MIDI Expressionist Manual 1.0

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Introduction

Thank you for purchasing MIDI Expressionist!

This app was created to provide you with dedicated MIDI control specifically designed for applying expression signals that "humanize" MIDI orchestral libraries. Whether you're working with strings, winds, percussion, or vocal libraries, MIDI Expressionist gives you the precise control needed to bring life and natural expression to your orchestral compositions.

While MIDI Expressionist was primarily designed for orchestral expression control, its flexible and programmable nature means it can be adapted for many other MIDI control applications to suit your specific workflow needs.

Welcome to a more expressive way of creating music.

The Philosophy Behind MIDI Expressionist

There's no doubt that many hardware MIDI controllers offer excellent build quality and ease of use, but this comes at a high monetary cost—despite being surfaces with just 3 or 4 faders and a basic display. Beyond the expense of these controllers, the programming experience is often cryptic and cumbersome, sometimes requiring additional elements like a computer front-end to function properly.

MIDI Expressionist offers a lower-cost solution with adaptability to countless situations. As an iOS-based app that runs on different devices with varying screen sizes, it provides unmatched ergonomic versatility. Additionally, because it's software-based, the concept of "Controller" can be extended to other paradigms, as we'll explore later in this manual.

This philosophy of accessibility, flexibility, and innovation drives everything MIDI Expressionist does—bringing professional-grade MIDI control to more musicians while opening new possibilities that hardware simply cannot match.

Quick Connection Guide

MIDI Expressionist will be almost ready to operate, except for the MIDI port connections part. Your iOS device's operating system is equipped with all the functionality and capability to transmit MIDI information, but you need to know which MIDI ports to work with.

The most common scenario is that you use a Mac computer as an Audio workstation where there is a DAW (Digital Audio Workstation) program like Logic Pro, Pro Tools, Cubase, Ableton Live, or any other.

There are 2 ways to connect your iOS device with your Mac for MIDI transmission:

- USB Connection
- Network

USB Connection

Step 1: Physical Connection

Connect your iOS device to Mac using the appropriate USB cable (Lightning or USB-C)
Ensure the cable supports data transmission (not charging-only cables)

Step 2: Audio MIDI Setup Configuration

Launch on your Mac “Audio MIDI Setup” from /Applications/Utilities/
If the Audio Devices window isn't visible, access it via Window > Show Audio Devices
Locate your iOS device in the right column of the window

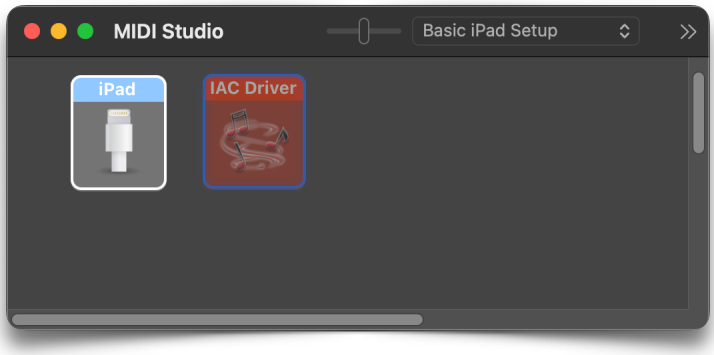
Step 3: Device Trust and Enablement

If prompted, authorize the connection on both Mac and iOS device
Click the "Enable" button next to your iOS device name:

This establishes the IDAM (Inter-Device Audio and MIDI) connection

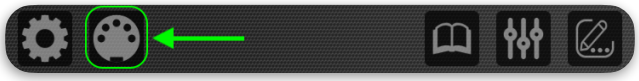
Step 4: MIDI Studio Verification

Access Window > Show MIDI Studio if the MIDI Studio window isn't visible
Confirm that your iOS device now appears as an available MIDI device
The device should show as connected and ready for MIDI communication

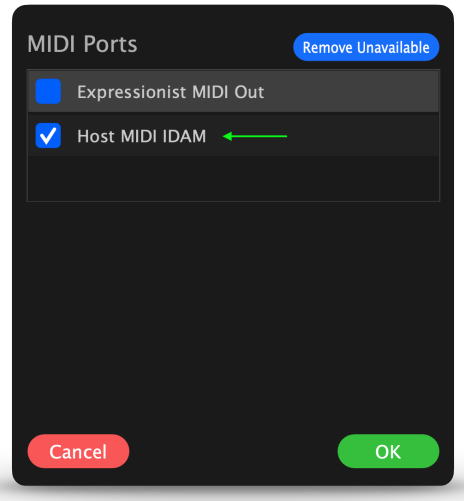


Step 5: MIDI Expressionist Configuration

Launch MIDI Expressionist app on your iOS device
Tap the MIDI Ports button in the top bar:



Verify that "Host MIDI IDAM" appears in the available ports list and is selected:



This confirms that MIDI Expressionist is ready to transmit MIDI data to your Mac via USB.

Benefits of USB IDAM Connection

The IDAM protocol provides:

- Zero-latency MIDI transmission between devices
- Stable connection that doesn't depend on network conditions

- Automatic device recognition once properly configured
- Reliable data transmission for professional music production
- Device charging during use, ensuring uninterrupted sessions

This direct USB method is ideal for studio work where reliability and minimal latency are essential, and where the physical cable connection doesn't restrict your performance needs.

Network Connection

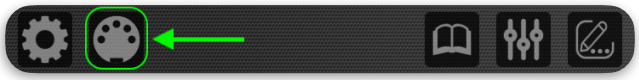
This method uses Wi-Fi connection to transmit MIDI data between your iOS device and Mac through the local network.

It is very important to emphasize that your Mac and iOS device must be on the same network in order to establish a connection.

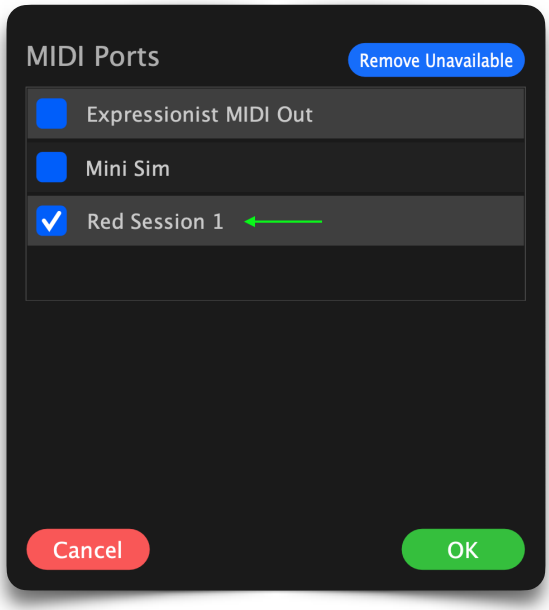
Steps for Network (Wi-Fi) Connection

Step 1: Launch MIDI Expressionist on your iOS device.

Step 2: Tap the MIDI Ports button:



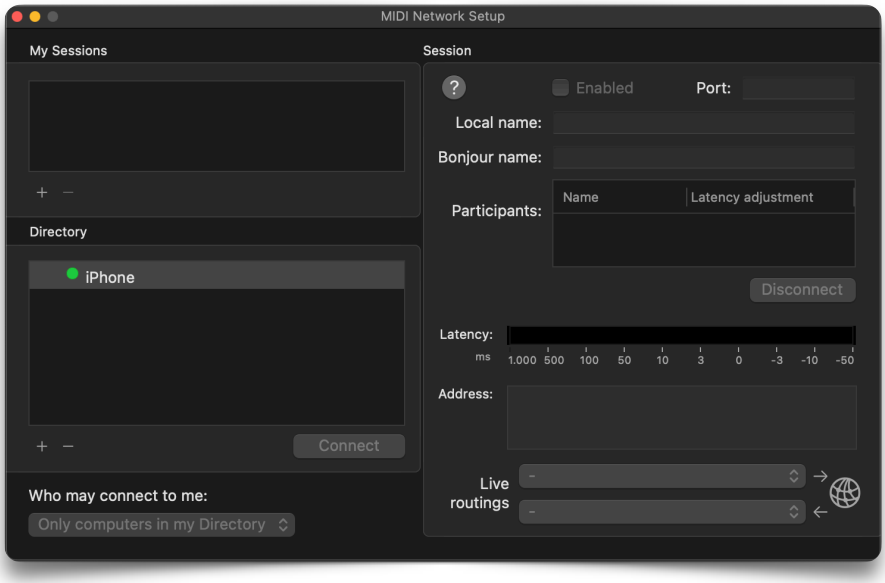
Verify that "Red Session 1" is selected:



It may appear with a different number, but the typical default is "Red Session 1."

Step 3: On your Mac, open Audio MIDI Setup (located in /Applications/Utilities/).

Step 4: Use the Window menu to select Show MIDI Studio. A new menu, "MIDI Studio", will appear, which includes the option to Open MIDI Network Setup.
If this is your first time using network MIDI, you will see a window like this:



Step 5: The first step is to create a network session to establish the connection point.

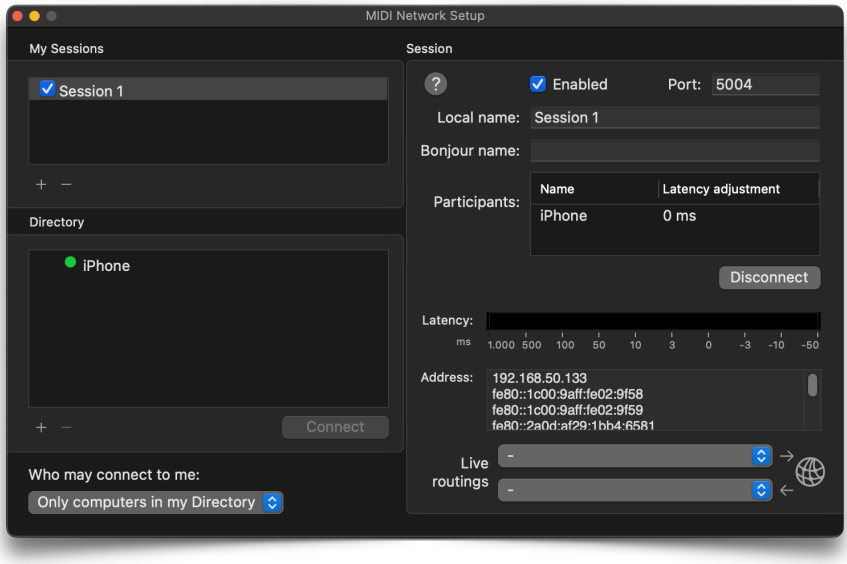
In the upper right column, where sessions are listed, add a new session by clicking the "+" button. It will automatically be named "Session 1." Initially, it will not be enabled.
Enable the session by clicking on its name.

Step 6: In the same column, further down, you will see a list of all available devices found on your local network.

Look for your iOS device (it should appear with a green dot if available).

Select your device and click the Connect button.

If the connection is successful, you should see your device listed in the Participants section on the right side of the window.
This is how it should look when everything is connected correctly:



With this setup, your iOS device running MIDI Expressionist and your Mac will transmit MIDI data over the local network, allowing you to use MIDI Expressionist as a wireless, networked MIDI controller with your DAW.

Advantages of Network connection:

- Freedom of movement - no cables required
- Flexible positioning of the iOS device
- Multiple devices can connect simultaneously
- Ideal for live performances where mobility is important

General Operation

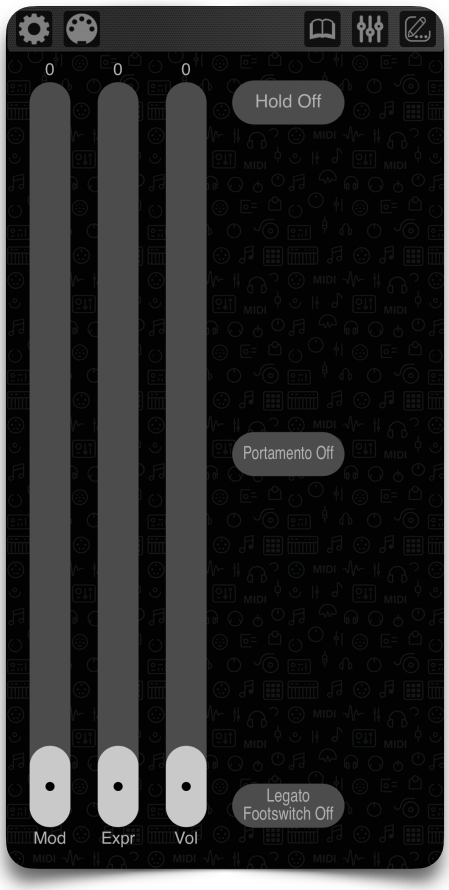
MIDI Expressionist provides easy-to-use controllers that generate Control Change Messages, which are fully programmable and user-definable.

The app offers standard controller groups for immediate use, while also providing an editing interface where you can define your own custom controller experience. All user-created controller sets can be saved for future use.

This flexible approach means you can start with proven configurations and gradually customize MIDI Expressionist to match your specific workflow and creative needs.

Graphical Interface

This is how MIDI Expressionist looks when you open it for the first time:



The interface displays a top bar with 5 icon buttons containing the following actions:

- General Preferences
- MIDI Ports
- Instruction Manual
- Settings Management
- Edit Settings Mode

Below the top bar is the area where the MIDI controllers are located. In this case, you can see 3 vertical faders and three buttons with two-state functions (On and Off).

This main controller area is where you'll interact with your MIDI controls during performance, while the top bar provides access to all configuration and management functions.

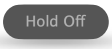
Fundamental Elements

MIDI Expressionist has 3 interaction elements for generating MIDI data:

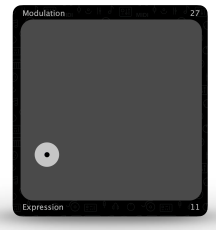
- Sliders
- Buttons
- Pads

Sliders represent fader-like elements. They are always positioned vertically and allow you to send MIDI data by placing a finger anywhere on their surface and moving it vertically. They have different interaction behaviors that will be explained later.

Buttons behave as two-state switches with Off and On states.



Pads are square two-dimensional elements that allow you to map 2 MIDI controls and act on MIDI values vertically and horizontally simultaneously. This enables you to send 2 different types of MIDI data at once with a single finger.



This variety of controller types gives you the flexibility to choose the most appropriate input method for each MIDI parameter in your setup, whether you need precise single-axis control (sliders), simple on/off switching (buttons), or expressive two-dimensional control (pads).

These elements are programmable not only in the type of MIDI data they provide, but you can also define the number of elements as well as change the size of each one. The app preserves aspect ratio laws (for screen rotation) so they always display appropriately for each device and axial position.

This flexible sizing and positioning system ensures that whether you're using an iPhone or iPad, in portrait or landscape mode, your controllers will always be optimally displayed and accessible for your performance needs.

Each of them has common characteristics and some specialized features depending on the object type. Let's examine the options for each one by analyzing their editable parameters.

Sliders

Sliders represent exactly what a physical MIDI controller fader does. Let's look at the parameters of a Slider as interpreted by MIDI Expressionist:

- In each object editing window, its type and the MIDI channel on which it transmits will always be displayed.

- The CC1 field contains the MIDI controller parameter it sends. In the case of Sliders, this parameter will always be values from 0 to 127. 14-bit controllers are also supported, called high-resolution controllers in the MIDI 1.0 specification. However, this mode is not supported by all devices and sometimes causes undesired behaviors, so you should proceed with caution and always verify if your device supports it.

- You can change the name of each Slider in the Name 1 field. By default, it automatically displays the standard MIDI name in abbreviated mode.

- Cursor Mode is a parameter present in both Sliders and Pads. It works as follows: in a slider there are several zones—the indicator area (Handle) and the path along which it slides. In Relative mode off (as shown in the figure), when you place your finger inside the Handle, the slider value doesn't change immediately; it will only change when you move your finger up or down. However, if you place your finger on the path, it will jump to the value at the point where you touch and generate the corresponding MIDI and the handle will jump to represent that value.

  When Relative mode is enabled, it doesn't matter where on the slider you place your finger—it will never jump abruptly and will only change the MIDI value starting from the current slider value without causing unwanted jumps. This mode was created primarily to facilitate using the slider without looking at the app, since it will only send values when you move your finger and always around the current value.

  This Cursor Mode feature is particularly valuable during live performance situations where you need to make adjustments without taking your eyes off your music or other interface elements. This is also useful when adding new controller information in subsequent edits.

  There's an invisible shortcut in the interface that allows you to change the state from Relative to non-Relative momentarily. Simply double-tap on the numerical value of the Slider.

This gives you quick access to toggle between Relative and Absolute cursor modes during performance without having to enter the editing interface—providing additional flexibility when you need different interaction behaviors on the fly.

- The handle color is adjustable, which can be useful for visually differentiating each parameter. Its opacity level is also programmable.

  This visual customization feature enhances the user experience by allowing you to create a color-coded system for your controllers, making it easier to quickly identify specific parameters during performance or editing sessions.

- Decay: This parameter is something totally unique to MIDI Expressionist. Together with the next parameter (Return Value 1), it allows you to establish a return value when the slider is not being actively controlled. Normally it's set to Off, but if you increase its value, it provides a range from 0.01 seconds to 4 seconds as the Decay value.

  It works like this: when Decay is enabled and you slide your finger over the Slider, when you lift your finger the controller value will travel to whatever is programmed in the Return Value 1 field at the speed dictated by the Decay setting. It behaves like automation to a resting value.

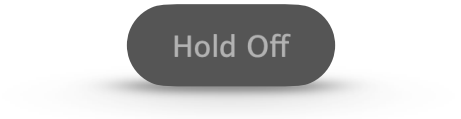
  This can be useful in certain situations where your instrumentation has a desired stability value and you always want it to stay close to that value except when you want expressive accents. There's an invisible shortcut in the interface that allows you to activate or deactivate this Decay parameter momentarily—simply double-tap on the Slider's name, which will toggle the Decay state.

- Return Value 1 contains the return value explained in the previous point.

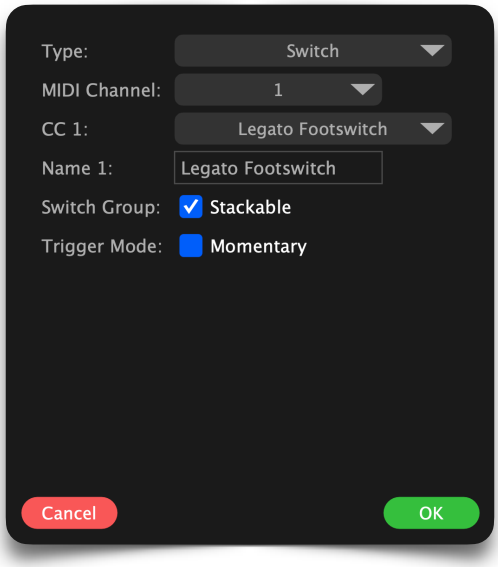
  This Decay feature essentially gives you "spring-loaded" behavior for your controllers, automatically returning them to a home position—perfect for parameters like expression or modulation where you want to apply temporary emphasis before returning to a neutral state.

Buttons

Buttons behave like physical two-state actuators. They are associated with MIDI controllers from 64 to 69 and cover the parameters: Hold, Portamento, Sostenuto, Soft Pedal, Legato Footswitch, and Hold 2. They are represented in the interface as shown here:



This is their editing interface with parameters:



- Similar to Sliders, the editing window displays the object type and MIDI channel. However, Buttons have their own specific characteristics:
- CC1 field contains the MIDI controller parameter (typically 64-69 for the standard pedal functions mentioned above).
- Name 1 allows you to customize the button label. By default, it shows the standard MIDI controller name.

  Unlike Sliders, Buttons send only two values: 0 (Off) and 127 (On), making them perfect for binary control functions like sustain pedals, portamento switches, and other on/off parameters.

  Buttons provide immediate, tactile-like response for essential performance controls that require quick, decisive switching during musical performance.
- Switch Group allows you to stack buttons when they are consecutive in the interface to optimize editing and control space. In Stackable mode, the stacking mode will be activated and will allow grouping each particular button in a single column. If it's turned off, the button will be alone in its own column.
- Trigger Mode can be either Momentary or Toggle type. In Momentary mode, the button's ON state remains only while your finger is pressing it. In non-Momentary mode, when you tap the

button, it changes state and will remain in that state even if you lift your finger or stop tapping on it, and will change state again only when you tap it again.

- This Switch Group feature is particularly useful when you have multiple related controls (like different sustain or expression pedals) that you want to keep visually grouped while saving screen real estate.

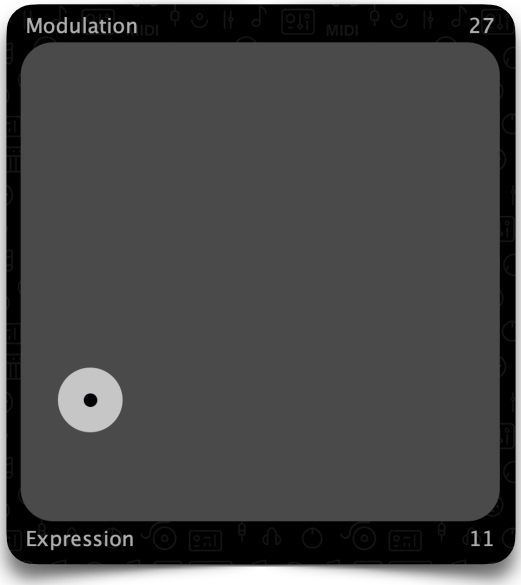
- The Trigger Mode gives you the flexibility to choose between piano pedal-like behavior (Momentary) or power switch-like behavior (Toggle), depending on how you want each button to function in your musical workflow.

  The maximum number of grouped buttons is also programmable. This parameter belongs to MIDI Expressionist's general preferences and will be explained in that section.

Pads

The implementation of Pads within MIDI Expressionist introduces a new way to humanize sound using two MIDI information parameters simultaneously. According to MIDI Expressionist's spirit and leitmotif, it's clear that the parameters with the best candidacy for use in Pads are Modulation (CC 1) and Expression (CC 11), although Volume (CC 7) is also a good candidate. But it always depends on the type of modulation and expression that the user wants and what the sound library being programmed supports. Fortunately, the memory and settings system will allow us to change the editing control states to our liking for each case.

This is the appearance of the Pad object:



The two-dimensional nature of Pads represents one of MIDI Expressionist's most innovative features, allowing you to control two critical orchestral expression parameters with a single gesture. This creates more natural and fluid expression possibilities compared to manipulating separate individual controllers.

The vertical axis typically controls one parameter while the horizontal axis controls another, giving you the ability to create complex expressive curves and combinations that would be difficult or impossible to achieve with traditional single-axis controllers.

This dual-parameter approach is particularly powerful for orchestral work where parameters like modulation and expression often need to work together to create convincing musical phrases and natural instrumental articulations.

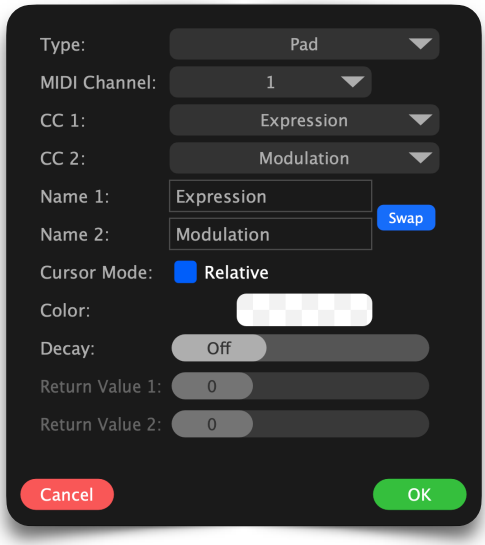
Other interesting combinations that will depend on the nature of the library and its sensitivity to each MIDI parameter could be Volume + Expression or Volume + Modulation.

As we have already explained, MIDI Expressionist's programmability will allow any combination to adapt to your work needs.

This flexibility means you can experiment with different parameter pairings to find the most effective combinations for each specific orchestral library or virtual instrument in your setup. Some libraries may respond better to certain parameter combinations than others, and MIDI Expressionist's programmable nature ensures you can optimize your control surface for each unique situation.

The ability to create custom parameter combinations beyond the traditional modulation/expression pairing opens up new creative possibilities for achieving the exact expressive control your music requires.

Here are the editing possibilities for Pads:



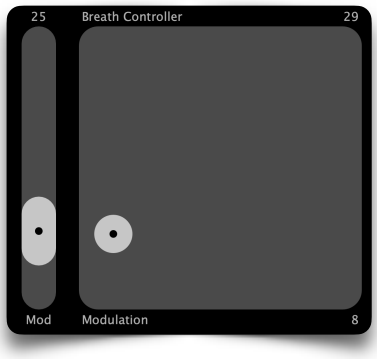
- Similar to other controller types, the Pad editing interface displays the object type and MIDI channel for transmission.
- CC1 and CC2 fields contain the two MIDI controller parameters that the Pad will send. CC1 typically corresponds to the vertical axis movement, while CC2 corresponds to the horizontal axis movement.
- Name 1 and Name 2 allow you to customize the labels for each axis parameter. By default, they display the standard MIDI controller names in abbreviated mode.
- Cursor Mode functions similarly to Sliders - when Relative mode is enabled, touching anywhere on the Pad won't cause immediate value jumps, instead allowing smooth transitions from the current position. When disabled, touching a specific area of the Pad will immediately jump to that coordinate's corresponding MIDI values.
- Color and opacity settings allow visual customization of the Pad, helping you distinguish between different parameter combinations in your controller layout.

  Decay and Return Value 1 and 2 parameters would function similarly to Sliders, allowing automatic return to specified positions when you lift your finger from the Pad surface.

Visual Indicators for Cursor Mode and Decay

MIDI Expressionist provides clear visual indicators that allow you to identify the cursor mode of Sliders or Pads, as well as the Decay state, without needing to enter the editing interface.

Standard Mode (Non-Relative, No Decay)



A central dot in the handle of a Slider or Pad, as shown in the image, describes the most common mode: non-Relative and without Decay.

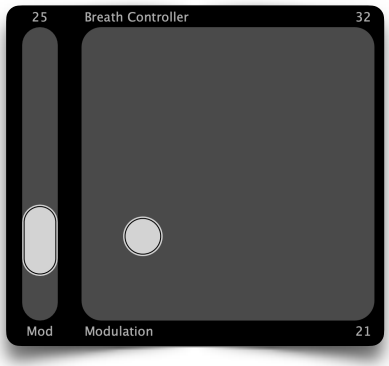
This default visual state indicates:

- Absolute positioning - touching anywhere on the controller will jump to that position.
- No automatic return - the controller maintains its position when you lift your finger.

Standard behavior - operates like traditional hardware faders.

Relative Mode with Decay Active

An outline on the handle edge indicates that the Decay system is active. If it doesn't contain the central dot, Relative mode is also active.

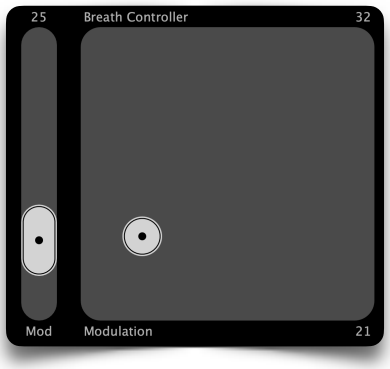


This visual combination tells you:

- Relative positioning - touching the controller won't cause value jumps.
- Automatic return - the controller will return to its programmed value after you lift your finger.

Smooth operation - ideal for expressive gestures that need to return to a rest position.
Non-Relative Mode with Decay Active

If the handles show both the edge outline and the central dot, we're in the case of non-Relative cursor with Decay.



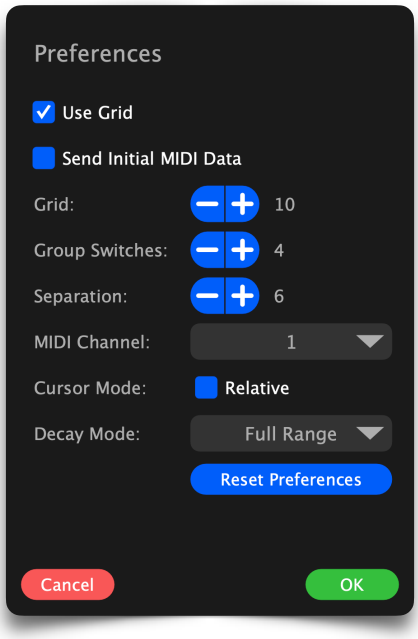
This dual indicator state means:

- Absolute positioning - touching specific areas will jump to those values.
- Automatic return - despite absolute positioning, the controller returns to its rest value.
- Hybrid behavior - combines immediate positioning with automatic return functionality.

Of course, it's possible to have neither the outline nor the central dot, in which case it's in Relative mode (no jumps when touching it) and the Decay system is turned off.

General Preferences

In the top bar, on its left side, you'll find the preferences icon. Tapping this icon will invoke MIDI Expressionist's general preferences:



- Use Grid: When enabled, this option activates a grid layout system that helps organize and align your controllers for a more structured interface.
- Send Initial MIDI Data: This setting determines whether MIDI Expressionist sends the current controller values when first connecting or loading a configuration, ensuring your receiving device starts with the correct parameter states.
- Grid: Sets the grid resolution (shown as 10 in the image) which determines how finely controllers can be positioned when the grid system is active.
- Group Switches: Controls the maximum number of buttons that can be stacked together in a single column (shown as 4 in the image). This relates to the Switch Group parameter mentioned earlier in the Button section.
- Separation: Allows you to determine the number of pixels between objects. From zero pixels to thirty. This global Separation control works in conjunction with the individual controller sizing and positioning features, giving you complete control over both the size of individual elements and the spacing between them.
- MIDI Channel: Sets the default MIDI channel (shown as 1) for new controllers. Individual controllers can override this setting in their specific editing windows.
- Cursor Mode: Sets the global default cursor behavior to Relative mode, which can be overridden on individual controllers. When enabled, this prevents unwanted value jumps when touching controllers.
- Decay Mode: Offers a dropdown selection (showing "Full Range") for the global decay behavior settings, which affects how controllers return to their rest positions.

Full Range mode uses the decay time calculated over the total MIDI parameter range, normally from 0 to 127. If Decay is set to 1.4 seconds, the value will change from 127 to zero in 1.4 seconds and from 64 to zero in 0.7 seconds.

In Actual Value mode, the return time will always be the programmed Decay time regardless of which value it starts from. In this case, it will always be 1.4 seconds.

This distinction gives you two different approaches to decay timing:

Full Range mode: Proportional timing based on the distance traveled (useful for consistent speed of change)

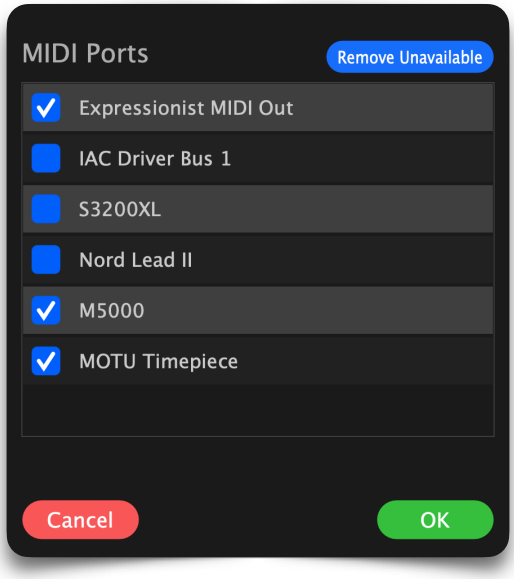
Actual Value mode: Fixed timing regardless of starting position (useful for consistent duration of effect)

The choice between these modes depends on whether you want proportional movement speed or consistent timing duration for your expressive controller returns.

- Reset Preferences: Allows you to restore all settings to their factory defaults.
- Cancel and OK buttons allow you to discard or save your preference changes respectively.

MIDI Ports

This button invokes the MIDI port selection window through which MIDI Expressionist's information will be sent. By default, the application itself will generate its own MIDI port, called: Expressionist MIDI Out, but you can select any available port in the system. Additionally, the selection is multiple, so it’s possible to send MIDI data through more than one port simultaneously.



The MIDI Ports interface shows all available MIDI destinations on your system.

The checkmarks indicate which ports are currently active for MIDI transmission. This multi-port capability is particularly powerful because it allows you to:

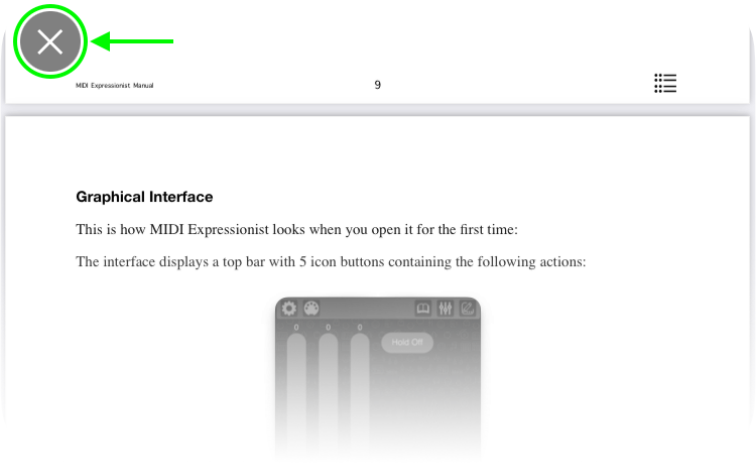
- Send the same MIDI data to multiple devices simultaneously
- Route different controller data to different destinations
- Create complex routing setups for elaborate orchestral configurations

The "Remove Unavailable" button helps clean up the list by removing MIDI ports that are no longer accessible on your system, keeping your interface organized and current.

This flexible MIDI routing system ensures that MIDI Expressionist can integrate seamlessly with any MIDI setup, whether you're using a simple single-device configuration or a complex multi-instrument orchestral template with multiple hardware and software destinations.

Instruction Manual

This button invokes the MIDI Expressionist instruction manual. A new window appears that allows you to consult any explanatory topic about this application. A gray button with an X (dismiss) will be present to hide the instruction manual:



The built-in manual system provides immediate access to help and documentation without leaving the app interface. This ensures that whether you're setting up controllers for the first time or fine-tuning advanced parameters during a session, comprehensive guidance is always just one tap away.

The dismiss functionality allows you to quickly hide the manual when you're ready to return to your controller interface, maintaining an uncluttered workspace during performance or editing sessions.

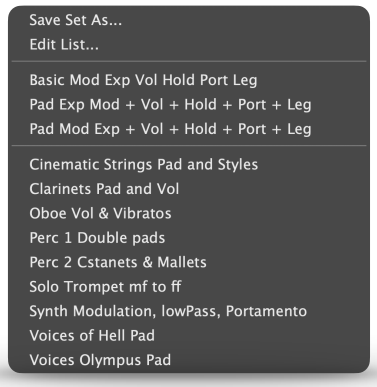
At the bottom (footer) of each page, you will find the page number in the center and an icon on the right-hand side. When this icon is pressed, it jumps directly to the table of contents:

This feature allows for quick navigation, so users can easily return to the main index from any section of the manual, streamlining the reading and reference experience.

This integrated help system reflects MIDI Expressionist's philosophy of keeping everything you need within easy reach, eliminating the need to search for external documentation or interrupt your creative workflow to find answers to setup or operational questions.

Settings Management

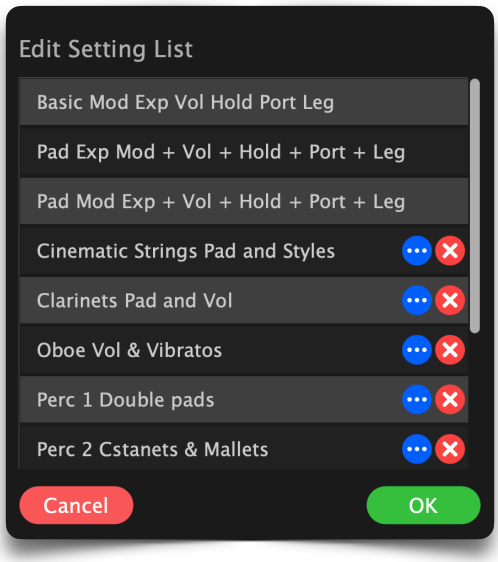
This button contains the following dropdown menu:



The menu provides access to different controller configuration controls and sets:

- Save Set As…: Allows you to save your current controller configuration as a new preset, giving you the ability to preserve specific setups for different musical projects or performance scenarios.
- Edit List…: Opens the preset management interface where you can organize, rename, or delete saved controller sets.

After the Save Set As... and Edit List... controls, there are 3 non-editable settings provided as operational examples. Following these examples appear the user-created ones. These settings can be manipulated using the Edit List... command:



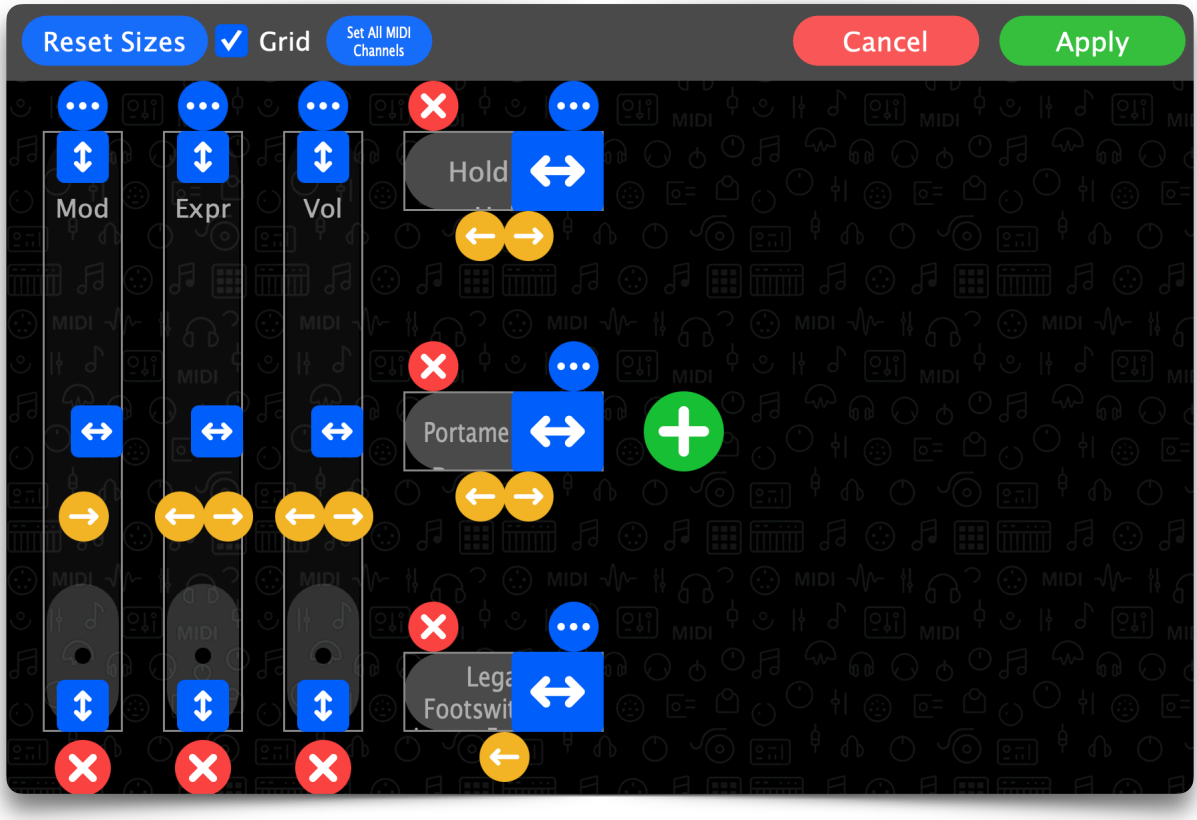
This button allows you to change the Setting name.

This button will delete it from the list and from the device.

Edit Settings Mode

This button enters the Setting Edit and/or Creation mode. This is possibly the most intimidating part of MIDI Expressionist's operation. But it is extremely simple and flexible.

If we press the Edit button with the product's initial setting, you will see this:



The Edit mode interface shown in the image reveals MIDI Expressionist's core customization capabilities. Here you can see the Top Control Bar section with:

- Reset Sizes: Returns all controllers to their default dimensions
- Grid toggle: Enables/disables the alignment grid for precise positioning.

  Reminder: There is a parameter that controls the Grid amount.

  It is found in General Preferences.
- Set All MIDI Channels: Applies a quick MIDI channel setting to all the present controllers
- Cancel: Discards any changes made during the editing session
- Apply: Saves and implements all modifications

Controller Layout Area:
The editing interface displays each controller with a series of overlaid editing buttons.

Each button executes an editing function, from changing its size and position, to editing its operational options, to deleting it or creating new controllers.

Edits sizes are based on extension movements that change the length of objects, with limits to always guarantee order regardless of the workspace shape (changeable by device size and orientation type).

There are position change buttons that determine the object's position by pre or post-positioning the screen arrangement.

Additionally, there are three additional types of buttons: the circle with three dots, which will invoke the options window for each object (these windows are the ones already explained in the object descriptions at the beginning of this manual).

This Delete button removes the object from the setting.

Finally, the green button with the plus sign will allow you to add new objects. When pressed, it will display a menu with available objects, which will be added to the setting when selecting the type from said dropdown menu:

Reminder: The distance between objects can be controlled with the "Separation" parameter found in General Preferences.

This comprehensive editing system transforms controller layout design from a programming task into an intuitive visual process, allowing you to create precisely the MIDI control surface your musical work requires.

MIDI Expressionist
Manual version 1.0

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