USER GUIDE

Congratulations, you're now the proud owner of the Joué instrument!

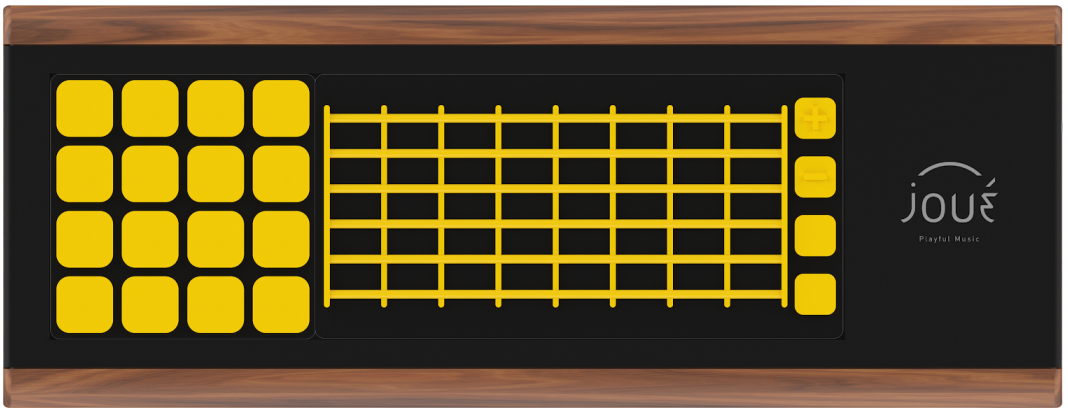
Joué is an expressive and modular MIDI controller that feels like a real instrument. It's an innovative and evolving instrument that simplifies digital music playing and offers beginners and professional artists a unique level of expressivity and spontaneity.

Joué is made of wood and metal and is equipped with a pressure sensitive sensor on which magic modules are placed. Modules such as piano keys, guitar strings, drums pads or 3D control provide an infinite playground for musicians.

This manual details the use and functions of the Joué board and its modules. If you're beginning with midi controllers or simply curious about the Joué possibilities, we recommend to visit www.jouemusic.com and download the Joué demo sessions for Bitwig Studio 8 Tracks and Ableton Live. These sessions feature fully prepared sounds and samples that give you some insight about the Joué capabilities.
You will also find some tutorials, tips and demos on Joué's website.

Enjoy playing music with the Joué!

Rev 3.0 - Nov 2020



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1. IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not use this apparatus near water
6. Clean only the Joué board with dry cloth.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
8. Protect the USB cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus
9. Only use attachments/accessories specified by the manufacturer
10. Unplug this apparatus during lightning storms or when unused for long periods of time
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way,

    such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the

    apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped
12. No naked flames, such as lighted candles, should be placed on the apparatus

Magnetic field

WARNING
Interference due to magnetic fields!

This product generates a permanent magnetic field (> 150mT) that can interfere with cardiac pacemakers and implanted defibrillators (ICDs)

Always maintain a distance of at least 30 cm (12”) between the Joué and the cardiac pacemaker or implanted defibrillator

2. ENVIRONMENTAL DECLARATION

Compliance Information Statement: Declaration of Compliance procedure

Product Identification: Joué

Address: 87 quai des Queyries, 33100 Bordeaux

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For USA – to the User:

- Do not modify this unit! This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Joué SAS may void your authority, granted by the FCC, to use this product.
- Important: This product satisfies FCC regulations when high quality shielded cables are used to connect with other equipment. Failure to use high quality shielded cables or to follow the installation instructions within this manual may cause magnetic interference with appliances such as radios and televisions and void your FCC authorization to use this product in the USA.
- Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by

turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

3. BOX CONTENT

- Joué Board
- Modules pack (depends on your purchase)
- USB Cable
- Getting started guide
- Software licenses (depends on your purchase)

4. GENERAL USE RECOMMENDATIONS

Plug & Play

The Joué is powered through its USB cable, and can be plugged into any USB compatible device (computer, tablet, smartphone, etc.).

Magnets & RFID

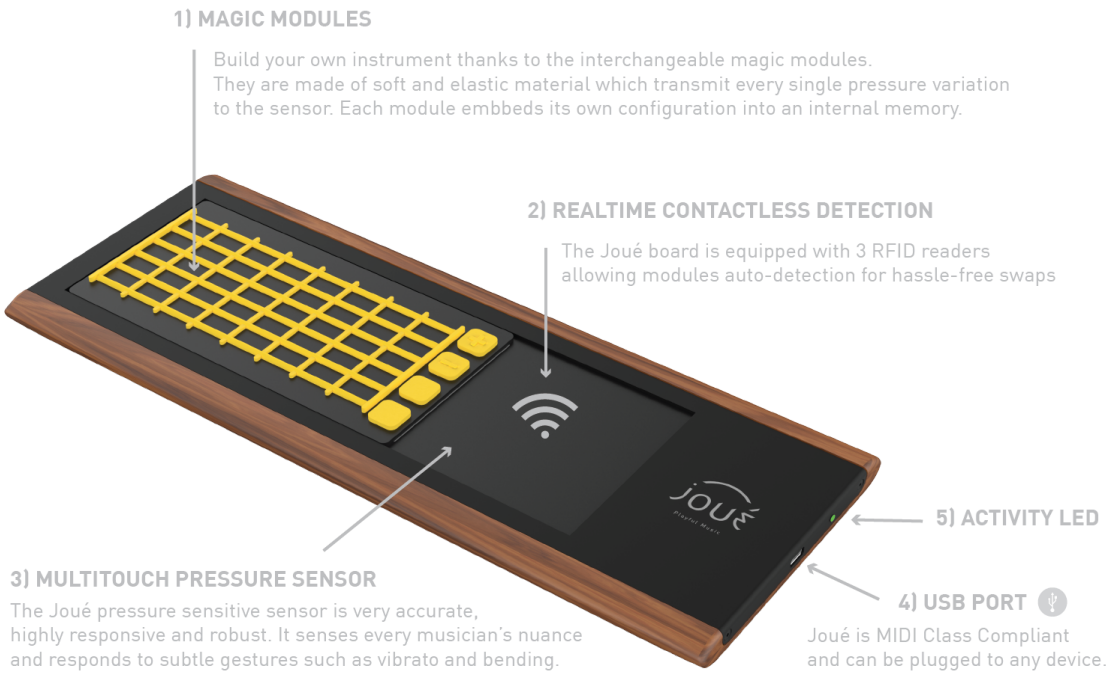
The Joué board contains magnets and RFID readers, the modules contains metallic particles and RFID tags. The magnets and metal make the modules fit and stay perfectly on the board and the RFID tags and readers allow the modules to be detected by the device.
We recommend not to place the Joué close to other magnetic devices, metallic surfaces to not alter its functionalities, or sensible devices (see safety instructions above).

WARNING about the RFID

Program the module's RFID tags only by using the Joué software. Never attempt to use a third party software, it could damage the RFID tags and prevent to program them again.

5. HOW DOES IT WORK?

Joué overview



The Joué Board

The Joué board is built around a highly sensitive multi-touch sensor that can capture very subtle pressure changes. The Joué board has 3 slots which can be filled by modules. Each slot is equipped with a RFID reader allowing real-time modules detection.
The Joué board connects to a computer, a tablet or a smartphone thru its USB-C connector. The Joué device is USB powered. It starts automatically when plugged to a computer and its activity LED lights. The Joué device is automatically powered off when unplugged.

The Modules

Modules are made of soft and elastic material which transmit every single pressure variation to the sensor. Thanks to that, the Joué offers a unique feeling of interaction based on natural gestures normally reserved to traditional instruments.

The modules fit with the sensor to provide different layouts of playing and control: the Joué can alternatively be a standard midi controller, an effect control, a very expressive instrument, or even all at the same time!
Simply change the modules to turn your Joué into a new instrument.

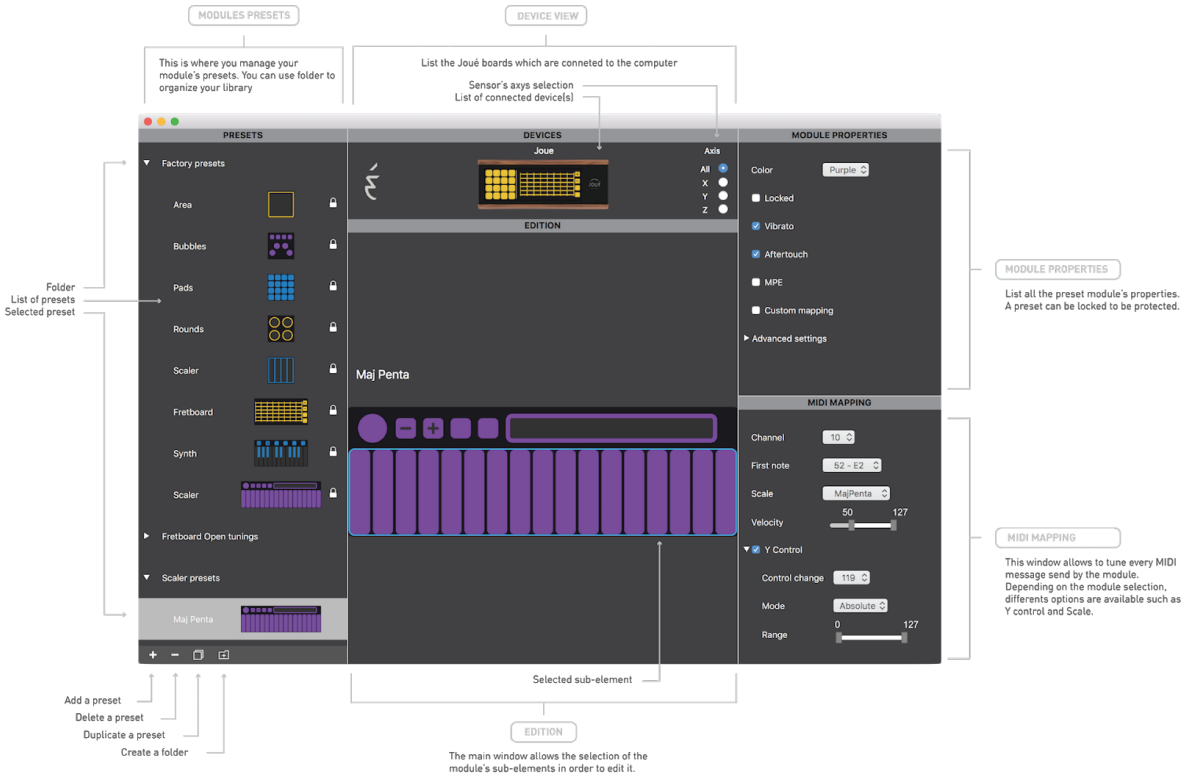
Each module will respond to vertical, horizontal and pressure movement, and send MIDI data (ie. Control change, pitch bend, etc.) to the connected device. This data is then used by the device or software to trigger sounds, control effects, etc.

The MIDI standard allows for 16 independent channels.
Each module is set (by default) to a separate MIDI channel, so they are completely independent from each other *(see Modules factory settings).*

Making sounds

The Joué itself doesn't produce sound, it has to be connected to a MIDI compatible audio software to make music. Any DAW (Digital Audio Workstation), virtual synthesizers or MIDI compatible audio app can be used in correlation with the Joué.
Visit our website to have more information about how to connect your Joué to the most popular audio softwares.

The Joué Editor

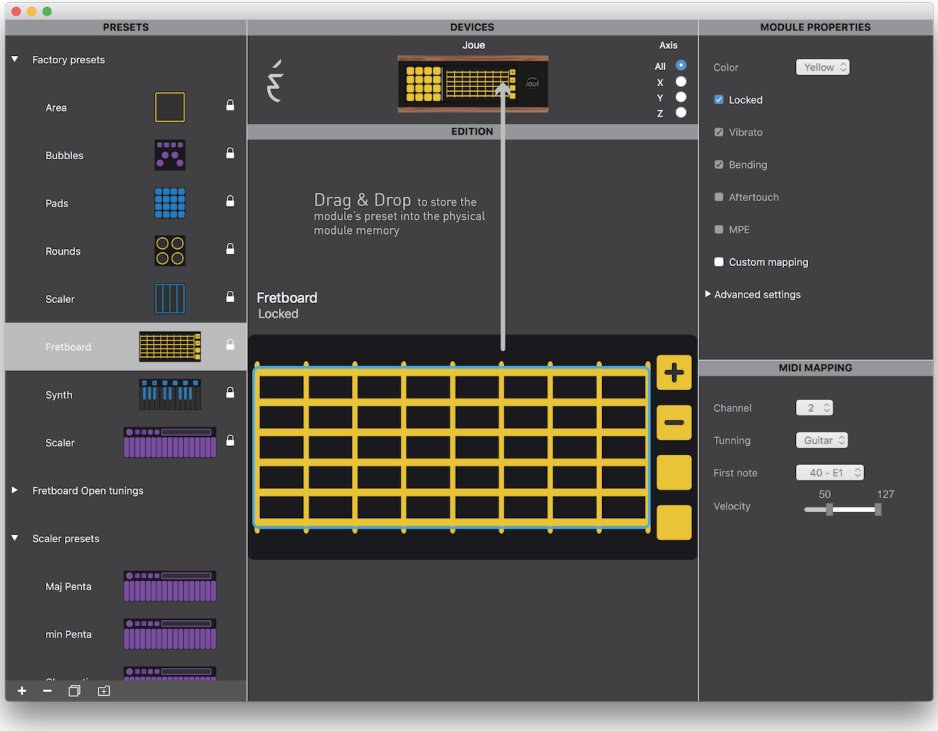


Each physical module can be configured by using the Joué editor software. The Joué editor allows the tuning of every message sent by the module; such as MIDI channel, note number, control change, pitch bend range, velocity range.
We provide factory presets for each module that you can use as reference.

To configure a module, create a new preset for this module and configure it.

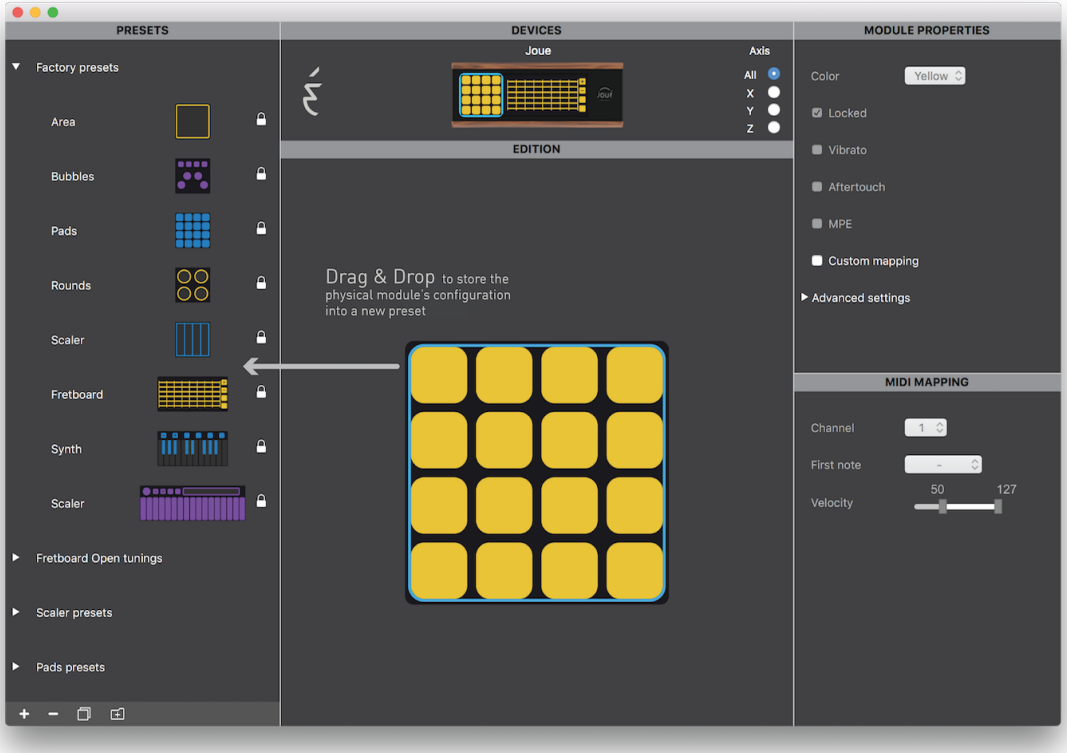
Once it's done, store the preset into the module's memory by simply drag your preset from the library (or from the main edition window) and drop it on the according module which is placed on top of the Joué board in the device view. The configuration is stored into the physical internal memory of the module (RFID tag) allowing for hassle-free swaps during a live performance.

You can have several presets for the same physical module. We recommend you to organize your workflow by using folders, for instance by song or project. You can re-organize the presets list by dragging each item into the list. A preset can also be duplicated easily for a fast configuration.



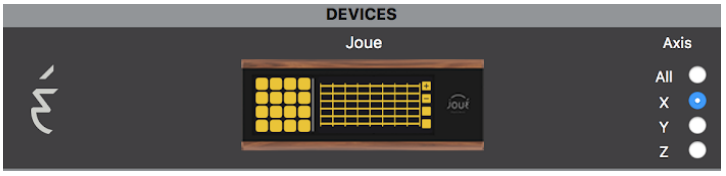
To read the physical module configuration which is stored in its memory, click on the according module on the devices view and read the properties. These properties cannot be changed (read only).

You can create a new preset out of an existing physical module memory. Simply drag & drop the module from the edition window to the preset list. It creates a new preset containing the module configuration.



MIDI Mapping tips

In order to quickly map continuous controls to a sound parameter, you can select which axis of the sensor sends MIDI data. It can be very useful to map 3D modules such as Area or Bubbles. To do so, select X, Y or Z in the Axis section of the device window:



X axis selected

Please note that this option is applicable to the whole device and to all modules present on top of the Joué surface.

MPE Compatibility

One of the special features of the Joué is its compatibility with MPE.
MPE stands for Multidimensional Polyphonic Expression, and offers amazing possibilities that standard MIDI controllers and instruments do not have.

With MPE, each note's messages are sent on a unique MIDI channel, rotating through a defined contiguous block of channels called Per-Note channels. The per-note messages are for instance Note On, Note Off, Channel Pressure (for finger pressure), Pitch Bend (for X-axis movement) or any CC number. The CC74 is usually used for Y-axis movement. All other messages (like Program Change, CC7/volume, CC64/Sustain, etc.) apply to all voices and can be sent over a separate "Common" channel, though some MPE synths do not implement a Common channel, instead receiving these Common messages redundantly over the Per-Note channels.

For full specification of MPE, please refer to the following document
http://bit.ly/mpe-spec

Download the latest version of the Joué editor on Joué's website (www.jouemusic.com/pages/joue-editor).

6. MIDI PORT CONFIGURATION

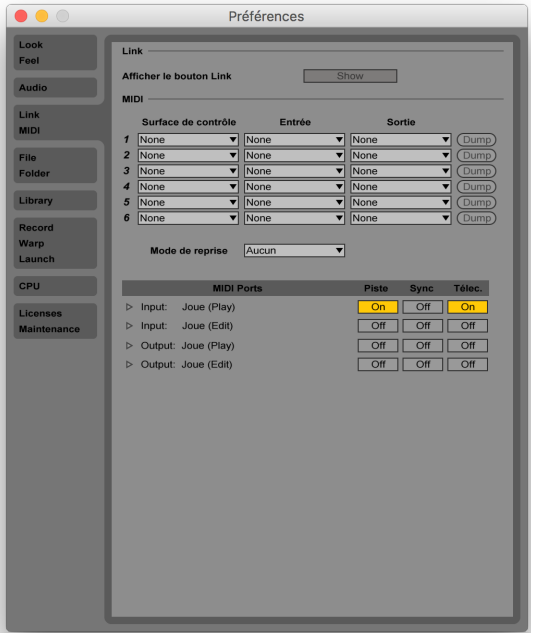
The Joué uses two different MIDI port when connected to a computer.

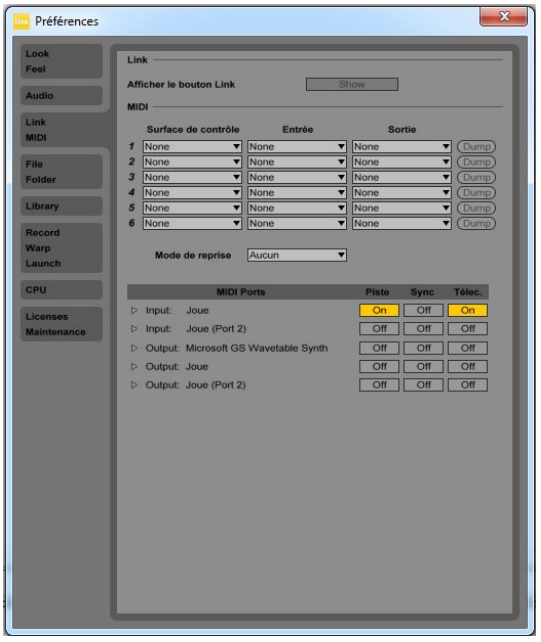
The first port ("Joué Play" on Mac, "Joué" on Windows) is used for the communication between the Joué board and any MIDI compliant software.

The second port (("Joué Editor" on Mac, "Joué (port 2)" on Windows) is used for the communication between the Joué device and the Joué software editor.

This second port must not be used to communicate with MIDI compliant software.

As an example, here's the configuration which has to be done for a proper using on Ableton Live:

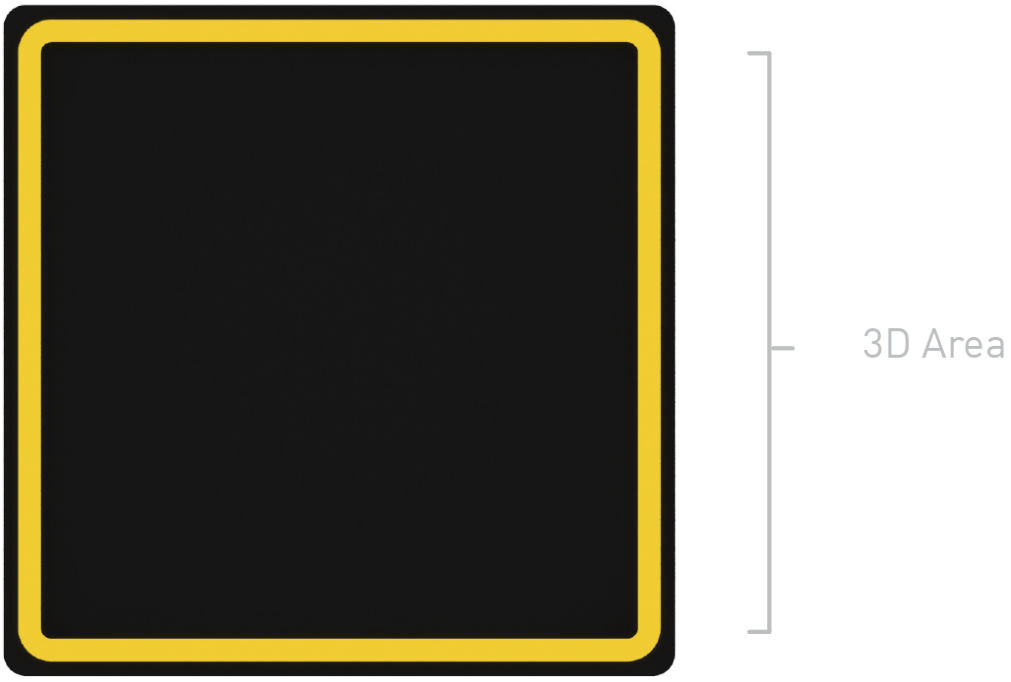




7. MODULES PARAMETERS LIST AND FACTORY SETTINGS

Note:
the "Locked" function in the "module properties" window allows to disable the modification of the preset's settings. This option is, by default, not activated expect for the Factory presets.

AREA



The Area is played by sliding and tapping the surface with fingers. The module sends X, Y, Z values which are 3 MIDI control changes by default. Each message can be customized.

Factory settings

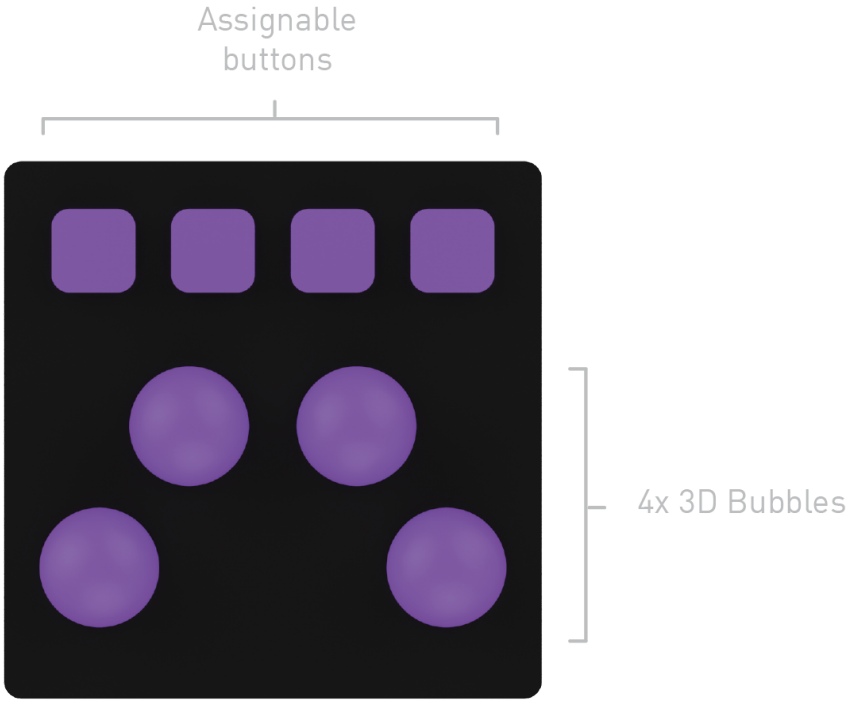
Module properties
Pressure range : Low

Midi mapping
- X : On
  - X Channel : 7
  - X Control change : 1
  - X Range : 0-127
  - Direction : Natural
  - Mode : Absolute
  - 14 Bits : off
- Y : On
  - Y Channel : 7
  - Y Control change : 2
  - Y Range : 0-127
  - Direction : Natural
  - Mode : Absolute
  - 14 Bits : off

Z : Off

Z Channel : 7
Z Control change : 3
Z Range : 0-127
Direction : Natural
Mode : Absolute
14 Bits : off

BUBBLES



The Bubbles module explores one of the unique aspect of the Joué technology: the elastic material is made to be manipulated with very natural gestures and to create analog modulations type.
The module can send up to three midi control changes per bubble (X horizontal, Y vertical, Z pressure) for a total of 12 control changes. On top of that, 4 configurable buttons are present to switch on/off effects for instance.

Factory settings

Module properties
Pressure range : Low

Midi mapping
Buttons *(from left to right)*
Button 1 :
    Action : Note
    Channel : 6
    Value : 0 - C-2
Button 2 :
    Action : Note
    Channel : 6
    Value : 1 - C#-2
Button 3 :
    Action : Note
    Channel : 6
    Value : 2 - D-2

Button 4 :

Action : Note
Channel : 6
Value : 3 - D#-2

Bubbles *(from left to right)*

Bubble 1:

X Channel : 6
X Control change : 1
X Range : 0-127
Direction : Natural
Start value : 64
Y Channel : 6
Y Control change : 2
Y Range : 0-127
Direction : Natural
Start value : 64
Z Channel : 6
Z Control change : 3
Z Range : 0-127
Direction : Natural
Start value : 64

Bubble 2:

X Channel : 6
X Control change : 4
X Range : 0-127
Direction : Natural
Start value : 64
Y Channel : 6
Y Control change : 5
Y Range : 0-127
Direction : Natural
Start value : 64
Z Channel : 6
Z Control change : 6
Z Range : 0-127
Direction : Natural
Start value : 64

Bubble 3:

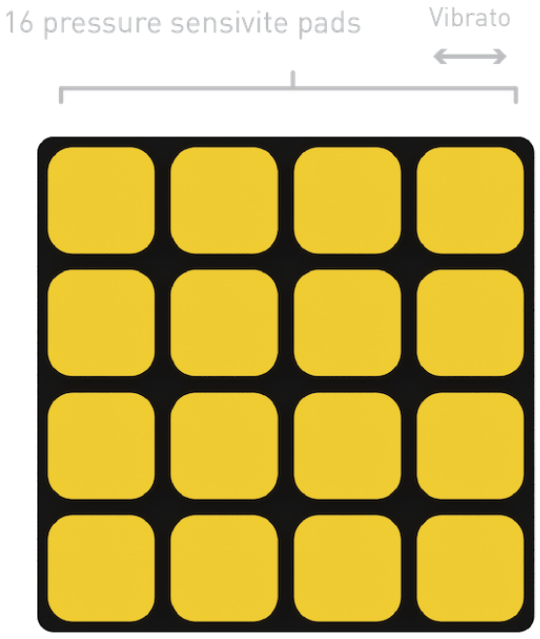
X Channel : 6
X Control change : 7
X Range : 0-127
Direction : Natural
Start value : 64
Y Channel : 6
Y Control change : 8
Y Range : 0-127
Direction : Natural
Start value : 64
Z Channel : 6

Z Control change : 9
Z Range : 0-127
Direction : Natural
Start value : 64

Bubble 4:

X Channel : 6
X Control change : 10
X Range : 0-127
Direction : Natural
Start value : 64
Y Channel : 6
Y Control change : 11
Y Range : 0-127
Direction : Natural
Start value : 64
Z Channel : 6
Z Control change : 12
Z Range : 0-127
Direction : Natural
Start value : 64

PADS



A 4×4 matrix of sensitive pads to play drums, percussion, melodies or to launch clips. Each pad can be configured individually or in group. Pads are sensitive to pressure (velocity), aftertouch & vibrato.

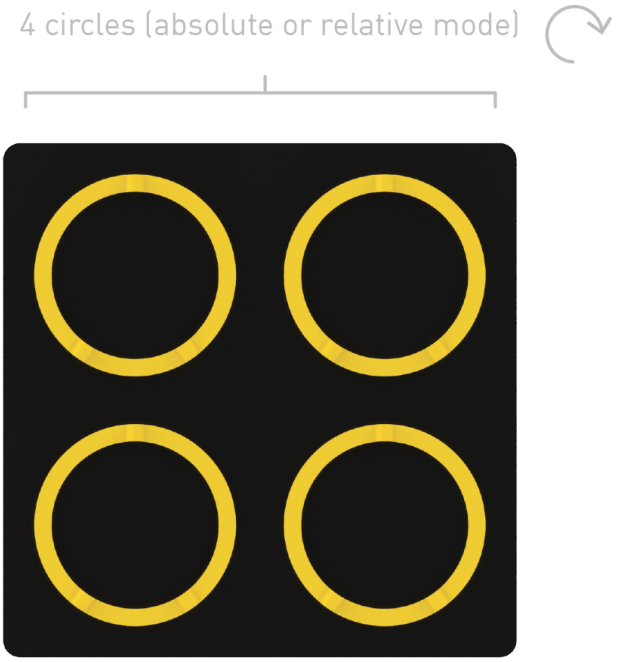
The key range, velocity and parameters can be adjusted in the Editor.
The advanced settings allow to set the Midi channel, the note and the velocity for each pads individually (custom mapping).

Factory settings

Module properties
Vibrato : off
Aftertouch : off
MPE : off
Custom Mapping: off
Pressure range : Low
MPE Channels : 1-16
Aftertouch : Channel
Vibrato : 1024

Midi mapping
Midi channel: 1
First Note: 36 - C1 (*36 - C1 to 51 - D#2 from bottom left to top right)*
Velocity: 50-127

ROUNDS



Slide your fingers across the circles to control any parameter. There are tactile areas to easily access min, mid and max values. Absolute or infinite modes are available.

Factory settings

Midi mapping
Rounds *(From bottom left to top right)*
Round 1 :
- Midi channel: 9
- Control change : 1
- Range : 0-127
- Direction : Natural
- Mode : Absolute
- 14 Bits : off

Round 2 :
- Midi channel: 9
- Control change : 2
- Range : 0-127
- Direction : Natural
- Mode : Absolute
- 14 Bits : off

Round 3 :
- Midi channel: 9
- Control change : 3
- Range : 0-127

Direction : Natural
Mode : Absolute
14 Bits : off

Round 4 :

Midi channel: 9
Control change : 4
Range : 0-127
Direction : Natural
Mode : Absolute
14 Bits : off