



Pro Option User Guide
February 2022 - Joué Music Instruments

Table of contents

Table of contents	2
Introduction	3
Glossary	4
Activate the Pro Option	5
Special case: Use on iPad.	5
Joué Editor	6
Presets	6
Device	6
Edition	6
Pad Properties	7
MIDI Mapping	8
Apply a preset	8
MIDI Configuration	8
Notes	8
Special cases	9
Effects	9
Manage the function of each axis.	10
Buttons	11
Control Changes	12
MIDI assignments	12
MIDI Mapping	12
Matching the CC number	13
Appendix 1: Absolute and Relative modes	14
Absolute	14
Relative (with Start value)	14
Relative (with Demultiplier)	14
Appendix 2 : The MPE	15

Introduction

Thanks to the Pro option, you will find all the features of the first Joué Music Instrument's tool, the Joué Pro. Unlock the full power of your Joué Play instrument and set up your Play Pads as you like using the Joué Editor software. If you plan to use third-party music production software such as Ableton Live, FL Studio, Logic Pro or Cubase, then the Pro option is a must-have for using your instrument to its full potential!

The Pro option gives you the ability to edit any MIDI messages sent by each of the pads you use. For example, you can turn your Keys Pad into a mixing console, your Drum Pad into a launchpad to trigger tracks or loops etc...

Furthermore, you'll be able to fine-tune the responsiveness of various parameters such as glissando, vibrato and velocity response, depending on your playing style and preferences. Finally, with this upgrade, you will be able to access the MPE feature, a unique technology that allows for unparalleled playing expressiveness.

In this guide, you will find everything you need to know about Joué Editor, and how to use it with third-party DAWs.

Before you begin, and if you haven't already done so, you can download the Joué Editor from [this page](#) so that you have everything you need to unlock the potential of your Joué Play Pro!

Glossary

In this guide, in order to make the explanation of certain principles easier, we will use technical abbreviations and terms, so here is a small glossary which may be useful later on.

Aftertouch : The fact of sending MIDI signals via the variation of pressure exerted on the controller after the activation of a note. These signals will modulate a parameter of the sound.

Bending : Pulling one or more strings (usually on a guitar) sideways to increase the pitch (tone) of the sound.

CC : Abbreviation used for Control Change, it is a type of MIDI message that allows to change the parameters of a sound (panning, volume, modulation...)

DAW : Digital Audio Workstation refers to music composition software, of which there are many on the market, each with its own specific features.

Glissando : The act of "sliding" from one note to another by playing all available pitches (or frequencies) in between continuously.

MIDI : Musical Instrument Digital Interface, a universal communication protocol related to music.

MPE : An extension of the MIDI protocol which aims to increase the expressiveness of digital instruments by sending MIDI signals via several channels, thus using notably pitch bend for each note independently, even if they are played simultaneously.

Vibrato : The act of vibrating the pitch of a note by moving one's finger slightly over that same note, it's done a lot on stringed instruments like the guitar, violin or cello.

Preset : When a configuration is saved, we will define the various pad settings created in the Joué Editor as presets.

Pitchbend : Variation of the frequency of a note managed with a control surface, commonly controlled by one of the two wheels available on the left side of digital keyboards and pianos, but also in a much more natural way via glissando and vibrato on MPE controllers such as the Joué Play.

Activate the Pro Option

The first step is to upgrade your Play Board and activate the Pro option. To do so, you just need to send us the following information by email to support@jouemusic.com:

1. The type of device you intend to upgrade your board on, and its operating system (macOS 10.1 min or Windows 8 min).

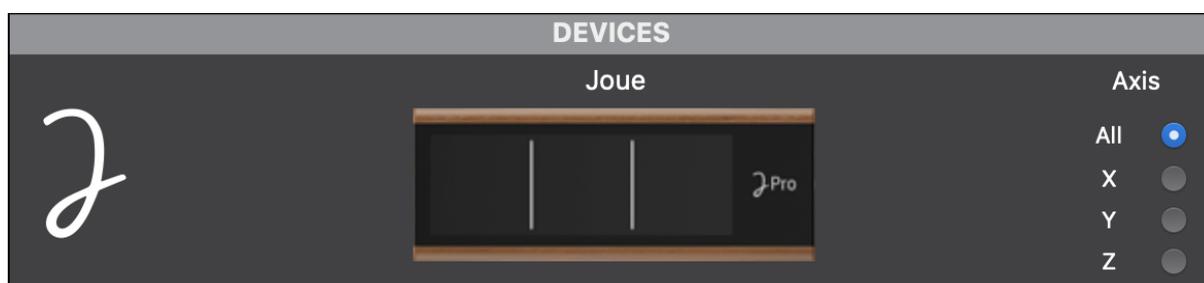
2. The number of your Board Play is written on the back as "JPLAY-XX-XXXXX".

3. The serial number of your Board Play. To find it, launch the Joué Editor (for Mac OS or Windows), plug in your board without placing a pad on it and "Alt+click" or "Option+click" on your board icon in the editor. A window will appear with your serial number.



Once we have this information, we can create a personalized upgrade programme, which we will be sent to you as soon as possible.

Download and run the program you have been given, then open Joué Editor, if everything worked, this is how your board should look in the software.



Your instrument is now upgraded, so you can use the Joué Editor to set up your pads to your liking.

Special case: Use on iPad.

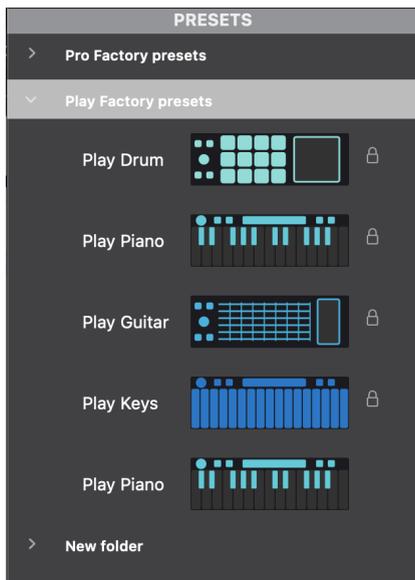
As mentioned, the Joué Editor allows you to modify the messages sent by the pads, once modified, the pads keep their configuration, no matter what device the Joué Play is plugged into.

The Joué Editor software is only available on Mac and PC, so you will need a computer to edit your pads before using your Joué Play with an iPad.

Joué Editor

As mentioned earlier, the Joué Editor is a software that allows you to edit the MIDI messages sent by any of your Play Pads. Let's start with a tour of the software interface. There are five sections in the software: Presets, Device, Edit, Pad Properties and MIDI Mapping.

1. Presets



Here you will find the different pad configurations that have been saved. You will have the default factory settings of the Play Pads with a lock, as they cannot be changed. You can rename your presets, and organize them in folders as you wish.

To create a new preset or folder, simply click on the respective icon at the bottom of the preset column.



Left to right, you can add, delete or duplicate a preset or create a new folder.

2. Device



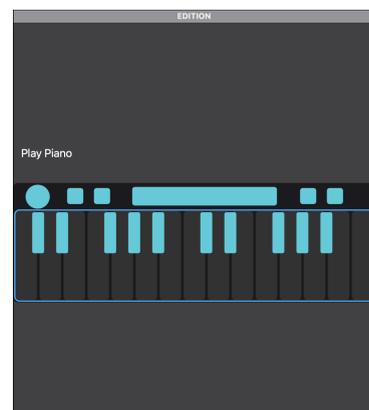
This is where you will find your board once plugged in, as well as the pad that is placed on it.

3. Edition

By clicking on a preset in the left hand column, a pad will appear in the center of the software in the "Edit" section.

This is where you will be able to select the keys of the pad that you want to edit.

For example, here you can see that the piano notes are selected, but you can click on the bubble in the top left corner or the ribbon to edit these areas.

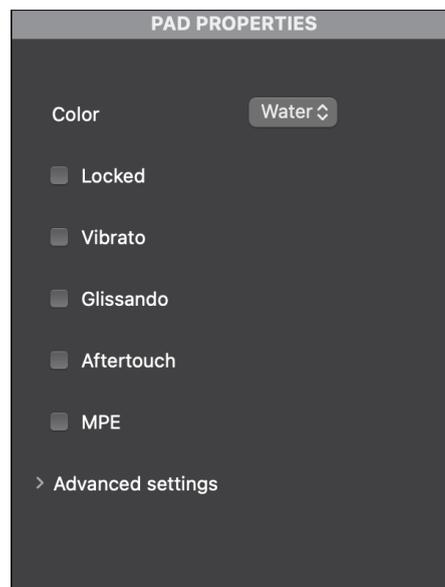


4. Pad Properties

In this section, you can edit the general properties of the selected pad (which appears in the "Edition" section). This is where you can define the overall response of the pad to the different gestures you apply to its surface.

Here is the list of editable parameters:

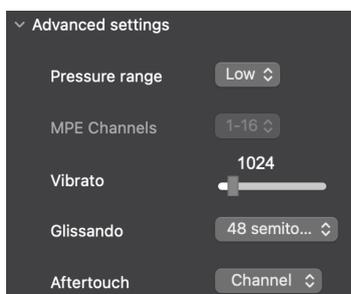
- Color : to change the pad color in the editor, for better readability.
- Locked : allows you to lock a pad so that it cannot be edited (by mistake).
- Vibrato : if enabled, the tone of the sound will vary if your finger moves on the same note.
- Glissando : if enabled, sliding without lifting the finger between several notes will vary the key without replaying the notes.
- Aftertouch : If enabled, you can modulate the sound by varying the pressure on the pad. Requires a (virtual) instrument that supports and allows aftertouch.
- MPE : allows the aftertouch to be used separately on several notes at the same time.



Some pads will have more settings to configure:

- Custom mapping : on the Keys Pad and Guitar Pad, allows you to edit each key on the Keys Pad or each string on the Guitar Pad separately.
- Bending : on the Guitar Pad, if activated, allows you to slightly vary the tone of the sound by moving your finger vertically on the string.
- Fretless : if activated, sliding on a string to another fret position does not trigger the notes over which the finger has passed.

You will also find "advanced" settings to control more precisely the configuration of your pad.



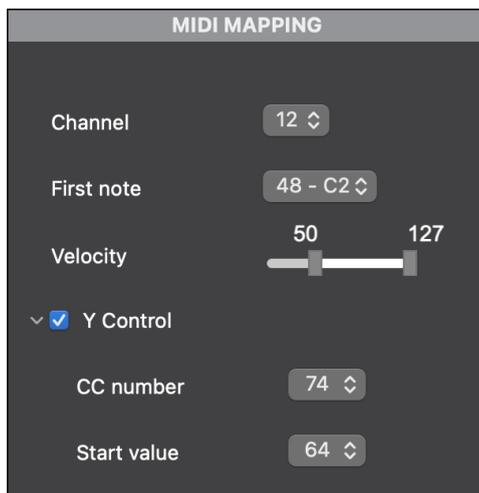
- Pressure range : allows you to control the intensity of the pressure response of your pad.
- MPE channels : if MPE is enabled, defines on which MIDI channels the signals are sent. (See Appendix for more information on MPE)
- Vibrato : vibrato intensity
- Glissando : glissando intensity
- Aftertouch : Aftertouch type

For the Guitar Pad, it will also be possible to modify the bending intensity.

Now let's see how to edit the MIDI messages sent by the pads.

5. MIDI Mapping

It is in this section that we will be able to edit the information that the pads transmit to our virtual instruments and thus adapt the Joué Play to our use. We must first select a zone of the pad from the "Edition" section to modify its parameters.



It will be possible to modify different parameters according to the selected area. We will thus be able to distinguish three categories:

- Notes
- Effects
- Buttons

Apply a preset

To apply a configuration to a pad, simply drag from the "Preset" section or the "Edition" section the pad to your pad on the board, visible in the "Device" section.



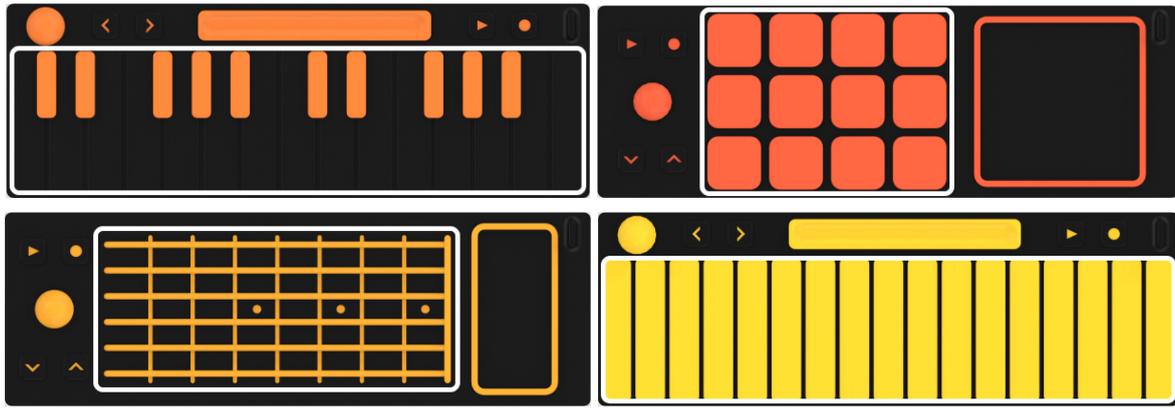
After a short loading time, the preset will be applied to your pad.

MIDI Configuration

As seen earlier, we will separate the areas of each pad into three categories, notes, effects and buttons.

1. Notes

Each pad has a dedicated area for triggering musical notes as shown below:



For each of these zones, it will be possible to define the MIDI channel via which notes are sent, the first note of the pad (which corresponds to the one on the left, bottom if applicable) and the velocity response of the pad on a scale of 50 to 127. If you choose a range of 127 to 127 for example, the velocity will be stable at its maximum.

Special cases

For the Keys Pad, it is also possible to choose the tuning of the pad. To do this, simply select a first note (which will be the "root note", the scale reference) and then a scale/mode from those offered.

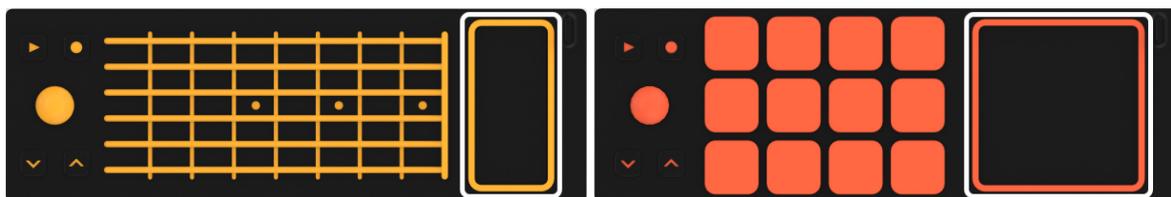
The Keys Pad and Guitar Pad also allow you to manually modify each key or string. To do this, you must activate the "Custom mapping" from the "Pad properties" section. Then you can choose a note, a channel and a velocity response for each key or string.

The Keys Pad and Piano Pad also have a Y-control, which means that you can manipulate an effect or parameter depending on the pitch you press for each note. We will explain the use of the Y-control in the next section.

2. Effects

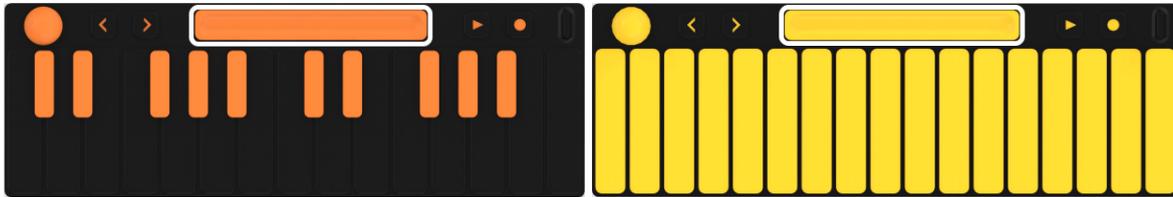
Each pad has two effect areas, which allow you to control any parameter to which a gesture is assigned. There are three categories of effect/parameter controllers: areas, ribbons and bubbles.

The Guitar Pad and Drum Pad each have an effect area to the right of the note area.



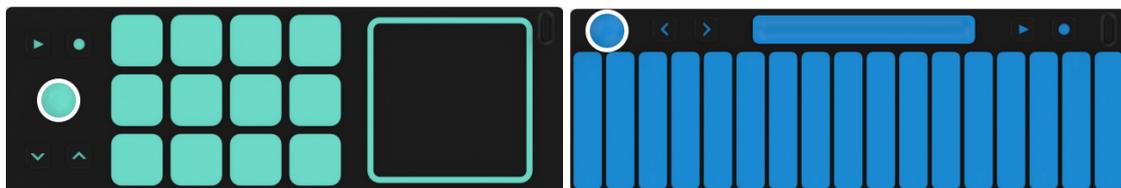
In this area you can control parameters on three axes, X (horizontal), Y (vertical) & Z (pressure). It will therefore be possible to assign parameter control to each of these axes from your DAW, synthesizer or virtual instrument.

The Keys Pad and Piano Pad have a ribbon effect above the note area.



On this ribbon, there is only one axis, the horizontal X axis. However, unlike the effect area, it will be possible to use the ribbon for pitch bending.

Finally, there is a bubble on each of the pads that allows you to control parameters on the three axes, X, Y and Z.

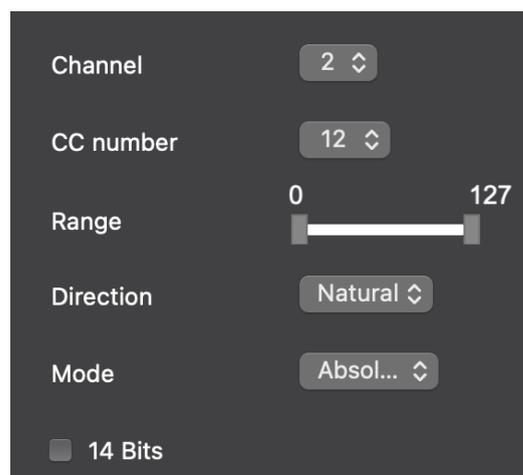


Manage the function of each axis.

As we have seen, each effect management zone has one or more axes on which you can act. It is therefore possible to configure the function of each of these axes via the Joué Editor.

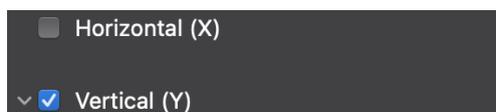
For each axis it will be possible to edit several parameters, namely :

- The MIDI channel
- The CC number on which we want to act
- Min and max values
- The direction (is the maximum to the right or left / up or down)
- The mode (only for the X and Y axes), you can choose between Absolute and Relative, we will detail this point at the end of this guide.
- The 14 bits mode



As mentioned earlier, the Y-axis is also available for the Keys Pad and Piano Pad keys. You will therefore have access to these features on the note areas of these pads.

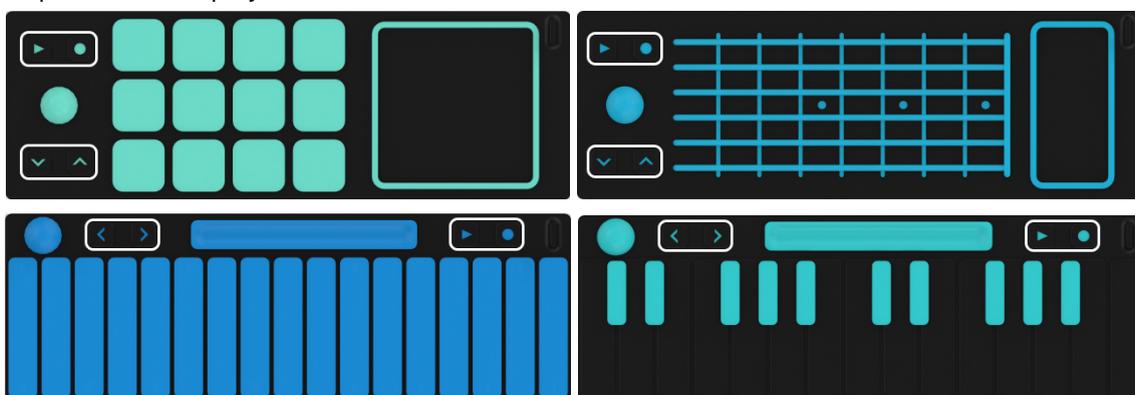
It is also possible to disable these features by unchecking the box in front of the axis name, below for example, only the Y axis is enabled.



Turning one axis off can be handy, especially on the Piano Pad and Keys Pad keys, where the Y-axis can modulate the sound in unwanted ways depending on the CC assigned to it (by default 74).

Buttons

Each of the pads also has four separate buttons, namely, the octave change arrows, and the transport buttons (play and record).



The octave change buttons "<" and ">" are not editable, and therefore have a single usage: change the octave. On the Drum Pad, these buttons are used to move through a bank of sounds for example.

The play and record buttons can be assigned to various functions:

- Trigger a note
- Change MIDI channel
- Activate or deactivate different functions (vibrato, glissando, bending, Y-control, fretless...)
- Manage a control (CC)
- Change program
- Playing with the pitch, the tone (pitchbend)

If you want to keep the playback and recording functions, choose a CC number and assign the transport functions to your pad from your software.

Control Changes

One of the most important principles in using Joué Play with third party software will be the management of "Control Change", also called "CC".

Numbered from 0 to 127, each CC can be assigned to any parameter. There are two ways of doing this, firstly the MIDI assignment, done directly via the software, and secondly, as is usually the case when using hardware, the mapping of CCs to their "common" function. Indeed, by default, some CC numbers have defined functions, among the most popular are :

CC 1: Modulation wheel

CC 7: Volume

CC 10: Panning

CC 64: Sustain pedal (on/off)

CC 71: Filter Resonance

CC 74: Filter cutoff frequency

There are a multitude of predefined CC's that you can find [here](#), but with DAW software, nothing is fixed and you can assign any parameter to any CC number.

The values of each parameter are distributed over a range from 0 (min) to 127 (max), from the Joué Editor, you can establish using the "range", the min and max values transmitted. For the "on/off" parameters, we will define that [0;63] corresponds to "off" and [64;127] to "on".

MIDI assignments

The MIDI assignments allow you to link the movements made on the pads directly to the software of your choice or to an external instrument.

MIDI Mapping

From your DAW software, you can assign a parameter to a CC number. The process differs according to the software used, so here is a list of explanatory links for the main software on the market:

- [Logic Pro X](#)
- [Ableton](#)
- [FL Studio](#)
- [Cubase](#)
- [Bitwig](#)
- [Studio One](#)
- [Reason](#)
- [Pro Tools](#)

Some virtual instruments or VSTs also allow you to make MIDI assignments, usually from the instrument's settings.

Don't forget to activate the "Control Change" function from the Joué Editor, this function, as seen previously, can be activated on an axis (X, Y or Z), on a button or on an effect area.

Be aware that some virtual instruments, usually emulations of analogue synthesizers, will have pre-established MIDI assignments. If we leave CC 74 active on the Y axis of the piano keys for example, the cutoff of the filter will be impacted by the way we play, and this will not necessarily be desired. To remedy this, you can disable the Y-axis from the Play Editor, or remove the MIDI assignment from the virtual instrument's settings.

Matching the CC number

If you are using your Joué with a [reConnect MIDI cable](#) and a hardware synthesizer, you will not be able to manually assign CC messages. You will need to refer to your machine's manual to check which CC number controls which parameter. Generally, instruments follow the MIDI standard and CC#s have the same functions, listed [here](#).

The reConnect MIDI cable has two outputs, a USB-A output to power the Joué Play and a MIDI output (female) to send MIDI signals. You will need another MIDI cable (male/male) to connect it to an external device, this allows freedom in the length of the cable and the organization of your studio.

Appendix 1: Absolute and Relative modes

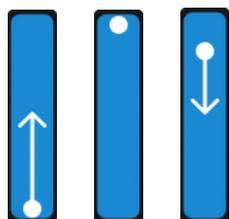
There are two modes of handling CC messages for the X and Y axes, namely Absolute and Relative.

The handling mode defines how the parameter will vary when you slide your finger on an axis, especially if you do it several times.

To illustrate the explanation, we will use examples with the Y axis of a Keys Pad, but the principle is the same horizontally. Also, it is important to specify that the "range" defined is from 0 to 127, so all possible values are represented on the axis, and the direction is "Natural".

Absolute

The absolute mode is the most common, the Y-axis will always be integer on the dedicated area, regardless of the current value of the controlled parameter. So we will have all values, 0 at the bottom of the key and 127 at the top.

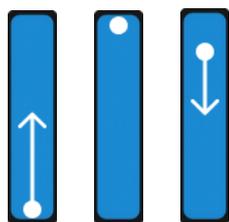


For example, here is a sequence of 3 movements on the Y axis:

1. I move my finger from 0 to 64. The value is therefore 64
2. I press the top of the key, the value changes to 127
3. I slide from a high position to the middle, the value goes from 127 to 64.

Relative (with Start value)

There are two methods of operation for the relative mode, namely "start value" and "demultiplier". On the Keys Pad and Piano Pad keys, the start value method is used. This means that in all cases the first source of pressure will indicate the start value.

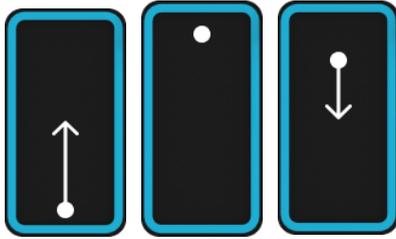


With the previous example, and a start value set to 64, we have :

1. I move my finger from 64 to 120, the value is 120
2. I press up without moving my finger, I return to the start value of 64
3. I slide down, I go from 64 to 25

Relative (with Demultiplier)

The relative mode with demultiplier allows to keep the current value of the parameter to be used as a base for the next movement. We will choose a demultiplier, by default x2, which means that the vertical movement from bottom to top will have to be performed twice to reach 127. When you place your finger on the axis, you start from the last value of the parameter.



If we take the same example as before (with the effect area of the Guitar Pad):

1. I move my finger from 0 to 32 (because there is a demultiplier), the value of the parameter is 32
2. I press the top of the key without moving my finger, the value does not move
3. I slide down, starting from 32, I move to 15

By default, the chosen mode is absolute, but depending on the use, the relative mode can be very useful!

Appendix 2 : The MPE

MIDI (or Multidimensional) Polyphonic Expression is a revolutionary MIDI protocol that allows messages to be sent via multiple channels, as opposed to just one. This makes it possible to control multiple instrument parameters simultaneously depending on how you press the notes.

Unlike Polyphonic Aftertouch, which sends a single MIDI message per note, MPE allows three messages to be sent simultaneously, vertically, horizontally and with the pressure applied.

The MPE is currently only available on certain software, including the Joué Play application. You can find all the DAWs and VSTs compatible with MPE on [this site](#).

The MIDI settings will be specific to each software, however, we will generally find the possibility to assign vertical and horizontal movements, and pressure variations to the parameters of our choice.

To activate the MPE from the Joué Editor, simply check the MPE box in the "Pad Properties" section. We can also choose the MIDI channels used from the advanced settings, [1;16], [1;8] and [9;16].

To learn more about the MPE, you can watch [this video](#) which presents the use of the MPE in Ableton Live 11 with the Roli seaboard.