

Getting Started



Introduced in 1940, the original Hammond Solovox was an oddity consisting of two parts - a keyboard assembly that was mounted directly beneath a piano keyboard, and a speaker cabinet containing the tone generation circuitry, amplifier, and speaker (utilizing a mere 18 vacuum tubes!). It was intended for pianists who wanted to add solo organ-style tones to their playing, and thus was strictly monophonic (i.e. one-note-at-a-time). Because the keyboard stuck out from the bottom of its “host” piano, its keys are tiny, kind of like a squashed Casio keyboard.

Along with the similar Clavioline and Ondioline, these lead-organ-under-piano instruments had their heyday through the 40s on up to sometime in the 60s. It's safe to say that the onslaught of compact transistor organs released in the 60s spelled their demise. This is kind of a shame, because the Solovox sounds super cool, and because we're suckers for anything old and keyboard-y, our DSP whiz pal Mark Barton shoved his super-accurate model in our faces and demanded we release it as a product, thus Cherry Audio Solovox was born!

Though it's a little different than operating a standard organ or synthesizer, Solovox is easy to use, and with a few useful added tweaks, it's surprisingly flexible.

Technical Assistance

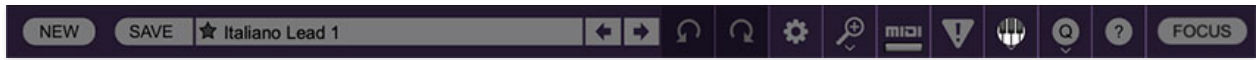
Cherry Audio's unique online store and automatic updating generally makes operation a smooth experience, but if you run into any issues or have questions, you can discuss issues online at the Cherry Audio forums at:

<https://forums.cherryaudio.com/>

... or you can communicate directly with our friendly tech support staff at:

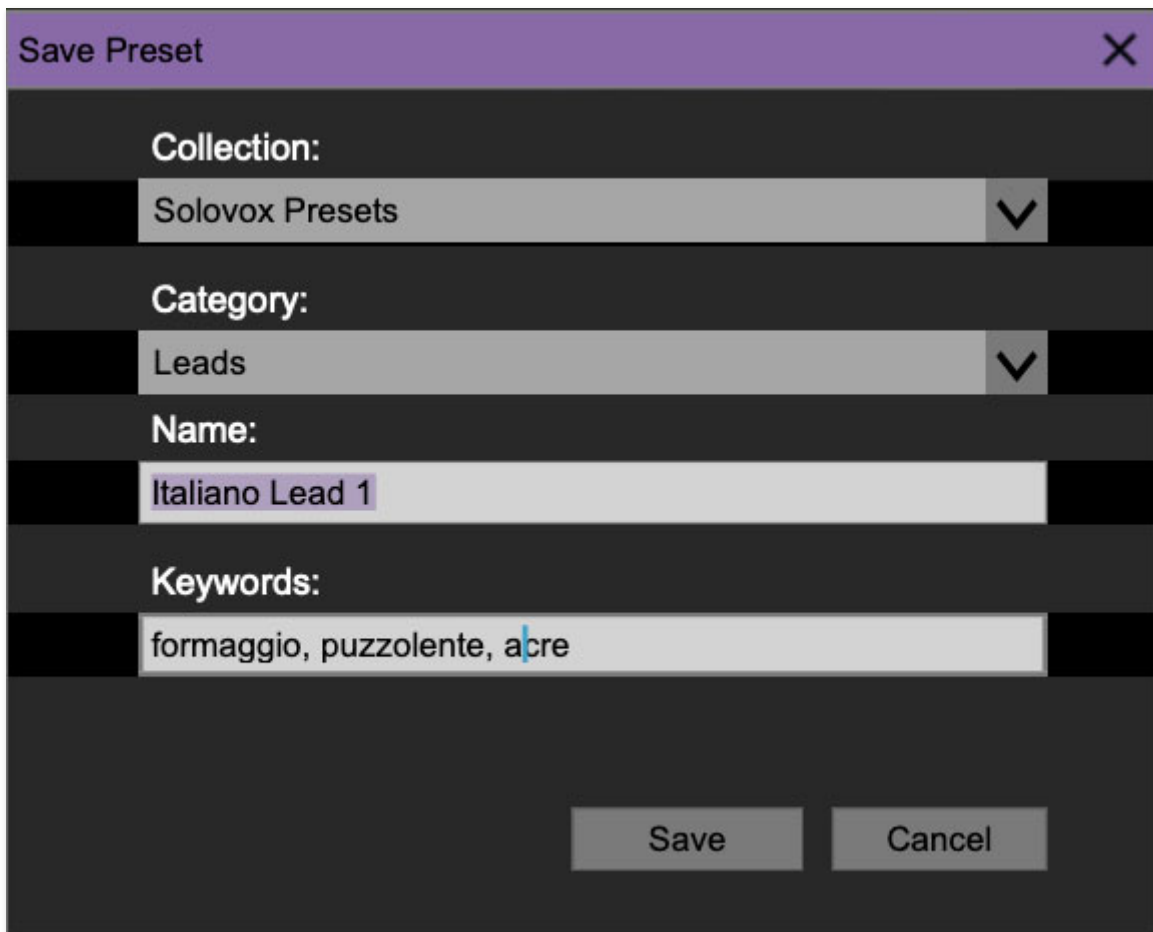
<https://cherryaudio.kayako.com/>

Top Toolbar and Preset Browser



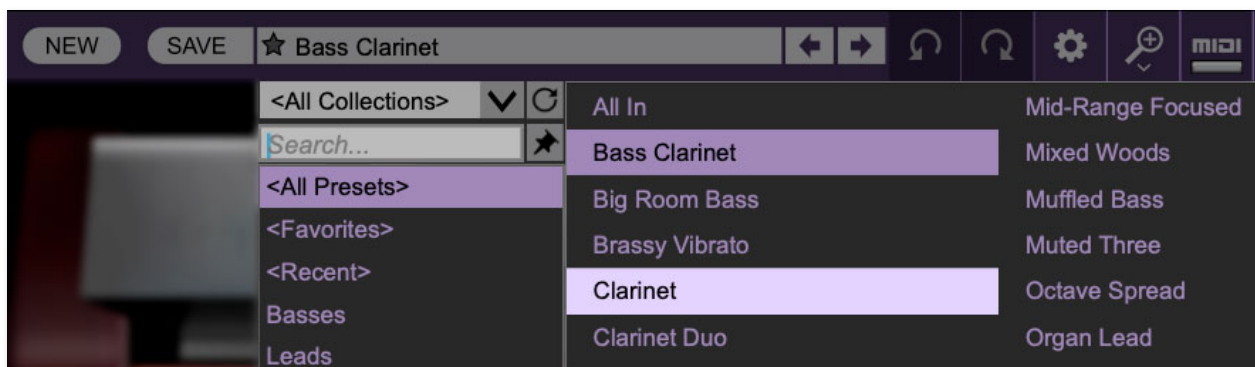
The purple strip at the top of the Solovox interface is where you'll load, save, and create sound presets. It also contains utility functions such as undo/redo, UI zoom and *Focus* controls, under-the-hood settings, and more. Let's go over them:

New- Opens a new blank patch preset. If an unsaved patch is currently open or you've modified an existing saved patch, a dialog asks if you'd like to save the patch in its current state. This greatly reduces the possibility of losing an edited unsaved patch.



Save- Use this to save patches. There are a couple of levels of hierarchy:

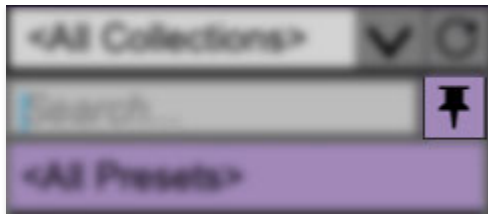
- **Collection**- This is the top level of organization, and contains entire “sets” of presets. The *Solovox Presets* are the main included collection. We also include a *User Presets Collection* for storing your own presets, but you’re free to create your own collections. To create a new collections, click in the *Collection* text field (where it says *User Presets* above) and type a name. User-created sounds can be freely saved to any collection; we like to keep ‘em separated for organizational purposes.
- **Categories**- Within each *Collection* are a number of sound categories. As with collections, you’re free to create as many categories as you like. To create a category, click in the *Category* text field of the *Save* dialog window and type a new category name.
- **Patch**- A patch is an individual sound. To save a patch, simply type the name in the *Name* field and click *Save*.
- **Keywords**- You can add descriptive words such as “shrill,” “bright,” or “oboeish,” etc., to patches to make them appear when terms are typed in the *Search* field. Use commas to separate multiple keyword entries.



Browsing Patches- Patches can be browsed by clicking the *<Select Preset>* field. To select a preset collection, click in the area that says *<All Collections>* or on the downward-facing arrow next to it.

Clicking on the left-side categories narrows down which patches are displayed.

- **<All Presets>** will show presets from all collections and categories.
- **<Recent>** displays recently used presets.
- **Refresh**- This is the circular arrow button to the right of the downward arrow; clicking this checks the Cherry Audio server for new or updated presets.



Pin- Clicking the push-pin icon locks the patch selection list open, allowing fast and easy browsing and auditioning of patches. Click the icon again to disable pin mode. when in pin mode, the up and down arrow keys can be used to select patches.

Preset Step Back/Forward horizontal arrows- These step to the previous or next preset. macOS [⌘+left/right arrow key] or Windows [CTRL+left/right arrow key] will navigate through presets back and forth in the currently selected collection/category.

Undo/Redo circular arrows- These undo or redo the last action. It remembers many steps, so if you really mucked something up, keep on clickin'...

Settings- This is where user preferences for user interface, audio interfaces, user account, and more are configured. See the [Settings](#) section for full information.

Importing Presets with drag-and-drop

Presets can be imported singly or en masse (as a single compressed ZIP file) simply by dragging and dropping from the desktop anywhere on the user interface.

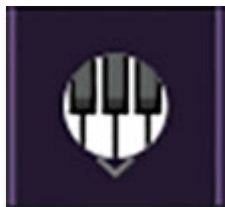
If a single *.preset file is dragged and dropped, the sound is immediately loaded and the standard Save Preset dialog appears; this lets you save the sound to the instrument's preset browser. Note that you don't have to save the sound to preset browser; if you just want to hear and play the sound, click the Cancel button in the Save Preset dialog - the sound will still be loaded.

Compressed zip files containing multiple sounds can also be drag and dropped onto the UI. This works the same as with single sounds, but instead of the Save Preset dialog, you'll see the Import Preset Collection dialog. The presets will be added as a new collection and available in the categories for which they were tagged.

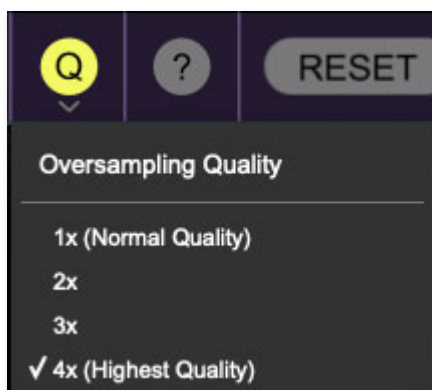
Zoom Magnifying Glass- Click to resize the Solovox interface. Selecting *100%* returns the user interface to native size.

MIDI Tab- Opens the MIDI controllers tab for configuring internal and hardware MIDI controls. See the [MIDI Controllers Setup and MIDI Tab](#) section for full information.

! (MIDI Panic) - Click to send an all-notes-off message in case of, "why won't this thing stop making noise?!?" stuck-note incidents.



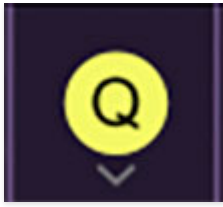
QWERTY Musical Typing Keyboard- Opens an onscreen keyboard allowing a standard QWERTY computer keyboard to be used for playing music notes. For more information, see [QWERTY Musical Typing Keyboard \(MTK\)](#) section.



Q Oversampling Quality - The Q button sets Solovox's internal oversampling rate; the higher the setting, the better audio fidelity will be, with the caveat that more computer processing power will be required.

Internal processing can be set to *1x* (same rate as the current sample rate of the host DAW or in the *Settings>Audio/MIDI* window for the standalone version) or to *2x*, *3x*, or *4x* the current sample rate. The sample rate is downsampled at the instrument output stage to match the current host sample rate.

For example, if the current DAW/instrument sample rate setting is 48 kHz, and oversampling is set to *2x*, Solovox's internal processing runs at 96 kHz, and is then reduced back to 48kHz at the output stage.



When oversampling is set to any multiple greater than $1x$, the *Q* button glows yellow.

Dependent on a number of factors (audio system D/A converter quality, monitor speakers, the nature of the current Solovox patch, etc.), you may not hear a big difference with higher settings.



? (Help) - Clicking this launches your web browser and opens this very help document. Regrettably, it will not play the classic 1965 Beatles release (but feel free to lay some sweet Solovox solos on top of it).

Focus Button



If you're using a tiny laptop, the user interface can potentially be hard to see. With this in mind, the *Focus* button conveniently blows up Solovox's view to roughly twice its normal size within the current window size. Unlike the *Zoom* "magnifying glass" function, *Focus* doesn't affect the current window size. By default, the patch panel section fills the current window, but the view can be scrolled vertically and horizontally with a mouse wheel, track pad, or Apple Mighty Mouse finger-scrolling. Or if you're the last person on earth still using a single-button mouse, scroll bars will appear at the window edges when in *Focus* mode. (Guess what? YOU'VE GOT MAIL!)

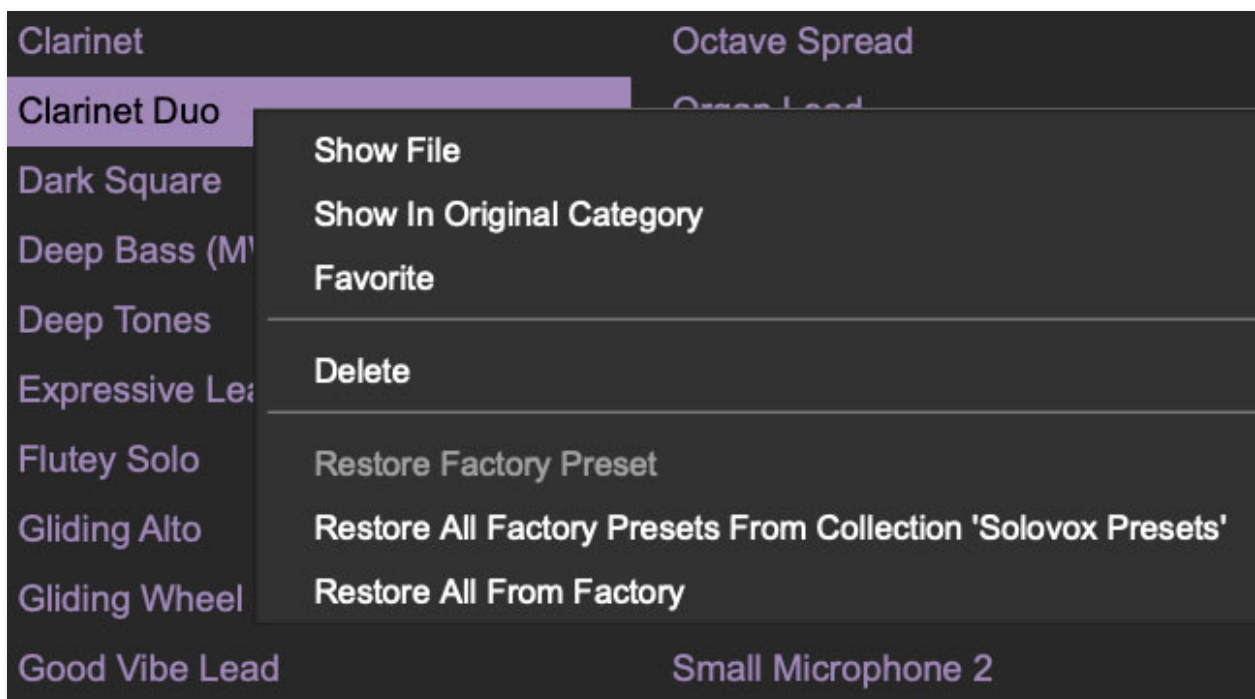
Using *Focus* mode couldn't be easier - just click the *Focus* button the top menu bar, and the recessed panel controls are enlarged and centered. To

return to standard view, click *Reset*. **There's also a superfast key shortcut** - on Mac, hold the ⌘ [COMMAND] key and click the mouse; in Windows, hold the [OPTION] key and click the mouse. Focus can be reset with the same key shortcuts.



Cherry and Solovox logos- Clicking either of these displays “about” information, and shows the version number and current registered user ID.

Preset List Right-Click Functions



Show File- This displays the selected preset in the Mac or Windows folder containing it. This is useful for backing up or sending a preset file to another

user.

Show In Original Category- Selects the preset within its category, i.e. the category will highlight in the left preset menu. The *Show In Original Category* command only displays if the preset was selected within the *<All Presets>*, *<Favorites>*, or *<Recent>* categories.

Favorites- Favorited presets will show in when the *<Favorites>* category is selected. A star will display next to the preset name. Right-click on the preset and reselect *Favorite* to un-favorite it.

Delete- Deletes the selected preset.

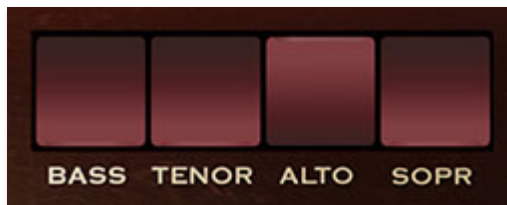
Restore Factory Preset- If one of the factory (i.e. not user) patches is edited and saved, selecting this command restores the patch to its unaltered "factory" setting. This menu will be grayed-out for user bank patches.

Restore All Factory Presets From 'Solovox Presets'- If any patches from the "factory" Tortoise bank are edited and saved, selecting this command restores *all* of them to their unaltered "factory" setting.

Restore All From Factory- If any patches from the "factory" banks are edited and saved, selecting this command restores *all* of them to their unaltered "factory" setting. At the time of writing, the Solovox bank mentioned above is the only factory bank, so this function and the *Restore All Factory Presets From 'Solovox Presets'* above have the same effect.

Front Panel Controls

Range Controls



Bass/Tenor/Contralto/Soprano- These rocker switches set Solovox's note range in octaves, just like a modern synthesizer's footage settings. Multiple switches can be enabled in any configuration.

Tone Controls



The *Deep Tone*, *Full Tone*, *First Voice*, *Second Voice*, and *Brilliant* knobs each control various filtered versions of the basic Solovox oscillator tone. Unlike typical analog synthesizer filters, the oscillator signal is split and routed to *all* of the filters, processed and then summed together, creating a composite tone, so it's best to think of these knobs as mixer controls. If all of the Tone knobs are set to zero, no sound is heard.

You'll notice that the vacuum tubes at the top of the interface will glow brighter as each filter set's volume is increased. These don't have any effect

on sound (just like the tube in every 90s Korg product, ba-dump!), but they look real cool. If we were smart, we'd cash in with a wildly overpriced NOS Mullard™ tube emulation, but we're too honest for that kind of buffoonery.

Deep Tone- Sets the level of tone generator signal with a one-pole lowpass filter with a fixed frequency of 200 Hz applied.

Full Tone- This actually isn't a filter at all - it simply controls the amplitude of the dry (no filters applied) oscillator signal.

First / Second Voice level and tone- Unlike the other Tone controls, the *First Voice* and *Second Voice* controls are two-pole bandpass filters with variable center frequencies. The top knobs control the level of the bandpassed signal, and the *Tone* knobs set the frequency. The First Voice *Tone* knob's center frequency is 400 Hz; the Second Voice *Tone* knob's center frequency is 800 Hz.

Brilliant Tone- Sets the level of tone generator signal with a one-pole highpass filter with a fixed frequency of 2000 Hz applied. (It's fun to think that the original designer thought, "What this thing needs is a more piercing tonality!")

Additional Controls



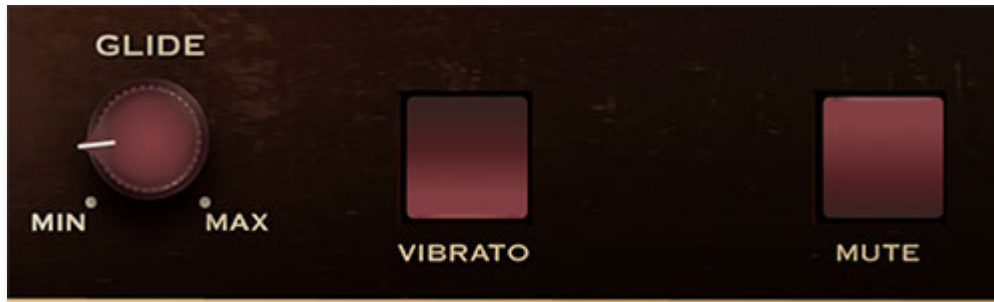
Reverb- The original instrument didn't include reverb, but since Solovox's included an amp/speaker, and thus were always heard in a room of some

sort, we felt a reverb with a room algorithm was an appropriate and useful addition. Turning the knob up adds more reverb - simple!

Volume- Sets master volume. If the red comes on, clipping is occurring, and volume should be reduced.

Attack- Adjusts the onset rate of amplitude. The higher the setting, the slower the attack time.

Release- Adjusts how long it takes for notes to fade to silence when a key is released. The higher the setting, the longer the release time.



Glide- The *Glide* knob causes notes to slide smoothly from one pitch to the next. Higher settings result in a slower change of pitch.

Vibrato- Adds a fixed rate/depth sine-wave vibrato, just like the original.

Mute- The *Mute* button does **NOT** shut off the sound as you might expect. The *Mute* button on the original instrument was intended to emulate shoving a mute in a trumpet or trombone - it filters harmonics from the oscillator voice, giving a more hollow and square wave-type tonality.

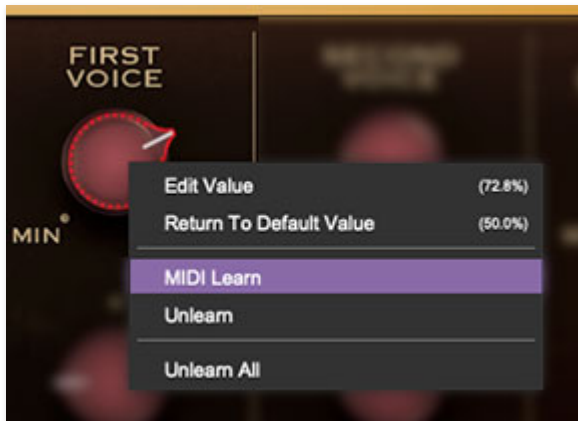
MIDI Controllers Setup and The MIDI Tab

Assigning internal and external hardware controls adds a whole new dimension of control and musicality to patches, and it's really easy to do. The MIDI Tab is where all controller assignments can be viewed and tweaked. First we'll show how to assign an external hardware controller to a Solovox control, then we'll go over all parameters in the MIDI Tab.

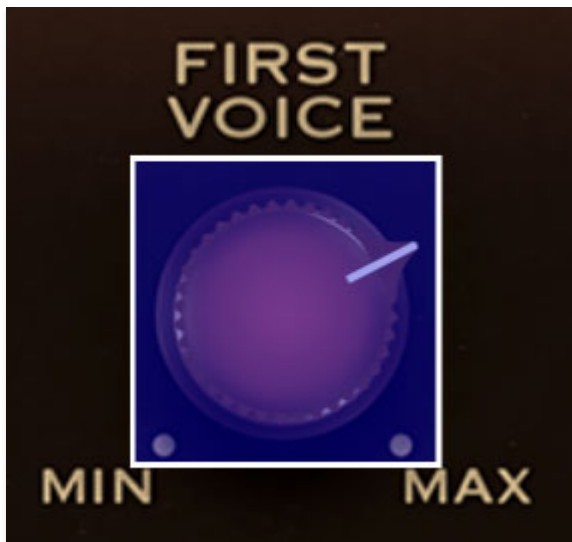
Basic External Hardware Control Assignment

This is the quick, "I just want to assign a hardware control right now!," section. We recommend reading this whole section to best take advantage of Solovox's MIDI control assignments.

In this example, we'll assign a hardware knob/slider control to the *First Voice* level knob.



Begin by right-clicking on the *First Resonator* amount knob and selecting *MIDI Learn*.



A transparent blue overlay appears over the knob indicating that it's in learn mode. Now move the desired hardware control device. The blue overlay disappears and the hardware control will move the onscreen slider. If you get cold feet (or accidentally put the wrong control into learn mode), learn mode can be aborted by right-clicking and selecting *Stop Learning*.

This is the basic procedure for assigning hardware controllers to almost any Solovox control.



When in MIDI learn mode, any previously assigned controller numbers will show in squares. These indicate the MIDI continuous controller number of the assigned hardware control (these are also displayed in the *MIDI* library tab at left).

Once a MIDI controller has been assigned, in addition to real-time control of a Solovox parameter, you'll also be able to record and play back controller data from a DAW.

The MIDI Tab

This is command central for all MIDI controller assignments. Here you'll be able to see information about all currently assigned controllers and adjust control ranges.



To view or hide the MIDI Tab, click the *MIDI* button in the top toolbar.

MIDI Learn		New Mapping Type:		Global		
Name	Type	Value	Preset	Min	Max	Curve
Bass	CC	73 ...	<input type="checkbox"/>			
Tenor	CC	75 ...	<input type="checkbox"/>			
Contralto	CC	79 ...	<input type="checkbox"/>			
Soprano	CC	72 ...	<input type="checkbox"/>			
Deep Tone Volume	CC	80 ...	<input checked="" type="checkbox"/>			
Full Tone Volume	CC	81 ...	<input checked="" type="checkbox"/>			

MIDI Learn button- This is almost exactly the same as enabling MIDI learn mode by right-clicking a control. Click the *MIDI Learn* button to enter learn mode (all controls turn purple). Unlike right-clicking on specific knobs, where Solovox automatically exits controller assignment mode, clicking the *MIDI Learn* knob "stays on" to enable assignment of multiple hardware controls.

This is handy for quickly assigning a bunch of sliders or the buttons of a grid-style controller.

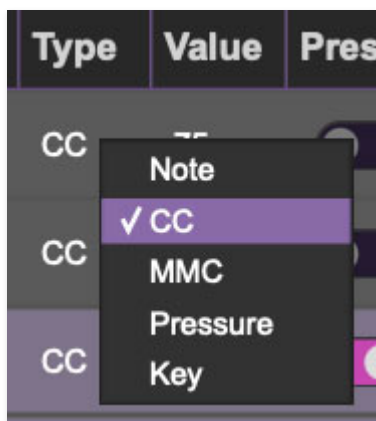
To assign multiple controls, click *MIDI Learn*, click an on-screen control, move the desired hardware knob or slider, continue clicking and assigning on-screen controllers until all desired controls are assigned, then click *Stop Learning* to exit learn mode. (And remember, when we stop learning, we stop growing, and... oh forget it.)

Remember that a single hardware knob/slider/button isn't limited to controlling just one parameter - a single hardware controller can simultaneously operate as many controls as you'd like.

New Mapping Type- This popup menu selects whether newly assigned MIDI mappings will be global (affects all sounds and doesn't change when different presets are selected) or saved with individual presets.

MIDI Tab Columns

Name- Displays the name of the parameter being controlled.



Type- There are five possible types of controller automation in Solovox:

- **Note**- Notes played on a MIDI keyboard controller, expressed as C-1 to G9
- **CC (MIDI Continuous Controller)**- The standard 128 MIDI controller numbers as defined in the MIDI spec. More specifically, these are the controllers transmitted by hardware knob and slider controls. MIDI CC's can be used to control parameters in real-time or recorded and played back within DAW software.
- **MMC (MIDI Machine Control)**- The MIDI control protocol for tape machine-style transport controls. Back in the dark ages, this was used to

control wonky old Tascam and Fostex reel-to-reel monsters, but it's useful if your MIDI controller has tape-style transport control buttons.

- **Pressure**- Most modern keyboard controllers transmit controller data when keys are pressed and released as they're held down. The vast majority of keyboard controllers with aftertouch transmit "mono" aftertouch only; in other words, aftertouch data is the sum of all keys to one single data stream. Note that Solovox only responds to mono aftertouch.
- **Key**- This allows keys of the computer QWERTY keyboard to act as button controls for Solovox's onscreen controls.

Value- Displays the specific automation controller. In the case of a *Note* this would show a MIDI note number (C-1 to G9, for a MIDI CC, this would be the MIDI CC controller number, etc. Clicking on the value opens a pop-up menu where all values are displayed and can be selected.

Preset- This slider works in conjunction with the *New Mapping Type* popup control. In the left position (gray background), the MIDI mapping is global (affects all sounds and doesn't change when different presets are selected), in the right position (lavender background), the MIDI mapping is saved with, and only affects the current sound preset.

The *Preset* switch is super nifty, because it means that MIDI mappings can easily be changed to global or per-preset status at any time. (A lot of folks have asked us for this feature.)

Min- Sets a limit on the lowest value any automation control can set a mapped controller to. This actually recalibrates the range of the automation controller to the remaining parameter range.

Max- Sets a limit on the highest value any automation control can set a mapped controller to. This actually recalibrates the range of the automation controller to the remaining parameter range.

- **Super Tricky Min-Max Tricks**- Not only can parameter ranges be limited via the the *Min* and *Max* knobs, mapped control destinations can be completely inverted by setting the *Min* knob all the way up and the *Max* knob all the way down (or anywhere in between).

Limiting and inverting parameter ranges with the *Min/Max* controls is particularly useful when multiplexing a single hardware control to operate multiple parameters. Along with the *Curve* control, the customization possibilities are super flexible.

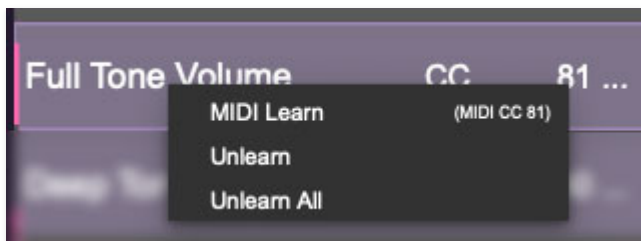
Curve- These allow the customization of how incoming MIDI CC controls affect the movement of Solovox's onscreen controls, ranging from exponential to linear to logarithmic curves.

MIDI Tab Column Configuration Right-Click Menu



Right-clicking anywhere in the top row (*Name, Type, Value, etc.*) displays the column configuration menu. Checking/unchecking these allows hiding and display of each column. This has no effect on assignments.

MIDI Tab Parameters Right-Click

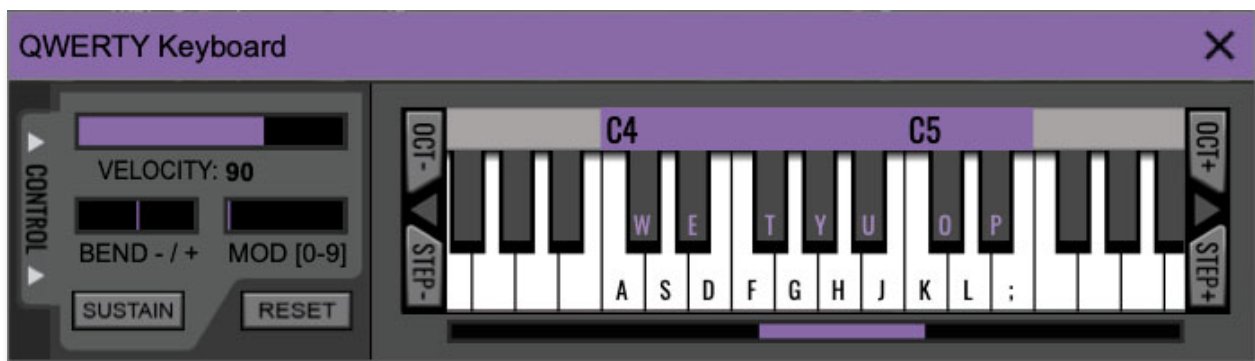


Right-clicking on an assigned parameter opens the menu above.

MIDI Learn- This is used to change the controller assigned to a particular parameter.

Unlearn- Deletes the selected automation parameter.

Unlearn All- Deletes all controller assignments for the patch. Solovox will display a warning dialog prior to deletion in order to thwart potential unlearn-related disasters.



If you don't have a MIDI keyboard attached to your computer, the standard QWERTY computer keyboard can be used to play notes - we're pretty sure you've got one of those! We'll refer to this as the "MTK." Following is a list of MTK keyboard modifiers and functions:



Opening and Closing the MTK - click the the circular keyboard icon in the top toolbar. To close the MTK, click the keyboard icon in the top toolbar, or click the X in the top right corner.

Play Notes- To trigger notes, simply press the corresponding computer keyboard key or mouse click the onscreen keys.

Adjust Currently Visible MTK Range- Slide the purple scroll bar horizontally to adjust the currently visible keyboard range.

Adjust Overall Visible Keyboard Range- Clicking and dragging the right edge of the MTK window allows the overall size of the window to be adjusted. This lets you view more or less of the onscreen keyboard. Note that the MTK window's borders cannot exceed the overall outside dimensions of the Solovox window.

Shift Range Up/Down Octave- Click the *Oct-* and *Oct+* buttons at the top left and right of the onscreen MTK. The current range is displayed above the keyboard.

Shift Range Up/Down Semitone- Click the *Step-* and *Step+* buttons at the bottom left and right of the onscreen MTK. The current range is displayed above the keyboard.

Hide/View Controllers- Clicking *Control* at the far left hides and displays velocity, bender, mod, and sustain control parameters. Hiding the control view makes more space available for the keyboard.

Set Note Velocity- Note velocity has no effect (Solovox does not respond to velocity).

Pitch Bend- Pitch bend has no effect (Solovox does not respond to pitch bender messages).

Mod Wheel- To add mod wheel modulation, press the number keys from *0-9* (above the character keys) while playing a note. The modulation amount will vary from none (*0*) to full modulation (*9*). Note that modulation will "stick" at the selected number; to disable modulation, click the *0* key. Mod can also be engaged by clicking the mouse in the mod bar area.

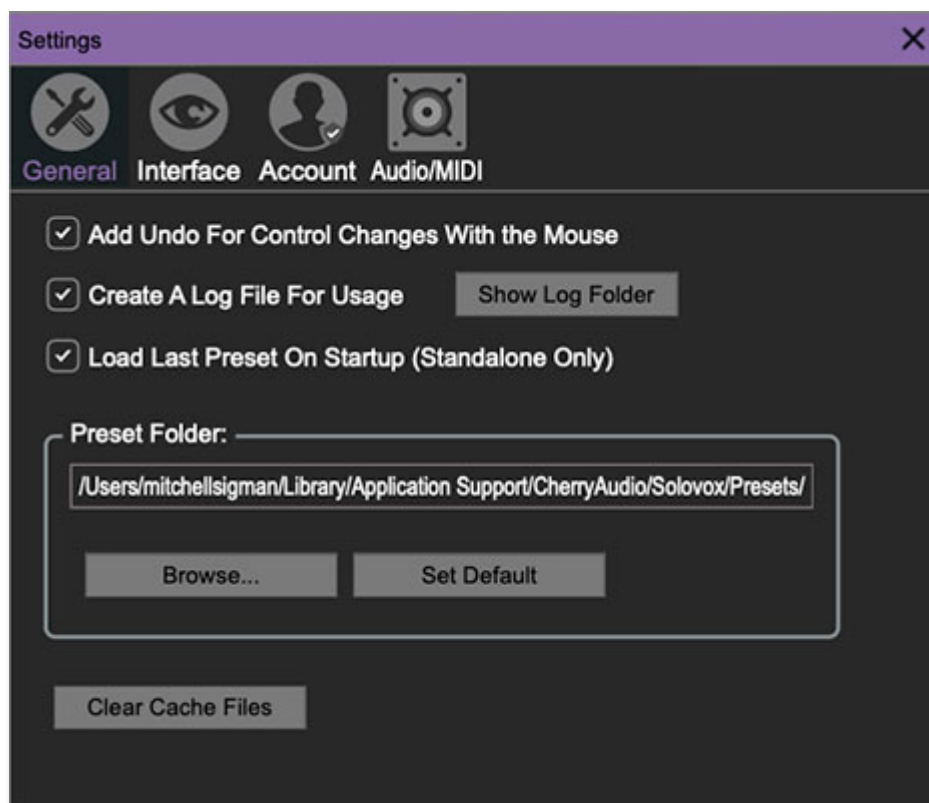
Sustain- The *Sustain* button mimics the functionality of a standard sustain pedal. Click the [TAB] key to engage sustain, or [SHIFT]+[TAB] to lock it. The *Sustain* button can also be engaged by mouse clicking it.

Reset- Initializes all MTK parameters including keyboard range and control parameters.

Settings

Clicking the settings gear opens a window with multiple tabs for configuring various "under-the-hood" settings. These are mostly set-and-forget kind of parameters; everything you'll usually use is right on the panel.

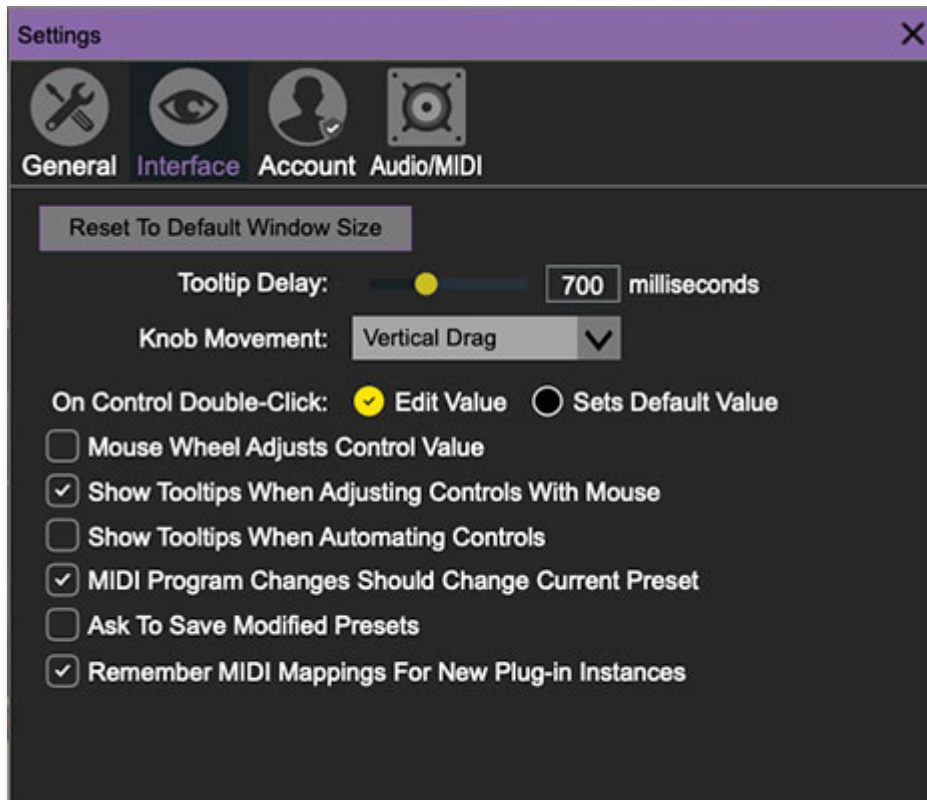
General



- **Add Undo For Control Changes With the Mouse**- Enabling this allows undo of knob/slider/button adjustments. You'll want this on if you want the ability to undo all aspects of patch editing and programming.
- **Create A Log File For Usage**- This creates a text doc of all of Solovox's internal and routines during use. It is mainly intended for our tech staff should you experience any issues. Clicking *Show Log Folder* opens the folder containing Solovox log file docs.
- **Load Last Preset On Startup (Standalone Only)**- Automatically loads the last preset used when Solovox standalone version is started.
- **Preset Folder**- Displays the current location of Solovox's sound presets. This can be changed by clicking and typing in the field.

- **Browse...** - Displays the current location of preset folder in the file manager.
- **Set Default**- Sets the current displayed *Preset Folder* path as the default location
- **Clear Cache Files**- Deletes all log files, temporary sounds, and the image cache.

Interface

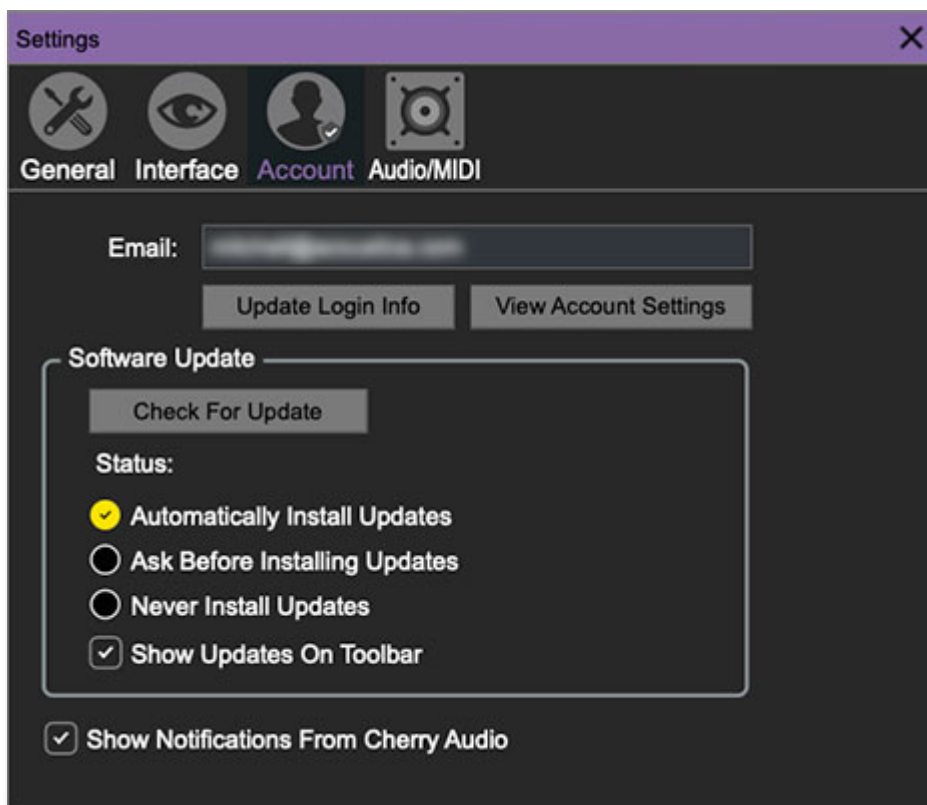


Allows customization of Solovox's user interface settings.

- **Reset To Default Window Size**- Resets the Solovox workspace to default size. Use this to reset the window size if the window somehow becomes too large for your display and can't be resized.
- **Theme**- Allows selection of 14 nifty floor surfaces beneath the pedals.
- **Tooltip Delay**- Tooltips are those informative bits of text that pop up when hovering over a control (go ahead and try it, we'll wait...). The *Tooltip Delay* setting defines how long you must hover before the tooltip pops up.

- **Knob Movement-** Defines which how mouse movements related to turning onscreen knobs. It defaults to *Vertical Drag*, but can be changed to *Horizontal Drag*, or *Rotary Drag* if you're one those folks that cut their teeth on the *Steinberg Model E VST* back in 2000.
- **On Control Double-Click-** Defines what happens when the mouse is double-clicked on a control. If *Edit Value* is selected, an exact number can be entered by typing the number and hitting [ENTER] or [RETURN]. If *Sets Default Value* is selected, double-clicking a control resets it to its default value.
- **Mouse Wheel Adjusts Control Value-** Enabling this lets you adjust knob, slider, and switch values by moving the mouse wheel. This works great with a standard mouse wheel, but you'll want to disable it if you're using an Apple Magic Mouse (which will move the control AND scroll the window).
- **Show Control Tooltips When Adjusting Controls With Mouse-** Displays parameter tooltips/values when the mouse is hovered over a control or as a control is moved with mouse clicked.
- **Show Tooltips When Automating Controls-** Displays parameter tooltips/values next to controls any time a control is changed, i.e. if a control is moved via an assigned MIDI controller or a *Perform* panel knob, etc.
- **MIDI Program Changes Should Change Current Preset-** Allows MIDI program change messages to change Solovox patches.
- **Ask To Save Modified Presets-** This opens a dialog window asking if you'd like to save changes if a patch has been edited and a new patch is selected. If you're the type that likes to click through presets and tweak a control here and there, it can be annoying to have a window pop-up asking if you'd like to save every time you switch presets - if you're that person, keep this off.
- **Remember MIDI Mappings For New Plug-in Instances-** When enabled, Solovox remembers all MIDI Tab controller settings.

Account



Settings for your personal login information and account.

- **Email**- Displays the email address of the current login.
- **Update Login Info**- No, this isn't a place for news and tour dates for yacht rock superstar, Kenny Loggins. Clicking this opens the same email and password login screen you'll see when initially launching Solovox.
- **View Account Settings**- This opens your personal account page on the Cherry Audio Store website containing information about modules purchased and more.

Software Update

- We often fix bugs and make improvements; below are options defining how Solovox handles updates.
- **Check For Update**- Click this to see if an updated version of Solovox available.

Status-

- **Automatically Install Updates**- Updates are automatically downloaded and installed.
- **Ask Before Installing Updates**- By default, Solovox automatically downloads new versions of modules when available. Checking this box

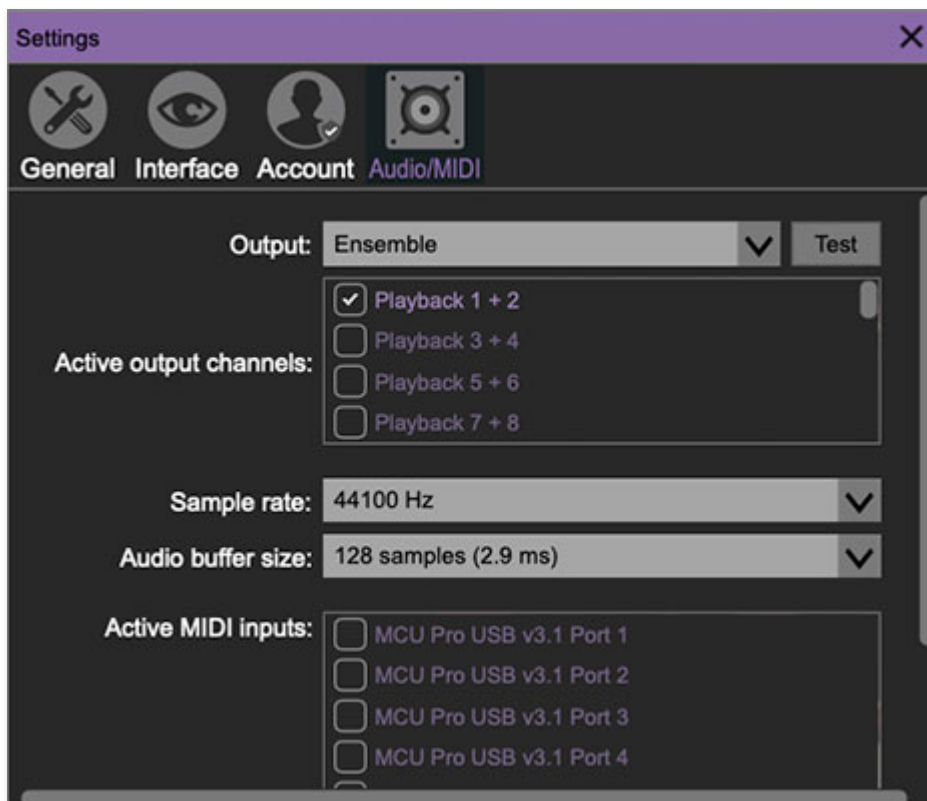
defeats automatic updates and will ask if you'd like to install updates when they become available.

We'll never make changes that can potentially "break" existing patches but we recommend enabling *Ask Before Installing Updates* if you're using Solovox for live performances or other "mission critical" situations.

- **Never Install Updates**- Solovox never automatically installs updates.
- **Show Updates On Toolbar**- Checking this will display an icon in the toolbar next to the logo letting you know there's an update available.

Show Notifications From Cherry Audio- We occasionally will fire off in-app advertisements; disabling this checkbox will hide them. We hate repetitive, annoying ads as much as you, so we won't use this feature too often. When we do, it'll be for something super cool (like a fabulous sale), so we recommend leaving it on.

Audio/MIDI



Not to be confused with audiomidi.com, where I used to work (talk about a not-fun job), these are settings for audio and MIDI hardware input and

output.

This tab is only visible in the standalone version of Solovox.

- **Output-** Use this drop-down menu to choose a physical audio output source. This defaults to *Built-In Line Output*, i.e. your computer's onboard system audio, but you'll get better fidelity with an external professional audio interface. The biggest audible difference is usually reduced background noise or hum.
- The *Test* button will produce a brief sine wave when clicked; this will help with troubleshooting, aka, "WHY THE HECK ISN'T THIS MAKING ANY NOISE?!?"
- **Sample Rate-** This sets Solovox's global sample rate. Lower sample rates offer better performance, but if you have a fast computer, high sample rates may offer slightly improved fidelity.
- **Audio Buffer Size-** As with any digital audio app, this defines performance vs. note latency, and will largely depend upon computer CPU speed. A professional external audio interface will almost always exhibit better performance than "built-in" system audio. Lower settings will result in less latency (in the form of faster response to notes played), but will increase the chances of audio gapping or crackling noise.
- **Active MIDI Inputs-** Enable MIDI input sources, i.e. MIDI/USB keyboards, pad controls, MIDI knob/fader control surfaces, etc. Check boxes to enable one or more devices. **If a MIDI/USB controller isn't working, make sure the appropriate box is checked here.** (We put this this piece of info *way* in the back of the manual, to make it extra challenging to find out when things aren't working.)