KIVIAK INSTRUMENTS

WOOFI

USER MANUAL 1.0.3

FIRMWARE v1.0.1
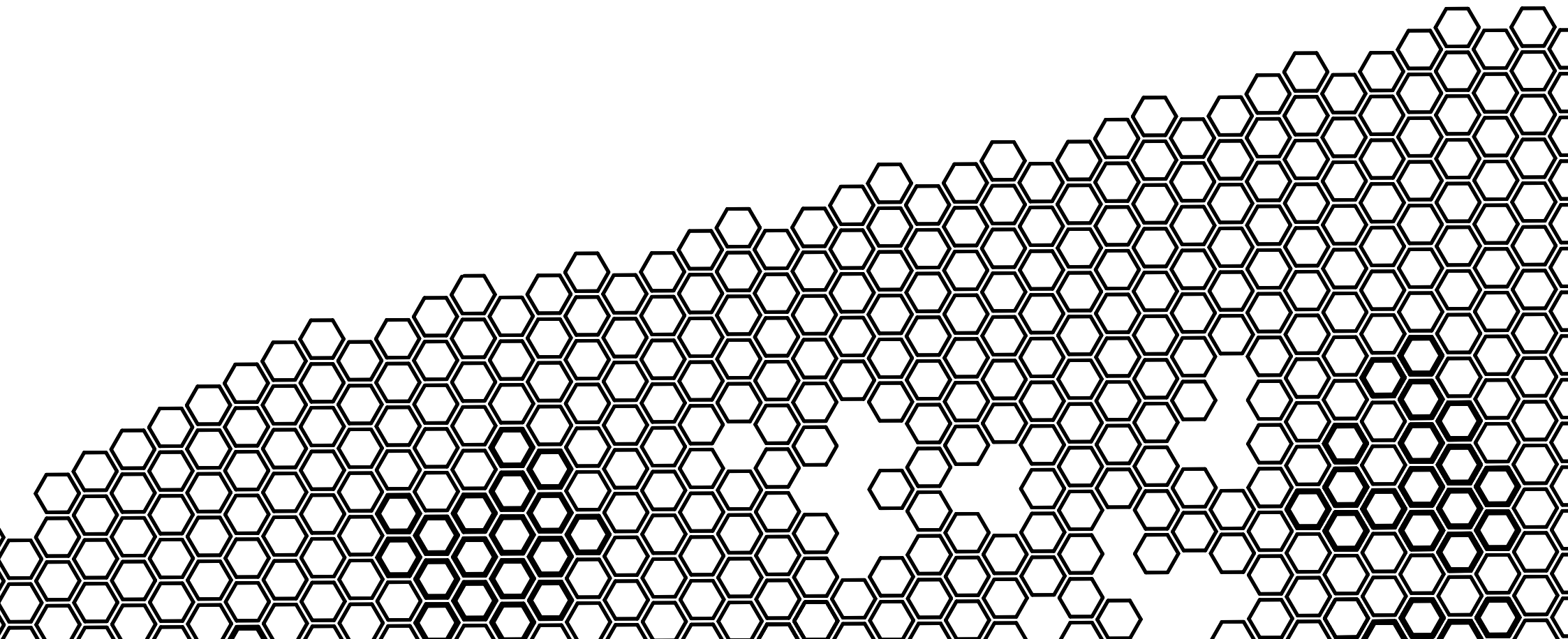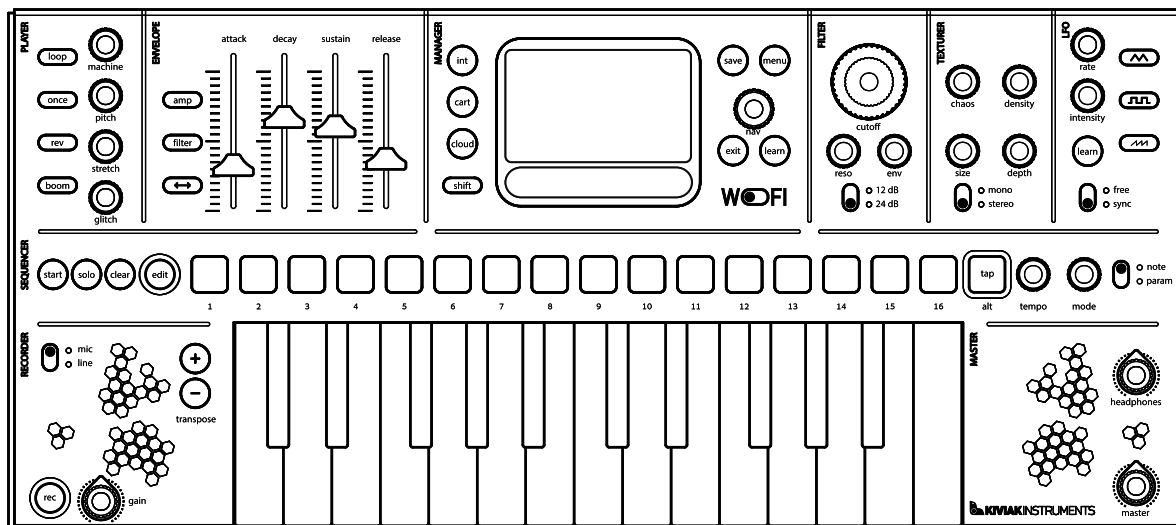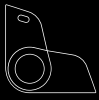
WOFI — TABLE OF CONTENT

1. Introduction

Explore, Create, and Have Fun!

Welcome to the world of WoFi, our very first synthesizer! This device is designed to empower you to explore new sounds and enjoy making music wherever you are.

Why Read This Manual?

While WoFi is intuitive enough for you to start playing right away, we highly recommend taking some time to read through this manual. Here's why:

- **Discover Features:** Learn about the various ways you can tweak your sounds.
- **Optimize Settings:** Get tips on managing your settings for the best experience.
- **Connectivity:** Understand how to connect WoFi to other devices and the internet.

For a quicker setup, you may refer to the Quickstart guide, but please note it is less detailed than this comprehensive manual. This document will also be updated over time with new features and improvements, so keep an eye out for updates.

Get ready to dive into the exciting world of WoFi—it's going to be an exhilarating journey!

1.1. Key Features

- **25 Keys**: The keyboard features 25 keys, providing a compact yet versatile playing surface.
- **Velocity Sensitivity**: The keyboard is velocity-sensitive, meaning it responds to how hard or soft you press the keys. Velocity affects volume of the notes
- **Monophonic Aftertouch**: The keyboard includes monophonic aftertouch, which allows for additional expression by pressing down on the keys after the initial strike. The target parameter for aftertouch can be selected in the menu, and it is off by default.
- **Up to 10-Voice Polyphony**: WoFi allows to play up to 10 notes simultaneously. This limit can be variable regarding the effect and envelope settings.
- **Realtime streaming**: All the samples are directly streamed from the flash memory, there is no preload time when changing samples, nor for using a sample after record.
- **Realtime processing**: Machine emulation, time stretch and pitch shift are applied on the fly.
- **Sample edition**: Recorded samples can directly be reworked: cut in and out, fade in and out, level normalization.

1.2. WoFi concept: workflow and data

The WoFi is a chromatic sampler, maybe closer to a synthetizer than a drum machine. The concept relies on playing **one sample** at a time, working on its reading method using **machine emulation** parameters, and process it using **shaping, filtering and texturing**.
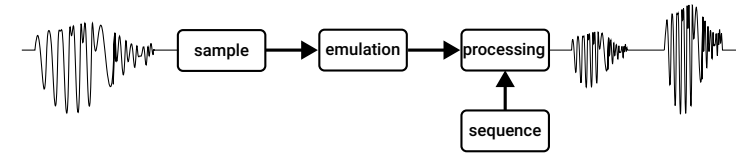
Each processing is real time, the parameters are used as soon as they change. The 16-steps sequencer allows to form **repetitive melodic frames**.

1.3. Patch

The current state of all the parameters can be saved in a preset called the **PATCH**. It is basically composed by

- the reference to the **sample** to read
- the set of parameters for the **synthesis**
- the data for the **sequence**
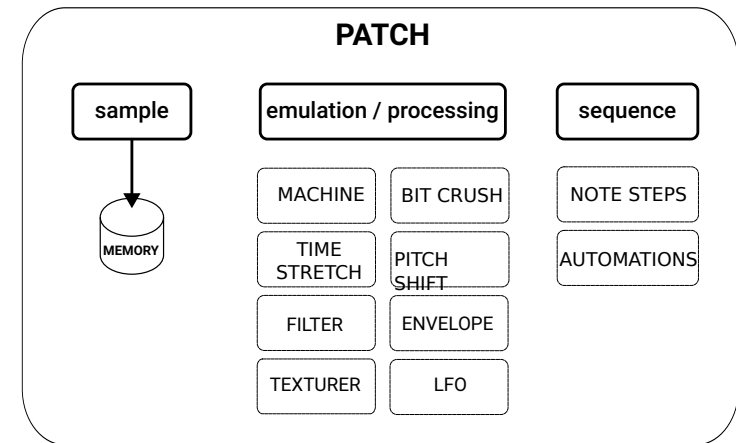
A patch can be created from Default patch, renamed from an existing patch or imported from the cloud library.

Every parameter in a patch can be changed, then resaved.

💡 Each time a patch is saved, the previous one is not overwrited.
It stays stored as a previous **revision**, and can be recalled at any time.

All parameters can be changed using rotaries and toggle switchs.

- **Player parameters** define the way the sample is read.
- **Enveloppe parameters** controls the amplitude and the filter opening.
- **Filter parameters** controls the cutoff frequency and the resonnance factor.
- **Texturer parameters** controls the granular reverberation.

💡 Default values can be restored for allmost all rotary encoders by clicking on them.

1.4.   Sample ∿

The sample is the base element

- it can be changed through **int >> SAMPLE**.
- it can be loaded from backup memory card through **cart >> SAMPLE**.
- it can be created using RECORD features as explained in Sample Recording section.
- it can be transfered to the WoFi, as explain in section Sample Loading.

💡 The sample is not stored inside a patch. It comes next to the patch and thus can be shared between many patchs.

- If a sample is not available anymore, the last sample loaded is used by the patch.
- The patch can be repaired by resending the sample to the WoFi, or choose another sample and save the patch again.

1.5.   First steps   ▷▷▷▷

After a first try with the factory presets, it is recommended to

- register to mywo.fi website
- pair your device to your account to benefit of content management through network
- read a bit more this manual to understand some new concepts that does not exists for now with other music gears.

1.6.   Encoder acceleration   🎛

Most parameters have a large range, but also require to be fine tuned.
In this purpose, the rotation of limitless encoder is used with acceleration monitoring:

- quick rotation will result in large variations.
- slow rotations will allow fine tuning.

2.   Precautions

2.1.   Safety Guidelines ⊙

- Always follow the instructions while using WoFi.
- Do not use the device or instrument near water, moisture, or in unstable positions.
- Avoid placing heavy objects on WoFi and ensure proper ventilation.
- Avoid extreme temperatures, water exposure, and direct sunlight.
- Use only the provided accessories and follow safety instructions.
- Do not spill any liquids onto the device or instrument.
- Operate in well-ventilated areas and avoid dusty or humid environments.
- Handle with care, avoid impacts, and secure cables during transportation.
- Avoid using the device or instrument during thunderstorms or gas leaks or close to strong magnetic fields.
- Refrain from modifying internal components or opening your WoFi as it would void the warranty and could harm the instrument.
- Do not insert anything into the device or instrument that may cause harm.
- Follow our instructions for firmware updates and software installations.

2.2.   Cleaning ✦

- Clean the device or instrument only with a soft, dry cloth to remove dust and debris. Do not use any liquids or sprays.
- Do not use gasoline, alcohol, acetone, turpentine, or any other organic solutions for cleaning.
- Ensure the device or instrument is powered off and unplugged before cleaning.
- Before cleaning the device or instrument, always remove the power source and cables.

2.3. Battery Handling and Power Supply

- ⚠️ The device embeds an Li-ion battery, the device shall not be exposed to excessive heat such as fire.

- The battery must be removed if the device is traveling in the aircraft hold.

- Use only specified chargers recommended by the manufacturer.

- Follow proper charging procedures to prevent overcharging.

- Prolong battery life by avoiding frequent full discharges and partial charging before storage.

- Use provided power adapters and ensure proper grounding.

- Dispose of batteries according to local regulations to prevent environmental damage. Use designated collection points for battery disposal. Improper handling can cause fire hazards. Disposal of a battery into fire or hot-oven, mechanically crushing, cutting or low pressure exposition of a battery can result in an explosion
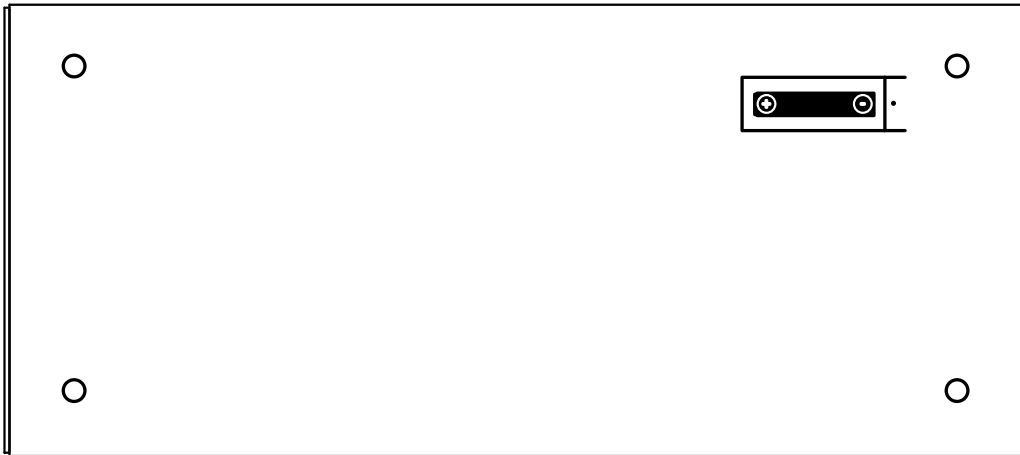
- **Battery Polarity Warning:**
  It is advised not to move the battery. If you must move it, correct polarity must be observed when reinstalling the battery.

  ⚠️ **Incorrect installation will damage the device** and void the warranty. Please observe below the back of the WoFi with the indicated polarity.

2.4. Storage

- Store the WoFi in a cool, dry place away from direct sunlight.

- Avoid placing heavy objects on top of the WoFi to prevent pressure damage.

- Use a protective case or cover to shield the WoFi from dust and potential impacts.

- Ensure the WoFi is turned off and unplugged before storing for extended periods.

- Periodically check the WoFi during storage to ensure its condition remains optimal.

2.5. Disposal of Waste Electrical & Electronic Equipment (WEEE) 🗑️

- The symbols on the product or its packaging indicates that this product must not be disposed of with other household waste.

- Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment.

- The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

- For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service, or the shop where you purchased the product.

2.6. FCC and CE Compliance FC CE

- This device complies with Part 15 of the FCC Rules and relevant European CE regulations. Operation is subject to the following conditions:

  1. This device may not cause harmful interference.

  2. This device must accept any interference received, including interference that may cause undesired operation.

- ⚠️ Severe ESD incidents can lead the device to stop working properly. Recovering of this issue needs the device to be manually restarted. For this reason the device complies to class C ESD requirements.

2.7. RoHS and UL Certification ✓Ⓤ

- This product complies with the Restriction of Hazardous Substances (RoHS) directive, ensuring that it is free from or contains limited amounts of hazardous materials.

- Additionally, it is UL Listed, indicating it meets safety standards established by Underwriters Laboratories.

2.8.   Emergency Procedures

- Power off and seek assistance in case of abnormal operation, smoke, or unusual odors.

- Disconnect from power sources during emergencies such as overheating or leakage.

- In case of malfunction, refer to troubleshooting guides and contact our support.

2.9.   User Responsibility and Specifications

- Read and understand all the instructions.

- Users are responsible for safe operation according to the provided instructions.

- Kiviak Instruments is not responsible for damage caused by improper operation.

- Specifications are subject to change.

3.   Conventions for this documentation

WoFi has different physical controls, here are the different types you might encounter :

▢	Square pads with three colors: red, blue and white.
◯	Round pads with three colors: red, blue and white.
⬭	Oblong pads with three colors: red, blue and white.
▣	Square pads (with 3 colors) and an additional blue light-pipe surrounding it.
◎	Round pads (with 3 colors) and an additional blue light-pipe surrounding it.
◉	Continuous and discrete (with steps and clicks) rotary encoders that can rotate infinitely without stopping, allowing limitless adjustment. They are sensible to acceleration : the faster you turn them, the faster the value change.
◉	Big continuous rotary encoder for the cutoff. It's bigger for comfort. In the manual we will often use the smaller rotary encoder image for explanations, even for the cutoff.
◉	Rotary potentiometer (knob) that has a limited range of motion (270 degrees) with physical stops at each end. It offers direct control over the analog signal of the volume and gain settings.
△	Fader that offers a linear control with defined end points at both extremes.
🎚	2-state toggle switch to change the status of a set parameter. In the top position, the top LED is lit, and in the down position, the bottom LED is lit.
⬛⬛⬛	25-key keyboard to play notes on WoFi.
	Touch stripe under the screen that can be used with one finger.

For this documentation, we will use the following conventions:

- ☼ : It means that we are giving a **tip** or some **extended knowledge**.

- ⚠ : It means it's something you should be **careful** about while using WoFi.

- ▢ or ◯ or ⬭ or ▣ or ◎ : It means you must **press** a pad/button.

- ◉ or ◎ : It means you must **press** a rotary encoder.

- ⬭ : It means you must **hold** the element you are pressing (either an encoder or a pad/button, in the example it is with an oblong pad).

- ◯ : It means you must **double-click** the element (either an encoder or a pad/button, in the example it is with a round pad).

- ◉ : It means you must **rotate** the encoder (unlimited rotations), clockwise will **increase** the parameter value ◉, and anti-clockwise will **decrease** it ◉.

- ◉ : It means you must **move** the potentiometer. Clockwise will **increase** the parameter value ◉, and anti-clockwise will **decrease** it ◉.

- ↕△ : It means you need to **move** a fader. Moving it upward increases the value, while moving it downward decreases it.

- 🎚 A > It means you need to **flip** the toggle switch to the **A** position or leave it in the **A** position if it's the current one.

- A + B : It means you must do the two actions **A** and **B** simultaneously. Examples: - ⬭ **shift** + ◉ **env** = press and hold **shift** and rotate **env**. - ◉ **reso** = press and rotate **reso** at the same time. You can notice here that we can easily combine different pictograms together for one action with the same element.

- A → B : It means you must do the two actions successively. Example: ◯ **menu** → ◉ **nav** = press **menu** then rotate **nav**.

- ▢ 1-16 : it means you can press the pads between 1 and 16.

- ▢ 1 : it means you have to press pad 1.

- A Specific Section means you can click on that part of the text and go directly to that part of the documentation. Exemple: Introduction

4. Getting Started, Interface and Connectivity

Before we even start talking about making sound with WoFi, let's first do a quick tour of WoFi's hardware and how to turn it on. In the following image, you can see a breakdown of the 2 different panels of WoFi and numbers indicating each main section's role.

4.1. Front Panel
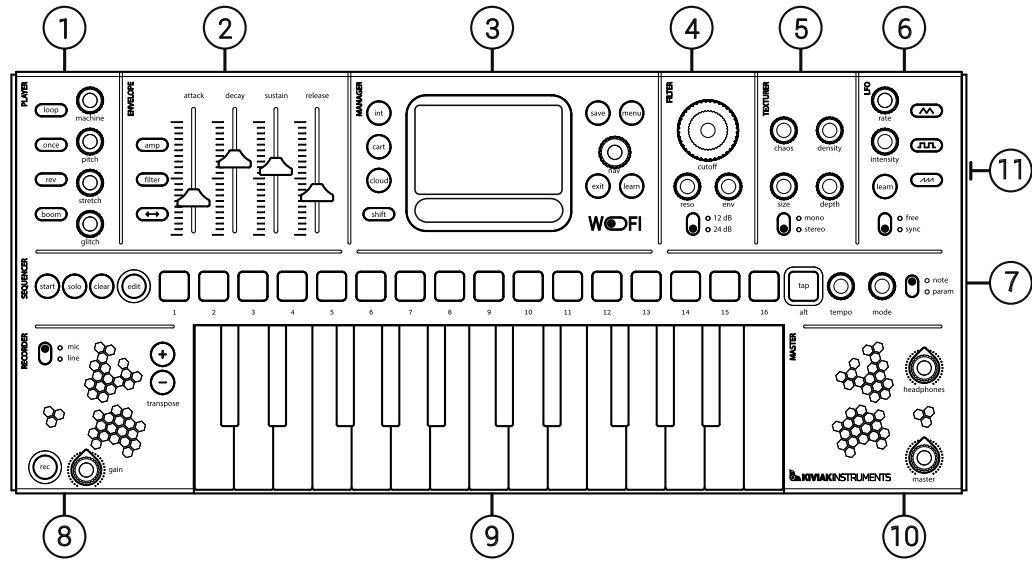
① Player Section	⑤ Texturer	⑨ Keyboard
② Envelope	⑥ LFO	⑩ Master
③ Manager	⑦ Sequencer	
④ Filter	⑧ Recorder	⑪ Cartridge slot

4.2. Back Panel

NB: I/O = Inputs and Outputs
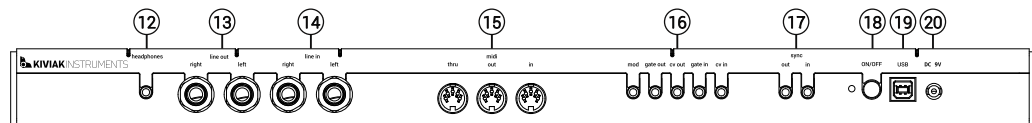
⑫ Headphones	⑮ MIDI I/O	⑱ Power button
⑬ Stereo output	⑯ CV/Gate/Mod I/O	⑲ USB
⑭ Stereo input	⑰ Sync I/O	⑳ DC Input

4.3. Turning WoFi On

To turn on your WoFi, press the black power button on the back of WoFi in section 18. Your WoFi is battery-powered and should come with its battery partially charged. You can also plug in the power supply if wanted thanks to the dedicated power input on section 20.

4.4. AC/DC wall adapter

External Power supply is DC +9V, polarity:

5. Dashboard

The bottom of the display is a reserved area showing the current status of the device
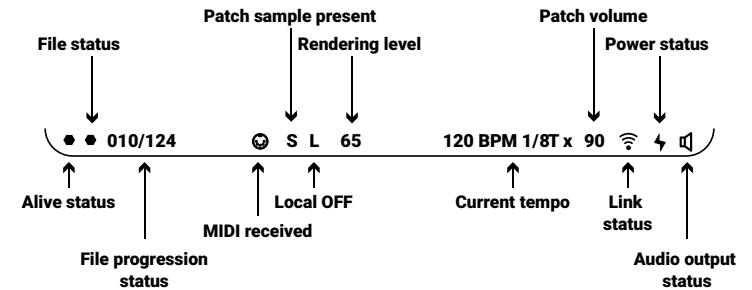
6. Memory

The WoFi allows to work from two local memory: internal or cartridge. Cloud possibilities offers to synchronize patchs and samples with your online account, taking content management to another level.
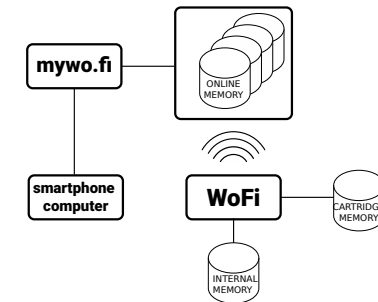
7. Main View

By default, when you turn on WoFi, the last used patch is automatically loaded. The screen will display the name of this patch, and you can start browsing the internal memory patches from there.

7.1. Browsing Internal Memory Patches

To browse and load patches from the internal memory:

- Use ⊚ **nav** to scroll through the available patches.

- Press ⊚ **nav** to load the selected patch.

Note: The loaded patch always has an arrow on its left, indicating that it is the current patch being played.

7.2. Navigating Between Memory Locations

To navigate between the memory locations (internal memory, cartridge memory), use the buttons on the left side of the monitor:

- Press ◯ **int** or ◯ **cart** to select the desired memory location.

- By default, you will start in the patch view of the selected location. Press the same button again to switch views and navigate between the following lists:

    - **PATCHES**: Displays the list of patches.
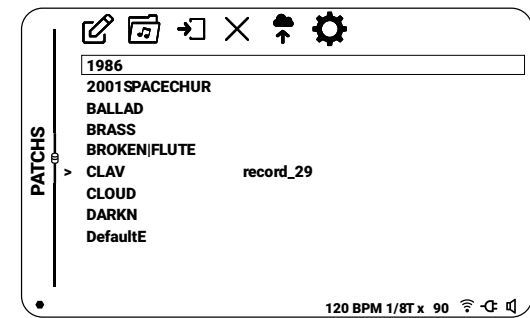
- **SAMPLES**: Displays the list of samples.
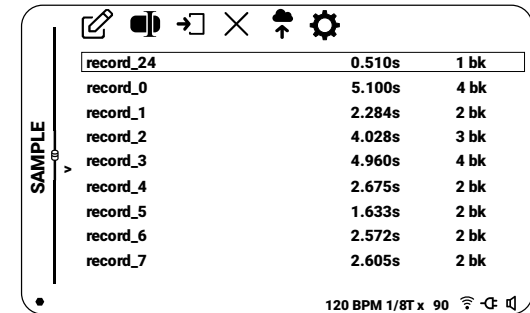
- **SOUNDBANKS**: Displays groups of patches.
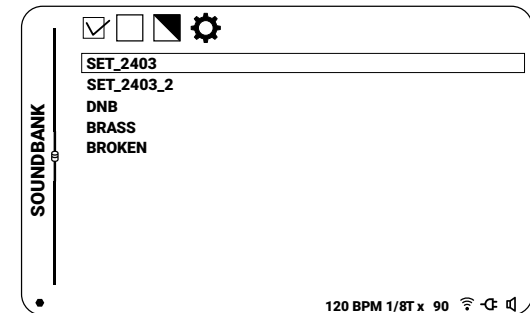
- **TAGS**: Displays tags added to samples or patches.
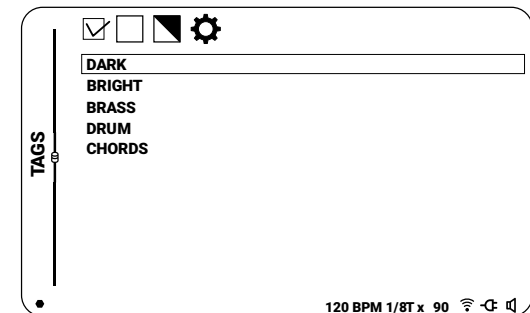
- For each memory location and its views, use ⟳ **nav** to scroll through the lists, just like when browsing internal memory patches. Press ◎ **nav** to load or select an item.

- Press ◯ **menu** to access specific commands for the current view. Use ⟳ **nav** to browse through the different MENU icons and select the desired option by pressing ◎ **nav**. You can also return to the previous view by pressing ◯ **exit**.

7.3. Action Menus

From list view patchs, sample, soundbanks and tags, action menu can be acceded using

◯ menu

7.3.1. Internal - Patches

SEND TO CART
EDIT   SEND TO MYWOFI
🖉 🗗 ⊣] ✕ ⬆ ⚙
DELETE
SOUNDBANK   SETTINGS

7.3.2. Internal - Samples
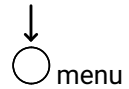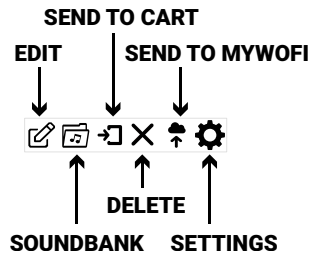
SEND TO CART
EDIT   SEND TO MYWOFI
🖉 ⊏Ɖ ⊣] ✕ ⬆ ⚙
DELETE
RENAME   SETTINGS
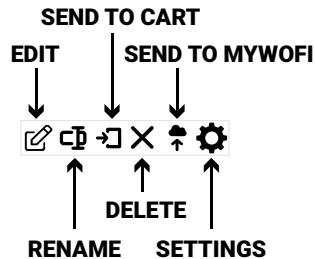
7.3.3. Cart - Patches/Samples

RETRIEVE   FORMAT
BACKUP
⊣] ⊕] ⊕] ✕ ✖
RESTORE
DELETE
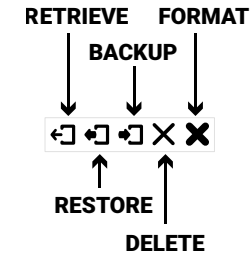
7.3.4. Tag and Soundbank display filtering

The patches and samples display can be controlled y filtering by soundbanks or by tags.

SELECT ALL
INVERT
☑ ☐ ◪ ⚙
DESELECT
SETTINGS
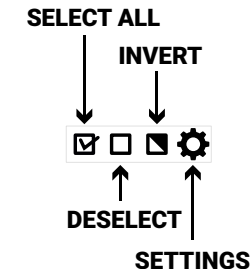
8.   Creating and Saving Patches

ACCESS TO INTERNAL MEMORY   DISPLAY   SAVE CONTEXTUALLY

MANAGER

int   save menu   ACCESS TO MENUS

ACCESS TO CARTRIDGE MEMORY → cart

ACCESS TO CLOUD CONTENT → cloud   ◎ nav   TO NAVIGATE AND SELECT

shift   exit learn   TO ASSIGN A DESTINATION PARAMETER TO THE STRIPE

WOFI

SHIFT KEY FOR COMBOS   TOUCH STRIPE   TO EXIT A SPECIFIC MENU
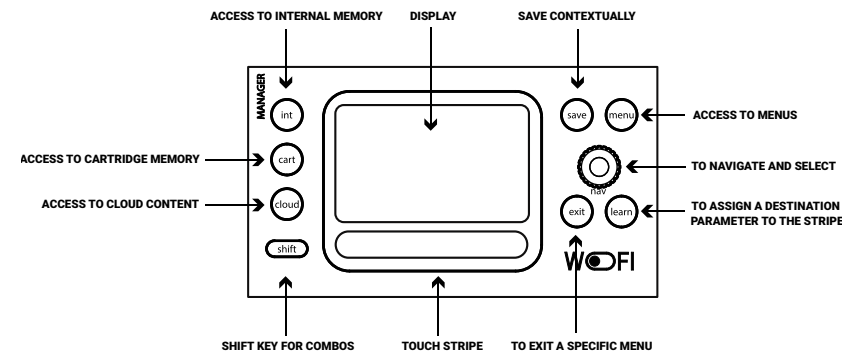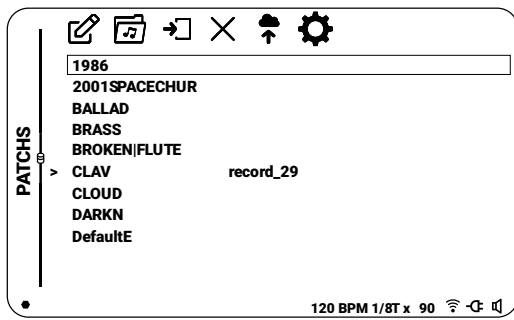
In this section, we will explore how to create and save patches on WoFi. A patch consists of a sample, various parameter settings, and the sequence associated with it. WoFi allows you to save patches internally, on the mywo.fi cloud platform, or on a removable cartridge.

8.1. Steps to Create a Patch

Start from Default or Any Patch: You can start creating a patch from the default patch, which has flat settings, or from any existing patch. The core idea is that when you save the patch you are editing and give it a different name, you create a new patch. If you save it with the same name, you overwrite the existing patch, creating a new version. For details on navigating patch versions, refer to the Sequencer Pads Modes section.

8.2. Steps to Save a Patch

To save a patch:

- Press ⭘ **save** to initiate the save process.

- Change the name of the patch if you want to create a new patch. Use the on-screen keyboard interface for entering the name. For detailed instructions on using the keyboard interface, refer to the ?? section.

- Validate by pressing ⭘ **save** again.

8.2.1. Saving Location Options

WoFi offers several saving location options:

- ⭘ **int**: Save to internal memory.

- ⭘ **cart**: Save to a removable cartridge.

⚠ **Warning:** When changing patches, you might need to move a fader to catch the value that was saved in the patch, as faders are analog controls. This means that the physical position of the fader may not match the saved parameter value until you move it. Ensure you adjust the fader to match the saved settings.

9. On-Screen Keyboard
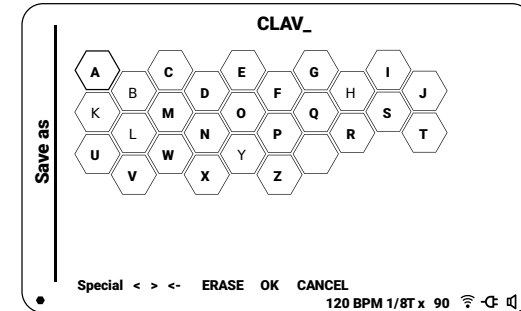
WoFi provides an intuitive on-screen keyboard interface for naming patches, samples, and other parameters. This interface facilitates easy text entry and navigation, enhancing the user workflow.

9.1. Navigating the Keyboard

To navigate through the characters on the on-screen keyboard:

- **Rotate** the ⟳ **navigation encoder** to move the cursor left or right across the character list.

- **Press** the ◎ **navigation encoder** to select a character or action (such as deleting a character).

9.2. Entering Text

To enter and save text:

1. Use the ⟳ **navigation encoder** to highlight a character on the on-screen keyboard.

2. Press the ◎ **navigation encoder** to confirm your selection and add the character to the text field.

3. Repeat the process until the desired text is complete.

4. To delete a character, navigate to the delete icon and press the ⊚ **navigation encoder**.

5. To erase all characters, navigate to the ERASE icon and press the ⊚ **navigation encoder**.

6. To navigate on the characters already written, navigate to the arrow icons and press the ⊚ **navigation encoder** to pick the direction you want to move to.

7. To finalize and save the entered name, press the ○ **save button**. This action confirms the text entry and completes the naming process.

Note: Ensure the desired name is correctly displayed in the text field before pressing the **save button**, as this action finalizes the naming process.

10.   Sample Recording

SELECT THE RECORDING INPUT

ARM / START / STOP RECORDING

ADJUST INPUT GAIN

Next ID 30
Current record_29 0.000s
Gain -03.5 dB

REC

00

120 BPM 1/8T x 90
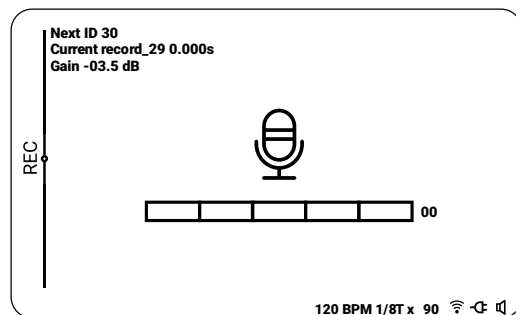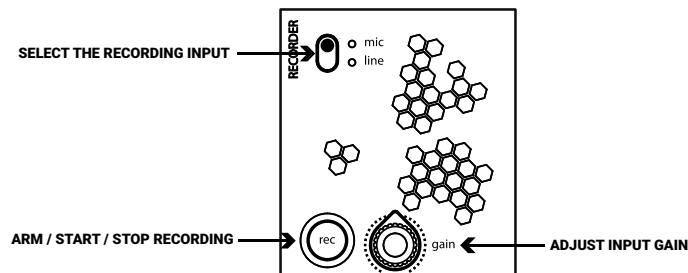
One of the strengths of WoFi is its ease of use in recording samples. The Recorder section provides direct access to all the tools you need to record samples effortlessly.

10.1.   Start a Recording

To record a sample using WoFi:

• Use ⊙ **input** to select the input source: either the built-in microphone (located on the front panel behind the honeycomb grille of the RECORDER section) or the line input (located on the back panel).

• Press ⊚ **rec** to arm the sample recorder. The REC button will start blinking.

• Adjust the gain if necessary using ⊚ **gain**. (Note: You can also activate a pre-listen of the audio source you're recording to monitor it. Instructions for this can be found in the corresponding section.)

• Press ⊚ **rec** again to start recording. The recording will start when the button is released, at which point the button will stop blinking and become still.

• Press ⊚ **rec** to stop the recording. The sample will be instantly loaded into the preset, ready to be played!

• **Triggering record using MIDI:** Once the recorder is armed:

   – Press ⊏ **shift** and play a MIDI note through DIN or USB to start a record.

   – Hold ⊏ **shift** button to stop the record when the note stops.

10.2.   Aborting a Recording

If you need to abort a recording, here are the two situations you might face and the actions you can take:

• To unarm the recorder when it is armed, press ⊏ **shift** + ⊚ **rec**. The REC button will stop blinking and go dark.

• To abort an ongoing recording, press ⊏ **shift** + ⊚ **rec**. The sample will not be saved.

10.3. Additional Features

- **Choosing the Root Note**: While the recorder is armed, you can press any key on the keyboard. The sample root note will automatically be assigned to the last key pressed once the recording is complete.

- **External Recorder Triggering**: You can trigger sample recording with an external keyboard synthesizer. Ensure the MIDI output of the synthesizer is connected to the MIDI input of WoFi, and the line output of the synthesizer is connected to the line input of WoFi. Once the routing is correct, press a key on your synthesizer to launch the sample recording.

- **Line In Render**: The "Line In Render" setting allows monitoring of the signal input from the line in while recording. This feature enables you to hear the incoming audio during the recording process. For configuration details, refer to the General Settings.

- **Record filename**: The filename suffix can be changed with pressing ◎ **nav** from the Rec View

11. Sample Loading

WoFi offers several methods to load samples, providing flexibility for different workflows and preferences. Below are the methods available:

11.1. Internal Storage

WoFi features internal storage with a 100 MB capacity, equivalent to 18 minutes of audio. To load samples from the internal storage:

- **Access Internal Storage**: Press ◯ **int** to access the internal storage.

- **Browse Samples**: Use ◎ **nav** to scroll through the available samples.

- **Load Sample**: Press ◎ **nav** to load the selected sample.

11.2. Cartridge Storage

WoFi supports removable cartridges, each with a capacity of 100 MB (18 minutes of audio). To load samples from a cartridge:

- **Insert Cartridge**: Insert the cartridge into the slot on the right panel of WoFi.
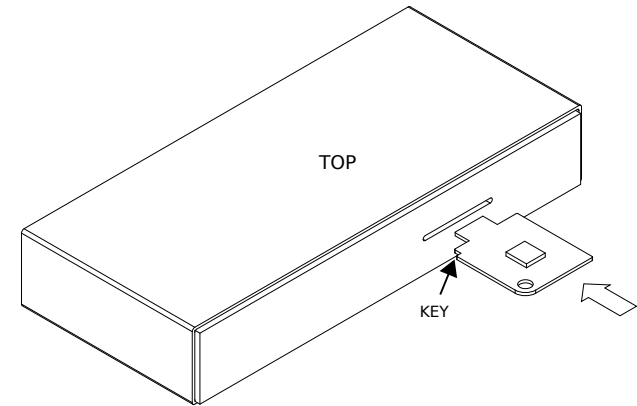
- **Access Cartridge Storage**: Press ◯ **cart** to access the cartridge storage.

- **Browse Samples**: Use ◎ **nav** to browse through the samples on the cartridge.

- **Load Sample**: Press ◎ **nav** to load the selected sample.

11.3. Cloud Storage via mywo.fi

For unlimited cloud storage, you can access samples stored on the mywo.fi platform. To load samples from the cloud:

- **Connect to WiFi**: Ensure WoFi is connected to WiFi.

- **Access Cloud Storage**: Press ◯ **cloud** to access the mywo.fi storage.

- **Browse Samples**: Use ◎ **nav** to browse through the samples available on mywo.fi.

- **Load Sample**: Press ◎ **nav** to load the selected sample.

For more details on using mywo.fi, refer to the dedicated mywo.fi documentation.

11.4.   Local Storage on a Computer

Using the WoFi Manager software, you can manage and transfer samples between your computer and WoFi via USB. To load samples from your computer:

- **Connect via USB**: Connect WoFi to your computer using a USB cable.

- **Open WoFi Manager**: Open the WoFi Manager software on your computer.

- **Manage Samples**: Use the software to browse, transfer, and organize samples between your computer and WoFi.

For more details on using WoFi Manager, refer to the dedicated WoFi Manager documentation.

12.   Waveform Viewer

The Waveform view allows you to display the waveform of the sample and attach cue points to the sample.

To enter this view, press ⬇ **shift** + ◯ **int** to enter the current sample editing mode.

For editing, use the rotary encoders from the Texturer section.
In this context, they exclusively work for sample editing.

START POINT SELECTION → chaos
END POINT SELECTION → density
VIEW WINDOW POSITION → size
VIEW WINDOW SIZE → depth
mono / stereo

CURRENTLY DISPLAYED CUE POINT · CUE POINT START · CUE POINT STOP · CURRENTLY SELECTED AND PLAYING CUE POINT

record_29
[0 s-2ms]zoom 1.43681   current 0

WAVEFORM

ZOOMED VIEW

FULL SAMPLE VIEW

[0   7 ms] -zoom 143681 - length 671 ms

120 BPM 1/8T x 90

ZOOM START · ZOOM STOP

To navigate in the sample, set the zoom factor with ◉ **depth**, then move the zoom window with ◉ **size**.

Edit Cue Points

The cue points is the set of one start point and one end point.

- The playback begins from the **the start point** until **the end point**, then it is looped revered or stopped regarding the player mode.

- The cue points are relative to a sample. They are reloaded each time the sample changes. Up to 16 cue points can be defined for a sample.

To manage cue points:

- Change the start point with ◉ **chaos**.

- Change the end point with ◉ **density**.

To manage cue points:

- Turn ◉ **nav** to browse among cue points (start-stop) to edit them.

- Press ◉ **nav** to select the current cue points to be used for the sample playback.

- Press ◯ **save** to save the edited cue points.

Note: The current playback cue points can be set using the PADs, see Sequencer Pads Modes section for more details.

13.   Sample export

From the Waveform view, press ⭕ **menu** to access to **Sample export** view.
This view allows the sample to be exported as a new sample. This feature is available only for the sample owned by you.

```
SAMPLE EXPORT

name              record_12_xp
normalize         off
level             0.0dB
fade in           20ms
fade out          20 ms
start             1007 (20ms)
stop              88200 (1837ms)

[waveform]

SAVE   CANCEL

120 BPM 1/8T x  90  🛜 ⊶ �🔊
```
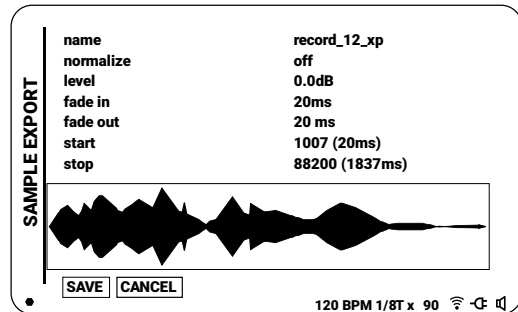
- Select the name for the exported sample

- Enable the normalizationif needed

- Set the normalization level

- Set the fade in and fade out time

- Set the sample number for start and stop. When opening the view, these values are set to the zoom window of the waveform editor. You can manually adjust them.

  Note: In this case, make sure that you set fade in and out to avoid glitches when looping.

- Select **save** to validate these setting and start the export.
  The resulting sample will be automatically loaded in the current patch.

14.   Player


```
PLAYER

SAMPLE PLAYS IN LOOP →  ( loop )   ◯ ← PICK THE MODEL OF
                                  machine   PLAYER ALGORITHM

SAMPLE PLAYS ONCE →  ( once )   ◯ ← ADJUST THE PITCH OF
                                 pitch      THE SAMPLE

SAMPLE PLAYS ONCE →  ( rev )    ◯ ← STRETCH THE SAMPLE WITHOUT
IN REVERSE                       stretch    CHANGING THE PITCH

SAMPLE PLAYS BACK →  ( boom )   ◯ ← ADD GLITCHES
AND FORTH IN LOOP                glitch
```

```
PLAYER UI

PITCH      STRETCH    GLITCH
160         160        160

LIN, 12 bits, BW 26 kHz
120 BPM 1/8T x  90  🛜 ⊶ 🔊
```
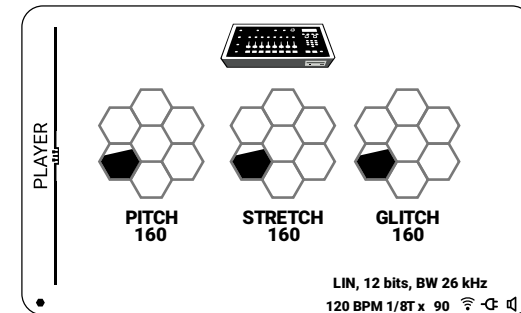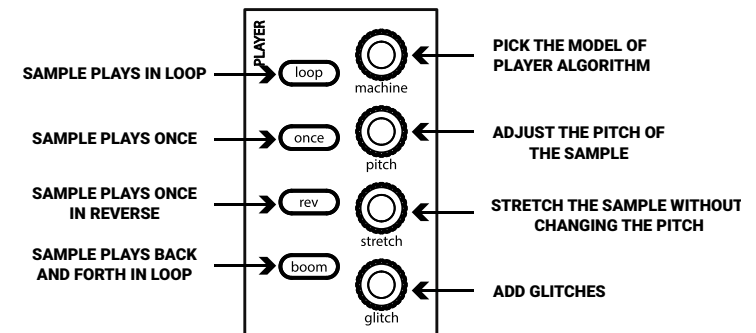
14.1.   Playback Modes

WoFi offers four playback modes for samples: loop, once, reverse, and boomerang. You can switch between these modes on the fly by pressing the corresponding oblong button.

- ⊂⊃ **loop**: Plays a portion of the sample repeatedly in a loop (between the start point and end point) until the note is released.

  💡 **Tip**: This mode is useful for sustaining sounds like pads or drones, where continuous playback is needed without re-triggering the sample.

- ⊂⊃ **once**: Plays the sample from start to finish once each time it's triggered. After the sample completes playback, it stops until triggered again.

  💡 **Tip**: This mode is ideal for percussive sounds or short sound effects where a single playback is desired.

- ⊂⊃ **rev**: Plays the sample backward from its endpoint to its start point.

  💡 **Tip**: This mode creates unique and interesting sound textures.

- ↓ **boom**: Combines forward and reverse playback in a single loop. The sample plays forward until it reaches the loop endpoint, then reverses and plays backward until it reaches the loop start point, and repeats this process until the note is released.

14.2. Playback Controls

The player section also includes controls for pitch, time stretch, and glitch effects on the sample being played back.

- **pitch**: Adjusts the pitch of the sample being played back, affecting all the notes uniformly.

- **stretch**: Slows down the sample when turned counterclockwise while maintaining the pitch, and speeds up the sample when turned clockwise, also maintaining the pitch.

- **glitch**: Adds artifacts to the sample being played back, such as white noise, distortion, and other effects.

14.3. Machine

machine allows you to select the **rendering style** within the sound engine. You can choose from a variety of distinct styles, each emulating existing machines or entirely original creations. These styles include different playback algorithms influenced by interpolation modes such as **sample & hold (SNH)**, **linear (LIN)**, and **Whittaker-Shannon (SINC)**. Additionally, variations in sample rates and bit resolutions further define the unique characteristics of each style. To change the machine model, **rotate** machine. The table below lists the available machine models:

Machine Name	Description
Clean Sound 1	SNH (sample and hold), resolution of 16 bits, BW 32 kHz
Clean Sound 2	SINC, resolution of 16 bits, BW 32 kHz
Rack Sampler	LIN (linear), resolution of 12 bits, BW 32 kHz
Desktop Sampler	LIN (linear), resolution of 12 bits, BW 26 kHz
Keyboard Sampler 1	LIN (linear), resolution of 8 bits, BW 17 kHz
Keyboard Sampler 2	SNH (sample and hold), resolution of 8 bits, BW 9 kHz
LoFi 1	LIN (linear), resolution of 12 bits, BW 24 kHz
LoFi 2	SNH (sample and hold), resolution of 8 bits, BW 18 kHz
LoFi 3	SNH (sample and hold), resolution of 4 bits, BW 18 kHz
LoFi 4	SNH (sample and hold), resolution of 3 bits, BW 4 kHz
LoFi 5	SNH (sample and hold), resolution of 2 bits, BW 2 kHz
LoFi 6	SNH (sample and hold), resolution of 1 bit, BW 33 kHz

Note: Playback mode can be changed on the fly, allowing you to switch between loop, once, reverse, and boomerang modes whenever you want by pressing the corresponding oblong button. You can also change the machine model on the fly by rotating machine.

15. Envelope (ADSR)
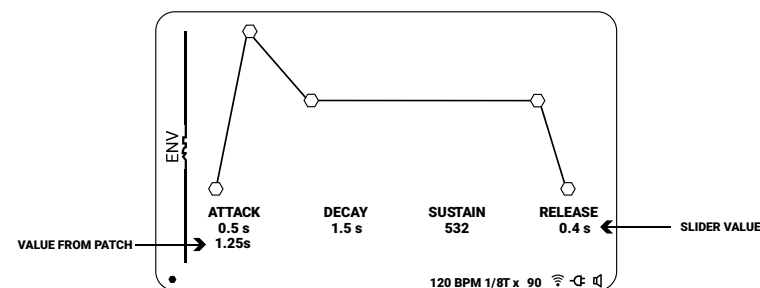
ADSR stands for Attack, Decay, Sustain, and Release, which are the four stages of the envelope. WoFi allows you to control these parameters for volume (amplitude) and filter envelopes. The three oblong buttons (amp, filter, and both) select the destination of the envelope.

ADJUST DECAY

ENVELOPE

attack   decay   sustain   release

ASSIGN THE ENVELOPE TO THE AMPLITUDE → amp

ASSIGN THE ENVELOPE TO THE FILTER → filter

ASSIGN THE ENVELOPE TO BOTH → ↔

ADJUST RELEASE

ADJUST ATTACK   ADJUST SUSTAIN
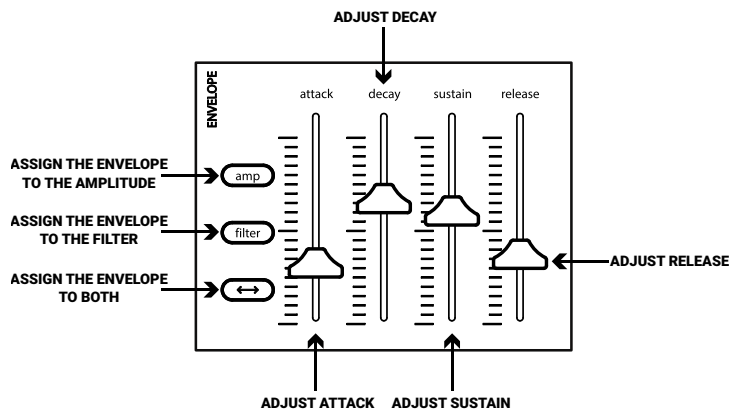
15.1.   Amplitude (Volume) Envelope

To adjust the amplitude envelope parameters:

- **amp**: Selects the amplitude envelope.

- **attack**: Adjusts the attack time, which determines how quickly the sound reaches its peak volume after pressing a key. Short attack time creates a sharp, immediate onset, while a longer attack time results in a gradual fade-in.

- **decay**: Adjusts the decay time, which specifies how long it takes for the sound to reach the sustain level after the initial attack.

- **sustain**: Sets the sustain level, which represents the sound's volume as long as the key is held down.

- **release**: Adjusts the release time, which determines how quickly the sound fades out after the key is released.

15.2.   Filter Envelope

To adjust the filter envelope parameters:

- **filter**: Selects the filter envelope.

- **attack**: Determines how quickly the filter opens when a note is triggered.

- **decay**: Specifies how long it takes for the filter to reach its sustain level.

- **sustain**: Sets the level at which the filter remains as long as the note is held.

- **release**: Dictates how quickly the filter closes after the note is released.

- **env** to set the amount of influence of the envelope on the filter. See Envelope

15.3.   Combined Envelope

To adjust both the volume and filter envelopes simultaneously:

- ↓ <->: Selects both the amplitude and filter envelopes.

- Use the same faders as above (↕ **attack**, ↕ **decay**, ↕ **sustain**, ↕ **release**) to adjust the corresponding parameters for both envelopes at the same time.

⚠ **Warning**: When you change patches, the fader positions might not match the saved values in the new patch.

💡 **tip**: Double click on the current envelope target to toggle between stored enveloppe value and sliders envelope values.

16.   Filter

FILTER

ADJUST CUTOFF → cutoff

ADJUST RESONANCE → reso   ADJUST ENVELOPE INTENSITY → env

ADJUST THE SLOPE → 12 dB / 24 dB

FILTER

RESO
254

CUTOFF
51 Hz

ENV
153

120 BPM 1/8T x 90
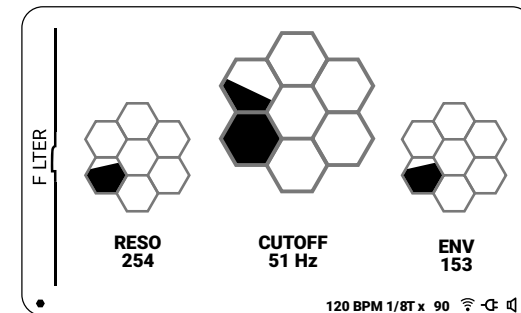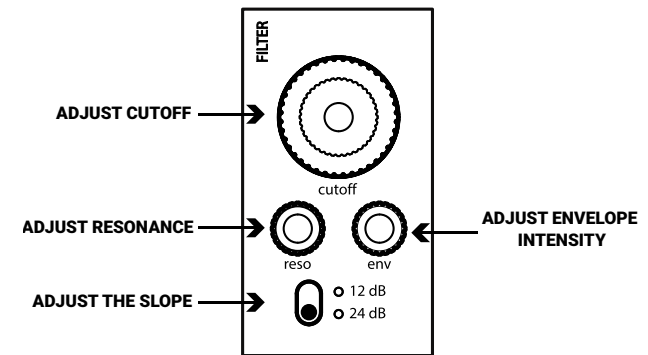
The filter section of WoFi allows you to shape the timbre of your sound by controlling the frequencies that pass through.

16.1. Cutoff Frequency

- ⟳ **cutoff**: This control determines the point at which the filter begins to attenuate frequencies above it.

- Lowering the cutoff frequency filters out more high frequencies, creating a darker or mellower sound.

- Raising the cutoff frequency allows more high frequencies to pass through, resulting in a brighter or more pronounced sound.

16.2. Resonance

- ⟳ **resonance**: This control emphasizes frequencies near the cutoff point, creating a peak in the frequency response curve.

- Increasing resonance adds a resonant peak, enhancing specific frequencies around the cutoff point.

- High resonance settings can lead to self-oscillation, where the filter produces a sine wave at the cutoff frequency, adding a tonal component to the sound.

16.3. Envelope

- ⟳ **env**: This control the influence of the enveloppe on the filter opening, when Envelope target is set to **filter**

- ☀ Applying an envelope to the filter cutoff can dynamically modulate the brightness or timbre of the sound.

- For example, a fast attack and decay envelope on the filter cutoff creates a "plucky" or percussive sound, while a slower envelope produces evolving or sweeping textures.

16.4. Slope (Filter Roll-off)

- ⬚ **12dB/24dB**: This control determines how steeply the filter attenuates frequencies above the cutoff point.

- A +12dB/octave slope attenuates frequencies gradually, providing a smoother filter effect.

- A +24dB/octave slope attenuates frequencies more steeply, creating stronger filtering effects, ideal for dramatic bass drops or effectively removing unwanted frequencies.

☀ **Tip**: Experiment with different combinations of cutoff, resonance, envelope, and slope settings to discover a wide range of tonal possibilities.

17. Texturer
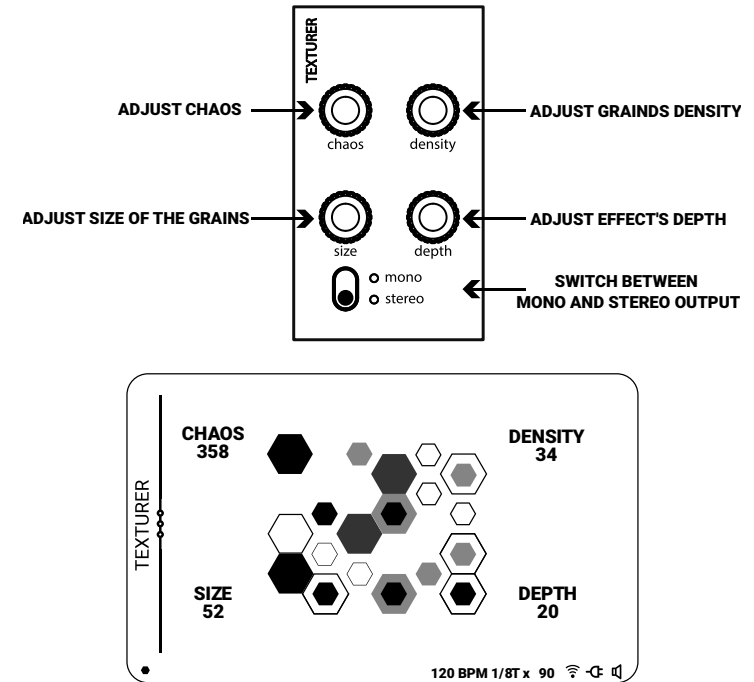
The Texturer module in WoFi allows you to manipulate audio with an effect inspired by granular synthesis. This effect is applied to the audio signal of the sampler engine, providing control over the timbre and character of your sound. Here are the key parameters and their functions:

- ⟳ **depth**: Controls the balance between the dry (unaffected) signal and the processed signal. At 0%, only the dry signal is heard, while at 100%, only the processed signal is heard.

- ⟳ **chaos**: Determines the position within the buffer from which grains are sampled. Adjusting this parameter changes the starting point for the grains within the audio buffer, influencing the timbre and character of the output.

- ⟳ **size**: Sets the size of the grains used in the granular synthesis process. Larger sizes result in longer grains, creating smoother textures, while smaller sizes produce more fragmented and percussive sounds.

- ⊚ **density**: Controls the density of grains generated by the module. Increasing density results in more grains being generated per unit of time, creating denser textures and thicker soundscapes.

- ⇕ **mono/stereo**: Choose whether the effect is in mono or stereo.

18. LFO

RATE OF THE LFO

INTENSITY OF LFO ON ITS DESTINATION

TO ASSIGN A DESTINATION PARAMETER TO THE LFO

RUN THE LFO IN SYNC WITH THE CLOCK OR FREELY

TRIANGLE WAVEFORM

SQUARE WAVEFORM

SAW TOOTH WAVEFORM

TARGET
CUTOFF

RATE
357 ms

AMOUNT
21%

120 BPM 1/8T x 90
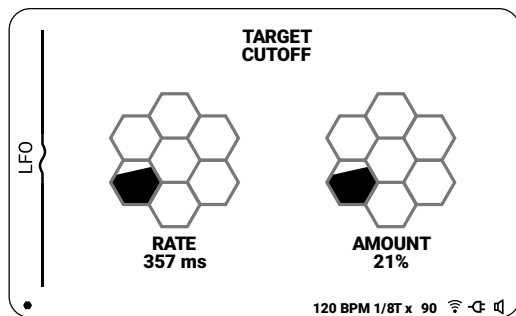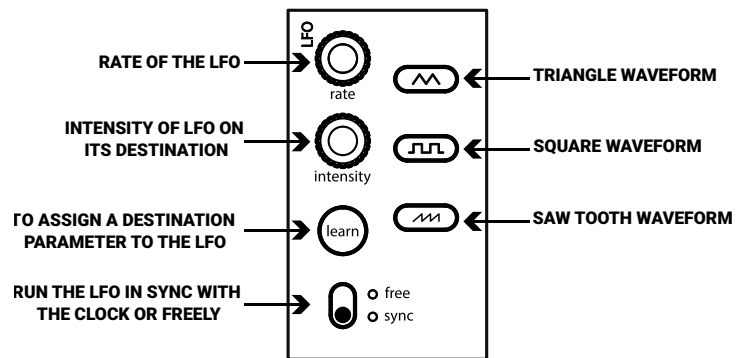
An LFO (low frequency oscillator) is a modulation source commonly found in synthesizers. It generates waveforms at frequencies below the audible range, typically used to modulate other parameters and create dynamic changes in sound.

This feature enables you to create evolving textures, rhythmic patterns, or dynamic changes in your sound by applying LFO modulation to parameters such as filter cutoff, oscillator pitch, amplitude, and more. Here are the key parameters and their functions:

18.1. Assign the LFO

To assign the LFO to a parameter:

- ⭘ **learn**: Press to select the target for automation. The lfo learn button starts blinking.

- Turn the encoder of the parameter you want to automate using the LFO.

- Adjust ⊚ **rate** and ⊚ **intensity** as desired. The tap button blinks at the LFO period.

- Press ⭘ **learn** again to deassign the target parameter or to cancel the LFO learning process.

18.2. Settings of the LFO

- ⊚ **rate**: Controls the speed at which the LFO waveform cycles. Measured in Hertz (Hz) or Beats Per Minute (BPM). Increasing the rate speeds up the modulation, producing faster changes, while decreasing the rate slows down the modulation, creating more gradual changes.

- ⊚ **intensity**: Determines the strength or depth of the modulation applied to the target parameter. Higher intensity results in more pronounced modulation, while lower intensity produces subtler effects. Intensity controls how much the LFO affects the parameter it is modulating.

- ⇕ **free mode**: The LFO operates independently of the tempo or rhythm of the music. The rate is set freely and isn't synchronized to the beat.

- ⇕ **sync mode**: The LFO rate is synchronized to the tempo of the music, typically specified in musical subdivisions such as quarter notes, eighth notes, etc. This ensures that the modulation stays in time with the rhythm of the music.

- **triangle wave**: Generates a smooth, triangular waveform, resulting in gradual transitions between high and low values.

- **square wave**: Produces a waveform with a sharp rise and fall, creating an on/off or pulsating effect when modulating parameters.

- **sawtooth wave**: Creates a waveform with a sharp rise and gradual fall (or vice versa), often used for sweeping or evolving modulation effects.

The modulation is added to the mean value defined by the parameter value, as shown below:
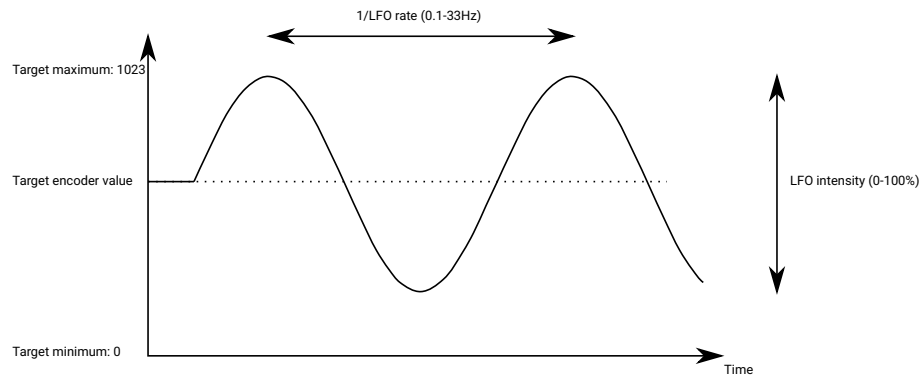
Tip: This LFO with parameters such as rate, intensity, waveform shape, and modulation routing options allows you to introduce dynamic motion, rhythmic pulsations, and evolving textures to your sounds, enhancing their expressiveness and versatility in music production.

19. Sequencer
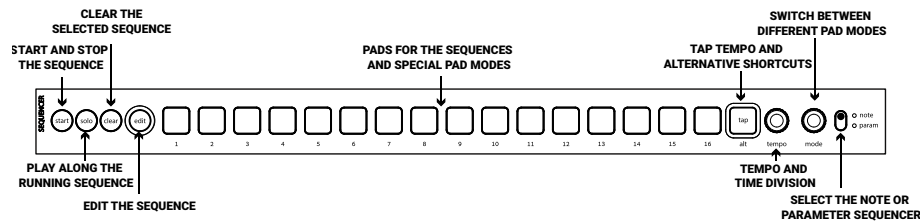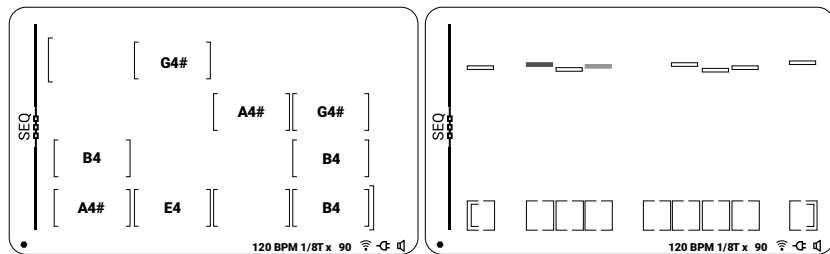
The WoFi sequencer is a powerful tool for creating and manipulating sequences of notes and parameter changes. It features 16 steps and supports both note and parameter sequencing. Below are the key functions and how to use them:

19.1. Sequencing Notes

To create a sequence of notes:

- ○ **edit**: Press to enter edit mode.
- ↕○ **note**: Select the note track.
- Enter a sequence of notes using the keyboard or MIDI input.
- ☐ **1-16**: Press to set a specific step.
- ○ **shift** + ☐ **1-16**: Press to reset a step.
- ○ **start**: Press to run the sequencer.
- Play notes on the keyboard to select the reference note for the sequence.
- ○ **solo**: Press to play notes using the keyboard over the running sequencer.

Warning: You must be in Step Sequencer Mode to sequence notes. For more information on changing modes, refer to the Sequencer Pads Modes section.

Tip: you can also edit the note or parameter sequences when the sequencer is running and edit mode is on as well.

19.2. Sequencing Parameters

To create a sequence of parameter changes:

- ○ **edit**: Press to enter edit mode.
- ↕○ **param**: Select the parameter track.
- Adjust the desired parameters; the variations are stored in the parameter track of the sequencer.

Warning: Once you're done, you must press ○ **edit** to exit the edit mode, otherwise each parameter or note added will be recorded on the current step.

19.3. Additional Sequencer Controls

- ○ **clear**: Clears the current sequence.
- ⬙ **toggle switch**: Select whether to sequence notes or parameters.
- ◎ **tempo**: Change the tempo.
- ⬓ **shift** + ◎ **tempo**: Change the time division.
- ◎ **mode**: Change the view of the sequencer (piano roll vs steps).
- Tap several time ⬓ **tap**: Lets you set the tempo.

💡 **Tip:** The WoFi sequencer also supports a unique **Compose Mode**, which allows for dynamic and intuitive sequence generation using the 16 pads. This mode is ideal for live performance and creative exploration. For more details, refer to the Sequencer Pads Modes section.

20. Keyboard

The WoFi keyboard is a 25-key keyboard designed for expressive play and control.

TRANSPOSE ONE OCTAVE UP

NOTES

transpose

TRANSPOSE ONE OCTAVE DOWN

```
NOTE

CHANNEL IN      10
SEQ ROOT        D3
OCTAVE          3
EXT TRANSPOSE  -1


120 BPM 1/8T x  90  🛜 ⟳ 🔇
```
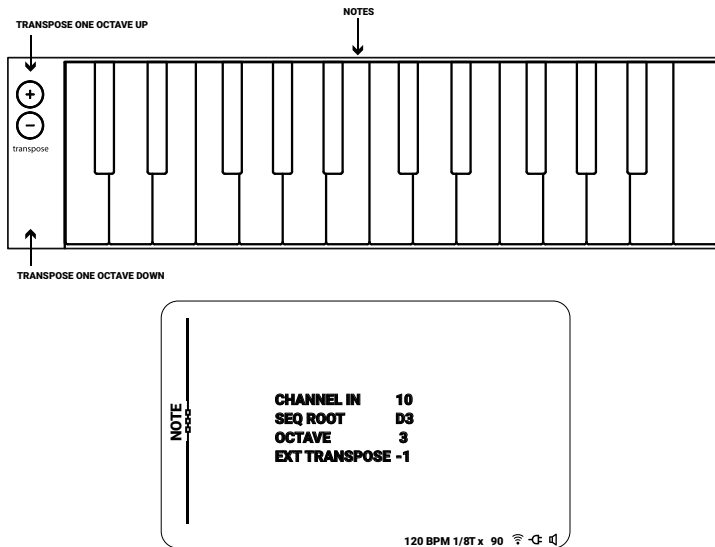
20.1. Transpose Buttons

WoFi includes two transpose buttons (○ **+** and ○ **-**) to navigate through different octaves.

💡 **Tip**: If you transpose while holding a note, it will freeze the note. To unfreeze it, return to the correct octave and play the note again.

20.2. Panic Button Combination

If the sound becomes messy or unresponsive, you can use the panic button combination to kill all audio. To activate the panic mode, hold ⬓ **shift** + ○ **cloud**.

20.3. Selecting Parameter Targets

To assign the target parameters for velocity or aftertouch, refer to the **Device Settings** section of this documentation. This section provides detailed instructions on how to navigate and assign these targets within the WoFi interface.

21. Sequencer Pads Modes

WoFi offers multiple modes for its sequencer pads, each providing unique ways to interact with your music, and not exclusively the sequencer. These modes are accessible through the user interface and allow for flexible control over sequences, patches, and samples. You can change these modes by rotating ◎ **mode**.

⚠ **Warning:** The current mode is indicated by an icon in the top right corner of the display, matching the icon displayed when switching modes.

Pad	Function
Sequence Mode	▪▪ ▪▪
Revisions Mode	1 ❷ 3 4
Cue Points Mode	⌐↗↘⌐
Compose Mode	▪▀▪▀

21.1. Step Sequencer Mode

In Step Sequencer Mode, the pads represent individual steps in a sequence. Activate or deactivate steps to create rhythmic patterns.

Hold down ⬭ **tap** to set start step and stop step for the sequence

Hold down ⬭ **pad** to repeat a pad

21.2. Revisions Mode

Revisions Mode allows you to access and manage different versions of a patch, providing a versatile tool for sound design and live performance.

- **Accessing Revisions:** If a patch has multiple revisions, you can access up to 16 versions through the pads ⬜ **1-16**. This feature enables quick comparison and selection, making it easy to navigate between different settings and tweaks.

    - For patches with more than 16 versions, you can access additional versions by using ⬭ **shift** + ◎ **chaos**.

- **Live Performance Use:** Revisions Mode can be particularly effective during live performances. By changing sequences, LFO speeds, or other parameters in real-time, you can create dramatic effects and dynamic transitions.

- **Parameter State Saving:** Each revision saves the state of all parameters, allowing you to revert to previous settings or compare changes. This helps in fine-tuning sounds or recalling specific setups.

💡 **Tip:** Using **Revisions Mode** is an efficient way to create variations of the same patch without increasing the number of patches. Each version can have different sequences and settings, facilitating smooth transitions and unique live performance elements.

21.3. Cue Points Mode

Cue Points Mode allows you to set and access up to 16 different cue points within a sample. These points define start and end positions for slicing the audio, facilitating intricate sample manipulation.

21.4. Compose Mode

Compose Mode enables the creation of sequences with each pad controlling specific parameters. This mode is ideal for live performance and creative composition, allowing real-time changes to sequences and parameters.

- ◎ **mode**: Select Compose Mode.

- Use the 16 pads to select different parameters. The table below explains the function of each pad.

- ⬜ **tap**: Launch the creation of the sequence based on the selected settings.

Pad	Function
1	Note sequence bit 3
2	Note sequence bit 2
3	Note sequence bit 1
4	Note sequence bit 0
5	Note dispersion bit 3
6	Note dispersion bit 2
7	Note dispersion bit 1
8	Note dispersion bit 0
9	Velocity dispersion 3
10	Velocity dispersion 2
11	Velocity dispersion 1
12	Velocity dispersion 0

Pad	Function
13	Reserved 3
14	Reserved 2
15	Reserved 1
16	Reserved 0

22. Touch Stripe

ACCESS TO INTERNAL MEMORY   DISPLAY   SAVE CONTEXTUALLY

ACCESS TO MENUS

ACCESS TO CARTRIDGE MEMORY

ACCESS TO CLOUD CONTENT

TO NAVIGATE AND SELECT

TO ASSIGN A DESTINATION PARAMETER TO THE STRIPE

SHIFT KEY FOR COMBOS   TOUCH STRIPE   TO EXIT A SPECIFIC MENU
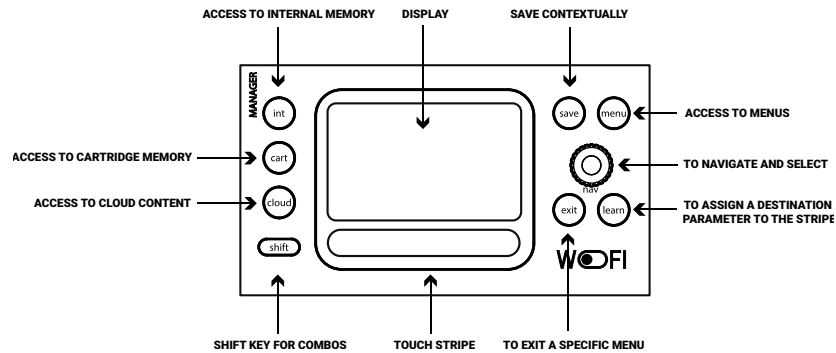
The touch stripe below the screen is a versatile control surface that can be assigned to any performance parameter, allowing for dynamic modulation during your performances.

22.1. Assigning the Touch Stripe

To assign the touch stripe to a performance parameter:

- Press ◯ **learn** to select the target for touch stripe modulation. ◯ **learn** will start blinking.

- Turn the encoder of the parameter you want to modulate using the touch stripe.

- Press ◯ **learn** again to deassign the target parameter.

- Press ◯ **learn** to cancel the learning process if needed.

22.2. Using the Touch Stripe

Once assigned, you can use the touch stripe to modulate the selected parameter by sliding your finger along the stripe. This allows for expressive control and real-time modulation during your performances.

23. Settings Views

Navigating the menus in WoFi is straightforward and follows a consistent workflow across different settings and features.
This section outlines the general process for accessing menus, selecting options, and adjusting parameters.

SETTINGS

GENERAL   DEVICE   NETWORK   CLOCK

MIDI   CTRL1   CV   INFO

EXIT

120 BPM 1/8T x 90
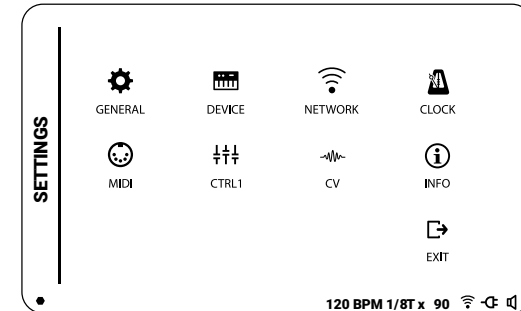
23.1. Accessing the Settings Views

To access the Main Settings View:

- Ensure that the ◯ **int** button is lit, indicating that you are in the internal memory view.

- Press the ◯ **menu** button twice to bring up the top icon bar on the screen.

- Use the ◎ **nav** encoder to scroll to the gear icon, which represents the Settings menu.

- Press ◎ **nav** to enter the Settings menu.

23.2. Navigating Views

Within the Main Settings View, there are various Views for different categories:

- Use ◎ **nav** to scroll through the list of submenu icons.

- Highlight the desired submenu and press ◎ **nav** to enter it.

23.3. Modifying Parameters

To modify parameters within a View:

- Scroll through the list of parameters using ⟳ **nav**.

- Press ◎ **nav** to select a parameter for editing.

- Adjust the parameter value by rotating ⟳ **nav**.

- Press ◎ **nav** again to confirm and save the changes.

- If you wish to cancel the selection without making changes, press ◯ **exit**.

23.4. Exiting Views

To exit a View:

- Navigate to the "RETURN" option using ⟳ **nav** and press ◎ **nav**.

- Alternatively, press ◯ **exit** twice to return to the main interface.

This consistent View navigation workflow helps you efficiently access and adjust various settings on WoFi.

24. General Settings

```
         invert display          off
         fade timeout            15 s
    [    debug level             0                    ]
         load default            off
         display sample name     off
G        display voices          off
E        display output level    off
N        line in direct render   off
E        master MCU              check update
R        link MCU                check update
A        link MCU                upgrade
L
         [RETURN]
  •                              120 BPM 1/8T x  90  📶 🔌 🔊
```
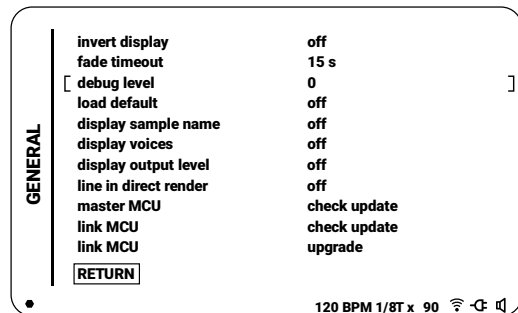
The **General Settings** View allows you to configure various system parameters. Accessing these settings follows the same navigation workflow as described in the Settings Views section. Below is an overview of the general settings and their descriptions.

24.1. Navigation Overview

To access the General Settings, follow the standard navigation workflow described in the Settings Views section. Use the rotary encoder to navigate through the menus until you find the General Settings option.

24.2. General Parameters Overview

Below is a table of the parameters available in the General settings:

Setting	Value	Description
invert display	off	Inverts display colors
fade timeout	15 s	Time before display fades
debug level	7	Sets debug information level
load default	off	Resets settings to default
display sample name	off	Shows sample names on display
display voices	off	Shows active voices
display output level	off	Shows output level
line in render	off	Processes line-in audio
master MCU	check update	Checks for firmware updates
link MCU	check update	Checks for link MCU updates
link MCU	upgrade	Upgrades link MCU firmware

25. Device Settings

```
         seq ignore ext root     off
         seq ignore ext learn    off
    [    transpose input         off                  ]
         LFO to MIDI             off
         ENV to MIDI             off
D        fixed velocity          off
E        after touch             Glitch
V        after touch value       25
I        record pad -20dB        on
C        card backup             create
E        card restore            upgrade

         [RETURN]
  •                              120 BPM 1/8T x  90  📶 🔌 🔊
```

The **Device Settings** View provides control over hardware-specific configurations. These settings are accessible through the standard menu navigation workflow. For more details, refer to the Settings Views section.

25.1. Navigation Overview

Access the Device Settings by navigating through the menu using the rotary encoder. Follow the procedure outlined in the Settings Views section to locate the Device Settings submenu.

25.2. Device Parameters Overview

Here are the parameters available under Device settings:

Setting	Value	Description
seq: ignore ext root	off	Ignores external root notes
seq: ignore ext learn	off	Ignores external learn commands
transpose input	off	Transposes MIDI input
LFO to midi	off	Sends LFO data to MIDI
ENV to midi	off	Sends envelope data to MIDI
fixed velocity	off	Uses fixed note velocity
after touch	Pitch	Assigns aftertouch to pitch
after touch value	2	Sets aftertouch sensitivity
record pad -20dB	off	Lowers pad recording level
Card backup	Create	Creates a backup on card
Card backup	Restore	Restores backup from card

26. Network Settings

```
          pair with mywo.fi account    unpaired
          wifi                         enabled
        [ favorite network             MYWOFI                    ]
 N        setup network                none
 E        registered network           show
 T        tcp/ip                       manual
 W        ip                           192.168.1.3
 O        mask                         255.255.255.0
 R        gw                           192.168.1.1
 K        dns1                         8.8.8.8
          dns2                         0.0.0.0
          [RETURN]
   •                              120 BPM 1/8T x  90  🛜 �⟩ 🔊
```
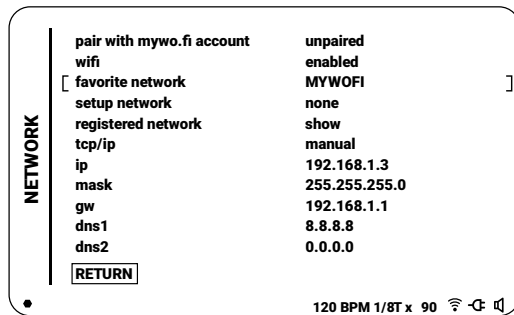
The **Network Settings** view is crucial for connecting your WoFi to Wi-Fi and pairing it with your mywo.fi account. It is essential to create an account on mywo.fi to access all features. The general workflow involves first pairing your device with your mywo.fi account and then setting up your Wi-Fi connection.

26.1. Navigation Overview

To access the Network Settings, follow the standard navigation workflow as described in the Settings Views section. This process involves using the rotary encoder to navigate through the menu system to locate the appropriate settings.

26.2. Pairing with mywo.fi Account

First of all, visit https://www.mywo.fi/ to create an account. To pair your WoFi with your mywo.fi account:

- Navigate to the **pair with mywo.fi account** setting using the ◎ **nav** encoder.

- Using a smartphone, scan the QR code displayed

- If you prefer use a browser, Press the ◯ **menu** button to display the address to visit.

- Once connected to mywo.fi, follow the flow to finalize the pairing process.

26.3. Setting Up Wi-Fi

Once your device is paired, follow these steps to connect to Wi-Fi:

- Navigate to **setup network** to access available Wi-Fi networks.

- Use the ◎ **nav** encoder to select your desired network.

- Choose **SETUP** at the bottom of the screen to proceed.

- Enter the network password using the visual keyboard.

- Confirm by selecting **OK** on the screen.

26.4. Network Parameters Overview

Below is a table summarizing the available settings and their functions:

Setting	Value	Description
pair with myWofi account	unpaired	Pair device with mywo.fi account
wifi	connected / disconnected	Wi-Fi status
favorite network	MYWOFI	Preferred Wi-Fi network
setup network	none	Configure Wi-Fi network
registered networks	show	View saved networks
tcp/ip	dhcp	Network protocol
ip	xxx.xxx.xxx.xxx	Current IP address
mask	xxx.xxx.xxx.xxx	Network mask
gw	xxx.xxx.xxx.xxx	Gateway address
dns	xxx.xxx.xxx.xxx	Primary DNS server
dns	xxx.xxx.xxx.xxx	Secondary DNS server

26.5. Optional Use of Wi-Fi and mywo.fi

While connecting to Wi-Fi and pairing with mywo.fi enhances the functionality of WoFi, these features are entirely optional.

The mywo.fi account provides additional features for free, including cloud storage and firmware updates. WoFi includes a dedicated chip for handling internet-related tasks, ensuring that all network functions are securely isolated from other system operations.

This means that if the Wi-Fi and mywo.fi features are not activated, they remain completely inactive, preserving your device's security and privacy.

27. Clock Settings
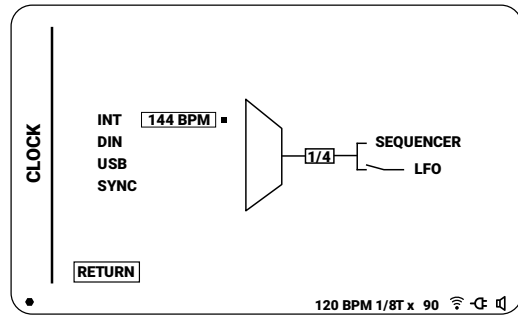
The Clock Settings view allows you to configure the timing and synchronization parameters of your WoFi. These settings determine the master clock source, BPM (beats per minute), and time division for time-related synthesizer functions such as the sequencer and LFO.

27.1. Accessing Clock Settings

You can access the Clock Settings like other submenus by navigating through the menu. For more detailed instructions, refer to the Settings Views section. Alternatively, there is a

shortcut to quickly access these settings by pressing the ⊚ **tempo** encoder.

27.2. Understanding Clock

WoFi's clock settings offer versatile synchronization options, including internal, MIDI, USB, and external sync. These options allow WoFi to either set the tempo as a master clock or synchronize with other devices, providing flexibility for various studio and live setups. This adaptability enhances WoFi's integration capabilities, making it a versatile choice for diverse musical environments.

27.3. Clock Parameters Overview

Below is a table summarizing the available clock settings and their functions:

Setting	Value	Description
source selection	INT, MIDI IN DIN, USB, SYNC	Selects the master clock source: internal, MIDI DIN, USB, or external sync
bpm	131 BPM	Sets the tempo in beats per minute
time division	-	Defines the time division for sync operations (e.g., 1/4, 1/8, 1/16 notes)

These settings allow you to synchronize WoFi with other devices or software, ensuring consistent timing across all your equipment. Adjust the BPM to control the overall tempo of your setup, and use the time division to refine the resolution of sequencer and LFO timing.

28. MIDI Settings
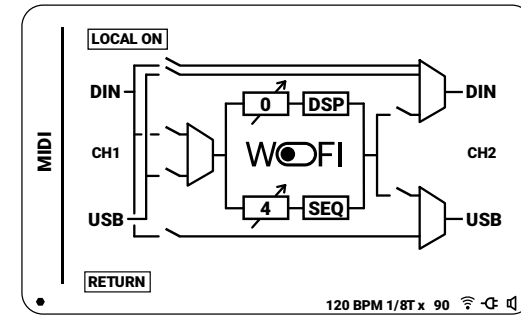
The **MIDI Settings** View allows you to manage MIDI configurations, including routing and signal flow for both hardware and software components. These settings are crucial for integrating WoFi with other MIDI devices and ensuring proper communication. MIDI controller assignation is explained in Control Settings

28.1. Accessing MIDI Settings

Access the MIDI Settings menu through the standard navigation process described in the Settings Views section.

28.2. Understanding MIDI

MIDI (Musical Instrument Digital Interface) is a technical standard that enables electronic musical instruments, computers, and other devices to communicate and synchronize with each other. MIDI does not transmit audio but rather control signals, such as note on/off, pitch, and control changes. This system is commonly encountered in synthesizers and other music equipment, providing a versatile and standardized way to control and automate various musical parameters.

28.3. MIDI Parameters Overview

Below is a table summarizing the MIDI settings available and their respective functions:

Setting	Value	Description
LOCAL ON	On/Off	Toggles local control; when off, the keyboard does not control the internal sound engine directly
DIN	On/Off	Controls MIDI data flow through DIN connectors
CH1	-	Specifies the MIDI input channel in use (e.g., Channel 1) CH* means all channels
CH2	-	Specifies the MIDI output channel in use (e.g., Channel 2) CH* means all channels
USB	On/Off	Enables or disables USB MIDI communication
DSP	On/Off	Activates or deactivates the digital signal processing path
SEQ	On/Off	Controls MIDI input/output for the sequencer
0	On/Off	External transposition before DSP (in ST)
D4#	-	Root note of the sequencer

Each branch of the MIDI signal path can be independently toggled on or off, allowing for precise control over the MIDI data flow. This flexibility is particularly useful when integrating multiple devices or when specific routing configurations are required.

29. Control Settings
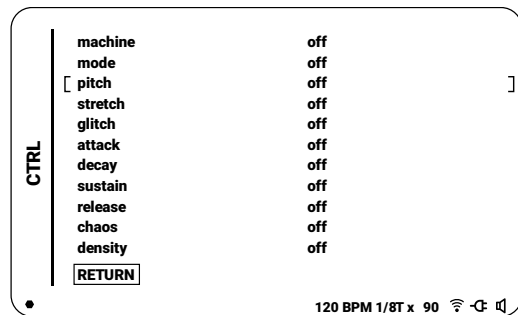
The **Control Settings** View allows you to manage the CC (Control Change) values for various parameters. This feature is essential for integrating external MIDI controllers and automating WoFi's settings.
You can access the Control Settings like other submenus by navigating through the menu. For detailed navigation instructions, refer to the Settings Views section.

Below is a table summarizing the available control settings and their functions:

Setting	Value	Description
machine	off	Controls the machine model selection
mode	off	Sets the playback mode (e.g., loop, one-shot)
pitch	off	Adjusts the pitch of the sample
stretch	off	Controls time stretching of the sample
glitch	off	Adds glitch effects to the sample
attack	off	Sets the attack time for envelopes
decay	off	Sets the decay time for envelopes
sustain	off	Sets the sustain level for envelopes
release	off	Sets the release time for envelopes
target	off	Assigns the control target parameter
octave	off	Adjusts the keyboard octave range
ext transpose	off	Sets the external MIDI note transpose range
patch	off	Sets the current patch. Note that it can also be achieved using Program Change messages
sample	off	Sets the current sample
cutoff	off	Sets the filter cutoff
reso	off	Sets the filter resonnance
env	off	Sets the filter enveloppe amount
chaos	off	Sets the texturer chaos
density	off	Sets the texturer grain density
size	off	Sets the texturer grain size
depth	off	Sets the texturer feedback depth
wave	off	Sets the LFO waveform
rate	off	Sets the LFO rate
amount	off	Sets the LFO amount
target	off	Sets the LFO target
revision	off	Sets the current patch revision
seq retrig channel	off	Sets the Sequencer retrig channel (preliminary)
seq restart channel	off	Sets the Sequencer restart channel (preliminary)

30.   CV Settings
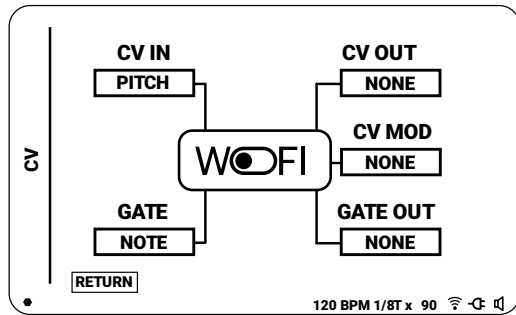
The **CV Settings** View allows you to configure the control voltage (CV) inputs and outputs, which are essential for interfacing with modular synthesizer systems and other CV-compatible devices.
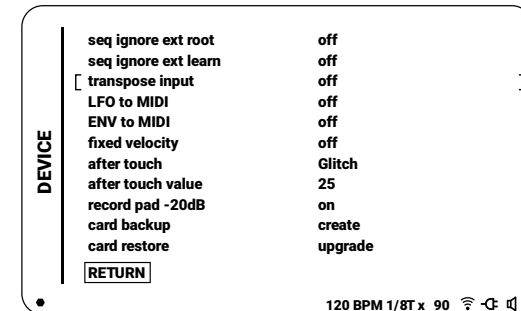
30.1.   Navigation Overview

To access the CV Settings, follow the standard navigation workflow described in the Settings Views section. Use the rotary encoder to navigate to the CV Settings submenu.

30.2.   Understanding CV and Gate

Control Voltage (CV) is a fundamental component in analog synthesizers and modular systems, allowing the control of parameters such as pitch, filter cutoff, and modulation. CV signals are continuous voltages that represent varying signal values. Gate signals, on the other hand, are used to trigger events like starting or stopping a note.

30.3.   CV Parameters Overview

Here is a table summarizing the available CV settings and their default values:

Setting	Value	Description
CV IN	None	Configures CV input channels
CV OUT	None	Configures CV output channels
CV MOD	None	Sets modulation sources for CV outputs
GATE	None	Configures gate inputs
GATE OUT	None	Configures gate outputs

31.   Info Submenu
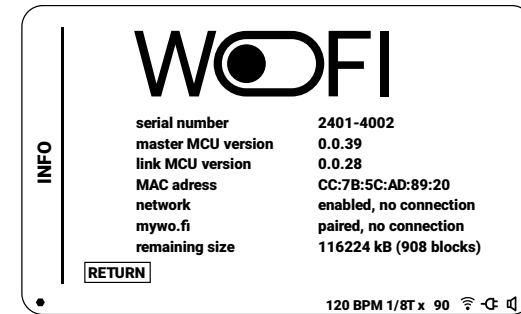
The **Info Submenu** in WoFi provides essential details about the unit, including system information and connectivity status. This submenu is purely informative, offering insights into the hardware and network configurations of your device.

31.1.   System Information

The following table summarizes the key information available in the Info Submenu:

Setting	Value
Serial Number	xxxxxxxx
master MCU version	1.0.0
link MCU version	1.0.0
MAC address	CC:7B:5C:AD:xx:xx
network	enabled, no connection
mywo.fi	unpaired, no connection
remaining size	129024 kB (1008 blk)

31.2.   Understanding Memory Report

The internal memory flash is NAND type. This technology is pretty efficient but has some contraints in writing/erasing process, leading to 128kB blocks file system partition.

That means that filling the memory won't be exactly linear:

- a file less than 126kB will use 1 block in flash memory (1.3s for a sample)

- a patch with less than 63 revision will fit in only 1 block

- when using small samples, optimal memory usage will be achieved with following durations: 1.3s, 2.7s, 4s, 5.4s, 6.8s, 8.1s, 9.5s

32.   Connecting WoFi with Other Equipment

32.1.   Audio Connections

To integrate WoFi into your audio setup, connect the audio outputs to an audio interface, mixer, or directly to speakers. This allows you to route the audio signals for recording, mixing, or live performance.
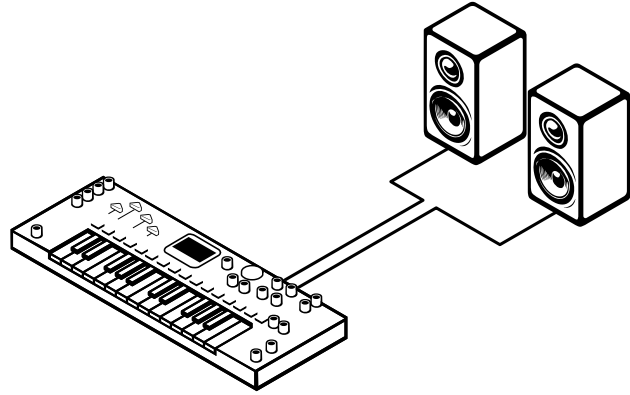
32.2.   Sync Connections (CV/Gate and MIDI)

For synchronization, WoFi can be connected to other devices using CV/Gate or MIDI. This setup allows WoFi to send or receive timing signals, ensuring that all devices play in sync.
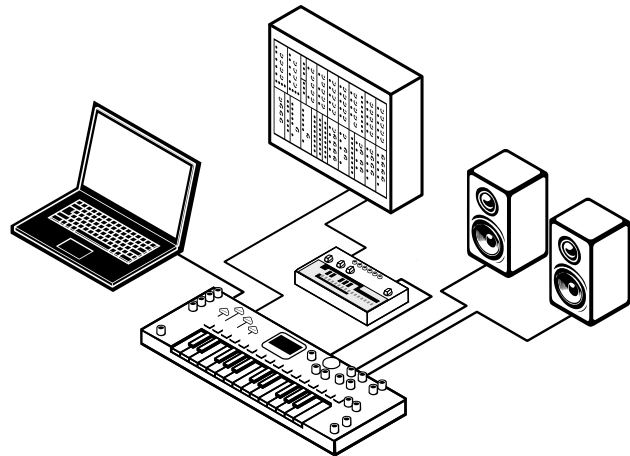
32.3.   MIDI and USB MIDI Connections

WoFi supports both traditional MIDI and USB MIDI connections. Use these connections to control WoFi from a MIDI keyboard, DAW, or other MIDI controllers, or to control external devices from WoFi.
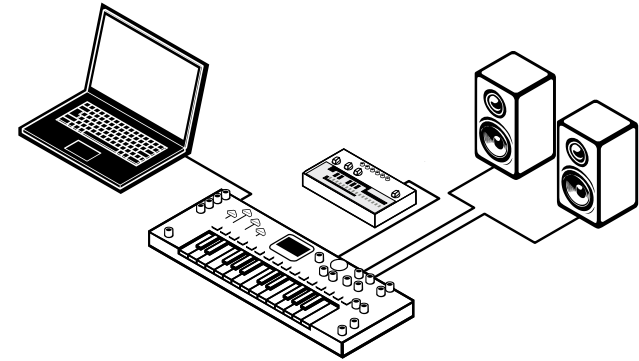
32.4.   Combining Connections

In complex setups, WoFi can be a central hub, combining multiple types of connections. For instance, you can use MIDI for control, CV/Gate for modular interaction, and audio outputs for sound processing.
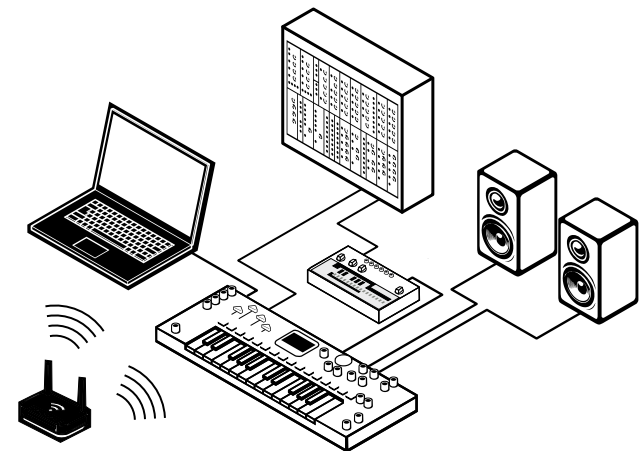
33. Shortcuts
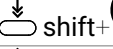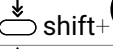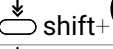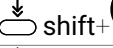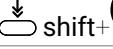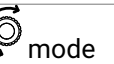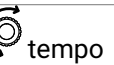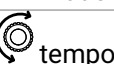
33.1. Default Values

Pushing encoder button for synth parmaeters allows to set the parameter to its default value
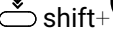
33.2. Modifier Keys

↓ shift and ↓ tap can be combined with rotary or button actions.

33.3. Rotary Shortcuts

Function	Shortcut
Set CV out type	shift+ mode
Set division	shift+ tempo
Patch master level	shift+ density
Midi in channel	shift+ machine
Midi input transpose	shift+ pitch
Patch revision	tap+ mode
Sequence move	tap+ tempo
Change PAD note	PAD+ mode
Change PAD velocity	PAD+ tempo

From Sample Editor view:

Function	Shortcut
Move cue window	shift+ chaos

33.4. Button Shortcuts

33.4.1. Rotary Buttons

Function	Shortcut
Shift sequencer view	mode
Display clock settings	tempo
Default value	chaos
Default value	density
Default value	size
Default value	depth
Default value	cutoff
Default value	reso
Default value	env
Default value	pitch
Default value	stretch
Default value	glitch
Toggle encoder acceleration	shift+ chaos
Toggle encoder acceleration	shift+ density
Toggle encoder acceleration	shift+ size

33.4.2. Rotary Buttons (continued)

Function	Shortcut
Toggle encoder acceleration	shift+ depth
Toggle encoder acceleration	shift+ cutoff
Toggle encoder acceleration	shift+ reso
Toggle encoder acceleration	shift+ env
Toggle encoder acceleration	shift+ pitch
Toggle encoder acceleration	shift+ stretch
Toggle encoder acceleration	shift+ glitch
Keep tempo when patch change	shift+ rate

33.4.3. Round Buttons

Function	Shortcut
Start seq from key	shift+ save
External sequencer root note	shift+ solo
Keep sequence when patch changes	shift+ clear
Prevent external notes to be recorded by sequencer	shift+ clear
Lock tempo	shift+ tap

Function	Shortcut
Toggle step	shift+ PAD
External transpose +	shift+ +
External transpose -	shift+ -
All note OFF	shift+ cloud
Local ON/OFF	tap+ solo
Set start/Stop	tap+ PAD

33.4.4. From Sample Editor view

Function	Shortcut
Open export view	menu
Save cue points	save
Select current cue point	nav
Set start cursor to zoom start	chaos
Set stop cursor to zoom stop	density
Set zoom start to 0	size
Swap zoom - cue point	depth

33.5.   Startup Straps

Features available from startup only, the button must be hold down when powering

↓
○ **start**: enter bootloader mode

↓
⊖ **int**: disable WIFI

↓
⊖ **cloud**: enable WIFI
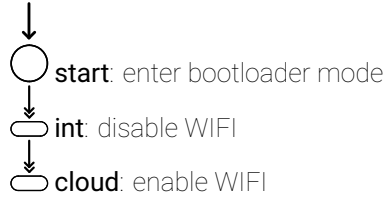
34.   Reset Factory

- Restore device settings: Select **factory default** in **general settings** view, then restart the device and confirm the action at startup.

- Erase all data memory: Hold ↓⊖ **shift**+↓⊖ **clear** at the startup

   ⚠ **Warning:** No confirmation is asked

35.   Appendix

35.1.   Firmware Updates

Thanks to user feedback, the WoFi firmware will be improved. This paragraph describe shortly the update methods available.
There are 2 computing unit that have to be updated:

- **MasterMCU:** the main core that embeds audio engine and interface management. Firmware is first sent to the device, then the device must be restarted to apply upgrade.

- **LinkMCU:** the unit that handles WiFi communications. The firmware must be sent to the device, then the update starts automatically

Each target can be updated individually
Sending the firmwares to the device can be done

- **using mywo.fi**: the easier way, no need of computer to achieve the update. Below the steps to follow:

   – Make sure that your device is connected

   – Go to you account in mywo.fi

   – Go to Device tab

   – Select the right device if you have several devices paired

– Go to update section

– Select the version you want to send to the WoFi and start the download

- **using WoFi-Manager app**:

   – Download and install the application from www.kiviak-instruments.com/re-sources

   – Connect the WoFi, consult the wofiManager user manual if needed

   – From mywo.fi update section, download the firmwares

   – Drag and drop the firmware.zip file to wofiManager

   – From the firmware tab, send the files to the device

Finalize the MasterMCU update:

↓
- Restart the WoFi in bootloader mode: hold down ○ **start** button when restarting

- The display must remain black, ○ **int** and ○ **cloud** blinking

↓
- Press ○ **cloud**, PAD 1 must light on

↓
- Press ▢ **PAD1** to start the update

- Wait until the device restart

Full procedure is also explained in mywo.fi

35.2.   MIDI Implementation Chart

There is no fixed MIDI implementation for the WoFi, because the control change assignation is full configurable.
Please refer to Control Settings section to setup MIDI mapping.
The device recognize the following messages:

- Midi notes: play notes / change sequencer root note

- Program change: change current patch

- Song selsect: change current sample

- Pitch bend: Pitch bend the sample

- Pressure: Apply aftertouch configured is Device setting view

- Midi sync: Tick, Start, Continue, Stop

35.3. Block Diagram and Overview of Screen Display Views

CLOCK STAGE

TRIGGER STAGE

SEQUENCER

RECORDING STAGE

SAMPLE RENDERING

DEVICE EMULATION

AUTOMATIONS

LFO

ENVELOPPE

PITCH SHIFT

TIME STRETCH

FILTER

BIT CRUSH

GRANULAR TEXTURER

PROCESSING STAGE

myWofi

WIFI

CLOUD SHARING

VOICE MERGING

OUTPUT STAGE

Control panels (top row)

RECORDING — mic / line · rec · gain

PLAYER — loop · machine · once · pitch · rev · stretch · boom · glitch

ENVELOPE — attack · decay · sustain · release · amp · filter

FILTER — cutoff · reso · env · 12 dB / 24 dB

TEXTURER — chaos · density · size · depth · mono / stereo

LFO — rate · intensity · learn · free / sync

SEQUENCER — start · solo · clear · seq · 1 · 2 … 15 · 16 · alt · tempo · mode · tap · note / param

Keyboard — transpose

Screens (second row)

REC
Next ID 30
Current record_29 0.000s
Gain -63.5 dB

PLAYER
PITCH 160 · STRETCH 160 · GLITCH 160
LIN, 12 bits, BW 26 kHz

ENVELOPE
ATTACK 0.5 s · DECAY 1.5 s · SUSTAIN 532 · RELEASE 0.4 s

FILTER
RESO 254 · CUTOFF 51 Hz · ENV 153

TEXTURER
CHAOS 358 · DENSITY 34 · SIZE 52 · DEPTH 20

LFO
TARGET CUTOFF · RATE 357 ms · AMOUNT 21%

SEQ
[G4#] A4# G4#
B4 [B4]
A4# E4 B4

NOTE
CHANNEL IN 10
SEQ ROOT D0
OCTAVE 0
EXT TRANSPOSE -1

(all screens footer: 120 BPM 1/8T x 90)

CLAV_

A B C D E F G H I J
K L M N O P Q R S T
U V W X Y Z
Special ◀ ▶ ERASE OK CANCEL
Save as

SAMPLE EXPORT

name	record_12_xp
normalize	off
level	0.0dB
fade in	20ms
fade out	20 ms
start	1007 (20ms)
stop	88200 (1837ms)

SAVE · CANCEL

WAVEFORM

record_29

PATCH

previous
>PATCH
next

SETTINGS

GENERAL · DEVICE · NETWORK · CLOCK
MIDI · CTRL1 · CV · INFO · EXIT

PATCHS / SAMPLE / SOUNDBANK / TAGS

PATCHS
1986
2001SPACECHUR
BALLAD
BRASS
BROKENFLUTE
CLAV   record_29
CLOUD
DARKN
DefaultE

SAMPLE
record_24 0.510s 1 bk
record_0 5.100s 4 bk
record_1 2.284s 2 bk
record_2 4.028s 3 bk
record_3 4.960s 4 bk
record_4 2.675s 2 bk
record_5 1.633s 2 bk
record_6 2.572s 2 bk
record_7 2.695s 2 bk

SOUNDBANK
SET_2403
SET_2403_2
DNB
BRASS
BROKEN

TAGS
DARK
BRIGHT
BRASS
DRUM
CHORDS

Navigation: INT · CART · CLOUD

PATCHS (cloud)
1987
ALPHA
DRILL
DRONE_32
KEYS_C3

Settings pages (bottom row)

GENERAL
invert display off
fade timeout 15 s
[debug time] 0
load default off
display sample name off
display velocity off
display output level off
line in direct render off
master MCU check update
link MCU check update
link MCU upgrade

DEVICE
seq ignore ext root off
seq ignore ext learn off
[transpose input] off
LFO to MIDI off
ENV to MIDI off
after touch off
fixed velocity Glitch
after touch value 25
record pad -2dB on
card backup create
card restore upgrade

MIDI
LOCAL ON
DIN · USB · DSP · SEQ · WOFI

CTRL
machine off
mode off
pitch off
stretch off
glitch show
attack off
decay off
sustain off
release off
chaos off
density off

CV
CV IN — PITCH
CV OUT — NONE
CV MOD — NONE
GATE — NOTE
GATE OUT — NONE

INFO — WOFI
serial number 2401-4002
master MCU version 0.0.39
link MCU version 0.0.28
MAC adress CC:7B:5C:AD:89:20
network enabled, no connection
mywo.fi paired, no connection
remaining size 116224 kB (908 blocks)

NETWORK
pair with mywo.fi account unpaired
favorite network enabled
registered network MYWOFI
tcp/ip manual
ip 192.168.1.3
mask 255.255.255.0
gw 192.168.1.1
dns1 8.8.8.8
dns2 0.0.0.0

CLOCK
INT 144 BPM
DIN
USB
SYNC
1/4 → SEQUENCER · LFO

Legend (bottom)

mode

- ▪ ▪ ▪ ▪ ↔ 1 2 3 4 ↔ ↱↓↰ ↔ ▪ · ▪ ·

TURN OFF SPEAKER ⇊

PANIC — shift + cloud

🔒 Modal view: only exit by validating or EXIT

⋯⋯⋯ Automatically switches back to the general view after a time out. Same behavior for INT, CART and CLOUD.

Buttons referenced throughout: nav · exit · menu · shift · int · save · cloud · cart · SAVE · CANCEL · RETURN

35.4. Technical Specifications

Note that these specifications depend on firmware implementation and may change with different versions.

35.4.1. Player

- 48kHz / 16bits

- Direct loading from the flash memory, no preloading

- Up to 10-voice polyphony

35.4.2. Recorder

- 48kHz 16 bits mono

- Line / dynamic microphone / integrated microphone

- Gain adjust -6dB + 22dB

- Eurorack level compliant

35.4.3. Memory

- Flash embedded memory: 100 MBytes

- Flash cartridge memory: 100 MBytes

- Up to 200 User Patches + 50 Presets

- **Note:** 100 MBytes allow storing 18 minutes of audio

35.4.4. Sequencer

- 16 steps track for notes

- 16 keys track for parameters sequencing

35.4.5. Sample editor

- trim in/out

- fade in/out

- normalize

35.4.6. DSP

- Real-time processing, no preprocessing

- Interpolation modes: sample & hold, linear, Whittaker-Shannon

- Pitch shift

- Time stretch

- Bit crusher

- Texturer

- Machine rendering emulation

- Resonant state variable filter (12dB/o-24dB/o)

- Parameter modulation from different sources: envelope, LFO, sequencer automations, external modulation (CV/MIDI), aftertouch, touch strip

- Texturer: self-mixing renderer based on granular sampling – 8 grains – multi-tap harmonizer

35.4.7. Network

- WIFI connectivity, up to 16 key pass, 2.4GHz only

- Cloud access: Patch / Sample upload and download, sharing or backup

35.4.8. Connectivity

- Sync clock + start/stop

- CV input ($\pm$5V), Gate input

- CV output ($\pm$5V), modulation output ($\pm$5V), gate output

- MIDI in, out, through DIN+USB

- Power input

- Line In, Line out (TRS/TS), Headphones

---

[1]Battery life depends on usage. Continuous use with the sequencer and speaker on can reduce battery life to approximately 2 hours. Using headphones consumes less battery.

35.4.9. Miscellaneous

- DC powered

- Embedded battery - up to 4 hours autonomy[1]. Battery Capacity: 3.6V 2980mAh 12Wh, Type: Rechargeable Li-ion Battery.

- Integrated Microphone (monophonic)

- Integrated Speaker (only 1 for monitoring purpose, both channels are mixed)

- Full backup to Cartridge or mywo.fi

- User-friendly workflow

35.4.10. Hardware

- Aluminium / wood body

- Dimensions: 51cm x 23cm x 6.5cm

- Weight: 2.5kg

35.4.11. Box

- Content: 1x WoFi, 1x Cartridge, 1x USB Cable, 1x Quickstart Guide

- Dimensions: 69cm x 31cm x 8cm

- Weight: 3.92kg

35.5. Glossary of Terms

- **ADSR Envelope**: Stands for Attack, Decay, Sustain, and Release. These are the four stages that shape the amplitude and sometimes the filter or pitch of a sound over time, controlling how a sound evolves.

- **Aftertouch**: A feature on some keyboards that responds to the pressure applied to the keys after they are pressed. It can be used to modulate various parameters such as vibrato, volume, or filter cutoff, adding expressiveness to the performance.

- **Arpeggiator**: A feature that automatically plays notes in a sequence, often based on the chords or notes played by the user. It can create complex rhythmic patterns and textures.

- **CV (Control Voltage) Input/Output**: Ports used to control various parameters of the WoFi device or external equipment via analog voltage signals. CV inputs can modulate parameters like pitch, filter cutoff, and volume, while CV outputs can send modulation signals to other gear.

- **Cutoff Frequency**: The frequency point at which a filter starts to attenuate frequencies. This parameter is crucial for shaping the tonal character of a sound.

- **DHCP (Dynamic Host Configuration Protocol)**: A protocol used to automatically assign IP addresses to devices on a network, simplifying network management.

- **Filter**: A circuit that removes or reduces certain frequencies from a sound, commonly used to shape the sound in synthesizers. Types include low-pass, high-pass, and band-pass filters.

- **Firewall**: A security system that controls and monitors incoming and outgoing network traffic, protecting against unauthorized access.

- **Frequency**: The rate at which a sound wave vibrates, measured in Hertz (Hz). Frequency determines the pitch of a sound; higher frequencies correspond to higher pitches.

- **Gain**: The level of amplification applied to an audio signal. In digital audio, gain can be adjusted to increase or decrease the volume of a sound, affecting both the overall loudness and the signal-to-noise ratio.

- **Gate Input/Output**: Connections that send or receive gate signals, which are used to trigger events such as starting a note or sequence. Gate signals are binary, indicating an on/off state, and are crucial in sequencing and synchronization tasks.

- **Headphone Output**: An output port specifically for connecting headphones, allowing for personal monitoring of the audio output from WoFi. This port typically includes a built-in headphone amplifier to drive various headphone impedances, making it suitable for detailed listening during live performances or studio sessions.

- **Line In**: An audio input designed for receiving line-level signals from external audio equipment such as synthesizers, mixers, or audio interfaces. Line-level signals are standardized and ensure compatibility with a wide range of professional audio gear, allowing WoFi to record, sample, or process incoming audio.

- **Line Out**: An audio output port that transmits line-level signals from WoFi to other audio equipment, such as mixers, amplifiers, and recording devices. This output provides the final processed or generated audio signal, suitable for monitoring or further audio processing.

- **LFO (Low-Frequency Oscillator)**: An oscillator used to modulate parameters like pitch, volume, or filter cutoff, typically operating below the range of human hearing.

- **MIDI (Musical Instrument Digital Interface)**: A protocol that enables electronic musical instruments and computers to communicate and control each other.

- **Modulation**: The technique of altering a signal using another signal. Common in synthesis, modulation can affect various parameters like pitch, amplitude, or filter cutoff.

- **Modulation Input/Output (MOD)**: Ports specifically designed for modulation signals, which can be used to modulate various parameters on the WoFi or external devices. This allows for dynamic and expressive control over sound shaping elements like filters and oscillators.

- **Oscillator (OSC)**: In traditional synthesizers, an oscillator is the basic sound-generating component that produces waveforms such as sine, square, and sawtooth. In WoFi, oscillators are implemented through samples, meaning the fundamental sound sources are recorded audio snippets that can be manipulated and played back. This approach allows for a broader range of timbral possibilities and the incorporation of real-world sounds into synthesis.

- **Patch**: A stored set of parameters and possibly sequences that define a particular sound or configuration in a synthesizer or sampler, like WoFi. Patches may include settings for oscillators, filters, envelopes, and effects.

- **Resonance**: A feature in filters that emphasizes frequencies around the cutoff point, enhancing certain harmonic components of the sound.

- **Sample**: A digital recording of a sound that can be manipulated and played back in various ways. Samples are the fundamental elements in samplers and digital audio workstations. In WoFi, samples serve as the core sound source, which can be looped, stretched, and pitched.

- **Sample Rate**: The number of samples per second in a digital audio recording, measured in Hertz (Hz). It affects the audio quality, with higher sample rates offering better resolution.

- **Sequence**: A series of musical notes or events arranged in a specific order, often looped to create repeating patterns. Sequences can include note information, parameter changes, and modulation events.

- **Sequencer**: A device or software that records, plays back, and manipulates sequences. It can be used to automate musical elements such as melodies, rhythms, and effects. WoFi's sequencer allows for complex arrangements, including multiple layers of notes and automation data.

- **SSID (Service Set Identifier)**: The name of a WiFi network, allowing users to identify and connect to it.

- **Sync Input/Output**: Ports that transmit or receive synchronization signals, enabling WoFi to sync its tempo with other devices, such as drum machines, sequencers, or other synthesizers. This ensures that all connected devices operate in time with one another, crucial for live performance and complex studio setups.

- **Synthesis**: The process of creating sounds electronically, often using techniques like subtractive, additive, or FM synthesis.

- **TCP/IP (Transmission Control Protocol/Internet Protocol)**: A suite of communication protocols used to connect devices on the internet, specifying how data should be formatted, transmitted, and received.

- **Time Stretch**: A process that changes the duration of a sample without affecting its pitch. Time stretching is used to match the tempo of a sample to a different beat or to create unique sound effects.

- **USB Port**: A versatile port that can serve multiple functions, including power supply, data transfer, and MIDI communication. The USB port on WoFi allows for easy integration with computers, enabling firmware updates, direct recording, and control via MIDI over USB.

- **Velocity**: The speed at which a key is pressed on a keyboard, which typically affects the volume and timbre of the note played. Higher velocity values usually result in louder and more intense sounds, providing a dynamic range for expressive playing.

- **Waveform**: In synthesis, a waveform is the shape of the signal produced by an oscillator, determining the harmonic content and timbral qualities of the sound. In the context of samples, a waveform visually represents the amplitude of the sound over time, allowing users to see the variations in loudness and understand the structure of the sound. This visual representation is crucial for editing, looping, and manipulating samples.

- **WiFi (Wireless Fidelity)**: A technology that allows electronic devices to connect to a wireless local area network (WLAN), typically providing internet access.

35.6.   User Community, Support Resources, Troubleshooting and FAQs

The present document can be downloaded from **kiviak-instruments.com/manuals**

From this web page are also linked

- The online documentation for mywo.fi plateform

- The online documentation for wofiManager utility

- The FAQ concerning the WoFi and associated applications

36.   Thanks

We would like to express our heartfelt gratitude to everyone who contributed to the development and success of the WoFi project.

Special thanks go to our dedicated team of engineers, designers, and testers who worked tirelessly to bring this product to life.
We also extend our appreciation to our beta testers, who provided invaluable feedback that helped us refine and perfect the WoFi experience.

Additionally, we thank our community of users and supporters.
Your enthusiasm, creativity, and passion for music inspire us to continue innovating and improving. We are committed to supporting you in your musical journey and are excited to see the incredible music you will create with WoFi.

A very special thank you goes to our backers, whose generous support made this project possible.
Your belief in our vision and your financial contributions have been instrumental in bringing WoFi to life. We are deeply grateful for your trust and commitment.

Finally, we are grateful to our families and friends for their unwavering support and encouragement throughout this journey.
Your belief in our vision has been a source of strength and motivation.

Thank you all for being a part of the WoFi family.

37.   Team and Contributions

Project Leader:
Romain Giannetti
At the origin of the WoFi concept. Responsible for overseeing, driving and founding the entire project, coordinating between teams, and ensuring the project's vision and goals were met.

Lead Engineer and Developer:
Olivier Broquet
Led the engineering efforts, from hardware and software development up to manufacturing, bringing the concept to real life.

Hardware and Software engineering:
Frédéric Meslin - Fred's Lab
Handled the design and integration of hardware components, and greatly contributed to the sound engine of WoFi.

Sound Designers:
Christian Laffitte, Simon Gallifet, Romain Giannetti
Involved in creating and curating sound patches and samples for factory presets.

Software Developers:
Clément Ledoux, Adrian Bonventre, Rémy Bhagalou, Antoine Leguillou, Vincent Roger, Antoine Luc, Xhinyuaho Lin
Contributed to differents parts of embedded software and web platform, also ensured the integration and functionality of the system.

UX / Industrial Designer:
Aymeric Alandry
Designed the user interface and physical aesthetics, focusing on user experience and device ergonomics.

WoFi Screen Graphics:
Stéphane Rot - Fluidshell Design
Created the graphics and visual elements for the WoFi display, enhancing the user interface.

Communication:
Thibault Bargat
Managed communications related to the project.

Documentation:
Thibault Bargat
Compiled and wrote user manuals and other documentation, and managed communications related to the project.

Proofreading:
Vincent Roger, Olivier Broquet, Romain Giannetti
Ensured consistency, tracked spelling mistakes and typos.