



User Manual

Lab4Music

Rev. 1
OS 5.04

*Thank you for purchasing SIPARIO.
With a wish that can accompany you in the music and in time.
Lab4Music Staff*



SAFETY INFORMATION

Do not open the instrument.

Any unauthorized opening will void the warranty.

Use only standard USB power supplies or a common USB socket for PC. Do not wet the device, do not immerse in water.



This product should be disposed of in an appropriate collection point.

Do not dispose of with household waste.



Declares that the product is in conformity with the provisions of the following harmonized reference rules and european directives:

EN 61000-6-1	2007_10
EN 61000-6-3	2007_11
2004/108/CE	electromagnetic compatibility
2011/65/CE	RoHS 2



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.

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

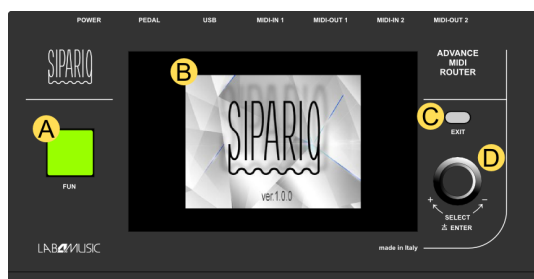
Front Panel

A: FUN backlit button dedicated to the change of sound within a scene.

B: Display touch 320 x 240.

C: EXIT button used to exit a screen or deny an operation.

D: Rotary encoder for selection by rotation and confirmation by pressure.



Rear Panel

A: MIDI IN/OUT ports.

B: USB port used for updating firmware, for saving / restoring the scenes, and for send and receive MIDI data.

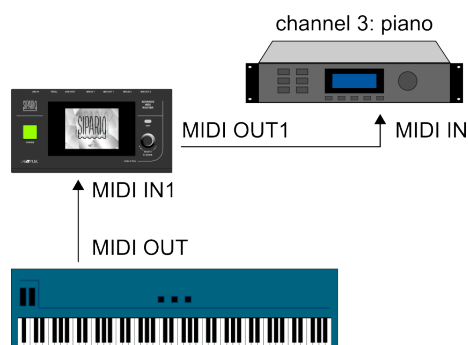
C: Input jack for pedal (type sustain).

D: USB port used for POWER ONLY +5V. Connect the device to a USB PC port type A or an alternative to a standard USB power adapter.



Let's Start

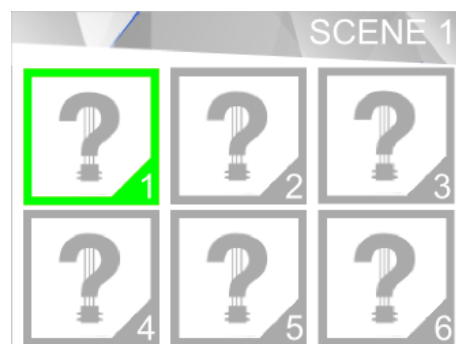
Connect the port MIDI OUT of a master keyboard to the input MIDI IN1 of SIPARIO. Connect the output MIDI OUT1 of SIPARIO to the input MIDI IN of a sound source like expander or keyboard.



Set a sound to the sound source, for example a piano, so that it responds to MIDI channel 3. Select, using the encoder, the menu SCENES.



Select from the list *Scene 01* and confirm by pressing the encoder. Stand on the first PERFORMANCE empty, first element indicated by a question mark and select it by pressing the encoder.

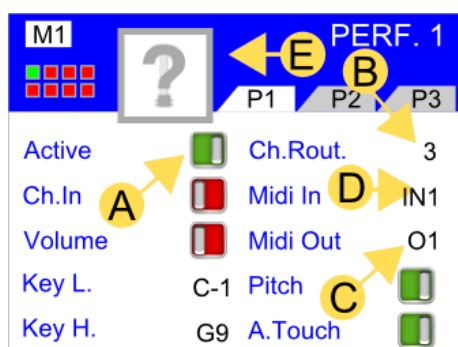


A: Select the *Active* parameter and set it to ON.

B: Select the parameter *Ch. Rout.* and set it to 3 (MIDI channel of the piano sound on the expander).

C: Set parameter *Midi Out* to O1 (MIDI OUT port where is connected the expander).

D: Set parameter *Midi In* on IN1 (MIDI INPUT port where is connected the master keyboard).



E: To change the icon representing the PERFORMANCE touch the question mark icon and select from the list the piano icon. To save, press EXIT and confirm with the encoder. Try playing ... you will hear the piano sound!



Layer

To add to the piano sound previously created, a layer, with for example a synth pad, set the expander to sounds such as a pad on the MIDI channel 1. Surfing SIPARIO until the page parameter of the PERFORMANCE PIANO just created. Each PERFORMANCE has up to 8 MAPS, to scroll the MAPS select M1 and turn the encoder.



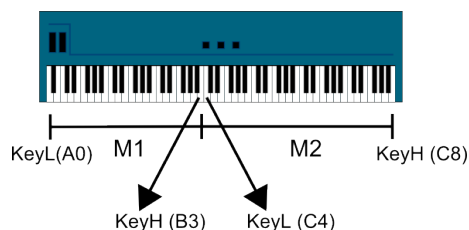
Position yourself on the MAP 2 (M2) and activate the MAP, setting parameter *Active* ON, the MIDI output on *O1* and *Ch. Rout.* on 1. Try playing ... you will hear the sound of piano + pad!

To adjust the volume, use parameter *Volume* of single MAP!

Each PERFORMANCE is organized in 8 MAPS. Each MAP is capable of handling signals from the MIDI inputs IN1, IN2 or USB, filter and remap them to the exits MIDI OUT1, OUT2 or USB. To obtain the layer two sounds you can alternatively set the two timbres to the same channel on the sound source and use a single MAP that directs that channel!

Split

To get the split zones, modify the parameters *KeyL* and *KeyH* of the individual MAPS. In this way the single MAP will sound only in the area between *KeyL* e *KeyH*.



 To set the faster the key range, select *KeyL* or *KeyH* and press the corresponding button on the master keyboard!

The Scenes

SIPARIO has preinstalled 40 SCENES initialized and numbered from 1 to 40 (*Scene 01*, *Scene 02*, ...). Every single SCENE is a song to play!



SCENES

To select the list of SCENES go to the menu SCENES and confirm by pressing the encoder. To change a SCENE, tap and hold the screen at one entry in the list of SCENES until the appearance of the menu.



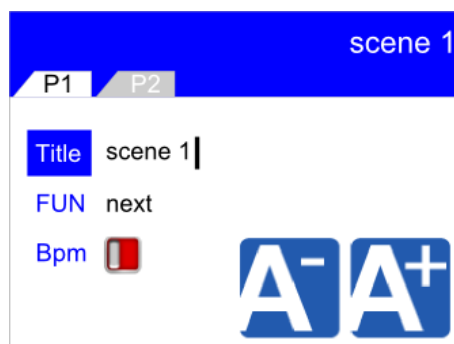
EDIT

To scroll through the menu items, rotate the encoder. To go to change the SCENE, select and confirm the item EDIT. To initialize the SCENE select and confirm the item DELETE.



DELETE

The section EDIT SCENES is structured in two pages P1 and P2.



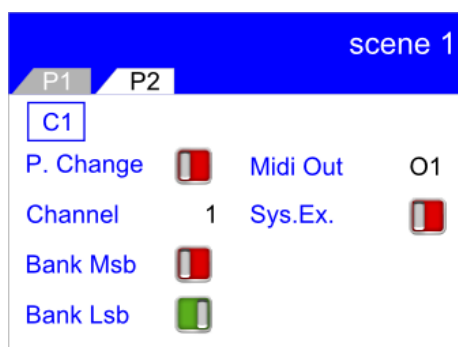
Title: title of the SCENE, once selected, act with the encoder to change the letter, use the A+ and A- for, respectively, add and delete a character.
FUN: [page, next, back, start/stop] function backlit button.

- page: when pressed, on the screen of the SCENE, allows progress of page.
- next: if pressed, in the screen of the SCENE, allows progress forwards in sequence the selection of the sound.
- back: if pressed, in the screen of the SCENE, allows progress backwards in sequence the selection of the sound.
- start/stop: if pressed, in the screen of the SCENE, allows to start / stop MIDI sequences.

Bpm: [Off, 40 $\longleftrightarrow$ 300] if active is generated a MIDI CLOCK message and sent to all the outputs with a frequency indicated from the parameter value.

In the screen of the SCENE, you can send NOTE OFF to the devices to reset them by holding button FUN for more that 3 seconds. It is like MIDI PANIC function.

On page 2 (P2) there is the possibility to send up to 5 program change (c1 $\iff$ c5) on the selection of the SCENE. In this way it will be possible to address up to 5 external devices to initialize them, so that they are ready with the selected sounds.



P. Change: [Off, 0 $\iff$ 127] handles the sending or not the program change. If this parameter is inactive no data is sent even if the other parameters are measured.

Channel: [1 $\iff$ 16] MIDI channel sending program change.

Bank Msb: [Off, 0 $\iff$ 127] MIDI values of BANK MSB associated with the program change.

Bank Lsb: [Off, 0 $\iff$ 127] MIDI values of BANK LSB associated with the program change.

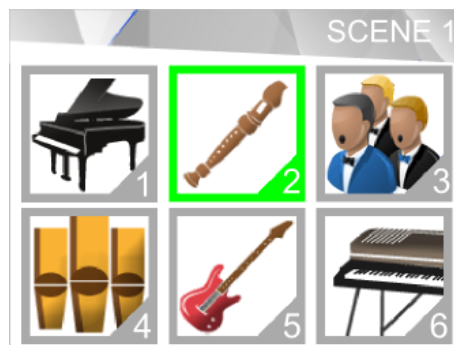
Midi Out: [o1, o2, USB] MIDI output port where to direct the program change, o1 $\rightarrow$ MIDI OUT 1, o2 $\rightarrow$ MIDI OUT 2, USB $\rightarrow$ USB socket.

Sys.Ex.: [Off, Sys.Ex1 $\iff$ Sys.Ex30] number of *System Exclusive* message you want sent to the SCENE selection (see paragraph Sys.Ex.).

C: [c1 $\iff$ c5] to send multiple program changes/Sys.Ex. select c1 and turn the encoder to change the value.

The Scene

The single SCENE is organized in 5 pages of 6 PERFORMANCES for a total of 30 PERFORMANCES.



Each PERFORMANCE is represented by an icon! You can go from a PERFORMANCE to another in several ways:

- Touching the display.
- Pressing the button FUN if the FUN has been programmed to the *next* value (green color).
- By a foot pedal connected to the sustain-type PEDAL of SIPARIO.

We can freely hold a chord on the first sound, select the second sound, play, and then release the chord!

If the FUN button is programmed with the value *Page* (red color) it will advance to the next page on pressure!

Also you can point directly to a PERFORMANCE sending a program change from 1 to 30 on one of the two MIDI inputs.

To select a performance you can connect a MIDI pedals on a SIPARIO MIDI INPUT or on a MIDI THRU of a master keyboard, and send a program change (eg: prog change 1 select PERFORMANCE 1, see chapter SETTINGS).

Touching and holding the display at a PERFORMANCE a menu will appear with the following functions: copy, paste, insert, cut and delete, useful for organizing the sequence of sounds.

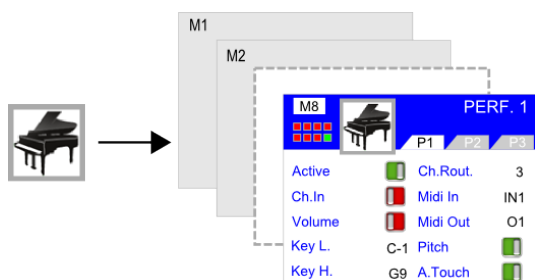
- **Copy:** Copies the PERFORMANCE in memory.
- **Paste:** Overrides the PERFORMANCE previously copied to the selected location.
- **Insert:** Inserts the PERFORMANCE previously copied to the selected location and moves the others PERFORMANCE of a position.
- **Cut:** Deletes the PERFORMANCE selected shifting the others PERFORMANCE of a position.
- **Delete:** Initializes the PERFORMANCE selected.

 *Holding the PEDAL connected to SIPARIO for more then 3 seconds you can pass through the next SCENE present in list.*

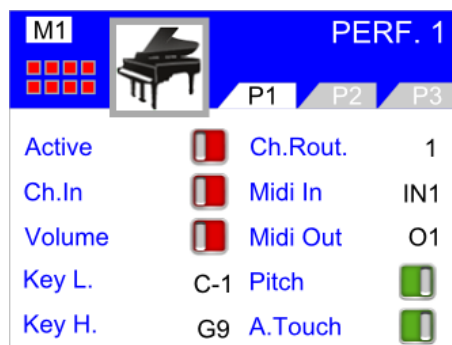
To enter the programming, position on a PERFORMANCE and confirm with the encoder.

The Performance

Each PERFORMANCE is represented by an icon or text and can handle up to 8 MAPS that can be combined in split or layer by adjusting the parameters *KeyL* and *KeyH*.



The icon is representative of all 8 MAPS and is in fact a configuration where you can associate MIDI inputs to MIDI outputs. For each MAP you have 3 pages P1, P2 and P3.



Active: [Off, Solo, On] Enables / Solo / Disables the MAP.

Ch.In: [Off, 1 $\longleftrightarrow$ 16] Sets the input MIDI channel, if off all channels are accepted.

Volume: [Off, 0 $\longleftrightarrow$ 127] Volume MIDI output, if Off the volume is not altered.

Key L.: [c-1 $\longleftrightarrow$ g9] Lower note that limits the action of the keyboard.

Key H.: [c-1 $\longleftrightarrow$ g9] Higher note that limits the action of the keyboard.

Ch. Rout.: [1 $\longleftrightarrow$ 16] channel MIDI output.

Midi In: [IN1, IN2, USB] selects the MIDI input port.

Midi Out: [o1, o2, USB] selects the MIDI output port.

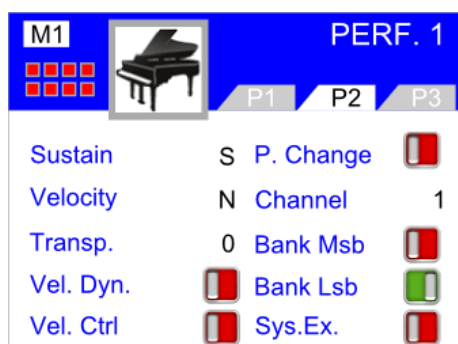
Picth: [Off, On] Enables / Disables the pitch control.

A. Touch: [Off, On] Enables / Disables the aftertouch coming from the master keyboard.

Sustain: [Off, S, R0 $\longleftrightarrow$ R127] controls the action of the sustain pedal from the master keyboard.

- Off: disables the action of the sustain.
- S: enables the action of the sustain.

- **R:** the sustain acts such a switch on the control changes specified in the number after the letter R. It's shown as *Rotor* (R) because the normal use is to activate / deactivate the rotary organ effect when you press the pedal.



Velocity: [L2, L1, N, H1, H2, C] Value of the velocity from the lightest to the hardest.

- **L:** *Light*, button light.
- **N:** *Normal*, velocity of the master keyboard.
- **H:** *Hard*, button hard.
- **C:** *Custom*, custom velocity curve (see chapter SETTINGS).

Transp.: [-60 $\iff$ +60] manages the transposition of the sound in terms of semitones.
P. Change: [Off, 0 $\iff$ 127] handles the sending or not a program change to the selection of PERFORMANCE.

Channel: [1 $\iff$ 16] sends channel of the program change.

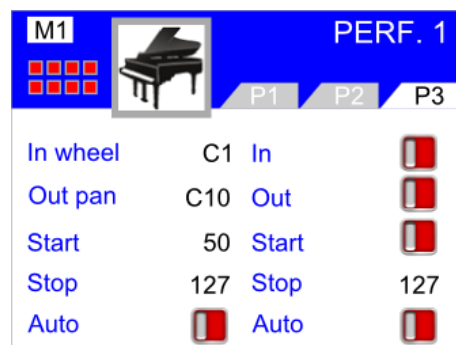
Bank Msb: [Off, 0 $\iff$ 127] parameter MIDI BANK MSB of the program change, sent only if the program change is active.

Bank Lsb: [Off, 0 $\iff$ 127] parameter MIDI BANK LSB of the program change, sent only if the program change is active.

Vel. Dyn: [Off, 1 $\iff$ 127] threshold of *velocity* beyond which the map is active.

Vel. Ctrl: [Off, C0 $\iff$ C127] control change to send with a value proportional to the velocity.

Sys.Ex.: [Off, Sys.Ex1 $\iff$ Sys.Ex30] number of *System Exclusive* message you want sent to the PERFORMANCE selection (see paragraph *Sys.Ex.*).



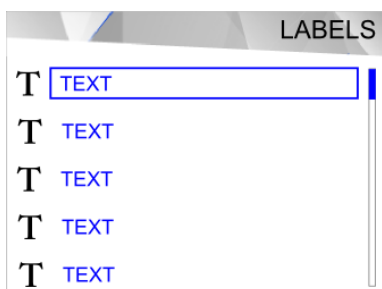
In P3 page you have the ability to remap the *control change In* to *control change Out*. *Start* represents the initial control change value, *Stop* the end value. In the example we can control with the modulation wheel (Control change 1) the Pan (PANORAMA control change 10) starting from a value of 50 to 127. The *Auto* setting is a *Automation*, if set, the control change will be sent in the timeframe specified.



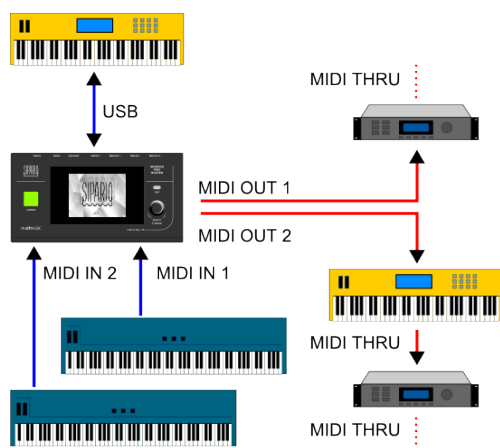
The colored rectangles represent the current state of the MAPS: deactivate (red), active (green) and in SOLO (yellow).



To represent the PERFORMANCE by a free text, tap on the image representative, scroll and the icons and select the last text illustrated with T. Scroll the list of LABELS and select the one desired. To customize a LABEL hold down on the same.



Below is an example of a possible setup.



If we want to drive multiple MIDI devices, we can put them in series by connecting them with the MIDI THRU port.

Backup and Restore

Connect a USB key to SIPARIO.



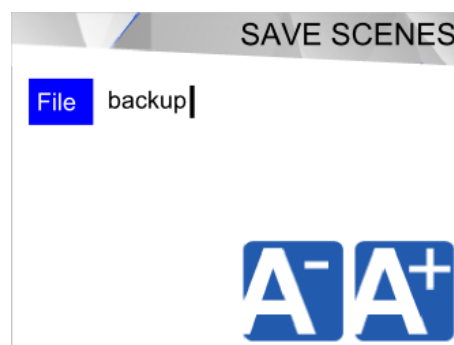
USB

Select the USB item from the main menu.



SAVE SCENES

To save the data related to the scenes in the memory, select the item SAVE SCENES. To set the file name, select the item *File*, turn the encoder to scroll through the letters, press the A+ and A- for, respectively, add and delete a character. Press EXIT and press the encoder to save. The file is saved with the extension ".spb".



To restore the saved scenes, move to the LOAD SCENES item menu and confirm with the encoder.



LOAD SCENES

Select from the list the backup file and confirm by pressing the encoder.

Firmware Update

To update the firmware, copy the file with the extension ".spf" in a USB key, insert it into the connector SIPARIO, select and confirm the entry USB with the encoder from the main menu.



USB

Select and confirm the item UPDATE FIRMWARE. Wait for the job and restarting the software.



UPDATE FIRMWARE

Alternatively, you can update the firmware by restarting the device with the key USB inserted!

Settings

To enter the settings of the device, move to and confirm the menu item SETTINGS from the main menu.



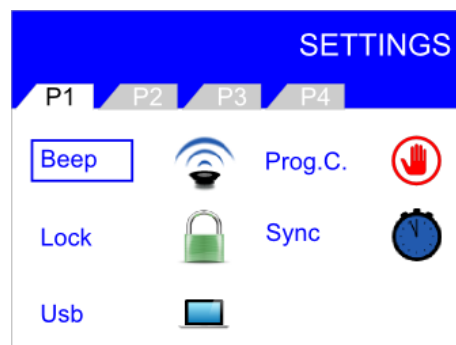
SETTINGS

On the *Settings* screen P1 act on the encoder or touch the item you want to change.

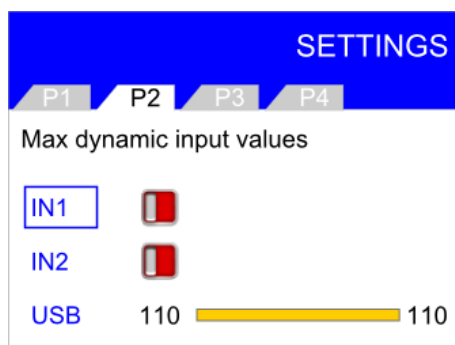
- *Beep*: Enables / Disables the beep at the touch.
- *Lock*: Enables / Disables the data protection from the changes. If set on  all the data

of the SCENES will be readable only and not editable.

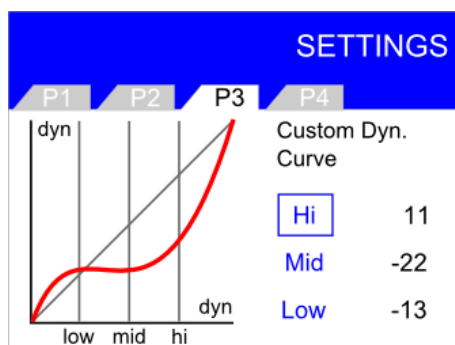
- *Usb*: Sets the behaviour of the USB socket: with  is possible to connect SIPARIO to a Pc / Mac / iOs and play VST loaded into HOST programs; with  you can use the USB socket to connect keyboards or memory stick.
- *Prog.C.*: with  is possible, within a SCENE, jump to a PERFORMANCE number N through receiving a program change N. When it's  the programs change are routed to the MIDI channel of the MAP. When it's  the programs change are ignored.
- *Sync*: with  all the Real Time Message are routed to the MIDI sockets to ensure the synchronism of the devices. Otherwise when it's set on  none sync is active and all RTM messages are stopped.



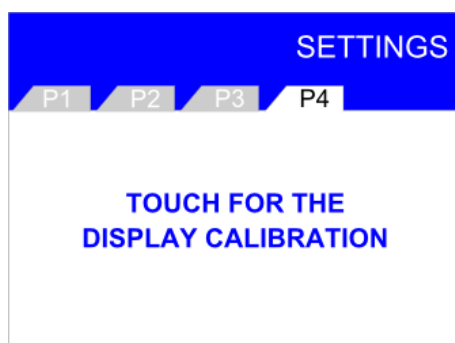
On the settings screen P2 you can track and finish the ride dynamics for the 3 inputs IN1, IN2 and USB, to compensate any shortcomings of keyboards in reach the maximum value (127). Play the keyboard to be monitored for view real-time velocity: automatically the corresponding input will take the maximum value reached. Position on the input and adjust the value with the encoder if necessary.



On the settings screen P3 you can define a custom velocity curve c, to use in the *velocity* parameters of the PERFORMANCE.



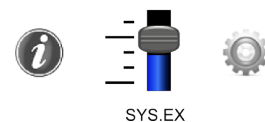
On the settings screen P4 you can calibrate the touch screen.



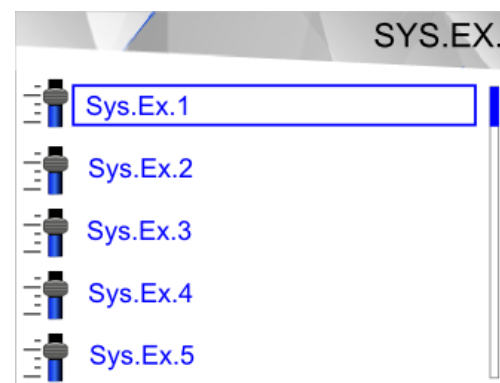
Press EXIT and confirm with the encoder to store the variations made.

Sys.Ex.

Within this section you can set upto 30 stings of *System Exclusive* to be used in the SCENES and PERFORMANCES.



To edit *Sys.Ex.* scroll through the list and press the encoder.



Inside you can customize the *Title* and the *Data*, the latter represent the sequence sent, excluding the start and end tag: *F0Hex*, *F7Hex*.

Technical Data

Display touch TFT 320 x 240 pixel

4 MIDI interface 5-pin DIN sockets

Socket USB A type

+5V power supply connector USB type B

Rotary encoder

Backlit button

Simple button

JACK 2.5"

Metal chassis, black finish

6.88 x 3.38 x 1.41 inches (W x D x H)

Weight about 1.32 lb

Specifications and appearance of the device may change without notice!

Contacts

www.lab4music.it

sipario@lab4music.it

SIPARIO is a product thinked by Ing. Christian Pasin
Software Design & Development Ing. Christian Pasin

Ing. Christian Pasin
vicolo A. Aleardi 3
Peschiera del Garda, Verona
Italy

LAB4MUSIC®