GETTING STARTED

Step 1: Assembling and connecting

Once you get your Jammy E out of the box, follow this video to assemble and connect it to your computer via USB with the cable provided:

Don't forget to screw the left and right parts together with the black-headed screw, so that the connection between them is sturdy.

Step 2: Connecting with the web-onboarding tool

When you connect your Jammy E for the first time, we recommend that you go to our web-onboarding tool at https://start.playjammy.com/. It will help you to make sure the firmware is up to date, allow to configure some basic playability and MIDI settings and explain how to download the desktop app/plugin:

1. Go to https://start.playjammy.com/ in your Chrome browser on your computer
2. Connect Jammy E to your computer via USB type-C cable provided in the box
3. Press Power On button on the back of the right-hand side of Jammy E
4. Make sure the LED light next to the Power On button is steady green
5. Press Start onboarding > Done in your Chrome and follow the instructions

*Considering the web-MIDI tools availability in Chrome **desktop** web-browser and its dominant market share, it was specifically selected as a platform for the web-onboarding tool to run on. So please make sure to use the most up to date version of Chrome and USB connection for the onboarding purposes.*

The Jammy G iOS/Android app that might be found on the respective app stores was designed to work only with our previous model, Jammy G, not Jammy E. So IT'S NOT supposed to connect NOR needed for Jammy E.

Step 3: Updating firmware

The very first thing happening in the web-onboarding tool is the firmware update. By default, the tool will verify that your Jammy E is running the latest firmware version and automatically update it if needed.

1. When asked by your Chrome browser, allow it to use MIDI devices:
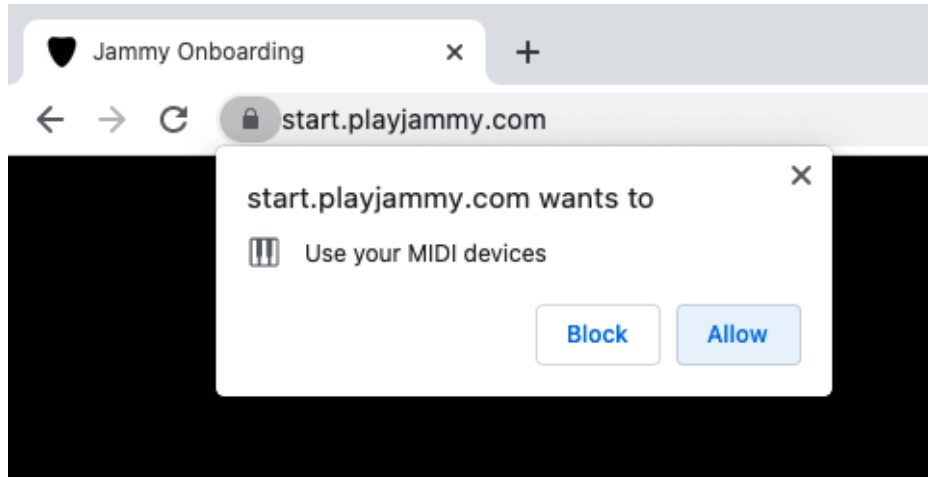
2. If new firmware is available, the web-onboarding will offer you to upgrade your Jammy E. To do so, click Start update.

3. Jammy E will switch to DFU* mode (the LED light next to the Power On button should switch to a red-yellow pattern to indicate that) and your web browser will ask your permission to connect once again. Select Jammy E DFU in a pop-up menu to press Connect:
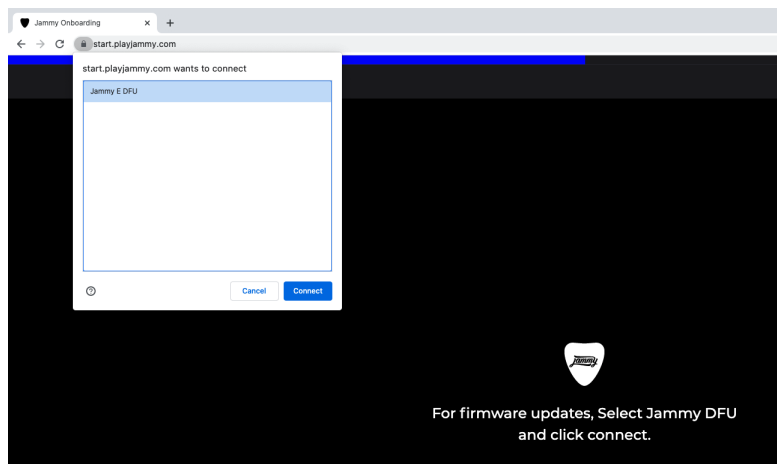

4. Don't switch tabs and wait for several minutes for the update process to finish.

* DFU stands for Device Firmware Upgrade. It is a vendor- and device-independent mechanism for upgrading the firmware of USB devices like Jammy E. During the firmware upgrade operation, Jammy E will change its operating mode to allow for firmware update. This will be indicated by changing the LED pattern on the Jammy E to red-yellow flashing pattern.

If by any reason (e.g. device connection interruption) Jammy E will be stuck in the DFU mode, disconnecting it from the USB and long-pressing the Power On button will switch it back to a default mode (with LED being constantly green).

In some cases for Windows-based computers, a manual DFU driver installation would be required to complete the update process. This would be proposed by the web-tool and don't require much effort. Just follow the on-screen instructions to do so:
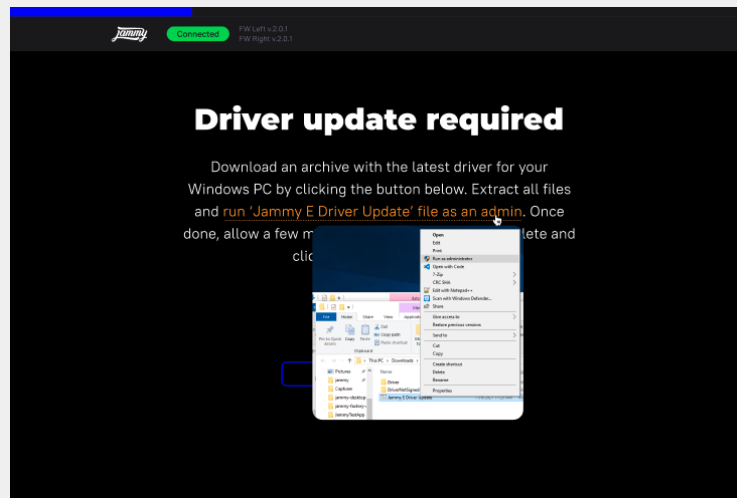
Step 4: Checking right-hand strings responsiveness

From now on, the web-onboarding tool will start reading and playing the incoming MIDI messages from your Jammy E with a built-in sound engine. If you would want to disable that for any reason, just toggle the SOUND switch in the upper right corner.

Now, try to pick each string or strum a chord to see how well your Jammy E responds to that. Don't forget that Jammy E is a digital instrument that has its peculiarities, so to enjoy it to the fullest, try to play a little bit more articulated than you would play a regular acoustic or electric guitar.

*In general, Jammy E sensors are optimized for regular or slightly-above regular guitar string tension. In case you are finding the picking/strumming responsiveness less sensitive than you expect, try **tightening** the strings on the right-hand part with the hex key provided in the box:*

Step 6: Setting advanced playing techniques

After clicking Next on the previous step, you would be offered to set up advanced playing settings. Click the corresponding menu item to do so.

Playability settings are organized in Playability Presets that allow to switch between predefined values corresponding to different playing styles. Once you click on a particular Playability Preset, it instantaneously gets applied to your Jammy E so you can check the difference right away. Optionally, you can drill down and fine-tune some particular parameters of the selected Playability Preset by pressing 'Customize'. Otherwise, proceed to the next step by pressing 'Apply Selected Preset'

By default, there are 3 Playability Presets that you can switch between:

Clean Picking and Strumming:
This Playability Preset turns off hammer-ons, pull-offs, bending and vibrato. Only the notes you pick with your right hand will be tracked. You can use this preset to play rhythm guitar parts, scales, classical pieces and to get a clean MIDI recording without any unwanted notes.

All Techniques
This Playability Preset turns on all the common guitar playing techniques like slides, hammer-ons, pull-offs, bending and vibrato. Since the digital guitar has its differences from a regular one, it might react to different playing styles slightly differently. In case you find the responsiveness a bit off, we recommend fine-tuning the exact parameters of this Playability Preset to your liking.

Super Tapping
It has the Hammer-On and Pull-Off Sensitivities set pretty high, so even a pretty light tap on the fretboard will be tracked as a hammer-on. Pull-Offs to an open string are very sensitive, as well.

Under each Playability Preset, the following parameters are available for fine-tuning (the same description can be found after hovering the cursor over the 'i' icon next to each of the parameters):

Bending and Vibrato Switch	Enables / disables bending and vibrato for all strings.
Hammer-On and Pull-Off Switch	Enables / disables hammer-ons, pull-offs and tapping on each string.
Pull-Off from Open String Sensitivity	Defines how easy it is to trigger pull-offs from an open string
Hammer-On to Open String Sensitivity	Defines how easy it is to trigger hammer-ons to an open string
Hammer-On and Pull-Off Sensitivity	Defines how easy it is to trigger regular hammer-ons and pull-offs
Hammer-On and Pull-Off Loudness	Defines the velocity level of hammer-ons, pull-offs and tapping.
Slide Switch	Enables / disables slides on each string.
Velocity Compressor Switch	Enables / disables loudness compression for all picked notes.
Velocity Compressor Level	Defines the velocity level to which the picking loudness will be compressed.
Velocity Compressor Amount	Defines how heavily the picking loudness will be pushed up or down towards the selected Velocity Compressor Level.

The legato techniques (or hammer-ons and pull-offs) are the subject to the biggest variation between the actual playing style and digital guitar response. There are 2 ways of adjusting the response towards how it feels more natural:

1) The same as for the right-hand part, left-hand sensors are optimized for regular or slightly-above regular guitar string tension. So in case you are finding the responsiveness less accurate than you expect, try tightening the strings on the left-hand part with the hex key provided in the box:

2) Software-wise, the most efficient way of adjusting the parameters would be the following:

1. *Start with the Pull-Off from Open String Sensitivity and Hammer-On from Open String Sensitivity. Make sure that the levels are high enough for the intentional hammer-ons and pull-offs to/from an open string are triggered in different areas of the fretboard. But low enough so that they are not triggered when you just place/remove your fingers from the fretboard during chord transitions.*

2. *Then go to Hammer-On and Pull-Off Sensitivity and adjust for the situations where the strings are already pressed with one your fingers and the other is making a hammer-on/pull-off. Here, the same logic of finding an ideal in-the-middle value applies.*

3. *Lastly, you can play around with Hammer-On and Pull-Off Loudness to set up a suitable velocity level that would be applied to the notes triggered by the legato techniques. Different virtual instruments in different DAWs are working very differently in that way – some play low velocities very loudly and some can be barely heard.*

Step 7: Setting MIDI parameters

The last step would be configuring your DAW-specific MIDI Settings. Exactly as with Playability Presets, MIDI Presets let you quickly change all MIDI Settings at once to best match the software that you're using Jammy E with (Ableton Live, Logic Pro, Guitar Pro, GarageBand etc).

Once you click on a particular MIDI Preset, it instantaneously gets applied to your Jammy E so you can check the difference right away. Under each MIDI Preset you will find the following list of parameters (the same description can be found after hovering the cursor over the 'i' icon next to each of the parameters):

MIDI Channels:
Jammy E sends the notes from each string into a separate MIDI channel, allowing you to split them between different virtual instruments or record tabs with accurate finger position information.

By default, Jammy E uses channels 2 (for the low E string) through 7 (for the high E string), which is the optimal setting for GarageBand and Logic Pro. Some programs that support MIDI Guitar input (for example, Guitar Pro and virtual guitar VST plugins) expect channels 1 (for the high E string) through 6 (for the low E string).

Note that if you set multiple strings to the same MIDI Channel, bending one of these strings will pitch-bend the notes played on the other strings, as well.

String Bending:
Pitch Bending Range (Divide By) controls whether string bending on Jammy will use the full range of the MIDI pitch wheel parameter or a fraction of it. This lets you adjust Jammy to the bending range of the software instrument that you're playing.

By default, this parameter is set to 1, so that a full-step bend on Jammy will work the same as moving the pitch wheel on a MIDI keyboard all the way up.

With some software instruments, moving the pitch wheel all the way up will result in a pitch bend of several octaves. In this case, you can increase the Pitch Bending Range (Divide By) parameter to keep string bending within the normal range. The wider the bending range of the software instrument, the higher you need to set this parameter.

So if you're playing a software instrument and it feels like the strings go out of tune very easily, or making a full-step bend sends the note much higher than expected, you likely need to adjust the Pitch Bending Range (Divide By) parameter. For example, guitar instruments in GarageBand and Logic Pro will play bends naturally when Jammy's Pitch Bending Range is divided by 24.

String Muting:
Palm Muting lets you trigger MIDI commands by palm muting the strings with your picking hand. You can choose from a number of modes:

- Off: No extra MIDI commands will be sent for palm muting.
- MIDI CC: A continuous control parameter (determined by MIDI CC Number) will be set to maximum (127) every time you palm mute the strings and minimum (0) every time you release them.
- Keyswitch: A MIDI note (determined by Primary Keyswitch) will start playing every time you palm mute the strings and stop playing every time you release them.

TROUBLESHOOTING

Rebooting Jammy E

You can always reboot your Jammy E by pressing the Power On button for a few seconds with the USB cable disconnected. If you do so, the LED light should go from green to flashing white and to dark immediately after. Pressing the Power On button again would reboot the device.

If for some reason after the reboot you are still experiencing any problems, try repeating the steps above but with the left part detached. Once you press the Power On button again, connect the left part back to the right part and wait for the LED to go from the flashing green to steady green.

> *Don't forget to screw the left and right parts together with the black-headed screw, so that the connection between them is sturdy.*

Fixing issue with the frets playing wrong notes

In case you noticed any inconsistency with notes detection on the fretboard, you might be experiencing a typical back-bowed problem of the guitar neck. An example of this would be when you try to play an A note (5th fret) on the Low E string but hear A# note (6th fret) instead. Jammy E is using electrical connection between the conducting frets and the string, so if the fretboard is back-bowed and the string you are pressing is touching a higher fret, the algorithm will get a wrong input and produce a wrong note:

Good news is that it's easily fixable and here is how you can do it:

1. Use the hex-key from the box to tighten **each** string on the fretboard, so that the fretboard becomes slightly more forward-curved as it should by default. You should be looking to get a regular or slightly-above regular guitar string tension:

2. In case the fretboard is still not forward-curved enough, try releasing the tension of the neck rod (in case it still pulls the curveity into the opposite direction). Just apply a regular slotted screwdriver counterclockwise to the rod's screw on the upper side of the fretboard:

Enabling bending in my DAW

Pitch bend is working differently in MIDI for different software instruments, so it is going to be crucial to set it up properly. In case you don't see/hear any reaction to you bending the string in the DAW, make sure the "Bending and Vibrato Switch" is enabled under Advanced playing techniques in the web-onboarding tool.

Next, use the same tool to go to MIDI Settings and use Pitch Bending Range (Divide By) that controls whether string bending on Jammy E will use the full range of the MIDI pitch wheel parameter or a fraction of it. This lets you adjust Jammy E to the bending range of the software instrument that you're playing.

With some software instruments, moving the pitch wheel all the way up will result in a pitch bend of several octaves. In this case, you can increase the Pitch Bending Range (Divide By) parameter to keep string bending within the normal range. The wider the bending range of the software instrument, the higher you need to set this parameter.

So if you're playing a software instrument and it feels like the strings go out of tune very easily, or making a full-step bend sends the note much higher than expected, you likely need to adjust the Pitch Bending Range (Divide By) parameter. For example, guitar instruments in GarageBand and Logic Pro will play bends naturally when Jammy's Pitch Bending Range is divided by 24.

Getting support

In case you are still having questions, you are more than welcome to send them over to our Support Team at support@playjammy.com. While we usually try to answer as fast as we physically can, please allow for 24 hours on the weekday to get a response.