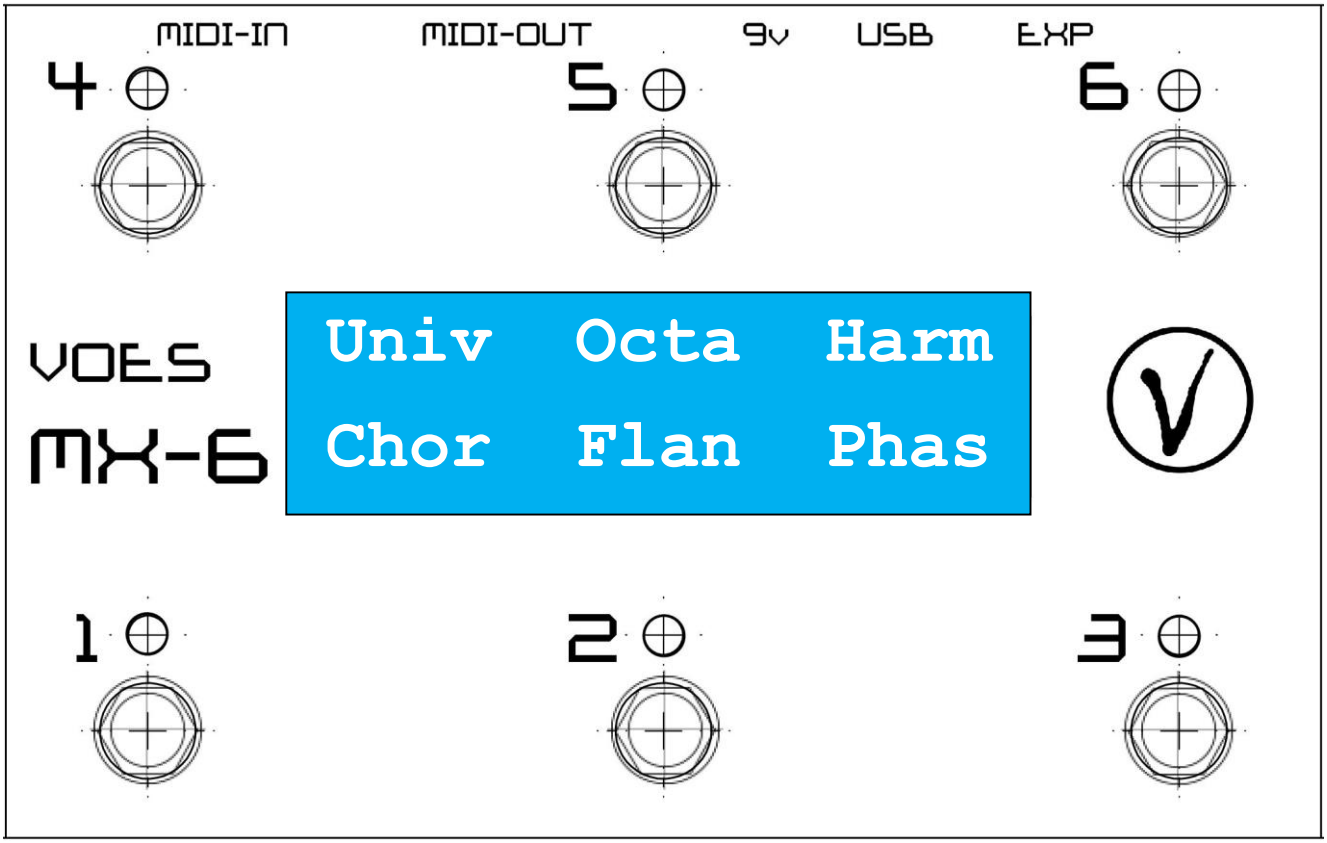
Voes Midi Controllers
MX-6x6 Editor
user manual



1 Introduction

This 6x6 editor and firmware is an alternative for the conventional MX firmware. This 6x6 firmware will only work on the **MX-6**.

This 6x6 firmware is made for analog pedalboards, where many Midi devices need to be controlled. Of course it can be used in other setups.

At any time you can change back to the *normal* MX firmware.

Features MX-6:

- 7-pin MIDI out.
- Power: 9-12v AC/DC 1A (2.1mm connector or Midi-7) *(power supply not included).*
- USB connection for easy-to-use editor.
- 2x16 Big LCD display.
- 1x Expression input.
- Auto engage/disengage Exp. Pedal.
- Expression input is suited for Expression Pedal or External Switch (SW-2x).
- 6 hardware buttons with 7 color LED (green, red, blue, purple, yellow, turquoise, white).
- 6 Pages with each 6 buttons.
- Each button has 2 layers: *normal press* and *long press (to access a different page)*.
- 6 commands for each button.
- 22 available commands: none, Preset (PC), CC On/Off, CC Off/On, CC On only, CC On only LED, CC Off only, CC value, CC Plus, CC Min, , Expr CC swap, Auto On CC swap, IA On/Off, All Other LEDs Off, Preset Down/Up, Favorite Preset, Scene/Snapshot, Scene/Snapshot Down/Up, Scene/Snapshot A/B, Page.
- Advanced commands: Steps and Groups.
- Dimensions approx.:
  19 cm x 12 cm x 3 cm *(7.24" x 4.73" x 1.18")*

Installation & Connecting

2 Installation

2.1 Windows

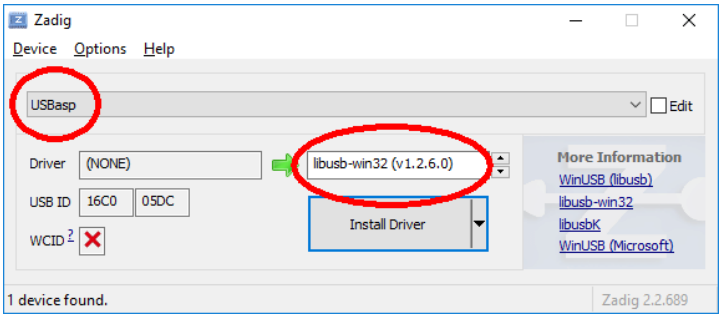
Download the latest editor, driver, firmware and manual on voes.be/downloads.

Unzip the file.

Connect the **MX-6** to your computer (Windows 7 or higher).
Let Windows detect the device (it will report driver not found). If a window pops up asking to search for driver, just close it or click *Cancel*.

Run **Voes MX-driver** (located in the map *manual and driver*). Do not update if asked.

Make sure **USBasp** and **libusb-win32** are selected. *(If **USBasp** is not in the dropdown list, enable **List All Devices** in the Options Menu.)*

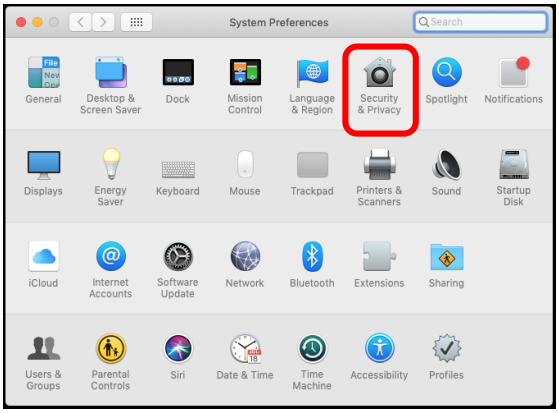


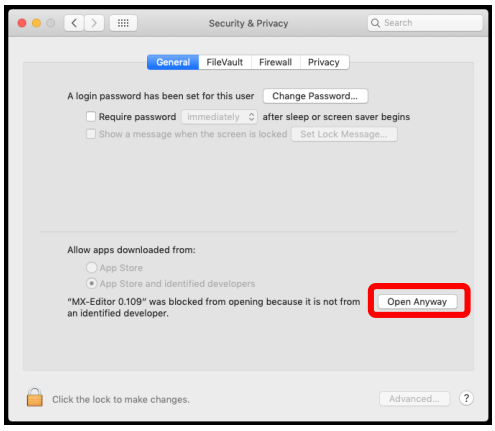
Start **Voes MX-6x6 Editor.**
If you get an error, check the *Voes Driver Problem* document (located in the folder *manual and driver*).

2.2 Mac

Download the latest editor, firmware and manual on voes.be/downloads.

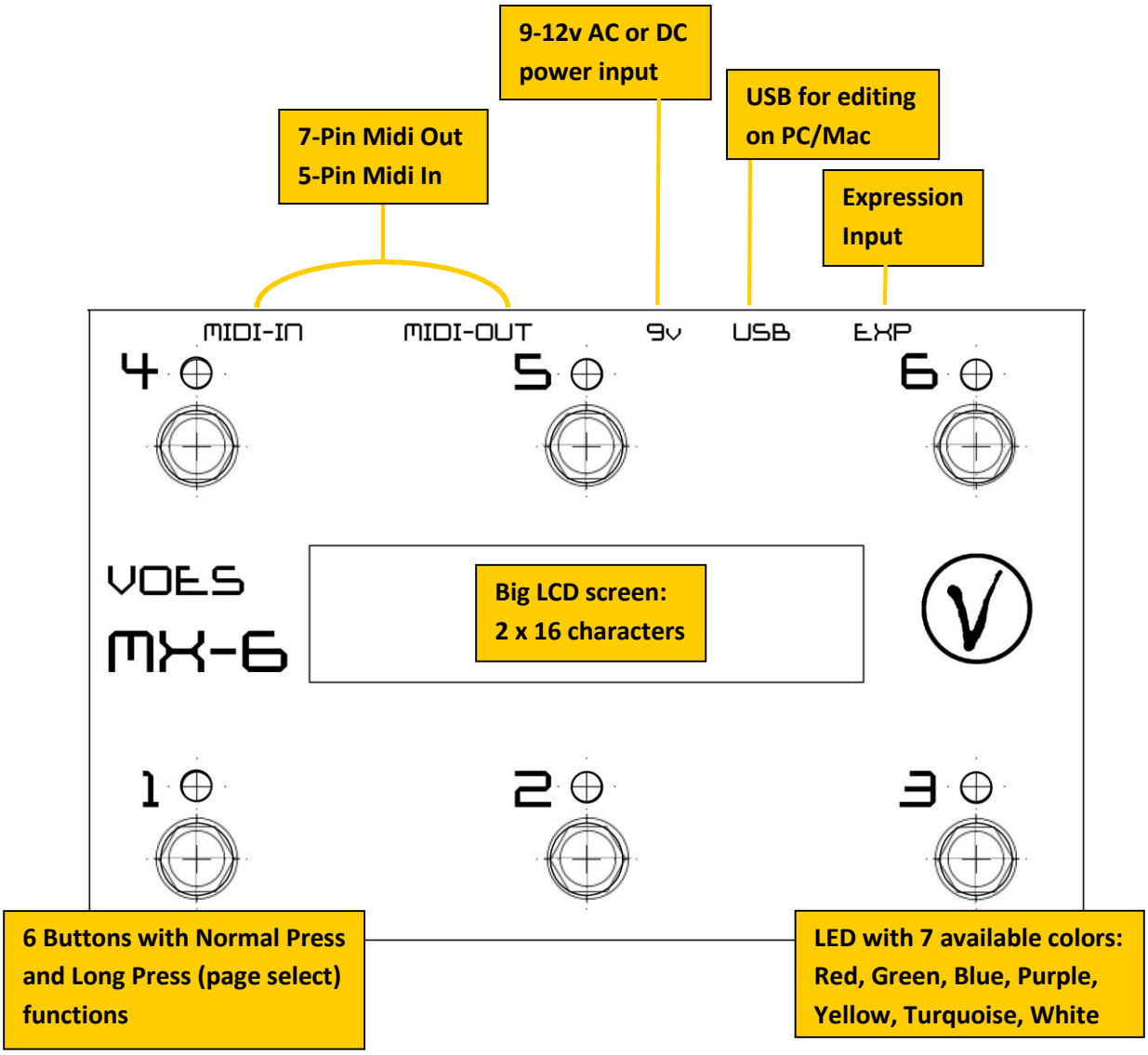
Unzip the file and open the editor. If Mac OS blocks it, you need to unblock this. Open **System Preferences**, select **Security & Privacy** and click **Open Anyway**.





That's it. Now you can Read and Write from/to your MX-6.

3 Overview


9-12v AC or DC power input
USB for editing on PC/Mac
7-Pin Midi Out
5-Pin Midi In
Expression Input
MIDI-IN
MIDI-OUT
9v
USB
EXP
4
5
6
VOES
MX-6
Big LCD screen:
2 x 16 characters
1
2
3
6 Buttons with Normal Press and Long Press (page select) functions
LED with 7 available colors: Red, Green, Blue, Purple, Yellow, Turquoise, White

Concept

4 Concept

Pages, Buttons, Commands, Types & IA's:

6 **Pages** are available.

Each **Page** has **6** Physical **Buttons**.

Each **Button** has up to 6 **Commands**.

Each **Command** can choose out of **22 Types**.

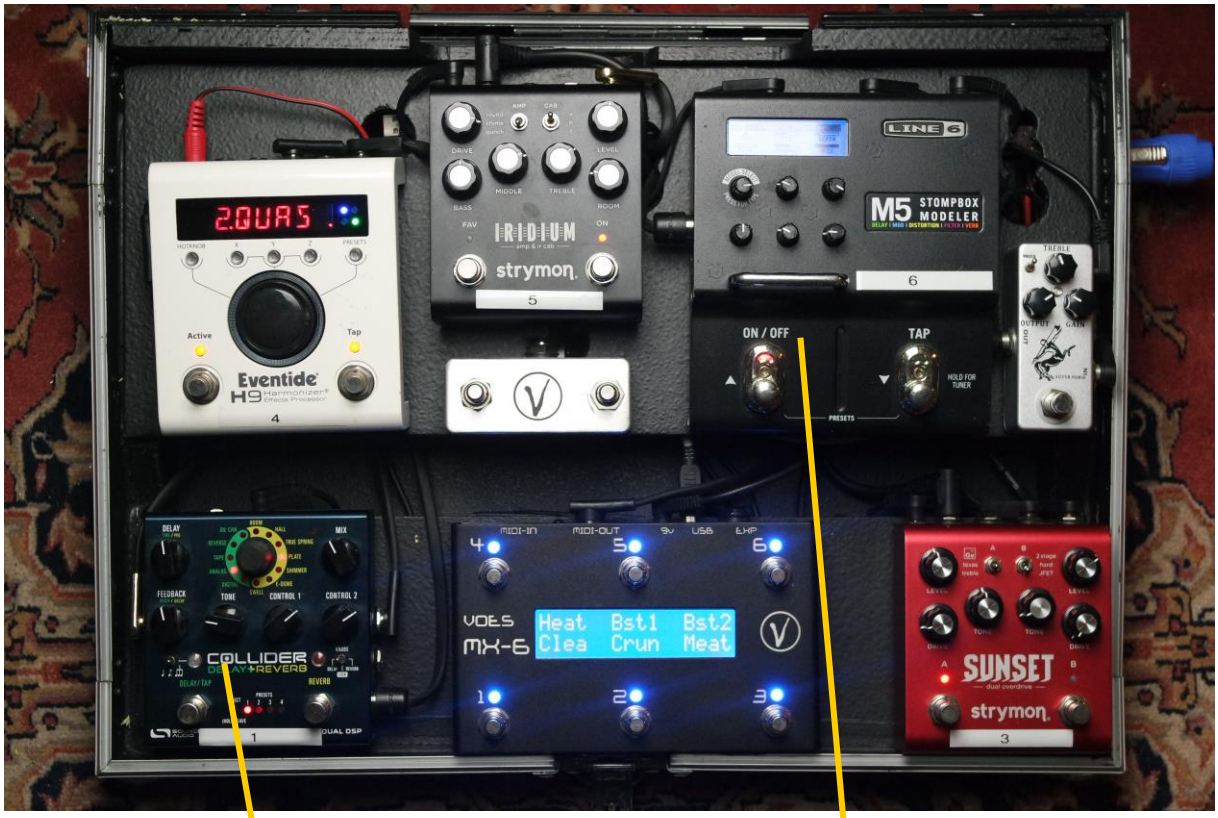
An example to demonstrate the concept. The pedalboard below has 5 different Midi devices:

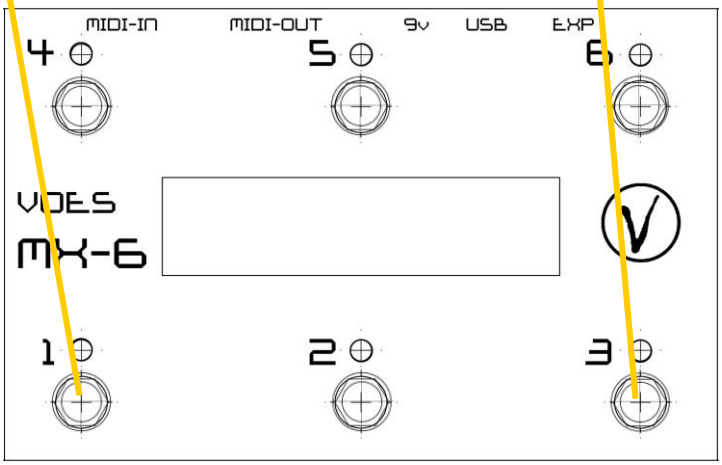
- Source Audio Collider Delay+Reverb™
- Eventide H9™
- Strymon Iridium™
- Line6 M5™
- Strymon Sunset™

4.1 Long press: how it works

Long press button 1-6 to switch to page 1-6. In this example:

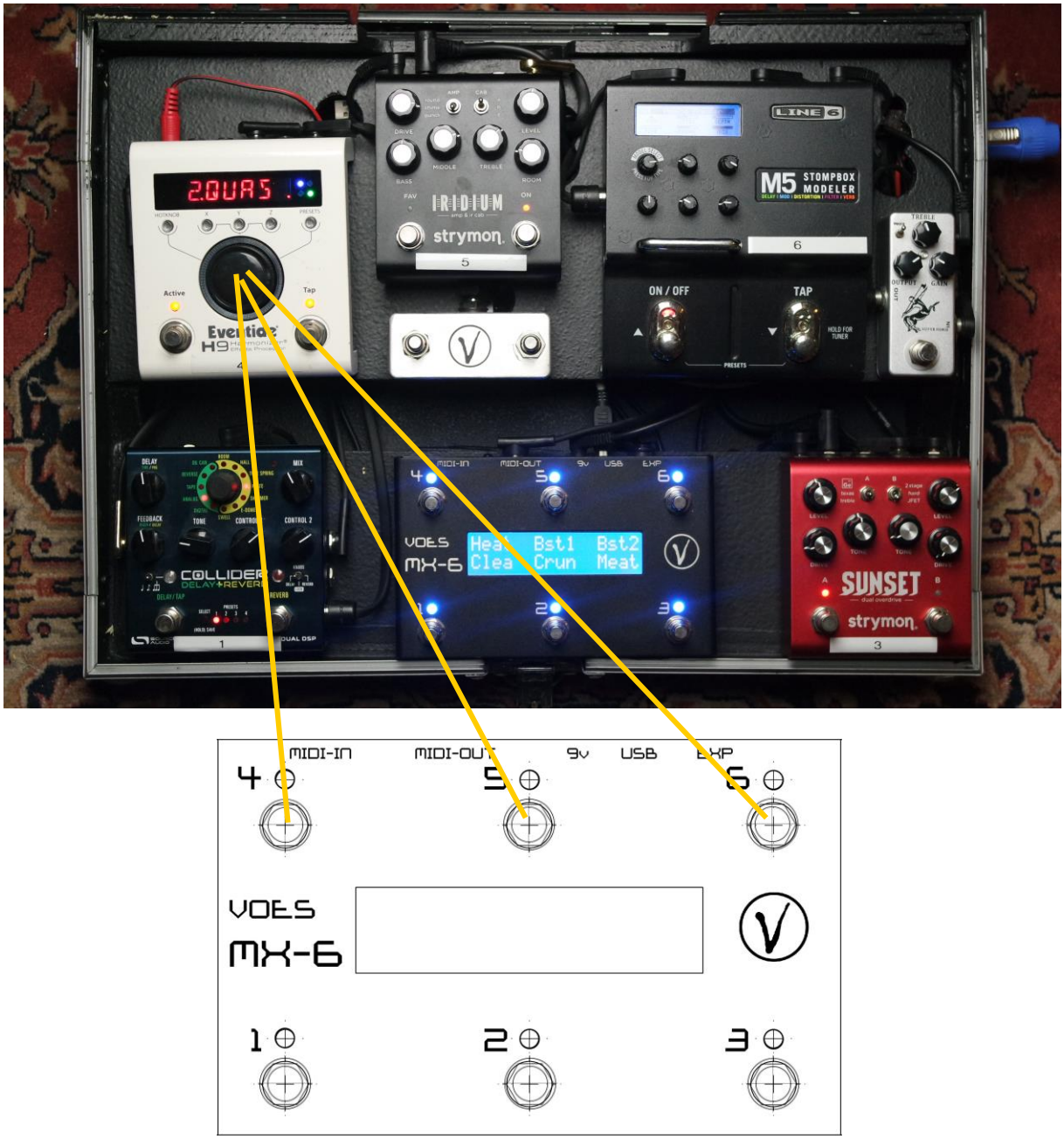
- Long press button 1 → Page 1: control Source Audio Collider Delay+Reverb™
- Long press button 3 → Page 3: control Line6 M5™





Different pages can control the same Midi device:

- Long press button 4 → Page 4: control Eventide H9™ presets 1-6
- Long press button 5 → Page 5: control Eventide H9™ presets 7-12
- Long press button 6 → page 6: control Eventide H9™ Looper



A page can control several Midi devices:

- Long press button 2 → Page 2: control Source Audio Collider Delay+Reverb™ , Strymon Iridium™ and Strymon Sunset™

4.2 Long press: visual Name and LED

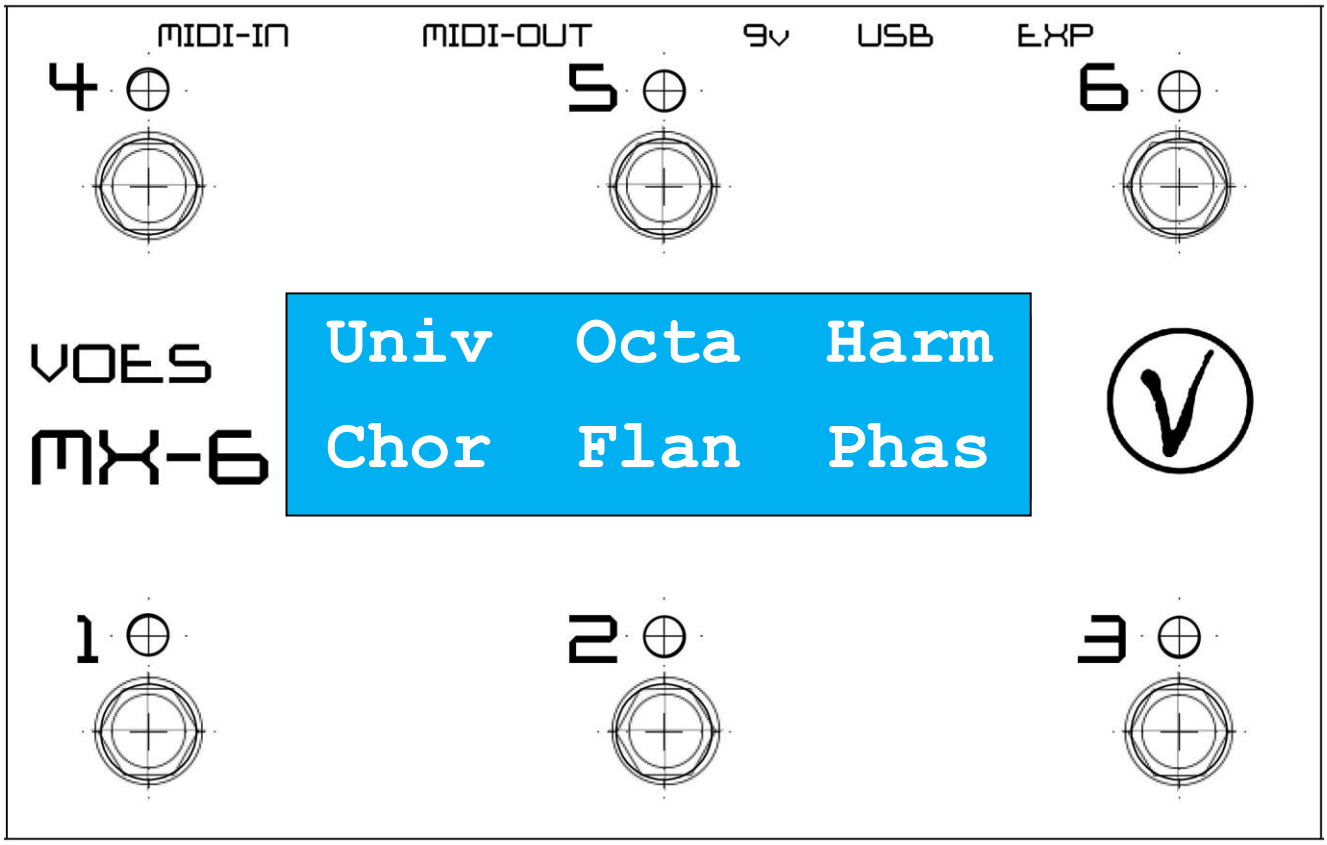
Once a page is selected, the page name is briefly shown in the LCD and all LEDs will turn to a chosen OFF color, to get a visual confirmation you changed the Page.

All buttons will change in command and the LCD will show the button names of that page.

In this example, long press button 3 will activate Page 3 (which controls the Line6 M5™).

Normal press of this page (3) in this example, will do a PC on the Line6 M5™ to get following FX:

- Normal press button 1 → PC1 Chorus
- Normal press button 2 → PC2 Flanger
- Normal press button 3 → PC3 Phaser
- Normal press button 4 → PC4 Univibe
- Normal press button 5 → PC5 Octaver
- Normal press button 6 → PC6 Harmonizer



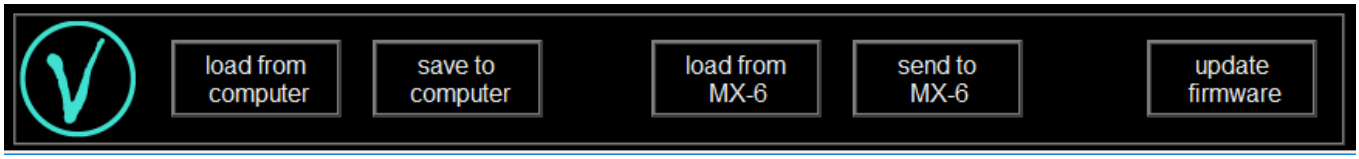

Editor

5 The Editor - Overview

Instead of using precious resources for editing on the hardware, which is a PITA to use, we thought it would be better to give you an excellent easy to use Editor and extra features.

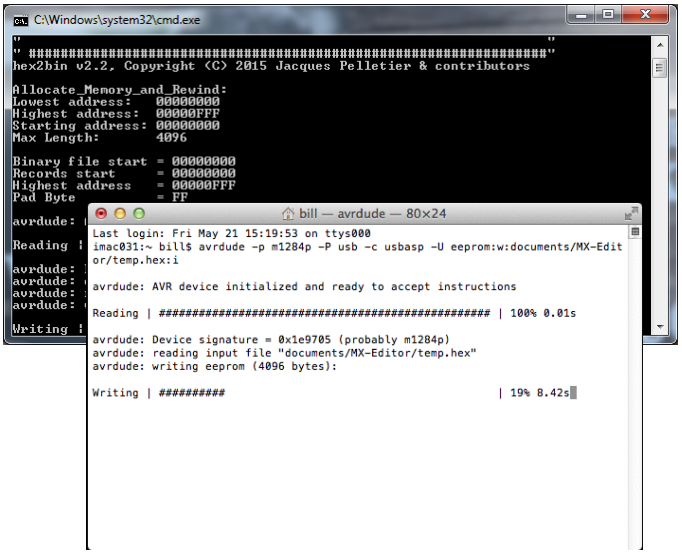
Select (main) tab Buttons, Expr. Input or Global.

6 Load/Save/Update



You can save and load settings from/to computer and from/to the **MX-6**.

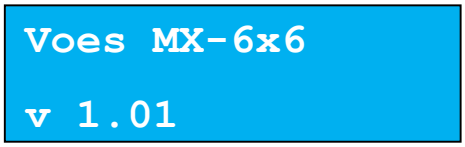
When sending to the **MX-6** a popup window will appear so you can follow the writing progress.



6.1 Updating firmware

Most recent firmware and software can be found on www.voes.be

Booting the **MX-6** will display the installed firmware version for 1 second:



Another way to find the firmware version is clicking on the logo in the left bottom corner. An info window will pop up with the editor version. If data is loaded from the **MX** the firmware version is also shown.

7 Tab Buttons

7.1 Page 1-6

The left panel shows the 6 available Pages.

Selecting a Page will display all the button names of that page on the blue LCD display.

Clicking on a button will show details info in the right panel.

You can change the Page name and the Page Off Color.

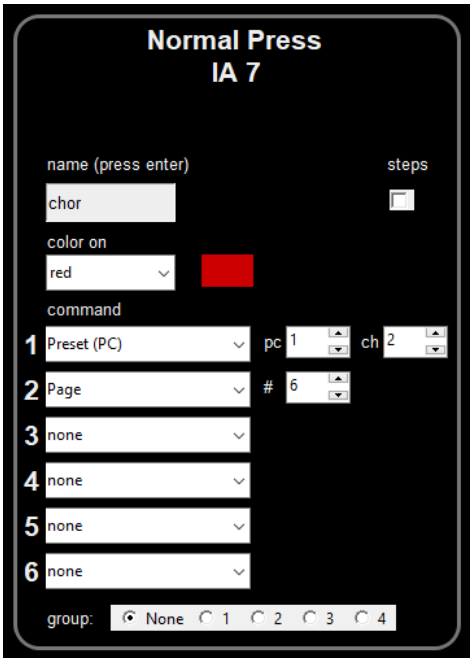
> ***Right Mouse Button and***
>
> ***Drag & Drop*** *will swap buttons.*
>
> ***Drag & Drop + CTRL*** *will copy a button.*
>
> ***Drag & Drop + SHIFT*** *will copy only the color of the button.*

7.2 Buttons

Clicking on a button will display the button commands on the left panel.

7.3 IA number and IA Name

Instant Access (IA) number and name are shown here.

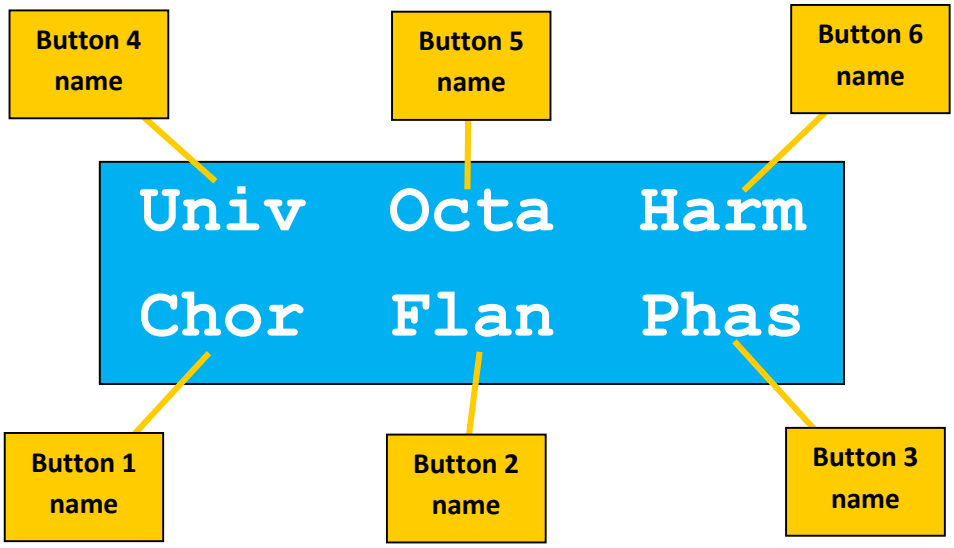


- Page 1: Button 1-6 → IA 1-6
- Page 2: Button 1-6 → IA 7-12
- Page 3: Button 1-6 → IA 13-18
- Page 4: Button 1-6 → IA 14-24
- Page 5: Button 1-6 → IA 25-30
- Page 6: Button 1-6 → IA 31-36

Here you can program up to 6 commands per button. *(see section 8.7)*

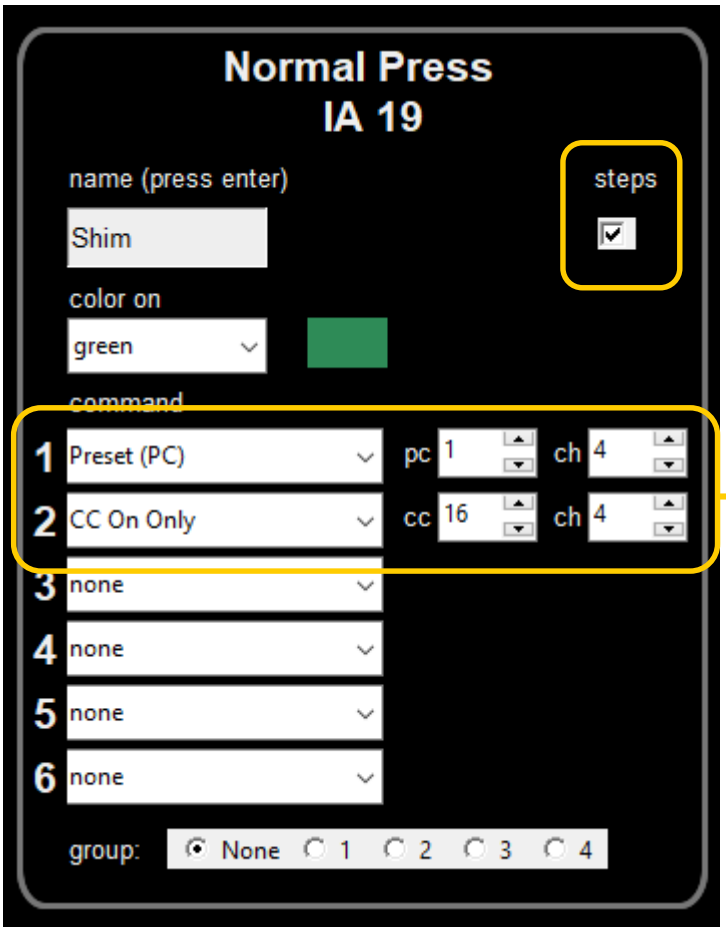
7.4 Button Name

Each button can be named (4 characters max). All Button names of the active Page are shown on the LCD.



7.5 Steps

When checked, each press will execute only **one** command. When using groups, steps is not available.



E.g. on the left:

first press	***1 PC1***
second press	***2 CC on only 16***
third press	***1 PC1***
fourth press	***2 CC on only 16***
....	

Reset Steps will reset all steps to the first step after 1 second of inactivity. This function can be found in *Global Settings (see section 10*).

The LED color will change on each step in this order: **Green**, **Red**, **Blue**, **Purple**, **Yellow**, **Turquoise**.

7.6 LED Color

Choose the LED color of the activated button. You can choose between the colors **Green**, **Red**, **Blue**, **Purple**, **Yellow**, **Turquoise** and White. The selected color will also be shown on the overview panel.

7.7 Command

There are 6 **Commands** available per Button. Each command can have one of these **22 Types:**

None, PC (preset change), CC On/Off, CC Of/On, CC On Only, CC On Only LED, CC Off Only, CC Value, CC Plus, CC Min, Expr CC Swap, Auto On CC Swap, IA On/Off, All Other LEDs Off, Preset Down/Up, Favorite Preset, Scene/Snapshot, Scene/Snapshot Down/Up, Scene/Snapshot A/B, Page.

None

None does nothing! If steps is active, this command will be skipped.

Preset (PC)

Preset (PC), also known as Program Change, transmits a program change **PC** on a midi channel **Ch** (1-16).

Depending on **Preset Offset** in *Global Settings (see section 10*), the PC range is 0-127 or 1-128.

CC On/Off

ON sends a control change **CC** (1-127) on **Ch** (1-16) with **Value 127** (maximum).

OFF sends exactly the same **CC** with **Value 0** (minimum).

CC Off/On

CC Off/On is the opposite of the previous type **CC On/Off**.

ON sends a control change **CC** (1-127) on **Ch** (1-16) with **Value 0** (minimum).

OFF sends exactly the same **CC** with **Value 127** (maximum).

CC On Only

Sends always **Value 127** on each press on **CC** (1-127) on **Ch** (1-16). This command is ideal for Tap-tempo.

The corresponding LED will blink briefly.

CC On Only LED (only available as first command)

Sends v**alue 127** on every press on **CC** (1-127) on **Ch** (1-16). The corresponding LED will toggle On/Off.

CC Off Only

Sends always **Value 0** on each press on **CC** (1-127) on **Ch** (1-16).

The corresponding LED will blink briefly.

CC Value

In cases where other CC values than 1 (minimum) or 128 (maximum) are needed**.**

Set CC number (1-128) and Data value (1-128). Midi Channel in **Primary External Device** in *Global Settings* (*see section 10)* is used*.*

The corresponding LED will blink briefly.

CC Plus / CC Min

Sends a different CC value on each push.

Set CC number (1-128) and value (0-127) that needs to be added or subtracted on each push.

In *Global Settings* (*see section 10)* in **Misc** set "CC Start +/- value". Midi Channel in **Primary External Device** is used*.*

Expr CC Swap

Expr CC Swap is a nice feature to change your Exp. Input, e.g. from Wah to Volume.

ON replaces the **CC** and **Ch** of the regular Expr settings.

OFF returns to the regular settings found in *Global Settings (see section 10*).

Auto On CC Swap

Auto On CC Swap can be useful in some situations. For example you could have 3 FX (wah, rotary, phaser). You want to control freq, speed and depth of each with one pedal, and you are not going to use them together. By setting freq, speed and depth to the same controller (**Expr Pedal**), wah, rotary and phaser would all change. Using the Auto On CC Swap command would only turn ON the FX you want.

ON replaces the **CC** and **Ch** of the regular Expr Auto On settings.

OFF returns to the regular settings found in *Global Settings (see section 10*).

IA On/Off

Turns another IA On or Off. You can choose all 36 IA's (6 Buttons x 6 Pages).

Caution! *You can create an endless loop. E.g. Button 1 turns Button 2 On and Button 2 turns Button 1 On.*

All Other LEDs Off

In some cases, there might be a conflict with the visual LEDs On/Off layout and the actual On/Off state of the connected musical instrument. Using the **All Other LEDs Off** command can solve this problem.

Preset Down / Preset Up

Preset Down/Up decreases/increases the current preset number. This function is often not included in other Midi Controllers.

Default start preset and Midi Channel is defined in *'Misc. – Start Preset'* and *'Primary External Device - Midi Channel'* in *Global Settings (see section 10).*

Favorite Preset

Jump to your favorite preset and go back to you previous selected preset.

Scene/Snapshot (only available as first command)

The **CC#** used for **Scene/Snapshot** is selected in 'Scenes CC#' on the selected *'Primary External Device'* in *Global Settings (see section 10).*

In case of "Axe-Fx II", "Axe-Fx III", "FM3", "FM9" or "Quad Cortex" the command selects a **Scene.**

In case of "HX Stomp" the command selects a **Snapshot.**

Scene/Snapshot Down / Scene/Snapshot Up (only available as first command)

Scene/Snapshot Down/Up will decrease/increase the current Scene or Snapshot. This command can be used with all *Fractal Audio Systems* ™ devices, the *Neural DSP Quad Cortex*™ and the *Line 6 HX Stomp* ™.

Scene/Snapshot A/B (only available as first command)

Switches between 2 Scenes/Snapshots. Midi channel is selected in 'External Device' in *Global Settings (see section 10).*

Page

Selects a different page (1-6).

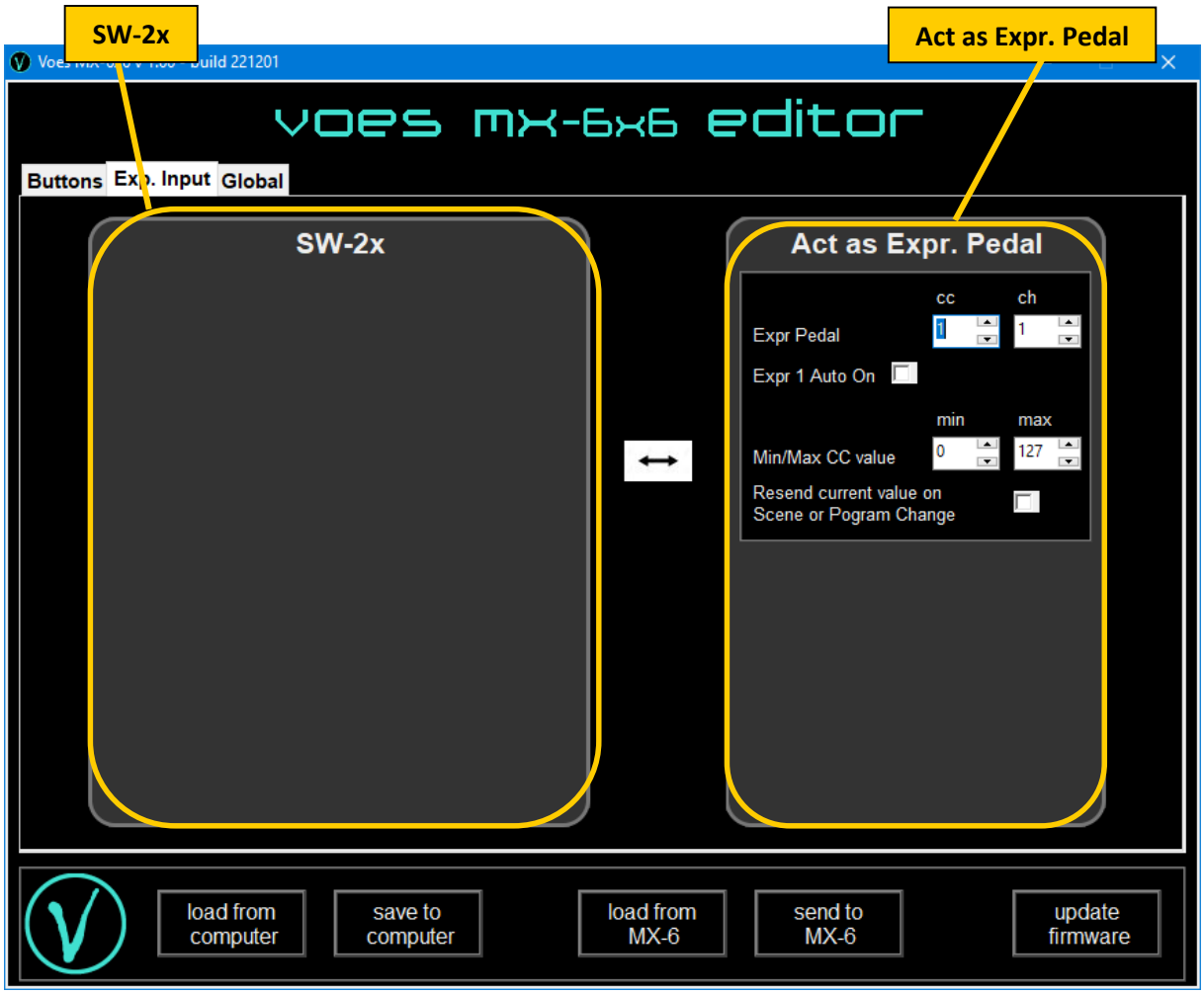
7.8 Group

You can group buttons in to **4** different button groups. This will link all buttons of this group with each other.

When a button is pressed, which is part of a button group, all other buttons of that group will be turned OFF and the selected button will be activated. It is a very nice feature if you have FXs that are similar but never used together (like different drives) and this feature will avoid tap-dancing.

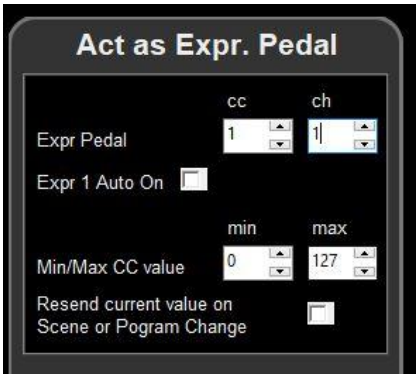
When using groups, **steps** are not available because it can cause conflicts.

8 Tab Exp. Input



The Exp. Input can be set up as input for an **Expression Pedal** or to control the external **SW-2x** switches.

8.1.1 Act as Expression Pedal



Set **Expr Pedal CC** (1-127) and midi channel **Ch** (1-16). If necessary, calibrate your pedal! *(see section 15).*

Set **Expr Auto On**: E.g. Wah Freq is controlled with CC 1, Wah On/Off is controlled with CC 85.

Instead of sacrificing a button to turn the Wah On/Off you can use the

Auto On feature.

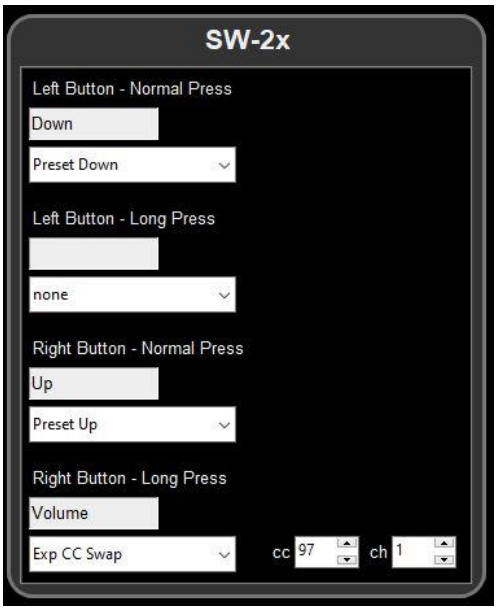
Set Expr Pedal CC to **1** and set Expr Auto On **checked** and to CC **85**.

Moving Expression Pedal 1 higher than 5%, turns the Wah On. When it is below 5% it turns the Wah Off.

Min/Mac CC value
Normally CC Min and Max values are 0 and 127. In some situations you want a different Min and/or Max value. For example a Volume parameter of your Midi device. When used as a boost, you don't want a Min value of 0, but rather a Min Value of 75.

Resend current value on Scene or Program Change: When checked, the current Expr1 Value will be send on a Scene change or a Program Change.

8.1.2 SW-2x

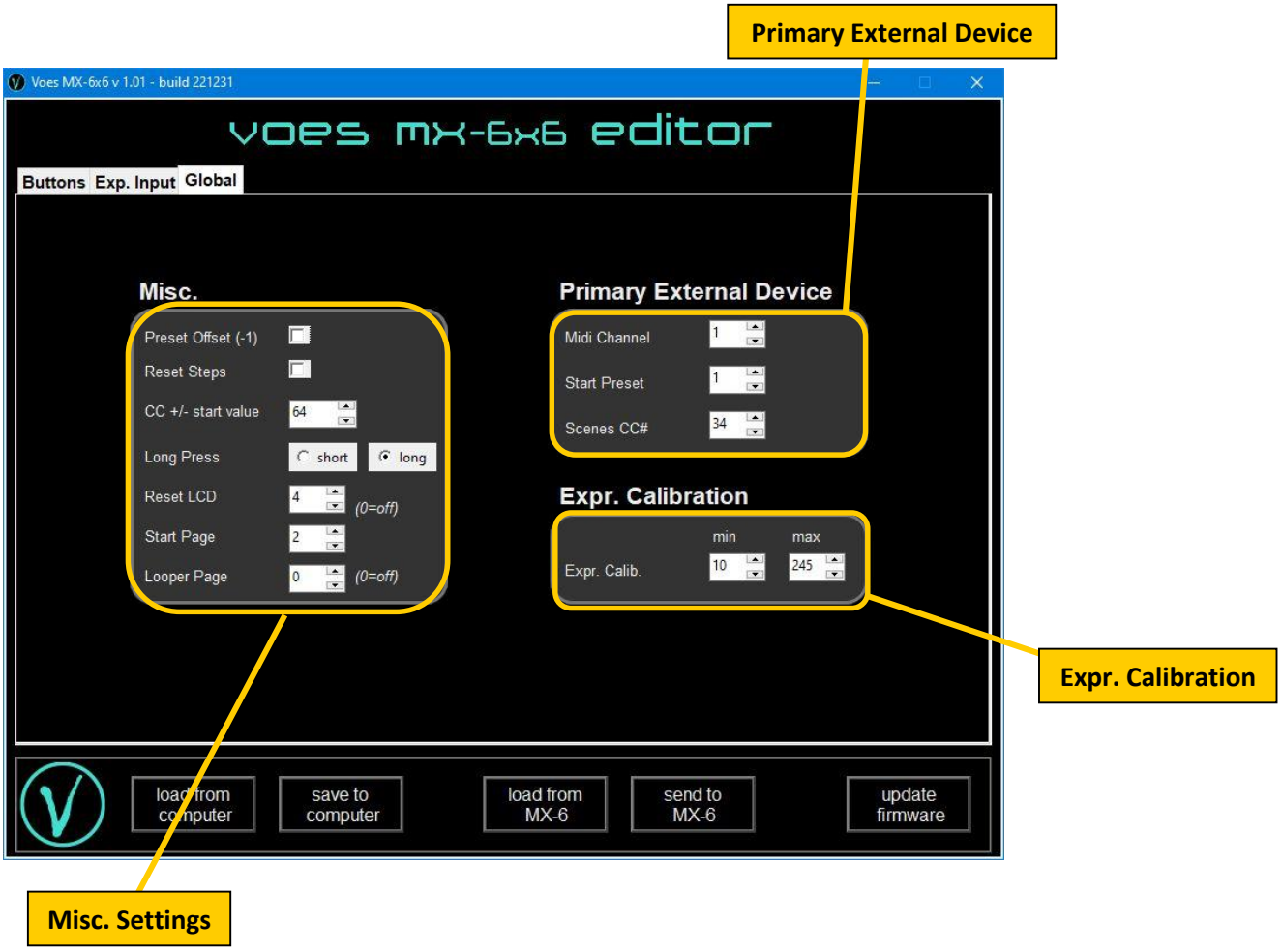


When a SW-2X is connected to the **Exp. Input**, you have 2 extra buttons, each with Normal Press and Long Press commands.

Almost all commands available for regular buttons can be used.

Long Press is type Trigger-Only.

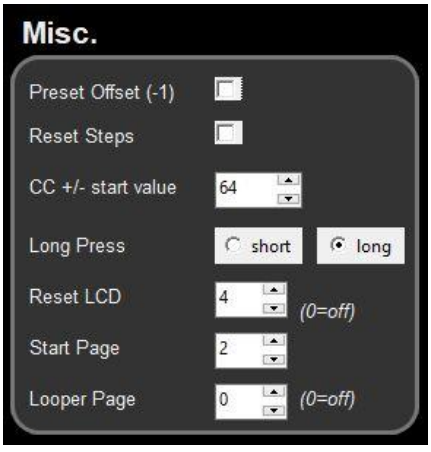
9 Global



9.1 Misc. settings

9.1.1 Preset Offset

Set PC range to 0-127 (checked) or 1-128 (unchecked).



9.1.2 Reset Steps

If checked, steps will return to the first step after 1 second of inactivity.

9.1.3 CC +/- start value

This is de start CC value for the commands **CC Plus** or **CC Min**.

9.1.4 Long Press

Choose between a short or long time to engage Long Press *(Page Select)*.

9.1.5 Reset LCD

On rare occasions the LCD might show strange letters (see image). This is a power issue. Whenever there are power fluctuations, the LCD will start with this behavior. Try another power adapter and see if this helps.

Alternatively you can adjust the reset refresh rate of the LCD. 1 will reset the LCD after 1 button click. 10 after 10 button clicks. 0 will turn the resetting off. Downside of resetting is a short flickering of the LCD.

9.1.6 Start Page

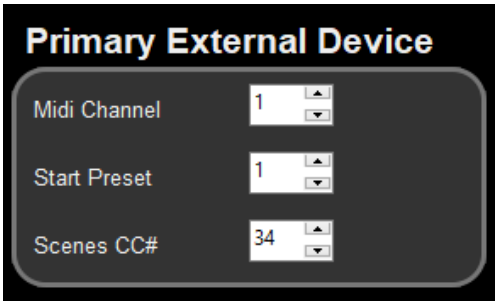
Selects the Page (1-6) when booting up.

9.1.7 Looper Page

When you define a Looper page, long press is disabled on all buttons on this page. This will result in a faster button response because commands will be processed on button press and not on button release, which is crucial for looper commands. Keep in mind that to get back to another page you need to program a command "PAGE" on one of the buttons of the Looper Page.

9.2 Primary External Device

This is your most important Midi Device.



9.2.1 Midi Channel

Specify the MIDI channel of your most important Midi Device. This is used in the commands **CC Value, CC Min, CC Plus, Preset Up**, **Preset Down, Favorite Preset, Scene/Snapshot, Scene/Snapshot Down, Scene/Snapshot Up** and **Scene/Snapshot A/B**.

9.2.2 Start Preset

Select **Start Preset** on boot up. This will be added to the preset number you select (only on the Midi Channel of your primary external device).

Example: If you set Start Preset to **22**, all presets will be added by **21** (22-1).
So if you select Preset 1, Midi PC 22 will be send. On the MX-6 however Preset 1 will be displayed.

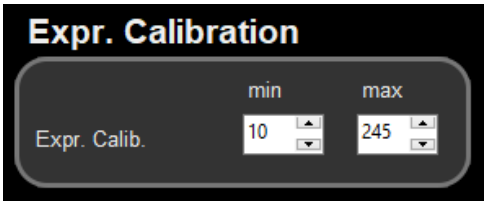
9.2.3 Scenes CC#

Some Midi devices use Scenes or Snapshots. Set the CC# accordingly.

- *Fractal Audio Systems Axe-Fx II (XL+), Axe-Fx III, FM3, FM9*™: **CC# 34**
- *Line6 HX Stomp*™: **CC# 69**
- *Neural DSP Quad Cortex*™: **CC# 43**

9.3 Expr. Calibration

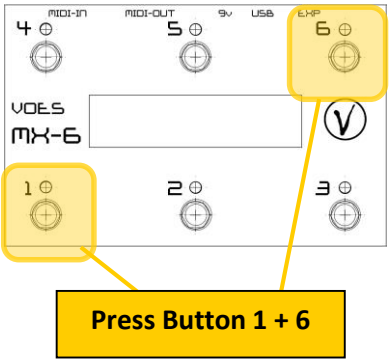
Mostly there is no need for Expression Pedal Calibration, but if needed you can adjust the calibration values here.



Calibration is in the range of 0-255. Typical, minimum and maximum are not 0 or 255.

Alternatively you can calibrate using the hardware, follow these instructions:

Step 1
Enter Calibration Menu



Step 2
Move Expr. Pedal

Step 3
Save and Exit Calibration Menu