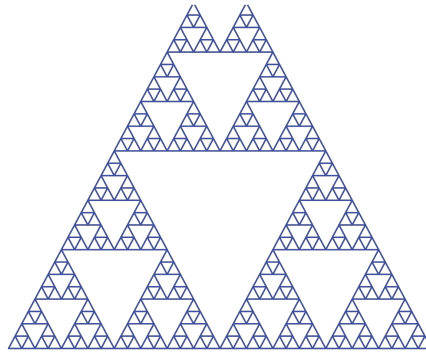
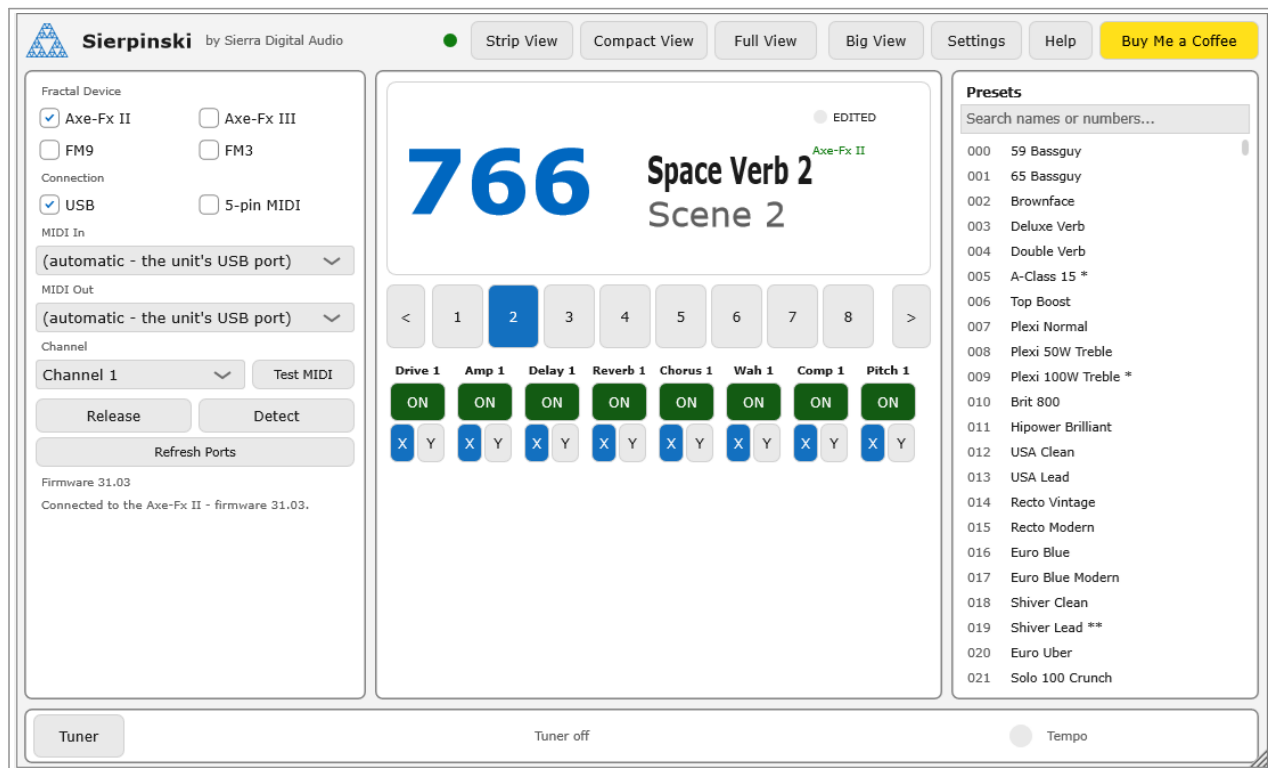




The Sierpinski Fractal

Sierpinski VST3

DAW control for the Axe-Fx II, Axe-Fx III, FM9 and FM3



User Guide - Version 1.0.0 - October 2026

Sierra Digital Audio - www.SierraDigitalAudio.com

Contents

1. What Sierpinski VST3 does	4
2. Quick start	4
3. Setting up the unit	5
4. The screen	5
5. Automation and recording	6
6. Foot controllers and MIDI Learn	6
7. Tempo	7
8. Preset names and Read from Unit	7
9. Using Axe-Edit at the same time	8
10. Settings	8
11. Troubleshooting	10
12. Sierpinski VST3 and Sierpinski Workbench	11
13. Support	12
Appendix A. Windows 10 and Windows 11 MIDI Notes	13
Appendix B. Connection Strategies	15

Click a heading to jump to it. Your PDF viewer's bookmarks panel lists the same sections.

NOTE: In this manual,

I will say '**computer**' to refer to a PC, laptop, Mac, or iPad.

I will say '**Fractal device**' to refer to your Axe-Fx III, Axe-Fx II / XL / XL+, FM9, or FM3.

I will say '**Fractal editor**' to refer to Axe-Edit, Axe-Edit III, FM9-Edit, or FM3-Edit.

IMPORTANT: Decide how your computer talks to your Fractal device before using Sierpinski VST3.

You probably connect your Fractal device to your computer with a USB cable, and use that cable for your Fractal editor. Sierpinski VST3 also needs a MIDI connection to the device - so the question is whether the two can share the USB cable.

It depends on your computer. On Windows 10, and on Windows 11 PCs without Windows MIDI Services, the rule is **one program per MIDI port**: only one program at a time can open the Fractal device's USB MIDI port, and only one can open each port of a USB-to-MIDI adapter. On Windows 11 with Windows MIDI Services (and on a Mac), several programs can share a port. Even then, your Fractal editor **pauses itself** for a few seconds whenever another program changes the preset, then resumes by itself. Appendix A explains this, how to check your PC, and how Sierpinski works with the Fractal editors.

Our recommendation, on every computer: keep your USB cable for your Fractal editor and add a USB-to-MIDI cable for Sierpinski VST3. Plug its two MIDI plugs into your Fractal device's MIDI IN and MIDI OUT, and plug its USB end into your computer. Your Fractal editor and Sierpinski VST3 then each have their own connection and run together without pausing. (The FM3 always needs this, because it has no USB MIDI.) On the Axe-Fx III, FM9 and FM3 the 5-pin connection also brings the tuner readout and the tempo light, which these units don't send over USB.

No USB-to-MIDI cable? Sierpinski VST3 can use the USB cable. Without Windows MIDI Services, close your Fractal editor first, or press **Release** in Sierpinski VST3 whenever you want to use the editor. With Windows MIDI Services both can stay connected, and the editor pauses when Sierpinski VST3 changes the preset.

Either way, turn off whichever port Sierpinski VST3 uses in your DAW. Sierpinski VST3 opens the port itself - and even where ports can be shared, a DAW listening on the same port would record and pass on the device's SysEx traffic.

Reaper: Options > Preferences > Audio > MIDI Inputs, then MIDI Outputs. Right-click the port and disable it.

Other DAWs: do the same on their MIDI settings page.

More details: [Appendix A. Windows 10 and Windows 11 MIDI Notes](#) and [Appendix B. Connection Strategies](#).

Which DAWs can use Sierpinski VST3?

Sierpinski VST3 1.0 is available now for Windows (VST3) and has been tested in Reaper. The Mac version (VST3 and AU) is coming. Any DAW that loads VST3 effect plugins should work; Pro Tools uses only its own AAX format and can't load Sierpinski VST3.

DAW	Windows	Mac	Notes
Reaper	VST3	VST3, AU	Tested. Recommended.
Steinberg Cubase / Nuendo	VST3	VST3	
PreSonus Studio One	VST3	VST3, AU	
Ableton Live	VST3	VST3, AU	
Bitwig Studio	VST3	VST3	
FL Studio	VST3	VST3, AU	
Cakewalk Sonar	VST3	-	Windows only
Tracktion Waveform	VST3	VST3, AU	
MOTU Digital Performer	VST3	VST3, AU	
Harrison Mixbus	VST3	VST3, AU	
Reason	VST3	VST3	
Acoustica Mixcraft	VST3	-	Windows only
Apple Logic Pro / GarageBand	-	AU	Mac only - needs the coming Mac AU version
Avid Pro Tools	-	-	Not supported (AAX only)

Notes: automation, the unit's ports and tempo sync work in any host listed. Foot-controller MIDI Learn needs a DAW that sends track MIDI to effect plugins (Reaper does). Formats change between DAW versions - check your DAW's documentation if in doubt.

1. What Sierpinski VST3 does

Sierpinski VST3 lets your Fractal unit follow the DAW. Presets, scenes, block bypasses and block channels become automation lanes on your guitar track; changes you make on the unit show up in the plugin and can be recorded; the unit's tempo can follow the project tempo. Audio passes through Sierpinski VST3 unchanged - it only sends and receives MIDI. Sierpinski VST3 is free.

2. Quick start

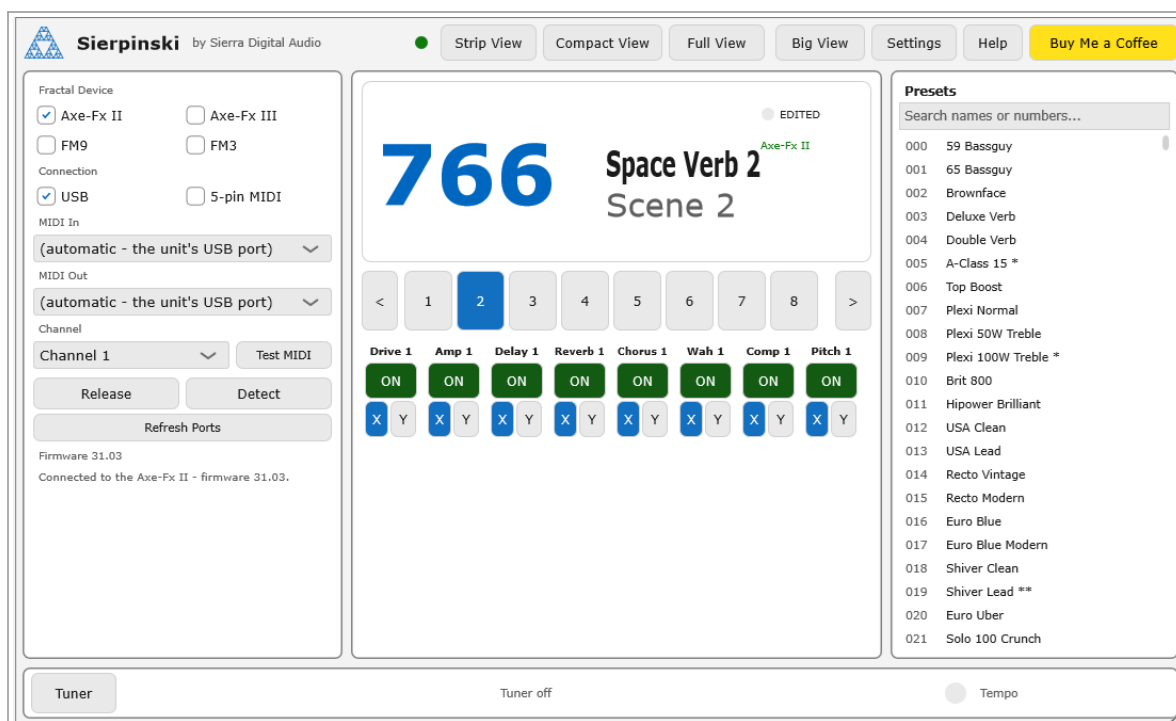
Step	What to do
1	Install: copy Sierpinski.vst3 to C:\Program Files\Common Files\VST3 (Windows).
2	Connect the unit by USB (Axe-Fx II, Axe-Fx III, FM9) or by a MIDI interface with both MIDI IN and MIDI OUT cables (any unit; required for the FM3). On Windows install the Fractal USB driver for your unit.
3	Disable the unit's ports in the DAW (see the box above) and close Axe-Edit / Fractal-Bot.
4	Rescan plugins and insert Sierpinski VST3 on your guitar track. It appears under Effects, from Sierra Digital Audio.
5	The plugin opens in the Full view and connects by itself. If needed, choose the Fractal Device, the Connection (USB or 5-pin MIDI), the ports and the MIDI channel, then press Connect. The status line shows the firmware when it is connected.
6	Axe-Fx III, FM9, FM3: the first time Sierpinski VST3 connects to one, it offers to read your preset names. Choose Read preset names (a minute or two) or Not now. The Axe-Fx II starts with its factory preset list.
7	Click scene buttons, block slots or a preset in the list - the unit follows. Change something on the unit - the plugin follows.
8	Draw automation for Scene, Preset or a slot in your DAW, or record it with your foot controller (section 6).

3. Setting up the unit

Unit	Settings
Axe-Fx II	I/O, then PAGE > to the MIDI tab: MIDI CHANNEL = the channel shown in Sierpinski VST3 (or OMNI), PROG CHANGE = ON, MAPPING MODE = NONE, MIDI PC OFFSET = 0 (or the same offset in Settings > Sync), SEND REALTIME SYSEX = ALL (tuner readout and tempo light).
Axe-Fx III / FM9	SETUP > MIDI/Remote: MIDI channel = the channel shown in Sierpinski VST3, program change on, no custom program-change mapping, Send Realtime Sysex = ON (tuner readout and tempo light - sent over 5-pin MIDI only, not over USB).
FM3	No USB MIDI - use a MIDI interface on MIDI IN and MIDI OUT/THRU. In SETUP > MIDI/Remote turn MIDI Thru OFF so OUT/THRU works as MIDI OUT; set the channel, turn program change on, and set Send Realtime Sysex = ON (tuner readout and tempo light).

Not sure of the channel? **Test MIDI** loads the next preset for a moment on each channel until the unit follows, sets the channel, and loads your preset again. STORE unsaved edits first. On the Axe-Fx II, Test MIDI also learns how the unit reports its channel; after that Sierpinski VST3 checks the channel every time it connects and sets it to match, with a note on the status line. Until then, a mismatch is reported so you know to press Test MIDI.

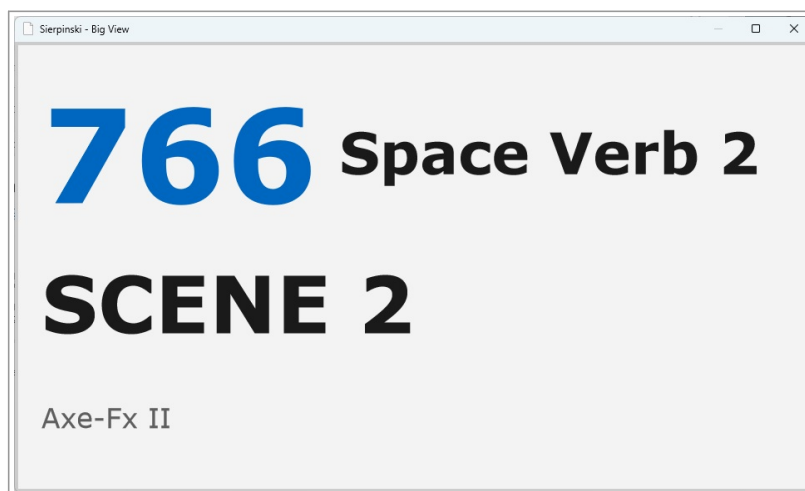
4. The screen



The Full View: connection panel (left), Stage View, scenes and slots (centre), presets (right), tuner and tempo (bottom).

Part	What it does
Header	Strip, Compact and Full views; Big View (a large window readable across the room); Settings; Help; Buy Me a Coffee. The dot is the connection light: green connected, amber trying, red problem.
Connection panel (Full)	Fractal Device, Connection (USB / 5-pin MIDI - USB is greyed out for the FM3), MIDI In / Out ports, Channel, Test MIDI, Connect / Release, Detect (tries every model of all four units), Refresh Ports, and the status line.

Part	What it does
Stage View	Preset number and name, scene (and scene name on the Axe-Fx III, FM9, FM3), the EDITED light (unsaved changes on the unit) and the unit's name.
Scenes	Buttons 1-8 and < > for the previous / next preset. The lit button follows the unit.
Slots	Eight block slots. ON/BYP engages or bypasses the block; X/Y (Axe-Fx II) or A-D (Gen 3) picks its channel. A dimmed slot's block is not in the loaded preset. Choose the blocks in Settings > Slots.
Tuner / Tempo	Tuner on/off with readout, tempo light and BPM. The Axe-Fx II sends the readout and tempo light over USB or 5-pin MIDI. The Axe-Fx III, FM9 and FM3 send them over 5-pin MIDI only, with Send Realtime Sysex = ON; over USB the tuner shows on the unit's own display.
Presets (Full)	Searchable list - type words or numbers. Click to load. On the Axe-Fx III, FM9 and FM3 it lists the presets whose names have been read.
Banners	Messages appear in a strip under the header: port problems, a project's saved settings, a skipped preset change, and an occasional Buy Me a Coffee reminder that never appears while the DAW plays or records.



Big View - a separate window, readable across the room.

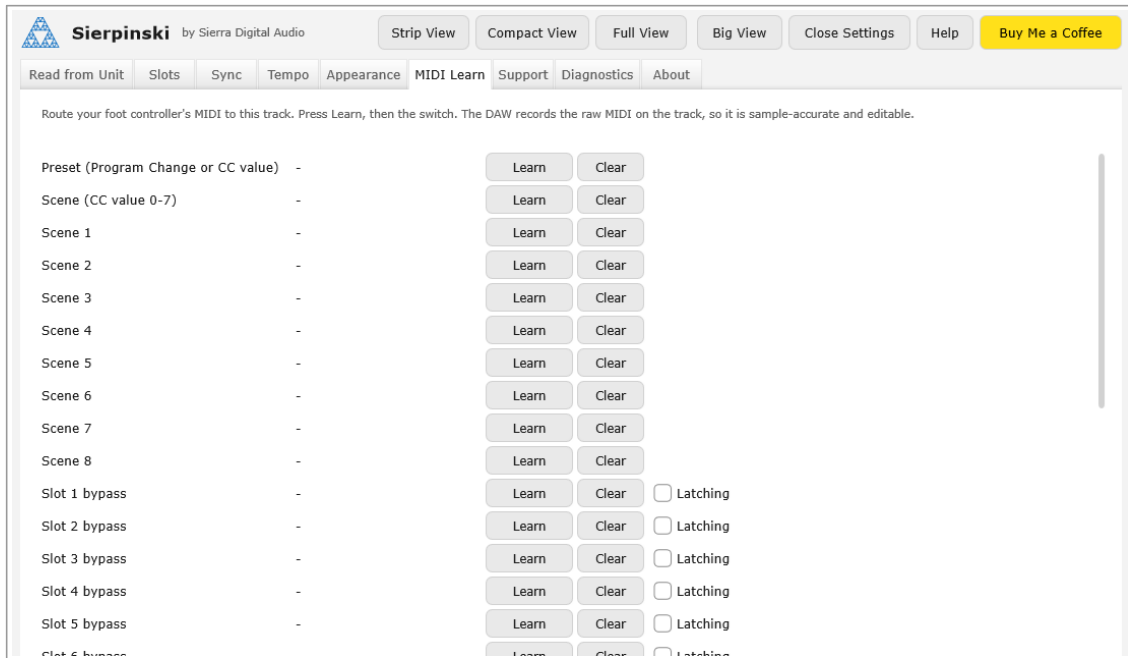
5. Automation and recording

Automation lanes: **Preset** (0-1023, limited to your unit's presets), **Scene** (1-8), **Slot 1-8 Bypass**, **Slot 1-8 Channel** and **Tuner**.

- Changes made on the unit move the parameters, so your DAW records them in Touch, Latch or Write mode. In Read mode the automation wins and sends its own value back.
- Use scenes for changes within a song - they are gapless. Preset changes cause a short gap (spillover settings on the unit control tails).
- When you start playback or jump the playhead, Sierpinski VST3 sends whatever the automation says at that point.
- When a project opens, Sierpinski VST3 sends its saved preset and scene to the unit by default. Settings > Sync can change this to use the unit's current state, or ask each time.
- **Protect unsaved edits** (on by default): automation preset changes are skipped while the unit's EDITED light is on, with a banner offering Load anyway.
- Nothing is sent to the unit during an offline (faster than real time) render. Tracks that re-amp through the unit must be rendered in real time (Reaper: online render).

6. Foot controllers and MIDI Learn

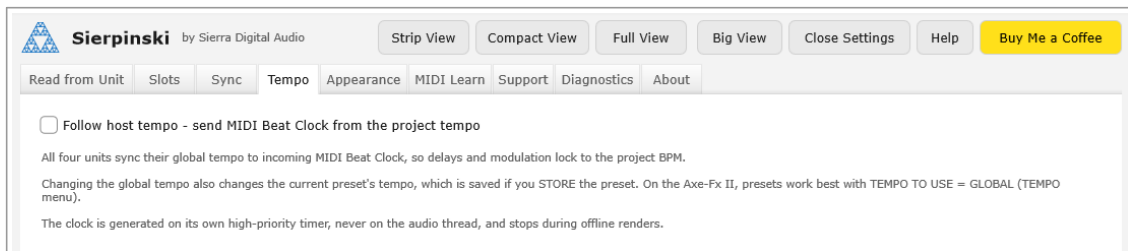
Route your foot controller (for example a Behringer FCB1010) into the DAW and to Sierpinski VST3's track. In **Settings > MIDI Learn** press **Learn** next to a function, then press the switch. The DAW records the raw MIDI on the track. Bypass and tuner switches toggle on each press, or tick **Latching** for switches that send on/off values. A controller plugged into the unit itself (MFC-101, FC-6, FC-12) needs no learning - its changes reach Sierpinski VST3 from the unit.



Settings > MIDI Learn.

7. Tempo

Settings > Tempo > Follow host tempo sends MIDI Beat Clock from the project tempo; all four units sync their global tempo to it. Changing the global tempo also changes the current preset's tempo, which is saved if you **STORE** the preset. On the Axe-Fx II, presets work best with **TEMPO TO USE = GLOBAL**.



Settings > Tempo.

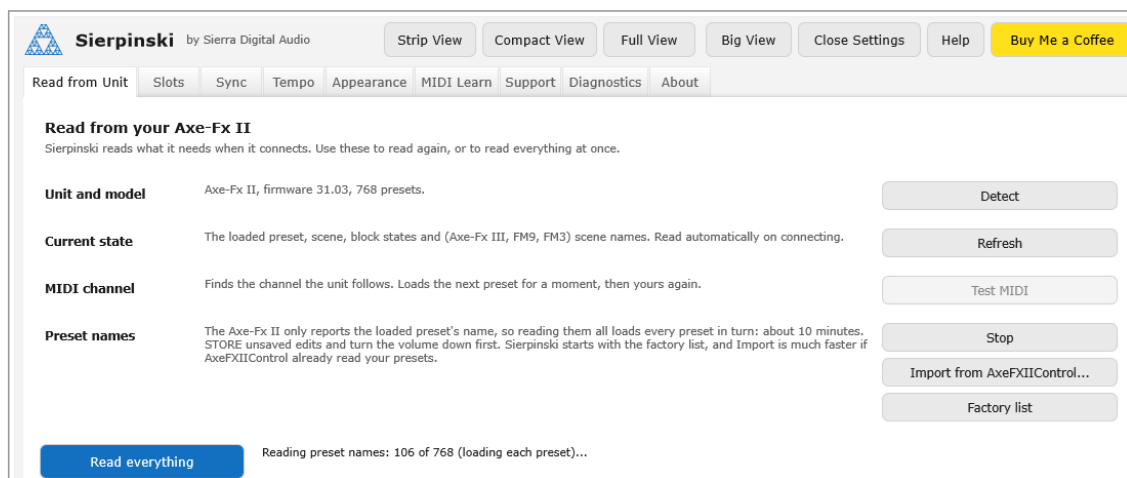
8. Preset names and Read from Unit

Settings > Read from Unit (the first Settings tab) reads everything Sierpinski VST3 uses from your unit: the model and firmware (Detect), the current preset, scene and block states (Refresh), the MIDI channel (Test MIDI) and the preset names. **Read everything** does the state and the names in one go.

- **Axe-Fx II:** Sierpinski VST3 starts with the factory list (presets 0-383 as shipped with the XL / XL+) and updates each preset as it is loaded (a name is stored only after the unit has confirmed the new preset, so a wrong entry corrects itself the next time that preset loads). The very first time Sierpinski VST3 runs it loads **preset 0** (unless the unit has unsaved edits) and offers to read your names. The unit can only report the loaded preset's name, so **Read all names** loads every preset in turn - about 10 minutes; **STORE** unsaved edits and turn the volume down first.

Your original preset is loaded again at the end. **Import from AxeFXIIControl** is much faster if AxeFXIIControl already read your presets. **Factory list** goes back to the factory names.

- **Axe-Fx III, FM9, FM3:** on the first connection Sierpinski VST3 offers to read the names. **Read all names** reads the whole list directly in a minute or two without changing anything on the unit. Until names are read, the preset list is empty - presets can still be chosen with < > or automation.



Settings > Read from Unit, reading the Axe-Fx II's preset names.

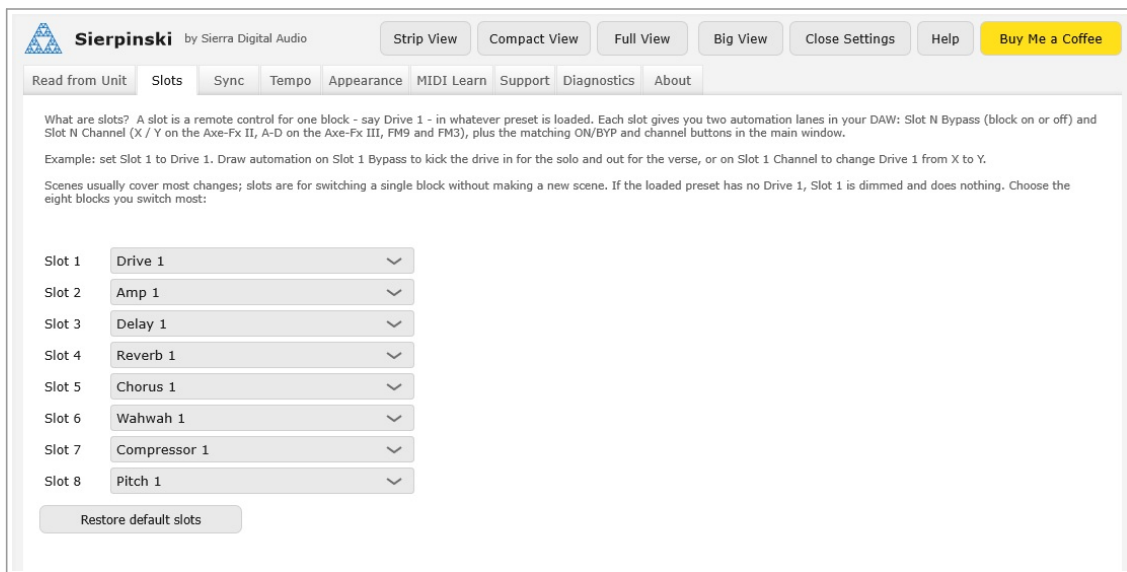
9. Using Axe-Edit at the same time

With a USB-to-MIDI adapter (5-pin MIDI) Sierpinski VST3 does not use the unit's USB port, so the Fractal editor and Sierpinski VST3 run together on every computer - the recommended setup.

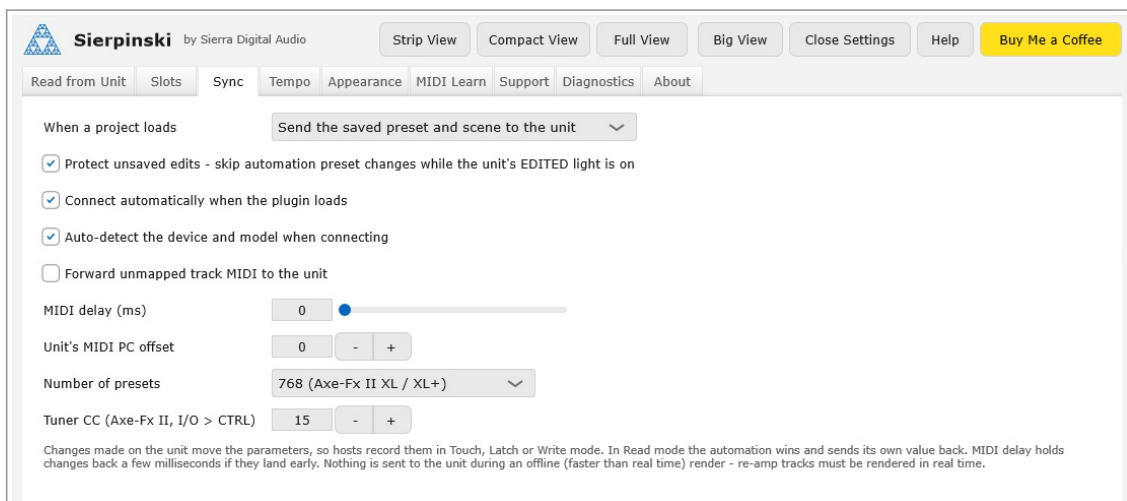
Over the unit's USB port it depends on your computer (Appendix A). Without Windows MIDI Services only one program can use the port: press **Release** to close Sierpinski VST3's ports, use the editor, close it, then press **Reconnect**. With Windows MIDI Services both can stay connected; the editor shows **Communications paused** whenever Sierpinski VST3 (or the front panel) changes the preset; after a few seconds it resumes by itself and catches up with the unit (click it if it stays paused).

10. Settings

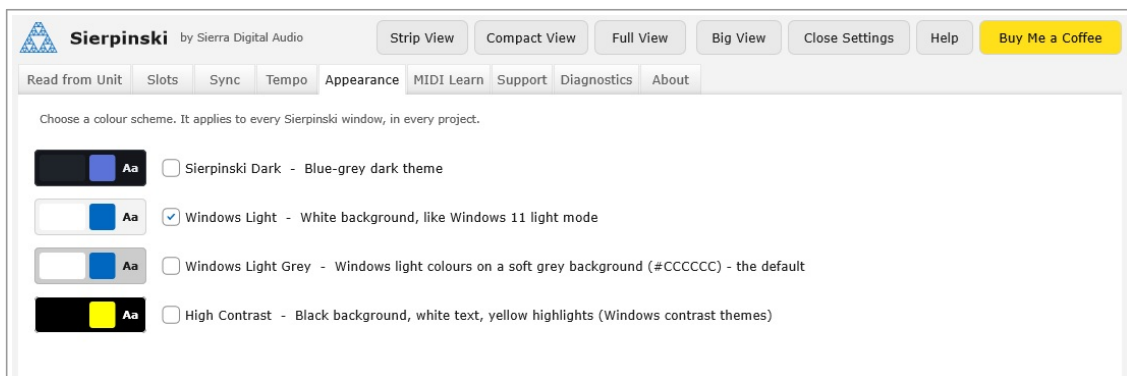
Tab	Contains
Read from Unit	Detect, Refresh, Test MIDI, preset names (Read all names, Import from AxeFXIIControl, Factory list / Clear), Read everything.
Slots	Which block each of the 8 slots controls; Restore default slots.
Sync	Project-load behaviour, Protect unsaved edits, Connect automatically, Auto-detect, Forward unmapped MIDI, MIDI delay, PC offset, number of presets, Axe-Fx II tuner CC.
Tempo	Follow host tempo.
Appearance	Colour scheme: Sierpinski Dark, Windows Light, Windows Light Grey, High Contrast. Applies to every Sierpinski VST3 window.
MIDI Learn	Foot controller assignments.
Support	Buy Me a Coffee and your supporter key.
Diagnostics	Every MIDI message in and out, with Copy to clipboard - include it when asking for help.
About	Version, supporters, trademark notice.



Settings > Slots: the block each slot controls.



Settings > Sync.



Settings > Appearance.

11. Troubleshooting

Start with the status line (Full view) and the red banner, then **Settings > Diagnostics**, which shows every message sent and received.

Symptom	What to check
Red banner: port is in use	Another program has the port (PCs without Windows MIDI Services - Appendix A). The DAW still has the unit's ports enabled - in Reaper, Options > Preferences > MIDI Inputs and MIDI Outputs, disable both; in other DAWs, their MIDI settings. Close Axe-Edit, FM9-Edit, FM3-Edit and Fractal-Bot. Then press Try again.
Red banner: no USB MIDI port found	Is the unit switched on and connected by USB, and is the Fractal USB driver installed (Windows)? Press Refresh Ports. The FM3 has no USB MIDI - choose 5-pin MIDI.
Status: Waiting for the unit, trying every second	The ports opened but the unit doesn't answer. Is it on and finished starting up? Is the right Fractal Device selected (or press Detect)? With 5-pin MIDI, check both cables; on the FM3 turn MIDI Thru off.
Connected, but presets don't change	MIDI channel (Test MIDI), PROG CHANGE = ON, MAPPING MODE = NONE, and the PC offset (Settings > Sync). On the Axe-Fx II the status line says when a preset had to be loaded by SysEx because the unit ignored the Program Change - that almost always means the MIDI channel.
The unit shows another preset than the plugin	A saved project sends its own preset when it opens (Settings > Sync > When a project loads - choose the unit's preset or Ask if you prefer).
A slot does nothing	That block isn't in the loaded preset (the slot is dimmed), or the slot is mapped to a different block - Settings > Slots.
The unit keeps switching back	An automation lane in Read mode is sending its own value. Record in Touch / Latch / Write, edit the lane, or delete it.
Banner: preset change skipped	The unit has unsaved edits (EDITED light). STORE or discard them on the unit, or press Load anyway. Turn off Protect unsaved edits in Settings > Sync if you prefer.
Project opened on the wrong preset	Settings > Sync > When a project loads: send the saved state, use the unit's, or ask.
Tuner shows no readout	Axe-Fx II: set I/O > MIDI > SEND REALTIME SYSEX = ALL. Axe-Fx III, FM9, FM3: connect by 5-pin MIDI and set SETUP > MIDI/Remote > Send Realtime Sysex = ON - these units don't send the readout over USB.
Tempo light doesn't flash	Axe-Fx II: SEND REALTIME SYSEX = ALL. Axe-Fx III, FM9, FM3: 5-pin MIDI and Send Realtime Sysex = ON.
Delays don't follow the project tempo	Settings > Tempo > Follow host tempo; on the Axe-Fx II set TEMPO TO USE = GLOBAL in the preset.
Preset list empty or names show (not read)	Settings > Read from Unit > Read all names. Axe-Fx II: or Import from AxeFXIIControl.
Reading Axe-Fx II names stopped early	Press Read all names again; it starts from preset 0. STORE unsaved edits first - the read won't start while EDITED is lit.
Banner: another instance controls the unit	Only one Sierpinski VST3 can drive the unit. Press Take Over in the one you want to use.
Nothing reaches the unit during a render	Expected for offline renders. Render re-amp tracks in real time.
Window too small or oddly laid out	Click Full or Compact. If it persists, remove Sierpinski VST3 from the track and insert it again.
Fractal editor shows Communications paused	Expected: the editor pauses whenever another program or the front panel changes the preset, and resumes by itself after a few seconds. If it stays paused, something keeps checking the unit - see Appendix A. A USB-to-MIDI adapter for Sierpinski VST3 avoids it (Appendix A and B).
A MIDI interface plugged in after the DAW started doesn't work	Windows MIDI Services: plug MIDI devices in before starting the DAW, or restart the DAW (Appendix A).
Still stuck	Settings > Diagnostics > Copy to clipboard and send it with a screenshot to Sierra Digital Audio via www.SierraDigitalAudio.com .

12. Sierpinski VST3 and Sierpinski Workbench

Sierpinski VST3 has a free companion: **Sierpinski Workbench** (formerly AxeFXIIControl), a stand-alone Windows app from Sierra Digital Audio. The plugin is made for recording - automation, project recall, the DAW's tempo. The Workbench is made for the stage and the bench - setlists, a full-screen Stage Monitor, the Scene Matrix, foot controllers without a DAW and a reference for every front-panel function. Use whichever fits the job, or both: Appendix B shows how to connect them together with Axe-Edit.

Feature	Sierpinski VST3	Sierpinski Workbench
Units and connection		
Axe-Fx II, XL, XL+	Yes	Yes
Axe-Fx III, FM9, FM3	Yes (beta)	Yes (beta, version 2.0)
USB or 5-pin MIDI connection	Yes	Yes
Auto-detect the model; keeps trying until the unit is on	Yes	Yes
Test MIDI (finds the unit's MIDI channel)	Yes	Yes
Work alongside the Fractal editor	Release / Reconnect, or share the port (Appendix A)	Editor button: shares the port where Windows allows, otherwise takes turns
Live control		
Load presets; search the preset list	Yes	Yes - also by amp, cab, drive and blocks
Scenes 1-8	Yes	Yes
Block bypass and channel (X/Y, A-D)	8 assignable slots	Every block in the preset
Scene Matrix (every scene against every block, editable)	-	Yes
Tuner on/off and readout	Yes (Gen 3 readout over 5-pin MIDI)	Yes
Tempo	Follows the DAW tempo (MIDI clock)	Tap, set BPM, tempo per song
Looper control	-	Yes
External Controllers 1-12	-	Yes
Global bypass, output volumes and other CC functions	-	Yes
DAW integration		
Runs inside the DAW (VST3; AU for Mac planned)	Yes	- (stand-alone Windows app)
Automation lanes for preset, scene, slots and tuner	Yes	-
Unit state saved and recalled with the project	Yes	-
Changes on the unit recorded into the DAW	Yes	-
MIDI Beat Clock from the project tempo	Yes	-
Safe during offline renders	Yes	n/a
Performance		
Setlists, songs and sections (unlimited)	- (the timeline is the setlist)	Yes
Perform view with keyboard / page-turner control	-	Yes
Large display for the stage	Big View window	Stage Monitor: full screen on a second screen or TV, with setlist, notes and banners

Feature	Sierpinski VST3	Sierpinski Workbench
Set timer and clock	-	Yes
Foot controllers (FCB1010, MFC-101, any MIDI pedal)	MIDI Learn through the DAW track	Foot Control window: works without a DAW, long press, profiles
Print and export setlists	-	Yes
Presets and reference		
Preset names	Factory list, Read all names, Import	Full read and resync, local preset library
Front-panel function reference (99 Axe-Fx II functions)	-	Yes
CC Map editor	- (factory CCs; tuner CC setting)	Yes
MIDI message log	Diagnostics tab	MIDI Log window
Raw SysEx tool	-	Yes
General		
Colour schemes	4 (Light Grey default)	Planned
Platforms	Windows (Mac planned)	Windows
Price	Free (Buy Me a Coffee)	Free (Buy Me a Coffee)

Download Sierpinski Workbench from www.SierraDigitalAudio.com.

13. Support

Sierpinski VST3 is free and always will be. If it helps your recording, please consider buying a coffee (the yellow button) - it funds development and testing on the Axe-Fx III, FM9 and FM3. Supporters receive a key (Settings > Support) that turns off the occasional reminder.

Axe-Fx, FM9, FM3, Axe-Edit and Fractal Audio are trademarks of Fractal Audio Systems. Sierra Digital Audio is not affiliated with or endorsed by Fractal Audio Systems; device names are used only to describe compatibility. VST is a registered trademark of Steinberg Media Technologies GmbH.

Appendix A. Windows 10 and Windows 11 MIDI Notes

Whether two programs - say Sierpinski VST3 and your Fractal editor - can use the same MIDI port at the same time is decided by Windows, not by Sierpinski or Fractal. Windows changed this recently, so the answer depends on your computer.

One program per port (Windows 10, and Windows 11 without Windows MIDI Services)

Windows' standard USB MIDI driver lets only one program open a MIDI port at a time; a second program trying to open it gets an error. In Sierpinski VST3 that shows as the red banner **port is in use**. This applies to the Fractal device's USB MIDI port and to each port of a USB-to-MIDI adapter.

Shared ports (Windows 11 with Windows MIDI Services)

Microsoft has rebuilt MIDI in Windows 11 as **Windows MIDI Services**. With it, every MIDI port is **multi-client**: several programs can open the same port, whatever driver the device uses. Existing programs - Sierpinski VST3, Sierpinski Workbench, the Fractal editors, your DAW - get this automatically; nothing has to be updated.

- It arrives through **Windows Update** on Windows 11 24H2 and 25H2, switched on in phases (the rollout began early in 2026). A PC with Windows Update turned off may not get it.
- There is no switch to turn it on. Microsoft warns against forcing it with third-party tools or installing developer "service" builds - that can leave a PC without working MIDI.
- **Our recommendation:** Windows 11 25H2 (the version Microsoft supports for the new MIDI system) with Windows Update on. Sierpinski works without it too.
- Known side effect: a MIDI device plugged in after a MIDI program has started may not work. Plug your Fractal device and MIDI interfaces in before starting the DAW (or restart the DAW).
- On a Mac, programs have always been able to share a MIDI port.

Is it on my PC?

- **Quick look:** press Win+R, type services.msc, and look for **Windows MIDI Service**. If it is listed, the new MIDI system is installed.
- **Definite answer:** Microsoft's checker, **midicheckservice** (linked from aka.ms/midi, "MIDI Feature Enablement Checker"). Download the x64 version, unzip it, close your MIDI programs, open Windows Terminal (right-click Start > Terminal) and run it there - double-clicking doesn't work. It is unsigned, so Windows may ask you to choose More info > Run anyway. It reports whether Windows MIDI Services is installed and enabled.
- **Practical test:** with your Fractal editor connected over USB, connect Sierpinski on the same USB port. If both connect, your PC shares ports.

The Fractal editors pause themselves

Fractal editors have a **Communications paused - click to resume** state. Fractal provides it so you can use a foot controller or the front panel without the editor's heavy two-way traffic causing audio gaps. In our tests (Axe-Edit with an Axe-Fx II XL+ on Windows 11 25H2) Axe-Edit also **pauses itself whenever the preset changes and Axe-Edit didn't change it** - from the front panel, an MFC-101, or Sierpinski. Window focus has nothing to do with it. It is a short pause: once the outside activity stops, the editor reads the unit again and **resumes by itself** after a few seconds - click it only if it stays paused. What keeps an editor paused is **constant** checking from another program: regular preset or scene requests every few seconds never let it settle. Editing then works normally, with no errors on either side. Sierpinski's background status checks (CPU use, the EDITED light) don't cause a pause. On a shared port the editor also sees every reply the unit sends to Sierpinski, and preset or scene replies it didn't ask for make it pause - so Sierpinski Workbench stops its regular checks while the editor is open (its quiet mode) and reads the preset only when you click back into its window or press Refresh. Sierpinski VST3 reads the preset when you load a project, jump the playhead or change it. Axe-Edit III, FM9-Edit and FM3-Edit have the same pause; whether they pause themselves in the same situations is being confirmed by beta testers.

How Sierpinski works with the Fractal editors

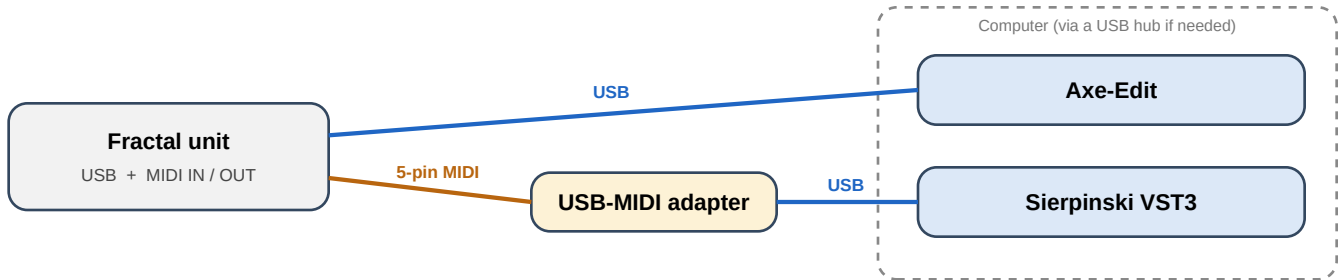
Connection	Sierpinski VST3	Sierpinski Workbench
USB-to-MIDI adapter for Sierpinski, USB for the editor (recommended, Appendix B)	Both run together on every computer. The editor still pauses when Sierpinski VST3 changes the preset.	Both run together on every computer. The Axe-Edit button just starts the editor; the Workbench stays connected.
Unit's USB port, one program per port (no Windows MIDI Services)	Take turns: press Release, use the editor, close it, press Reconnect.	Take turns: the Axe-Edit button closes the Workbench's ports, starts the editor, and reconnects when it closes.
Unit's USB port, shared (Windows MIDI Services)	Both can stay connected. Each preset change from Sierpinski VST3 (automation or the preset list) pauses the editor for a few seconds; it resumes by itself.	Both stay connected (the default). While the editor is open the Workbench reads the preset only when you click back into it or press Refresh, so the editor isn't paused; it pauses when you change the preset in the Workbench. Options can switch to taking turns.
The FM3	Always a USB-to-MIDI adapter (it has no USB MIDI).	Always a USB-to-MIDI adapter.

Two things don't change, whatever your computer: **keep the unit's ports disabled in your DAW** (Sierpinski VST3 opens them itself, and a DAW listening on the same port would record and pass on the unit's SysEx), and **don't read all preset names while editing in the Fractal editor** - on the Axe-Fx II that read loads every preset in turn.

Appendix B. Connection Strategies

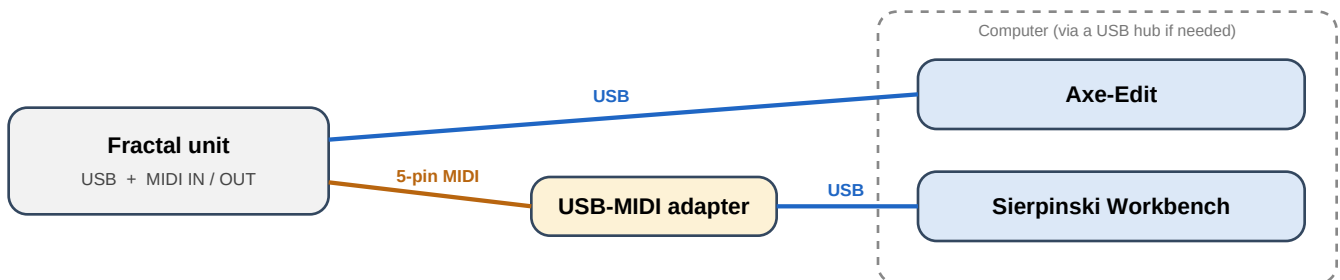
These setups are the best-practice recommendation: they work on every computer, whether or not it can share MIDI ports (Appendix A), and the Fractal editor never has to pause. The professional, most flexible setup is to **keep the unit's USB port for Axe-Edit** (or Axe-Edit III / FM9-Edit / FM3-Edit) and to connect **Sierpinski VST3 through a USB-to-MIDI adapter** wired to the unit's MIDI IN and MIDI OUT jacks. Choose **5-pin MIDI** in Sierpinski VST3's Connection setting and pick the adapter's ports. Remember to disable those ports in your DAW's MIDI settings. On the Axe-Fx III, FM9 and FM3 this is also the connection that carries the tuner readout and the tempo light (Send Realtime Sysex = ON).

Scenario 1 - Axe-Edit and the Sierpinski VST3 plugin (recommended for recording)



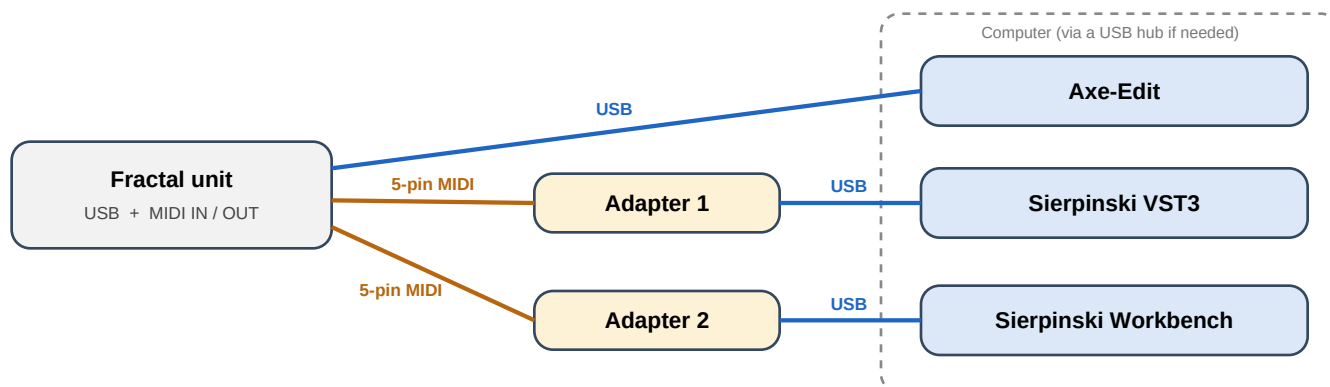
Axe-Edit uses the unit's USB port; the Sierpinski VST3 plugin uses the adapter. Tweak tones in Axe-Edit while Sierpinski VST3 runs your scenes and presets from the timeline. One adapter is enough.

Scenario 2 - Axe-Edit and Sierpinski Workbench (recommended for the stage and the bench)



The same wiring with the Workbench in place of the plugin: setlists, the Stage Monitor and foot control alongside Axe-Edit. One adapter is enough.

Scenario 3 - Axe-Edit, the Sierpinski VST3 plugin and Sierpinski Workbench at the same time (advanced)



The plugin and the Workbench can't share one adapter port, and the unit has one MIDI IN and one MIDI OUT. Running all three needs one of these:

- **Two adapters, a MIDI merger and a MIDI thru box:** both adapters' MIDI OUTs feed the merger into the unit's MIDI IN; the unit's MIDI OUT feeds the thru box, which sends to both adapters' MIDI INs.
- **A multi-port MIDI interface with built-in routing** (for example the iConnectivity mio range), set to merge two computer ports into the MIDI OUT to the unit and copy the unit's MIDI OUT to both. One box, no extra cables.
- **A multi-client driver** from the adapter's maker, where one exists - for example ESI offers an optional MIDI port driver for multi-device / multi-client use on Windows with its interfaces - lets two programs open the same adapter.
- **Windows MIDI Services** - on Windows 11 PCs that have it (Appendix A), several programs can share one port, so one adapter can serve both Sierpinski programs. They then send to the same MIDI IN, so don't let both change presets at once.

Most players don't need Scenario 3: the plugin is for recording and the Workbench for the stage. To switch between them on one connection, press Release (plugin) or close the Workbench, then connect the other.

Using USB only (one cable)

With no adapter, Sierpinski VST3 uses the unit's USB port. Without Windows MIDI Services Axe-Edit can't run at the same time: press **Release** before opening Axe-Edit and **Reconnect** after closing it. With Windows MIDI Services both can stay connected, and Axe-Edit pauses whenever Sierpinski VST3 changes the preset (Appendix A). The FM3 has no USB MIDI, so on the FM3 Sierpinski VST3 always uses an adapter and FM3-Edit keeps the USB port - that is Scenario 1 or 2. On the Axe-Fx III and FM9 over USB, the tuner readout and tempo light are not available (the unit sends them over 5-pin MIDI only).

Choosing an adapter and a hub



A typical USB-to-MIDI adapter. One end plugs into the computer's USB port; the two 5-pin MIDI plugs go to the unit's MIDI IN and MIDI OUT jacks.

Which plug goes where: the plug marked **OUT** carries what the computer sends, so it goes into the unit's **MIDI IN**. The plug marked **IN** goes into the unit's **MIDI OUT**. Some adapters spell it out ("connect to MIDI IN"). If nothing reaches the unit, swap the two plugs.

Avoid cheap, unbranded USB-to-MIDI cables. Most low-cost cables don't handle MIDI SysEx (System Exclusive) reliably: they drop or corrupt the long SysEx messages Sierpinski VST3 depends on. Scene changes may seem to work while preset names, block states and the tuner fail. Choose a class-compliant interface from a known MIDI maker.

Adapters known to handle SysEx

Adapter	Type	What the maker or long-time users report
CME U2MIDI Pro	1 in / 1 out cable, USB-A (C2MIDI Pro for USB-C)	CME lists support for all MIDI messages including clock, SysEx, MIDI timecode and MPE; class compliant.
ESI MIDIMATE eX	1 in / 1 out cable	Class compliant; ESI offers an optional Windows driver for multi-client use (see Scenario 3).
Roland UM-ONE mk2	1 in / 1 out cable	Widely used for SysEx transfers; Roland marks it discontinued in some regions, so it may be found used.
iConnectivity mio range, ESI M4U eX / M8U eX	Multi-port interfaces	For Scenario 3: several ports with routing, so two programs can share the unit.

These adapters have not yet been tested with Sierpinski VST3 - the list reflects what their makers and users report. Test any adapter as described below.

- Connect both plugs, as described above. On the FM3 turn MIDI Thru off so its OUT/THRU jack works as MIDI OUT.
- A powered USB hub is fine for the adapters and the unit's USB cable.
- Test a new adapter with **Settings > Read from Unit > Refresh**: if the preset name and block states appear, long SysEx gets through.