

 SINGULAR SOUND

# BEATBUDDY 2



# Manual

# Welcome

## BeatBuddy 2 Manual

REACH US!

**support@singularsound.com**

We love to help! :-)

In order to benefit from all the latest features, it is necessary to have the most recent firmware version installed.

To check the firmware version on your BeatBuddy 2, press the Drum Set and Tempo knobs down at the same time and select 'About BeatBuddy'. The firmware version appears on the second line, and as of the writing of this manual, it is **1.0.0**

We periodically release new firmware updates, so please check the link below to verify that you have the latest version.

### **Don't have the latest firmware?**

Find it here: <https://www.singularsound.com/pages/support>

For the complete changelog of firmware improvements, see the end of this manual.

### **Important note about SD card compatibility**

The SD card must be a standard size (i.e. **mini SD cards are not supported**) and needs to be between 4 and 32 GB in capacity. Class 10 is recommended.

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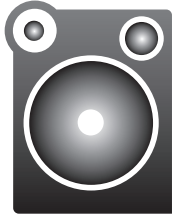
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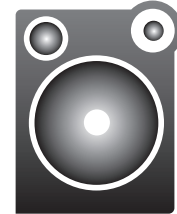
# Quickstart Guide

This section is the **Quick Start Guide**.

If you need more detailed information, please read on for the full manual



## Sound Quality



**The BeatBuddy sounds best when played through a full-range, neutral stereo sound system.**

Many guitar and bass amps are either not full range (they don't emit all high and low frequencies evenly) and/or add distortion, lowering the quality of the BeatBuddy 2's sound. Acoustic guitar amps, PA systems, and home stereos tend to be neutral and full-range. If you're unsure about your sound system, listen to the BeatBuddy with high-quality headphones to hear what it should sound like.

Tip: Plug BeatBuddy 2's headphone port into your home stereo or your amp's aux-in jack, if available. Using the aux in on a guitar amp will have the same drawbacks as the main input.



# Quickstart Guide

## Inputs and Outputs (I/O)



- |  |                                      |
|--|--------------------------------------|
| 1. Multiswitch 1*                          | 8. Power Button                      |
| 2. Multiswitch 2*                          | 9. SD card slot (push in to eject)   |
| 3. Right Input                             | 10. Power jack (9v, Center Negative) |
| 4. Left Input                              | 11. MIDI In port                     |
| 5. Left Output                             | 12. MIDI Out port                    |
| 6. Right Output                            |                                      |
| 7. Headphones 1/4" Jack (Adapter Included) |                                      |

\* The BeatBuddy 2 has two Multiswitch ports, which support Footswitch +, Expression Pedal, and SuperSwitch accessories. You must set the type of accessory being used in the Multiswitch setting. Access settings by pressing the drum set and tempo knobs down at the same time.

Read more about plugging in on [pg. 23](#)

# Quickstart Guide

## Quick Setup Tips

The input jacks on the BeatBuddy 2 are there if you want to put both the BeatBuddy 2's and your instrument's sounds into the same sound system without needing a mixer. Use the BeatBuddy 2's Volume knob to either control the main volume (level of the drums versus the input signal coming out of the Main L/R out port) or the headphone volume (controls both the input level volume and the drum volume). The BeatBuddy 2 does not change your instrument's sound.

**SIGNAL** ←

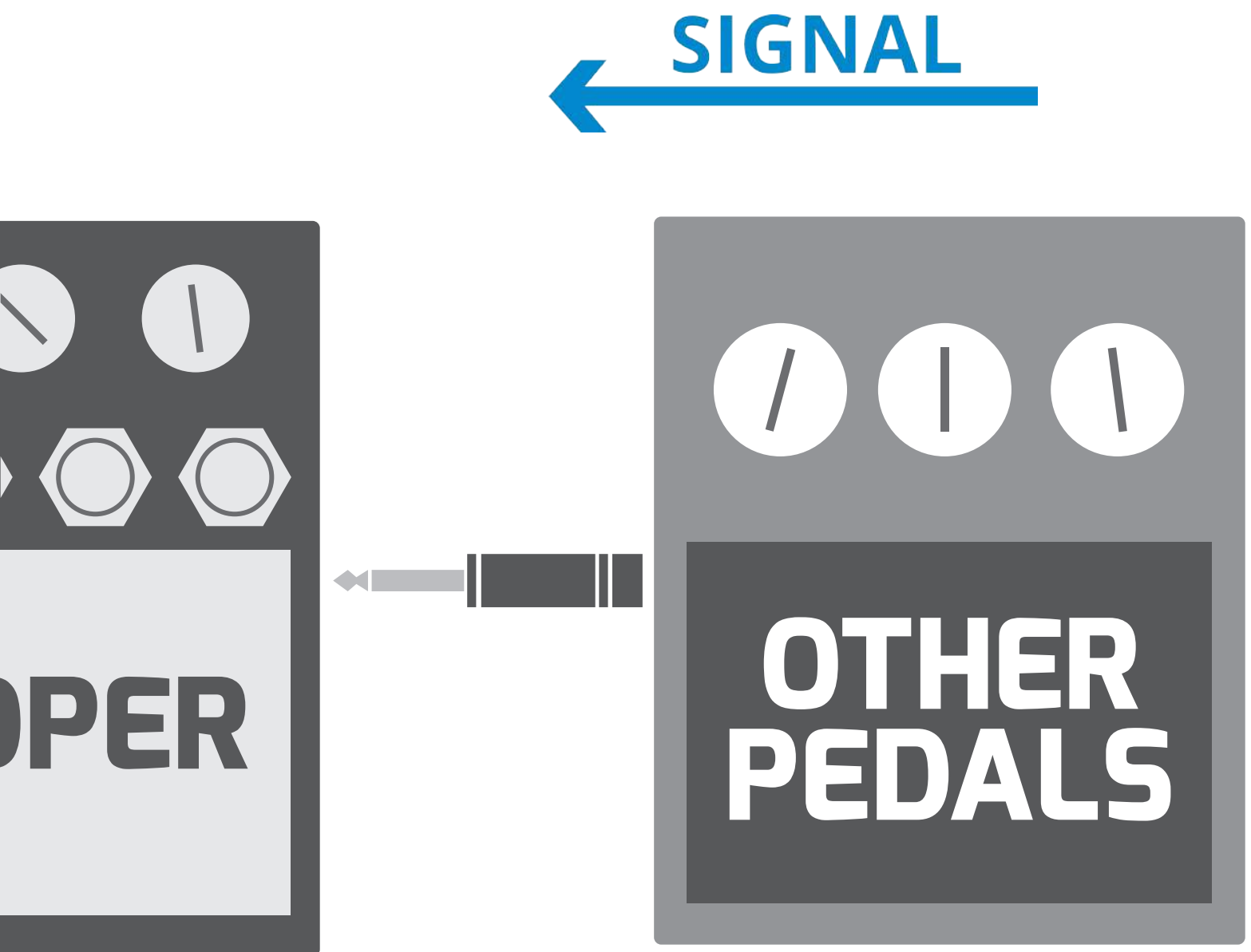


# Quickstart Guide

## Quick Setup Tips

If you are plugging other pedals into the BeatBuddy 2, the BeatBuddy 2 should be **last** on the pedal effects chain. This is so that the BeatBuddy 2's sound isn't affected by your other pedals.

You **DO NOT** need to have an instrument plugged into the BeatBuddy 2 for it to produce sound.



# Quickstart Guide

## Actions of the BeatBuddy 2

**First tap:** Start beat without intro/count in

**Tap once:** Pause/Unpause



### Master Control (default)

**First tap:** Start beat (with optional intro fill)

**Tap once:** Insert fill (different fill each time)

**Hold down:** Begin transition

**Release hold:** End transition, advance to next song part

**Double tap:** End song (with optional outro fill)

Default pedal functions for each button can be changed in the Settings menu  
(Press the Drum Set and Tempo knobs at the same time).

# Quickstart Guide

## Actions of the Footswitch+

**While Playing/Paused:** Next Part

**While Stopped:** Press to open the next song in the folder. On the player screen, *hold* to enter Folders screen. In the Folders screen, *hold* to enter a folder, or *tap* to scroll down. In a folder, *hold* to exit, or *tap* to scroll down.



**While Playing/Paused:** Plays accent hit

**While Stopped:** Press to play the accent hit. In the Folders screen, *hold* to enter a folder, or *tap* to scroll up. In a folder, *hold* to exit, or *tap* to scroll down.

*Note: Holding on the player screen to enter the Folders screen will not work when the button is set to an action that happens on press (such as Accent Hit, Next Part, Previous Part, or Tap Tempo).*

Default footswitch functions can be changed in the Settings (Press the Drum Set and Tempo knobs at the same time).

# Quickstart Guide

## Actions of the SuperSwitch



The **Singular Sound SuperSwitch** was designed to be whisper quiet and withstand the heavy use of a BeatBuddy 2 performance, with ergonomic buttons that are comfortable even for barefoot players.

Set your Multiswitch port to SuperSwitch by opening the settings (press Tempo and Drum Set knobs at the same time) and going to Multiswitch Ports > Multiswitch 1 or 2 . Read more about the SuperSwitch on [pg. 46](#)

*The SuperSwitch button defaults are:*

### **Switch 1**

While Playing - Accent Hit  
While Paused - Accent Hit  
While Stopped - Accent Hit

### **Switch 2**

While Playing - Previous Part  
While Paused - Previous Part  
While Stopped - Previous Part

### **Switch 3**

While Playing - Next Part  
While Paused - Next Part  
While Stopped - Next Part

### **Switch 4**

While Playing - Half Time  
Paused - Half Time  
Stopped - Song Advance

### **Switch 5**

While Playing - Double Time  
While Paused - Double Time  
While Stopped - Tap Tempo

### **Switch 6**

While Playing - Outro  
While Paused - Instant Stop  
While Stopped - Open Song List



# Quickstart Guide

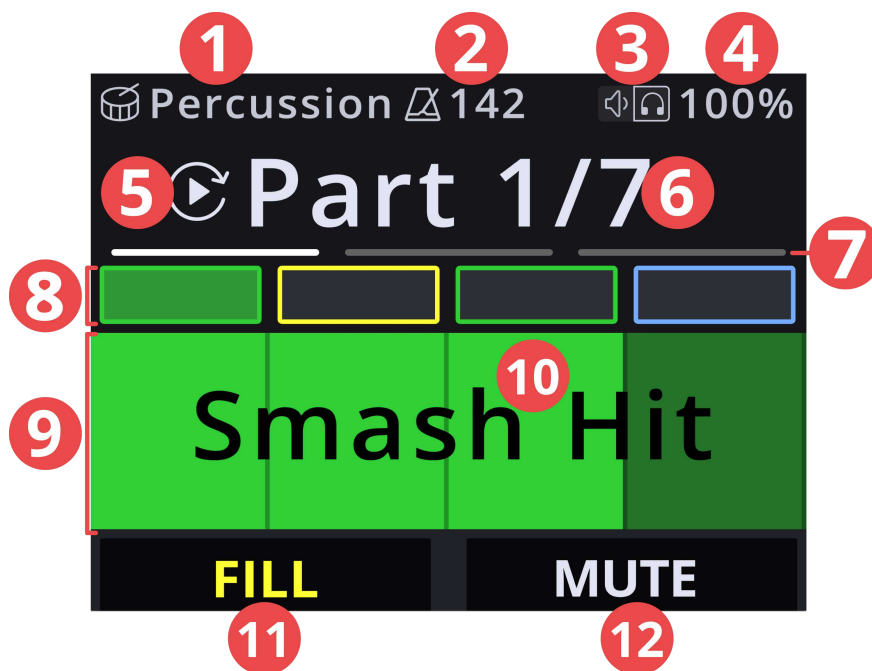
## Your BeatBuddy 2



- a. **Drum Set knob:** Changes the drum set (sounds) being played by the beat. Rotate to scroll, press to select. Press and hold to save as the default drum set for the current song.
- b. **Tempo knob:** Changes the tempo (speed) of the beat, measured by BPM (Beats Per Minute). Rotate to increase or decrease the tempo. Press and hold to save the current tempo as the default tempo for the current song.
- c. **Volume knob:** Adjusts the currently selected volume (Main/Headphones). Click the knob to switch between the selections. The main volume does not affect the sound level of any instrument that is plugged into the BeatBuddy 2.
- d. **Multi-directional Pad:** Scroll up and down in the Content Menu, going right selects folder/song, going left exits. In the settings menu, the right button can highlight the gear menu and info icons. Press the Tap button to display the info for that setting or while highlighting the gear icon to modify the settings in the gear menu. Read about the gear menu on [pg. 70](#).
- e. **Tap button:** Enters Tap Tempo mode; press the button or master control to the tempo of a song to calculate the tempo; tap in the settings to select the highlighted option or enter the next settings page; tap on a song or drum set to select that song or drum set; tap on a folder to enter that folder.
- f. **BeatBuddy Left Pedal:** Set as the Master Control (by default), can be set to any footswitch function in the settings (read more about settings on [pg. 73](#)).
- g. **BeatBuddy Right Pedal:** By default pauses when tapped while playing, while paused it unpauses, and while stopped it starts the song immediately with no intro or count in (read more about settings on [pg. 73](#)).

# Quickstart Guide

## Your BeatBuddy 2



1. Current Drum Set
2. Tempo (BPM)
3. Main/Headphone Volume selector - Tap the volume knob to switch between the currently selected volume type
4. Volume % of current selection
5. Autopilot indicator: Current song has autopilot active (song changes will happen automatically). Read more in the Autopilot section on [pg. 59](#).
6. Part Count - Shows the current part out of the total parts
7. Page Counter - Shows the current “page” of measures you are on to show song progress. Read more in the Beat, Measure, and Page counter section on [pg. 33](#).
8. Measure counter - Shows up to 8 measures on screen at a time, the measure colors will correspond to any Autopilot settings for the measures. Read more in the Autopilot section on [pg. 59](#).
9. Beat Counter (visual metronome - Shows where the beat is in the measure
10. Song Name
11. Left pedal tap behavior
12. Right pedal tap behavior



# Quickstart Guide

## SD Card

All of the BeatBuddy 2's content (beats, drum sets, settings) are stored on the SD card. The SD card must be properly inserted into the BeatBuddy 2 for it to work.

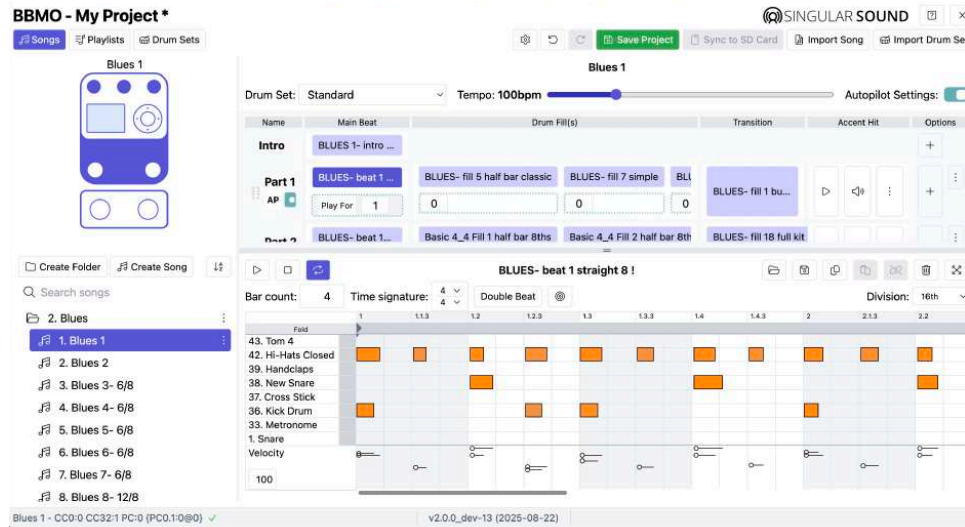


If you lose your SD card, you can download the default BeatBuddy 2 content to put on a new SD card at: [singularsound.com/support](https://singularsound.com/support)

# Quickstart Guide

## BeatBuddy Manager Online (BBMO)

[bbmo.singularsound.com/](https://bbmo.singularsound.com/)



The BeatBuddy Manager Online web app enables you to **edit and organize** your BeatBuddy content, **load content** that you have downloaded from the BeatBuddy 2's Beat Boutique Library or any content from the user forum, and **create your own** songs and drum sets. You **do not** have to download the application, it is free to use online. Supported on Google Chrome, Microsoft Edge, Opera, and Vivaldi browsers.

Read more on [pg. 52](#).

# Quickstart Guide

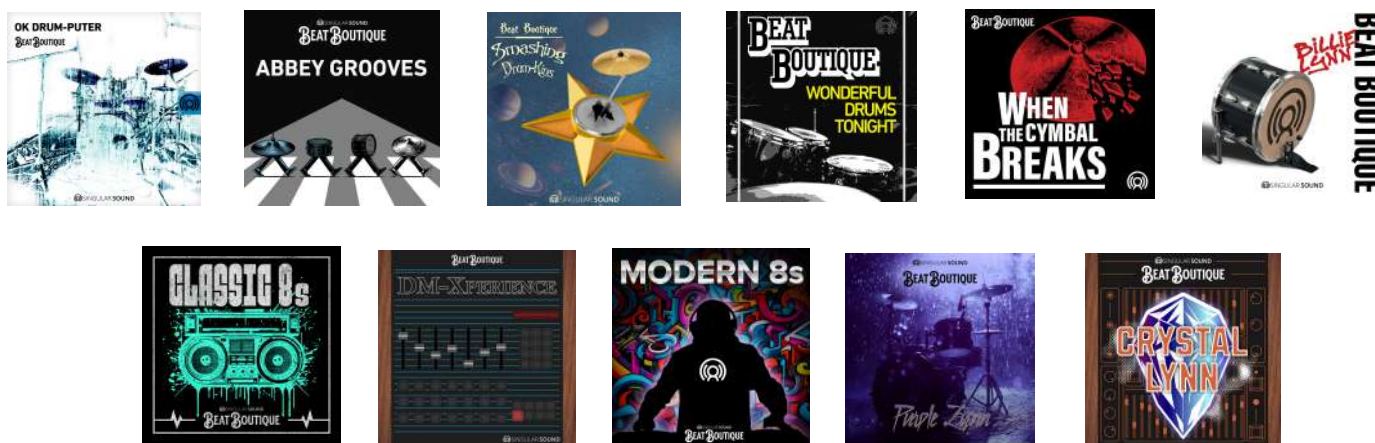
## The Beat Boutique

Shop for Singular Sound's expansive library of drum sets and songs meticulously curated for the BeatBuddy at:  
**[singularsound.com/beat-boutique](https://singularsound.com/beat-boutique)**

### HD Drum Sets



### Beats



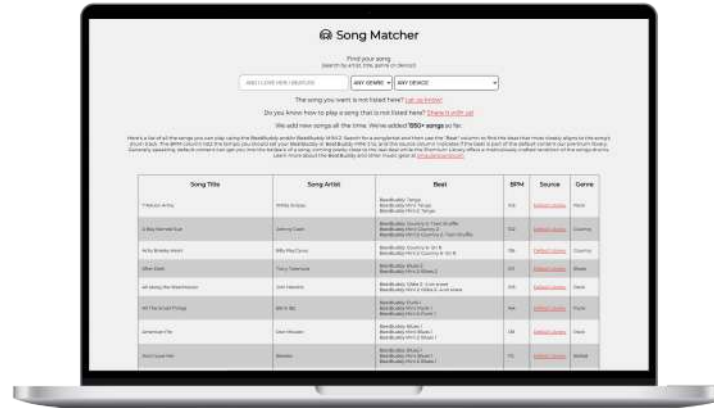
Validate your warranty and take **\$10 off** any item in the  
**Beat Boutique Library!**

Just register your BeatBuddy within 30 days of purchase at:  
**<https://www.singularsound.com/pages/warranty>**

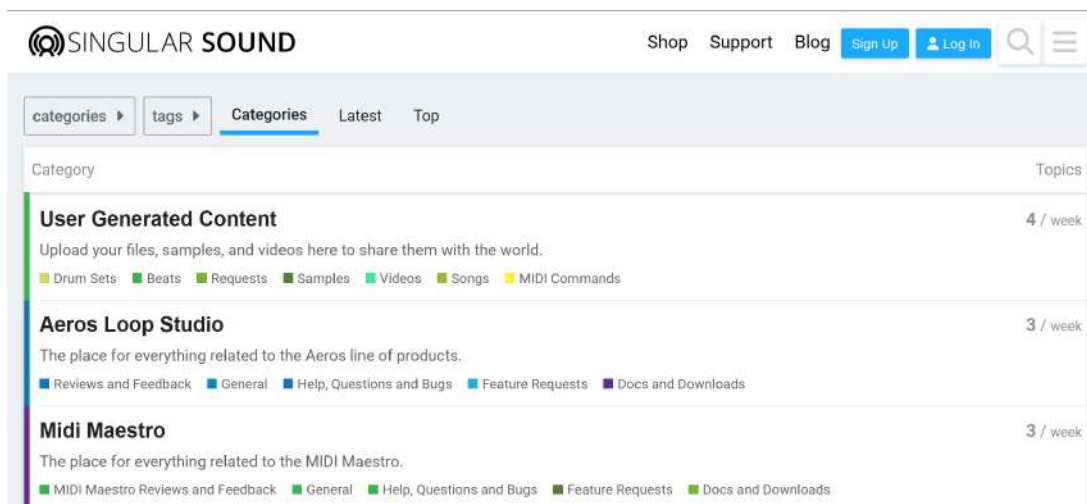
# Quickstart Guide

## Song Matcher

Not sure which beat to use for your favorite songs?



Check out  
[songmatcher.singularsound.com](https://songmatcher.singularsound.com)  
For our song-matching tools



**Share** the content you create, **Discover** user-generated content, & **Discuss** ways to use the BeatBuddy 2 on our community forum:

[singularsound.com/forum](https://singularsound.com/forum)

# Quickstart Guide

## BeatBuddy Plugin



Use all your favorite BeatBuddy sounds straight in your DAW, featuring a Mixer for more granular control of your drum set, and fully compatible with ***any BeatBuddy drum file.***

Easily create content to use on your BeatBuddy within your DAW, the plugin uses the same award winning algorithm as the BeatBuddy. No more guessing velocities, use the same sounds!

Learn more at:  
[singularsound.com/beatbuddy-plugin](https://singularsound.com/beatbuddy-plugin)

# Quickstart Guide

**We're here for you** 

**[support@singularsound.com](mailto:support@singularsound.com)**

**[singularsound.com/contact](https://singularsound.com/contact)**

**Please note:** If your BeatBuddy 2 starts acting strange, try unplugging the power for a minute then plugging it back in. If that doesn't work, please contact us. We love to help!

## Warranty

Your BeatBuddy 2 comes with a 2-year limited warranty on parts and workmanship from the date of purchase. During this period we will repair or replace (at our option) defective units free of charge.

The warranty remains valid only if the serial number on the unit is not defaced or removed. It does not cover damage due to misuse, unauthorized tampering, accident or neglect.

Congratulations! You've reached the end of the Quick Start Guide. Read on for the full Manual.

# Introduction

*Congratulations and thank you for purchasing your BeatBuddy 2!*

## What it does

The BeatBuddy 2 is the sequel to the world's first pedal drum machine that enables musicians to easily control the beat hands-free. Just by pressing a button, you can start a beat, insert fills, transition from verse to chorus, throw in drum breaks (pauses), trigger accent hits (such as hand claps or cymbal crashes) and more! It is the closest thing to having a real drummer. And it won't drink all of your beer! In fact we have a **Sobriety setting** so you can control how drunk your BeatBuddy 2 gets, no beer required! (for real)

## BeatBuddy Content

The BeatBuddy 2 has two main types of content:

- Songs
- Drum Sets

**Songs** are a collection of MIDI files organized into song sections. MIDI files are like the musical notes on a piece of sheet music, which tell the musician what to play on an instrument. Songs may also have a .wav file that is played as the "accent hit" for each part, the accent hit can be triggered by any button on your BeatBuddy, the Footswitch +, or the SuperSwitch.

**Drum sets** on the BeatBuddy 2 are .wav files (which are recordings of the actual drum sounds) organized into drum set instruments, like a Kick or a Snare. Learn more about drum set files and editing them on pg. 57.

The MIDI files in Songs trigger the .wav files in the Drum Sets. This is how the BeatBuddy 2 is able to play any beat, any time signature, using any drum set at different tempo settings to get a completely different sound.

Whenever possible, the BeatBuddy 2's drum sets and beats were set up referring to the General MIDI Drum Map, so that most beats work with most drum sets.

Please note that not all beats and drum sets sound good together -- it may sound strange to play jazz beats on a heavy metal drum set -- or it may sound cool! You decide.

**Please Note:** There is **one typical exception**, and that is the **Latin genre/drum set**. The Latin genre is exclusively compatible with the Latin drum set. We occasionally have some Beat Boutique content that also is mapped to match General MIDI Latin drum set and those songs are preset to use the Latin drum set as default.

# Introduction

## Content Organization

The BeatBuddy 2's beats are organized into 'songs', each comprising 'song parts' (such as verse or a chorus).

Each song part has:

- A main beat loop - a song part must have a main beat to function, think of this as the main repeating groove or phrase of that song part
- Optional fills - Tap the master control while playing to hear a fill
- Optional transition fills - Press and hold the Master Control (left main footswitch by default) to hear the transition and switch to the next part. If there is no transition fill, the main beat will play as you transition to the next part.
- An optional accent hit

All of these actions can be triggered via footswitch or MIDI, read more about MIDI on [pg. 99](#).

Songs can also have an optional intro and/or outro fill which are separate from the song parts.

When transitioning between song parts, the song parts are played in order until the last song part is played, and then it goes back to the first song part. For example, if there are 3 song parts, it will play part 1, 2, 3 and then back to 1. If you wish to play song parts out of order, you will need to use a MIDI controller such as the [MIDI Maestro](#), or assign the action of changing to a specific part to the buttons on your [Footswitch+](#) or [SuperSwitch](#).

All beats and drum sets are stored on the SD card. If you lose your SD card, you can [download the content that came with your BeatBuddy 2](#) for free and place it on a new SD card.



# Introduction

## Filetypes

There are multiple files worth knowing about on the BeatBuddy:

**.BBS** - The internal filenaming for songs on the BeatBuddy, you will see these files on the SD and in your BeatBuddy 2 project's master folder

**.SNG** - A BeatBuddy song file exported from the BBM Legacy or [BeatBuddy Manager Online](#) (read more on [pg. 52.](#)). You must use the BeatBuddy Manager Online to load songs onto your BeatBuddy

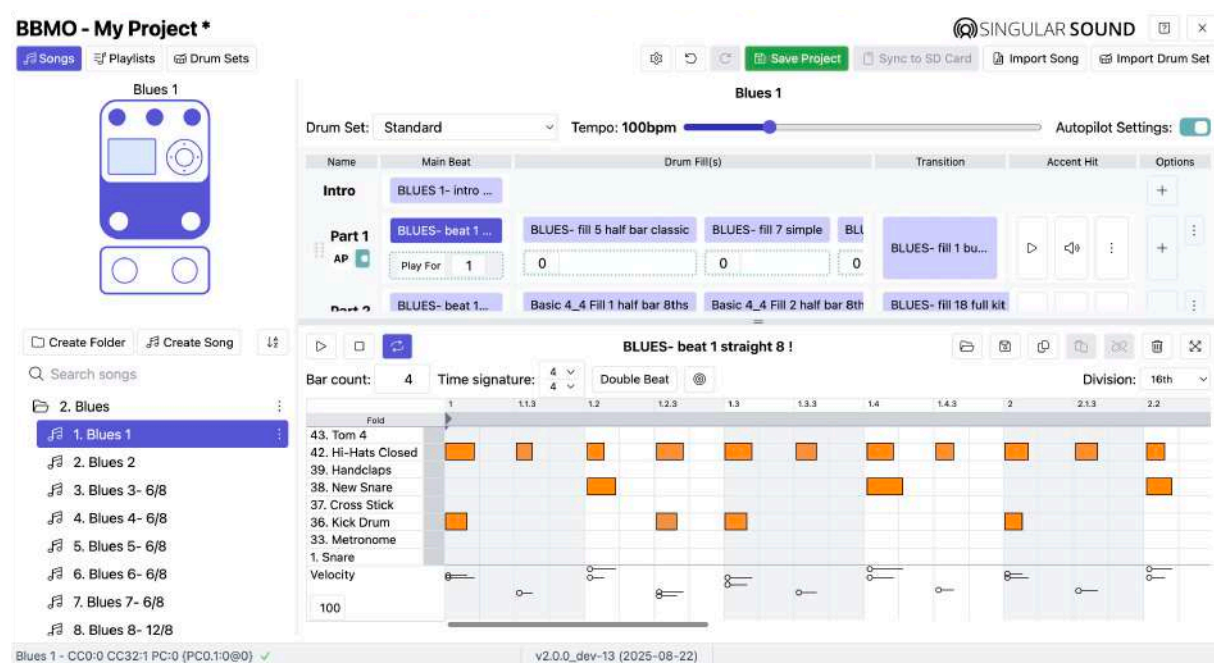
**.PBF** - An exported BeatBuddy Folder file, this folder file contains all of the .SNG files in order, great for quick sharing and importing of multiple sng files

**.DRM** - A BeatBuddy drum file, it has a max capacity of 100MB and also is compatible with the original BeatBuddy

**.DRMX** - An HD drum file that is only compatible with the BeatBuddy 2, it has a max capacity of 450MB. Read more about HD drum sets on [pg. 67.](#)

**.PBDF** - An exported BeatBuddy Drum Folder file, this folder file contains all of the .DRM or .DRMX files in order, great for organizing, or quick sharing and importing of multiple drum files

**.BBP** - The BeatBuddy Project file on your SD card, and also found in the project folder you edit when using the [BeatBuddy Manager Online](#)



# Introduction

## What the BeatBuddy 2 is Not

The BeatBuddy 2 can do a lot of things, let's clarify the things it can't do

### **The BeatBuddy 2 is not a traditional drum machine:**

Drum machines have traditionally been used to create looping beats on the drum machine itself. The BeatBuddy 2 is a performance tool, and cannot be used to create beats on the device itself. The BeatBuddy 2 uses BeatBuddy song files to tell it what to play. However, the BeatBuddy 2 can be used as a drum brain, meaning it can play beats from a separate drum machine using MIDI (read more about MIDI notes on [pg. 87.](#)).

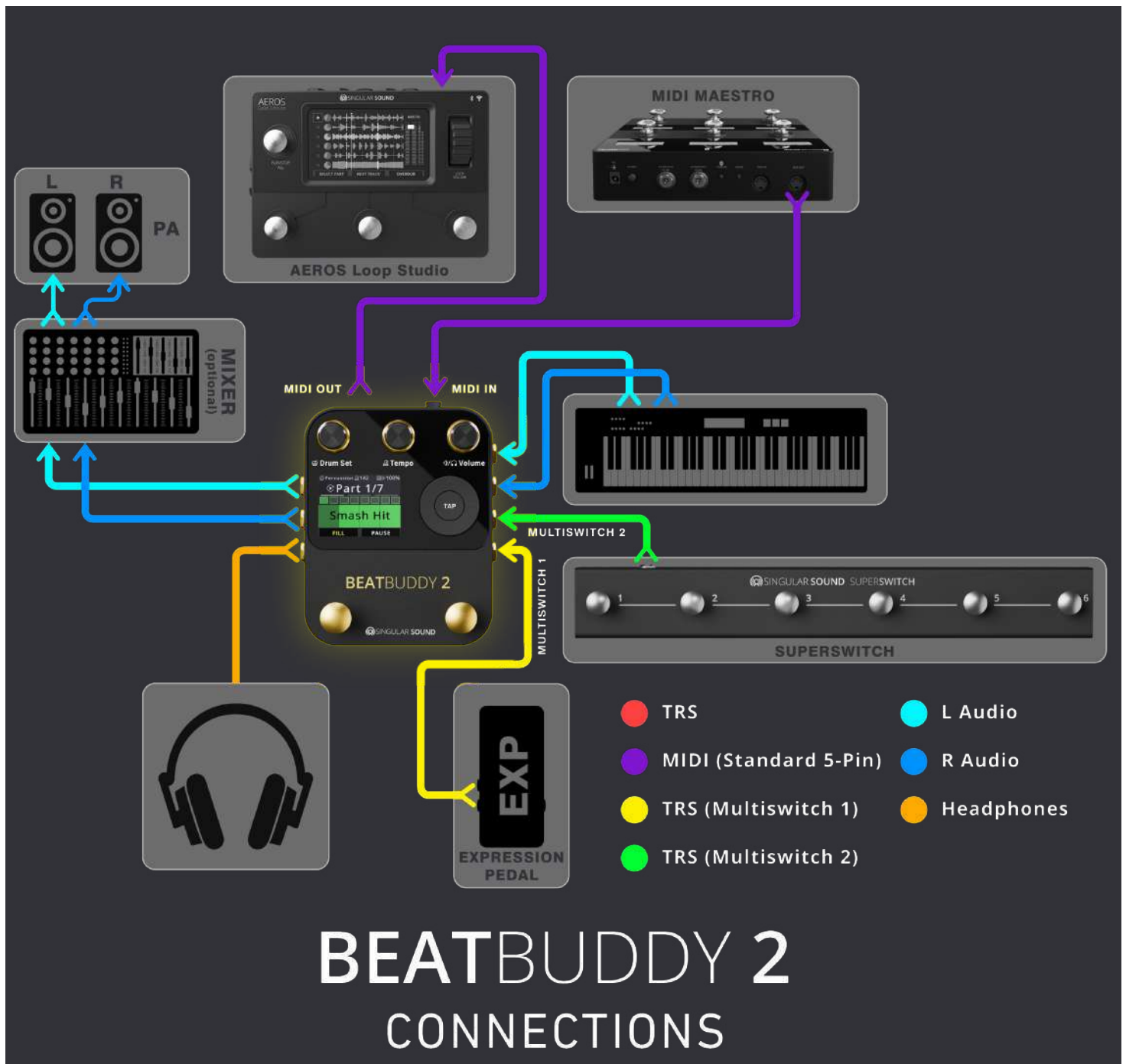
New beats (loaded as BeatBuddy songs) can be created on the [BeatBuddy Manager Online](#) or using any of the many beat creation software programs available (Tools and DAWs such as Guitar Pro, Cubase, Pro Tools, GarageBand, Ableton, EZ Drummer, etc). As long as the software can export MIDI files you can use the [BeatBuddy Manager Online](#) to load that content onto the BeatBuddy 2 (the BBMO is available for FREE at [bbmo.singularsound.com](http://bbmo.singularsound.com)).

### **The BeatBuddy 2 is not an effect pedal:**

Unlike effects pedals, the BeatBuddy 2 is not intended to modify your instrument's sound. It has input jacks only in case you want to put both the BeatBuddy 2 and your instrument into the same sound system without the need for a mixer. **The beats are not changed by your instrument's sound, and your instrument's sound is not changed by the BeatBuddy 2.** No instrument needs to be plugged into the BeatBuddy 2 for it to work normally, so the BeatBuddy 2 can be a stand-alone tool used by any musician.

# How to Plug in

Read this section to learn all the ways to plug in your BeatBuddy



# How to Plug in

## Power

The BeatBuddy 2 uses a 9V 500mA center-negative power supply.

**If you use a power supply of more than 9V or plug it directly into AC power you will destroy your BeatBuddy 2**, and your warranty will NOT be valid! This would be painful for everyone - especially your BeatBuddy 2. **Do not do this!**

The power supply must have a minimum of 300mA (0.3 Amps) for the BeatBuddy 2 to turn on. More amps won't harm your BeatBuddy 2. If you use a center-positive adapter, it won't harm your BeatBuddy 2 either, but your BeatBuddy 2 won't turn on.

### Using your pedal board's power supply

If you would like to use your pedal board's 'octopus' power supply (a single power supply that powers all of your pedals), make sure it is 9V and center negative (most are) BEFORE plugging it in! To calculate if your pedal board's power supply has enough Amps to power the BeatBuddy 2, add up all of the Amps that your other pedals require (usually written on the bottom of the pedal [1000 mA(milliAmps) = 1.0 A (Amps)]) and add 0.3 amps for the BeatBuddy 2's requirement.

If this total is more amps than your power supply can produce (for example, the total of all of your pedals plus the BeatBuddy 2 is 2.5 amps but your power supply can only produce 2.0 amps), then the BeatBuddy 2 won't turn on (neither will any of your other pedals), because there isn't enough power available.

PLEASE NOTE: Plugging the BeatBuddy 2 (a digital pedal) into the same power supply as analog pedals (most effect pedals) or another digital pedal (like the Aeros) can cause noise interference in the sound. If you experience this, please use a separate power supply for the BeatBuddy 2.

*Tip:* It's better to get a power brick that has isolated PSUs and has enough power to distribute for all of your pedals.

# How to Plug in

## SD Card

Compatibility: All SD cards 4-32 GB in capacity (outside that range will not work). Class 10 is recommended. Micro-SD cards **do not work**, even if you use an SD adapter.

All of the BeatBuddy 2's content (songs/beats and drum sets) are stored on the SD card. The SD card must be properly inserted into the BeatBuddy 2 for it to work.



The BeatBuddy 2 SD card comes loaded with 13 drum sets and 200+ generic songs in many different styles. In the BeatBuddy 2's official content, 3 of the included drum sets are HD drum sets and 7 of the songs included are Autopilot versions of songs by popular artists, find more songs for sale on our [website](https://singularsound.com). Learn more about HD drum sets on [pg. 67](#) and about Autopilot on [pg. 59](#).

If you lose your SD card, you can download the default BeatBuddy 2 content to put on a new SD card at [singularsound.com/support](https://singularsound.com/support).

For additional songs and drum sets check out the Beat Boutique Bundles: [singularsound.com/beat-boutique](https://singularsound.com/beat-boutique).



# How to Plug in

## Sound System and Passthrough

The BeatBuddy 2 can be used without an instrument plugged into it - it will still produce sound. The input jacks are there in case you want to put both the BeatBuddy 2 and your instrument signals into the same speaker without the need for a mixer. The BeatBuddy 2 will combine any signal it receives in the input jacks with the signal it produces. The main volume just controls the level of the signal the BeatBuddy 2 produces (the beats), not the signal it receives from the input jacks. The headphones volume adjusts the combination of the input signal and the BeatBuddy 2's signal (the beats). Change the parameter the Volume knob is adjusting (headphones or main volume) by pressing the Volume knob.

The BeatBuddy 2 produces 'line-out' level analog signal, similar to a standard music player or computer headphones jack. You can plug the BeatBuddy 2 into any speaker system that accepts 1/4" (6.35mm) audio jacks.



However, like all audio, the better the sound system it is plugged into, the better the BeatBuddy 2 will sound. The BeatBuddy 2 sounds best when played through a high-quality full-range stereo sound system. A PA system or a home stereo system is ideal, (using a 1/4" to 1/8" adapter or a 1/8" to 1/4" adapter) you can plug the BeatBuddy 2's headphones output into the 1/8" AUX input (sometimes these are also 1/4", but this is less common) on your home stereo or guitar amplifier, if it has one.

**Many electric guitar and bass amps are not full range speakers** (they clip off the higher frequencies), so they muffle the BeatBuddy 2's sound. Acoustic guitar and keyboard amps are full-range. If you're not sure if your amp is full-range, listen to the BeatBuddy 2 on high-quality headphones to compare. If there is a noticeable difference in the audio, then connecting it to a higher quality full-range speaker system will enable you to hear the BeatBuddy 2's full potential. But as always, trust your own ears and do what sounds best to you.



# How to Plug in

**If you have the BeatBuddy 2 plugged into an amp,** any effects on the amp will affect the sound of your BeatBuddy 2 (unless the BeatBuddy 2 is plugged into your amp's AUX jack, then it is fine). So if your amp's distortion is on, the beats will sound distorted. It is highly recommended to have your amp set to a 'clean', neutral tone for the best sound and use effects pedals instead of the amp's effects if you wish to have effects on your instrument sound. If you are using the BeatBuddy 2 with other pedals, it is recommended to place the BeatBuddy 2 after all of the other pedals in the effects chain so that the BeatBuddy 2's sound isn't affected by your other pedals.

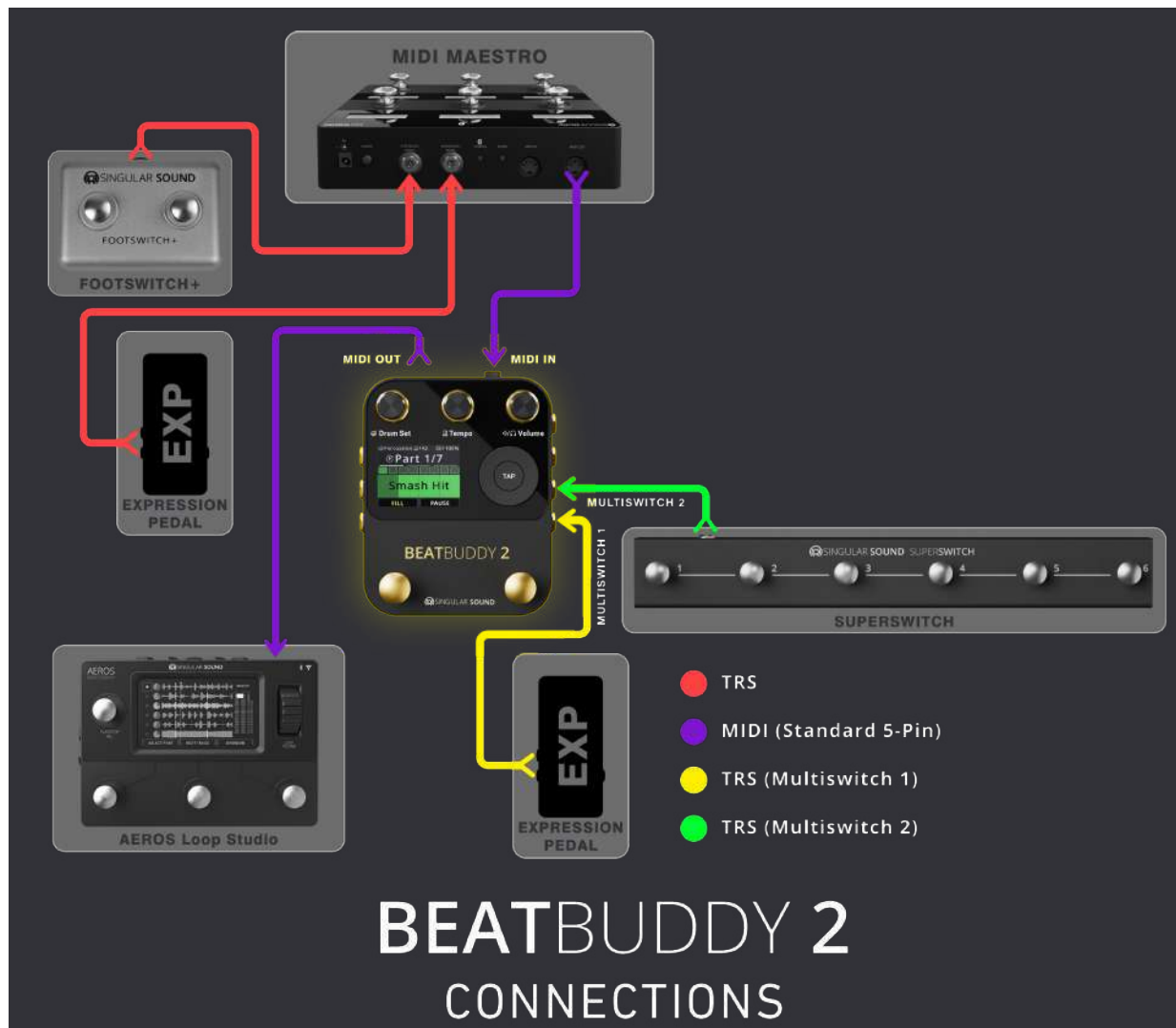


If you prefer using your amp exclusively for your instrument, you may use a separate amp for the BeatBuddy 2. This will also allow you to enjoy the built in effects of your main amp for your guitar without affecting the BeatBuddy 2's drum sounds.

One additional issue that may arise from using the same amp to play your guitar and the BeatBuddy 2's beats is that on some amps, the sound of the bass drum will cause the guitar to tremolo, or waver, a bit to the beat. While some people love this effect -- if you would like to reduce it, lower the Bass (Low) setting on your amp.

# How to Plug in

## Connecting other devices



**A typical configuration using both the IN and the OUT MIDI ports on your BeatBuddy 2 (BeatBuddy 2 set to MIDI Merge see [pg. 93](#) in MIDI Out section) and making use of both Multiswitch ports for ultimate control.**

The BeatBuddy 2 is compatible with other MIDI enabled devices (like the [Aeros Loop Studio](#) and the [MIDI Maestro](#), expression pedals, dual-momentary footswitches (like the [Footswitch+](#), and the brand-new [SuperSwitch](#) from Singular Sound. Dual-momentary footswitches, expression pedals and the SuperSwitch require a ¼" TRS cable to connect to one of the two multiswitch input ports on the right side of the pedal. MIDI devices require a [standard male to male 5-pin MIDI cable](#).



# How to Plug in

## MIDI



**What is MIDI Sync?** It is the transfer of MIDI Clock between two devices allowing them to become synchronized to the same time reference. The BeatBuddy 2 can send and/or receive MIDI Clock, MIDI time signature, PC commands (read about MIDI Song Select on [pg.107](#)), MIDI Start/Stop, and transition (CC:102) messages once connected to another device via MIDI. Read more about MIDI and the BeatBuddy 2 on [pg. 99](#).

In order to connect the BeatBuddy 2 via MIDI, you'll need at least 1 standard male to male 5-pin MIDI cable. If you wish to connect more than 1 MIDI device you will need at least 2 standard 5-pin MIDI cables.

# How to Plug in

## Multiswitch Ports



The BeatBuddy 2 features two multiswitch ports which are compatible with any standard dual momentary or latching footswitch (like the Footswitch +, which is momentary), expression pedals, and the Singular Sound SuperSwitch.

To connect a device to the Multiswitch port you must use a 1/4" Tip-Ring-Sleeve (TRS) cable/patch cable. The BeatBuddy 2 is compatible with standard momentary or latching dual footswitches which have a single TRS (Stereo) 1/4" output. **It is NOT compatible with ABY switches.**

Make sure that the external device is connected to the BeatBuddy 2 with a "stereo" Tip-Ring-Sleeve (TRS) cable and that the cable is plugged in all the way. **You should not use a balanced cable**, it will not work.

If your 1/4" cable has one circle on the metallic portion of the cable, it is NOT a TRS cable, it is a mono TS (Tip-Sleeve) cable (and only one footswitch button will work if this cable is used). TRS cable = two circles on the plug of the cable. See the image below.



**TRS**  
Unbalanced Stereo

# How to Plug in

The multiswitch port behavior is defined in the BeatBuddy 2 settings (read more about the SuperSwitch settings on [pg. 82](#)). Press both the Drum Set and Tempo knobs to open the settings and go to the Multiswitch 1 or Multiswitch 2 settings page.

You must set the multiswitch port to the appropriate setting to allow the external device to behave as expected. By default, Multiswitch 1 is set to Footswitch +, and Multiswitch 2 is set to Expression Pedal. Select and open the gear menu to set the behaviors for an external device (read more about the gear menu on [pg. 70](#)).

## **Footswitch Detector**

If you are not sure if your dual footswitch is momentary or latching (or if you wish to test that your footswitch is working) you can use the footswitch detector.

Press the Drum Set and Tempo knobs down at the same time to enter the Settings menu. Go to Multiswitch 1 or 2 and select Footswitch +. Once selected, highlight and open the gear menu. In the gear menu, select 'Footswitch Detector' and follow the onscreen instructions. (Read more about the gear menu on [pg. 70](#).)

The BeatBuddy 2 will save your settings, so you only have to use the 'Footswitch Detector' again if you use a different footswitch.



# How to use the BB2

Read this section to learn how to get started on your BeatBuddy 2

## File Playback

Remember, there are 2 main files on the BeatBuddy 2: Songs and Drum Sets. You need to have at least one song and at least one drum set loaded onto your SD card to use the BeatBuddy 2. If you need to load the BeatBuddy 2 default content again it can be found here:

[www.singularsound.com/support](http://www.singularsound.com/support)

You can find new songs and drum sets for you BeatBuddy on our website, check out the [Beat Boutique](#) Library for all your BeatBuddy 2 content needs!

On first use, the BeatBuddy 2 will automatically start up loaded to the first song in the first folder of your SD card library.

## Visual Display (Song Progress)

The BeatBuddy 2 has a fresh, new design of the beloved visual metronome seen on the original BeatBuddy, allowing you to accurately follow the beat and measure count, even for song parts that are very long. The colors onscreen help you identify what section you are currently hearing play back.



Intro / Outro



Playing



Transition



Paused



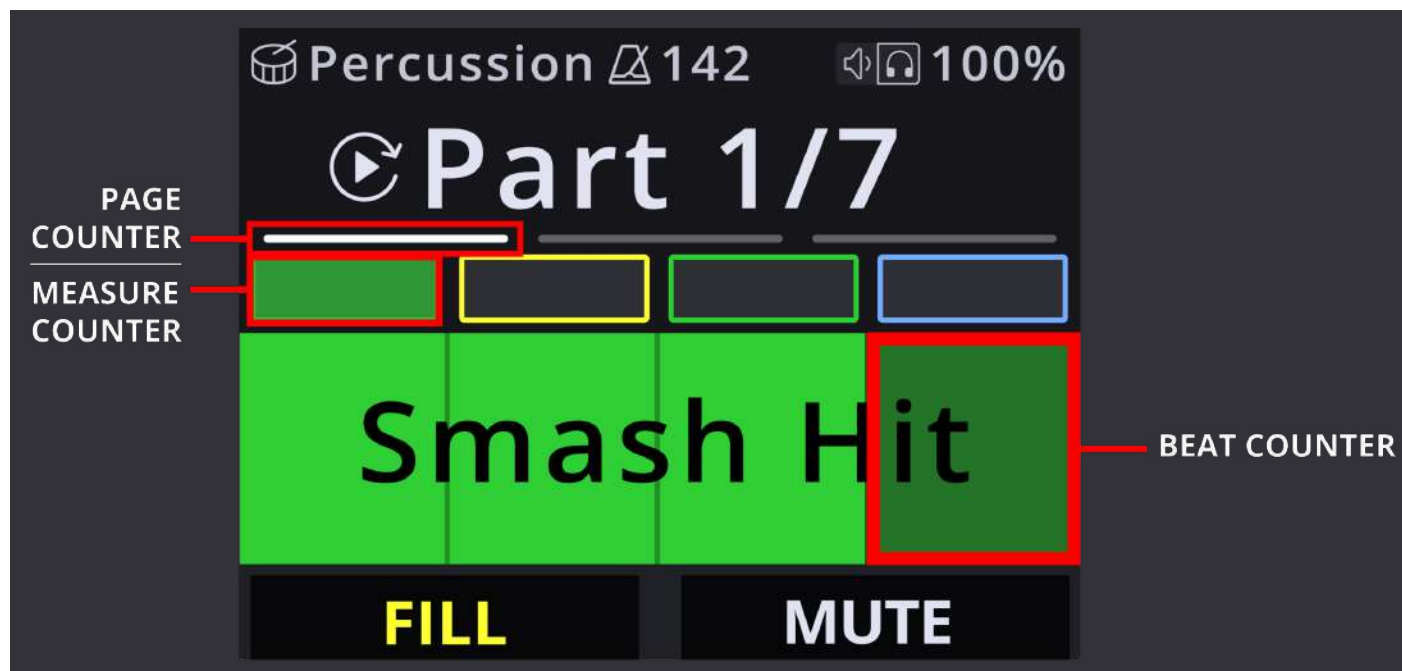
Stopped

# How to use the BB2

## Beat, Measure, and Page counter

There are 3 main components showing the song's progress

1. The beat counter
2. The measure counter
3. The page counter



The **beat counter** shows where the beat is within the measure, the amount of beats in the measure depends on the time signature of the beat. If the time signature is 4/4, there are 4 beats in the measure and so there are 4 rectangles in the beat counter. The current beat will be a darker shade of green and the beats are counted from left to right. If the time signature is in 5/4, the measure counter would have 5 rectangles on screen from left to right.

The **measure counter** tells you what measure you're currently on in a main beat, intro, outro, fill, or transition fill. Measures are counted from left to right, the current measure you're on will be filled in while the other measures will only have an outline. There can only be up to 8 measures onscreen at a time. If there are more than 8 measures in a main beat, then the **page counter** will be visible.

The **page counter** will have the current page highlighted in white, and other pages will be greyed until they are actively shown on screen. This allows you to get a general sense of how much longer a song part will play for. Each page can have a maximum of 8 beats in it.

# How to use the BB2

## Autopilot UI



When autopilot is enabled (see settings on [pg.59](#)) and you're using an autopilot song, the **measure counter** will color code the measures in a part according to their function (read more about autopilot on [pg.59](#)).

Any measure that plays...

- The main beat will show in green
- A fill will show in yellow
- A transition fill will show in blue
- An outro will show in red

This way it's easy to tell at a glance what is coming up in your autopilot song.

### Extra Measures

Sometimes there will be an outro starting on the 9th measure (1 measure after what can be shown on a full page), or a fill will be cued to the next measure when playback is already in the 8th measure of the part.

In these cases, the fill or outro will be shown as a yellow or red bar (respectively) at the far right of the measure counter.



# How to use the BB2

## **Onscreen status feedback**

**The BeatBuddy 2 screen can report the following:**

"STARTING" - The BeatBuddy 2 is starting up

"NO SD CARD" - No SD card is inserted

"UPDATING BEATBUDDY FIRMWARE" - Firmware is being written to the device

"LOADING" - Parsing and loading the content

"EMPTY SD" - the SD card is empty (no song and drum set)

"INVALID SD" - Something went wrong, folder or drum set is missing, try reloading the content to your SD card or contact [support@singularsound.com](mailto:support@singularsound.com) for assistance.

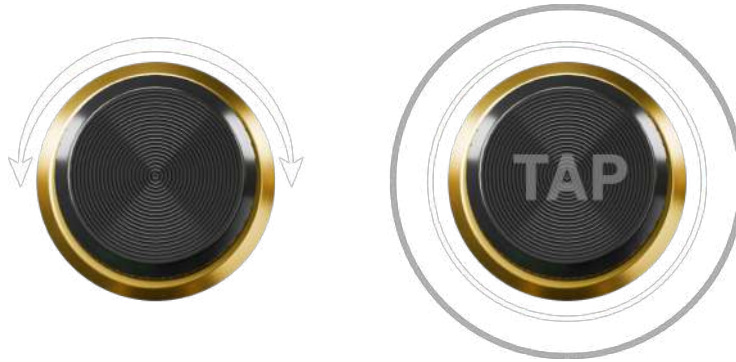
**For videos tutorials on how to use the BeatBuddy 2 [CLICK HERE](#)**

# How to use the BB2

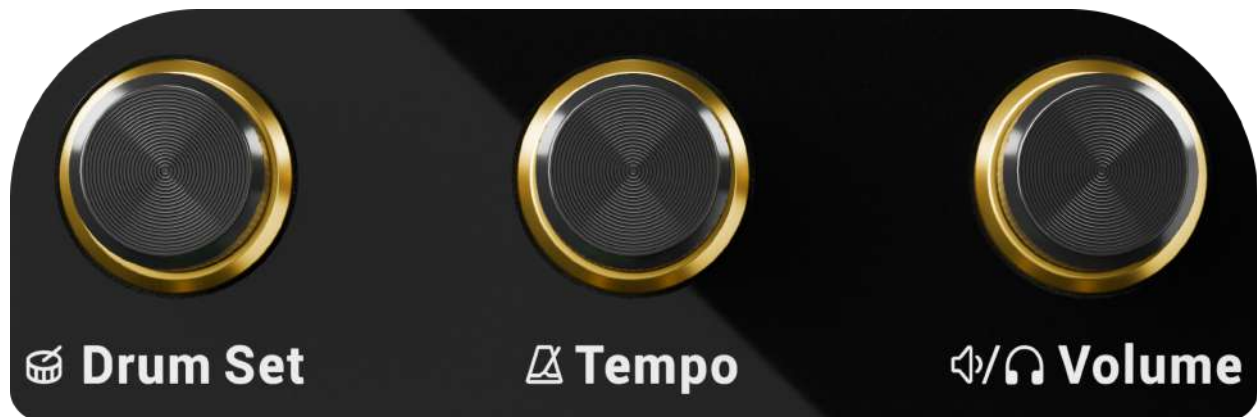
## Control and Navigation Basics

There are many ways to control the BeatBuddy 2, including controls sent from external devices

### The Encoders (Knobs)



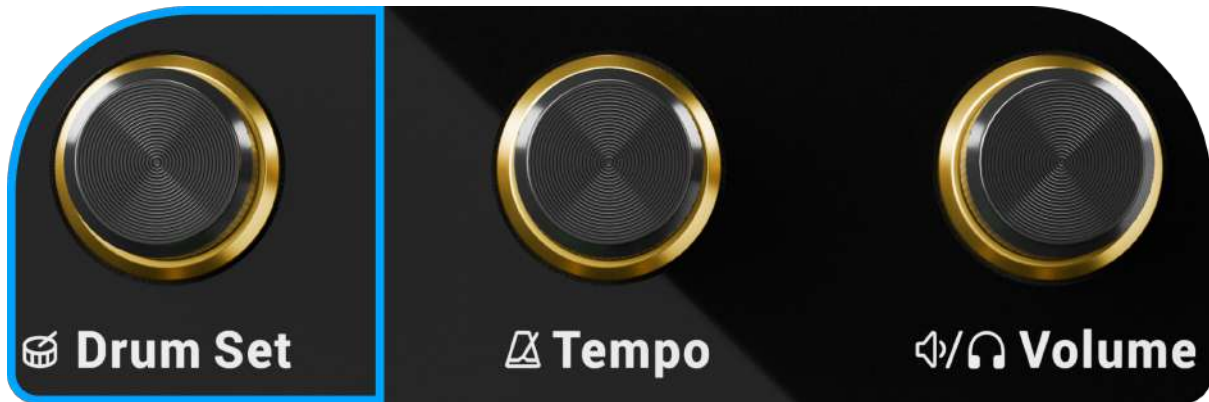
The “knobs” on the BeatBuddy 2 are all encoders. An encoder is a “knob” you can both press or scroll right and left. Read on to learn how to use the encoders, which we will continue to refer to as “knobs”. (Shout out to our British customers who are cackling right about now.)





# How to use the BB2

## Drum Set Knob



The Drum Set knob has different uses depending on what screen you're on

### Player Screen (Drum Set Knob)

If you're in the Player Screen, press or scroll the drum set knob in any direction to see and scroll through the drum set list. Highlight the drum set in the list and press either the Tap button inside the D-Pad or the Drum Set knob to load that kit.



### Default Drum Set

In the Player Screen, you can overwrite and set a new default drum set on the BeatBuddy 2 itself by pressing and holding the Drum Set knob. This will set the current song to always load with the drum set you currently have open.

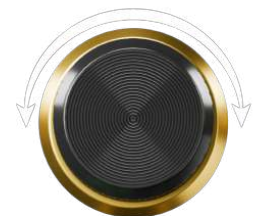
The default drum set is the drum set that is set to load when you open the song, it is set in the [BeatBuddy Manager Online application](#) (read more [pg. 52](#)).

### Settings Screen (Drum Set Knob)

Turning the Drum Set knob to the right while in the Settings Screen will select the info icon or gear icon, click the encoder or the Tap button to open the info or gear menu (learn about the gear menu on [pg. 70](#)).

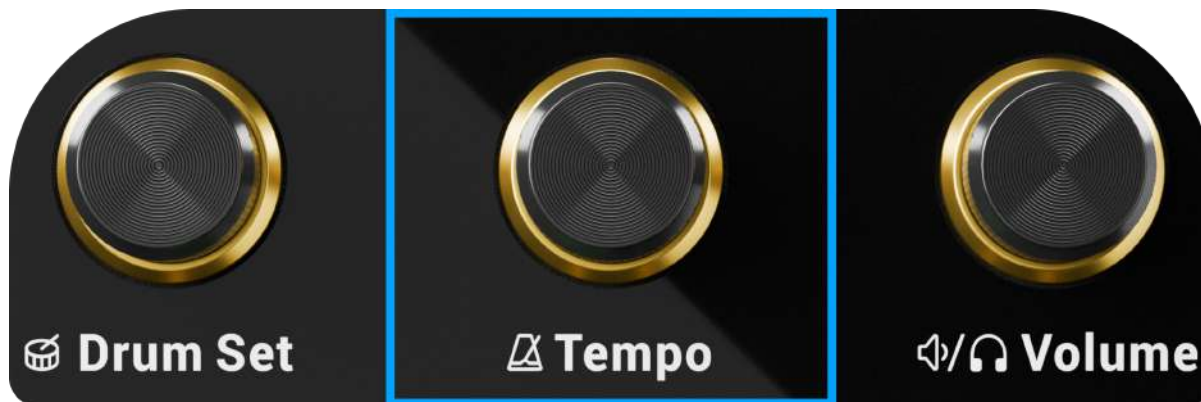


You enter the settings by pressing both the Drum Set knob and Tempo knob at the same time (read about the settings on [pg. 69](#).)



# How to use the BB2

## Tempo Knob



The Tempo knob has different uses depending on what screen

### you're on **Player Screen (Tempo Knob)**

If you're in the Player Screen, scroll the drum set knob in either direction to change the tempo

Press to open the currently loaded Folder and see the list of songs in it, press while highlighting a song to load it.

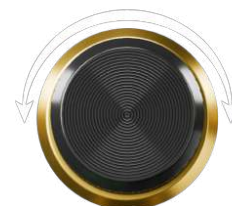
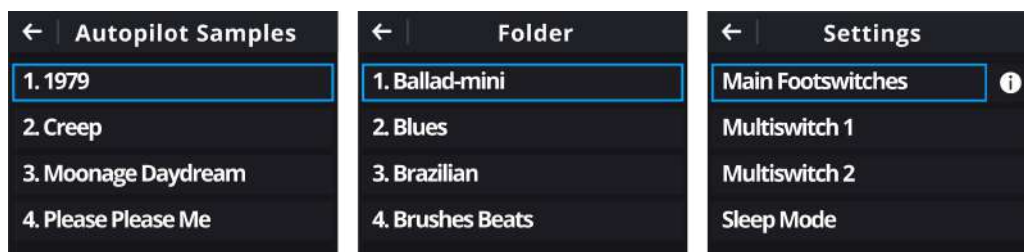


### *Default Tempo*

In the Player Screen, you can overwrite and set a new default tempo on the BeatBuddy 2 itself by pressing and holding the Tempo knob. This will set the current song to always load with the current tempo.

The default drum tempo is the tempo that is set to load when you open the song, it is set in the [BeatBuddy Manager Online application](#) (read more [pg. 52](#)).

### Other Screens (Tempo Knob)

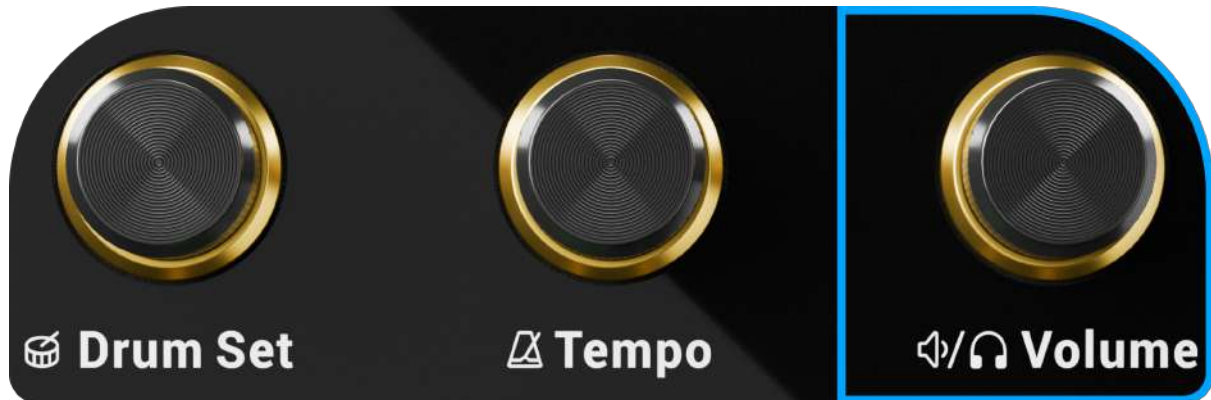


The Tempo knob can be used to scroll through and interact with the Songs List, Folders list, and the Settings screens.

Scroll through any list screen to highlight the option in the list. Press either the Tap button inside the D-Pad or the Tempo knob to open the file, go inside a folder, or select an option in the list.

# How to use the BB2

## Volume Knob



On the BeatBuddy 2, the main volume and headphone volume are controlled by the same knob. Tap the Volume knob to change which volume you are editing when twisting the knob.

You can see the currently selected volume and its value in the player screen

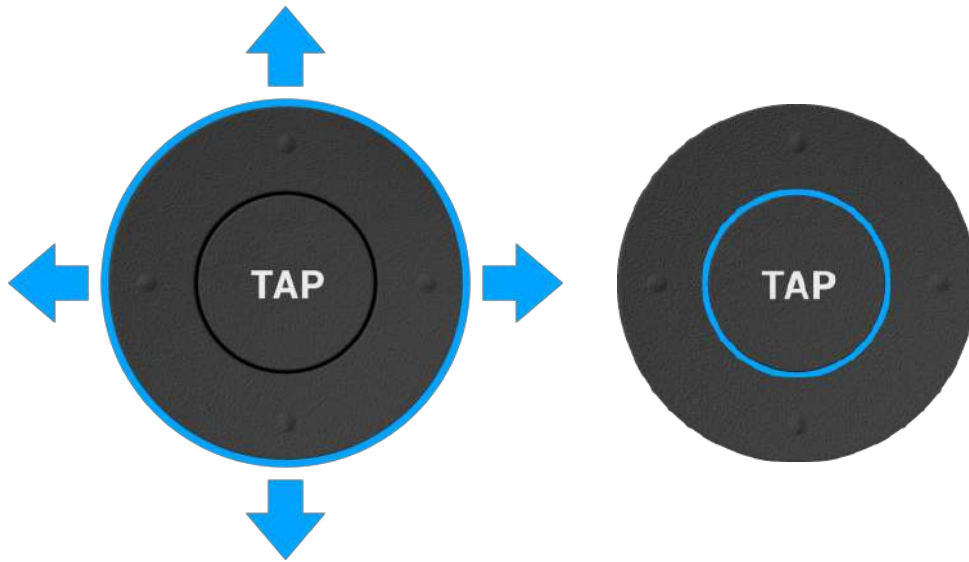


Pressing the Volume knob will change the onscreen selection



# How to use the BB2

## The D Pad and Tap Button



Use the BeatBuddy 2's D-Pad to scroll through lists, enter folders, and interact with the info and gear icons, you can then press the Tap button to choose a selection and open it

Click up and down on the D Pad to navigate lists of songs, folders, options and settings. You can enter a highlighted folder or select a highlighted option by clicking to the right. You can exit a folder by clicking to the left. Click to the right to access the info button or gear menu and press Tap to open it. Read about the gear menu on [pg. 70](#).

Clicking to the right in the player screen will open the current folder song list, and clicking to the left will open the list of folders. Click up and down to scroll through options one by one.

# How to use the BB2

## The Main Footswitches



The main footswitches on the BeatBuddy 2 are fully configurable in the Settings menu (read more about the settings on [pg. 69](#)). On the BeatBuddy 2, the behaviors of the BeatBuddy are shown in the button labels on screen. The left label represents the Left Main footswitch action and the right label represents the Right Main Footswitch action.

By default, the Left Main Footswitch is set to be the Master Control. The Right Main Footswitch is set to pause while playing, unpause while paused, and start the song with no intro while stopped. These behaviors can be set in the Main Footswitches menu.

Whenever you see button labels on screen, this means there is an action possible by tapping the main footswitches.



# How to use the BB2

## Master Control

The master control is the most versatile button on the BeatBuddy 2, it allows for multiple behaviors to be performed with a single button. The Master Control is similar to the Main Pedal on the original BeatBuddy, but now any footswitch on the BeatBuddy 2 could be the master control. By default, the Left Main Footswitch is the Master Control. You can customize the main footswitches to have any behavior in the BeatBuddy 2 settings.



### Start Beat

The Master control can be set to restart playback on the **Press** (default or on the **Release** of the master control. This affects starting playback from stopped or from paused state, read on to learn more.



### While Stopped

#### Tap

Start the song with an intro, count in, or immediately (based on Intro settings, read on [pg. 84](#))

## Press and Hold



If Start Beat is set to release, you can enable Tap Tempo Mode. Hold the BeatBuddy 2's Master Control down to enter tap tempo mode and then use the Master Control to tap a tempo. The Tap Tempo mode can be disabled in the settings (Main Footswitches > Start Beat > Tap

Tempo Mode). Read more about the settings on [pg. 79](#).

You would want to disable the Tap Tempo Mode if you prefer to hold down the Master Control and release it once it should start playback.

## While Playing



### Tap

Plays a fill



### Press and Hold

Starts a transition

- Keep holding to loop the transition
- Release to complete the transition at the end of the current measure



### Double Tap

Plays the Outro or stop the song at the end of the current measure



### Triple Tap

Stops the song immediately, must be enabled in the settings (Main Footswitches Triple Tap Stop)

## While Paused

The Master Control has special settings (Main Footswitches > Unpause Behavior > Master Control Unpause) which decide what it will do while the BeatBuddy 2 is paused. Read more about the settings on [pg. 78](#).



### Tap

Sets the behavior when Master Control is tapped while paused.

- Intro - Unpauses the BeatBuddy 2 by playing the intro fill
- Fill - Unpauses the BeatBuddy 2 by playing a fill
- Start Transition - Unpauses the BeatBuddy 2 by playing a transition fill, then transitions to the next part
- Stop Song - Stops the song without playing the song



### Press and Hold

Sets the behavior when Master Control is held while paused.

- Stop Song - Stops the song without playing the song
- Start Transition - Unpauses the BeatBuddy 2 by playing a transition fill, then transitions to the next part

*Note: If the Main Footswitches' Start Beat setting is set to Press, the Hold option will be greyed out. To make the Hold option active, set Start Beat to Release. This is to avoid the Tap command from happening and causing unwanted behaviors when holding the pedal.*

## Handsfree

You can use the Main Footswitches to navigate the Folders and Songs List handsfree

### In the Folders or Songs List:

- Tap the Right Main Footswitch to go down the list or press and hold it to open a folder/song.
- Tap the Left Main Footswitch to go up the list or press and hold it to exit the folder



# How to use the BB2

## The Footswitch+

Learn how to make the most of your Footswitch + (or any dual momentary footswitch) with your BeatBuddy 2. By default, multiswitch port 1 is set to work with the Footswitch +. Either multiswitch port can be set to use the Footswitch +, change the behaviors of the external footswitches using the Footswitch + gear menu. (Read more about the gear menu on [pg. 70](#)).



*The Footswitch + button defaults on the BeatBuddy 2 are:*

### Switch 1 (Left)

- While Playing/Paused: Next Part
- While Stopped: Press to open the next song in the folder

### Switch 2 (Right)

- While Playing/Paused/Stopped: Plays accent hit

## Handsfree Navigation (Footswitch +)

Use an external footswitch to navigate through folders or within a folder hands free:

1. If a song is open
  - a. Use the footswitch 2 (right) to advance to the next song by default. Both footswitches can be set to open the next or previous song in the current folder. Read more about how to set the footswitch on [pg. 80](#).
  - b. Press and hold the footswitch 2 (right) button to open the folder list
2. If on the Folder list:
  - a. Use the footswitch 2 (right) button to scroll down to the next folder and the footswitch 1 (left) to scroll up to the previous folder.
  - b. Press and hold external footswitch 1 or 2: Opens folder
  - c. Press and hold Master Control: Opens folder
3. If inside a folder:
  - a. Use the footswitch 2 (right) button to scroll down to the next song in the current folder and the footswitch 1 (left) to scroll up to the previous song in the folder.
  - b. Press and hold external footswitch 1 or 2: Returns to folder list
  - c. Press and hold Master Control: Opens song
4. Either of the two footswitches can be set to open the next or previous song in the current folder, or to go to the songs/folder list by setting it up using the gear menu. Read more about how to set up any footswitch on [pg. 73](#) and learn about the gear menu on [pg. 70](#).

# How to use the BB2

## Stopping While Paused using Footswitch

A lot of users like the ability to pause and stop a song to have a silent ending that they can control without any outro playing. To achieve this, there is a **separate 'While Paused'** footswitch setting allowing you to set the behavior of the footswitch while paused and while playing without editing both at the same time. To stop the song while paused, set one of the footswitches to **Stop Song or instant stop** while paused.

All Master Control and External unpause settings are detailed on [pg. 78](#) of the Settings section.

After following these steps we would suggest having one footswitch button set to:

- While Playing - Accent Hit
- While Paused - Stop Song
- While Stopped - Accent Hit

## Stopping While Paused using Master Control

This way you can have the normal behaviors and also the new benefit of choosing to stop the song while paused without losing the ability to use the accent hit while playing.

You can achieve the exact same behavior while paused, but only if your master control Pedal Press setting (Master Control > Pedal Press is set to *release*).

If you are set to Release, you can have an option set for **tap** and a separate option set for **hold**. If set to Press, you will not have access to the **hold** commands and only the **tap** commands. The downside to having Pedal Press set to Release is that timing the start of the beat may be more tricky, it's a tradeoff.

All Master Control and External unpause settings are detailed on [pg. 78](#) of the Settings section.

You can set the BeatBuddy 2 to stop by tapping, but some users have a tap option they prefer to use anyway. In this case, we point you to try out the various footswitch control settings. Go to [pg. 73](#) to read more about the footswitch settings.

# How to use the BB2

## The SuperSwitch



The SuperSwitch opens new possibilities for controlling your Aeros and BeatBuddy 2. Set each button's function independently in the other product's settings menus. Then, use it to play fills and transitions on the BeatBuddy 2, or to open and close the mixer on the Aeros, with so many more options available! Featuring whisper-quiet buttons with a sleek metal casing, the SuperSwitch is designed to withstand heavy use and provide a rock-solid performance.

By default, neither multiswitch port is set to use the Superswitch, but either multiswitch port can be set to use it. **You must manually set the multiswitch port to use the SuperSwitch in the multiswitch settings menu.** Change the behaviors of the 6 external footswitches using the Superswitch gear menu. (Read more about the gear menu on [pg. 70](#)).

Get yours at: [singularsound.com/superswitch](https://singularsound.com/superswitch)

The SuperSwitch button defaults on the BeatBuddy 2 are:

### Switch 1

While Playing - Accent Hit  
While Paused - Accent Hit  
While Stopped - Accent Hit

### Switch 2

While Playing - Previous Part  
While Paused - Previous Part  
While Stopped - Previous Part

### Switch 3

While Playing - Next Part  
While Paused - Next Part  
While Stopped - Next Part

### Switch 4

While Playing - Half Time  
While Paused - Half Time  
While Stopped - Song Advance (next song in folder)

### Switch 5

While Playing - Double Time  
While Paused - Double Time  
While Stopped - Tap Tempo

### Switch 6

While Playing - Outro  
While Paused - Instant Stop (stops immediately with no outro)  
While Stopped - Go to Folders (goes to song folders list)

# How to use the BB2

## Handsfree Navigation (SuperSwitch)

Use the SuperSwitch to navigate through folders or within a folder hands free, the footswitches are counted from left to right:

1. If you are on the player screen and playback is stopped
  - a. Press and hold Footswitch 1 or 2 to open the folder list
    - i. This doesn't work if the footswitch is set to Accent Hit, Next Part, Prev Part, or Tap Tempo because these actions happen on the Press
    - ii. This doesn't work if the footswitch is set to Folders or Song List because these are redundant requests
  - b. By default, use footswitch 4 to advance to the next song by default.
  - c. By default, Press footswitch 6 to open the folder list
  - d. Any of the six footswitches can be set to open the next or previous song in the current folder, or to go to the songs/folder list by setting it up using the gear menu. Read more about how to set up any footswitch on pg. 73, and learn about the gear menu on pg. 70.
2. If in the Folder list:
  - a. Press footswitch 2 to scroll down to the next folder and press footswitch 1 to scroll up to the previous folder.
  - b. Press and hold footswitch 2 to open the folder
  - c. Press and hold footswitch 1 to exit the folder list and return to the player screen
  - d. Press footswitch 3 to open the highlighted folder
3. If inside a folder (songs list):
  - a. Press footswitch 2 to scroll down to the next song and press footswitch 1 to scroll up to the previous song.
  - b. Press and hold footswitch 2 to load the song
  - c. Press and hold footswitch 1 to exit the song list and return to the folder list
  - d. Press footswitch 3 to load the highlighted song

# How to use the BB2

## How to Update the BeatBuddy 2

The BeatBuddy 2 has updatable firmware, and a newer update may have been published since it was released. To check the current firmware of your BeatBuddy 2, go to settings (press both the Tempo and Drum Set encoders at the same time) and scroll down to About BeatBuddy, select this option and check the current firmware.

The latest firmware is v1.0.0

Follow these steps to update your BeatBuddy 2:

1. Download the latest firmware .zip from the [website](#) or the forum
2. Unzip and open the enclosing folder
3. Copy and paste / drag and drop all of the files into the BeatBuddy 2's formatted SD card
  - a. If your computer says that the files already exist, replace all of them, **do not merge**
4. Connect your BeatBuddy 2 to a power source and power on
5. Once powered on, insert the SD card, if you placed the update files correctly on the SD card the BeatBuddy 2 screen will read "Updating Firmware" this will take a few moments
  - a. **DO NOT** unplug the BeatBuddy 2 nor remove the SD card while it is updating the Firmware, this will **BRICK YOUR UNIT**, if you encounter any issues while updating please reach out to [support@singularsound.com](mailto:support@singularsound.com) at your earliest convenience
6. Confirm the update in the settings in 'About BeatBuddy' menu

Check out this YouTube video on updating firmware

# Tips & Tricks

1. Want to know which beat to use with a particular famous song? Try out our [Song Matching Tool](#)!
2. If you accidentally double tap and the outro fill begins, you can cancel the outro with one more tap on the Master Control, and then the current song part will continue playing at the start of the next measure.
3. You can find out what any setting in the BeatBuddy 2 does by highlighting the little (i) symbol next to it by using the right direction arrow and pressing the tap button to display the help text next to that setting. Read more about the settings on [pg. 69](#).
4. Navigate through settings, folder and song lists quickly by turning the Tempo knob. Pressing the Tempo knob selects an item and pressing the Drum Set knob exits the current setting or folder.
5. End the song with fast presses on a cymbal crash accent hit to simulate a drummer doing a 'swell' as the song ends with a big finale.
6. Stepping on both the Pause and Accent hit footswitches at the same time stops the drums with a crash cymbal sound (if the accent hit is a crash cymbal) -- a nice effect.
7. While paused, unpause with a fill by pressing the main BeatBuddy 2 pedal instead of using the footswitch to unpause with the regular main beat. This adds a dramatic flourish when unpausing the beat. See the Unpause Behavior section on [pg. 78](#) for more
8. Starting a song with a double tap will play just the outro fill and end the song... when only a single fill is required! Nice for when you're introducing your robot drummer to your audience!
9. If the song or drum set name is too long to be displayed on the screen, you can see it scroll again by pressing the Drum Set or Tempo knob twice.
10. Hold the Tempo or Drum Set knob down to set the default tempo or drum set (respectively). So if you like a certain tempo or drum set for a certain song, you don't have to adjust it every time you select that song. The setting will be saved!
11. If you know you want a certain tempo or drum set, but are not sure which beat to use, disable the default tempo and/or drum set in the Settings menu (Settings > Playback > Default Tempo/Drum Set) so that you don't have to keep adjusting the tempo and drum set while changing songs.

12. To navigate through folders or within a folder hands free:
  - If a song is open
    - Use the right external dual footswitch to advance to the next song by default. Both footswitches can be set to open the next or previous song in the current folder. Read more about how to set the footswitch on [pg. 80](#).
    - Hold the right footswitch button to open the folder list
  - If on the Folder list:
    - Use the right external dual footswitch button to scroll down to the next folder and the left footswitch to scroll up to the previous folder.
    - Hold left or right external dual footswitch: Opens folder
    - Press and hold Master Control: Opens folder
  - If inside a folder:
    - Use the right main footswitch button to scroll down to the next song in the current folder and the left main footswitch to scroll up to the previous song in the folder. This also works on an external dual footswitch
    - Hold left or right external dual footswitch: Returns to folder list
    - Press and hold Right Main Footswitch: Opens song or folder
13. You can load a rimshot sound ('ba dum tss') or the sound of applause into the first accent hit of a song (through the [BeatBuddy Manager Online software](#)), and use it as comedic relief in a show.
  - Check out our CrowdBuddy Drum Set to see this in action!
14. Done with the BeatBuddy 2 but don't want to disconnect every time? Put it in sleep mode! Just hold down both the Drum Set and Tempo knobs to enter the settings menu and choose sleep mode. The screen will power down.



# Tips & Tricks

15. Sending the Outro command from any Footswitch pedal while the BeatBuddy 2 is paused does not always stop the song, instead, if Outro is enabled, it will play the Outro.
  - To stop the song immediately while paused, go to Master Control > Unpause Behavior > External Unpause and set to "Outro Stops Song" in the settings, this will also apply to any MIDI outro commands. Read more on [pg. 78](#).
16. Try out playlists - simply scroll to select a song within a folder without opening it, and hold the tempo knob down, this will start the Playlist dialog. Songs in playlists can be moved and removed and playlists can be deleted (this doesn't delete the songs in the playlists!) Read more about playlists on [pg. 68](#).

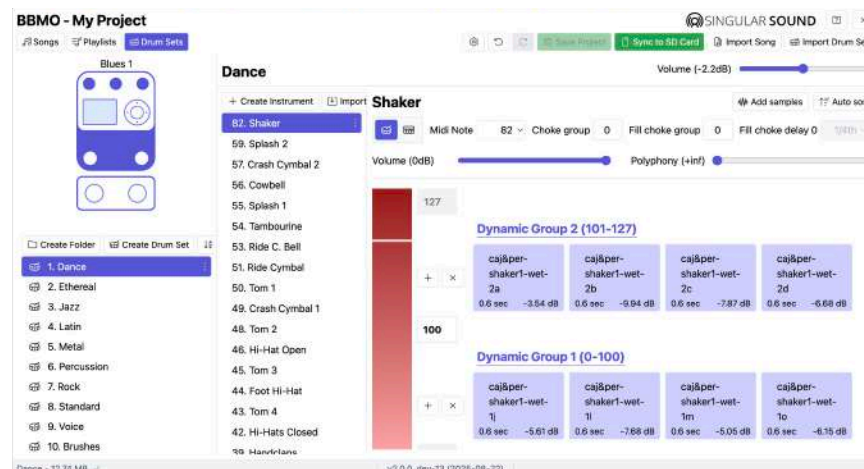
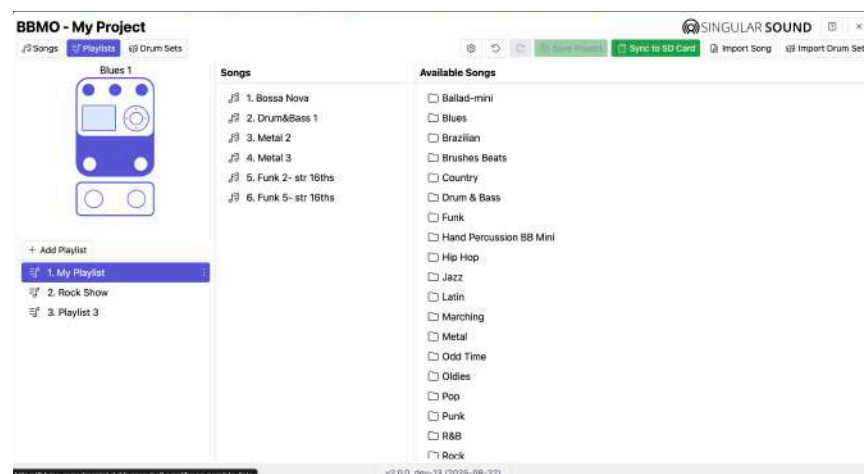
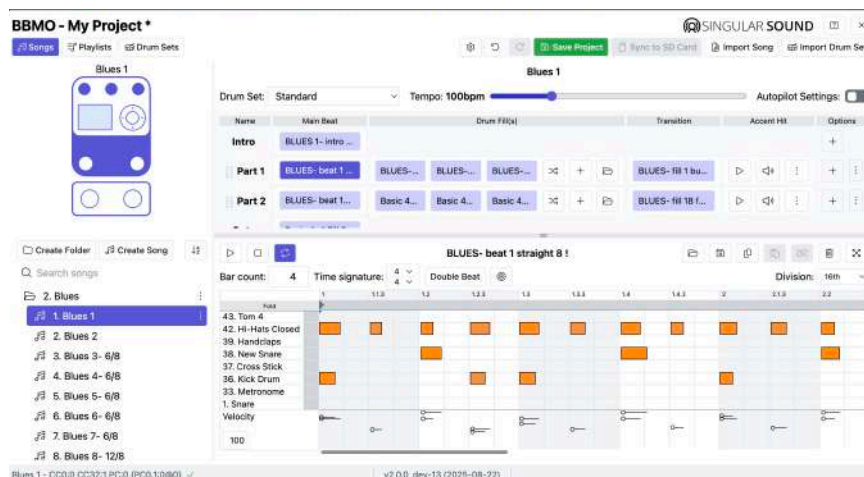
If you think of a cool new tip or trick, please share it with the BeatBuddy 2 community at <https://forum.singularsound.com/>.

Thanks! :-)

# BeatBuddy Manager Online (BBMO)

The BeatBuddy Manager Online application (available for free at [bbmo.singularsound.com](http://bbmo.singularsound.com)) will enable you to manage your BeatBuddy 2 content. All you need is to use a supported browser and have an internet connection.

To find a Manual for the BeatBuddy Manager Online [click HERE](#)



Use the BeatBuddy Manager Online to:

- Set up and edit Autopilot settings (read more about Autopilot on [pg. 59](#))
- Import and export all associated BeatBuddy files into your BeatBuddy 2 project, and load them onto the BeatBuddy 2 SD card.
  - .sng - Exported Song files
  - .bbs - song field on the BeatBuddy 2 SD card
  - .drm - Drum files
  - .pbf - Song Folder Files
  - .pbdf - Drum Folder Files
  - .bbp - Project Files
  - MIDI and WAV - Building blocks to use for Songs, Drum Sets, and Accent hits
- Edit your song files
  - Add/remove song parts
  - Add/remove regular, intro, transition, and outro fills
  - Edit the MIDI files using the MIDI editor
  - Edit the default drum set and tempo for the song
    - This default can be ignored by disabling the Default Drum Set and Default Tempo settings on the BeatBuddy 2 itself. (Settings > Playback>Default Tempo/Drum Set)
  - Set the song's accent hit and the accent hit volume
  - Import and export MIDI files
- Edit your drum sets
  - Edit the drum sets
  - Add/remove instruments
  - Import instruments from other drum sets
  - Import samples
  - Auto arrange your imports
  - Edit and arrange the velocity to sample layers
- Preview your content
  - Use the virtual BeatBuddy 2 emulator to test out your masterpiece
  - Tap, hold, or double-tap the main footswitch functions to start, stop, transition, pause, and play the accent hit.
  - Play back MIDI files while editing them in the MIDI editor
  - Audition .wav samples as you add them as accent hits or to a drum set instrument
- Create and edit playlis

# BeatBuddy Manager Online (BBMO)

## Compatibility

**The BeatBuddy Manager Online application is not supported by Safari and Firefox browsers, and cannot be used on a tablet or on mobile. The BBMO is only supported on desktop using the latest Google Chrome, Microsoft Edge, Opera and Vivaldi browsers.**

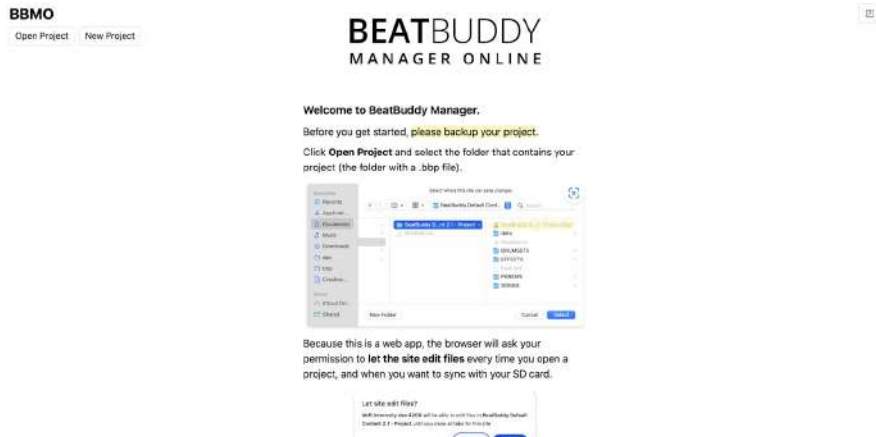
If you are using Safari or Firefox, consider writing to Apple Support or Firefox Support and asking them to allow Filesystem API on directories.

Copy and paste this message to reach out:

"Please create a new version of the browser app that supports the ability to use FilesystemAPI on directories, this is essential for working with a BeatBuddy project and SD cards that are saved on my computer using the online editor."

## Setting Up for the First Time

We suggest making a copy of the SD card on your computer and editing the files from there. Once you are happy with your edits, you can do a synchronization to your SD card to load it onto the BeatBuddy. Read more about how to synchronize to the SD card in the BeatBuddy Manager Online manual.



You DO NOT have to have an SD card connected to your computer to use the BeatBuddy Manager Online, you only need to have a copy on a physical drive (your computer or hard drive) to be edited.

If you've just bought your first BeatBuddy 2 and do not have the default content loaded on your SD you can always find the [default content on our website](#), it's free! You do not need to own an SD card to edit content on the BeatBuddy Manager Online.

You can find all downloadables in the BeatBuddy 2 section of our support page: [singularsound.com/support](https://singularsound.com/support)

# BeatBuddy Manager Online (BBMO)

You can find all downloadables in the BeatBuddy section of our support page:

[Support](#)

How to get the content loaded on your computer:

1. Copy the contents (files and folders) from your BeatBuddy 2's SD card to a new folder on your computer OR download the BeatBuddy 2 Default Content v1.2 project .zip file and unzip the file, inside will be a folder enclosing all relevant project files.
2. Move the entire folder (with all its contents) to a location on your computer that you will easily remember where it is, it can be anywhere on your computer.
3. (Suggested:) Duplicate this project somewhere on your computer to create a backup
4. Open the BeatBuddy Manager Online web application
5. Click 'Open Project'
6. Select and/or open the folder with the project files inside of it, and hit the Enter key or confirm the project location on the pop-up file browser window.
7. Do not only select the .bbp file. You must open the entire folder.
8. Your browser will ask if you would like to edit the files, click 'Edit Files' in the pop up window to finalize opening the project
9. All set! Now you can name your project by clicking the name of the project at the top where it says "BeatBuddy 2 Default Content v1.2" and get going on your own personal project

## Load Project

To load an existing project, use the Open Project button. If you are just starting out, we encourage you to download the BeatBuddy 2 Default Content from our website and read the Setting Up for the First Time section on [pg. 23](#) for more information.

1. Open the BeatBuddy Manager Online web application
2. Click 'Open Project'
3. Select and/or open the folder with the project files inside of it, and hit the Enter key or confirm the project location on the file browser import window
4. Your browser will ask if you would like to edit the files, click 'Edit Files' in the pop up window to finalize opening the project
5. All set! Now you can get going on your own personal project!

# BeatBuddy Manager Online (BBMO)

## Create Project

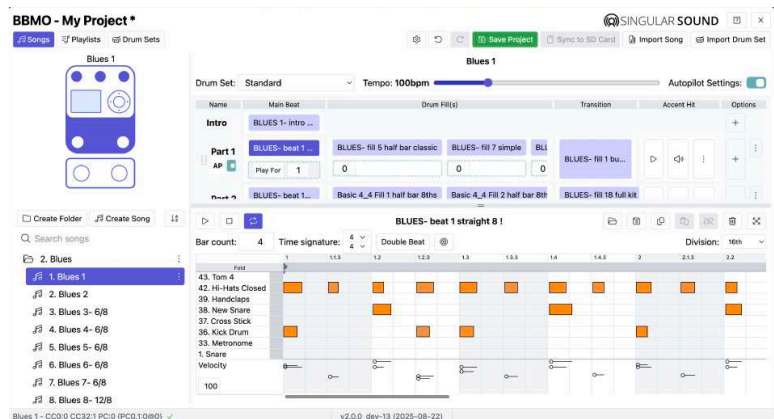
This will create a blank project that you can start from scratch

1. When you open the Start Page of the application, click 'New Project'
2. This will ask you to choose a location to save the new blank project on your computer, and save the folder to a location on your computer that you will easily remember where it is, it can be anywhere on your computer.
  - a. The BeatBuddy Manager project can't be saved directly into a folder with system files in it (e.g. the system Downloads, Documents, and Applications folders.)
  - b. If the BBMO says you can't save your project to a folder with system files, simply make a new subfolder inside that folder using any name and save your project there.
3. Your browser will ask if you would like to edit the files, click 'Edit Files' in the pop up window to finalize opening the project
4. All Set! When you open the project on the editor, you will need to add all song and drum files yourself.

Read more in the [BeatBuddy Manager Online manual](#)

## BeatBuddy 2 Projects

The BeatBuddy 2 will have its own version in the [BeatBuddy Manager Online](#) application, you must convert your existing Original BeatBuddy Project into a BeatBuddy 2 project to make use of the new features like Autopilot and HD Drum Sets. Read ahead to learn how to do this



## BeatBuddy 2 Exclusive Features

Some features will be exclusive to the BeatBuddy 2 and can only be accessed or used with the [BeatBuddy Manager Online](#) on version 2.0.0 or later

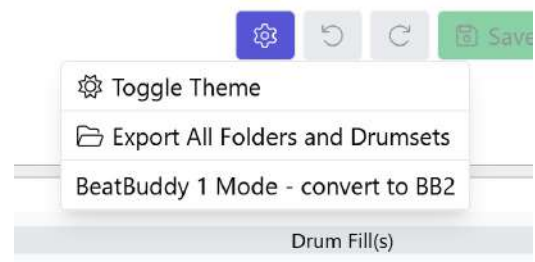
- Autopilot - Read more on [pg. 59](#)
- HD Drum Sets - Read more on [pg. 67](#)
- More features may be coming soon!

## Converting to a BeatBuddy 2 Project

If your project is converted, you will see the BeatBuddy 2 as the virtual pedal instead of the original BeatBuddy

To convert a project from BeatBuddy 1 mode to BeatBuddy 2 Mode:

1. First, open your existing BeatBuddy project on the BeatBuddy Manager Online
2. Then, hit the gear icon in the top of the screen, choose **BeatBuddy 1 Mode - Convert to BB2**
3. The application will ask you to choose a location to save a backup of your current project for safekeeping, choose a location
4. All set, welcome to [BeatBuddy Manager Online](#) v2.0!

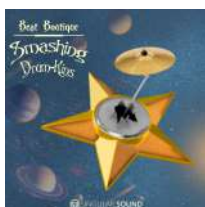


The Project in your BeatBuddy 2 SD card does not have to be converted, it will open it as a BeatBuddy 2 project as long as you are using BBMO version 2.0.0 or later



# BeatBuddy Manager Online (BBMO)

## The Beat Boutique



Professionally produced additional beats and drum sets can be purchased and downloaded from Singular Sound's Beat Boutique Library at [singularsound.com/beat-boutique](http://singularsound.com/beat-boutique), and free user-created songs and drum sets can be found on the forum at <https://forum.singularsound.com>.

You would use the BeatBuddy Manager Online to add these files to your BeatBuddy 2 project

All BeatBuddy beats of artist cover songs sold in the Beat Boutique will have Autopilot set for you to use immediately on your BeatBuddy 2. If you purchased your content before the BeatBuddy2 was released, make sure you download the latest version from our website downloader.

HD drum sets can be purchased optionally when purchasing a drum set, if you purchase an HD .drmx drum set, you will also be able to download the non-HD .drm version.

HD .DRMX drum sets are able to hold up to 450MB and so they will have more samples for greater granularity of sound and also some completely new instruments for you to experiment with.

## Autopilot



H\jg'a cXY'Wb'cb'mVY'i gYX'k \Yb'gcb[g'Uj Y'VYYb'dfY!dfc[fUa a YX'jb'h'Y' 6YUhi XXmA UbU[ Yf'Cb'jbYžcf'jZnei 'UfY'i g]b[ 'dfY!dfc[fUa a YX'6YUhi6ci h'ei Y' VdbhYbh' Znei 'di fVUgYX'6YUhi6ci h'ei Y'VdbhYbh'VYZcfY'nei 'Vci [\h'h'Y'6YUhi XXm &žnei 'a Um\Uj Y'U'bYk 'i dXUHY'Uj U]UV'Yžcf'Xck b'cUX'cb'ci f'k YVg]hY''

Make sure Autopilot is enabled in the settings menu by pressing the Drum Set and Tempo knobs simultaneously. Go to Settings (Playback > Autopilot) to enable/disable the mode. Read more about the settings on [pg. 85](#).

### What is Autopilot?

When enabled, it allows you to perform highly complex song arrangements with a single press of the pedal while still letting you interact with the pedal. When the feature is enabled, the screen will read "Autopilot On" within the beat counter while stopped and you will see the Autopilot icon above the measure counter while playing or paused.



Just press the pedal once and focus on your playing! This setting will only affect songs that were programmed to work with the Autopilot mode. The BeatBuddy 2 will take care of playing all the drum parts in order automatically for the entirety of the song. This means you don't have to hold the pedal down to transition as it plays or time a fill perfectly for a cover song. This gives the BeatBuddy 2 the benefits of a backing track with the added benefits of an interactive BeatBuddy experience.

### Using Autopilot

Each main section plays for the set number of measures. You can see the length of sections as shown in the measure counter:



If a section has more than 8 measures in its count, it will have pages. Read about pages on [pg. 33](#).



An autopilot song will transition to the next song part automatically when the playback reaches the measure on the right end of the screen (or on the last measure of the last page for that part if there are pages). If any drum fills were pre-programmed, they will also play on their own.

This means:

- The song will automatically transition from one section to the next, playing any programmed transition fills along the way.
- The song will play fills where they were programmed to play
- The song will stop and play the outro if there is one
  - You can also have a song set to loop back around to the beginning of the song instead of stopping. This is set in the [BeatBuddy Manager Online](#).

This is all set in the [BeatBuddy Manager Online](#).

## Interacting with Autopilot Live

To extend a section, press the Master Control to trigger a fill (or send a MIDI fill command, read more on [pg. 114](#)). Once the fill has finished playing, the bar count for that section resets, and the part starts again from the beginning (note: you could repeat a section this way as many times as you'd like). This is great for repeating solo sections and impromptu live changes to the song form.

- Note: If there is no drum fill loaded into the song, the measure marker will simply restart on the same song part after pressing the pedal once it completes the current measure. This will happen without hearing a fill.

To shorten or skip a section, manually trigger a transition fill by holding down the pedal or sending a transition command (via footswitch or MIDI). You can still play the transition for as long as you want by continuing to hold the pedal down.

The song will end as it is programmed to. You can also end it at any time by starting the outro fill (double tap of the Master Control). To avoid ending a song at a set point, either trigger a fill to extend that section (single tap of the Master Control) or trigger a transition to the beginning of the song (press and hold of the Master Control). These actions can all be triggered via MIDI.

# Features

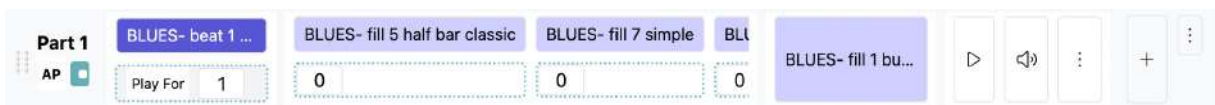
## Setting Up an Autopilot Song (BBMO)

You will need to use the [BeatBuddy Manager Online \(BBMO\)](#) to set up an autopilot song. Turn the Autopilot setting for the whole song on in the top right corner of the BBMO editor. Make sure the song part is set to have autopilot enabled.



## Play For Value (Main Beat and Transition Fills)

Set the AP Play For value for the song part to the total number of measures for a section. If there is a transition fill, the fill will begin to play in its entirety in reference to the total number of measures set for autopilot. For example, if the song part is set to Play For 32 measures, and the transition in the song part is 1 measure long, the transition would start at the beginning of measure 32.



## Play At Value (Fills)

For Fills, you can set a Play At autopilot value, which tells the fill to play at a specific measure. In our same example of 32 measures, you could have 8 fills (max) set to play in that part at measures 2, 4, 8, 12, 16, 20, 24, and 30

These fills playing will not restart the count of the autopilot, only interacting to manually play a fill would do this. It is not allowed to have a song part with both shuffle and autopilot enabled. If the song part has autopilot enabled, the shuffle setting for fills is ignored.

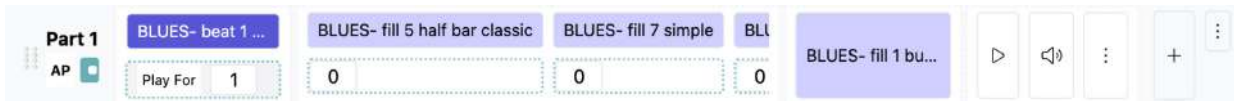
## Manual-Only Fills

You can also have the fills Play At value set to 0. This means it will not automatically be triggered by autopilot, but you can manually trigger the fill yourself. You can have a combination of fills with Play At values above 0 (which will get triggered by autopilot at the corresponding measure) and fills with Play At values set to 0 (which will only be triggered when you decide to).

# Features

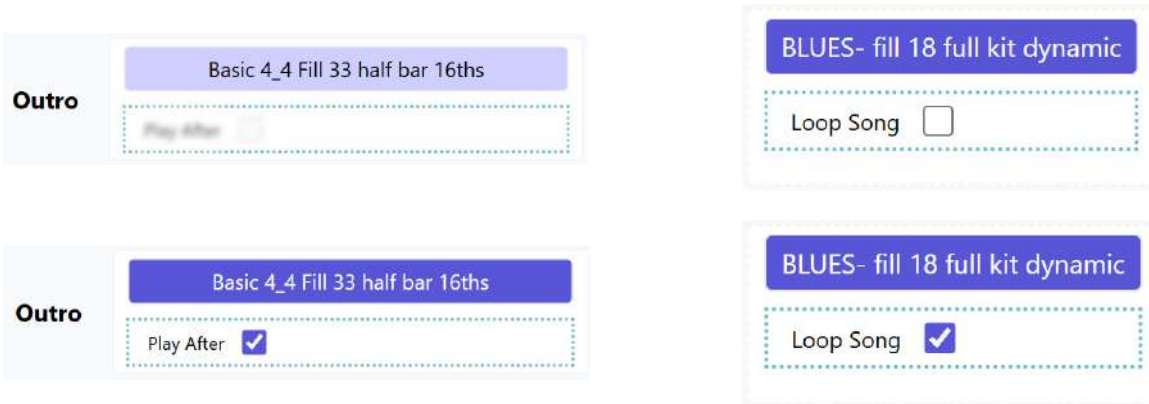
## Per-part AP Setting

By disabling a part's AP, you can have the benefits of AP in specific song parts, without sacrificing the BeatBuddy 2's interactive experience. A song part with AP disabled in an AP enabled song will behave like a normal BeatBuddy song, all automation will be off.



## Play After (Last Part, Loop Song, and Outro)

The last part's transition has an extra option to loop the song back around to start from the beginning instead of stopping/playing the outro.



If Loop Song is enabled, the song will not play the outro and will start the song over from the first part.

If an outro exists, it will start playing either before or after the end of the AP Count for the last song part, depending on the Play After setting for the outro. If play after is enabled, it will play the outro after the last part plays fully. If play after is disabled, it will play the outro before the end of the last part's AP count.

- For example, if the last song part is set to Play For 32 measures, and the outro is 1 measure long
  - With Play After enabled, the outro would start at the beginning of the 33rd measure.
  - with Play After disabled, the outro would start at the beginning of measure 32.

# Features

## Double Time and Half Time



The BeatBuddy 2 can enter double and half time mode to either play files twice as fast or twice as slow, respectively. When doing this, the tempo is not adjusted, making it possible to use half or double time while synced to a MIDI device (like the [Aeros Loop Studio](#)) without causing a desync.

Double time and half time mode can be triggered via any footswitch (read about footswitch action settings on [pg. 73](#)) or using MIDI (CC:83 for double time and CC:82 for half time, read more on [pg. 113](#)). When triggered it will enter the mode at the start of the next measure.

Once in double time or half time mode, return to 'normal time' by sending the same command again. Normal time will start at the next start of a measure.



# Features

## Dynamic Control

Fully control the dynamics of the BeatBuddy Live with an Expression pedal or by using MIDI (CC:78 to increase and CC:79 to decrease, read more on [pg. 112](#)). The Dynamic Control expression pedal must be set to Dynamic Control (Multiswitch 1 or 2 > Expression Pedal > Gear Menu [[pg. 70](#)] > Behavior).

Once set, you can offset the velocity values of the currently open song's MIDI files, which makes the BeatBuddy change the dynamics of the playback. This is different than changing the volume, because most drum sets on the BeatBuddy 2 trigger different hits at different velocities. These other samples are grouped into ranges of velocities that have their own timbre.

This can sound just like when a drummer starts to hit the drums quieter or louder live for dynamic effect. You can take this to the next level with our brand new [Beat Boutique](#) HD drum sets, the BeatBuddy 2 can handle a drum set up to 450 MB in size, which is more than 4x the maximum of its predecessor. Read more about HD drum sets on [pg. 67](#).

### Minimum and Maximum Velocity

The range of the Dynamic Control can also be defined. The minimum value represents the lowest velocity value a MIDI note can be moved to by the Dynamic Control feature. The maximum value represents the highest velocity value a MIDI note can be moved to by the Dynamic Control feature

For example:

- If your minimum is 60, and you have a note set to velocity of 80. Say the offset is -30, this means that the velocity of that note will not go lower than velocity 60.
- If your maximum is 120 and you have a note set to velocity 115. Say the offset is +30, this means that the velocity of that note will not go higher than velocity 120.

Any note with a velocity lower than the minimum will not be affected by decreasing the offset. Any note with a velocity higher than the maximum will not be affected by increasing the offset.

The BeatBuddy 2 will show the dynamic control and its current value on screen while it is being applied





# Features

## Fills and Transitions

Part of what makes the BeatBuddy 2 and the original BeatBuddy stand out from regular drum machines is its ability to play fills within a song part and have multiple parts that you can transition into. The BeatBuddies can have up to 8 fills in each song part and can have 32 parts maximum. Each part can have a transition, the transition is optional.

### Fills

Fills are their own separate files from the Main Beat, and are MIDI files. Fills are 1 measure or shorter (can be a partial measure) and are triggered during playback by tapping the Master Control once or sending a fill command. If you trigger a fill manually, once the fill is done playing the main beat will start over from the first measure.

Fills can also be triggered via MIDI using CC:112 with any value 1-127.

The BeatBuddy measure and beat counters will turn yellow when a fill is playing. Read more about the measure and beat counters on [pg. 33](#). If the fill is less than a measure long, the BeatBuddy 2 will play the main beat file for the first part of the measure before playing the notes in the fill file.

**You can have up to 8 fills in each song part and they can be set to play in order or to shuffle. The order and shuffle setting can be set in the [BeatBuddy Manager Online](#) (read more on [pg. 52](#)).**

### Fills in Autopilot

When using autopilot, you can set when an autopilot enabled song will play the fill without the fill restarting the part count (the part only restarts when you trigger the fill yourself, not when it's triggered by autopilot). This is very useful when playing a cover song or original that has a lot of fills. When using autopilot, you can still manually trigger a fill, which will restart that part's autopilot count from the beginning after the fill is played. Read more about autopilot on [pg. 59](#).

# Features

## Transitions

Transitions (transition fills are their own separate files from the Main Beat, and are MIDI files. Transition fills are typically 1 measure or shorter (can be a partial measure and are triggered during playback by pressing and holding the Master Control once or sending a transition command.

The BeatBuddy 2 will loop the Transition until the master control is released (read more on [pg. 73](#)) or the complete transition command is received. If a footswitch is set to transition, it will also wait for you to release before ending the transition.

Transitions can be triggered via MIDI using CC:113 value 1-32 (which corresponds to the part you're transitioning to to begin the transition, then complete the transition by sending CC:113 value 0. There are also Exclusive Transition and No Fill Transitions possible via MIDI, read more about this on [pg. 91](#).

The BeatBuddy 2 measure and beat counters will turn blue when a transition fill is playing and the onscreen text will tell you what part you are switching to. Read more about the measure and beat counters on [pg. 33](#). If the transition fill is less than a measure long, the BeatBuddy 2 will play the main beat file for the first part of the measure before playing the notes in the fill file.

Each song part can have a transition fill but they are optional. If there is no transition file, the BeatBuddy 2 will still transition but will only play the main beat while the transition state is active. The transition can be edited in the BeatBuddy Manager Online (read more on [pg. 52](#)).

## Transitions in Autopilot

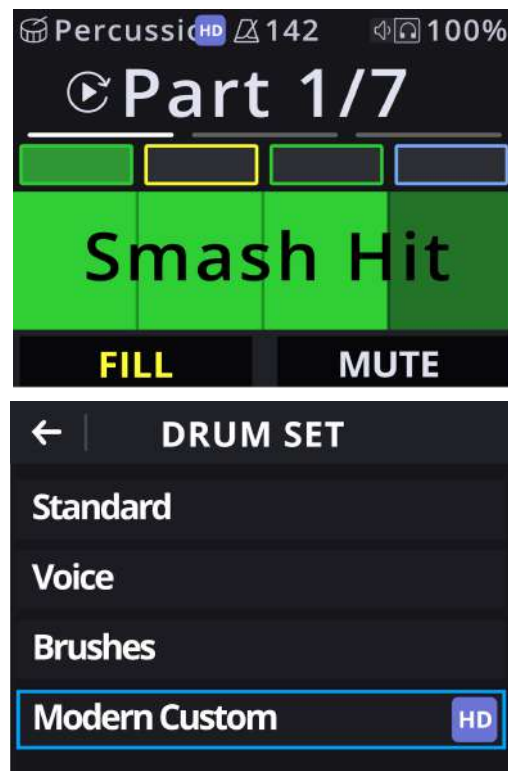
When using autopilot, the transition will play before the part is set to end, the part length is determined by its 'Play For' value. This is very useful when playing a cover song or original that has a lot of parts to switch from. When using autopilot, you can still manually trigger a transition fill, which will switch to the next part. Read more about autopilot on [pg. 59](#).

# Features

## HD Drum Sets

Drum Sets got a revamp for BeatBuddy 2, you can find all of the available HD Drum Sets on our website, in the [Beat Boutique](#).

Previously, files for drum sets were only available up to 100MB in size, but now the BeatBuddy 2 can load drum set files that are up to 450MB in size! All drum sets will still be purchasable in **.DRM** file format, but a new HD option called **.DRMX** will be available for purchase on [our website](#).



These HD versions of kits (.DRMX files) will utilize extra samples we record in the studio when creating the samples for the content, increasing the dynamic power of the BeatBuddy 2's playback algorithm.

.DRMX files are not compatible with the original BeatBuddy, and can only be edited and created using the [BeatBuddy Manager Online](#) (BBMO) application (read more on [pg. 52](#)).

Any .DRM file can be converted into a .DRMX file and more sounds can be added into it. On the BeatBuddy 2 and on the BBMO, .DRMX files will have an HD icon to find them easily.

# Features

## Playlists

Add any song you have on the SD to a playlist folder (1-17). To do this, simply highlight the song without opening it in the folder view (press the left arrow on the D-pad to exit the song screen and enter the list of songs within a folder), and long-press the Tempo knob. This will open a pop-up to choose the Playlist you want to place the song in.

### Steps to Create a Playlist on the BeatBuddy 2

1. While a song is open, press on the left arrow key in the D-pad to show the list of songs in the current folder
2. Using the Tempo knob, scroll to the song you wish to add to the playlist
3. While highlighting the song, press and hold the Tempo knob, this will open a list of all the possible playlists (1-17)
4. Using the D-pad or the knob, highlight and select the playlist you want to add the song to

### More Info

Playlists can have up to 128 songs in them. The songs in playlists are not copies, they are just a way to collect the song files you have on your SD in order quickly for the sake of a performance or session.

Playlists can be removed on the BeatBuddy 2 by selecting the Playlist in the root folder screen and long pressing the Tempo knob, a pop-up will ask if you wish to delete the playlist. Deleting a playlist will not delete the songs in the playlist.

Songs within the playlist can be moved in the playlist or removed by first selecting the song and long pressing the Tempo knob. The pop-up will have the three options: Move, Remove, Cancel. Removing all songs deletes the playlist, but it can always be repopulated with songs.

To move a song within the playlist, select 'Move' and use the tempo knob to choose the new location for the song and press the knob to place it.

When using the default Song Select setting the playlists will be recallable using the MSB Layer 127 followed by a PC command. If on Aeros Mode, the playlists will be recallable using the LSB layers 111-127, sending a PC command will select the song within the playlist in order. This means that, in Aeros mode, only the first 110 folders on the BeatBuddy 2 will be mapped by MIDI. LSB layer 111 = Playlist 1, LSB layer 112, = Playlist 2, ... LSB layer 127 = playlist 17, etc. Read more about song selection on [pg. 103](#) in the MIDI and the BeatBuddy 2 section.

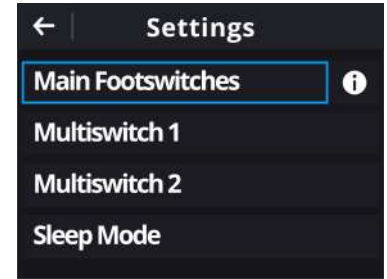
*To edit Playlists on the computer, you must use the [BeatBuddy Manager Online application](#)*

# Settings

To enter the Settings screen, press down on the 'Drum Set' and 'Tempo' knobs at the same time.

The settings give you many options to customize the BeatBuddy 2 to suit your needs and playing style. For your convenience, all default settings will be marked with an asterisk (\*) unless otherwise noted.

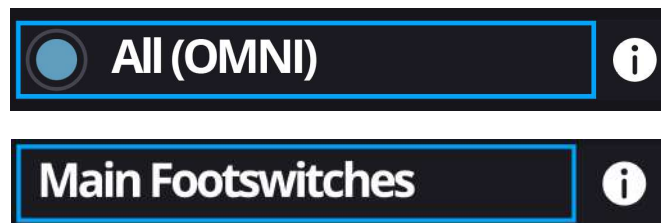
**Tip:** If you are unsure what a particular setting does, press the right on the D-Pad to select the (i) and press 'tap' button to see a short explanation. Press the left on the D-pad to exit the explanation.



## Editing and Navigating Settings

Use the Tempo knob, or the D-Pad and Tap button to interact with the options in the settings. If an option doesn't have a selection button, this means you can enter it and find more options inside

If there is a selection button you can press the Tempo knob or use the D-Pad and Tap button to select that option.



# Settings

## Gear Menu and Info



Some options have a gear icon and/or an info icon next to them, you can press right on the D-Pad to highlight the info or gear icons. You can also use the Drum Set knob to scroll through and/or open the info and gear menu.



If you press right on the D-Pad one more time while already selecting the info icon it will open the info pop up.



The Gear menu contains settings for the highlighted option, you will see the gear icon used when setting up Multiswitch 1 and 2 ports, read about the options for the multiswitch ports on [pg. 80](#).

# Settings

## The Settings

To enter the Settings screen, press down on the 'Drum Set' and 'Tempo' knobs at the same time.

### Main Menu

The root settings menu where you can find all of the BeatBuddy 2 settings.

- Main Footswitches - [pg. 77](#)
- Multiswitch 1- [pg. 80](#)
- Multiswitch 2- [pg. 80](#)
- Sleep Mode - [pg. 84](#)
- Playback - [pg. 84](#)
- MIDI - [pg. 87](#)
- Audio - [pg. 97](#)
- Font Size - [pg. 98](#)
- Screen Brightness - [pg. 98](#)
- Sobriety - [pg. 98](#)
- About BeatBuddy 2 - [pg. 98](#)
- Restore Default Settings - [pg. 98](#)

# Settings

## Footswitch Action Defaults

The Main Footswitches, Footswitch +, and the SuperSwitch have default settings to be able to plug-and-play out of the box. Read about what these controls do on the following page in the Switch Action Settings sub-section.

### Left Main Footswitch

- Act as Master Control

### Right Main Footswitch

- While Playing - Pause
- While Paused - Unpause
- While Stopped - Start Immediately (no intro)

### Footswitch +

#### Left Footswitch

- While Playing - Accent Hit
- While Paused - Accent Hit
- While Stopped - Accent Hit

#### Right Footswitch

- While Playing - Next Part
- While Paused - Next Part
- While Stopped - Song Advance (Next Song in Folder)



### SuperSwitch

#### h Switch 1

- While Playing - Accent Hit
- While Paused - Accent Hit
- While Stopped - Accent Hit

#### Switch 2

- While Playing - Previous Part
- While Paused - Previous Part
- While Stopped - Previous Part

#### Switch 3

- While Playing - Next Part
- While Paused - Next Part
- While Stopped - Next Part

#### Switch 4

- While Playing - Half Time
- While Paused - Half Time
- While Stopped - Song Advance (Next Song in Folder)

#### Switch 5

- While Playing - Double Time
- While Paused - Double Time
- While Stopped - Tap Tempo

#### Switch 6

- While Playing - Outro Fill
- While Paused - Instant Stop (stops immediately with no outro)
- While Stopped - Go To Song Folders list



# Settings

## Switch Action Settings

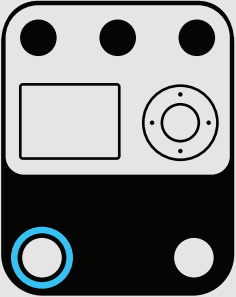
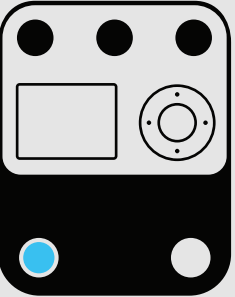
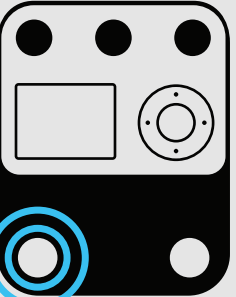
All of the footswitches compatible with the BeatBuddy 2 have the same settings. To avoid repeating the same thing over and over in the manual, we will write them out one time here and refer to this instance in the manual where needed. The defaults for all the footswitches are on the previous page.



### Act as Master Control

Enables/disables the footswitch to act as the master control. In addition to starting the song with a tap, the master control can tap to play a fill, double-tap to stop, and hold to transition during playback. When disabled, the footswitch behaviors for playing, paused, and stopped states can be set individually.

- Enabled
- Disabled

Pedal Action			
	SINGLE TAP*	HOLD DOWN*	DOUBLE TAP*
While Playing	Insert a drum fill <i>(different fill each time)</i>	Begin transition <i>(release to go to next part)</i>	End Song
While Stopped	Start song <i>(with optional intro fill)</i>	Tap tempo mode <i>(when no song is playing)</i>	—

*\*Both main footswitches' behaviors can be set in the device settings, by default the Left Main Footswitch is the Main Pedal*

# Settings

## While Playing

Sets what the BeatBuddy 2 does if the footswitch is tapped while playing. If the footswitch has Act as Master Control enabled, this option will be greyed out.

- **No Action** - Does nothing when tapped
- **Accent Hit** - Plays the accent hit when tapped
- **Tap Tempo** - Sets tap tempo when tapped. We recommend at least 3-4 taps to get an accurate reading from the tap tempo.
- **Pause** - Pauses when tapped. If you want the same button to unpause, make sure you set the While Paused behavior to unpause.
- **Mute** - Mutes and unmutes when tapped. Muting will silence playback without stopping the song.
- **Outro Fill** - Plays an outro fill when tapped. A good solution to avoid double-tapping to play the outro/stop the song.
- **Next Part** - Starts and completes a transition to the next part. Hold to loop the transition and release the pedal to finalize the transition at the end of the current measure.
- **Previous Part** - Starts and completes a transition to the previous part. Hold to loop the transition and release the pedal to finalize the transition at the end of the current measure.
- **Half Time** - Enables half time mode at the next measure when tapped, tap it again to return to normal time at the next measure
- **Double Time** - Enables double time mode at the next measure when tapped, tap it again to return to normal time at the next measure
- **Stop (No Outro)** - Stops the song with no outro, even if there is one in the song
- **Instant Stop** - Stops the song immediately when tapped
- **Specific Parts** - Sets a specific part to transition to when the footswitch is tapped. Starts and completes a transition to a chosen part. Hold to loop the transition and release the pedal to finalize the transition at the end of the current measure.
- **MIDI Notes (Accent Hits)** - Sets the button to trigger a specific MIDI note (0-127). These can be used to have different accent hit sounds on different buttons.

# Settings

## While Paused

Sets what the BeatBuddy 2 does if the footswitch is tapped while paused. If the footswitch has Act as Master Control enabled, this option will be greyed out.

- **No Action** - Does nothing when tapped
- **Accent Hit** - Plays the accent hit when tapped
- **Unpause** - Unpauses when tapped. If you want the same button to pause, make sure you set the While Playing behavior to Pause.
- **Tap Tempo** - Sets tap tempo when tapped. We recommend at least 3-4 taps to get an accurate reading from the tap tempo.
- **Outro Fill** - Plays an outro fill when tapped. A good solution to stop a song with an outro while paused.
- **Next Part** - Switches through the parts of the current song without unpausing the song, the Master Control Label will show the Part number you currently have selected
- **Previous Part** - Switches through the parts of the current song in reverse order without unpausing the song, the Master Control Label will show the Part number you currently have selected
- **Half Time** - Enables half time mode while paused, tap it again to return to normal time
- **Double Time** - Enables double time mode while paused, tap it again to return to normal time
- **Instant Stop** - Stops the BeatBuddy 2 without starting playback
- **MIDI Notes (Accent Hits)** - Sets the button to trigger a specific MIDI note (0-127). These can be used to have different accent hit sounds on different buttons.

# Settings

## While Stopped

Sets what the BeatBuddy 2 does if the footswitch is tapped while stopped. If the footswitch has Act as Master Control enabled, this option will be greyed out.

- **No Action** - Does nothing when tapped
- **Accent Hit** - Plays the accent hit when tapped
- **Song Advance** - Switches to the next song in the current folder
- **Song Back** - Switches to the previous song in the current folder
- **Tap Tempo** - Sets tap tempo when tapped. We recommend at least 3-4 taps to get an accurate reading from the tap tempo.
- **Outro Fill** - Plays an outro fill when tapped.
- **Next Part** - Next Part Switches through the parts of the current song without starting the song, the Master Control Label will show the part number you currently have selected
- **Previous Part** - Switches through the parts of the current song in reverse order without starting the song, the Master Control Label will show the part number you currently have selected
- **Start Immediately** - Starts the BeatBuddy 2 without playing the intro or count in, even if the intro file exists and either the intro/count in are enabled
- Previous Part - Switches through the parts of the current song in reverse order without starting the song, the Master Control Label will show the part number you currently have selected
- Start Immediately - Starts the BeatBuddy 2 without playing the intro or count in, even if the intro file exists and either the intro/count in are enabled
- Open Song List - Opens the song list within the current folder
- Go to Folders - Opens the list of folders in your BeatBuddy 2 Project
- MIDI Notes (Accent Hits) - Sets the button to trigger a specific MIDI note (0-127). These can be used to have different accent hit sounds on different buttons.

# Settings

## Main Footswitches

Settings related to the main footswitches on your BeatBuddy 2, both footswitches can be set to your liking. The left footswitch is the main pedal by default. The right footswitch is set to pause while playing, to unpaue while paused, and to start the song immediately (skips intro or count in, if any) while stopped (by default).



## Right/Left Footswitch

Settings related to the Left and Right Main Footswitches on your BeatBuddy 2. See the switch actions in the settings on [pg. 73](#).

## Double Tap

Enables/disables whether the outro can be triggered by the main pedal with a double-tap. Some users accidentally trigger the outro with a double-tap and so would prefer to disable it. Use any footswitch set to "Outro" to use a one-tap outro.

- **Enabled\***
- **Disabled**

## Triple Tap Stop

Enables/disables stopping the song immediately with a triple tap

- **Enabled**
- **Disabled\***

# Settings

## Unpause Behavior

Sets what happens when the BeatBuddy 2 is unpaused

- **Master Control Unpause** - Sets the Tap and Hold behaviors when unpausing using a footswitch set to Master Control. When the Main Footswitches are set to Start Beat on Press, the Unpause Hold behavior is not able to be set, to allow it, you must set the Main Footswitches to Release. This is to avoid the Tap command from happening and causing unwanted behaviors when holding the pedal.
  - **Tap** - Sets the behavior when Master Control is tapped while paused
    - **Intro** - Unpauses the BeatBuddy 2 by playing the intro fill
    - **Fill\*** - Unpauses the BeatBuddy 2 by playing a fill
    - **Start Transition** - Unpauses the BeatBuddy 2 by playing a transition fill, then transitions to the next part
    - **Stop Song** - Stops the song without playing the song
  - **Hold** - Sets the behavior when Master Control is held while paused. *If the Main Footswitches' Start Beat setting is set to Press, this option will be greyed out.* To make active, set Start Beat to Release. This is to avoid the Tap command from happening and causing unwanted behaviors when holding the pedal.
    - **Stop Song\*** - Stops the song without playing the song
    - **Start Transition** - Unpauses the BeatBuddy 2 by playing a transition fill, then transitions to the next part
- **External Pedal Unpause** - Sets what happens when an external device sends a command to the BeatBuddy 2 from a Paused State
  - **Follow Master Control Outro Setting\*** - Sets the BeatBuddy 2 to follow the Playback Outro enabled/disabled setting when the BeatBuddy 2 receives an Outro command from an external footswitch or MIDI controller while paused.
  - **Outro Stops Song** - Sets the BeatBuddy 2 to not follow the Playback Outro enabled/disabled setting and will always stop when receiving an Outro command from an external footswitch or MIDI controller while paused.
    - This is useful if you want to enable the Outro on the BeatBuddy 2 but also stop the song silently with a footswitch or MIDI controller while it is paused."

# Settings

## Start Beat

Sets whether the beat starts on the press or on the release of the main pedal. If set to press, the Unpause behavior setting will only allow setting the tap function (hold function greyed out). This is to avoid unwanted actions occurring on the press while paused.


- **Press\*** - Starts the beat on the press of the Master Control.
  - This setting removes the option to enter the tap tempo mode when stopped, and the ability to unpause using a hold command in the Main Footswitches' Unpause Behavior.
- **Release** - Starts the beat when releasing the pedal.
  - This setting allows holding down to enter tap tempo mode when stopped. This can be disabled using the Tap Tempo Mode setting.
- **Tap Tempo Mode** - Enables/disables whether holding the pedal from a stopped state will enter a tap tempo mode where the user can tap the desired tempo using the footswitch set to Master Control.
  - **Enabled\*** - When enabled, tap tempo mode can be accessed from the stopped state if the Master Control footswitch is set to respond on the release.
  - **Disabled** - If disabled, the BeatBuddy 2 will start playback on the release of the pedal after holding, some users prefer to hold down and release then they would like to start playback.

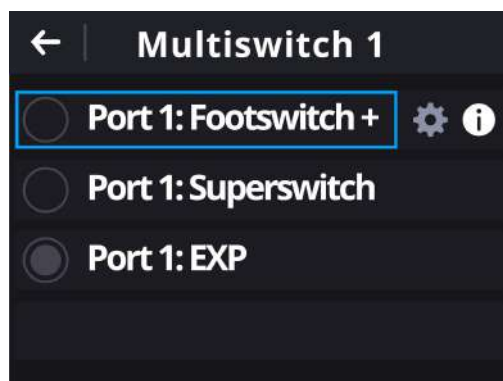


# Settings

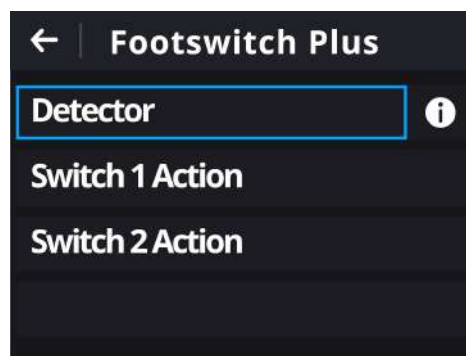
## Multiswitch 1 and 2

Settings related to the Multiswitch 1 and 2 ports on your BeatBuddy 2.

- The multiswitch supports any Dual Momentary footswitch (like the [Footswitch +](#)), the Singular Sound [SuperSwitch](#), or an Expression (EXP) Pedal.
- These settings will feature a **gear menu**,  use the D-Pad or the Drum Set knob to access the gear menu. The settings for the Footswitch +, SuperSwitch, and expression pedal can be found here. Read about the gear menu on [pg. 70](#).
- By default, Multiswitch 1 is set to Footswitch + and Multiswitch 2 is set to Expression Pedal.



### Port 1 and 2: Footswitch +



When selected, sets Multiswitch 1 or 2 to respond to Singular Sound's [Footswitch +](#) (or any Dual Momentary footswitch)

- Go right on the D-Pad or scroll to the right using the Drum Set knob to select the gear icon or info icon. Open the selection by pressing TAP button or pressing on the Drum Set knob. Use the gear menu option to set the behavior of the Footswitch +. Read more about the gear menus on [pg. 70](#).
- By default, Multiswitch 1 is set to Footswitch + and Multiswitch 2 is set to Expression Pedal.





# Settings

## Detector

Starts a test for the two buttons on your Singular Sound Footswitch + (or any dual momentary footswitch). The left footswitch is switch 1, and the right is switch 2. Follow the onscreen steps to complete the test. This is accessible via the gear menu, learn more about gear menus on [pg. 70](#).

- The expected behavior is “Momentary Norm. Off”. If you do not get these results, your footswitch may not be best suited for use with the BeatBuddy 2.

**PRESS AND  
RELEASE  
FOOTSWITCH  
#1**

## Switch 1 and 2 Action (Footswitch +)

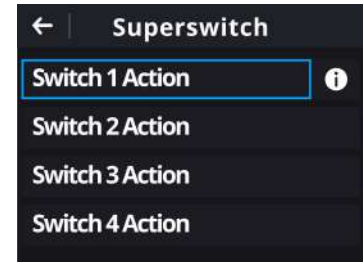
Sets the behavior of Switch 1 and 2 on your dual momentary footswitch. See switch actions in the settings on [pg. 73](#). This is accessible via the gear menu, learn more about gear menus on [pg. 70](#).



# Settings

## Port 1 and 2: SuperSwitch

When selected, sets Multiswitch 1 or 2 to respond to Singular Sound's SuperSwitch. This is accessible via the gear menu, learn more about gear menus on [pg. 70](#).



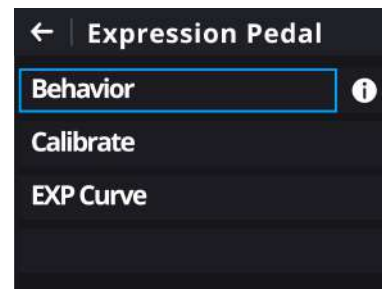
- Go right on the D-Pad or scroll to the right using the Drum Set knob to select the gear icon or info icon. Open the selection by pressing TAP button or pressing on the Drum Set Knob. Use the gear icon option to set the behavior of the [SuperSwitch](#).



## Switch 1 - 6 Action (SuperSwitch)

Sets the behavior of Switch 1 - 6 on the Singular Sound [SuperSwitch](#). See switch actions in the settings on [pg. 73](#). This is accessible via the gear menu, learn more about gear menus on [pg. 70](#).

## Port 1 and 2: EXP



When selected, sets Multiswitch 1 or 2 to respond to an EXP pedal

- Go right on the D-Pad or scroll to the right using the Drum Set knob to select the gear icon or info icon. Open the gear menu or info section by pressing the TAP button or pressing on the Drum Set Knob. Use the gear icon option to set the behavior of the EXP
- By default, Multiswitch 2 is set to Expression Pedal, by default the expression pedal is set to control Tempo



# Settings

## Behavior

Sets the parameter controlled by the expression pedal. This is accessible via the gear menu, learn more about gear menus on [pg. 70](#).

- **Tempo\*** - Sets the Expression Pedal to control the Tempo value based on the relative movement of the EXP. This allows you to control the BeatBuddy 2's tempo by moving the pedal to max or min with a range of up to  $\pm 128$  value. This is the default setting.
- **Tempo (Positional)** - Sets the Expression Pedal to control the Tempo value based on the position of the EXP. This allows you to control the BeatBuddy 2's tempo with a full range from 40BPM-300BPM.
- **Main Volume** - Sets the Expression Pedal to control the Main Volume value based on the position of the EXP.
- **Headphones Volume** - Sets the Expression Pedal to control the Headphones Volume value based on the position of the EXP.
- **Dynamic Control** - Sets the Expression Pedal to control how hard or soft the drums sound like they're being played. This is done by adding or reducing MIDI velocity to the MIDI notes being played. Read more about this super-cool feature on [pg. 64](#).

## Calibration

Calibrates your expression pedal. Select this option to begin the process. Have your expression pedal plugged in and follow the steps onscreen. This is accessible via the gear menu, learn more about gear menus on [pg. 70](#).

- Use the BeatBuddy 2 Main Footswitches to cancel or confirm your changes. The onscreen button labels show the button's behavior.

## EXP Curve

Sets the behavior of the curve when using the Expression pedal.

This may make it easier to control certain parameters because it changes the sensitivity of the pedal in different positions. This is accessible via the gear menu, learn more about gear menus on [pg. 70](#).

- **Linear\*** - When in Linear Mode the BeatBuddy 2 will respond to the EXP pedal evenly from the pedal's minimum to the pedal's maximum. This is the default setting.
- **Exponential** - When in Exponential Mode the BeatBuddy 2 will respond to the EXP pedal more sensitively around the low values when moving closer to the pedal's minimum, and will be less sensitive around the high values when moving closer to the pedal's maximum.
  - This allows more granular control near the pedal's maximum, and may be preferable to use when controlling the BeatBuddy 2 Main/Headphones volume.

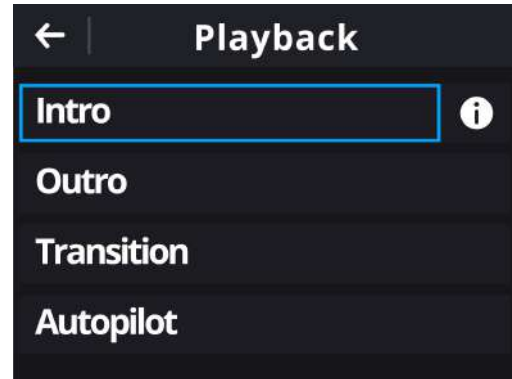
# Settings

## Sleep Mode

This puts the BeatBuddy 2 in a low-power state. Wake it up any time by pressing any knob or button on the pedal.

## Playback

Settings related to the behavior of the BeatBuddy 2 when it is playing back



### Intro

Sets the behavior of the BeatBuddy 2 when starting a song from the stopped state.

- **Intro Fill\*** - Sets the BeatBuddy 2 to play the intro fill when starting a song (if there is one). This is the default setting.
- **Count in** - Sets the BeatBuddy 2 to count in for 1 measure when starting a song, regardless of whether there is an intro or not
- **Intro Or Count in** - Sets the BeatBuddy 2 to either play the intro or to count in for 1 measure when starting a song. If there is no intro file for the song the count in will play instead.
- **None** - Sets the BeatBuddy 2 to start immediately, regardless of whether there is an intro or not

### Outro

Enables/disables the outro playing when stopping the BeatBuddy 2. If disabled, the BeatBuddy 2 will stop the song at the end of the current measure without playing the outro, if an outro exists. This is enabled by default.

- **Enabled\***
- **Disabled**

### Transition

Enables/disables the transition fill playing when switching parts on the BeatBuddy 2. If enabled, the transition fill will loop when triggered until a Complete Transition command is received. This is enabled by default.

On the BeatBuddy 2, loop the transition by holding the Master Control and releasing to complete the transition at the end of the current measure. If disabled, the parts will still switch at the end of the current measure after the release, but the transition fill will not play.

- **Enabled\***
- **Disabled**

# Settings

## Autopilot

Enables/disables Autopilot mode for songs with autopilot data in the song file. Autopilot allows you to play an entire song with fills, transitions, and the outro with one tap. The BeatBuddy 2 will follow the rules set for it in the BeatBuddy Manager Online (BBMO). This is enabled by default.

The song must have Autopilot enabled in the BBMO to use this feature, and your project must be converted to a BeatBuddy 2 project format (using the BBMO). Individual song parts can have Autopilot enabled/disabled in the BBMO. Please make sure the parts you want to use with autopilot are set in the BBMO. Read more about Autopilot on [pg. 59](#).

- **Enabled\***
- **Disabled** - When disabled, the BeatBuddy 2 will not play the song using Autopilot, even if Autopilot is enabled for the song in the BBMO.

## Transition Forgiveness

Enables/Disables MIDI Transition forgiveness. When enabled, the BeatBuddy 2 will allow a small window of time (300 milliseconds) after the start of the measure for the user to send a Complete Transition command (CC:113, value 0).

If the command is sent in the time window, the BeatBuddy 2 will change parts immediately without losing its count and without playing a transition. This is enabled by default. This is to avoid a late transition when using a MIDI controller + the Aeros + the BeatBuddy 2.

- **Enabled\***
- **Disabled**

## Default Tempo

Enables/disables using the default tempo for the specific song. When disabled, the current tempo will stay the same when switching songs. You can set the default tempo for a song on the BeatBuddy Manager Online or by pressing and holding the Tempo knob on the BeatBuddy 2 to save the current value as default. This is enabled by default.

- **Enabled\***
- **Disabled**

## Default Drum Set

Enables/disables using the default drum set for the specific song. When disabled, the currently loaded drum set will stay the same when switching songs. You can set the default drum set for a song on the BeatBuddy Manager Online or by pressing and holding the Drum Set knob on the BeatBuddy 2 to save the current value as default. This is enabled by default.

- **Enabled\***
- **Disabled**

# Settings

## Cue Fill Period

Controls when the fill is triggered after the pedal is pressed. Please note that even when set to 'Immediately', if you press the pedal in the last half beat of the measure, it will play the fill in the next measure. This is because it's very unlikely that you want less than half a beat fill, so you probably pressed it too early. Immediately is the default setting.

- **Immediately\***
- **Next Half Beat**
- **Next Beat**
- **Next Measure**

## Click Enable

Enables/disables a click (metronome) on the BeatBuddy 2. When enabled, you will hear a click while playing back a song. If disabled, the count in will still play the metronome. This is disabled by default.

The metronome sound is decided by what Sample is tied to note value A0 in your currently loaded drum set. The sound that plays back for the click can be changed in the drum set editor using the BeatBuddy Manager online.

- **Enabled**
- **Disabled\***

# Settings

## MIDI

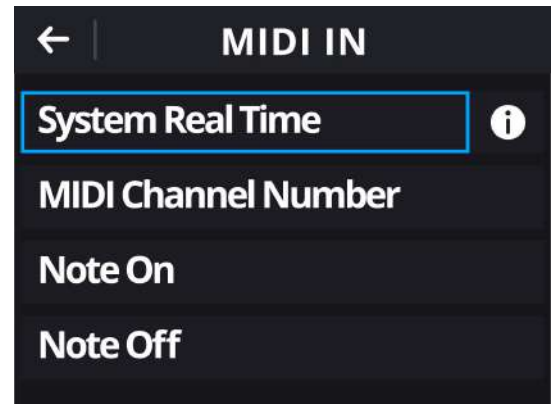
Settings related to the MIDI in and out behavior of the BeatBuddy 2

## MIDI IN

Sets the behavior of the BeatBuddy 2 when receiving MIDI commands to the MIDI In port

### System Real Time

Sets behavior for receiving MIDI tempo (sync), start, and stop commands to the MIDI in port



- **Sync** - Enables/disables whether the BeatBuddy 2 responds to incoming MIDI Sync commands, which set the tempo. This is enabled by default. This is needed to ensure synchronization between two MIDI-capable devices.
  - **Enabled\***
  - **Disabled**
- **Start** - Enables/disables whether the BeatBuddy 2 responds to incoming MIDI Start commands. The BeatBuddy 2 needs to receive a MIDI start command to start on the correct beat when using two linked MIDI devices. This is enabled by default.
  - **Enabled\***
  - **Disabled**
- **Stop** - Enables/disables whether the BeatBuddy 2 responds to incoming MIDI Stop commands. The BeatBuddy 2 will stop immediately once this is received. This is enabled by default.
  - **Enabled\***
  - **Disabled**

## MIDI Channel Number

Sets the MIDI channel that the BeatBuddy 2 responds to. Omni is the default setting, which means it listens to all MIDI channels.

- **All (OMNI)\*** - Sets the BeatBuddy 2 to respond to incoming MIDI commands on all MIDI Channels. This is the default setting.
- **Channel** - Lists the possible MIDI channels BeatBuddy 2 will respond to (1 through 16).
  - **Channel (1-16)** - Sets the BeatBuddy 2 to send all MIDI commands to a specific channel

## Note On

Enables/disables whether the BeatBuddy 2 responds to incoming MIDI Note On commands. This is enabled by default.

- **Enabled\***
- **Disabled**

# Settings

## Note Off

Sets whether the BeatBuddy 2 responds to incoming MIDI Note Off commands.

- **Choke Notes** - Sets whether the BeatBuddy 2 'chokes' the playback of a MIDI note when receiving a corresponding MIDI Note Off command.
  - Choking means to stop the playback immediately.
  - This may sound weird if using it on percussive elements, but it may be useful for non-percussive sounds.
- **Ignored\*** - Sets the BeatBuddy 2 to ignore all incoming MIDI Note Off commands. This is the default setting.



# Settings

## Control Change (CC)



Sets whether the BeatBuddy 2 responds to any incoming Control Change (CC) MIDI commands. Individual MIDI CC commands can also be filtered. This setting and all Control Change (CC) MIDI Commands are all enabled by default, except where otherwise indicated.

- **Enabled\*** - If enabled, you can set individual MIDI CC commands to either be read or ignored, read on to learn more
- **Disabled** - Ignores all incoming MIDI CC commands

### ***Dynamic Control (Inc/Dec)***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:78 and CC:79 dynamic control commands. This is enabled by default.

This dynamic control command allows you to add or remove a certain value from the dynamic control offset value based on the value of the CC command. CC:78 increments and CC:79 decrements the value of the dynamic control. Read more about this on [pg. 64](#).

### ***Tempo (Inc/Dec)***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:80 and CC:81 tempo commands. This is enabled by default.

This tempo command allows you to add or remove a certain value from the tempo based on the value of the CC command. CC:80 increments and CC:81 decrements the value of the tempo. Read more about this on [pg. 112](#).

### ***Tempo (MSB+LSB)***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:106 (MSB) and CC:107 (LSB) tempo commands. This is enabled by default.

By using both commands together, in proper order (MSB followed by LSB), you can select a specific tempo in the entire BPM range (40 - 300BPM). Read more about this on [pg. 111](#).

### ***Halftime***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:82 Halftime command. This is enabled by default. Send it again to return to normal time.

# Settings

## ***Double Time***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:83 Double Time command. This is enabled by default. Send it again to return to normal time.

## ***Settings Control***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:104 Settings command. This is enabled by default. This command opens the device's settings screen.

## ***Main Volume***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:108 Mix-Vol command. This is enabled by default. This sets the level of the drums versus the incoming volume level.

## ***HP-Vol***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:109 HP-Vol command. This is enabled by default. This sets the main mix level that goes out of the headphone port.

## ***Accent Hit***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:110 Accent Hit command. This is enabled by default.

## ***Pause/Unpause***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:111 Pause/Unpause command. This is enabled by default.

## ***Drum Fill***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:112 Fill command. This is enabled by default.

## ***Transition***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:113 Transition commands. This is enabled by default.

Send any CC:113 value 1 - 32 part command to loop the transition fill, and then a CC:113 value 0 command to complete the transition at the end of the measure. The first value of the CC:113 command decides what part you are transitioning to. Read more about transitions on [pg. 65](#).

For example, CC:113 value 2 will start looping the transition to switch to part 2. Value 127 transitions to the next song part and value 126 transitions to the previous part.

## ***Intro***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:114 Intro command. This is enabled by default. Use this MIDI command to start a song with the intro while stopped.

# Settings

## ***Outro***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:115 Outro command. This is enabled by default.

Use this MIDI command to stop the song with an outro while playing. If the External Pedal Unpause is set to Outro Stops Song (Main Footswitches > Unpause Behavior), the BeatBuddy will stop silently when this command is received while paused.

- **Enabled\***
- **Playing Only**
- **Disabled**

## ***Drum Set***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:116 Drum Set commands. This is enabled by default. Value 1 = drum set 1 in the list, and the drum set list order decides the value that opens that drum set.

## ***Tap Tempo***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:117 Tap Tempo commands. This is enabled by default.

## ***Enter/Exit Folder***

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:118 Enter/Exit Folder command. This is enabled by default.

## ***Scroll Up/Down***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:119 Scroll Up (value 0) or Scroll Down (value 1) commands. This is enabled by default.

## ***Remote Master Control***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:120 Remote Master Control commands.

This is enabled by default. This command allows the MIDI button to act like the Master Control for the BeatBuddy. Send any CC:120 value from 1-127 to emulate a button press, and CC:120 value 0 to emulate a button release.

## ***Exclusive Transition***

Enables/disables whether the BeatBuddy 2 responds to incoming CC:121 Exclusive Transition commands. This is disabled by default. Send a CC:121 value 1-32 part command to loop the transition fill, and then a CC:121 value 0 command to complete the transition at the end of the measure.

The first value of the CC:121 command decides what part you are transitioning to, for example, CC:121 value 2 will start looping the transition to switch to part 2. Value 127 transitions to the next song part, and value 126 transitions to the previous part. The Aeros does not respond to this transition command.

- **Enabled**
- **Disabled\***

# Settings

## **No Fill Transition**

Enables/disables whether the BeatBuddy 2 responds to incoming CC:122 No Fill Transition commands. This is disabled by default.

This command causes a transition without playing the transition fill, even if the song part has a transition fill. Send a CC:122 value 1-32 part command to loop the transition fill, and then a CC:122 value 0 command to complete the transition at the end of the measure.

The first value of the CC:122 command decides what part you are transitioning to, for example, CC:122 value 2 will start looping the transition to switch to part 2. Value 127 transitions to the next song part and value 126 transitions to the previous part.

- **Enabled**
- **Disabled\***

## **Mute/Unmute**

Enables/disables whether the BeatBuddy 2 responds to an incoming CC:123 Mute/Unmute command. This is enabled by default.

Mute will stop the audio from playing back without affecting the playback, so you can unmute immediately at any time without restarting the song. This is the BeatBuddy 2's version of Mute Pause.

## **Program Change (PC)**

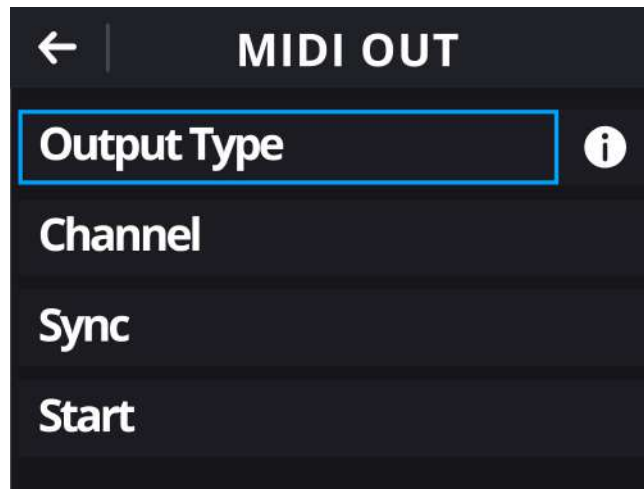
Sets whether the BeatBuddy 2 responds to any incoming Program Change (PC) MIDI commands. Program changes are needed to use the MIDI Song Select feature. There are two possible enabled options: Default Mode or Aeros Mode.

- **Disable** - Disables the ability for the BeatBuddy 2 to respond to MIDI program change commands. MIDI program change commands are needed to use MIDI song select to open songs on the BeatBuddy 2.
- **Default Mode\*** - Sets the BeatBuddy 2 to open a song when it receives MSB, LSB, and PC commands in order. The MSB + LSB commands both choose the folder, and the PC number selects the song in the folder. Remember, computer nerds start with 0, so command PC 0 is song 1 in the folder. This is the default setting.
- **Aeros Mode** - Sets the BeatBuddy 2 to open a song when it receives both an LSB and a PC command in order. The LSB command chooses the folder, and the PC number selects the song in the folder. Remember, computer nerds start with 0, so command PC 0 is song 1 in the folder.
  - This setting allows you to independently select songs on the Aeros and BeatBuddy 2 via MIDI when using them together. The Aeros only responds to MSB and PC commands.

# Settings

## MIDI Out

Sets the behavior of the BeatBuddy 2 when sending MIDI commands to the MIDI Out port



### Output Type

Sets what MIDI commands are sent through the MIDI Output port. The options are MIDI Out, MIDI Merge, and MIDI Thru

- **MIDI-OUT** - Sets the BeatBuddy 2 to send only MIDI messages it creates itself to the MIDI Out port
- **MIDI-MERGE\*** - Sets the BeatBuddy 2 to send both the MIDI messages it creates itself and all incoming MIDI messages to the MIDI Out port. This is the default setting
- **MIDI-THRU** - Sets the BeatBuddy 2 to send all incoming MIDI messages to the MIDI Out port, but not MIDI messages created by the BeatBuddy 2 itself
- **Disable** - The BeatBuddy 2 does not send any MIDI messages to the MIDI Out port

### Channel

Sets which MIDI channel the BeatBuddy 2 sends messages on. The default is channel 1.

### Sync

Sets the behavior of the BeatBuddy 2's outgoing MIDI sync tempo clock signal

- **Always On\*** - Sets the MIDI Sync to always send through the MIDI Out port, even if the BeatBuddy is stopped. This is necessary to ensure proper timing sync with the [Aeros Loop Studio](#). This is the default setting.
- **While Playing** - Sets the MIDI Sync to only send through the MIDI Out port when the BeatBuddy 2 is actively playing back or paused
- **Playing not Paused** - Sets the MIDI Sync to only send through the MIDI Out port when the BeatBuddy 2 is actively playing back, but not when paused.
- **Disable** - Stops the BeatBuddy 2 from sending MIDI sync to the MIDI Out port

# Settings

## Start

Sets the behavior of the BeatBuddy 2's outgoing MIDI Start command

- **Intro** - Sets the BeatBuddy 2 to send a MIDI Start command at the beginning of the intro when started from a stopped state
- **Main Beat\*** - Sets the BeatBuddy 2 to send a MIDI Start command at the beginning of the Main Beat (after any intro) when started from a stopped state.
  - This avoids starting in the middle of the measure when there is an intro with pickup notes (partial measure). This is the default setting.
- **Disable** - Sets the BeatBuddy 2 to not send a MIDI Start command when started from a stopped state
- **Unpause** - Enables/disables whether the BeatBuddy 2 sends a MIDI Start command when it is unpaused. This is enabled by default.

## Stop

Sets the behavior of the BeatBuddy 2's outgoing MIDI Stop command

- **Pause Only** - Sets the BeatBuddy 2 to send a MIDI Stop command only when paused
- **Pause & End\*** - Sets the BeatBuddy 2 to send a MIDI Stop command both when paused and stopped. This is the default setting.
- **End Only** - Sets the BeatBuddy 2 to send a MIDI Stop command only when stopped
- **Disable** - Sets the BeatBuddy 2 to never send a MIDI Stop command

## Notes

Enables/disables whether the BeatBuddy 2 sends MIDI Note commands. This is used to send MIDI notes in the song file to a second drum machine or, potentially, to record the MIDI playback in a DAW. This is disabled by default.

- **Enabled**
- **Disabled\***

# Settings

## Next Part

Enables/disables whether the BeatBuddy 2 sends MIDI transition command (CC:102). The BeatBuddy 2 sends the command once it completes a transition. This is enabled by default.

- **Enabled\***
- **Disabled**

## Song/Folder Select

Sets whether the BeatBuddy 2 sends a song select command from the MIDI Out port when a song is opened. By default, the BeatBuddy 2 will send the same MSB, LSB, and PC commands that open the song.

This means that if the song is opened by MSB 0, LSB 0, and PC 0, then the BeatBuddy will send MSB 0, LSB 0, and PC 0 when that song is opened. To use with the Aeros, try Aeros mode. Remember, the BeatBuddy 2's MIDI Song Select ID is set by the position of the song and folder in the list.

- **Disable\*** - Sets the BeatBuddy 2 to not send any outgoing MIDI Song Select commands to the MIDI Out port. This is the default setting.
- **Default Mode** - Sets the BeatBuddy 2 to send outgoing MIDI Song Select commands to the MIDI Out port. In Default Mode, the MSB, LSB, and PC commands are all sent.
- **Aeros Mode** - Sets the BeatBuddy 2 to send altered outgoing MIDI Song Select commands to the MIDI Out port.
  - In Aeros Mode, only MSB and PC commands are sent. The MSB value retains the omitted LSB value, so if the BeatBuddy 2 would have sent MSB 1, LSB 3, and PC 5 in default mode, it would instead send MSB 3 and PC 5 only.
  - This is because the Aeros only responds to MSB and PC commands to open songs for song select.
  - By using Aeros Mode, you can increase the potential number of songs that open with MIDI Song Select by 128x.



# Settings

## Time Signature

Sets the BeatBuddy 2 to send out time signature information – useful for devices like the [Aeros Loop Studio](#)

- **Sysex\*** - Sets the Time Signature to send in a custom Sysex format. This is the same format used by the Aeros Loop Studio to set the time signature automatically. This is the default setting.
  - The command is sent approximately every 3 seconds while the BeatBuddy 2 is stopped and every time a new song is loaded.
- **Control Change (CC:103)** - Sets the Time Signature to send as a CC:103 Control Change command.
  - The command is sent approximately every 3 seconds while the BeatBuddy 2 is stopped and every time a new song is loaded.
- **Disable** - Sets the BeatBuddy 2 to not send any time signature messages

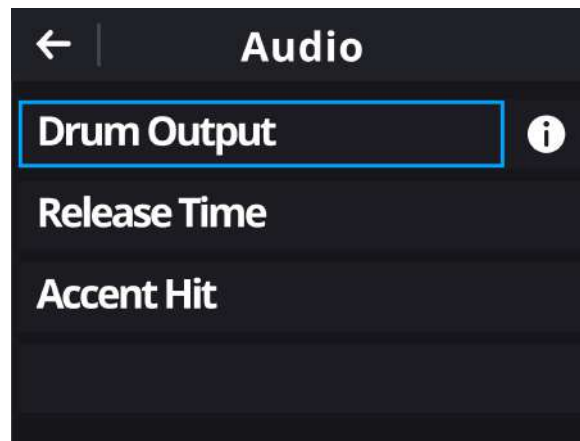
## Restore MIDI Settings

Restores all MIDI Settings to factory default without affecting non-MIDI settings

# Settings

## Audio

Settings related to the Audio output of the BeatBuddy 2



### Drum Output

Sets whether the audio plays back in a mono or stereo format. Stereo is the default setting.

- **Mono**
- **Stereo**

### Release Time

Sets the period of time (in milliseconds) over which the BeatBuddy 2 fades out a choked sound (advanced feature)

- **0ms**
- **10ms**
- **20ms**
- **30ms**
- **40ms**
- **50ms**
- **60ms**
- **70ms**
- **80ms**
- **90ms**
- **100ms\***
- **250ms**

### Accent Hit

Sets the accent hit behavior

- **Source** - Sets the accent hit to either play the part's default accent hit or to play a specific accent hit in the BeatBuddy 2's library.
  - **Default\*** - Plays the default accent hit for the song part when the accent hit command is sent. The accent hit for a song is set in the [BeatBuddy Manager Online \(BBMO\)](#). This is the default setting.
  - **Global** - Plays a specific accent hit which will always play regardless of the currently open song part's accent hit setting. Go to Select to preview and choose an accent hit from the available list of accent hits.
  - **Select** - Click to see a list of all possible accent hits you can use and select one
- **Volume** - Sets the playback level of the accent hit. The default is -40dB.

# Settings

## Font Size

Sets the font size on the BeatBuddy 2. This only affects the list screens like the Songs/ Folders screens, the Drum Set list, and the settings. Normal is the default setting.

- **Small**
- **Normal\***
- **Large**

## Screen Brightness

Sets the brightness of the BeatBuddy 2 screen. The default is 100%.

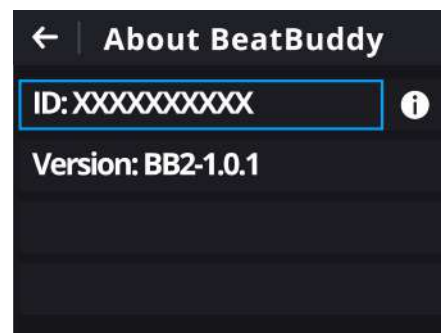
## Sobriety

Sets the sobriety level for your BeatBuddy 2 playback

- **Sober\*** - BeatBuddy 2 hasn't been drinking. This is the default setting.
- **One Beer** - BeatBuddy 2 just had one beer; his tempo is beginning to fluctuate, but he's still mostly on time.
  - Closely emulates the tempo fluctuations of a real drummer. This mode is great for practicing listening to the drummer for timing cues. Tempo randomly changes by 1-2 BPM
- **Tipsy** - BeatBuddy 2 is tipsy; he's still sort of on time but starts to play a little wildly. Tempo randomly changes by 5-10 BPM
- **Drunk** - BeatBuddy 2 is drunk; he's totally off time and starts playing fills randomly.
- **Wasted** - BeatBuddy 2 has had way too many. His tempo (and temper) is wildly off and fluctuating, and he plays random drum fills, transitions, and accent hits.
- **Hide Sobriety Option** - Removes the sobriety option from view. Restore the default settings to show it again.

## About BeatBuddy 2

Lists your unique BeatBuddy 2 ID number and the currently installed firmware version



- **ID** - Your BeatBuddy 2's unique unit ID
- **Version** - The current version of the loaded firmware. Find the latest version of the firmware on [our website](#).

## Restore Default Settings

Restores settings to the way they came from the factory

# MIDI and the BB2

## What is MIDI?

MIDI (Musical Instrument Digital Interface) is the digital language that musical equipment uses to communicate. By using MIDI, the BeatBuddy 2 can either receive commands (BeatBuddy 2 is the MIDI receiver/slave) or send commands (BeatBuddy 2 is the MIDI transmitter/master). It can also send and/or receive tempo information from other devices, making it easy to synchronize your set-up.

## How do I connect my BeatBuddy 2 with MIDI?

You will need at least one standard 5-pin male-to-male MIDI cable to connect a MIDI device to your BeatBuddy 2

On the back side of the BeatBuddy 2 you will find two standard 5-pin MIDI ports for MIDI IN and MIDI OUT.

### **When BeatBuddy 2 is Transmitter:**

Connect the MIDI OUT port to the other device's MIDI IN port using the standard MIDI cable.

### **When BeatBuddy 2 is Receiver:**

Connect the MIDI IN port to the other device's MIDI OUT port.



*Tip: The BeatBuddy 2 can be both Receiver to one device and Transmitter to another simultaneously.*

# MIDI and the BB2

## What can I use MIDI for?

### **BeatBuddy 2 is Transmitter (“Master”) (MIDI OUT):**

**Sync your looper to the BeatBuddy 2:** MIDI Sync is a powerful tool to integrate the BeatBuddy 2 with your other MIDI enabled devices, such as MIDI Sync enabled loopers and effects, to create a powerful performance or recording system.

- For example, when the BeatBuddy 2 is synced with a MIDI Sync enabled looper (such as the [Aeros Loop Studio](#), the best looper to use with the BeatBuddy 2), the looper can complete the loops exactly on the beat automatically, so that the recorded loop stays in sync with the drums.
- When using the Aeros with the BeatBuddy 2, the devices re-sync at every measure, eliminating any chance for drift (a common issue with loopers since there are tiny differences in MIDI timing that add up).
- If you use a looper without MIDI sync with the BeatBuddy 2, there will be noticeable time-shift or drift. Even a few milliseconds off can become noticeable as it continues to loop.
- The BeatBuddy 2 also sends out MIDI Start and Stop commands so that the looper starts and stops at the same time the BeatBuddy 2 does (though not all loopers follow these commands, some just work with the sync).
- You have full control of which commands BeatBuddy 2 sends and reacts to in the MIDI settings, read more about the MIDI Settings on [pg. 87](#).

**Sync effects to the BeatBuddy 2’s drums:** Some effects can be timed to the BeatBuddy 2’s tempo.

- For example, if a MIDI Sync enabled delay effect is used, it will time the length of the delay to the speed of the beat, so it sounds perfectly in sync with the drums.
- Some excellent MIDI sync capable effects are provided by the Eventide H9, Strymon TimeLine, and TC-Helicon VoiceLive 3.

**Record your BeatBuddy 2’s MIDI notes in your DAW:** The BeatBuddy 2 has the capability to stream out the MIDI notes it is playing through the MIDI OUT port. You can connect the BeatBuddy 2 to your computer to record the MIDI notes as the BeatBuddy 2 is playing, so you can have the ease of playing the BeatBuddy 2 to lay down the beat, but also keep the powerful capabilities of working with MIDI notes.

# MIDI and the BB2

## **BeatBuddy 2 is Receiver (“Slave”) (MIDI IN): Quick song selection.**

- You may have 3,000 songs in your repertoire and you play gigs where you get random song requests from the audience. Though you have already figured out which BeatBuddy 2 beats go with which songs in your repertoire (or used our handy [Song Matching Tool](#)), you don’t want to have to search through all of the BeatBuddy 2’s folders for the right beat when you get a song request.
- With MIDI, you can use an iPad app such as [OnSong](#), which has your song database of lyrics and chord charts so that when you pull up the chord chart to a song on OnSong, it will change to a certain BeatBuddy 2 song which matches it.

## **Additional control with external MIDI footswitch.**

- Some users want a footswitch for every function (drum fill, transition, outro, tap tempo, skip to different song parts out of order, more accent hits, better tempo controls, etc.).
- So we have created a special ‘CC’ MIDI command for practically every function the BeatBuddy 2 has, so you can control the BeatBuddy 2 from another device. (We recommend our universal MIDI foot controller, the [MIDI Maestro](#). It comes with a built in [BeatBuddy mode](#) for easy plug-and-play.)

## **Trigger the BeatBuddy 2’s super awesome drum sounds with an electronic drum set. Use the BeatBuddy 2 as your Drum Brain!**

- So you have a cheap electronic drum set and you hate the way it sounds.
- You can connect the MIDI OUT from the drum set to the MIDI IN on the BeatBuddy 2 and when you play on the electronic drum set, it will play the BeatBuddy 2’s award winning super high quality sounds!
- This is also useful when you’re composing beats in your DAW and want to test how they will sound on the BeatBuddy 2 -- no need to load the MIDI files into the BeatBuddy 2 -- just stream the MIDI notes!

Make sure to enable Transition Forgiveness in the Master Control settings to ensure the Aeros Transition commands work correctly when using the Aeros as Transmitter and BeatBuddy 2 as receiver. This is enabled by default.

# MIDI and the BB2

## Time Signature - In-depth explanation

Time Signature is sent by BeatBuddy 2 whenever a song is loaded as a Sysex midi message (by default) and every few seconds after while stopped and song is open.

The Sysex values in hex are as follows:

- 2/4: F0 - 7F - 7F - 03 - 02 - 04 - 02 - 02 - 18 - 08 - F7
- 3/4: F0 - 7F - 7F - 03 - 02 - 04 - 03 - 02 - 18 - 08 - F7
- 4/4: F0 - 7F - 7F - 03 - 02 - 04 - 04 - 02 - 18 - 08 - F7
- 5/4: F0 - 7F - 7F - 03 - 02 - 04 - 05 - 02 - 18 - 08 - F7
- 3/8: F0 - 7F - 7F - 03 - 02 - 04 - 03 - 03 - 18 - 08 - F7
- 6/8: F0 - 7F - 7F - 03 - 02 - 04 - 06 - 03 - 18 - 08 - F7

The CC:103 command is a bit trickier to understand but uses the following values:

CC103 Time Signature Values			
Time Signature	CC103 Value	Data (binary)	Data (hex)
1/4	1	0b00000001	0x01
2/4	5	0b00000101	0x05
3/4	9	0b00001001	0x09
4/4	13	0b00001101	0x0D
5/4	17	0b00010001	0x11
6/4	21	0b00010101	0x15
7/4	25	0b00011001	0x19
1/8	2	0b00000010	0x02
3/8	10	0b00001010	0x0A
5/8	18	0b00010010	0x12
6/8	22	0b00010110	0x16
7/8	26	0b00011010	0x1A
9/8	34	0b00100010	0x22
12/8	46	0b00101110	0x2E
21/8	82	0b01010010	0x52
1/2	0	0b00000000	0x00
2/2	4	0b00000100	0x04
3/2	8	0b00001000	0x08
4/2	12	0b00001100	0x0C
1/16	3	0b00000011	0x03
2/16	7	0b00000111	0x07
3/16	11	0b00001011	0x0B
4/16	15	0b00001111	0x0F

# MIDI and the BB2

## Folder/Song Select

You can select a BeatBuddy 2 folder and song with the MIDI Bank Select (combination of CC:0 [MSB] and CC:32 [LSB] and Program Change (PC) messages. Depending on your settings for the Song Select, the BeatBuddy 2 is expecting different things. In the settings, go to MIDI > MIDI In > Program Change (PC) to choose the behavior.

### **Default**

- The folder is selected with the Bank Select Message (Bank MSB and LSB) and the song is selected with the Program change. MSB selects the Bank, LSB the folder within the bank. Every MSB bank has 128 folders each.
- PC command selects the song within the current open folder
- This gives a potential of  $128 \text{ MSB} \times 128 \text{ LSB} = 16,384$  different folders with 128 songs each (selected by the Program Change [PC] command).
- The order of the folders / songs are sorted by the BeatBuddy 2 Manager. The order of the folders / songs corresponds to the number used by the MIDI messages +1.
  - This means that Program Change (PC) Message must have a value of 0 to select the first song in the menu.
  - We know this is confusing -- but MIDI was designed by computer nerds, not normal people like us, and computer nerds like to start with 0 instead of 1.

Folder/Song	Bank MSB (CC:0)	Bank LSB (CC:32)	Program Change (PC)
Folder 1 - Song 1	Value 0	Value 0	Value 0
Folder 1- Song 2	Value 0	Value 0	Value 1
Folder 3- Song 3	Value 0	Value 2	Value 2
Folder 129 - Song 4	Value 1	Value 1	Value 3



# MIDI and the BB2

## ***Aeros Mode***

- The folder is selected using only LSB 0-110, these correspond to the first 111 BeatBuddy 2 folders. LSB 111-127 open playlists 1-17.
- The order of the folders / songs are sorted by the BeatBuddy 2 Manager. The order of the folders / songs corresponds to the number used by the MIDI messages +1. The Playlist song select starts on LSB 111 which corresponds with Playlist 1.
  - This means that Program Change (PC) Message must have a value of 0 to select the first song in the menu.
  - We know this is confusing -- but MIDI was designed by computer nerds, not normal people like us, and computer nerds like to start with 0 instead of 1.

### *Aeros Mode Example:*

Folder/Song	Bank MSB (CC:0)	Bank LSB (CC:32)	Program Change (PC)
Folder 1 - Song 1	N/A	Value 0	Value 0
Folder 1- Song 2	N/A	Value 0	Value 1
Folder 3- Song 3	N/A	Value 2	Value 2
Playlist 1 - Song 1	N/A	Value 111	Value 0
Playlist 2 - Song 1	N/A	Value 112	Value 0
Playlist 2 - Song 4	N/A	Value 112	Value 3

Please note that the BeatBuddy 2's song does not change until the Program Change message is received, i.e. bank messages alone are not enough to change a song.

# MIDI and the BB2

## How to open an Aeros song with MIDI Song Select

- **Step 1:** Set an Aeros song to respond to a specific set of MSB and PC commands. Remember, MSB is represented by the CC command CC:0, the value decides which MSB bank is activated. For example, CC:0 value 4 is MSB 4.
- **Step 2:** Set your MIDI controller to send a CC:0 (MSB) command set with a value between 0-127. In some devices MSB commands are sent differently, refer to your MIDI controller's manual for more information on sending MSB commands.
- **Step 3:** Next, set your MIDI controller to also send a PC command with a value between 0-127. This should be sent after the MSB command, if sent before the MSB command, it will not work.
- **Step 4:** Send both the MSB and PC commands (in that order) to a MIDI channel the Aeros is currently listening to. Make sure the Aeros song you are trying to open is set to the same MSB and PC values you are sending.
- **Step 5:** Your song will open.

## How to automatically open an Aeros song when you open a specific BeatBuddy 2 song with MIDI Song Select

- **Step 1:** Identify the BeatBuddy 2 song's MIDI Song Select message, this will tell you what message the BeatBuddy 2 will send. If the BeatBuddy 2 Song/Folder Select setting (MIDI > MIDI Out > Song/Folder Select) is set to Aeros mode, the BeatBuddy 2 will not send the LSB command and will send an MSB command of the same value instead.
- **Step 2:** Set the Aeros song to open to the same MSB, LSB, and PC commands sent by the BeatBuddy 2. To do this, go to the song settings and enable MIDI Song Select. Once enabled, the user can set which MSB (0-127) bank and which PC command (0-127) will be required to open the song. It is possible to only set the PC value to open a song on the Aeros.
- **Step 3:** Hit Save to save the change on the Aeros
- **Step 4:** Open the song on the BeatBuddy 2 to open the desired Aeros song

### Example:

- **Step 1:** My BeatBuddy 2 song is in Folder 3 and it is song 2. This song would open to MSB 0, LSB 2, and PC 1. These are the same commands it will send if Song/Folder Select is set to default, if set to Aeros Mode it will send MSB 2 and PC 1 instead. It switched the values of MSB and LSB and did not send the LSB value.
- **Step 2:** If the BeatBuddy 2 Song/Folder Select setting was in default mode, I will set the Aeros to open to MSB 0 and PC 1. Using Aeros Mode, the Aeros Song Select should be set to MSB 2 and PC 1
- **Step 3:** Hit Save on Aeros
- **Step 4:** Open the song on the BeatBuddy 2 to open the Aeros song.

# MIDI and the BB2

## How to automatically open a BeatBuddy 2 song when you open a specific Aeros song with MIDI Song Select

- Step 1: Open the song, and edit the song settings (click the pencil icon in the Loop Studio Dashboard or use the hands free slideout option). There are four relevant settings: MIDI Out Control and the MSB, LSB and PC setup.
- Step 2: Enable MIDI Out Control.
- Step 3: Identify the MIDI Song Select command that will open the BeatBuddy 2 song, the command is based on the location of the song in the folder on the BeatBuddy 2.
- Step 4: Set which MSB bank (0-127), LSB bank (0-127), and which PC command (0-127) will be sent out the Aeros' MIDI Out port when you open the song. It is possible to send any combination of one, two, or all three commands.
- Step 5: Open the song again to send the MIDI Out Control commands as they were set
  - By using a MIDI device, like the MIDI Maestro or the BeatBuddy 2, capable of sending CC:0 (MSB bank) + PC commands in a sequence, you can open that song at any time.

# MIDI and the BB2

## BeatBuddy 2 Song Select Commands Cheatsheet

### Incoming MIDI Song Select

The BeatBuddy 2 can be set to respond to commands as it does by default or it can be set to Aeros mode. Aeros mode allows the BeatBuddy 2 to ignore MSB commands for more versatility when choosing songs on the two units independently while both devices are on the same MIDI channel.

#### *Default*

- The folder is selected with the Bank Select Message (Bank MSB and LSB) and the song is selected with the Program change. MSB selects the Bank, LSB the folder within the bank. Every MSB bank has 128 folders each.
- PC command selects the song within the current open folder
- This gives a potential of  $128 \text{ MSB} \times 128 \text{ LSB} = 16,384$  different folders with 128 songs each (selected by the Program Change [PC] command).
- The order of the folders / songs are sorted by the BeatBuddy 2 Manager. The order of the folders / songs corresponds to the number used by the MIDI messages +1.
  - This means that Program Change (PC) Message must have a value of 0 to select the first song in the menu.
  - We know this is confusing -- but MIDI was designed by computer nerds, not normal people like us, and computer nerds like to start with 0 instead of 1.

Folder/Song	Bank MSB (CC:0)	Bank LSB (CC:32)	Program Change (PC)
Folder 1 - Song 1	Value 0	Value 0	Value 0
Folder 1 - Song 2	Value 0	Value 0	Value 1
Folder 3 - Song 3	Value 0	Value 2	Value 2
Folder 128 - Song 1	Value 0	Value 127	Value 0
Folder 129 - Song 1	Value 1	Value 0	Value 1
Folder 129 - Song 4	Value 1	Value 0	Value 3

# MIDI and the BB2

## *Aeros Mode*

- The folder is selected using only LSB 0-110, these correspond to the first 111 BeatBuddy 2 folders. LSB 111-127 open playlists 1-17.
- The order of the folders / songs are sorted by the BeatBuddy 2 Manager. The order of the folders / songs corresponds to the number used by the MIDI messages +1. The Playlist song select starts on LSB 111 which corresponds with Playlist 1.
  - This means that Program Change (PC) Message must have a value of 0 to select the first song in the menu.
  - We know this is confusing -- but MIDI was designed by computer nerds, not normal people like us, and computer nerds like to start with 0 instead of 1.

Folder/Song	Bank MSB (CC:0)	Bank LSB (CC:32)	Program Change (PC)
Folder 1 - Song 1	N/A	Value 0	Value 0
Folder 1- Song 2	N/A	Value 0	Value 1
Folder 3- Song 3	N/A	Value 2	Value 2
Playlist 1 - Song 1	N/A	Value 111	Value 0
Playlist 2 - Song 1	N/A	Value 112	Value 0
Playlist 2 - Song 4	N/A	Value 112	Value 3

Please note that the BeatBuddy 2's song does not change until the Program Change message is received, i.e. bank messages alone are not enough to change a song.

# MIDI and the BB2

## Outgoing MIDI Song Select

**Song/Folder Select (in settings, MIDI > MIDI Out):** The BeatBuddy 2 can send song select commands from the midi out port when a song is opened. In default mode, the BeatBuddy 2 will send the same MSB, LSB, and PC command that opens the song. This means that if the song is opened by MSB 0, LSB 0, and PC 0 then the BeatBuddy 2 will send MSB 0 LSB 0 PC 0 when the song is opened. To use best with the Aeros, try Aeros mode. Remember the BeatBuddy 2's MIDI ID is set by the position of the song and folder in the list. Read more about Song Select on [pg. 103](#).

- **Disable\*** - The BeatBuddy 2 will not send any Song Select commands. This is disabled by default.
- **Default Mode** - The BeatBuddy 2 will send an MSB, LSB and PC command
- **Aeros Mode** - The BeatBuddy 2 will send an MSB and PC command. The true MSB value is negated and is substituted by the LSB value. So a song with a Song Select Message of MSB 0 LSB 125 PC 5 will send MSB 125 and PC 5. The Aeros only uses MSB values to open songs.

Remember, the BeatBuddy 2 will send a command based on the song (PC) and folder position (MSB and/or LSB) in the folder and song

<b>Default Example:</b>			
<b>Folder/Song</b>	<b>Bank MSB (CC:0)</b>	<b>Bank LSB (CC:32)</b>	<b>Program Change (PC)</b>
Folder 1 - Song 1	Value 0	Value 0	Value 0
Folder 1 - Song 2	Value 0	Value 0	Value 1
Folder 3 - Song 3	Value 0	Value 2	Value 2
Folder 128 - Song 1	Value 0	Value 127	Value 0
Folder 129 - Song 1	Value 1	Value 0	Value 1
Folder 129 - Song 4	Value 1	Value 0	Value 3
<b>Aeros Mode Example:</b>			
<b>Folder/Song</b>	<b>Bank MSB (CC:0)</b>	<b>Bank LSB (CC:32)</b>	<b>Program Change (PC)</b>
Folder 1 - Song 1	Value 0	N/A	Value 0
Folder 1 - Song 2	Value 0	N/A	Value 1
Folder 3 - Song 3	Value 2	N/A	Value 2
Playlist 1 - Song 1	Value 111	N/A	Value 0
Playlist 2 - Song 1	Value 112	N/A	Value 0
Playlist 2 - Song 4	Value 112	N/A	Value 3

# MIDI and the BB2

## Tempo Control

- Since the BeatBuddy 2's tempo ranges from 40BPM - 300BPM, we can't use just one CC command to cover the whole range because a CC command can only have 128 values.
- There are two ways of changing the tempo.
  - With INC/DEC (increase/decrease) messages which adjust the tempo up or down by 1 BPM or a preset amount
  - By skipping directly to a specific tempo BPM using an MSB/LSB system, like in the Song Selection system.

However, it's a bit more complicated because, unlike the Song Selection system where you have dedicated CC commands to represent the MSB (CC:0) and LSB (CC:32), there are no dedicated CC commands for Tempo.

So we use the "NRPN Register" (Non-Registered Parameter Number) which is a general purpose MSB (CC:99) and LSB (CC:98). All that means is that you can control multiple parameters on the BeatBuddy 2 using an MSB sequence, which is usually a series of 3 commands: 2 CC commands and one PC.

This can be used to control tempo, any other parameter, or multiple parameters at once. Currently we're only using it to control tempo, but we follow the MIDI Standard protocol to leave room for further control in the future. Because of this capability for multiple parameter control, the steps below are followed.

# MIDI and the BB2

## Tempo MSB & Tempo LSB

- In order to directly set the tempo to a specific BPM, you need to use the Tempo MSB and Tempo LSB. The BeatBuddy 2 will update its current tempo only when receiving the LSB message.
- So the order of the message should be:
  1. MSB value
  2. LSB value
- Don't forget, the value of the Tempo can only be set with both MSB (CC:106) and LSB (CC:107).

Here are a few examples of Midi message combinations:

MSB (CC:106)	LSB (CC:107)	Tempo
0	25	40
0	40	40
0	127	127
1	0	128
1	25	153
1	50	178
2	0	256
2	44	300
2	45	300



# MIDI and the BB2

## INC/DEC

The advantage of INC / DEC command is that you can map the midi control to an infinite encoder (e.g. roller wheel). This is done by using the generic Data Button Increment (CC:96) and Decrement (CC:97). The parameter that will be changed by this message is defined by the NRPN register (CC:98 and CC:99). See <https://www.midi.org/specifications> for more information on MIDI.

Here are the common steps to do to control the BeatBuddy 2's tempo. It follows the Data INC/DEC specification of the MIDI protocol. *Note: these same steps can be used to set the Main (CC:108) or Headphone (CC:109) volume parameters.*

### Steps to Increment Tempo

Steps	Message	Details
1*	CC:99 / 106	Set the NRPN MSB register to Tempo MSB
2*	CC:98 / 107	Set the NRPN LSB register to tempo LSB
3	CC:96 / 1	Increment the tempo by one
4*	CC:99 / 127	Clears the NRPN MSB register
5*	CC:98 / 127	Clears the NRPN LSB register

Steps with a \* are optional if the only value control by Inc/Dec is the Tempo. By default, the BeatBuddy 2 will increment / decrement the tempo when receiving a INC/DEC message.

### Steps to Decrement Tempo

Steps	CC:# / Value	Details
1*	CC:99 / 106	Set the NRPN MSB register to Tempo MSB
2*	CC:98 / 107	Set the NRPN LSB register to tempo LSB
3	CC:97 / 1	Decrement the tempo by one
4*	CC:99 / 127	Clears the NRPN MSB register
5*	CC:98 / 127	Clears the NRPN LSB register

Steps with a \* are optional if the only value control by Inc/Dec is the Tempo. By default, the BeatBuddy 2 will increment / decrement the tempo when receiving a INC/DEC message.

# MIDI and the BB2

## MIDI IN COMMANDS

CC #	Command Name	Value	Action
<b>CC:0</b>	Bank (Song folder) Select MSB	0-127	Bank (Song folder) Select MSB
<b>CC:32</b>	Bank (Song folder) Select LSB	0-127	Bank (Song folder) Select LSB
<b>CC:78</b>	Dynamic Control Increase	0-127	Increases tempo by value received (NewTpmo = Tempo + value)
<b>CC:79</b>	Dynamic Control Decrease	0-127	Decreases tempo by value received (NewTpmo = Tempo - value)
<b>CC:80</b>	Tempo Increase	0-127	Increases tempo by value received (NewTpmo = Tempo + value)
<b>CC:81</b>	Tempo Decrease	0-127	Decreases tempo by value received (NewTpmo = Tempo - value)
<b>CC:82</b>	Normal mode	0	Returns to normal mode
	Half-time mode	1-127	Goes to half time mode
<b>CC:83</b>	Normal mode	0	Returns to normal mode
	Go to Double-time mode	1-127	Goes to double time mode
<b>CC:96</b>	Data Increment (Data Entry +1)	1-127	Increases the BeatBuddy 2 Tempo (default)
<b>CC:97</b>	Data Decrement (Data Entry -1)	1-127	Decrease the BeatBuddy 2 Tempo (default)
<b>CC:98</b>	Non-Registered Parameter Number (NRPN) - LSB	0-127	Read more on pg. x
<b>CC:99</b>	Non-Registered Parameter Number (NRPN) - MSB	0-127	Read more on pg. x
<b>CC:100</b>	Registered Parameter Number (RPN) - LSB*	0-127	Read more on pg. x
<b>CC:101</b>	Registered Parameter Number (RPN) - MSB*	0-127	Read more on pg. x

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# MIDI and the BB2

## MIDI IN COMMANDS (cont.)

<b>CC:104</b>	Open settings	0-127	Opens the BeatBuddy 2 settings
<b>CC:106</b>	Tempo MSB		This command when used in conjunction with the Tempo LSB command will allow users to select a specific tempo. MSB 1 implies a BPM of 129 or greater.
<b>CC:107</b>	Tempo LSB		This command can select a tempo for the BeatBuddy 2. If choosing a BPM greater than 128, the user must also send an MSB command. MSB 1 implies a BPM of 129 or greater. LSB 0-39 = BPM of 40 (lowest possible tempo), LSB 40 = 41.
<b>CC:108</b>	Main Volume	0-100	Change the main volume (like Main Volume knob)
<b>CC:109</b>	Headphone Volume	0-100	Change the headphone volume
<b>CC:110</b>	Accent Hit	0-127	Triggers an accent hit with a volume from the value 0 (mute) to 100 (original recorded volume) to 127 (amplified more than the original recorded volume)
<b>CC:111</b>	Unpause Pause Pause/ Unpause	0 1 >1	Unpause the current song Pause the current song Toggle between pause and unpause
<b>CC:112</b>	Fill	1-127	Triggers a drum fill
<b>CC:113</b>	Transition End Transition at next Measure	0	Starts transition to the currently selected part in 6x6. This command is used in conjunction with CC:113 values 1-6, 126, and 127 to allow toggling through parts before starting the transition.  As of v4.1.6, if the BeatBuddy 2 is stopped the CC:113 value 0 command will start it from stopped

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# MIDI and the BB2

## MIDI IN COMMANDS (cont.)

<b>CC:113</b>	Start Transition	1-32	<p>Selects the part according to the value number sent (part # = value #). The BeatBuddy 2 will loop the transition fill until it receives CC:113 value 0 (shown above). Then, it will complete the transition and change parts at the end of the measure.</p> <p>As of v4.1.6, if the BeatBuddy 2 is stopped, the BeatBuddy 2 will change to that part without starting playback once this command is received.</p>
	Cancel Transition	125	Cancels any pending transition
	Previous Part	126	<p>This will start the transition to the previous part. To switch to the selected part, the user must send CC:113 value 0 to end the transition and change parts at the end of the measure.</p> <p>As of v4.1.6, if the BeatBuddy 2 is stopped, the BeatBuddy 2 will change to the previous part without starting playback once this command is received.</p>
	Next Part	127	<p>This will start the transition to the next part. To switch to the selected part, the user must send CC:113 value 0 to end the transition and change parts at the end of the measure.</p> <p>As of v4.1.6, if the BeatBuddy 2 is stopped, the BeatBuddy 2 will change to the next part without starting playback once this command is received.</p>
<b>CC:114</b>	Start	0-127	Starts the playback of the current song
<b>CC:115</b>	Stop	0-127	Triggers the outro of the song
<b>CC:116</b>	Drum Set	0-127	Selects a specific drum set
<b>CC:117</b>	Tap Tempo	0-127	Enters Tap Tempo mode and generate Tap Event
<b>CC:118</b>	Enter/Exit	0-127	Enters or Exits a folder

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# MIDI and the BB2

## MIDI IN COMMANDS (cont.)

<b>CC:119</b>	Scroll		
	Scroll Down	0	Scrolls down song/folder list
	Scroll Up	1	Scrolls up song/folder list
<b>CC:120</b>	Master Control		
	Master Control Release	0	Emulates Master Control release
	Master Control Press	1-127	Emulates Master Control press
<b>CC:121</b>	Exclusive Transition		This command is meant to behave just like a CC:113 transition command. The BeatBuddy 2 will trigger a transition when a CC:121 command is received you can select which part to go to after the transition by setting the value of the commands of the same number of the part you want to jump to. The transition will continue playing in a loop until value 0 command is received. The Aeros does not respond to CC:121 .
	Complete Transition	0	Ends transition at the next measure.
	Change Part	1-32	Selects the part according to the value number sent (part # = value #). The BeatBuddy 2 will loop the transition fill until it receives CC:121 value 0 (shown above). Then, it will complete the transition and change parts at the end of the measure.
	Previous Part	126	This will start the transition to the previous part. To switch to the selected part, the user must send CC: 121 value 0 to end the transition and change parts at the end of the measure.
	Next Part	127	This will start the transition to the next part. To switch to the selected part, the user must send CC:121 value 0 to end the transition and change parts at the end of the measure.

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# MIDI and the BB2

## MIDI IN COMMANDS (cont.)

CC:122	No- Fill Transition		The BeatBuddy will trigger a transition when a CC:122 command is received. The BeatBuddy will not play a fill and will continue playing the main beat of the current part. You can select which part to go to after the transition by setting the value of the commands to the same number as the part you want to jump to. The transition will not complete until a value 0 command is received, it will then transition at the next measure.
	Complete Transition	0	Starts transition to the currently selected part in 6x6. This command is used in conjunction with CC:122 values 1-6, 126, and 127 to allow toggling through parts before starting the transition.
	Change Part	1-32	Selects the part according to the value number sent (part # = value #). The BeatBuddy 2 will loop the transition fill until it receives CC:122 value 0 (shown above). Then, it will complete the transition and change parts at the end of the measure.
	Previous Part	126	This will start the transition to the previous part. To switch to the selected part, the user must send CC: 122 value 0 to end the transition and change parts at the end of the measure.
	Next Part	127	This will start the transition to the next part. To switch to the selected part, the user must send CC:122 value 0 to end the transition and change parts at the end of the measure.
CC:123	Mute/Unmute		Mute stops the audio from playing back without affecting the playback, so you can unmute immediately at any time without restarting the song.
		0	Unmutes the playback
		1-127	Mutes the playback

# MIDI and the BB2

## MIDI OUT COMMANDS

CC #	Command Name	Value	Action
CC:102	Force Aeros Transition	0-127	Next Part. Sent whenever the song part is changed on the BeatBuddy 2, at the end of the transition. This makes the Aeros Transition immediately in 2s2 and immediately in 6x6 if a part other than the open part is selected.
N/A	Start (Sysex Real Time)		Sent when BeatBuddy 2 intro ends by default, can be set to send at start of intro, and when unpaused (can be modified in BeatBuddy 2 settings)
N/A	Stop (Sysex Real Time)		Sent when BeatBuddy 2 outro ends and when paused (can be modified in BeatBuddy 2 settings)
	MSB + LSB + PC	MSB= CC0 values 0-127 LSB= CC0 values 0-127 PC values 0-127	The BeatBuddy 2 can now send Song Select commands automatically when a song is opened, the command sent cannot be set, it is based on the song and folder location. In Default Mode, the BeatBuddy 2 will send the MSB and LSB (representing folder) and a PC for the song within the folder.
	MSB + PC	MSB= CC0 values 0-127 PC values 0-127	The BeatBuddy 2 can now send Song Select commands automatically when a song is opened, the command sent cannot be set, it is based on the song and folder location. In Aeros Mode Mode, the BeatBuddy 2 will send the MSB 0-127 to represent the first 128 folders on BeatBuddy 2, LSB is not used. A PC representing the song within the folder will also be sent. This was done to allow user to control Aeros more versatility, LSB commands do not affect the Aeros.

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# MIDI and the BB2

## MIDI OUT COMMANDS (cont.)

<b>CC:103</b>	Time Signature		Time sig - Value 1/4 - 1 2/4 - 5 3/4 - 9 4/4 - 13 5/4 - 17 6/4 - 21 7/4 - 25 1/8 - 2 3/8 - 10 5/8 - 18 6/8 - 22 7/8 - 26 9/8 - 34 12/8 - 46 21/8 - 82 1/2 - 0 2/2 - 4 3/2 - 8 4/2 - 12 1/16 - 3 2/16 - 7 3/16 - 11 4/16 - 15
<b>N/A</b>	Time Signature:		Time Signature is sent by BeatBuddy 2 whenever a song is loaded as a Sysex midi message and repeatedly every 3 seconds. The Aeros, for example, will set it's own internal time signature when receiving these commands if the song is empty.  (All values in hex) 2/4: F0 - 7F - 7F - 03 - 02 - 04 - 02 - 02 - 18 - 08 - F7 3/4: F0 - 7F - 7F - 03 - 02 - 04 - 03 - 02 - 18 - 08 - F7 4/4: F0 - 7F - 7F - 03 - 02 - 04 - 04 - 02 - 18 - 08 - F7 5/4: F0 - 7F - 7F - 03 - 02 - 04 - 05 - 02 - 18 - 08 - F7 3/8: F0 - 7F - 7F - 03 - 02 - 04 - 03 - 03 - 18 - 08 - F7 6/8: F0 - 7F - 7F - 03 - 02 - 04 - 06 - 03 - 18 - 08 - F7

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# Technical Support

## We're Here to Help

If you notice anything strange with your BeatBuddy 2, first make sure all the cables are firmly connected.

Try powering the pedal off by turning off and disconnecting it from power for a minute, then plug it back in and power back on.

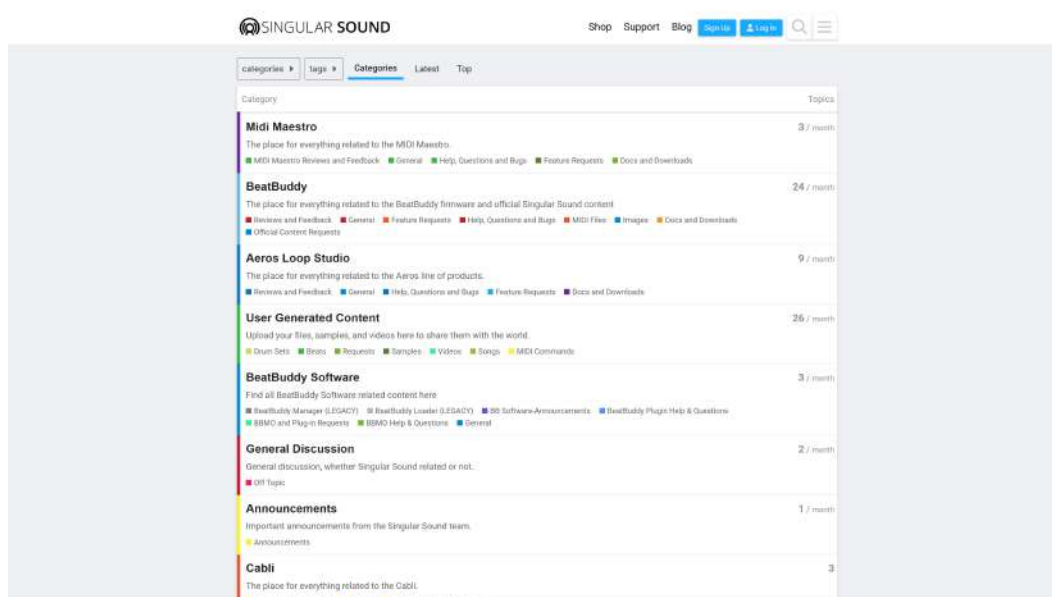
If that doesn't work, the files on the SD card may have been corrupted (this happens on rare occasions), and you should delete all of the files from the SD card and reload your saved Project with the [BeatBuddy Manager Online](#) or use the BeatBuddy 2 Default Content SD card backup files.

The SD card backup files and the BeatBuddy Manager Online application are available at [singularsound.com/support](http://singularsound.com/support)

If you're having trouble fixing any problems with your BeatBuddy 2, please email us at [support@singularsound.com](mailto:support@singularsound.com). We love to help!

Check out the Singular Sound Forum for user generated content and to join our lively community!

[forum.singularsound.com](http://forum.singularsound.com)



# Tech Specs

## Dimensions & Weight

### Height

2.75" (7 cm)

### Width

4.5" (12 cm)

### Depth

6" (15 cm)

### Weight

1 lbs. 5.7 oz. (615 g)

## Audio Quality

### Sample Rate

44.1kHz

### Bit Depth

24-bit

## Ports

### Inputs

2 x 1/4" TS (L/R audio passthrough)

### Outputs

2 x 1/4" Mono (L/R) Main Audio, 1 x 1/4" Stereo Headphones

### MIDI I/O

2 Full Size 5-pin MIDI IN/OUT Ports

### Other I/O

2 x 1/4" TRS Multiswitch port Inputs (Support Footswitch+, SuperSwitch, Expression Pedal)

## Software

BeatBuddy Manager Online (read more on pg. 52)

## Other

### Bypass Switching

Digital Dry Through

### Storage

4GB Class 10 SD Card (Expandable up to 32gb)

### Screen

2.4" Diagonal TFT RGB (240x320)

### Power Source

9V DC Power Supply (Included)

### Power Usage

300mA

# Warranty

Your BeatBuddy 2 comes with a full two-year warranty on parts and workmanship from the date of purchase. During this period we will repair or replace (at our option) defective units free of charge.

Most issues can be solved by writing to us at [support@singularsound.com](mailto:support@singularsound.com)

If we cannot help you fix the problem, we may have you send the BeatBuddy 2 in for servicing.

The warranty remains valid only if the serial number on the unit is not defaced or removed. It does not cover damage due to misuse, unauthorized tampering, accident or neglect.

To validate your warranty please register your BeatBuddy 2 within 30 days of purchase at [singularsound.com/warranty](http://singularsound.com/warranty)

Thanks for reading the manual! If there is anything you don't understand, or think that can be explained better, please contact us at [support@singularsound.com](mailto:support@singularsound.com), or visit our Forum at <http://forum.singularsound.com>

# Changelogs

Once we make changes to the firmware you will find them here!