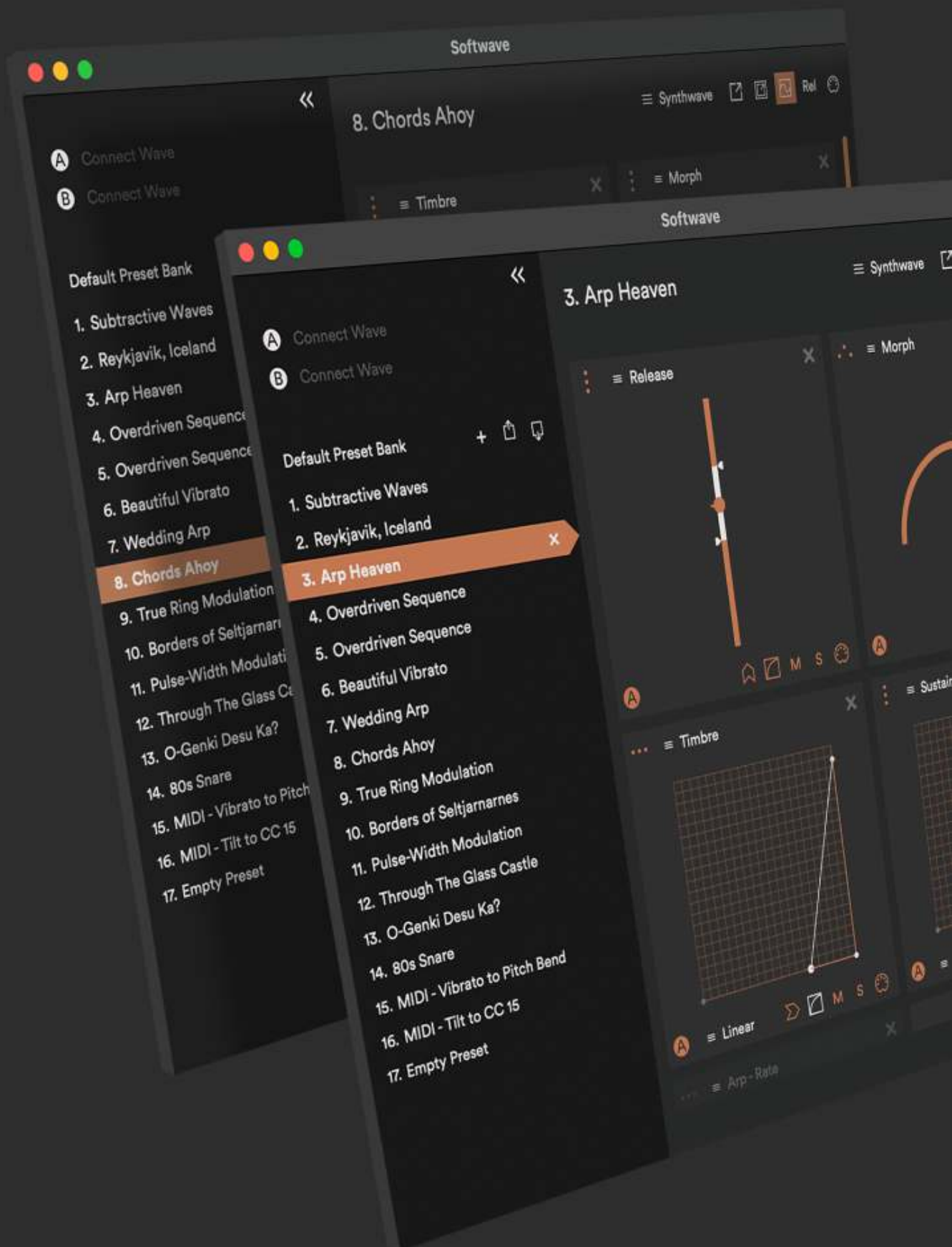


# SOFTWAVE

## QUICKSTART GUIDE



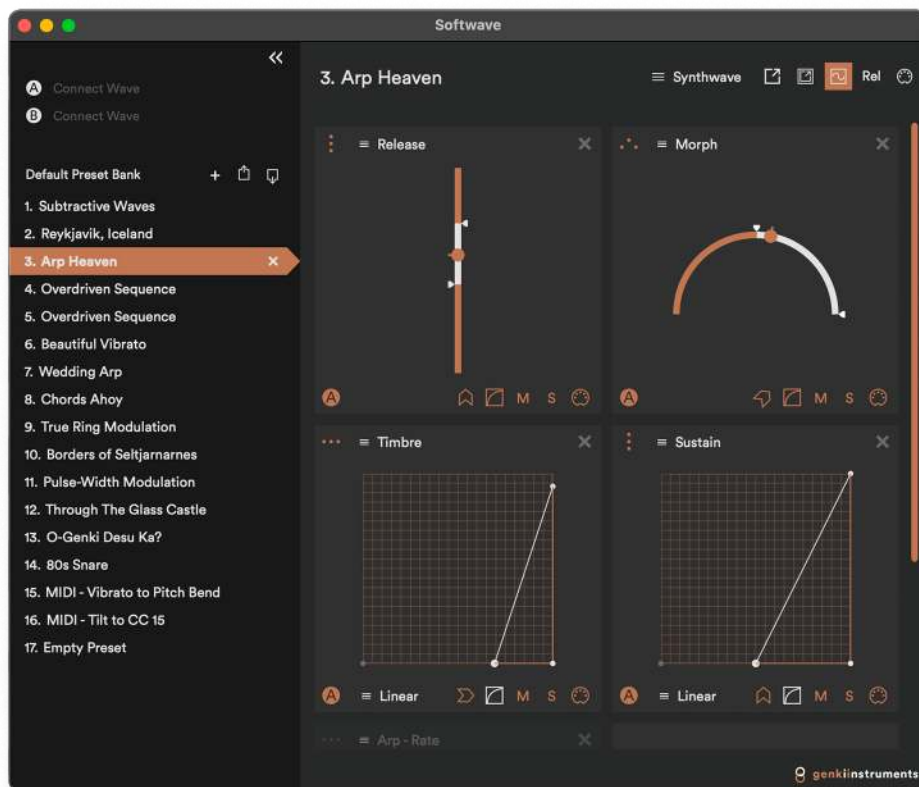
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# About Softwave

Softwave is Wave's companion software. Softwave allows users to fully customize Wave by creating their own presets and preset banks. It can either help users intuitively map Wave's functions to their DAW of choice or host their favourite VST3 and AU plugins. Softwave also has a built in sound engine and comes pre-loaded with fifteen curated presets so you can start making music immediately.

- When using Wave with your DAW keep Softwave open in the background.
- Softwave is not a VST plugin.
- Softwave does not work on your mobile.



# Installing on Windows

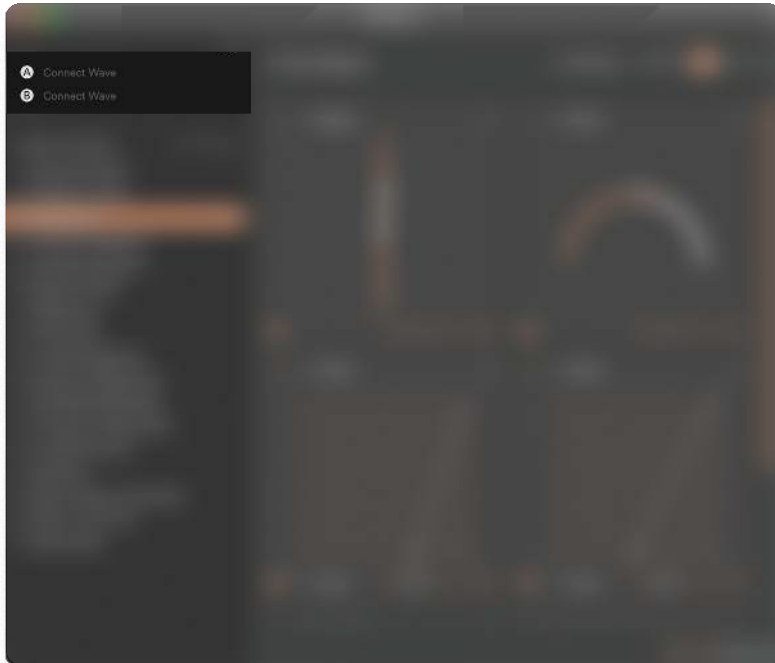
- 1 When you open Softwave for the first time you might get a notification.
- 2 Please select **Learn more and Run anyway**.
- 3 Softwave will ask you to install loopMIDI, a virtual MIDI driver, if it's not already installed. If for some reason this does not happen, the driver can be found here. **Note that your browser may prompt a warning when trying to download loopMIDI, but we assure you that it's completely safe.**

## If you have an older version of Softwave installed

It's preferable to completely remove the Korg BLE MIDI driver from the system. To do this head through Settings → Apps, search for "Korg BLE MIDI" and click "Uninstall." Verify that the driver is not present in Device Manager → Sound, video and game controllers or Device Manager → Software devices. Restart the computer.

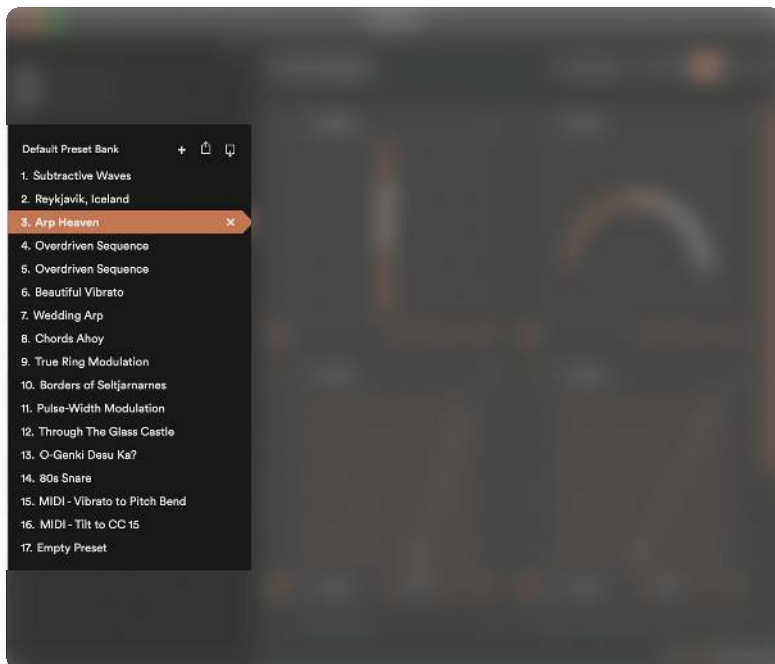
# Interface guide

## Wave



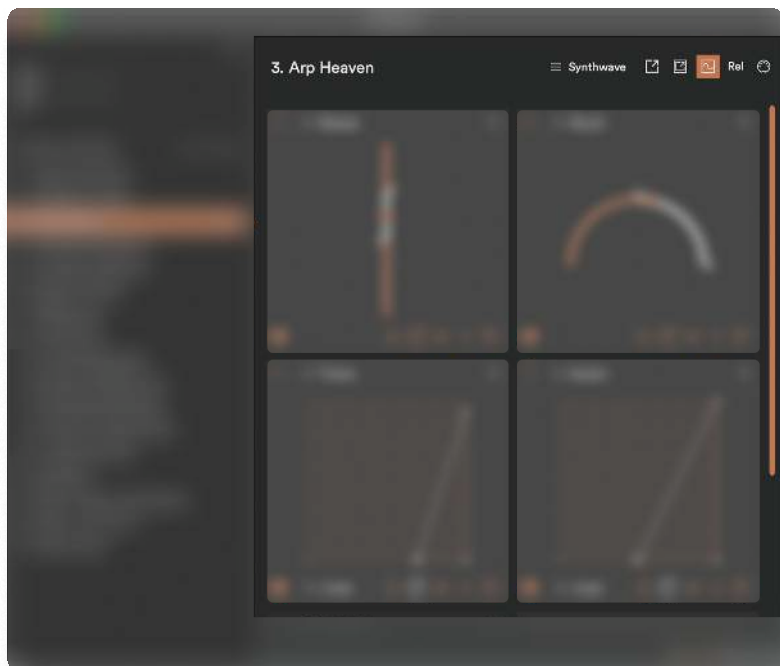
This is where you connect Wave, up to two Waves at a time. When Wave is connected to Software you can access Wave's configuration panel by pressing the gear icon, configure Standalone mode and Wavefront and see Wave's battery status.

## Preset Bank



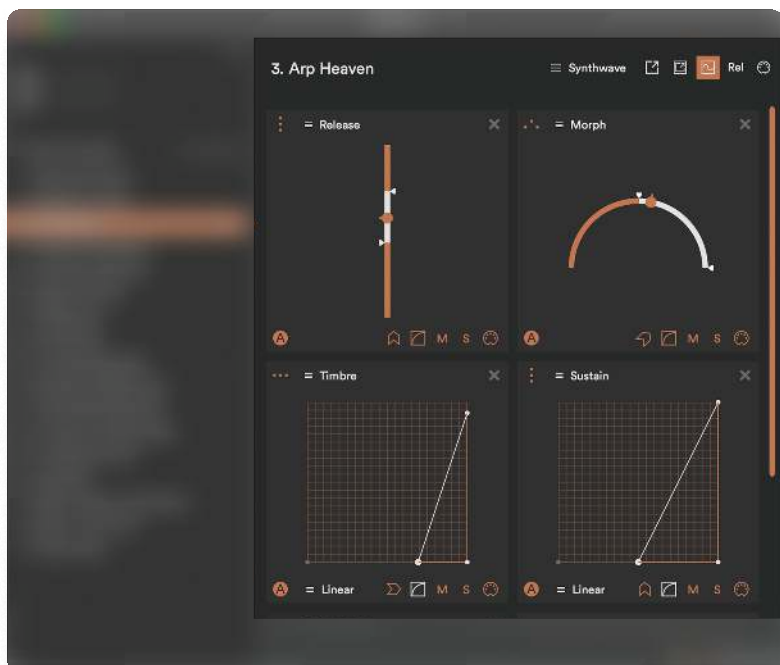
The preset bank holds the presets you're working with at any given time. Create or delete presets, save your preset bank, or load in new ones.

## Preset



Each preset can be configured individually. Give it a descriptive name, add a VST or Audio plugin to it, change between Relative and Absolute mode and set MIDI Channel and/or Program change.

## Functions within a preset



Add functions to your preset and customize them; the movement and output range, movement direction and curve, mute, solo and add CC values, notes or key commands.

# Connecting Wave to Softwave

To connect Wave make sure it is turned on.

You turn Wave on by pressing its Middle button.

Also make sure Bluetooth is turned on in your computer.

After you connect Wave, Softwave remembers it and autoconnects to it next time you turn your Wave on.

- 1 Press "A Connect Wave" in the top left corner of Softwave.
- 2 Select Wave from the list that appears.
- 3 Close the window.
- 4 Wave should be connected to your computer.
- 5 To connect a 2nd Wave to Softwave press "B Connect Wave" and repeat steps 2-4

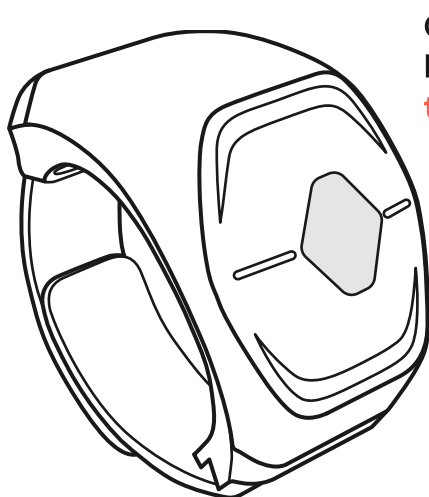
## Troubleshooting

- If you have an older version of Softwave installed and already installed the KORG driver, it is preferable to completely remove the Korg BLE MIDI driver from the system. To do this head through Settings → Apps, search for "Korg BLE MIDI" and click "Uninstall." Verify that the driver is not present in Device Manager → Sound, video and game controllers or Device Manager → Software devices. Restart the computer.
- If Wave gets in a strange connect/disconnect loop with the system (lights flashing on/off). This seems to happen if you've previously paired Wave through Windows's system settings. Pairing is not necessary, and removing Wave through the system's Bluetooth settings will fix the issue. You can still connect through Softwave just fine.
- If you're experiencing a slow or jittery connection, that might be due to old or outdated Bluetooth drivers. Make sure you have the latest drivers installed for your system. If the drivers are up to date and you still experience issues, consider using an external USB dongle instead. We've found this dongle to work best in our tests.

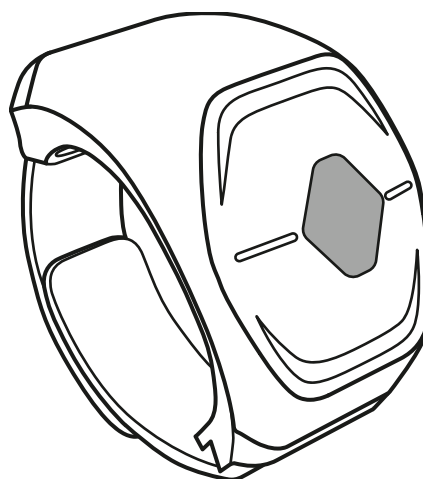
# Button configuration

These are the default settings for Wave within Softwave.

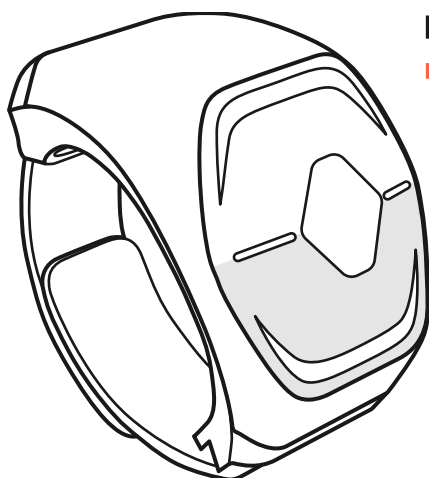
These settings can be customized to your own liking in Wave's configuration panel.



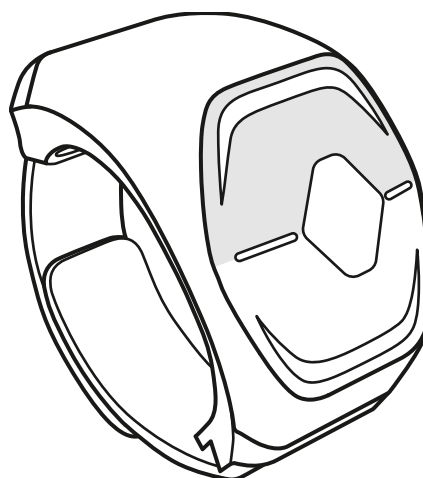
Click middle button to **turn on**



Long press to **reset movements**



Click lower button for **next preset**



Click upper button for **previous preset**

Wave has 3 buttons; Up, Middle and Down. The Middle button activates and deactivates Wave. Simply put you can deactivate Wave so you can scratch your nose without affecting sound every time you do it.






Holding the Middle button will Reset the movements to their starting point.

The Up and Down buttons act as navigation buttons. You use them to navigate between the presets in Softwave. Try navigating between presets while playing to change the sound in Softwave and functions on Wave.







# Icon list



## Wave

-  Wave configuration panel
- R** Wave configured on Right hand
- L** Wave configured on Left hand
-  Activate/Deactivate Wave
-  Reset Wave to starting point
-  Standalone mode editor
-  Wavefront editor














## Presets

-  Opens plugin window
-  Auto opens plugin window
-  Auto activates Wave
- Rel** Wave is set to Relative movements
- Abs** Wave is set to Absolute movements
-  Preset channel & program

## Preset Bank

- +** Create new preset
-  Save preset bank
-  Load preset bank
- ×** Delete preset

## Functions

- |   |               |  |                        |
|---|---------------|--|------------------------|
|  | Tilt          |  | Assigned to Wave A     |
|  | Pan           |  | Assigned to Wave B     |
|  | Roll          |  | Movements direction    |
|  | Vibrato       |  | Movement curve         |
|  | Tap           | <b>S</b>   | Solo function          |
|  | Middle button | <b>M</b>   | Mute function          |
|  | Up button     |  | Assign MIDI CC or Note |
|  | Down button   | <b>Key</b>   | Assign Key command     |

# Using two Waves within Softwave

You can use two Waves within Softwave at a time - Wave A and Wave B.

## Connecting a second Wave

To connect a second Wave to Softwave press "B Wave" at the top left corner of Softwave. Then follow the same steps as before when you connected the first Wave

## Changing Wave A to Wave B and vice versa

To change Wave A to Wave B select Wave A and drag it down under Wave B. The two connected Waves should change roles.

## Mapping functions to Wave B

Automatically all new functions you add to your preset are mapped to Wave A.

To map functions over to Wave B press the A in the lower left corner of the function window. It should turn from brown to white and read B instead of A.

Repeat for all functions you want to map over to Wave B.

## Identifying which Wave is which

In the top left corner of Softwave press the name of the Wave you want to identify. The LED screen on that Wave will light up.

# Disconnecting Wave from Softwave

To disconnect Wave from Softwave you can:

- 1 Turn Wave off by holding the Up and Down buttons simultaneously.
- 2 Simply close Softwave.
- 3 To completely disconnect Wave you can navigate to Menu → Connect Bluetooth Device and press the "x" behind the connected Wave. This way Softwave will forget Wave.

**Note** that Softwave has a built in auto-connect feature, so the next time you open Softwave it will connect automatically to Wave unless you do this.

# Preset Configuration Panel

At the top of every Preset you'll find the Preset Configuration Panel.

## Preset name



On the left side of the panel you'll see the preset number and preset name. To rename the preset; click the Preset name. You can now write a new name. Press Enter when done or click with the mouse cursor outside the box.

Renaming Presets to a descriptive name can help organise your workflow; "Recording," "Automating strings" etc.


## Selecting a plugin

Each preset can host its own plugin (VST3/AU). This way it's easy to move between plugins and sounds. To select a plugin click the box where it reads "Select Plugin." If the preset is already hosting a plugin the box will read the name of that particular plugin.

## Opening a plugin

-  To see the plugin your preset is hosting press this icon.
-  For plugins to automatically open when you navigate to a preset press this icon.

## Auto activating a Preset

-  Select this icon if you want Wave to activate automatically when you navigate to that particular preset. This feature is default in all new presets.

## Relative vs Absolute

Within each preset you can decide if Wave uses Relative (Rel) or Absolute (Abs) movements. The default state for Wave is Relative.

Relative mode behaves in a way that when you deactivate a preset, no matter how you move your hand in between, when you reactivate it the ring will start tracking from the last position before deactivating.

The Absolute mode does the opposite. It keeps tracking your movements even if you've deactivated the preset, and "jumps" to the current value when you reactivate it.

Absolute is stuck in space, Relative moves with you.

## MIDI channel

You can select a MIDI Channel for each preset. Press the MIDI icon in the top right corner of Softwave. Change the number for the channel by pressing the number and selecting from the list. The default is Channel 1.

## Program change

You can set a Program Change for each preset. This way, every time you navigate to that particular preset, it will send out the program change. Select the MIDI icon in the top right corner of Softwave to set the Program Change, Bank MSB and Bank LSB.

# Hosting VST3/AU plugins within Softwave

Each preset can host its own plugin (VST/AU). Therefore you can use Softwave on its own without the need for a DAW when you're playing.

## Selecting a plugin

To select a plugin click the box where it reads „Select plugin.“ If the preset is already hosting a plugin the box will read the name of that particular Plugin.

## Scanning for available plugins

You need to scan for the plugins on your computer for Softwave to know which plugins are available. You can scan for VST3 and AU plugins.

- 1 To scan for your plugins navigate to the top left corner of your screen to Menu. Select "Scan for plugins." A window opens.
- 2 Press "Options..." and select "Scan for new or updated AudioUnit-or-VST3 plug-ins." This might take a while if you have a lot of plugins on your computer.
- 3 When the scanning process is over close the window.
- 4 All of your plugins should now be available in the "Select plugin" list within each Preset.


# Mapping function to plugin parameters

There are two options to map functions to plugin parameters.

## Option 1

- 1 Press the "Select parameter" at the top of the function window you want to map.
- 2 A dropdown appears with all available parameters.
- 3 Select the one you want to map.
- 4 Repeat for other functions or if you want to remap an already mapped function.

## Option 2

- 1 Open the plugin by pressing this icon. 
- 2 At the top of each plugin you'll see the icons of all the functions within the preset. Press the icon of the function you want to map. It should turn brown.
- 3 Next move the parameter you want to map. The name of the parameter should appear next to the icon at the top. The parameter and function are mapped together.
- 4 Repeat for other functions or if you want to remap an already mapped function.

# Preset Bank

Softwave holds one Preset Bank at a time.

- A preset bank is a bank of presets. Each preset bank can hold endless amounts of presets.
- A preset is a combination of functions that each has a certain purpose. Each preset can hold up to 8 functions.
- A function is one of the following: Tilt, Pan, Roll, Vibrato, Tap or Click.

## Creating & Managing Presets

It's easy to create new presets, delete them, rename them or move them in order to customize your workflow to your needs.

### Creating a new preset

To create a new preset click the “+Preset” icon.

### Renaming the preset bank

To rename the preset bank, click the “**Default Preset Bank.**” You can now write in a new name. Press Enter when done or click with your mouse cursor outside the box

### Renaming presets

There are two ways to rename presets.

- To rename a preset in the preset list; click on the Preset name. You can now write a new name. Press Enter when done or click with the mouse cursor outside the box.
- To rename a preset in the top left corner of the preset window; click the Preset name. You can now write a new name. Press Enter when done or click with the mouse cursor outside the box.



## Rearranging the Preset Bank

To rearrange Presets in your Preset Bank simply click and hold the preset number and drag it to the desired location.

## Renaming the preset bank

To rename the preset bank, click the "**Default Preset Bank.**" You can now write in a new name. Press Enter when done or click with your mouse cursor outside the box

## Deleting a preset

To delete a Preset click the "x" behind the Preset in the Preset Bank list.

## Restoring a deleted preset

If you accidentally delete a Preset and haven't saved your session you can use cmd+z (Mac) or ctrl+z (Windows) to undo your mistakes.


# Saving & Loading


Softwave holds one Preset Bank at a time. You can save and load preset banks so you can store multiple banks and even share them with others.

## Saving a preset bank

 To save a Preset Bank click this icon.

## Loading Presets: Load new & Add to bank

 To load a new Preset Bank click this icon and select "Load new." You can select a previously saved Preset Bank and load it into Softwave. This will swap the current bank out for the new one.

 To add Presets into your Preset Bank click this icon and select "Add to bank." A window opens showing an overview of the previously saved Preset Bank. You can choose which of these presets you'll add to your current bank. Deselect the Presets you don't want to add and press "Ok."

# DAWs

## CC numbers

In order to map functions from Softwave to your DAW (such as Ableton Live or Logic Pro) you need to attach a MIDI CC number to the function.

You can assign **any** CC number, but make sure each function has an individual number. **Softwave uses this number to communicate with your DAW.**

Some DAWs such as Cubase and Pro Tools have some of their CC values hard coded, so you can't use all of them.

Additionally you can assign:

- 1 PB (Pitchbend) to Tilt, Pan, Roll and Vibrato.
- 2 Notes (C, C#, D, E, F etc.) when using the Tap function.
- 3 Notes and Key commands/Shortcuts (cmd+T, R, f12 etc.) when using the Click function.

## Ableton Live

- 1 To make sure Wave works with Live, navigate to the top left corner of your screen to Live → Preferences → Link MIDI. Make sure Wave (Bluetooth) has Track and Remote toggled on.
- 2 In Softwave solo the function you want to map. Make sure your function has a dedicated CC number or Note.\*
- 3 In Live navigate to MIDI in the top right corner, shortcut cmd+m (Mac) or ctrl+m (Windows).
- 4 Select the parameter you want to map.
- 5 Depending on which type of function you are mapping, move, tap or click on Wave to make the link.
- 6 Press MIDI again in Live. De-Solo the function. You should have mapped a function to a parameter in Live successfully.
- 7 Repeat for other functions.

**\* In order to map functions from Softwave to Ableton Live you need to attach a MIDI CC number to the function.**

You can assign any CC number, but make sure each function has an individual number. Softwave uses this number to communicate with your DAW.

Additionally you can assign:

- 1 PB (Pitchbend) to Tilt, Pan, Roll and Vibrato.
- 2 Notes (C, C#, D, E, F etc.) when using the Tap function.
- 3 Notes and Key commands/Shortcuts (cmd+T, R, f12 etc.) when using the Click function.

# Logic Pro X

- 1** To make sure Wave works with Logic Pro X, navigate to the top left corner of your screen to Logic Pro X → Preferences → MIDI... A preferences window opens up.
- 2** Navigate to the "Inputs" tab and make sure "Wave" is enabled.
- 3** In Softwave solo the function you want to map. Make sure your function has a dedicated CC number or Note.\*
- 4** Make sure the track you're assigning to is record enabled.
- 5** A quick way to map a function to a parameter is to move the parameter you want to map. This is so Logic remembers the "last used parameter." Next navigate to Preferences → Control Surfaces and select Learn assignment for "x." You can also hit cmd+L on your keyboard for the same result. A window opens up.
- 6** Another way is to navigate to Preferences → Control Surfaces → Controller Assignment. A window opens up. Select "Learn." Move a parameter in Logic to map. With "Learn" selected move to the next step.
- 7** Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link. Close the Controller Assignment window.
- 8** Now De-Solo the function in Softwave. The function should be mapped to Logic Pro X.
- 9** Repeat for other functions.

## Troubleshooting

If you're having trouble mapping Wave to a parameter try the following:

- 1 Make sure Wave is connected and active.
- 2 Try navigating to the top left corner of your screen to Logic Pro X → Preferences → General. A preferences window opens up. Navigate to "Advanced" and enable "Show Advanced Tools."
- 3 If this does not work, restart your computer.

**\* In order to map functions from Softwave to Logic Pro X you need to attach a MIDI CC number to the function.**

You can assign any CC number, but make sure each function has an individual number. Softwave uses this number to communicate with your DAW.

Additionally you can assign:

- 1 PB (Pitchbend) to Tilt, Pan, Roll and Vibrato.
- 2 Notes (C, C#, D, E, F etc.) when using the Tap function.
- 3 Notes and Key commands/Shortcuts (cmd+T, R, f12 etc.) when using the Click function.

## Pro Tools

To connect Wave to Avid's Pro Tools, navigate to Setup → Peripherals... → MIDI Controllers. Create a new controller in one of the four slots. Type should be "M-AudioKeyboard." Receive from "Wave, Bluetooth." Send to "Wave, Bluetooth." #Ch's "8."

There are several different ways to use Wave within Pro Tools.

### Mapping to Pro Tools' native Transport Controls and Parameters

- 1 Pro Tools has dedicated CC signals for a few native Transport Controls and Parameters.
- 2 In Softwave make sure every function you want to use to control Pro Tools' native Transport Controls and Parameters has a dedicated CC number (→ see Wave for Music Quickstart guide → Functions)
- 3 You can use Tilt, Pan, Roll and Vibrato for the following (→ see Wave for Music Quickstart guide → Functions)

CC number	Function
CC 17 to CC 24	Pan for tracks 1–8
CC 33 to CC 40	Faders on tracks 1–8
CC 41	Master Fader

- 4 You can use the Click Function for the following:

CC number	Function
CC 12	Mute selected track
CC 13	Solo selected track
CC 14	Move bank left
CC 15	Move bank right

<b>CC number</b>	<b>Function</b>
CC 49 to CC 56	Slider buttons (mute on tracks 1–8)
CC 57	Flip button
CC 109	Mode button
CC 110	Previous track
CC 111	Next track
CC 113	Loop button
CC 116	Stop
CC 117	Play
CC 118	Record

Additionally you can use Key Commands for Transport Control (→ see Wave for Music Quickstart guide → Functions).

- 5** You can use the Momentary Click Function for the following (→ see Wave for Music Quickstart guide → Click Function)

<b>CC number</b>	<b>Function</b>
CC 114	Rewind
CC 115	Fast forward

## Mapping to a Virtual Instrument Plugin

- 1 In Softwave make sure every function you want to use to control Pro Tools' native Transport Controls and Parameters has a dedicated CC number. (→ see Wave for Music Quickstart guide → Functions).
- 2 As there are quite a lot of CC signals already taken by Pro Tools' native Transport Controls and Parameters you need to use one of the following CC signals:

CC number	Function
CC 0 to CC 11	Customizable
CC 16	Customizable
CC 25 to CC 32	Customizable
CC 42 to CC 48	Customizable
CC 58 to CC 63	Customizable
CC 65 to CC 73	Customizable
CC 79 to CC 108	Customizable
CC 112	Customizable
CC 119	Customizable

- 3 In Softwave solo the function you want to map.
- 4 Create an → Instrument Track ← in Pro Tools.
- 5 Open the virtual instrument of choice, e.g. Xpand!2 which comes with Pro Tools.
- 6 Right-Click the parameter you want to control and select "Learn MIDI CC."
- 7 Now De-Solo the function in Softwave. The function should be mapped to Pro Tools.



### Important 1

You won't be able to control the parameter with Wave unless you arm the Instrument Track.

### Important 2

Not all Virtual Instrument Plugins allow for MIDI Learn. This completely depends on the developer of the plugin. If nothing happens when you Right-Click a parameter in the plugin you can not assign MIDI to it.

## Mapping to an Audio Plugin

- 1 In Software make sure every function you want to use to control Pro Tools' native Transport Controls and Parameters has a dedicated CC number. (→ see Wave for Music Quickstart guide → Functions).
- 2 As there are quite a lot of CC signals already taken by Pro Tools' native Transport Controls and Parameters you need to use one of the following CC signals:

CC number	Function
CC 0 to CC 11	Customizable
CC 16	Customizable
CC 25 to CC 32	Customizable
CC 42 to CC 48	Customizable
CC 58 to CC 63	Customizable
CC 65 to CC 73	Customizable
CC 79 to CC 108	Customizable
CC 112	Customizable
CC 119	Customizable

- 1 In Softwave solo the function you want to map.
- 2 Create an →Audio Track← in Pro Tools.
- 3 Open the plugin you want to map to.
- 4 Now create a →MIDI Track← in Pro Tools.
- 5 On the "Input" choose "Wave, Bluetooth."
- 6 On the "Output" choose the plugin you put on the Audio Track.
- 7 Open the plugin.
- 8 Right-Click the parameter you want to control and select "Learn MIDI CC."
- 9 Now De-Solo the function in Softwave. The function should be mapped to Pro Tools.

#### **Important 1**

You won't be able to control the parameter with Wave unless you arm the MIDI Track.

#### **Important 2**

Not all Audio Plugins allow for MIDI Learn. This completely depends on the developer of the plugin. If nothing happens when you Right-Click a parameter in the plugin you can not assign MIDI to it.

# Cubase

- 1 To make sure Wave works with Steinberg's Cubase, navigate to the top menu of your screen to Studio → Studio Setup. The MIDI Port Setup window should have opened.
- 2 Find "Wave IN" on the list of devices and make sure "In 'All MIDI Ins' is enabled.
- 3 Cubase has mappings auto-assigned. In Softwave map the function you want to use to one of the following CC signals:

<b>CC number</b>	<b>Function</b>
CC 1	Modulation
CC 2	Breath
CC 4	Foot
CC 7	Main Volume
CC 8	Balance
CC 10	Pan
CC 11	Expression
CC 16	Gen Purp1
CC 25	Control 25
CC 64	Sustain

Wave should automatically control the selected CC in Cubase.

- 4 To assign Wave to a 3rd party plugin, solo the function you want to map within Softwave. Make sure your function has a dedicated CC number or Note (→ see Wave for Music Quickstart guide → Functions) that is not already auto-assigned in Cubase.
- 5 In the 3rd party plugin right click on the parameter you want to map. Many plugins allow "MIDI Learn." Select "MIDI Learn" if available.
- 6 Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link.
- 7 Now De-Solo the function in Softwave. The function should be mapped to the parameter in the 3rd party plugin within Cubase.
- 8 Repeat for other functions.

## Reason

- 1 To make sure Wave works with Reason, navigate to Reason → Preferences → Control Surfaces. Look under "Easy MIDI Inputs" and make sure you can see Wave and it is enabled.
- 2 In Softwave solo the function you want to map. Make sure your function has a dedicated CC number or Note.
- 3 To map the function within Reason right click on the parameter you want to map and select "Edit Remote Override Mapping..."
- 4 Make sure Wave is chosen as the Control Surface and check "Learn from control surface input."
- 5 Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link.
- 6 Now De-Solo the function in Softwave. The function should be mapped to Reason.
- 7 Repeat for other functions.

# FL Studio

- 1** To make sure Wave works with Image-Line's FL Studio, navigate to the top left corner of your screen to FL Studio → Preferences → MIDI. Find Wave Bluetooth in the input device list and select Enable under the list.
- 2** In Softwave solo the function you want to map. Make sure your function has a dedicated CC number or Note (→ see Wave for Music Quickstart guide → Functions).
- 3** To map the function to a native plugin within FL Studio right click on the parameter you want to map and select "Link to Controller."
- 4** To map the function to a 3rd party plugin right clicking doesn't work. Instead move the parameter you want to map, for FL Studio to remember the last used parameter. Next go to Tools → Last tweaked and select "Link to Controller."
- 5** Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link.
- 6** Now De-Solo the function in Softwave. The function should be mapped to FL Studio.
- 7** Repeat for other functions.

# Reaper

- 1** To make sure Wave works with Reaper, navigate to Reaper → Preferences → Audio → MIDI Devices. Under MIDI Inputs, right-click on Wave and make sure both "Enable input" and "Enable input for control messages" are checked.
- 2** In Softwave solo the function you want to map. Make sure your function has a dedicated CC number or Note (→ see Wave for Music Quickstart guide → Functions).
- 3** To map the function to native transport controls within Reaper, hover over the parameter and notice it's name. Then head to "Actions → Show action list..." and search for the parameter in the list. Select the parameter and click "Add..." under "Shortcuts for selected action."
- 4** To map the function to a 3rd party plugin, first move the parameter you want to map. Then click "Param" and verify that "Last touched" matches the parameter you want to map. Then select "Learn."
- 5** Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link.
- 6** Now De-Solo the function in Softwave. The function should be mapped to Reaper.
- 7** Repeat for other functions.

# Bitwig

- 1** To make sure Wave works with Bitwig Studio, navigate to File → Settings → Controllers. Click Add → Generic → MIDI Keyboard. In the MIDI device drop-down, select Wave's input.
- 2** In Softwave solo the function you want to map. Make sure your function has a dedicated CC number or Note (→ see Wave for Music Quickstart guide → Functions).
- 3** To map the function to native transport controls within Bitwig, right-click the parameter you want to map and select "Map to Controller or Key."
- 4** To map the function to a 3rd party plugin, first move the parameter you want to map. You should see the name of the parameter displayed on the device in the Fx-chain. Right-click the parameter and select "Map to Controller or Key."
- 5** Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link.
- 6** Now De-Solo the function in Softwave. The function should be mapped to Bitwig Studio.
- 7** Repeat for other functions.

# Studio One

- 1 To make sure Wave works with Presonus' Studio One, navigate to File → Preferences → External Devices. Click "Add..." Select "New Control Surface" from the list on the left. Rename "Device Name" to "Wave" or similar. Under "Receive From" choose "G1W1 Bluetooth." Click "OK."
- 2 In Softwave make sure every function you want to map over to Studio One has a dedicated CC number or Note (→ see Wave for Music Quickstart guide → Functions).
- 3 In Studio One open the Mix console by pressing "Mix" in the lower right corner. Then press "External" on the other side of the screen, in the lower left corner.
- 4 On the list that opens press the arrow beside the name of your Control Surface ("Wave") and select "Edit..." The External Devices window opens up.
- 5 Press "MIDI Learn." All of Softwave's functions that are active at that given time will be recognised in Studio One. Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link. Disable "MIDI Learn."
- 6 In Softwave solo the function you want to map.
- 7 Next Right-click a parameter in Studio One and select "Assign parameter name to Control# on Wave."
- 8 Now De-Solo the function in Softwave. The function should be mapped to Studio One.
- 9 When you link Tap and Click to Studio One the MIDI message for these functions will be registered as a Knob. With "MIDI Learn" enabled right click each Knob you want to change and select Button. Then right click again and select "Assign Command..." From the list select the command you want to assign.
- 10 Repeat for other functions.



# Cakewalk

- 1 To make sure Wave works with Cakewalk, navigate to Edit → Preferences → MIDI → Devices. Make sure Wave is checked under MIDI input.
- 2 In Softwave solo the function you want to map. Make sure your function has a dedicated CC number or Note (→ see Wave for Music Quickstart guide → Functions).
- 3 In Cakewalk right click the parameter you want to control and navigate to Remote control → Click "Learn." Select "Ok."
- 4 Depending on which of Wave's functions you are mapping, move, tap or click on Wave to make the link.
- 5 Now De-Solo the function in Softwave. The function should be mapped to Cakewalk.
- 6 Repeat for other functions.

## NI Traktor Pro 3

To make sure Wave works with Traktor Pro 3, navigate to the top left corner of your screen to Preferences → Audio Setup. Make sure you've selected an audio device.

### Mapping movements

- 1 To map Wave to a slider or a knob in Traktor Pro 3 navigate to Traktor's Preferences → Controller Manager.
- 2 Under Device, select Add → Generic MIDI
- 3 In Softwave solo the function you want to map (the "S"). Make sure your function has a dedicated CC number.\*
- 4 Navigate back to Traktor's Controller Manager. Click "Add In..." and select the effect you'd like to assign (e.g. Dry/Wet Adjust or X-fader position).
- 5 Click "Learn" and move Wave accordingly to make the link.

You should now see the MIDI CC change next to the Learn button. Press "Learn" again when finished to disable the learning mechanism.

- 6 In Softwave de-solo the function (the "S"). Now you've mapped a movement function to a parameter in Traktor Pro 3 successfully.

### Mapping the click function

- 1 To map Wave to a button in Traktor Pro 3 navigate to Traktor's Preferences → Controller Manager.
- 2 Under Device, select Add → Generic MIDI
- 3 Click "Add In..." and select the button you'd like to assign (e.g. Play or FX unit 1 on).
- 4 In Softwave add a "Click" function and give it a MIDI CC number.\*

- 5 You need to specify in both Softwave and Traktor Pro 3 what type of button interaction you want to use:

**For a "Click" function (to toggle buttons on/off):**

In Softwave make sure the action is set to "Click" and the type is set to "Trigger" (lower left corner of the function window).

In Traktor's Controller Manager select "Toggle" under "Interaction Mode."

**For a "Hold" function (to activate while pressing the button):**

In Softwave make sure the action is set to "Momentary."

In Traktor's Controller Manager select "Hold" under "Interaction Mode."

- 6 Click "Learn" and press the button on Wave (the one you chose in Softwave) to make the link.
- 7 You should now see the MIDI CC change next to the Learn button. Press "Learn" again when finished to disable the learning mechanism.
- 8 Now you've mapped one of Wave's buttons to a function in Traktor Pro 3 successfully.

**\* In order to map functions from Softwave to Traktor Pro 3 you need to attach a MIDI CC number to the function.**

You can assign any CC number, but make sure each function has an individual number. Softwave uses this number to communicate with your DAW.

Additionally you can assign:

- 1 PB (Pitchbend) to Tilt, Pan, Roll and Vibrato.
- 2 Notes (C, C#, D, E, F etc.) when using the Tap function.
- 3 Notes and Key commands/Shortcuts (cmd+T, R, f12 etc.) when using the Click function.

# Wave's Configuration Panel

To access Wave's configuration panel press the gear-icon behind a connected Wave in the top left corner of Softwave. In the panel you can change Wave's name, Reset its movements, configure buttons and configure Wave's standalone mode.

## Rename Wave

To rename Wave right-click on a connected "Wave," select 'Rename' and type in a new name.

Renaming Wave can come in handy when you have more than one Wave, or if you simply want to identify your own Wave from the ones of your friends.

## Wave on Right or Left index finger

Depending on what you are doing it might come in handy to have Wave on your left index finger instead of the right one.

Wave is symmetrical so this is easily possible. In order to flip the screen as well as the motion detection algorithms press "R" (Right). It should now read "L" (Left). Repeat to change it back.

## Activating Wave from Softwave

Activating Wave from Softwave is made possible so one person can wear Wave and another one can control it.

 Press this icon.

## Reset Wave's movements from Softwave

Resetting Wave's movements from Softwave is made possible so one person can wear Wave and another one can control it.

 Press this icon.

## Button configuration

You can configure all buttons to your liking, using either a Click or a Long Press (or both).

### Click

A Click is when you press a button once to activate a command.

### Long Press

A Long Press is when you press a button down and hold it to activate a command. The command mapped to Hold is activated after half a second.

## Reset button configuration

If you ever want to reset the button configuration to its default state press Reset button configuration.

If you want to undo the resetting of the buttons you can use the undo command, cmd+z (Mac) or ctrl+z (Windows).

## Button icons

These icons identify which button you are configuring.

 Middle button    Up button    Down button

## Button command list

Select a command from a drop down menu for each button;

- 1 Next Preset - Navigates to the next preset within Softwave.
- 2 Previous Preset - Navigates to the previous preset within Softwave.
- 3 Reset Movements - Resets movements to their starting point.
- 4 Edit Mode - Lets you enter Edit Mode (only in Standalone mode)

- 5 Activate - Activates and deactivates a Wave.
- 6 Momentary activate - Activates Wave while holding the button.
- 7 Show Battery - Shows the battery status of Wave.

## Standalone Mode editor

Standalone Mode is when you use Wave without Software.

 To enter the Standalone Mode editor, press this icon.

The changes you make are saved to Wave automatically.

## Wavefront editor

If you have the Wavefront receiver, you can edit how Wave behaves when connected to it.

 To enter the Wavefront editor, press this icon.

The changes you make are saved to Wave automatically.

# Menu

You find Softwave's menu in the top left corner of your screen.

## Audio/MIDI settings

In Audio/MIDI Settings you can:

- Mute and unmute audio input.
- Select the preferred audio output.
- Select an input device.
- Change the Sample Rate.
- Change the Audio buffer Size.
- Select active MIDI inputs.
- Test if the sound is working properly.

## Scan for plugins

You need to scan for the plugins on your computer for Softwave to know which plugins are available. You can scan for VST3 and AU plugins.

## Undo/Redo

You can use Undo and Redo to undo or redo your last actions.

You can also use `cmd+z` / `cmd+shift+z` (Mac) or `ctrl+z` / `ctrl+shift+z` (Windows) for the same results.

## Save

Saves the preset bank you're working within.

## New preset bank

Create a blank preset bank.

## Load default preset bank

Load the original Preset Bank that Softwave came with.

# Shortcuts

Use these shortcuts to control a few practical things in Softwave.

## Key shortcuts: Mac

SAVE PRESET BANK



OPEN AUDIO/MIDI SETTINGS



UNDO



REDO



## Key shortcuts: Windows

SAVE PRESET BANK



OPEN AUDIO/MIDI SETTINGS



UNDO



REDO





# Standalone Mode

## Overview

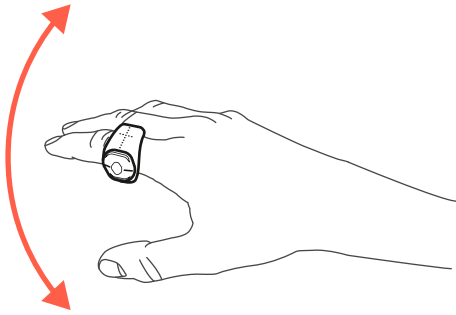
Wave can be used as a stand alone MIDI controller with your iPad, iPhone or Android device or by using WIDI Master by CME which allows you to connect Wave straight to your hardware instrument, without the need of a computer.

As a default Wave only has one preset in Standalone mode and the CC numbers Wave sends, and each movement's range is predetermined.

You can configure how Wave behaves in Standalone mode, creating presets and customising everything to your liking, by using Softwave's Standalone mode editor, on your mac or windows computer.

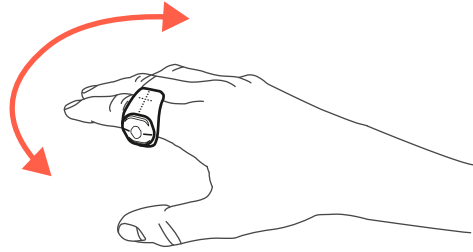
The LED display indicates whether Wave is active or not. A stable horizontal line indicates that Wave is inactive while interactive horizontal and vertical lines indicate that Wave is actively sending data to your device.

## Standalone Mode default values



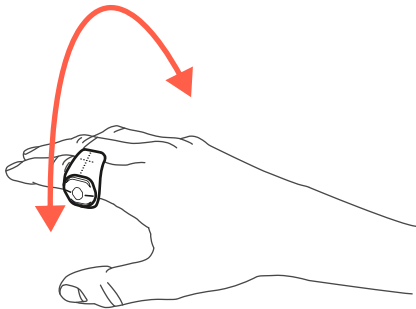
### ⋮ Tilt (CC 16)

Tilt hand vertically to control parameters.



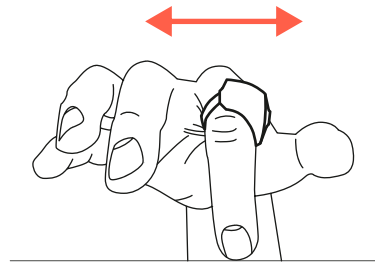
### ⋮ Pan (CC 17)

Pan hand horizontally to control parameters.



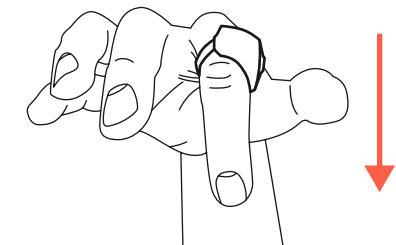
### ⋮ Roll (CC 18)

Roll hand side to side to control parameters.



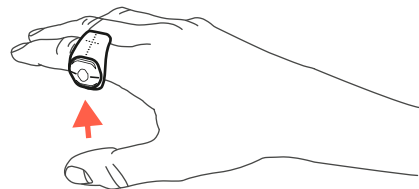
### ⋮ Vibrato (Pitch Bend)

Move Wave sideways to control parameters.



### ⋮ Tap (Note C1 (36))

Hit any surface to trigger samples or notes.

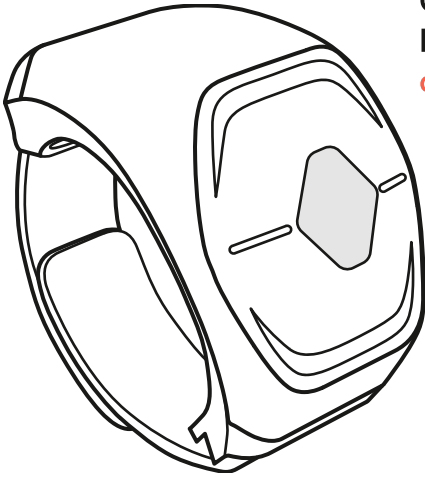


### ⋮ Click (CC 21)

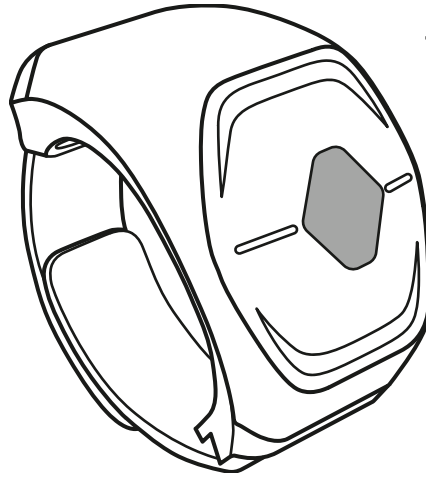
Issue commands and navigate presets.

## Default button settings

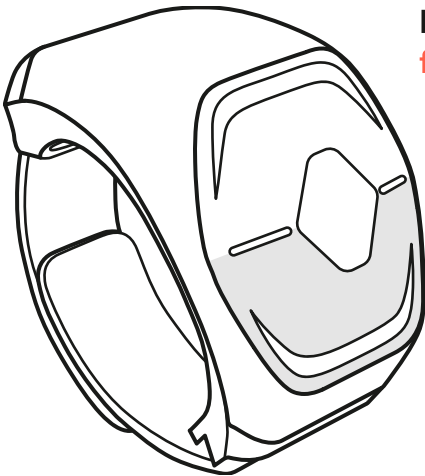
Wave has 3 buttons you can reach with your thumb. Each button has a certain function.



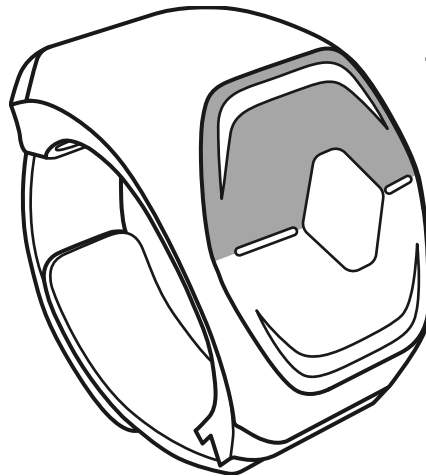
Click middle button to **activate/deactivate Wave**



Long press to **reset movements**



Click lower button for **click function (CC 21)**



Long press upper button to **enter/exit edit mode**

# Connecting Wave

To connect Wave make sure it is turned on. You turn Wave on by pressing its Middle button. Also make sure Bluetooth is turned on in your device.

## iPad and iPhone

You can connect Wave to your iPad and iPhone. It works on an app-to-app basis so you need to connect Wave through the application you want to use it with - not through the regular Bluetooth Settings.

- 1 Turn Wave on. Make sure Bluetooth is turned on on your device.
- 2 Navigate to the app you want to use Wave with.
- 3 Find the app's settings (usually a wrench or a gear icon) and find Bluetooth MIDI (as long as the app supports Bluetooth MIDI devices).
- 4 You should see Wave on a list of Bluetooth MIDI devices. Press connect.
- 5 If the app you're using does not provide an option to pair Bluetooth MIDI devices, download this application and use it connect Wave to your device.

## Android

- 1 Turn Wave on. Make sure Bluetooth is turned on on your device.
- 2 Navigate to the system settings (gear icon).
- 3 Select Connected Devices and select Bluetooth.
- 4 Select Pair new device.
- 5 You should see Wave on the list. Press it to connect it.
- 6 Once your Bluetooth MIDI device is paired, it'll show up in the list of Paired devices.
- 7 Now go over to the application you want to use Wave with (as long as it can send MIDI) and map the functions to parameters.

## WIDI Master

- 1 The WIDI Master consists of two units. The bigger unit connects to the MIDI OUT port of your instrument, and the smaller unit connects to MIDI IN.
- 2 Turn Wave on and keep it close to WIDI Master.
- 3 Now turn your instrument on, or plug WIDI Master into an instrument that is already turned on.
- 4 Wave should connect automatically to WIDI Master.
- 5 When WIDI Master is searching for a connection it flashes a blue light, which becomes steady when it connects to a device.

### **If Wave does not connect:**

- 1 Try unplugging WIDI Master and plugging it back in.
- 2 Try turning your instrument on and off.
- 3 Make sure neither device is connected to anything else, for example your computer or Wavefront.

# Mapping to an app

Mapping Wave to parameters in apps can vary from one app to the other. These instructions are related to how you use Wave when mapping and not how you enable MIDI mapping or select parameters to map within your app of choice.

## Mapping to an app: Movements, Vibrato and Tap

- 1 With MIDI mapping enabled in your app, select the parameter you want to map.
- 2 Enter Edit Mode on Wave (hold Up button) and navigate to the function you want to map - each represented by its icon. Edit Mode solos each function so Wave only sends the CC number for that particular function.
- 3 Depending on the function you're mapping, move or tap Wave. The function should be mapped instantly.
- 4 Repeat for other functions.
- 5 Disable MIDI mapping in your app and exit Edit Mode (hold Up button again) when done.

## Mapping to an app: Click

- 1 With MIDI mapping enabled in your app, select the parameter you want to map.
- 2 Press the button on Wave assigned to the Click Function (Default is the Down button).
- 3 Disable MIDI mapping in your app.

# Softwave's Standalone mode editor

When Wave is not connected to Softwave, it's in a mode called Standalone mode. You can configure this mode using Softwave's Standalone mode editor.

❑ The standalone mode editor can be accessed by clicking this icon.

Wave supports up to 24 presets in Standalone mode. When you make changes in the standalone mode editor, the changes are saved immediately to Wave. The preset configuration is exactly the same as in the main view, the only difference being that the main view presets do not get saved to Wave.

## Edit mode

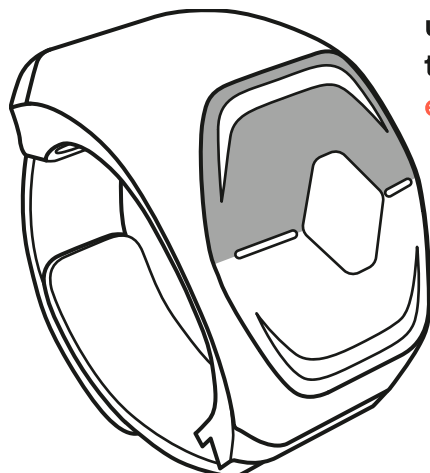
'Edit mode' allows you to adjust presets on Wave it self, without going back to the computer. 'Edit mode' consists of a main menu, which is an overview of the preset's functions and submenus for each function, where you can adjust them.

'Edit mode' does not allow you to create new presets, it merely allows you to edit the presets you've already created using Softwave's Standalone mode editor.

You can MIDI Learn CC and Program Change values, manually change CC and note values, adjust movement range, sensitivity, output range and more.

## Enter/Exit Edit Mode

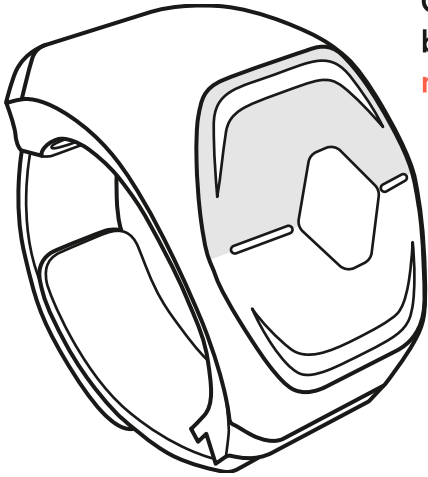
Enter 'Edit mode' by doing a long press on the UP button. Exit 'Edit mode' the same way.



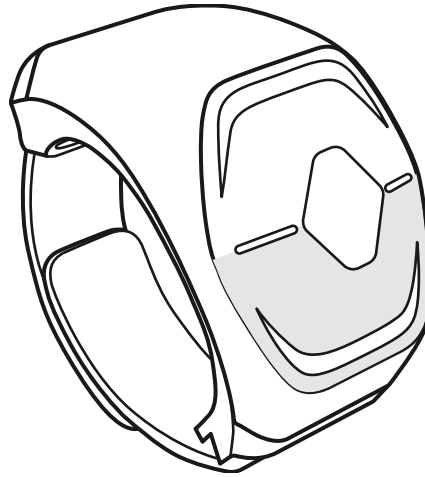
Long press  
upper button  
to **enter/exit**  
**edit mode**

# Navigation

Move between screens by clicking the UP and DOWN button.



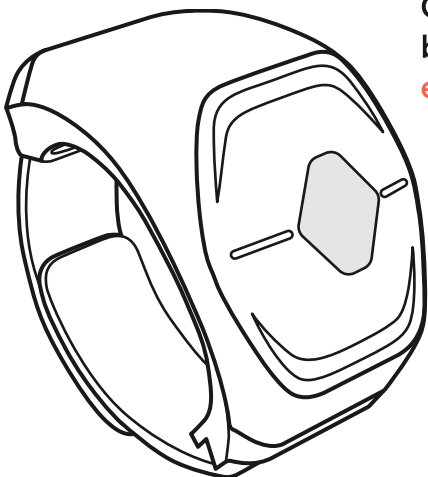
Click upper button for **next screen**



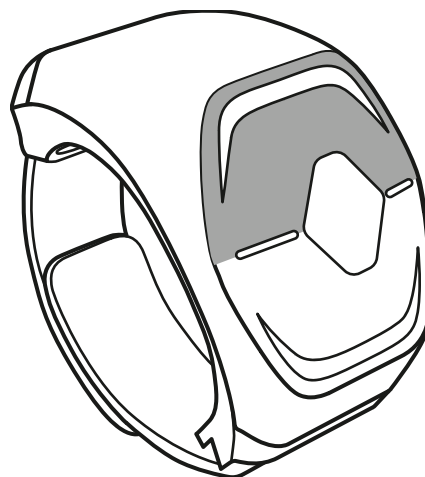
Click lower button for **previous screen**

# Enter/Exit Submenus

Enter a function's submenu by clicking the MIDDLE button. Exit a function's submenu by doing a long press on the UP button.



Click middle button to **enter submenu**

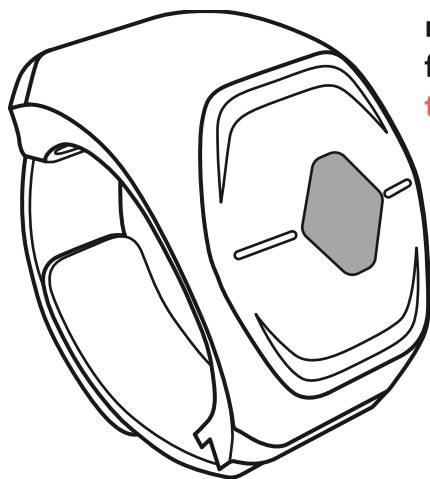


Long press upper button to **exit submenu**



## Shortcut to MIDI Learn

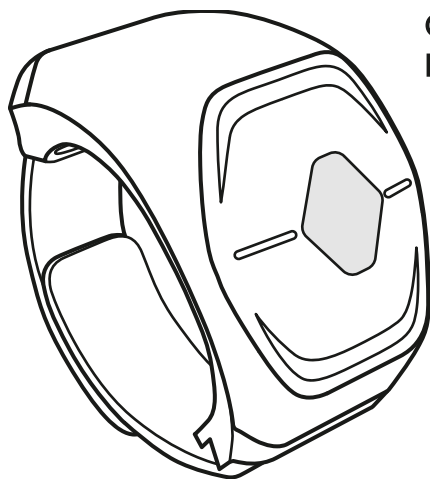
Shortcut to MIDI LEARN by doing a long press on the MIDDLE button in the main menu view.



Long press  
middle button  
for **shortcut**  
to **midi learn**

## Adjusting functions

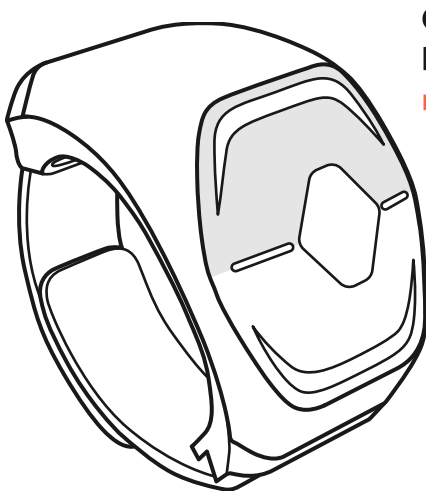
Adjust anything by clicking the MIDDLE button. Click again when finished.



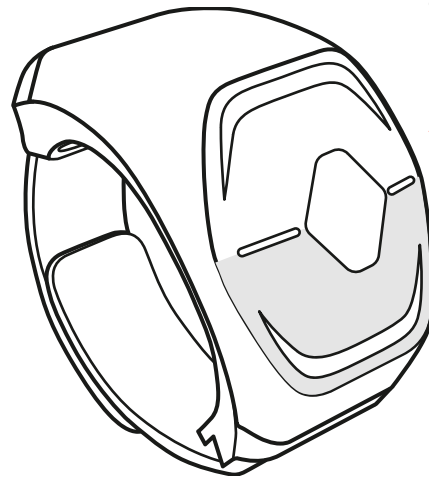
Click middle  
button to **adjust**

# Edit mode: Main menu

Move between screens by clicking the UP and DOWN button.



Click upper button for next screen



Click lower button for previous screen

## RE/AB - Relative, Absolute

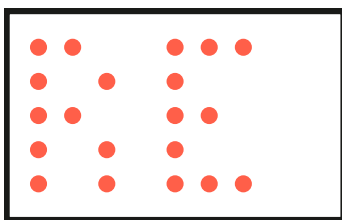
You can decide if a preset uses Relative (RE) or Absolute (AB) movements. The default state for Wave is Relative.

Relative mode behaves in a way that when you deactivate Wave, no matter how you move your hand in between, when you reactivate it Wave will start tracking from the last position before deactivating.

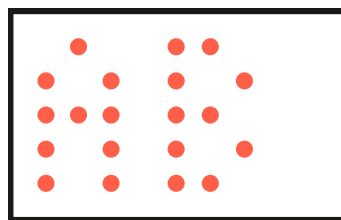
The Absolute mode does the opposite. It keeps tracking your movements even if you've deactivated Wave, and "jumps" to the current value when you reactivate it.

Absolute is stuck in space, Relative moves with you.

Click MIDDLE button to change.



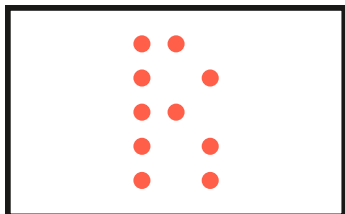
Relative movements



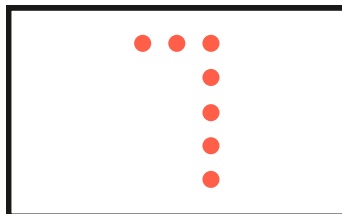
Absolute movements

## R/L - Right, Left

Use this feature dependant on if you wear Wave on your left or right index finger. Click MIDDLE button to change.



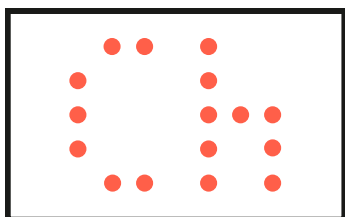
Right



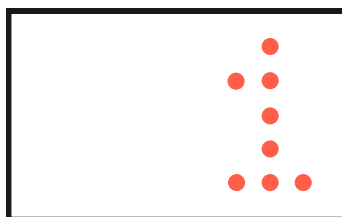
Left - L upside down  
(intended for your left hand)

## Ch - Channel

Use this feature to change the preset's MIDI Channel. Click MIDDLE button to change. Use UP and DOWN buttons to find your channel of choice. Click MIDDLE button again when finished.



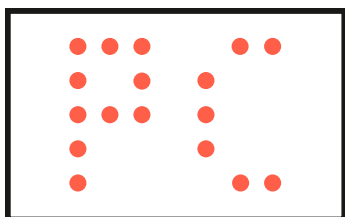
Ch or Channel shows  
up momentarily



Channel number

## PC - Program Change

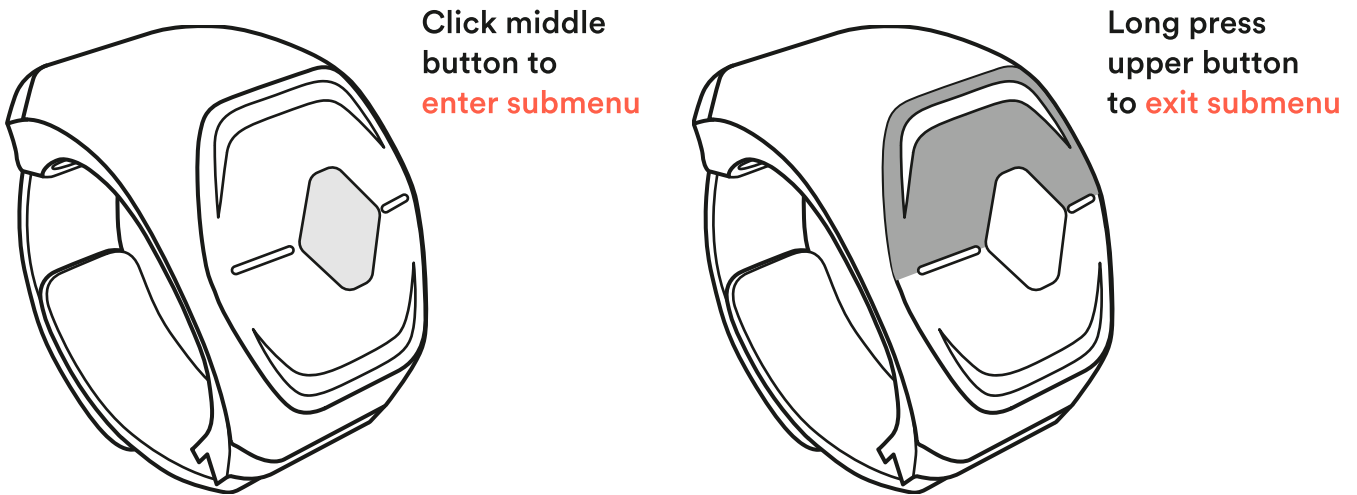
Use this feature to MIDI Learn a Program Change onto the preset. This way, every time you navigate to this particular preset it will send out a program change to your hardware device. Click MIDDLE button to activate MIDI Learn. Select the program change on your hardware device. It should register automatically.



Ch or Channel shows  
up momentarily

## Edit mode: Submenus

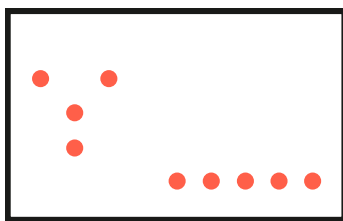
Enter a function's submenu by clicking the MIDDLE button. Exit a function's submenu by doing a long press on the UP button.



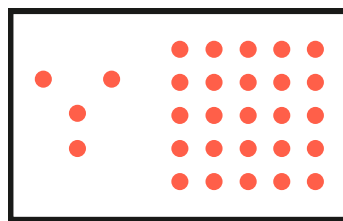
## Movement Sensitivity (Vibrato)

You can change the sensitivity of the Vibrato by clicking the MIDDLE button and then adjust the sensitivity by using the UP and DOWN buttons.

The sensitivity block has 5 stages represented by lines. The more lines the block has the more sensitive the Vibrato is. Click the MIDDLE button again when finished.



Low sensitivity

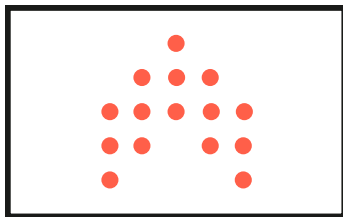


High sensitivity

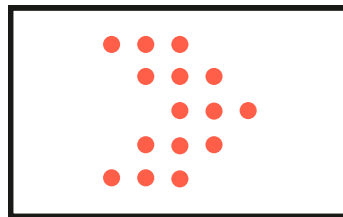
## Movement Direction (Tilt, Pan, Roll & Vibrato)

You can invert the movement direction by clicking the MIDDLE button on Wave. When you do the arrow should flip.

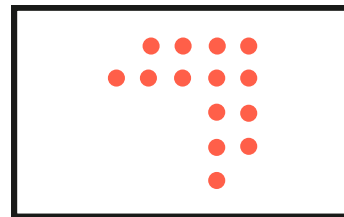
This will make the parameter you are controlling move in the opposite direction of your movement.



Tilt default direction



Pan default direction



Roll default direction

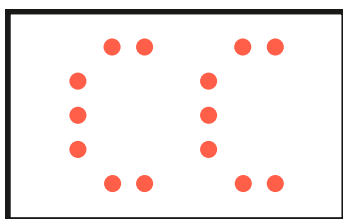
## CC Value

You can adjust the CC value for each function. There are two ways possible to do this.

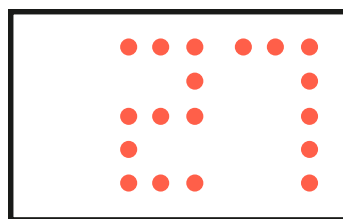
Either click the MIDDLE button and use the UP and DOWN buttons to change the number manually. Click the MIDDLE button again when finished.

Or click the MIDDLE button to activate MIDI Learn. Simply turn a knob on your hardware device and its CC number should register automatically.

**\*Pro Tip -** You can shortcut your way to MIDI Learn in the main menu by holding the MIDDLE button.



CC shows up momentarily



CC number

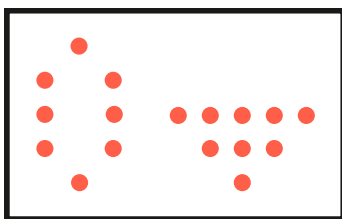
## Output Range (Tilt, Pan, Roll & Vibrato)

You can adjust each function's Output range. The default is 0-127 but you can change this number manually using the UP and DOWN buttons.

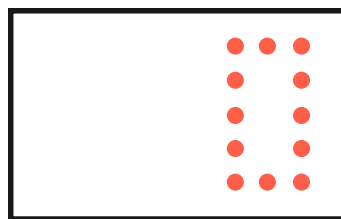
There are two screens for this feature, one for the min Output and another one for the max Output.

Click the MIDDLE button and change the number. Click again when finished.

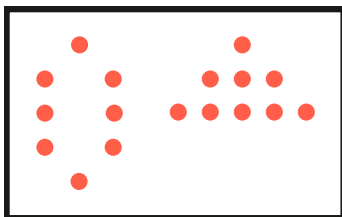
You can also use a parameter on your synth to adjust the number.



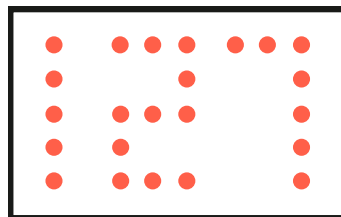
Output min shows up momentarily



Output min number



Output max shows up momentarily

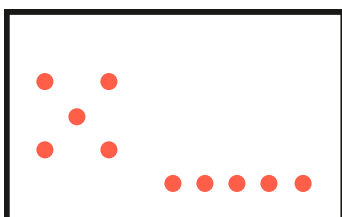


Output max number

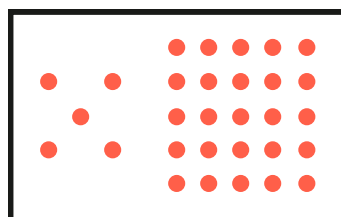
## Trigger Sensitivity (Tap)

You can change the sensitivity of the Tap by clicking the MIDDLE button and then adjust the sensitivity by using the UP and DOWN buttons.

The sensitivity block has 5 stages represented by lines. The more lines the block has the more sensitive the Tap is. Click the MIDDLE button again when finished.



Low sensitivity



High sensitivity