



drumbeam

reference manual

Regulatory Information

This product, **drumbeam (Model: afk-drmbm-V1-blck)**, complies with the following international regulations and standards:

European Union (EU)

Conforms with the essential requirements of:

1. 2014/53/EU – Radio Equipment Directive (RED)
2. 2014/30/EU – Electromagnetic Compatibility Directive (EMC)
3. 2011/65/EU – Restriction of Hazardous Substances (RoHS)
4. 2012/19/EU – Waste Electrical and Electronic Equipment (WEEE)

Harmonized standards applied include EN 300 328, EN 301 489-1, EN 301 489-17, EN 55032, EN 55035, EN IEC 62368-1, EN IEC 62368-3, and EN 50581.

United States (FCC)

Contains FCC ID: **2AC7Z-ESPS3MINI1**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

5. This device may not cause harmful interference.
6. This device must accept any interference received, including interference that may cause undesired operation.

OEM integrators must ensure compliance of the final product in line with FCC KDB 996369.

Canada (ISED)

Contains IC: **21098-ESPS3MINI1**

This device complies with ISED licence-exempt RSS standards. Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation.

The antenna must be installed with a minimum separation distance of 20 cm from the user.

Power Supply

USB-C, 5 V DC only.

WEEE

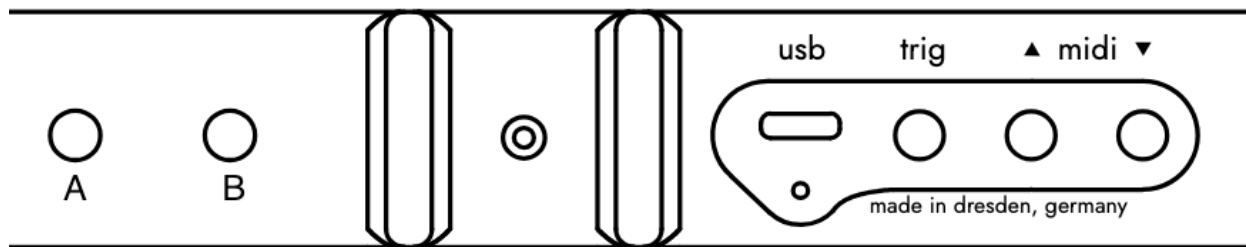
This product must not be disposed of with household waste. Please dispose of it at appropriate collection points in accordance with local regulations.

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1. drumbeam

Thank you for purchasing **drumbeam**. By doing so, you are supporting our small brand on our journey to develop innovative products that encourage people to get *away from keyboard*.
drumbeam is a state-of-the-art MIDI drum controller designed for musicians who demand flexibility, performance, and creativity.

1.1. Hardware Elements



USB-C Port Functionality

drumbeam is powered via a USB-C connection. Power consumption ranges from 400 mA to 3000 mA, depending on the brightness settings and the capabilities of the connected USB-C port. For maximum brightness, connect drumbeam to a high-power USB-C port using the included cable.

In addition to supplying power, the USB-C port is also used for **USB MIDI connectivity** and for performing **firmware updates**.

Analog Trigger Input

drumbeam features an analog trigger input, designed for use with electronic kick pedals and other piezo triggers. The wiring is **Roland-type**, so Yamaha-type piezos may be less sensitive. Input sensitivity can be adjusted in the settings.

MIDI Connectivity

MIDI TRS output and input (**Type A**) are available for connecting to other hardware MIDI devices. A MIDI adapter cable is included in the box.

Device Navigation

Two dedicated buttons on the device allow you to switch between presets and navigate the user interface:

- **Left button (A):** Switch to the previous preset. Holding the button temporarily stops sending MIDI notes. This is useful for CC mapping in DAWs.
- **Right button (B):** Switch to the next preset.

Special functions at boot:

- Hold **left button** at boot → toggle wifi off/on. This way you can turn off the wifi functionality, e.g. if you play live on stage and want to minimize interference with other radio devices.
- Hold **right button** at boot → enables bootloader mode for firmware updates.
- Hold **both buttons** at boot → deletes all user data and conducts factory reset

Configuration App

drumbeam includes Wi-Fi connectivity, enabling access to a dedicated configuration web app for advanced settings and customization. See [Configuration](#).

1.2. Mounting

drumbeam features a **multifunctional mounting system** designed for compatibility with a wide variety of setups, whether you're performing on stage, working in the studio, or rehearsing at home.

At the heart of the system is a custom mounting sleeve that supports both 11 mm and 13 mm diameters. This makes it compatible with most boom arms, percussion clamps, and common drum hardware. To switch between diameters, simply unscrew the sleeve, flip it around, and screw it back in using the opposite side.

Inside the same sleeve, you'll find an integrated **M8 thread**, allowing drumbeam to be mounted directly onto tabletop stands or placed securely on top of cymbal stands. This clever design eliminates the need for additional adapters, making drumbeam highly adaptable to any environment.

2. Getting Started

This chapter guides you through the initial setup and basic operation of your drumbeam device. From connecting to your computer or other hardware to exploring the factory presets, you'll find everything you need to start making music right away.

2.1. Connecting as USB MIDI Device

drumbeam is a USB MIDI device designed for plug-and-play compatibility with any digital audio workstation (DAW). No drivers or additional software are required. To begin:

1. Connect drumbeam to your computer via the included USB-C cable.
2. Launch your preferred DAW.
3. In the DAW's settings, select **drumbeam** as your MIDI controller.

2.2. Connecting to other hardware via MIDI TRS

The MIDI TRS **Out** port allows you to connect to external hardware such as synthesizers, samplers, and drum machines, integrating drumbeam seamlessly into your setup.

The MIDI **In** port can be used to:

- Chain multiple drumbeams or other MIDI devices via MIDI Thru.
- Remotely select presets on drumbeam using program change messages.

Important: drumbeam uses MIDI TRS **Type A** connectivity. A compatible adapter cable is included.

2.3. Factory Presets

drumbeam comes with **8 different factory presets** to get you started quickly.

- Each preset has a different number of segments and transmits on a unique MIDI channel: preset 1 → channel 1, preset 2 → channel 2, and so on.
- Within each preset, every segment sends a distinct MIDI note. The leftmost segment sends **MIDI note 36**, with subsequent segments sending chromatically ascending notes from left to right.
- Presets can be switched using the navigation buttons.

3. Configuration

The configuration of drumbeam is handled in a dedicated **web app** accessible via Wi-Fi. It offers extensive customization options, including:

- Number, size, and color of drum pad segments
- MIDI notes, channels, scales, CC numbers
- Animations, Preset names and banks
- Brightness, network configuration, and MIDI routing

Because the app is browser-based, it is platform-independent and works on computers, tablets, and smartphones. No installation needed.

3.1. Connecting to the Configuration Web App

When powered on, drumbeam automatically opens a Wi-Fi access point with the SSID of the device which is **drumbeam** by default. The initial password is **supersafe**. You can also use the left QR code below to connect directly to the Wi-Fi network.

For your security, we strongly recommend changing the initial password to prevent unauthorized access to your drumbeam — for example, during live shows. You can do this in the [Settings](#).

Note: Some devices may display a warning that the Wi-Fi network does not provide internet access. In this case, simply click “Connect” to proceed.

Once connected, open your browser and go to **http://drumbeam.local** or scan the right QR code below. The URL is the devices SSID.local. If you change the SSID to f.e. “Klangstab” it’s klangstab.local. The drumbeam Config-App will open directly in your browser.

Troubleshooting: On some smartphones, you may need to temporarily disable mobile internet to ensure a stable connection to the drumbeam network. If the connection fails try to refresh the page.



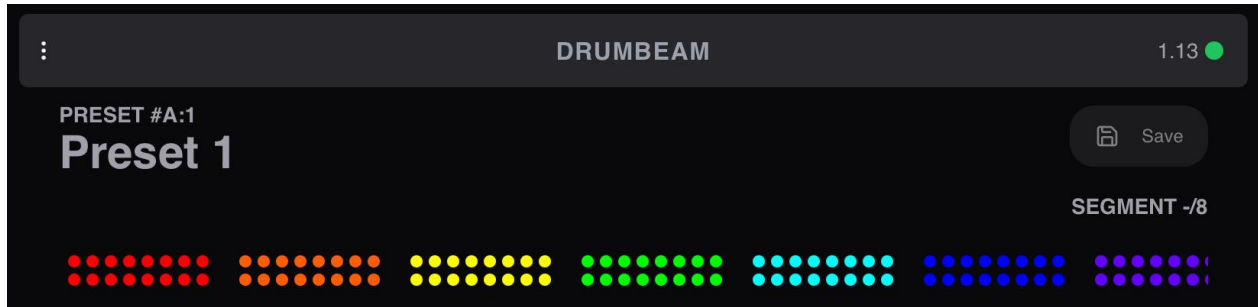
connect to Wi-Fi



open web-app

3.2. Preset View

When you open the Config-App, it starts in **Preset View**, showing the currently selected preset. In this view, you can adjust all parameters that affect the entire preset. These settings apply only to the active preset and can be configured differently for each preset.



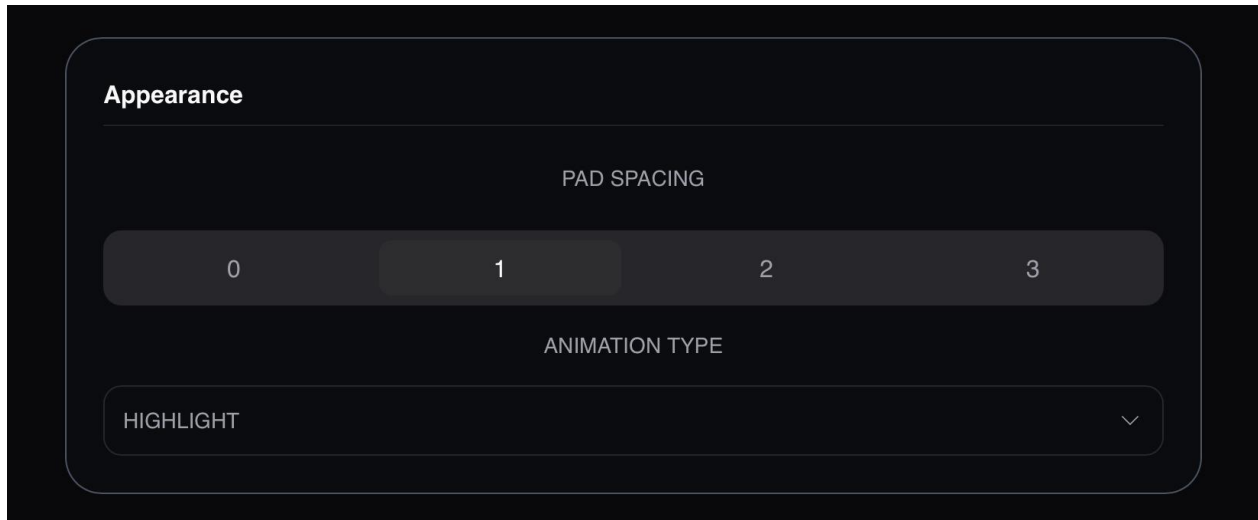
- **Top Bar:** The top section shows the **preset bank**, the **preset number**, and the **preset name**. For example: PRESET #A:1 – Default Preset
- **Segment Display:** Below the title, the segments of the selected preset are displayed as colored blocks. These represent the active pads on your drumbeam, mirroring the layout on the physical device.

This view allows you to quickly identify which preset is active and see its segment configuration at a glance. You can **click on a segment** to navigate to [Segment View](#).

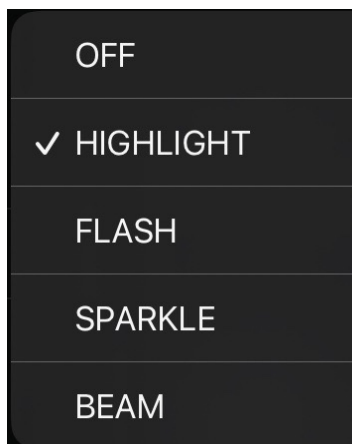
3.2.1. Appearance

The **Appearance** section in the Config-App allows you to customize the visual look and behavior of your drumbeam pads. These settings affect only the display and animations, not the musical output.

The **Pad Spacing** control lets you adjust the gap between visual pad segments on the display in LED pixels. A value of 0 means the pads are directly adjacent with no spacing. Select the desired spacing by clicking on the corresponding number.



The **Animation Type** menu defines how pads visually respond on the audience side when triggered:

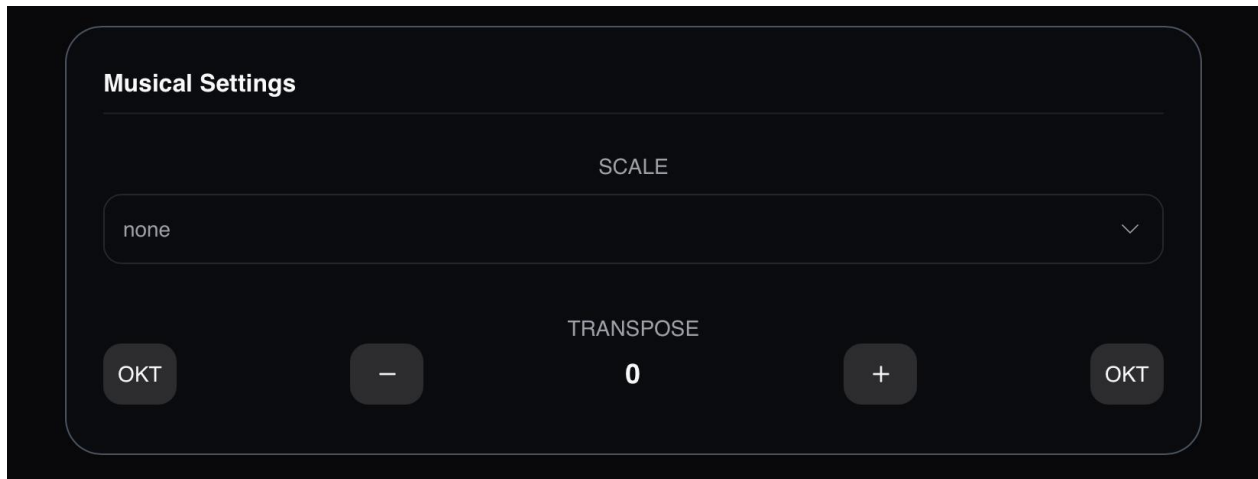


- **OFF** – LEDs are turned off on the audience side
- **HIGHLIGHT** – Pads are shown and light up as on the user side
- **FLASH** – Pads are not shown on audience side, all audience-side LEDs light up in the corresponding pad color
- **SPARKLE** – The audience side is dark and displays a sparkling effect on hit.
- **BEAM** – Pads are not shown on the audience side, a beam-like animation radiating from the triggered point is shown.

Choose an animation type from the drop-down list. The currently selected option is marked with a check symbol. **HIGHLIGHT** is the default animation type.

3.2.2. Musical Settings

The **Musical Settings** section is used to quickly adjust the MIDI notes of all pads in the current preset to different musical contexts.

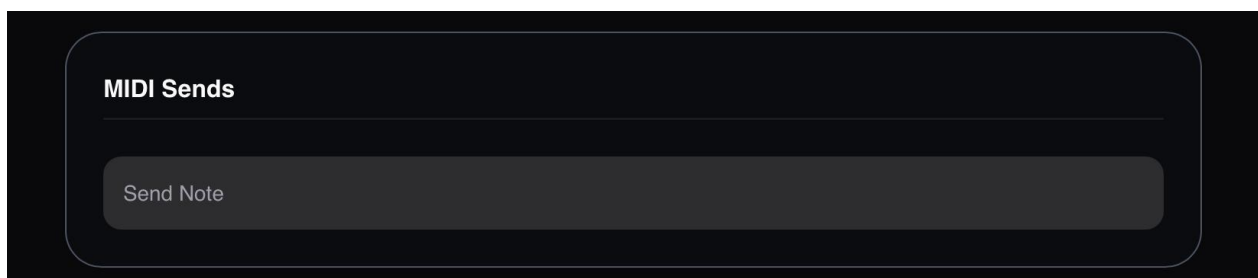


The **Scale** setting can be used to map the notes on all pads of the current preset to the selected musical scale.

The **Transpose** control shifts the pitch of all pads up or down. Use the **+** and **–** buttons to increase or decrease the transpose value in semitones. The **OKT** buttons adjust the transposition in full octave increments. This setting is useful for adapting to different keys without changing the preset layout.

3.2.3. MIDI Sends

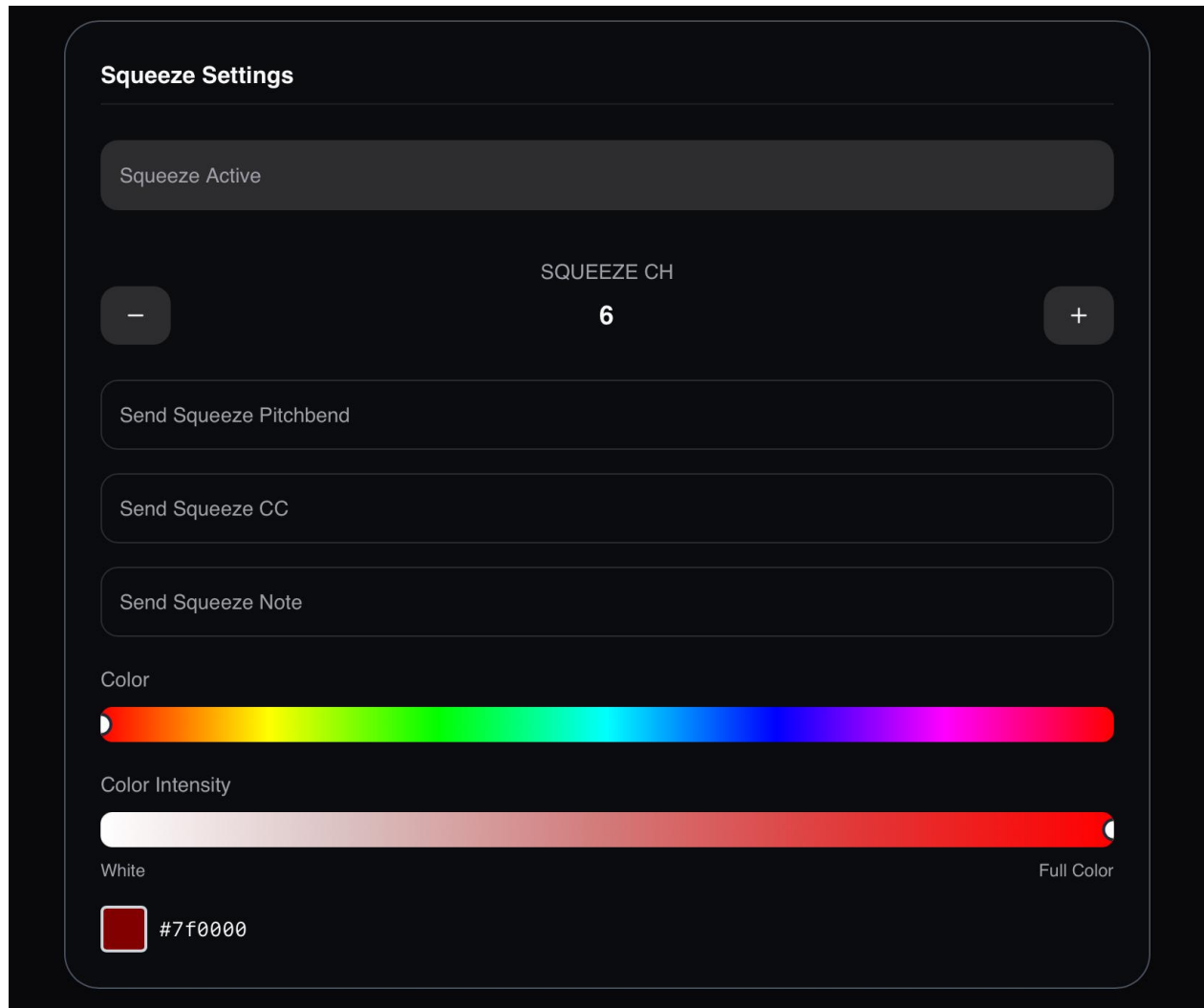
With the **MIDI Sends** options you are able to set if the current preset sends midi notes.



By default **Send Note** is activated, but deactivating it might be useful when mapping CC controllers. Since it is intended for mapping, the **Send Note** state is not saved, when you save the preset, to prevent mistakes.

3.2.4. Squeeze

With the **Squeeze** feature, drumbeam can distinguish whether it is struck with a drumstick or pressed with a hand. This allows it to be used for functions such as choking notes, pitch bending, or controlling effects by pressing on the sensor.



When **Squeeze Active** is enabled, additional settings become available. The MIDI messages generated by **Squeeze** are independent of any pad assignments, allowing for flexible configuration.

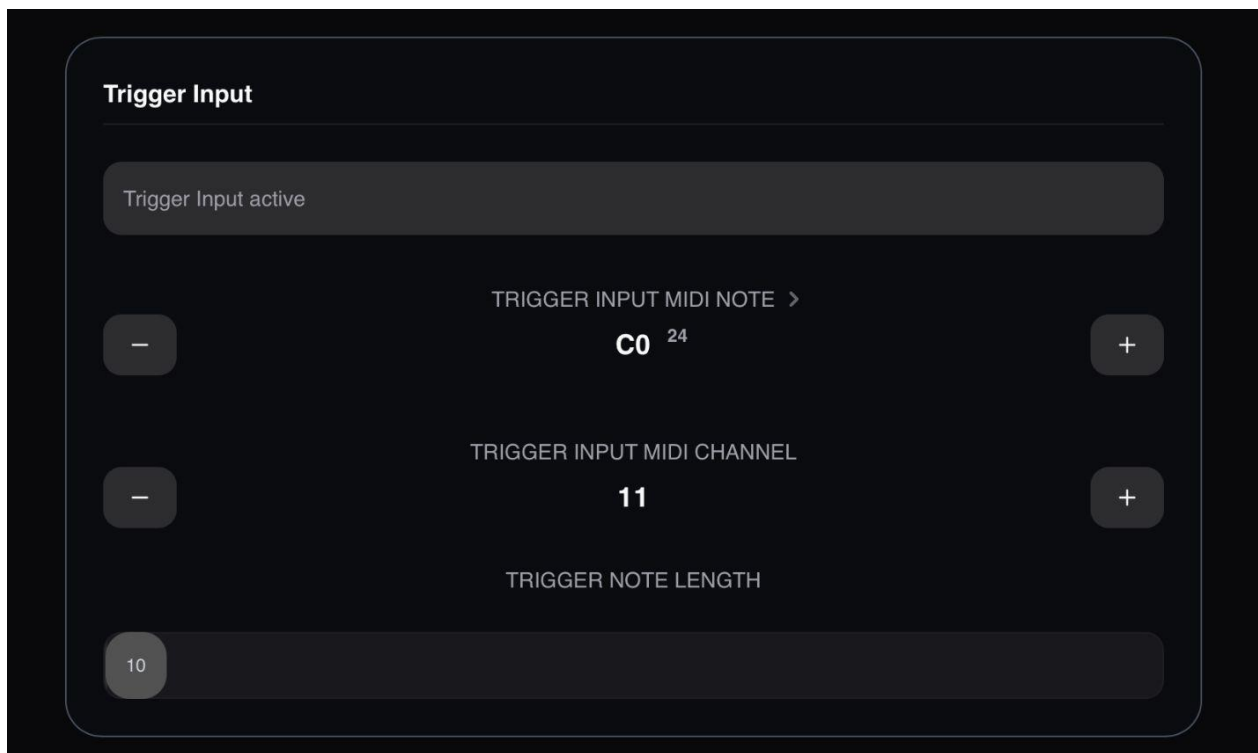
- **Squeeze Channel** – Sets the MIDI channel for squeeze messages.
- **Pitch Bend** – Sends a pitch bend message based on the applied pressure.
- **CC** – Sends a Control Change (CC) message representing the applied pressure on the selected CC number.

- **Note** — Sends a note-on message when a squeeze gesture is detected and a note-off when the sensor is released. Any MIDI note can be assigned.

A **color slider** is available to select the squeeze animation color, visible to both the player and the audience. With the **color intensity** slider you can blend from full color to white.

3.2.5. Trigger In

drumbeam features a trigger input for connecting an external kick pedal or other piezo triggers. The input is deactivated by default and can be enabled and configured individually for each preset.



The **Trigger Input MIDI Note** defines which MIDI note is sent when an incoming trigger is detected, while the **Trigger Input MIDI Channel** specifies the MIDI channel on which this note is transmitted. With the **Trigger Note Length** you can define the time in milliseconds between the note-on and note-off MIDI messages. If it is set to INF, the note-off is only sent just before the next note-on message. The sensitivity of the trigger input is set globally and can be adjusted in [Settings](#).

3.3. Segment View

The **Segment View** in the Config-App allows you to configure each individual segment of the currently selected preset in detail. This view gives you precise control over the behavior, MIDI output, and appearance of every pad.



The top section is the same as in [Preset View](#). The current preset is shown (e.g. PRESET #A:1 – Default Preset), along with a visual representation of all segments. The two rows of colored dots represent the **LEDs on both sides** of the drumbeam:

- The **upper row** shows the **user-facing** side.
- The **lower row** shows the **audience-facing** side.

You can **select a segment** in two ways: **Tap** directly on a segment in the Config-App view or physically **hit** the corresponding segment on the drumbeam hardware. The currently selected segment is highlighted and indicated on the top right (e.g. SEGMENT 1/8).

Segments can be managed by using the controls on the right side:

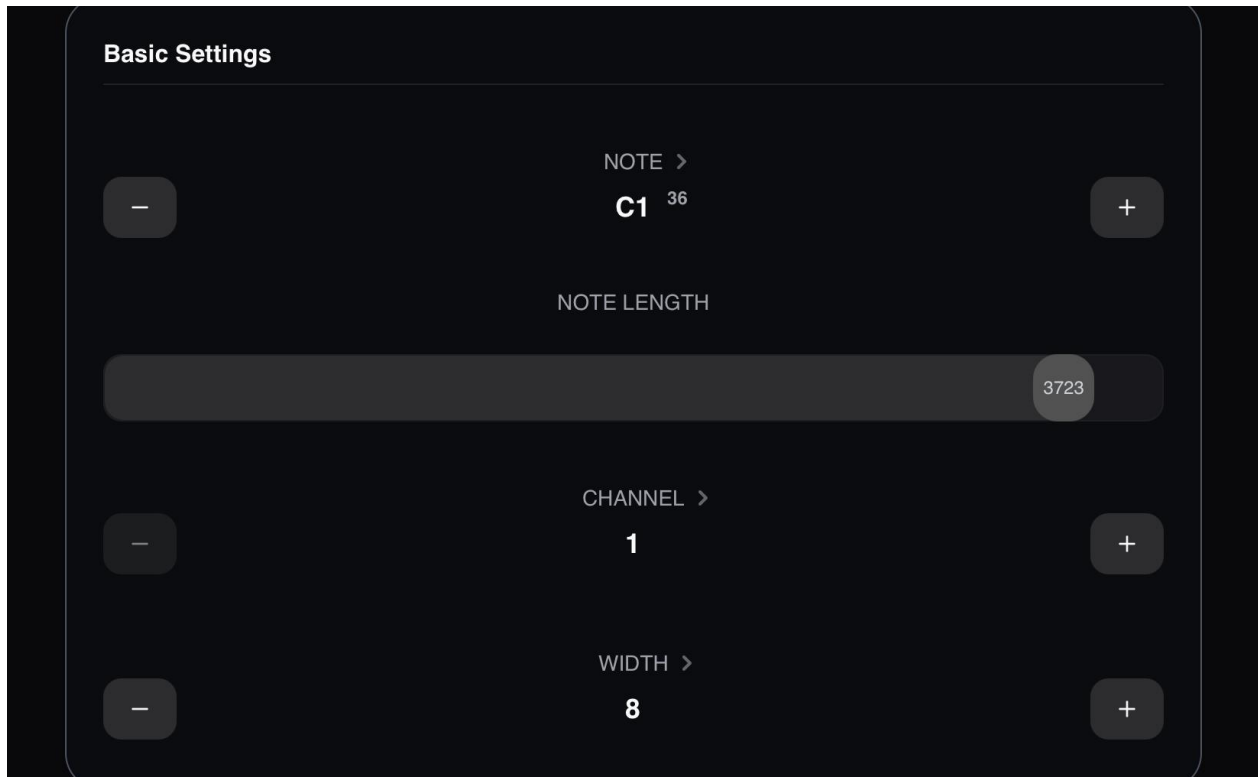
- Tap the **“+” button** to **add a new segment** to the preset.
- Tap the **trash icon** to **delete the currently selected segment**.

When segments are added or deleted, all existing segments are **automatically resized** to evenly distribute across the total length of the drumbeam.

To return to the preset view, tap the **back arrow** (←) on the left side of the screen.

3.3.1. MIDI Settings

Each segment in a preset can be configured to send specific MIDI messages when triggered. These are controlled with the following MIDI parameters:



Note

Defines the MIDI note number that will be sent when this segment is triggered. The note is displayed both as a musical note (e.g. C1) and as its corresponding MIDI number (e.g. 36).

Advanced Note Selection

For more precise control over the MIDI note assigned to a segment, you can open the Advanced Settings view by tapping the note field. This opens a piano-style layout that allows you to quickly select a note by name or number. The current note is highlighted, and you can transpose up or down by octaves using the -1 Octave and +1 Octave. Alternatively, you can manually enter the desired note in the text field at the top left of the view.

Note Length

Specifies in milliseconds how long the MIDI note is held before a note-off message is sent. By default, the note length is very short to support fast and responsive playing. Increasing the note length can be useful when triggering synthesizers or loops, sustaining melodic instruments, or working with sound engines that fail to respond to very short notes. If the slider is set completely to the right, the note length is infinite. This means that only a note-on message is sent and the corresponding note-off only if the pad is triggered again just before the next note-on is sent.

Channel

Sets the MIDI channel (1–16) for the note or CC message. The MIDI channel is set per segment to allow for maximum flexibility with different hardware and software sound engines.

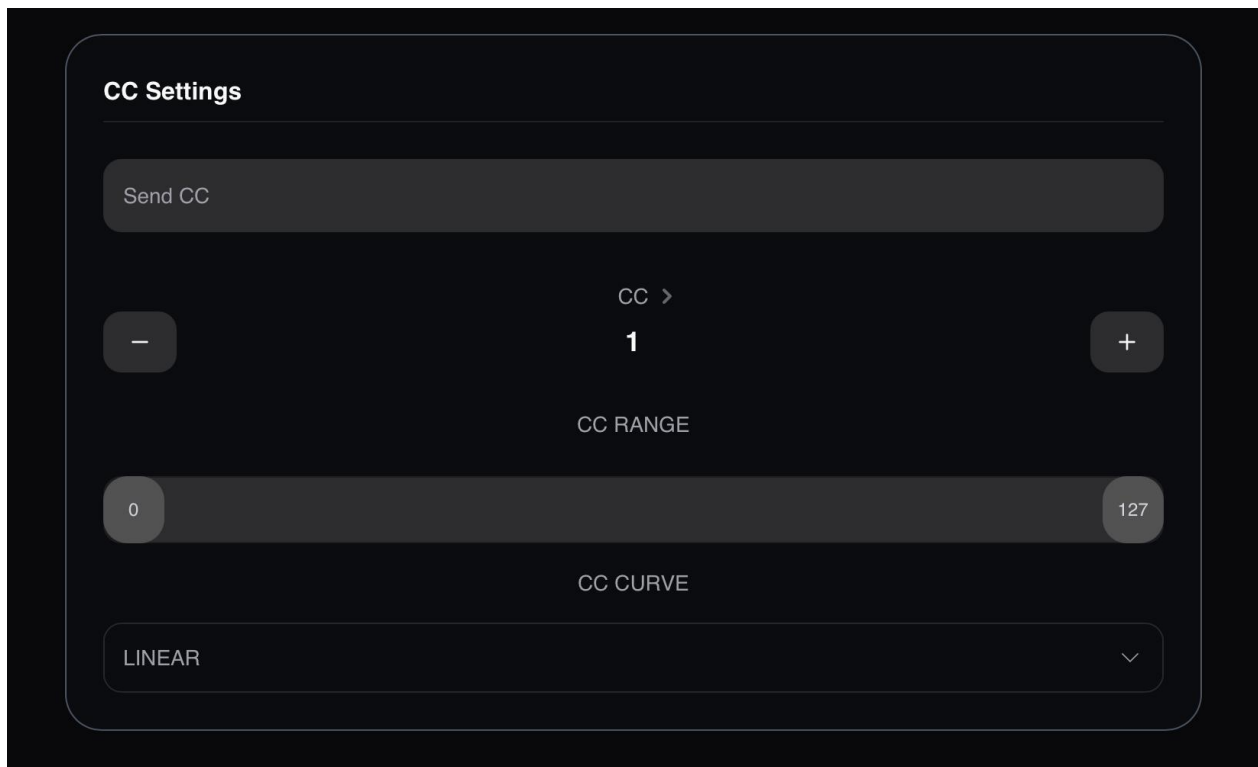
Pad Width

The **Pad Width** setting defines how many LED pixels are assigned to a segment, affecting both its visual size and trigger area. When you adjust the width of one segment, all other segments are automatically rescaled to fit the full length of the LED strip.

With a high number of segments in a preset, changing one width can cause noticeable jumps in the layout, as the system needs to round values to whole LED pixels. This may lead to uneven scaling or sudden changes in segment sizes.

3.3.2. CC Settings

Each segment can optionally send a MIDI **Control Change (CC)** message based on the position of the hit within the pad. If you enable the Send CC option for the currently selected pad, a dropdown menu will open, allowing for further settings.



The CC number assigned here determines which MIDI controller the segment will affect. The actual CC value is dynamically generated depending on the exact location of the hit along the segment. The **CC value range** determines the minimum and maximum values sent. For example, setting a range of 10–90 will scale all position values within that range, allowing for precise modulation control.

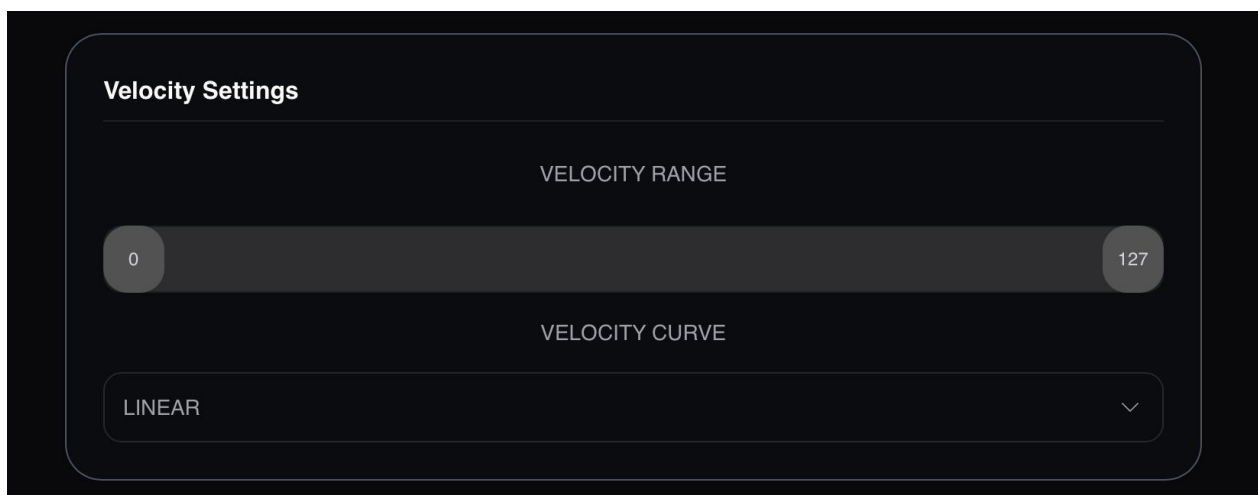
The **CC curve** defines how the pad position maps to the output value:

- **Linear** – direct mapping from position to CC value.
- **Exponential** – values increase more steeply with position, ideal for effects that need a more dramatic response.
- **Logarithmic** – boosts subtle positional changes, useful for fine-grained control near the bottom of the range.

These controls offer a powerful way to add continuous expressive input to your setup beyond simple note triggering. This feature is useful for controlling effects, modulating filters, or tweaking parameters in your DAW or hardware synths while playing drums. The current controller position is displayed as a single dot inside the segment on the user side LEDs.

3.3.3. Velocity Settings

The **velocity settings** control how the force of a hit is translated into MIDI velocity values, allowing for expressive and dynamic performance.



The **velocity range** defines the minimum and maximum MIDI velocity values that can be sent by a segment. By narrowing the range (e.g. from 0–127 to 20–100), the output is limited to that

interval—hits will still be detected across the full sensitivity range, but the resulting velocity values will be scaled and constrained within the defined limits.

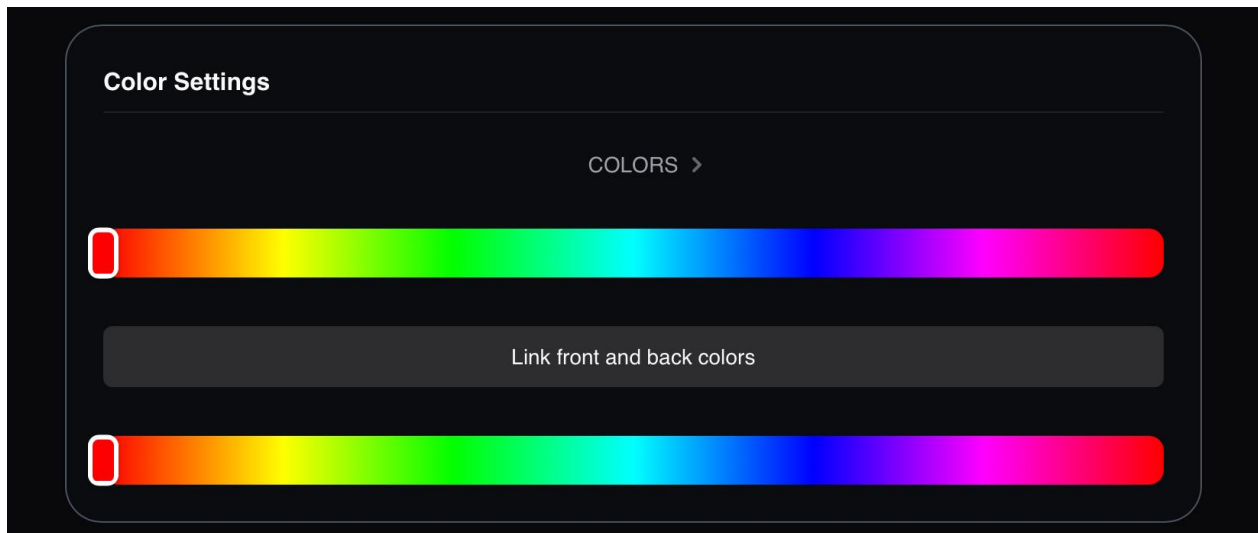
The **velocity curve** determines how the input intensity is mapped to the output range:

4. **Linear** — standard one-to-one mapping of input force to velocity.
5. **Exponential** — increases the velocity more sharply with harder hits.
6. **Log Logarithmic** — produces higher velocity values with softer hits, useful for delicate playing styles.

These settings help adapt the pad’s response to your playing technique or the dynamics of specific sound engines.

6.1.1. Pad Colors

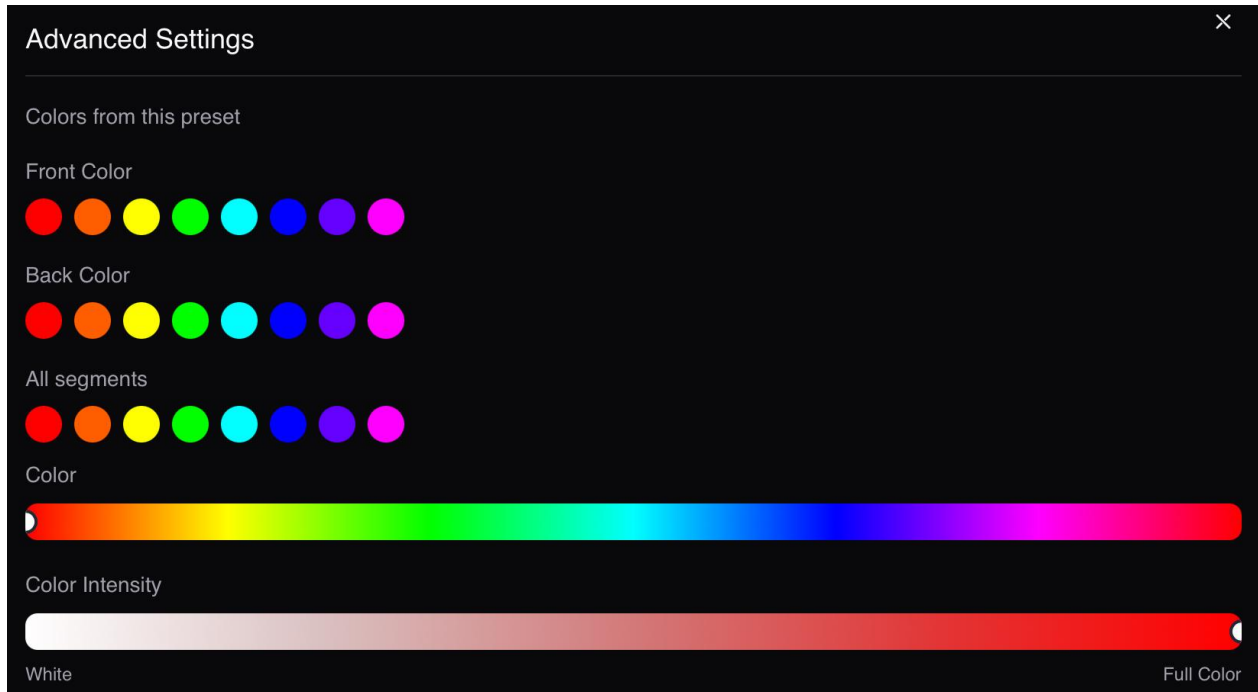
Each segment can be assigned two colors: one for the **user side** (upper color slider) and one for the **audience side** (lower color slider). Use the two color sliders to set each color individually. If you prefer both sides to match, you can enable **“Link front and back colors.”**



The **audience side color** also defines the appearance of the **trigger animation** shown when the pad is hit, giving your performance a visual dynamic from the front.

Tapping the **Colors** field opens a submenu with additional options. From here, you can:

- Choose from **colors already used** in other segments of the preset.
- Apply the current color to **all segments** at once for quick and consistent styling.
- Set the **color intensity**, blending from full color to white



6.1.2. Save Preset

A red asterisk next to the preset name indicates that there are unsaved changes. To save these changes to the current bank and slot, press the **Save** button located next to the preset name and confirm the action. This will overwrite the preset currently stored in that slot. Saving can be done from both, preset and segment view. By tapping the preset name you can rename the presets quickly without using the Preset manager.



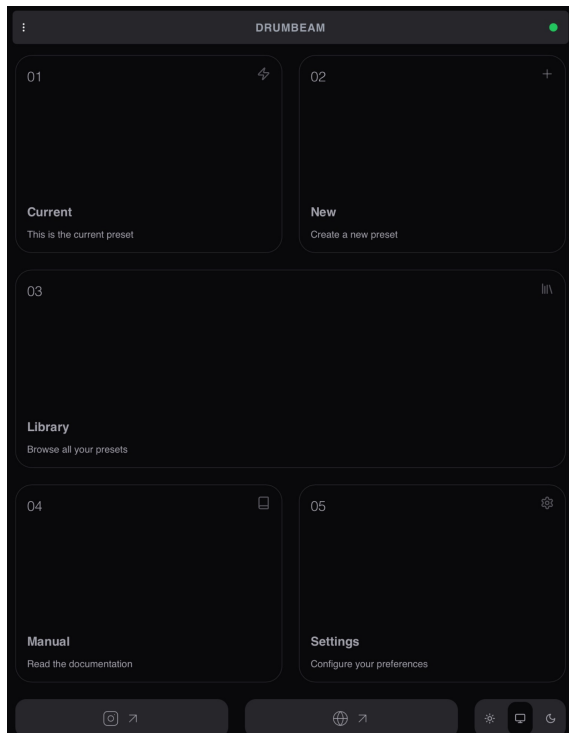
6.2. Navigation Menu

The navigation menu gives you quick access to all major areas of the **drumbeam** Config-App. You can open it by either tapping on the device name **drumbeam** at the top of any page or by tapping the **three dots** in the top left corner.

The menu is organized into tiles, each leading to a specific section:

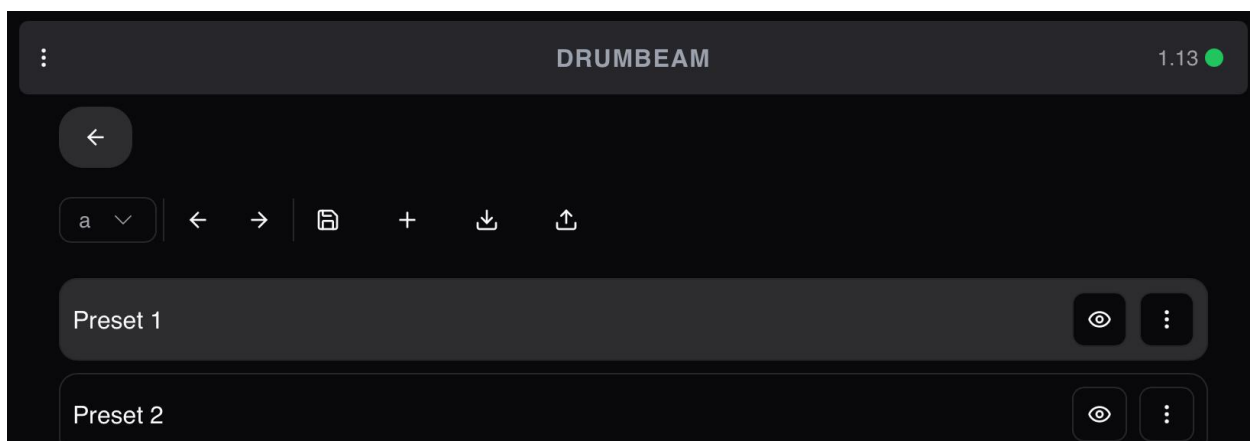
- **Current**
Displays the currently active preset. This is where you can edit and adjust the preset that is loaded on the device.
- **New**
Allows you to create a new preset from scratch the current preset slot. This will override your current selected preset.
- **Library**
Provides access to all your saved presets. From here, you can browse, load, or manage your library of sounds and setups. See [Preset Library](#) for more.
- **Manual**
Opens the documentation, giving you quick reference to all features and settings.
- **Settings**
Opens the global preferences where you can configure system-wide settings such as Wi-Fi, MIDI behavior, Sensitivity and other device options. See [Settings](#) for more.

At the bottom of the menu, additional quick links provide access to external resources like website and social media. The bottom right corner also includes a **dark/bright mode toggle**, allowing you to quickly switch between light and dark display themes or using the system settings.



6.3. Preset Library

The **Preset Library** provides access to all available presets stored on the device. It is organized into **8 banks** (labeled *a, b, c, d, ... h*), each containing **8 presets**, giving you a total of 64 preset slots.



At the top left, you can switch between banks using the **dropdown menu**. The currently selected bank is displayed, and the presets within that bank are listed below. Each preset entry shows its name and provides quick actions on the right-hand side:

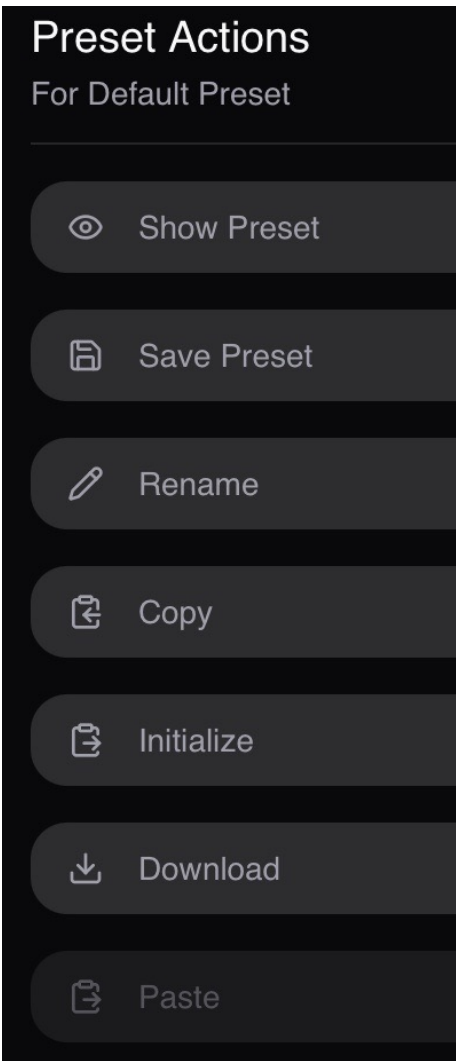
- **Eye icon:** Load this preset in the hardware.
- **Menu icon (three dots):** Open the **Preset Actions** menu with advanced options.

Above the preset list, several utility buttons allow you to manage your library:

- **Left/Right arrows:** Navigate through the preset banks.
- **Plus button:** Create a new blank preset on the current slot..
- **Download button:** Export the currently selected preset or bank to your local device for backup or sharing. This action should download a **.beam** file.
- **Upload button:** Import a previously exported preset or bank (.beam file) from your device back into drumbeam.

Preset Actions Menu

Pressing the three dots next to a preset opens the **Preset Actions menu**, offering detailed management functions:



Show Preset

Load this preset as the current preset on the hardware so you can view and edit its parameters.

Save Preset

Save the current state of the preset after you have made changes.

Rename

Give your preset a fancy name for easy identification.

Copy

Copy the preset so it can be pasted into another slot.

Initialize

Resets the preset to a blank state, clearing all settings.

Download

Exports the selected preset to your local device as a .beam file.

Paste

Inserts a previously copied preset into this slot, replacing the existing one.

6.4. Settings

The **Settings** chapter covers all global configuration options that affect drumbeam's overall behavior. Unlike presets, which store pad-specific parameters and performance mappings, the settings described here apply system-wide and remain active regardless of which preset or bank is selected. Available setting categories include **Sensitivity**, **Brightness**, **Network** and **MIDI**.

All settings are saved **automatically**. There is no need to manually store changes; adjustments take effect immediately and are retained after restarting the device.

6.4.1. Sensitivity

The **Sensitivity Settings** allow you to fine-tune how drumbeam responds to playing gestures and external triggers. Each parameter controls the minimum threshold level required to recognize a hit or gesture. Lower values increase sensitivity, but may also introduce false triggers or unwanted crosstalk. For maximum sensitivity it is a good approach to test at which threshold value the pads start triggering by themselves and then set the threshold slightly higher.

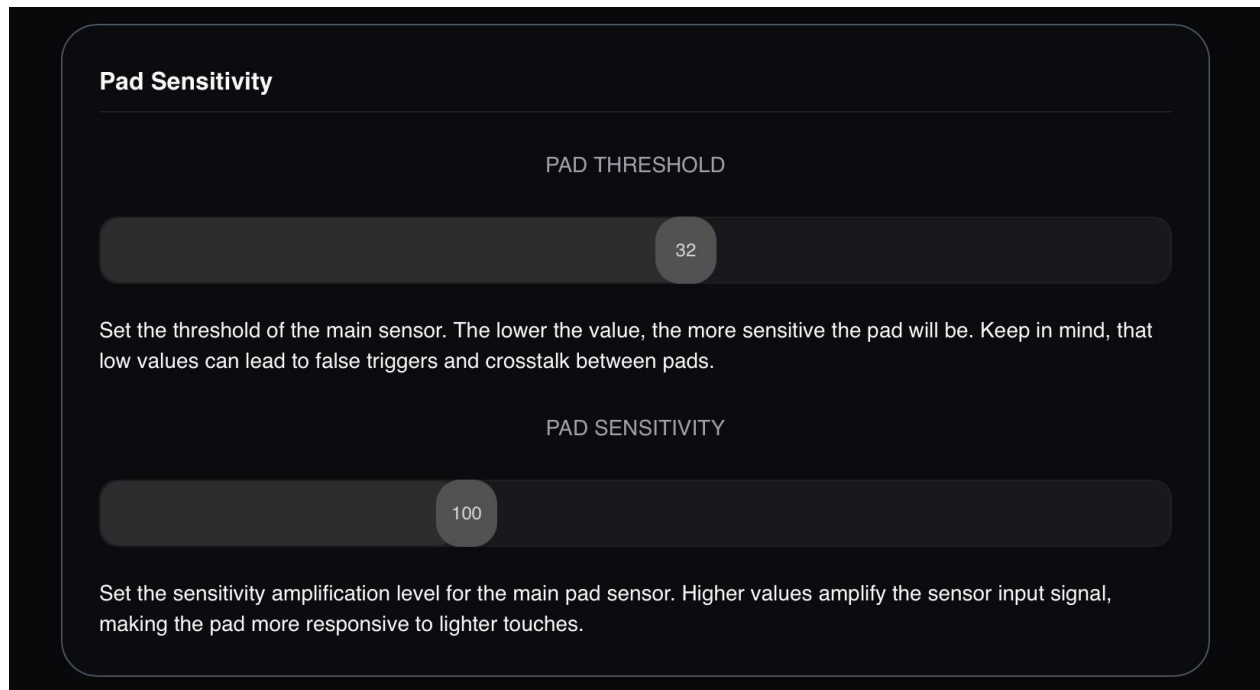
Pad Threshold and Sensitivity

Pad threshold defines the velocity threshold of the drum pad segments.

- Lower values → more responsive to soft hits.
- Higher values → reduces false triggers and crosstalk but requires harder hits.

Pad sensitivity sets the velocity amplification of the drum pad segments.

- Lower values → more force needed to get high velocity values
- High values → less force needed to get high velocity



Trigger Response

Trigger Response

TRIGGER INPUT THRESHOLD

125

Set the threshold of the trigger input for kick pedals or other trigger signals. The lower the value, the more sensitive the trigger input will be.

TRIGGER SENSITIVITY

120

Set the sensitivity level for trigger input signal processing in % amplification. Higher values make the trigger more responsive to input signals.

TRIGGER SCAN TIME (MS)

2

Set how long the trigger input is scanned for each detection cycle. Depending on your trigger source, you might want to adjust this value for optimal performance.

TRIGGER IDLE TIME (MS)

50

Set the minimum idle time between trigger detections. This prevents double triggers and ensures clean trigger separation.

Trigger threshold sets the threshold for external trigger inputs, such as kick pedals or piezo pads.

- Lower values → more responsive to subtle signals.
- Higher values → useful for filtering out noise or unwanted signals.

Trigger Sensitivity sets the level for trigger signal amplification in percent.

- Lower Values → higher peak needed to get high velocity values
- Higher values → high velocity values can be achieved easier

Trigger scan time defines in milliseconds how long the algorithm waits for the maximum peak. This can be helpful if the velocity of your trigger is not recognized correctly but adds a bit of latency.

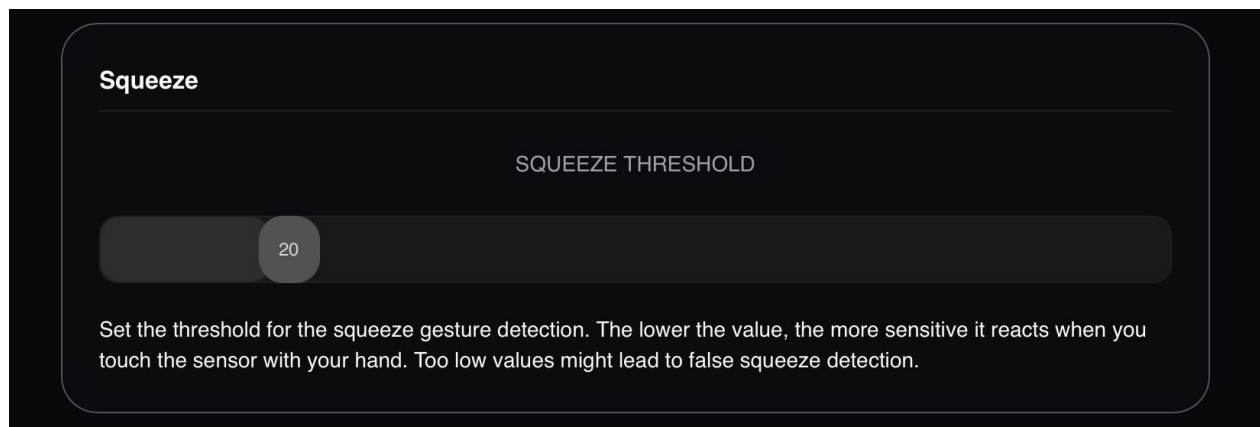
Trigger idle time describes a time period in milliseconds where the trigger input is blocked for detecting. This can be helpful if you have issues with double triggers. However too high values can cause problems with fast playing.

Squeeze Threshold

Controls the threshold of squeeze gesture detection.

- Lower values → lighter squeezes will be detected.
- Higher values → requires firmer squeezes, reducing accidental triggers. This is useful for playing drumbeat with fingers to avoid accidental squeeze recognition.

Tip: Start with medium values and adjust gradually until you find a balance between responsiveness and stability for your playing style.



Troubleshooting

Pad triggers by itself: Increase the Pad Threshold slightly to reduce false triggers or crosstalk.

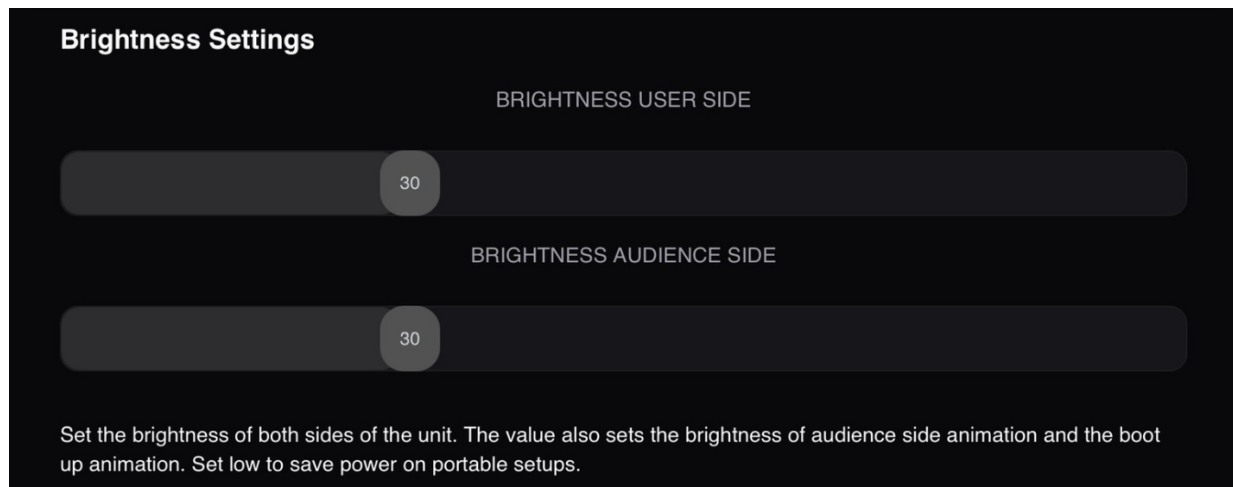
Missed hits: Lower the Pad Threshold to improve response to lighter strikes.

Unwanted trigger input noise: Raise the Trigger Input Threshold to filter out weak or spurious signals.

Squeeze not detected: Lower the Squeeze Threshold until the gesture is reliably recognized.

6.4.2. Brightness

The Brightness Settings control the LED intensity for both the user side and the audience side of the unit. These adjustments affect not only the steady-state lighting but also the boot-up animation and, on the audience side, any triggered animations during performance.



Brightness User Side

Adjusts the visibility of the LEDs facing the performer. Set higher for better visibility in bright environments, or lower to conserve power in portable setups.

Brightness Audience Side

Controls the LED brightness facing the audience. This also determines how vivid audience-side animations appear. To completely disable the audience-side lighting across all presets, set this value to 0.

Tip: Lower brightness levels and turned-off audience side LEDs reduce power consumption, which is especially useful when running on battery powered hosts (like laptops or tablets) or USB Ports with low power output.

6.4.3. Network

The Network Settings allow you to configure the Wi-Fi access point (AP) of your drumbeam. drumbeam creates its own Wi-Fi network that you can join with any compatible device (e.g., phone, tablet, computer). Please make sure to change your password at the first use!

Wi-Fi Name (SSID)

Defines the name of the Wi-Fi network created by drumbeam. Default: **drumbeam**. This will be the device's configuration URL. If your SSID is Klangstab for example, it's klangstab.local.

Wi-Fi Password

Sets the password required to join the drumbeam network. Default: **supersafe**

Both the Wi-Fi name and password must be at least **8 characters long**. Any modifications take effect only after restarting drumbeam. To restart, unplug the USB cable and reconnect it.

6.4.4. MIDI

The MIDI Settings control how drumbeam communicates with your computer, DAW, or external MIDI gear.

MIDI Device Name

Defines the name under which drumbeam appears as a MIDI device on your computer or DAW. Changing the name requires a restart of the unit by unplugging and reconnecting the USB cable.

Program Change: drumbeam can respond to MIDI Program Change messages to switch between presets remotely.

Enable Program Change: Activates or deactivates this function.

MIDI Channel: Select the channel (1–16) to listen to, or set to “all” for omni mode.

Program Number Mapping: drumbeam responds only to program numbers (not bank select). Presets are grouped in banks of 8:

Programs **1–8** → Bank A

Programs **9–16** → Bank B

Programs **17–24** → Bank C

... and so on.

MIDI Through Routing: Controls software MIDI thru between the USB port and the DIN MIDI (TRS) port. This allows flexible routing of MIDI signals or chaining of multiple drumbeams. The following options are available:

USB to TRS: Forwards incoming USB MIDI to the DIN MIDI output.

TRS to USB: Forwards incoming DIN MIDI to the USB output.

TRS to TRS: Forwards incoming DIN MIDI to the DIN MIDI output.

Use Case Examples

USB to TRS: Connect drumbeam to your DAW via USB, then forward MIDI notes or sequences from the DAW directly to external hardware through drumbeams TRS MIDI port.

TRS to USB: Use an external MIDI controller connected to drumbeam's TRS MIDI input to control software instruments inside your DAW via USB.

TRS to TRS: Place drumbeam in the middle of a hardware setup to pass MIDI data from one hardware unit to another, while still using drumbeam as an additional controller.

6.4.5. Reset

Tap on RESET FLASH to reset drumbeam and delete all user data. See [Update and Factory Reset](#)

7. Update and Factory Reset

7.1. Firmware Update

drumbeam supports simple and safe firmware updates using a standard drag-and-drop process. Updating ensures that your device runs the latest features and improvements.

1. Download the Firmware File

Get the latest firmware update file (.uf2) from our website.

(<https://afk-audio.de/pages/support>)

2. **Enter Update Mode**

Hold the inner button (**Button B**) while connecting drumbeam to your computer via USB. drumbeam will appear as a mass storage device (similar to a USB stick). The LEDs turn **green** when the device is ready for the update.

3. **Transfer the Firmware**

Drag and drop (or copy and paste) the downloaded .uf2 file onto the drumbeam device on your computer.

4. **Processing the Update**

While the update is in progress, the LEDs will blink yellow. **Do not disconnect** the device during this stage.

5. **Restart**

Once the update is complete, drumbeam will restart automatically and show the normal startup animation.

Troubleshooting

drumbeam does not appear as a USB drive and/or does not turn green

- Make sure you are holding **Button B** while plugging in the USB cable.
- Try using a different USB cable, preferably the one included with drumbeam.
- Check that the USB port on your computer supports data transfer (some charging-only ports will not work). Ensure the device is powered via a stable USB port with sufficient current.

Firmware file does not copy

- Verify that you downloaded the correct **.uf2** file for drumbeam.
- Restart the update process and try again.

Computer shows error after update

- Some computer systems try to create system files on external storage devices which is not possible on drumbeam. This can lead to system errors indicating the operation would not have been successful. However usually the update did work. This is especially reported for some macOS versions (e.g. macOS Sierra).

Update interrupted (device unplugged too early)

- Repeat the update process from the beginning. drumbeam is designed to recover from incomplete updates. If the firmware update was faulty, drumbeam goes to update mode directly.

Verifying Firmware Version

To confirm the firmware version after an update, drumbeam can be started in debug mode:

1. Hold **Button A** (outer button) while connecting drumbeam to USB.
2. The LEDs will display the firmware version after the startup animation:

The number of lit LEDs represents the version number, grouped in fives.

Example: 10 LEDs lit (2 groups of 5) = Version 10;
 17 LEDs lit (3 groups of 5 + 2 single LEDs) = Version 17

After checking, restart drumbeam normally by unplugging and reconnecting it without holding any button.

 **Attention:** In debug mode, **USB MIDI is deactivated**. Only use this mode for checking the firmware version, not for regular operation.

7.2. Factory reset

There are two ways for doing Factory resets:

- press both buttons at the same time while connecting drumbeam
- In the Config-App navigate to Settings -> Reset and tap on the red button called ERASE FLASH

This will erase all user data (presets, settings, etc.) and apply the factory settings.

Compliance Statement

Manufacturer:

afk-audio GmbH
Pulsnitzer Straße 6
01099 Dresden
Germany

www.afk-audio.com

Hereby, afk-audio GmbH declares that **drumbeam (Model: afk-drmbm-V1-blck)** is in compliance with:

European Union: Directives 2014/53/EU (RED), 2014/30/EU (EMC), 2011/65/EU (RoHS), 2012/19/EU (WEEE).

United States: FCC Part 15, containing FCC ID: 2AC7Z-ESPS3MINI1.

Canada: ISED Certification Number 21098-ESPS3MINI1.

The full text of the EU Declaration of Conformity is available at request.