosting or attenuation at and around the cut off frequency. Values above 1 boost the level of the audio signal at the cutoff frequency. Values below 1 attenuate the level of the audio signal at the cutoff frequency.</p>

# FX MODE

In FX mode you can adjust the settings for the Delay and Reverb effects. There is one global set of effects settings that are applied to the overall signal that has been routed to the effects channels. You can adjust the FX sends for each track in MIXER or TRACK mode.

There is a lot happening on the FX screen. Here's how to use the controls in FX mode:

Control	Control Behavior in FX Mode
Knobs	Adjust the value for an effect setting in the pink frame.
Touch	Touch and drag an on-screen knob to adjust a parameter value. Tap to change knob focus or toggle state of a button. Touch and drag on the x-y grid to adjust the effects parameters.
FX button	Cycles through the FX View modes: FX1/Delay, FX2/Reverb Small, FX2/Reverb Large, X/Y Grid
A button	When there is more than one bank of knobs on the screen, this will select the next group of 4 knobs.
B button	Not used in FX mode.

## FX View Modes

Push the FX button multiple times to cycle through the four different view modes:



**FX Mode with FX1/Delay View**



**FX Mode with FX2/Reverb - Small View**



**FX Mode with FX2/Reverb Large View**



**FX Mode with X/Y Grid View**

**NOTE:**

- ▶ If you leave FX mode and come back, bluebox will remember which FX View mode you are using.
- ▶ The Delay and Reverb fx sends are only sent to the Main Out 1. If you set the CUE Source to Main, you will hear the effects through the Phones output as well.

Adjust Reverb and Delay Effects Settings:

1. Adjust the effects sends for each track using the Track or Mixer control mode.
2. Choose whether the FX Mix is pre- or post-fader in the Main Configuration screen.
3. Push FX. Bluebox will display the last FX view mode used. Push FX again to change the view mode if needed.
4. Turn a knob to adjust the value of one of the on screen controls in the pink box.
5. Touch an on-screen knob and drag left and right or up and down to change the value of the setting.
6. Touch an onscreen button to toggle its state.
7. Push A to to advance the knob focus to the next control group. The pink frame will move to show the current focus. You can also tap a control to change the focus to the corresponding group.
8. In X/Y Grid view mode, touch and drag in the grids to change the effects settings. For the Delay, X= cut-off frequency and Y=filter bandwidth. For Reverb, X=size and Y=level.

Here are the available settings for the Delay effect:

Delay Parameter	Description
Delay Time	The amount of time between when the dry signal is received and when the first echo is heard. If Beat mode is on, the delay time will be expressed in musical increments. Otherwise, it is a percentage of the time range between 0 and 2 sec.
Feedback	The amount of wet signal that is sent back into the delay buffer, from 0 to 100%.
Cutoff	When Filter is On, this is the center frequency of the frequency band that the delay will be applied to.
Width	When Filter is On, this is the range of frequencies on either side of the Cutoff that will be included in the delay.
Beat	When Beat is on, the delay amount is expressed in musical increments, and thus synchronized with the MIDI clock. When off, the Delay time is a percentage of time between 0 and 2 sec.
Filt	When the filter is on, the feedback path goes through a band pass filter to shape the sound of the echoes, using the cutoff and width parameters above.

#### NOTE:

- ▶ You do not have to push Play to use the Beat mode for the delay. The delay will use the tempo set in the Project Configuration screen.

Here are the available settings for the Reverb effect:

Reverb Parameter	Description
Size	The size of the room simulated by the reverb algorithm. Larger sizes have a longer reverb time.
Feedback	How much of the wet reverb signal is sent back into the reverb buffer.
Decay	How long it takes for the reflections in the room to fade out.
Spread	Controls the shape of the reverb. Knob positions to the right of center broaden the distribution of the reverb echoes in the standard forward playback. Knob positions to the left of center increasingly broaden the distribution of reverse playback of the echoes.
Level	Controls the audio level of the main body of the reverb. Keep this high to hear more of the reverb.
HI C	The high frequency cutoff. When all the way up, all frequencies are allowed into the reverb processing. Dial this down to remove higher frequencies from the reverb processing.
ER LV	The Early Level controls the loudness of the first group of reflections that occur when the sound initially reflects off the walls.
Low C	The low frequency cutoff. When all the way down, all frequencies are allowed into the reverb processing. Dial this up to remove lower frequencies from the reverb processing.
Pre D	Use the Pre-delay for coarser adjustments (0 -1000ms) to the timing of the entire tail of reflections. This simulates how long it takes for the source to reach the sides of the room and bounce back to the listener. Increase this to simulate a bigger room.
ER TM	Use the Early Time for fine adjustments (0 - 90 ms) of the timing of the first group of reflections that occur when the sound bounces off the walls. This does not affect the rest of the tail.
Freeze	Turn on the freeze for brief periods to reverberate the current input signal at max levels and hold it until freeze is turned off. The freeze will turn the high cut off all the way up, the low cut off all the way down, and the reverb level all the way up.
Mod F	Controls the frequency of the modulation changes.
Mod D	Increase the modulation depth to add more animation to the reverb by creating more subtle variations in the sound.
Diffu	Increase the diffusion to push the reflections closer together and thicken the sound.
Reson	The resonance controls how abruptly the reverb processing changes as the frequency approaches the high and low cutoff frequencies. This changes the "color" or characteristic of the space.

## EDIT MODE

Once you start recording, you will start to accumulate some files on the microSD card. In Edit mode, you can see the files that have been recorded as part of this project, add new files from the microSD card to the project, and assign files to playback for a track.

Sometimes, you want to hear one WAV file while recording another. You may want to hear multiple WAVs playing at once and mix them together. You also might need to stop playing back a WAV file. You can set these things up in EDIT mode.

### NOTE:

- ▶ Recording can be done from any control mode, once tracks have been armed in MIXER or TRACK control mode. Since it doesn't fit in any one control mode, we cover this in the [RECORD AND PLAY WAV FILES](#) section, after the discussion of all of the control modes.
- ▶ If you want to configure an external MIDI controller to work with bluebox, you will also start that process by using the LEARN button in EDIT Mode. However, since this process crosses over several modes, we will discuss it in the [MIDI Controller Mapping](#) section below.

Here's an overview of the controls in EDIT mode.

Control	Control Behavior in EDIT Mode
Knobs	Scroll through the list of files and select a file.
Touch	Touch a file to select it. Touch and drag the file list to scroll through the list.
EDIT button	Not used in EDIT mode.
A button	Toggle the ACTIVE state of the currently selected WAV file.
B button	Not used in EDIT mode.

### Play a WAV file for a Track:

When you record a track, bluebox stores a WAV file for that track in the folder for the project on the microSD card. You can see the list of files in EDIT mode. By default, the most recent recording for a track is marked Active. If a recording is marked Active here, and it is not armed for recording, bluebox will play back that track when you press the Play or Rec + Play transport buttons. To play a WAV file, you will need to set its state to Active and disarm it for recording.

1. Push EDIT. You will see a list of files that have been recorded for each track along with files that have been mapped to tracks.
2. Turn a knob or touch to select the file you want to play.
3. Push A to change the state of the file to Active.
4. Push MIXER.
5. Make sure the track is not armed for recording. If the track has a red frame, touch the Rec button at the bottom of the screen, and then touch the track to disarm it.
6. Push the black square ► PLAY transport button to start playback.

	File	Learn
DRUMS	01-DR1-000--Strk.DEMO	ACTIVE
DRUMS2	02-DR2-000--Strk.DEMO	ACTIVE
	02-DRUMS2-001	ACTIVE
HH	03-HH-000--Strk.DEMO	ACTIVE
	03-HH-001	
PERC	04-PERC-002--Strk.DEMO	
	04-PERC-001	ACTIVE
TOMS	05-TOMS-000--Strk.DEMO	ACTIVE

### EDIT Mode

#### NOTE:

- Only one file per track can be ACTIVE at a time. If you make one file ACTIVE, the previously ACTIVE file will now be inactive.

### Make a WAV File Stop Playing:

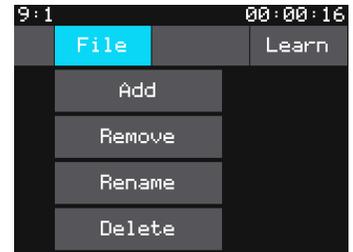
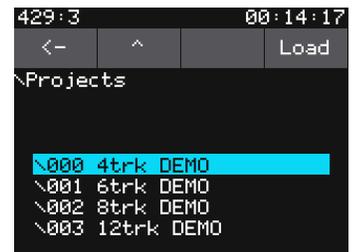
You recorded a track, disarmed it, and now the WAV file plays back when you push ► PLAY. You can make it stop by changing the ACTIVE status of the WAV file.

1. Push EDIT. You will see a list of WAV files that have been recorded or loaded for each track.
2. Turn a knob or touch to select the file that is marked ACTIVE for the track where it is playing back.
3. Push the A button to toggle the ACTIVE state off. As long as there is no active file for the track, nothing will play for that track.

Add a File to a Project:

If you have another WAV file that you want to play in the MIXER, you can put it on the microSD card and then add it to the project. You can also add a WAV file from a different project.

1. Take the microSD card out of blackbox and put it in your computer. (The card is spring loaded. Push it in to get it to pop out.) Copy the file you want onto the microSD card. Under the Projects folder on the card, there is a folder named for each project. Put the file here to keep it with the project.
2. Push EDIT. You will see a list of files per track for this project.
3. Select the track where you want to add the file.
4. Touch File at the top of the screen to open the File menu.
5. Touch Add. Navigate to the folder with the file by selecting a folder and touching Load or touching the ^ symbol to navigate back in the folder hierarchy. Turn the knobs to change the folder or file selection.
6. Touch LOAD with the file selected to add the file to the project. The file will now appear in the list and will be set as the ACTIVE file for that track.
7. If you want to change the file to inactive, select it and push the A button.

**EDIT File Menu****EDIT - File Selection****NOTE:**

- ▶ When you add a file to a project, the file does not move or get copied. It stays in its original folder. Bluebox simply adds a pointer to that file to the list of assets for the project. If that file gets deleted or moved, the link will be broken and the file will not be able to play.
- ▶ WAV files must be 48kHz for bluebox to play them.

### Remove a WAV file from a Project:

If you no longer want to include a file in a project, you can remove it from the list of assets for the project without deleting the WAV file.

1. Push EDIT.
2. Turn a knob or touch to select the file you want to remove from the project.
3. Touch File, then Remove.

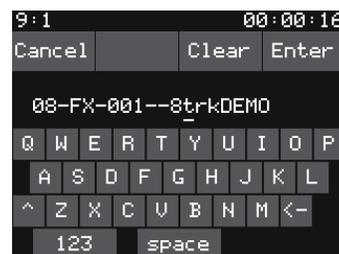
#### **NOTE:**

- ▶ When you remove a file from a project, you are taking it out of the list of assets for that project. The file is still on the microSD card. Use DELETE if you also want to erase the file from the microSD card to free up space.

### Rename a WAV File:

When bluebox records a WAV file, the file name is <track number> + <track name> + <number>. For example, if you have renamed track 2 to DRUMS, the third recording for that track is named 02-DRUMS-003. You can rename it to help you keep track of the files.

1. Push EDIT.
2. Touch File and then Rename. You will see a text keyboard on screen.
3. Touch Clear at the top of the screen if you want to start with a blank name. Turn a knob to change the cursor position. Touch <- to backspace. Touch 123 or ABC to change between text and number entry. Touch the ^ to toggle between upper and lower case letters.
4. Touch Enter when you are done typing the new name. Bluebox will change the display name of the file in the list and change the name of the file on the microSD card.

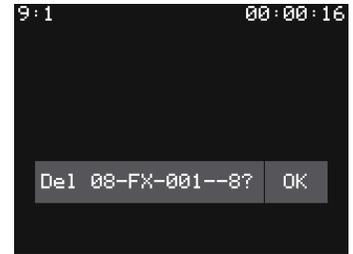


**Text Keyboard**

### Delete a WAV file from a Project:

You can delete a file from the project and the microSD card to free up space.

1. Push EDIT.
2. Turn a knob or touch to select the file you want to remove from the project.
3. Touch File, then Delete.
4. Touch OK to confirm. The file is now removed from the microSD card. Touch anywhere else on the screen to cancel.



**Delete  
Confirmation**

#### **NOTE:**

- ▶ There is no “UNDO” for delete.

### Playback a Recording of the Main Output:

The list of files in EDIT mode does not include the WAV files that were recorded from the Main output. The files are on the microSD card in the folder for the project. The file names start with 13-Main. To play one of these WAV files, add it to a track.

1. Push EDIT.
2. Select the track to be used for playback.
3. Touch File, then Add.
4. Navigate to the project folder, and then scroll down to the files that start with 13-Main. Select the file you want and touch Load.
5. Make sure the track you used is not armed for recording.
6. Push ▶ PLAY.

## TOOLS MODE

The tools screen has some valuable information that is easy to overlook: the available space on the microSD card, and the current firmware version. This is also where you can adjust the brightness of the screen.

Here is what the controls do in TOOLS mode:

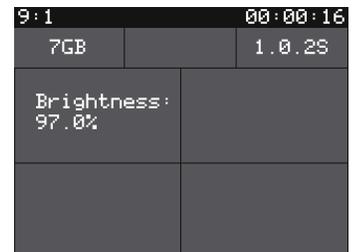
Control	Control Behavior in TOOLS Mode
Knobs	Turn the top left knob to adjust the brightness.
Touch	Not used in TOOLS mode.
TOOLS button	No additional functions in TOOLS mode.
A button	Not used in TOOLS mode.
B button	Not used in TOOLS mode.

### Adjust the Screen Brightness:

1. Push TOOLS.
2. Turn the top left knob to select the desired brightness.

### See How Much Space is Available on the microSD Card:

1. Push TOOLS.
2. The available space is displayed just above the brightness setting in the menu area.



**TOOLS Mode**

### See What Firmware Version You Are Using:

1. Push TOOLS.
2. The current firmware version is displayed in the top right menu area. (1.0.2S in the image on the right.)

## RECORD AND PLAY WAV FILES

With bluebox, you can record individual tracks and the Main mix to WAV files on the microSD card. You can record one track at a time while playing back other tracks to create a layered recording. You can then save the overall mix to a single WAV file or take the individual WAV files to your computer to further refine your mix. You can also record a jam session up to 4 hours long and then take the file to your computer to pull out the best parts.

### Record One or More Tracks:

To record a track, you first have to arm it on either the MIX or TRACK screen. Then you can use the transport buttons to stop and end recording.

1. Push MIXER. If you don't see the Rec button in the control options at the bottom of the screen, push MIXER again.
2. Touch Rec in the control options at the bottom of the screen.
3. Arm the tracks you want to record by touching them. The armed tracks have a red frame.
4. To Arm a track in TRACK mode, push TRACK, touch the track you want to arm and then touch the REC button in the control panel at the bottom of the screen.
5. Use your external gear to send a signal to the input for the armed track or tracks.
6. Push the REC and PLAY transport buttons together to start recording.
7. Push the STOP transport button when you want to end recording.



**MIXER Mode - Arm for Recording**

Bluebox will save the WAV file or files to the microSD card in the folder for this project. You can see the WAV files for tracks in EDIT mode. The WAV file you just recorded for each track is ACTIVE for that track. This means if you disarm recording for that track and push the PLAY transport button the WAV file will play. You can change this in EDIT mode.



**EDIT Mode**

### NOTE:

- ▶ You can only have one ACTIVE WAV file per track at a time.
- ▶ You can record all inputs and the Main output at the same time.
- ▶ WAV files must be 48kHz for bluebox to play them.

### Record the Main Mix:

To record the Main mix, you first have to arm it on the MIX screen. Then you can use the transport buttons to stop and end recording.

1. Push MIXER. If you don't see the Rec button in the control options at the bottom of the screen, push MIXER again.
2. Touch Rec in the control options at the bottom of the screen.
3. Touch the Main meter on the right to arm the Main mix for recording. You can record the Main mix and individual tracks at the same time.
4. Use your external gear to send a signal to the inputs. You can also configure a WAV file to playback for one or more tracks. These WAV files will not be recorded in the Main Mix.
5. Push the REC and PLAY transport buttons together to start recording.
6. Push the STOP transport button when you want to end recording.



**MIXER Mode - Main Armed to Record**

The Main mix recording is saved in a WAV file with the prefix 13-Main in the folder for the project, but it is not listed in EDIT mode with the track WAV files. You can add the Main mix recording to a track to play it.

### Play a WAV file for a Track:

You can play WAV files that you recorded on bluebox and files you have copied onto the microSD card. To do this, you need to assign the file to the track, set the status of the WAV file to ACTIVE, and make sure the track is not armed for recording. When you record a file on bluebox, it is mapped to the track used to record it. You can change this in EDIT mode.

1. Push EDIT to see the list of files mapped to each track and the ACTIVE status of the WAV files.
2. If the file you want to play is listed but does not have the word ACTIVE in the right column, you will need to make it ACTIVE. Turn a knob or touch the screen to select the WAV file you want to play. Push A to set the selected file as ACTIVE for playback for that track.
3. If you want to add a file to a track, select the track and then touch File and Add. Select the file you want to add and then touch Load. You can navigate to other folders to find the file if needed. Touch the ^ to go back to a previous folder in the hierarchy, or touch Load to drill into a folder in the list.
4. Push MIXER and check the status of the tracks you want to play. If a track has a red frame, you have to disarm the recording status. Touch Rec at the bottom of the screen, and then touch the tracks you want to disarm.
5. Push the PLAY transport button to start playback of the ACTIVE WAV files for the tracks that are not armed for recording.

## MICROSD FILE MANAGEMENT

Bluebox stores all of the project files and WAV recordings on the microSD card. When you playback WAV files, they are streamed from the microSD card. Recording up to 13 WAV files at one time is very demanding and not all microSD cards can work fast enough. We recommend name brand cards with the **A1** or **A2** rating or better. For example, SanDisk A1 cards work very well. The card provided with the bluebox has an A1 rating.

The microSD card makes it easy to move files on and off of the bluebox. Take the microSD card out of bluebox by pressing it in until it springs back. Then you can use a USB or SD card adapter to put the card in your computer. You can then browse the files in standard file management tools. You will find a Projects folder at the root of the card, and under that a folder for each project, with the same name as the project. Within each project's folder, you will find the WAV files recorded for this project. Bluebox assigns names to the WAV files in the format of <Track Number>-<Track Name>-<Number>. You can rename the files in EDIT mode on bluebox. This will ensure that they maintain their mapping to the tracks and their ACTIVE state. If you rename the files from your PC, bluebox won't find them when you open the project. You can add the files to tracks if needed.

In addition to the WAV files, each project folder also has two XML files: assets.xml and project.xml. These files are updated when you save the project and store your project settings and WAV file mappings.

### Copy a Project or Make a Backup on Your Computer:

You can copy a project to another project on the microSD card, or to your PC for backup purposes. To copy a project, you need to copy the project folder and all of its contents. Project folders must be under the Projects folder on the microSD card for bluebox to find them.

1. Remove the microSD card from bluebox by pushing it gently until it springs back out.
2. Use a USB or SD Card adapter to put the microSD card in your computer.
3. Use File Explorer on a PC or Finder on a Mac to open the removable drive.
4. Open the Projects folder and you will see a folder for each of your projects.
5. To make a new project on the microSD card, copy the folder for a project and all of its contents to a folder under the Projects folder.
6. To back up your files, copy the folders in the Projects folder onto your computer.
7. When the files finish copying, be sure to eject the removable drive in File Explorer or Finder before removing the USB or SD Card adapter from your computer. This will ensure that the computer has properly closed the connection to those files and will avoid file corruption.
8. You can put the microSD card back in bluebox to continue using the old projects and start working with any new projects.

## MIDI CONTROLLER MAPPING

You can use an external MIDI controller to customize the way you control your mix. You can also use a MIDI connection to synchronize MIDI clocks with external devices.

### Control Bluebox Settings with a MIDI Controller:

You will need to connect the controller to bluebox, and then use MIDI Learn mode on bluebox to map the controls to the bluebox settings.

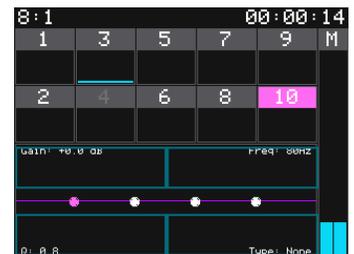
1. Connect your MIDI Controller to the MIDI Device input on the back panel of bluebox, or to the TRS MIDI IN jack on the front panel.
2. Push EDIT.
3. Touch Learn. The Learn button turns blue and you are now in Learn mode. While in Learn mode, the settings you can map to a MIDI device have a blue frame.
4. Touch one of the blue framed settings to select it and the frame will turn a lighter blue. You can use MIDI to control settings in MIXER, EQ, and FX modes.
5. Use the controller you want to connect to this setting. Bluebox will now map this MIDI Control to this setting and display the MIDI mapping in blue on the screen. The mapping is in the format **<Channel> : <CC Number>**.
6. Repeat steps 4 and 5 to create additional mappings.
7. Push EDIT and touch Learn to exit MIDI Learn mode. You can now use the MIDI device to control the mapped settings.



### EDIT Mode - MIDI Learn On



### MIXER Mode - MIDI Learn On



### TRACK Mode - MIDI Learn On



### FX Mode - MIDI Learn On

#### NOTE:

- ▶ Bluebox cannot connect directly to a computer through the USB Device port. This port is only for MIDI controllers.
- ▶ Bluebox can power some external MIDI devices through the USB MIDI device connection. Some MIDI devices require too much power and will need to be powered separately.
- ▶ The TRS MIDI input on the front panel can support both MIDI TRS Type A and Type B connections. You can use the MIDI Adapter included with bluebox to connect through a MIDI 5 pin DIN.

## MIDI CLOCK SYNCHRONIZATION

Bluebox is designed to work together with other synthesizer gear. This includes sharing a clock signal in order to synchronize timing. Bluebox will display the clock at the top of the screen. You can configure the effects to synchronize with the clock, and you can turn on the metronome to hear the clock while you play.

Bluebox will automatically synchronize to an external MIDI clock on a connected MIDI device. Bluebox is also always sending the current clock signal (either the native bluebox clock or the synchronized clock) out on the MIDI OUT TRS jack and the MIDI Device port.

### Setup Bluebox to Follow a MIDI Clock:

1. Connect a MIDI Device with a clock signal to either the MIDI Device USB connection on the back panel or to the MIDI IN TRS jack on the front panel.
2. Configure the external MIDI device to send a clock signal. Bluebox will automatically follow the incoming clock.

### Setup Bluebox to Send a MIDI Clock:

1. Connect a MIDI Device that is ready to follow a clock signal to either the MIDI Device USB connection on the back panel or to the MIDI OUT TRS jack on the front panel.
2. Configure the external MIDI device to follow a clock signal.
3. Push the PLAY transport button bluebox. Bluebox will send out a MIDI clock whenever the PLAY transport button is active. You will see the clock reading at the top of the screen update in real time.
4. To change the tempo, push PROJ and then push the B Button. Turn a top knob to select the BPM setting, and then turn a bottom knob to adjust the value.

#### **NOTE:**

- ▶ Set the bluebox BPM and configure the metronome on the Project Configuration screen. Push PROJ, and then push the B button to access these features.

## UPDATE FIRMWARE

1010music occasionally provides firmware updates with bug fixes and new features. You can use the microSD card with your computer to get the new firmware. You will need to register for the 1010music forum (for free) to download the new firmware, put it on the microSD card, and then reboot bluebox while telling it to load new firmware.

### Update the Bluebox Firmware:

1. Check which firmware version you are currently running. Push Tools. The current firmware version is displayed in the top right corner.
2. Check the forum to see if there is a newer version. On your computer, go to the website [forum.1010music.com](http://forum.1010music.com). Click Login or Sign Up in the top right corner. You will need to be a registered forum user in order to access firmware updates. It is free to register. Follow the instructions on screen to login or sign up if needed. Note that when you first sign up, you will receive an email asking you to confirm your email address. You must click the link in that email to confirm your email address before you will be able to access the downloads. Email [support@1010music.com](mailto:support@1010music.com) if you have any trouble with registering.
3. Once you are logged in to the forum, scroll to the Product Downloads section, and then go to the Bluebox Firmware Downloads section to look for the latest firmware. Download the file to your computer. Unzip the contents of the file. Some computers will unzip it automatically when you download it.
4. Put the bluebox microSD card in your computer and place the new copy of BLUEBOX.BIN in the root folder. Make sure you allow it to overwrite the old file with the new file, and make sure it is named BLUEBOX.BIN. You can use a microSD to SD adapter, or a microSD to USB adapter to put the microSD card in your computer.
5. Unplug your bluebox and put the microSD card back in. Hold down the A button while plugging it back in. Release the A button when you see "Bluebox Installer" on the screen. Bluebox will display status updates as it completes the reprogramming. It will finally display a success message and then restart with the firmware update.

## COMMON TASKS

The earlier parts of this document focused on how to use the different bluebox Control Modes. Here we will cover some of the same information from the perspective of how to do some common tasks. We will describe one quick way to do each task, but there may be other ways to do it as well.

### How to Balance Levels for the Main Mix:

1. Push MIXER. If you don't see Vol in the control options at the bottom of the screen, push MIXER again.
2. Start your external gear to send signals to your inputs.
3. Touch Gain.
4. Touch and drag a meter for a track to adjust the gain for that track. Do this for all the tracks until they are all even.
5. Touch Vol.
6. Touch and drag a meter for a track to adjust the volume for that track. Do this for all the tracks until you get the mix you want.



**MIXER Mode -  
Volume Control**

### How to Mute a Track:

1. Push MIXER. If you don't see Mute in the control options at the bottom of the screen, push MIXER again.
2. Touch Mute in the control options at the bottom of the screen.
3. Touch the track in the meter bridge that you want to mute. The header text for the track will turn gray. Touch the track again to stop muting it.

### How to Mute an Output:

1. Push MAIN.
2. Touch the MUTE button on the screen under the heading for the output you want to mute. The MUTE button is blue when the mute is engaged. Touch the button again to stop muting.



**MAIN Mode**

How to Adjust a Track's Sends to Out 2 and CUE/Phones:

1. Push TRACK.
2. Touch the meter for the track you want to control.
3. Push the A button until the pink knob focus ring is around the right control panel.
4. Turn the bottom left knob to adjust the send to CUE/Phones.
5. Turn the bottom right knob to adjust the send to Out 2.
6. You can also touch and drag one of the on screen knobs to adjust its value. Move your finger up and down or left and right to change the setting.

**TRACK Mode**How to Adjust a Track's Sends to FX1 and FX2:

1. Push TRACK.
2. Touch the meter for the track you want to control.
3. Push the A button until the pink knob focus ring is around the right control panel.
4. Turn the top left knob to adjust the send to FX1, which is the delay.
5. Turn the top right knob to adjust the send to FX2, which is the reverb.
6. You can also touch and drag one of the on screen knobs to adjust its value. Move your finger up and down or left and right to change the setting.

How to Use Headphones to Monitor the Main Output:

1. Plug your headphones into the Phones jack.
2. Push Main.
3. Push the B button.
4. Select the CUE Source parameter by touching it. Turn a bottom knob to change the value to Main. The signal coming out of the Phones jack will now use the same mix as the Main output. You can still adjust the CUE volume independently in Main mode.
5. If you want to go back to hearing a custom mix to the headphones, set the CUE Source to Custom, and then adjust the CUE sends for each track.

**MAIN Configuration Screen**

## How to Send a Dry Track Signal to an External Device for Processing:

1. Connect Out 2 of bluebox to the device that will receive the dry signal.
2. Optionally, you can connect the output of the external processing device into one of the bluebox inputs to use it as an additional track.
3. Push Track.
4. Touch the meter for the track you want to control.
5. Tap the OUT 2 knob in the on screen control panel to set the knob focus to include this control.
6. Turn the bottom right knob to adjust send for this track to Out 2.
7. Repeat steps 4, 5, and 6 for additional tracks as needed.



## LEARN MORE

Check the bluebox support page on our website for updated user manuals and links to videos:

**Bluebox Support page:** [1010music.com/blueboxdocs](http://1010music.com/blueboxdocs)

Look for how-to videos that show the bluebox in action on the 1010music YouTube page:

 [youtube.com/c/1010music/playlists](https://youtube.com/c/1010music/playlists)

## STAY IN TOUCH

Share information with other users and our support team on our forum, website and social media pages:

**Forum:** [forum.1010music.com](http://forum.1010music.com)

**Website:** [1010music.com](http://1010music.com)

 [facebook.com/1010musicllc](https://facebook.com/1010musicllc)

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