

Jay-D Usage Guide

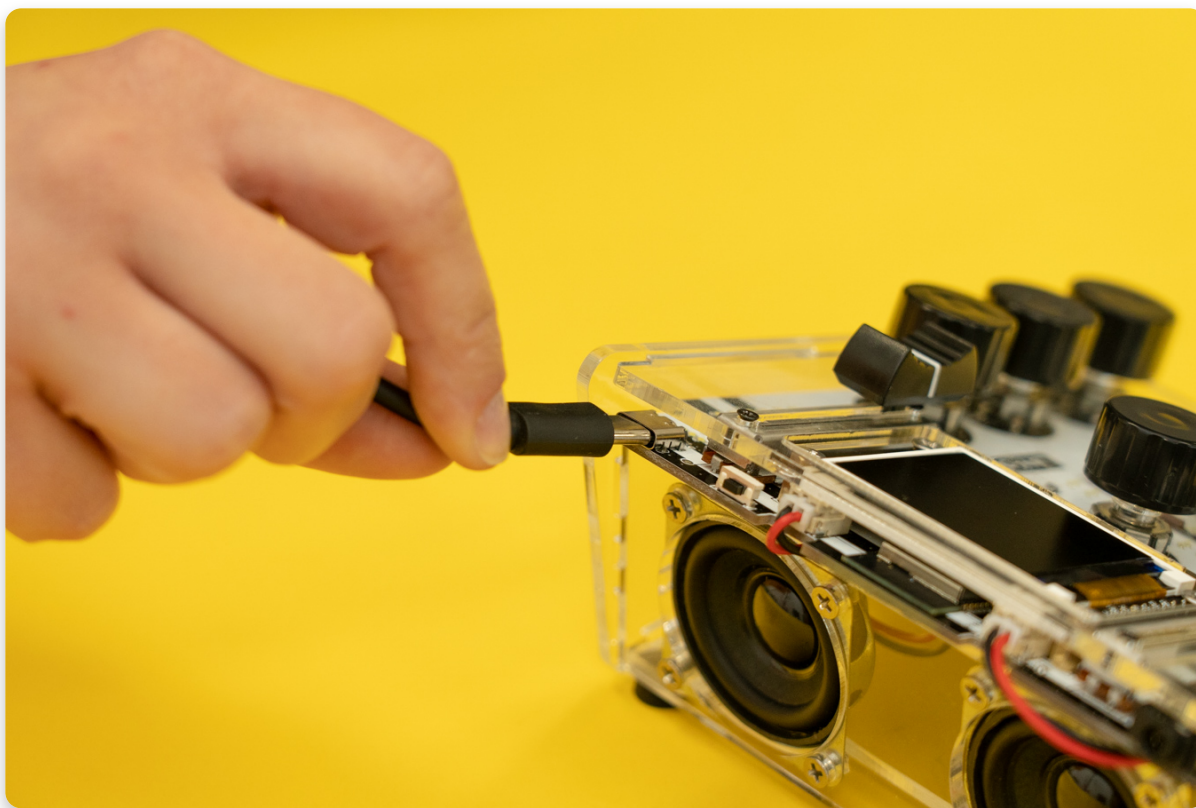
Find your way around...

Setting up

Welcome to Jay-D's usage guide!

Hopefully, you had fun assembling your own DJ mix table. Are you ready to grow a bit more? We are going to show you how to use Jay-D in this usage guide!

Insert the other side of the USB cable into the USB port on the board.



For best performance, use a power adapter with an output of minimally 2A!

Find a **power adapter with an output of at least 2A** (ampere). This means that almost any adapter that you use to charge your smartphone should work just fine.

Jay-D's volume and all the other features will work best with an adapter of at least 2A. If you plug it into your laptop, or another power source, there is a possibility that the features won't work perfectly because of the lack of power the device receives.



Connect it to the power source

The USB-C cable is used for charging and programming your device. Insert the other end of the cable into the power adapter!

After that, connect the power adapter into a power outlet to turn on your Jay-D.



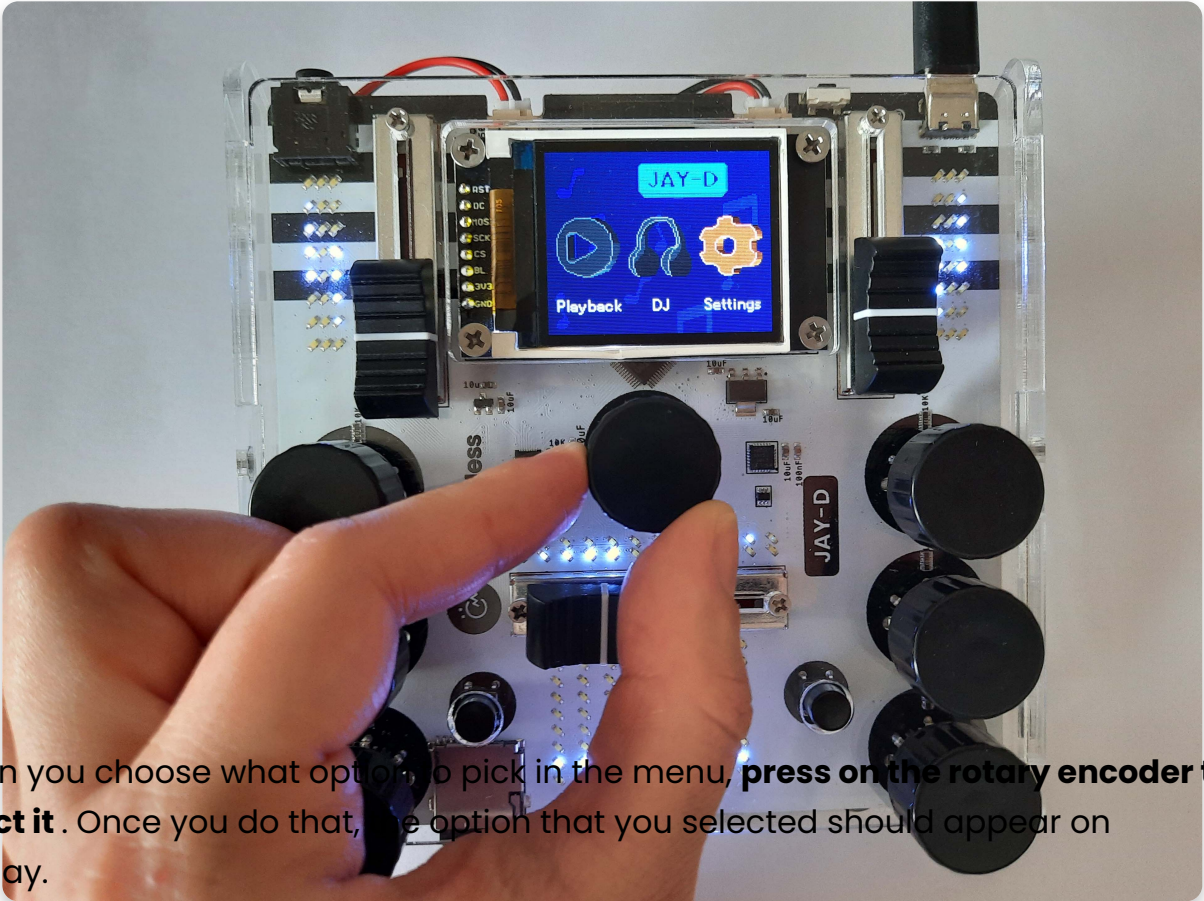
Navigate through Jay-D's menu

This is Jay-D's menu. There are three options to choose from:

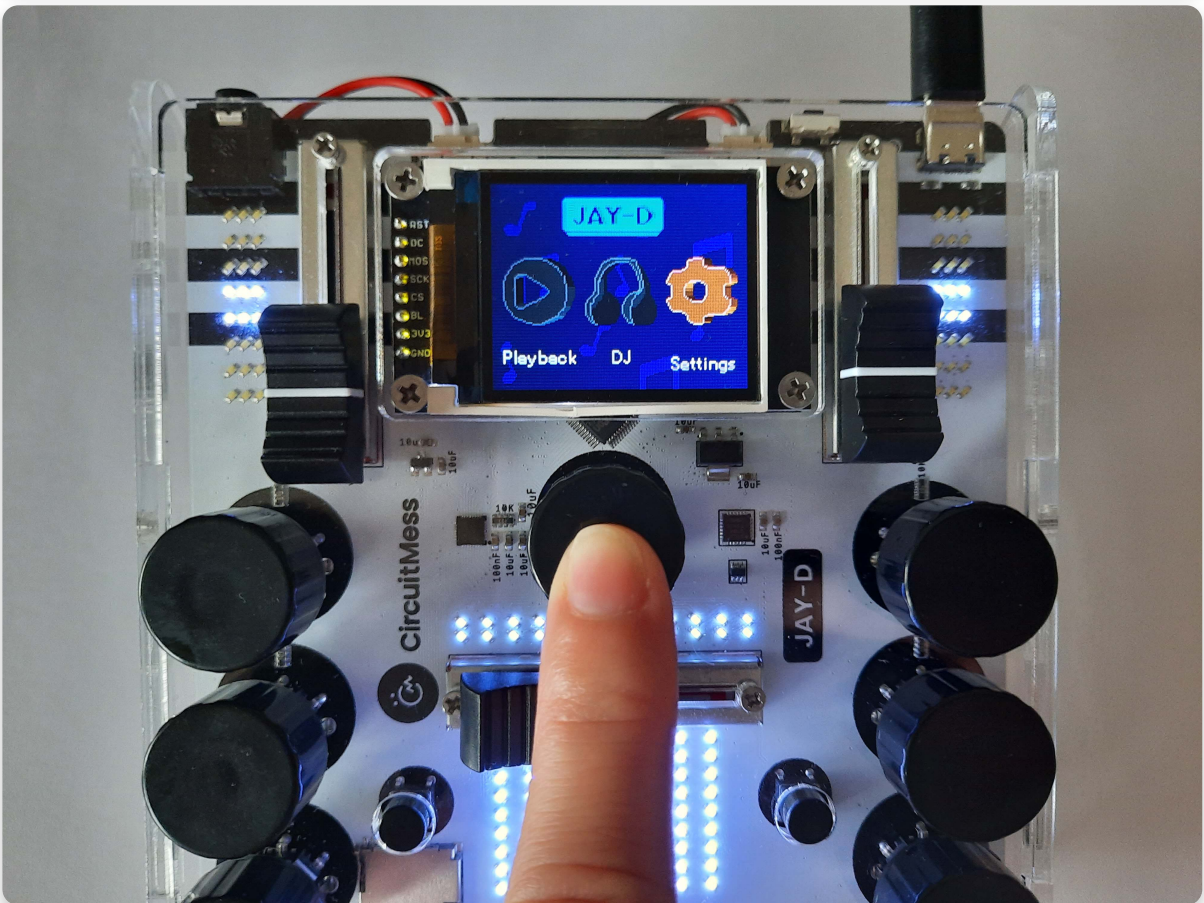
- **Playback** – Play songs that are on the SD card, or your own that you recorded while remixing
- **DJ** – Remix songs, add different effects, and record your masterpieces!
- **Settings** – Adjust the volume, brightness and perform an input test if needed

Jay-D's menu

Navigate through Jay-D's menu by **rotating the rotary encoder** below the display like in the photo.



When you choose what option to pick in the menu, **press on the rotary encoder to select it**. Once you do that, the option that you selected should appear on display.

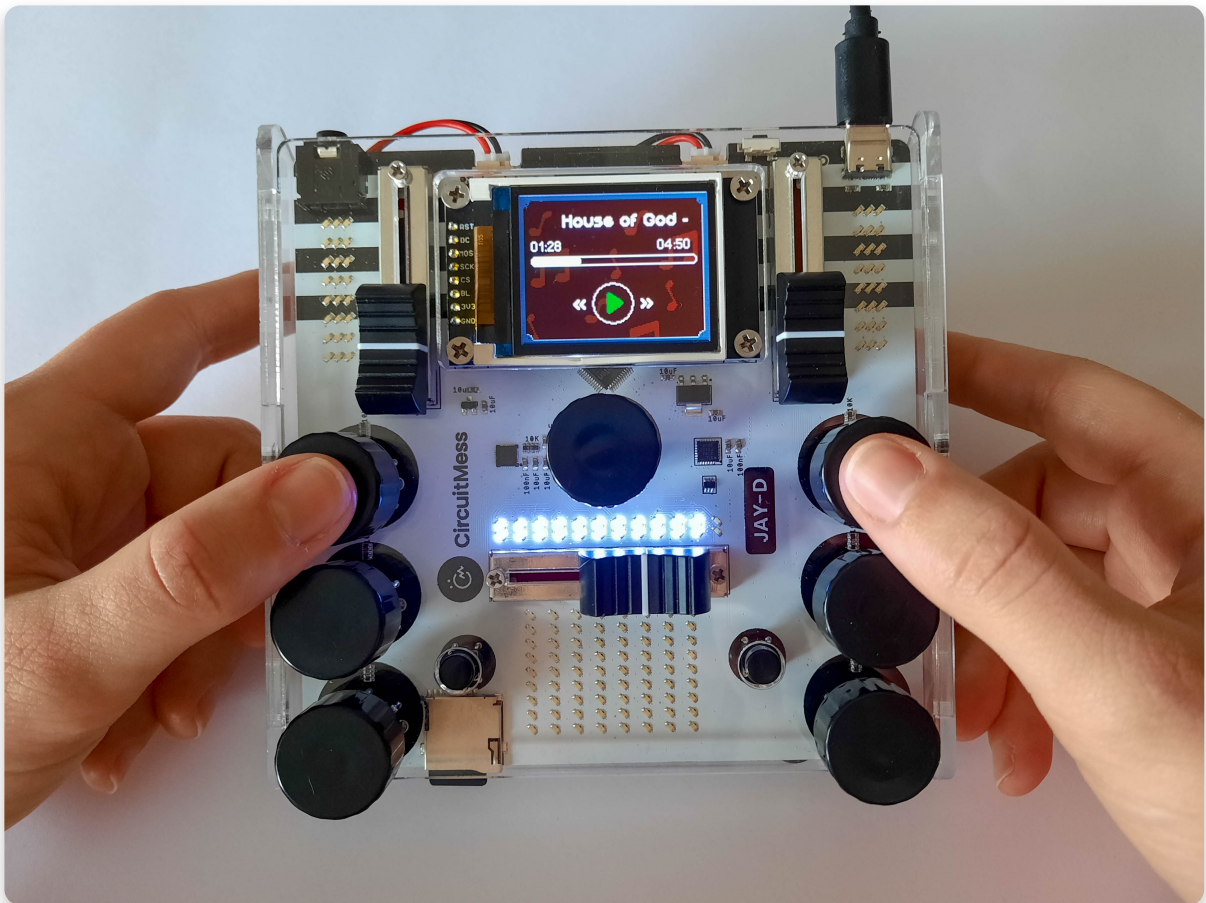


Click the encoder to select an option

How to go back?

To exit one of the options that you selected (*Playback, DJ, or Settings*), press the two rotary encoders on the top simultaneously, like taking a screenshot on your smartphone.

You can do that every time you wish to exit any of the options.



Let's go over all the options, one at a time, starting with the Settings...

Settings

Settings

When you enter the Settings mode on your Jay-D's menu, you'll be able to adjust the maximum volume, maximum brightness and perform the input test that you should have done in the *First check* step in the build guide.

In case you later suspect there is something wrong with any of the components that you soldered to the board, this is where you can check if everything works as it should.

Rotate the middle encoder under the display to navigate through the Settings.

Adjusting the volume

- Click on that same middle encoder to start adjusting the volume (or any other feature).
- When you click the encoder, a small red dot should appear on the volume slider, indicating how loud you're setting your volume to be.
- Rotate the encoder to set the volume.
- Click on the encoder to lock the volume.

Adjusting the brightness

- By rotating and clicking the middle rotary encoder, select the brightness option.
- The small red dot should appear to indicate how bright you want your LED lights to be.
- Rotate the encoder to set the brightness.
- Click on the encoder to lock the brightness.

Input Test

Perform this input test if you suspect that any of the components don't work as they should.

In case you can't complete the input test, you should check your soldering joints.

Save and exit

Exit the Settings by clicking on the Save option. Your volume and brightness settings should be saved.

Playback

Play some music!

This is where you can play the music that's already loaded on the SD card.

Later on, when you record your own remixes and learn how to transfer new music to the SD card, this is where you will find all of that.

Let us teach you how to use this feature...

Select Playback in the menu

Navigate through the menu by rotating the middle rotary encoder and select Playback by clicking on that same encoder.

Browse through the music list

Right after you click the Playback option in the menu, this music list should appear on display.

This is where you can see everything that's on the SD card.

Navigate through the list by rotating the middle encoder and select a song by clicking on the encoder.

Let the music play

When you click on the song in the list, a player like this should appear on display.

- **Start/pause** - pause the song by clicking on the middle rotary encoder, play the song by doing the same thing.

Click on the encoder to pause

- **Rewind** - rewind and seek by rotating the middle rotary encoder

Rotate the encoder to rewind

Adjusting the volume

You can adjust the volume by sliding the middle slider potentiometer like in the photo.

The maximum volume will be as loud as you set in the Settings option.

Exiting the Playback

Exit the Playback by pressing two top rotary encoders like in the photo.

DJ

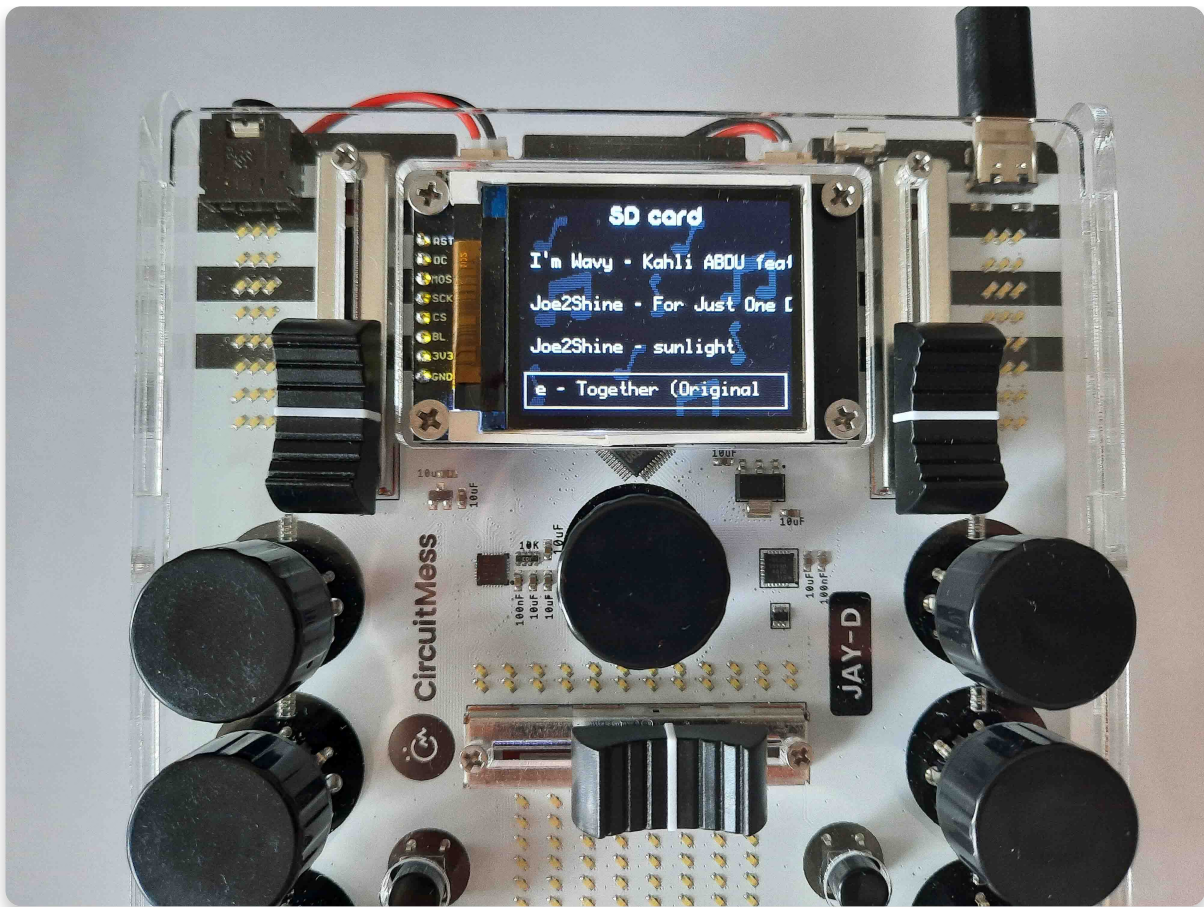
This is where the fun starts! Ready?

In this step of the usage guide, we'll explain how to remix music with Jay-D.

Select the DJ option in the menu to start remixing!

Right after you select the DJ option, a music list should appear.

To remix the songs, you'll have to select which songs to remix. Browse through the music list and select the first song by clicking on the middle encoder. After you do that, the same list should appear once again, and you'll be able to select the second song.



Select the two songs you want to remix

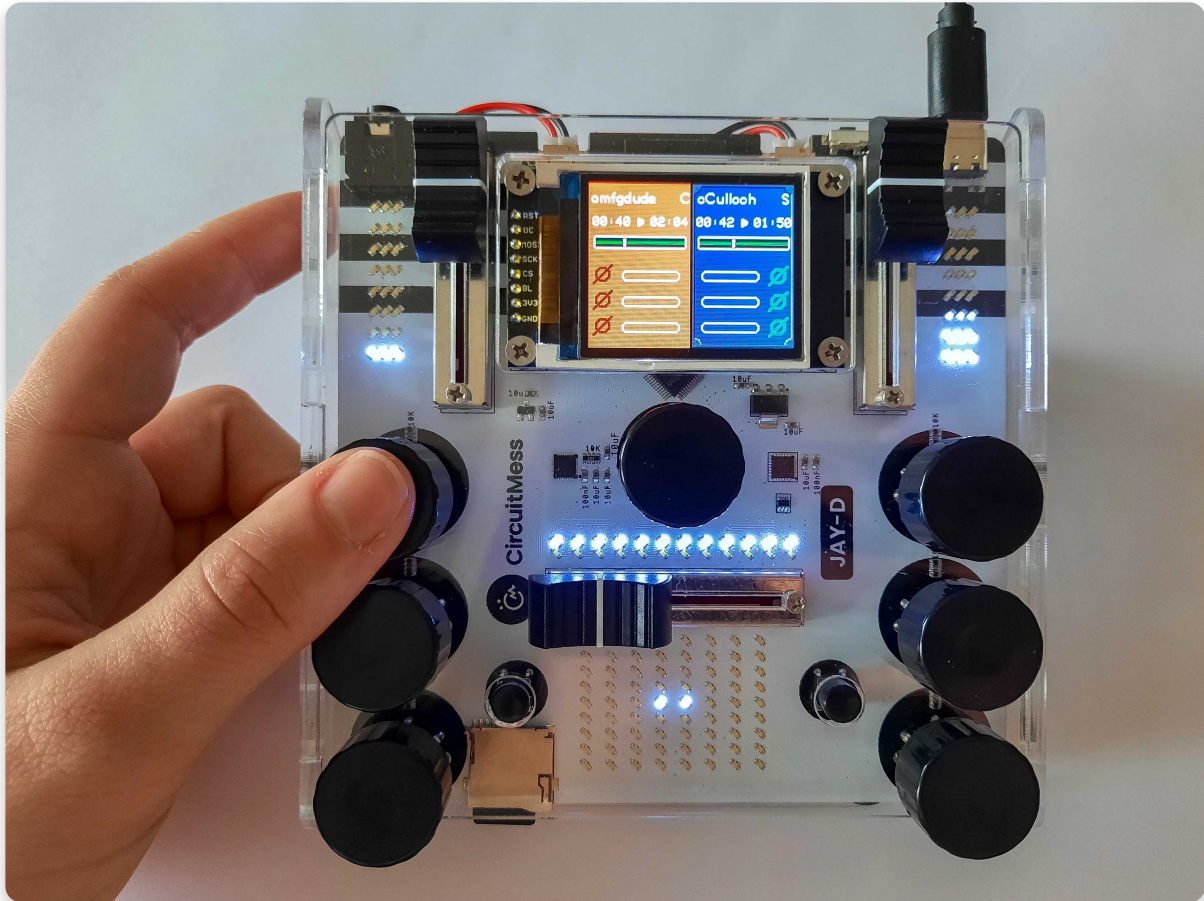
Here is a photo where you can see what each component on the board does:

- **The sliders on the side are adjusting the volume for each song.** The left slider is for the song on the left side of the display, and the right slider is for the song on the right side of the display.
- **The fader in the middle of the board enables the fading between the two songs.** Depending on which side you move the slider, will depend on which song is more dominant - to the left for the left song and to the right for the right song. e.g. if the slider is completely on the left, only the left song will play (vice versa).
- **Encoders** - these rotary encoders will add different effects to the songs that you're remixing.

Adding the effects

As you can see in the photo below, we added all the possible effects and will shortly explain each of them.

You can add the effect by clicking any side rotary encoders and rotating it until you find the effect you want to select. Select it by clicking on the same side encoder and then rotate it again to adjust the effect.



Click on the side rotary encoder to add one of the effects

Let's go over the effects in order like in the photo:

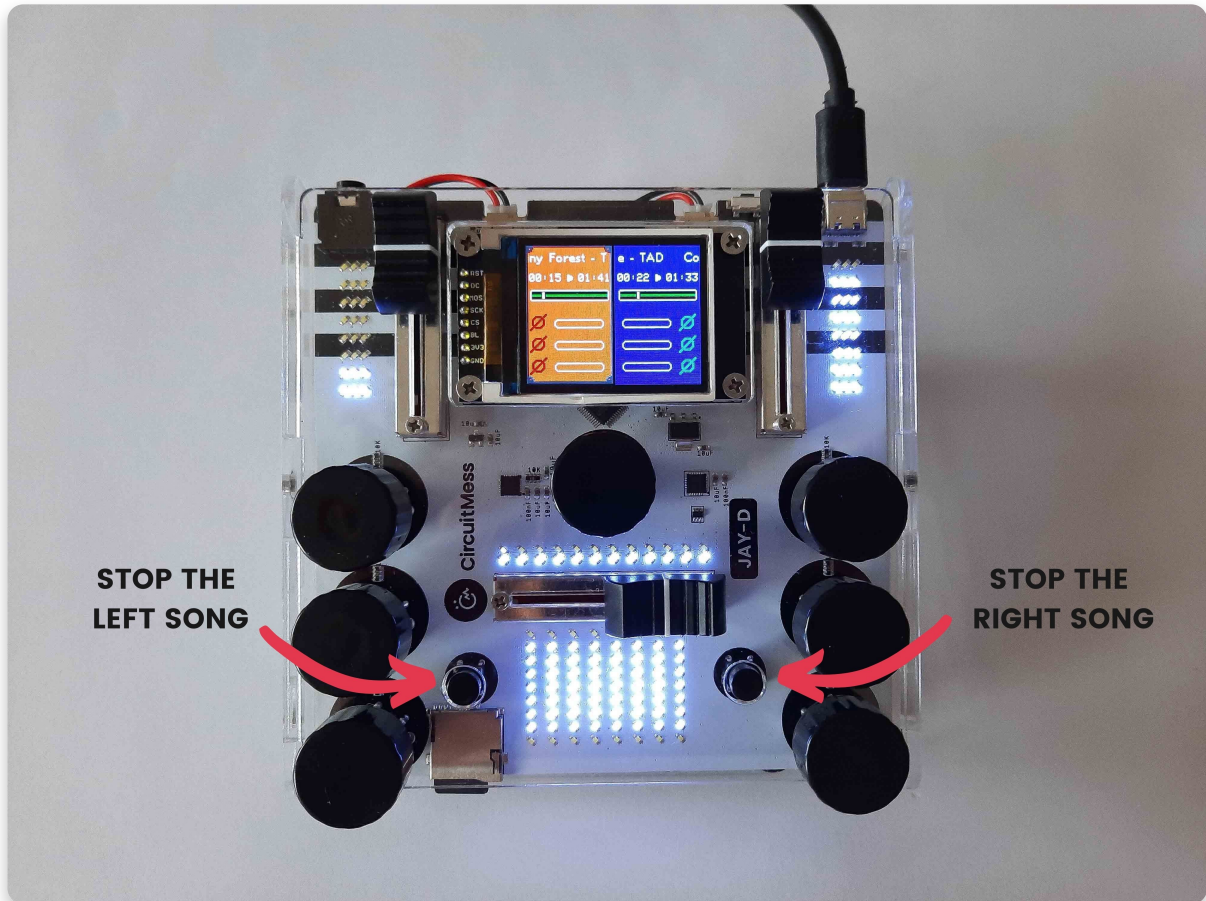
1. **High pass filter** - focuses on the vocals and reduces the bass
2. **Low pass filter** - the tone is deeper with more bass
3. **Circles** - adds echo to the sound
4. **Speed** - adjusts the speed of the song, go slower or faster with this one
5. **Bitcrusher** - the small robot effect will reduce the resolution or bandwidth of digital audio data making it sound like a robot

Start/Pause

To pause the song, click one of the small buttons next to the side encoders.

The small left button is for the song on the left side of the screen.

The small right button is for the song on the right side of the screen.



Replacing the song in the mix

Press and hold the middle rotary encoder to replace the song that you select by rotating the middle encoder.

The music list should appear on display, and you can now select the new song you want to add to the mix.

Press and hold

Recording your own remix

You can record your own remix playing at the moment and listen to it again in the Playback option. Pretty cool!

Press the bottom two rotary encoders to start recording.

While you're recording, feel free to mix some more: add effects, play with the fader, volume, and other features.

Be sure that you're recording!

A **small red dot** should appear in the middle of the screen – this means that the recording is in the process.

To exit the recording process, press the two encoders on the top at the same time.

Saving your recording

Press the two bottom rotary encoders to stop the recording and to save it.

Right after you do that, the following menu will appear on display. Rotate the middle encoder to navigate the alphabet and click on the letter you want to select.

When you name your recording, make sure to click on a small tick at the end of the alphabet.

Your recording is saved on the inserted SD card after this small window disappears from the display.

Go ahead, try to find your remix on Playback.

Choose an animation mode

One of the coolest things that you can do with the LED lights is choosing an animation mode.

Remember the small buttons that we used for pausing the songs? **Press both small buttons to select the LED animation.**

Browse through the animations by rotating the middle rotary encoders. Select the animation by clicking on the same encoder and **enjoy the light show!**

Connecting to the computer

Connecting to the computer

Eager to add new music?

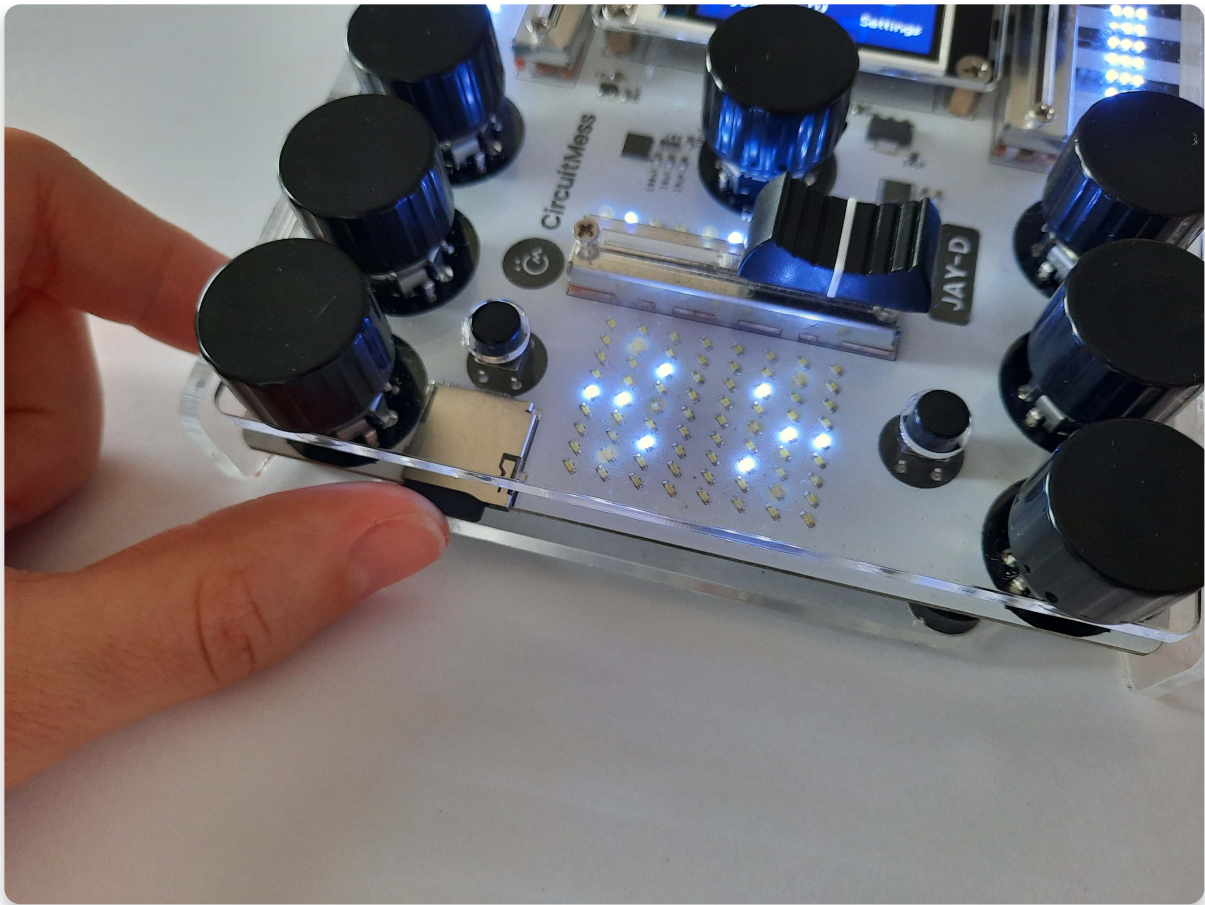
In this step of the usage guide, we'll explain how you can connect your Jay-D to the computer to add new music, transfer old songs, and delete the ones you don't want.

Firstly, let's go over the process of managing the SD card and everything that's on it.

Take out the SD card

Locate the SD card at the bottom left of the board.

Taking out the SD card works on a push principle where you only have to push it slightly, so it pops out. Once the card pops out, you can take it out of the slot.



Push the SD card to unlock its position. It should pop out of the slot after you do that.

Once the SD card pops out, you can take it out of the slot

Insert the SD card into the USB

Connect the SD card to your computer

To enable your computer to read the SD card, you need to insert the USB adapter with the SD card inside into your computer.

The only challenge here is to insert the SD card into the USB adapter, so it doesn't stick out too much.

Insert the USB adapter into your computer

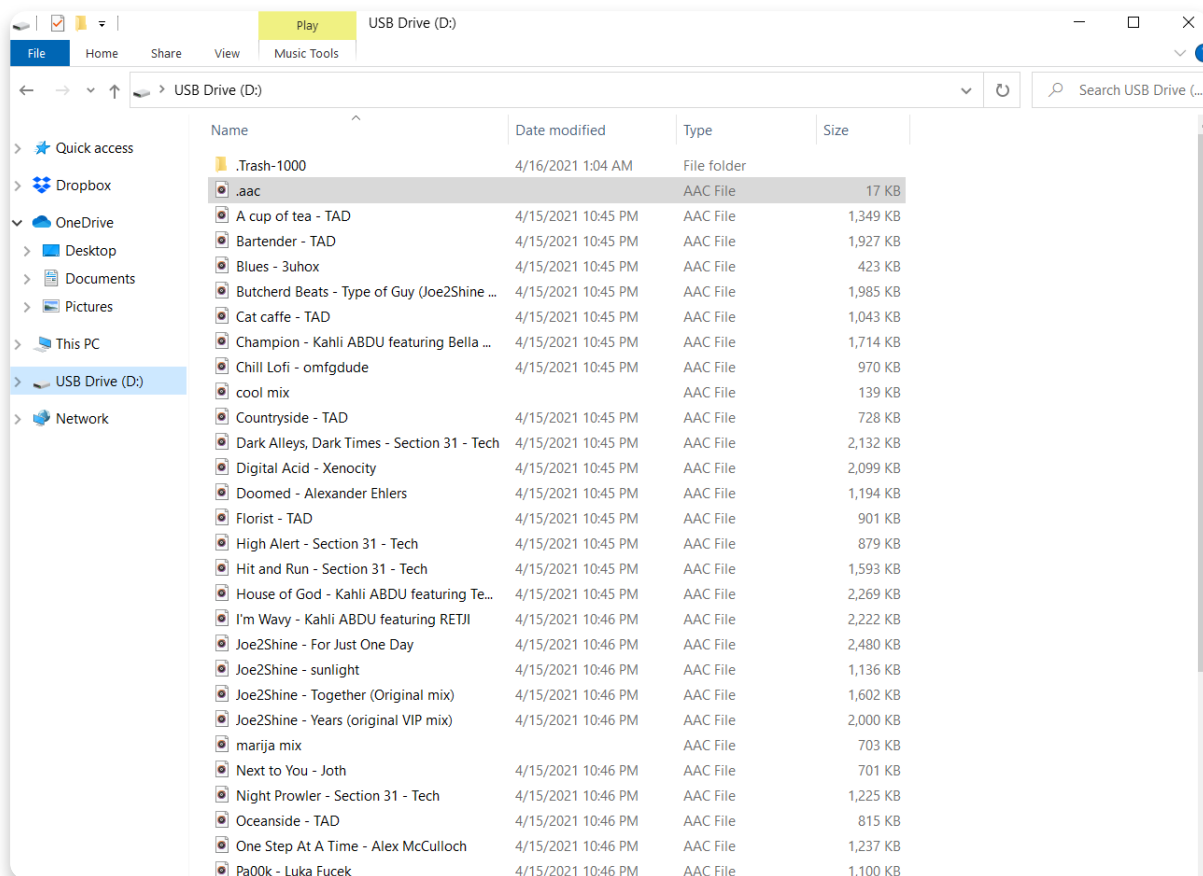
Managing the SD card

Curious how to add new music?

Once you inserted the USB adapter into the computer, you should find the SD card folder.

The easiest way to find it is to go to This PC in File Explorer and find the **USB Drive** folder.

Click on that one, and a list like this should appear. Looks familiar? This is where you will find everything that's on Jay-D's SD card and music list.



Jay-D's music list

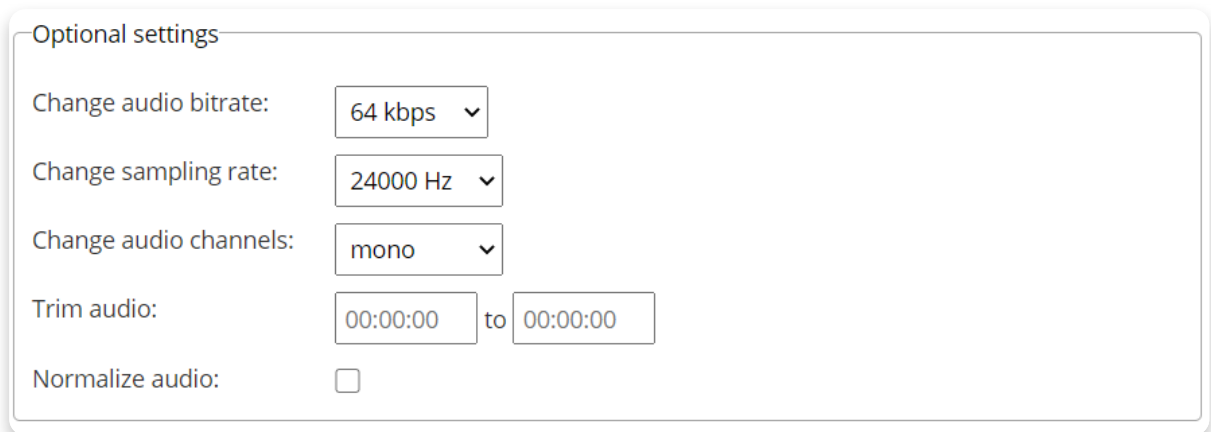
If you look closer, you'll notice that all the music is in **AAC file type**. This is the type that's compatible with Jay-D, and everything that you want to transfer to this SD card should be in AAC type as well.

This might mean that you'll most probably need to convert your music files from MP3 (or any other type) to AAC type.

Here is the link and the settings where you can convert the files before transferring them to the SD card: [Audio converter](#)

When converting please make sure to set up the settings **exactly like this**:

- audio bitrate: **64kbps**
- sampling rate: **24khz**
- audio channels: **mono**

A screenshot of a software interface titled "Optional settings". It contains five rows of controls: 1. "Change audio bitrate:" with a dropdown menu set to "64 kbps". 2. "Change sampling rate:" with a dropdown menu set to "24000 Hz". 3. "Change audio channels:" with a dropdown menu set to "mono". 4. "Trim audio:" with two time input fields, both set to "00:00:00", separated by the word "to". 5. "Normalize audio:" with an unchecked checkbox.

After you convert and download the audio files you'd like to add, feel free to paste or transfer them to the list shown in the photo above.

This list shows up after you open the USB Drive folder on This PC.

You can also delete and copy the files that are already on the SD card. This will be important if you decide to transfer your remixes to your computer, for example.



Only add .AAC music files to the SD card!

Don't add folders to the SD card folder because Jay-D won't be able to read that.

Inserting the SD card back

When you're done managing the songs on your computer, it is time to **put the SD card back into the slot on Jay-D's board**.

1. For this, you'll have to take out the card from the USB adapter.
2. Put the SD card into the slot by slightly pushing it until it's locked in the slot.
3. **Reset your Jay-D** – This step is important because the new songs won't be readable if the mix table is not turned off and on. The small reset button is located next to the USB port on Jay-D's board.

4. Enjoy your new music! - Once you restart your Jay-D, go to Playback and test out the newly added music.

You should be all set now!

If you have any questions or comments, feel free to contact us at contact@circuitmess.com, and we'll make sure to help out as soon as possible.

Now that you know how to use your Jay-D, try **programming** some **custom functions** for him. You can create your own **custom light show**, draw **cool images** on Jay-D's display, and much more.

We'll guide you through the first steps in the **Jay-D coding guide**:

- [Jay-D coding - first steps](#)