



V-Synth Patch Composer

User Guide

A patch editor for the Roland V-Synth and V-Synth XT.



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CHAPTER 1

Introduction

V-Synth Patch Composer edits Roland V-Synth and V-Synth XT patches on your Mac and exchanges them with the instrument over MIDI and through project folders. It keeps a library of everything the V-Synth holds, provides interactive graphics that match the V-Synth's screen illustrations, and lets you audition each edit as you make it.

What the app does

- Edits every setting the V-Synth accepts over MIDI: the 512 Work Area patches, the 16 Temporary Area Parts, System and Setup.
- Shows each patch the way the V-Synth's screens do, in groups and tabs, with drawings of envelopes, LFOs, filters, effects and more that you can drag to change the settings.
- Loads patches from the V-Synth and sends them back. With Live Edit on, each change goes to the instrument as you make it.
- Saves everything in a library file, and imports and exports V-Synth project folders.
- Keeps keywords and notes with each patch, and finds patches by any setting.
- Plays the V-Synth from the Mac with the on-screen Musical Keyboard.
- Optionally sets up a patch from a description in words, with Auto Compose and a language model of your choice.

What you need

- A Roland V-Synth running system version 2.0, or a V-Synth XT. The V-Synth GT is not supported.
- The V-Synth must be running as a V-Synth, not with a VC-1 or VC-2 V-Card.
- A MIDI interface connected to both the V-Synth's MIDI IN and MIDI OUT. The app sends to the instrument and reads its replies, so it needs both directions.
- A Mac with macOS 14 Sonoma or later.
- For Auto Compose only: a language model server on your Mac or network, such as LM Studio or Ollama, or an account with a cloud AI service that provides an API URL and API key. Cloud services charge for their use.

Using the app without a V-Synth

You can explore the app, edit patches, and work with libraries and project folders without the instrument connected. Only loading, sending, Live Edit and the Musical Keyboard need a V-Synth.

About this guide

- Menu commands are written with the menu first: **File > Save Library** means the Save Library command in the File menu.
- Keyboard shortcuts use the keys' symbols:  Command,  Option,  Shift and  Control.
- The V-Synth's own terms are capitalized as the instrument writes them: Part, Work Area, Temporary Area, Patch Palette. [Appendix B](#) explains them.
- The built-in help (**Help > V-Synth Patch Composer Help**) covers the same ground in shorter form.

CHAPTER 2

Setting up

This chapter connects the V-Synth to the Mac, sets up the app to reach it, and loads a first patch.

Connecting the V-Synth

Connect a MIDI cable from your MIDI interface's output to the V-Synth's MIDI IN, and another from the V-Synth's MIDI OUT to the interface's input. If the V-Synth is behind a MIDI router or patch bay, make sure both directions are routed between the V-Synth and the Mac.

Checking the V-Synth's MIDI settings

On the V-Synth, press SYSTEM, touch **Common** at the bottom of the screen, then touch **MIDI USB** on the left.

- **Rx Sys-Ex** must be on. With it off, the V-Synth ignores everything the app sends.
- Note the **Device ID**. It is 17 unless someone has changed it. The app must use the same number.
- Turn on **Tx Edit** if you want edits made on the V-Synth's panel to appear in the app while Live Edit is on. It is off by default. To keep it on after the V-Synth is turned off, touch **Write** at the bottom right of the screen, then touch **EXECUTE** when the V-Synth asks "Are You Sure?".

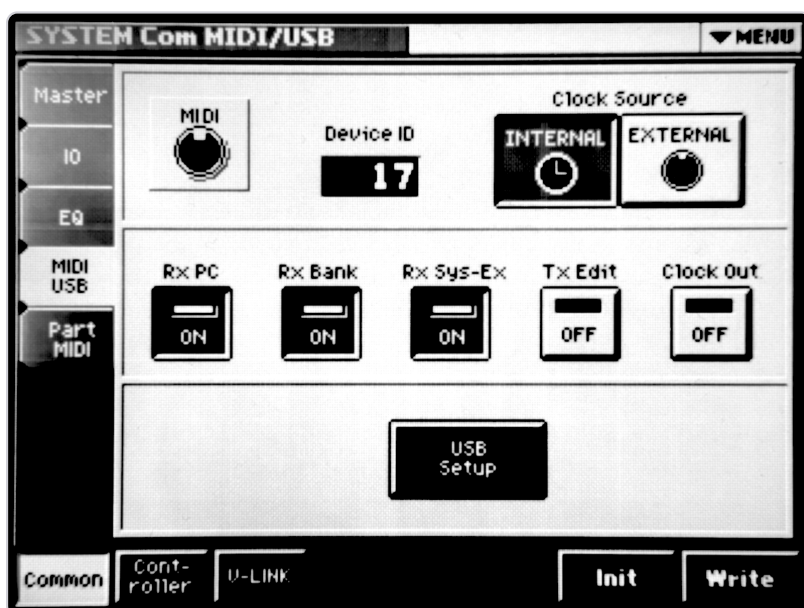


Figure 2-1. The V-Synth's MIDI USB screen as it leaves the factory: Device ID 17, Rx Sys-Ex on and Tx Edit off.

Choosing the MIDI ports and Device ID

1. Choose **V-Synth Patch Composer > Settings...** (⌘ ,) and click **MIDI**.
2. Set **Device ID** to match the V-Synth. If you are not sure, click **Find**. The app asks every connected V-Synth to identify itself, then sets the ID if one answers. If several answer, it lists them so you can choose.
3. Under **Output**, choose the port connected to the V-Synth's MIDI IN.
4. Under **Input**, choose the port connected to the V-Synth's MIDI OUT, or leave **All MIDI inputs** chosen.

If a port does not appear, connect the interface and click **Refresh**. If the chosen input is disconnected later, the pane says so, and nothing is received until it is back or you choose another.

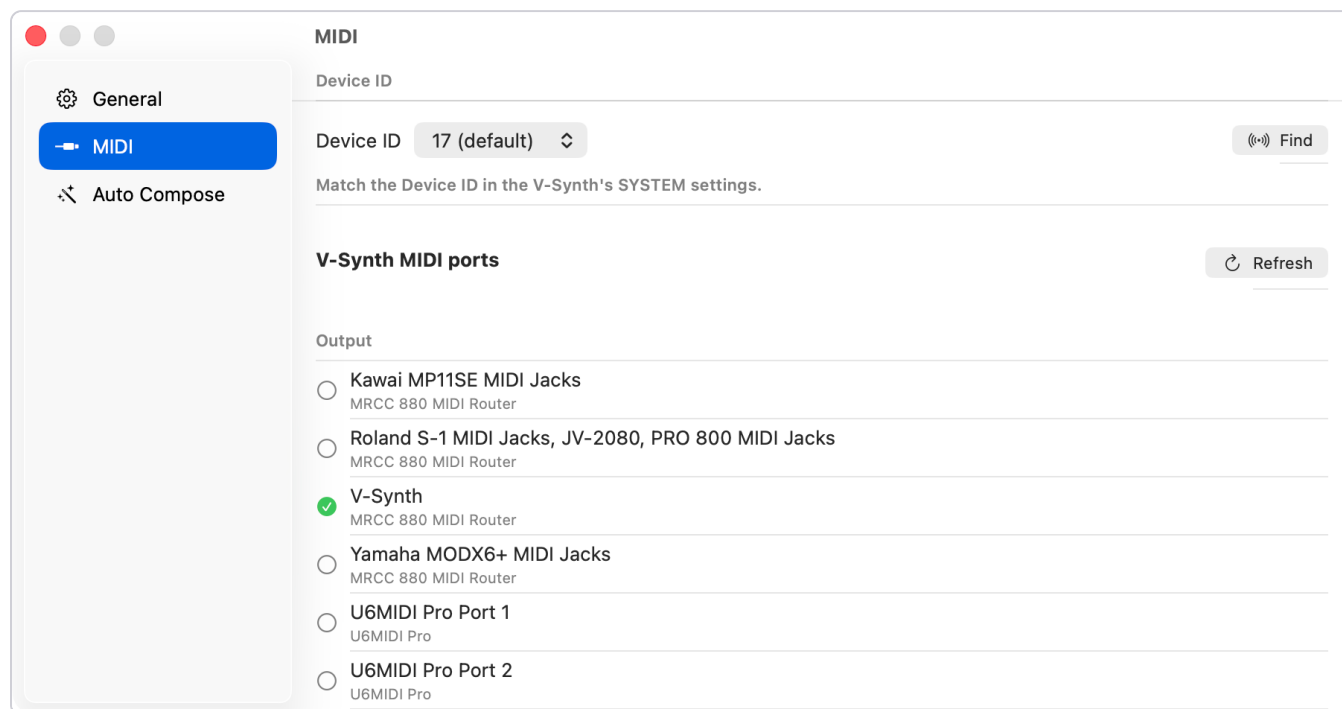


Figure 2-2. The MIDI settings: the Device ID, and the Output ports with the V-Synth chosen. The Input ports are below them.

If your V-Synth is behind a MIDI router, its port may appear under the router's name. The app looks for "V-Synth" in the port names, but you can choose any port by hand.

Loading your first patch

1. In the sidebar, under **Temporary Area**, select **Part 1**. The V-Synth plays Part 1 by default.
2. Click **Load from V-Synth** in the editor's header, or press  . A whole patch takes about five seconds to load. A progress bar appears next to the button.

When the load finishes, the Part shows a green check, meaning the app and the V-Synth have the same data for that Part.

If a dialog says **The V-Synth Did Not Answer**, nothing was loaded. The dialog says what to check, and its **Open MIDI Settings...** button goes straight to the ports and the Device ID.

[Chapter 15](#) has more.

Saving your work

Every change is kept as you go, in the app's own working copy, and is still there the next time you open the app. To keep a named copy of the library that you can open again, back up or move to another Mac, choose **File > Save Library** ( ). [Chapter 5](#) explains libraries.

CHAPTER 3

The main window

The main window has the library on the left, the editor in the middle and the keywords and note on the right.

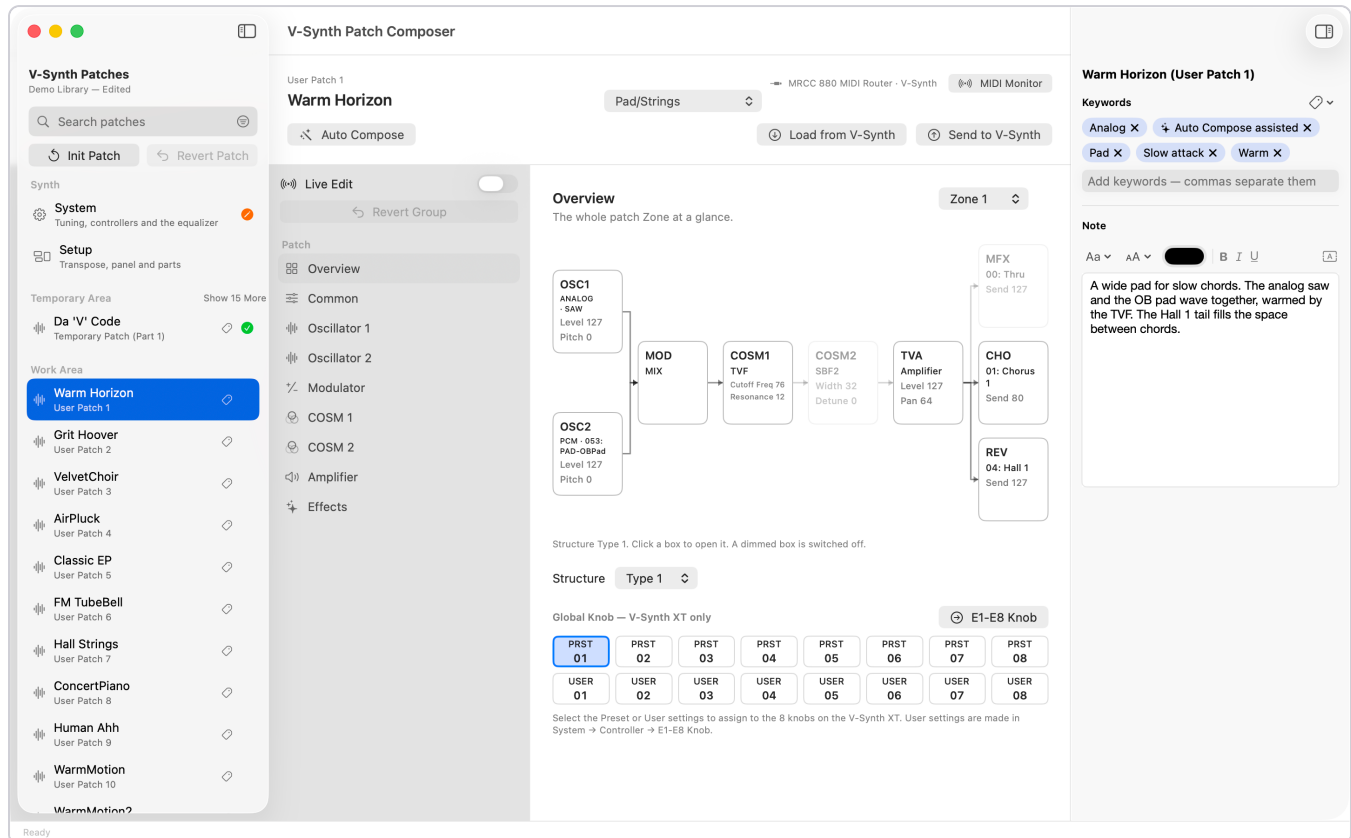


Figure 3-1. The main window: the sidebar on the left, then the group list, the editor showing the Overview, and the inspector on the right.

The sidebar

The sidebar lists everything in the library. From the top:

- The library's name. — **Edited** after it means the library has changes that are not saved to its file.
- The search field. Type to filter by name or keyword. The filter button at its right end opens Advanced Search.
- **Init Patch** and **Revert Patch**, for the selected patch.
- Three sections: **Synth** (System and Setup), **Temporary Area** (the Parts the V-Synth is playing) and **Work Area** (its 512 stored patches).

Marks beside a patch show its state: a green check  when it matches the V-Synth, an orange pencil  when it has been edited, a tag  when it has keywords or a note. [Chapter 4](#) explains them all.

The group list

Between the sidebar and the editor is the list of the patch's groups: **Overview**, **Common**, **Oscillator 1**, **Oscillator 2**, **Modulator**, **COSM 1**, **COSM 2**, **Amplifier** and **Effects**. Above them are the **Live Edit** switch and **Revert Group**. System and Setup have groups of their own.

The editor

The editor's header shows, from the left:

- Where the patch is stored, such as **Temporary Patch (Part 1)**, and the patch's name. Click the name to rename the patch.
- The patch's category.
- The MIDI port the app sends to, and the **MIDI Monitor** button.
- **Auto Compose**, when Auto Compose is turned on in Settings.
- **Load from V-Synth** and **Send to V-Synth**.

Below the header is the group on screen, with its tabs across the top and the Zone pop-up at the right. The Zone pop-up chooses which of the patch's sixteen Zones you are editing. [Chapter 6](#) explains groups, tabs and Zones.

The inspector

The inspector shows the selected patch's keywords and note. Choose **View > Show Inspector** (  ), or click the right sidebar icon at the top right of the window. On a screen narrower than 1428 points, the inspector opens as a floating window instead.

The status bar

The status bar at the bottom of the window shows the result of the last action, such as a load, a save or an import. A transfer in progress shows its progress there too. Failures are marked.

Other windows

Window	Opens with	What it is for
Musical Keyboard	Window > Musical Keyboard   K	Playing the V-Synth from the Mac.
MIDI Monitor	Window > MIDI Monitor   M	Every MIDI message sent and received.
Edit Keywords	Window > Edit Keywords   T	Adding, renaming and deleting keywords.
Auto Compose	The Auto Compose button	A conversation with a language model about the patch.
Settings	V-Synth Patch Composer > Settings...  ,	General, MIDI and Auto Compose settings.

If you close the main window, **Window > Patch Library** ( 0) brings it back.

CHAPTER 4

The patch library

The library mirrors the V-Synth's memory: every patch, and the instrument's global settings. The sidebar lists them in three sections.

The three sections

Section	What it holds
Synth	System and Setup , the V-Synth's global settings. System holds the tuning, the equalizer, the MIDI settings and the controllers. Setup holds the panel settings, the patch each Part plays and the Patch Palette.
Temporary Area	The sixteen Parts the V-Synth can play now. In its default single-Part mode, Part 1 is what you hear.
Work Area	The 512 patches of the project the V-Synth has loaded, User Patch 1 to User Patch 512.

The Temporary Area

Part 1 is always listed. Another Part is listed when its Receive Switch is on, in System > Common > Part MIDI. Click **Show 15 More** beside the section's heading to list all sixteen Parts, and **Receiving Only** to go back. A Part that is selected or has Live Edit on stays listed either way.

The Work Area

Sending a patch to a Work Area slot stores it in the V-Synth's memory immediately, replacing what was there. The app can undo the edit on the Mac, but not on the instrument.

The Work Area is the V-Synth's working memory. A patch sent to it is lost when the V-Synth is turned off, unless you save the project on the V-Synth in the DISK > Save Project screen.

A Work Area slot that holds an initialized patch shows the factory project's name for that slot, grayed, to help you find your way around. The grayed name is only shown. It is not stored in the patch or sent to the V-Synth. A library made from a V-Synth project shows "Init Patch" in plain type instead, because the factory names would not match that project.

The marks beside a patch

The screenshot displays the V-Synth Patch Composer interface, divided into two main sections: Temporary Area and Work Area.

Temporary Area: This section is located at the top left. It contains a list of patches. The first patch is "Da 'V' Code", which is a "Temporary Patch (Part 1)". It has a blue double-dot icon and a green checkmark icon to its right. A "Show 15 More" link is visible at the top right of this area.

Work Area: This section is located below the Temporary Area. It contains a list of patches. The first patch is "Da 'V' Code", which is a "User Patch 1". The second patch is "Solar Circle", which is a "User Patch 2".

Right Panel: This panel displays a list of patches. The first patch is "V-Bamboozled", which is a "User Patch 25". The second patch is "D-yna-TUNED", which is a "User Patch 26". The third patch is "Solo Wah Saw", which is a "User Patch 27". The fourth patch is "Voco Motion", which is a "User Patch 28". The fifth patch is "INIT PATCH", which is a "User Patch 29". It has an orange pencil icon to its right. The sixth patch is "Sea of Bells", which is a "User Patch 30". It has a tag icon to its right. The seventh patch is "D&B Vibe KIT", which is a "User Patch 31". The eighth patch is "RhythmThroat", which is a "User Patch 32".

Figure 4-1. Left: Part 1 with Live Edit on and a green check, and names read with Load Patch Names in italics. Right: grayed factory names, an edited patch with the orange pencil, and a patch with keywords.

Mark	Meaning
 Green check	The app and the V-Synth have the same data, as of the last load or send.
 Orange pencil	Edited since the patch was last loaded, sent, imported, opened or saved. The same mark appears on each group, tab and setting that changed, and on the Zone pop-up beside each Zone that changed, so you can find the edit.
Grayed name	An initialized patch in a Work Area slot, shown with the factory project's name for that slot.
<i>Italic name</i>	Only the name has been read from the V-Synth, with Load Patch Names. The patch itself has not been loaded.
 Tag	The patch has keywords or a note. See Chapter 11 .
 Radio waves	Live Edit is on for this Part. See Chapter 9 .

A patch that has been edited shows the pencil even if it also matched the V-Synth before the edit. Undoing the edit removes the pencil again.

Finding a patch

Type in the search field at the top of the sidebar to filter the list by name or keyword. The grayed factory names are searched too. Click the filter button at the right end of the search field to search by any setting, keyword or note. See [Chapter 11](#).

Reading the patch names from the V-Synth

To see the real names of the patches on the instrument without loading each one, choose **Data › Load Patch Names from V-Synth** (  ). It reads only the names, and takes about 20 seconds for all 512 slots.

- It fills only slots that hold an initialized patch, or a name read earlier. Slots holding a loaded, sent, imported or edited patch are left alone, and the status bar says how many were skipped.
- A name read this way is shown in italics until the whole patch is loaded or sent.
- One   takes back the whole run.
- If the V-Synth does not answer the first five slots, the run stops and a dialog says what to check.

Starting over and going back

Init Patch, under the sidebar's search field or in the Data menu, replaces the selected patch with the V-Synth's own initial patch: the same one the instrument's PATCH Init makes. It asks first, and you can undo it. If Live Edit is on for the Part, the Part on the V-Synth is initialized too.

Revert Patch, beside it, returns the patch to what it was when it was last loaded, sent, imported, opened or saved. A patch with none of those returns to the initial patch. While Live Edit is on, Revert returns the Part to what it was when you turned Live Edit on, and the V-Synth follows.

Revert Group, above the group list, does the same for one group of the patch, in every Zone. In the Engineer layout it is **Revert Section**. All of these can be undone.

System and Setup can be reverted, but not initialized.

Copying a patch to another slot

Select a patch and choose **Edit > Copy** ($\mathbb{C}$), then select the destination and choose **Edit > Paste** ($\mathbb{V}$). The patch's keywords and note go with it. The destination keeps its own slot, so pasting into User Patch 7 gives you User Patch 7 holding the copied sound. Revert brings back what the slot held before. [Chapter 10](#) covers copying Zones and groups.

Replacing a Part with a Work Area patch

Drag a Work Area patch onto a Part in the Temporary Area. The app asks before it replaces the Part, and one $\mathbb{Z}$ puts the Part back. To hear it on the instrument, send the Part, or have Live Edit on for it.

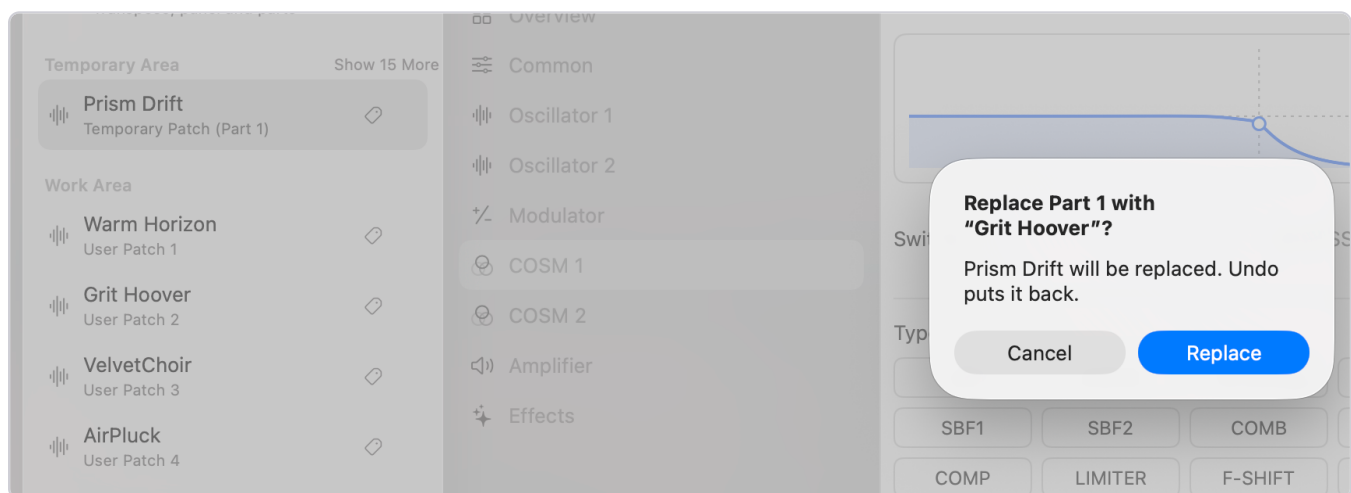


Figure 4-2. Grit Hoover dropped on Part 1. Replace puts it in the Part, and Undo puts the Part back.

Several patches at once

Shift-click or Command-click to select several patches. The editor then shows how many are selected. With several selected:

- Drag the selection to the Finder to save it as one MIDI file.
- Drag it onto a track in a DAW such as Logic Pro to import it as a region of System Exclusive messages.
- Choose **File > Export 2 Items...** (⌘ E) to save the MIDI file where you choose.
- Right-click the selection and use the **Keywords** submenu to tag them all.

Playing such a file to the V-Synth writes each patch back to the slot it came from. [Chapter 9](#) has more about MIDI files.

CHAPTER 5

Libraries and V-Synth projects

A library is a file holding everything the app keeps: the patches, System and Setup, samples, keywords and notes. It can also exchange V-Synth project folders with the instrument.

Your work is kept as you go

Every change is written to the app's own working copy a moment after you make it, so nothing is lost if you quit or the Mac restarts. That working copy is what the app opens next time, unless you choose otherwise in Settings › General › At Launch.

A library is a file you save, named as you like. When the working copy holds changes the library file does not have, the sidebar shows — **Edited** after the library's name. If you undo every change since the last save, — **Edited** goes away again.

Library commands

File menu	What it does
New Library...  	Starts a new library. Choose New Init Library (every patch initialized, System and Setup as the factory sets them) or New from V-Synth Project... (an Init library with a project folder imported into it).
Open Library...  	Opens a saved library, or imports a V-Synth project folder.
Open Recent	The ten libraries opened or saved most recently. They are also in the app's Dock menu.
Import Project Folder...	Brings a V-Synth project folder into the library on screen. See below.
Close Library   	Leaves no library open.
Save Library  	Writes the library back to its file. A library that has never been saved asks where to put it.
Save Library As...   	Saves under a new name or in a new place.
Export Project Folder...	Writes a V-Synth project folder for the instrument. See below.

You can also double-click a library in the Finder, or drop a library or a project folder on the app's Dock icon.

Saving, and leaving unsaved changes

Whenever an action would leave unsaved changes behind (quitting, closing a library, opening another library or starting a new one), the app asks whether to save them first.

- **Save** writes the changes to the library file, then goes on.
- **Cancel** stays where you are.
- **Don't Save** leaves the library file as it was. When quitting or closing a library, the changes stay in the app's working copy and come back the next time the app opens, unless At Launch is set to Open to Init Library or you open a different library. When opening a different library or starting a new one, the changes are lost.

Saving is also a new starting point. The undo history is cleared, the orange edited marks go away, and Revert returns to what was saved. A patch the V-Synth is known to hold keeps its green check, because saving a file changes nothing on the instrument.

A save that takes more than a couple of seconds shows a progress window.

If a sound file in the library was changed or removed outside the app since the app last wrote it, Save stops and asks before writing over it. Choose **Overwrite** to put back the app's copy, or **Cancel** to leave the file alone. A sound file someone added is left in place.

What a library holds

A library is a single item in the Finder: a package ending in **.vspclibrary**, though the extension is normally hidden. Inside it are:

- A complete V-Synth project folder, with the 512 Work Area patches, System, the Patch Palette, the Sampling Templates and any samples.
- Setup and the sixteen Temporary Area Parts, which a V-Synth project does not contain.
- Your keywords and notes.

To move a library to another Mac, save it and copy the file.

Everything in a library you open becomes the starting point that Revert returns to. Nothing in it has a green check until it is loaded from or sent to the V-Synth.

At launch

Settings › General › At Launch chooses what the app opens:

- **Open to Last Library**, the default: the working copy, as you left it, unsaved changes included.
- **Open to Init Library**: a new Init library.
- **Ask What to Open**: the No Library Open page.

[Chapter 14](#) describes every setting in the Settings window.

The No Library Open page appears after Close Library too. It offers **Open Last Library**, **New Init Library** and **Choose Library...**

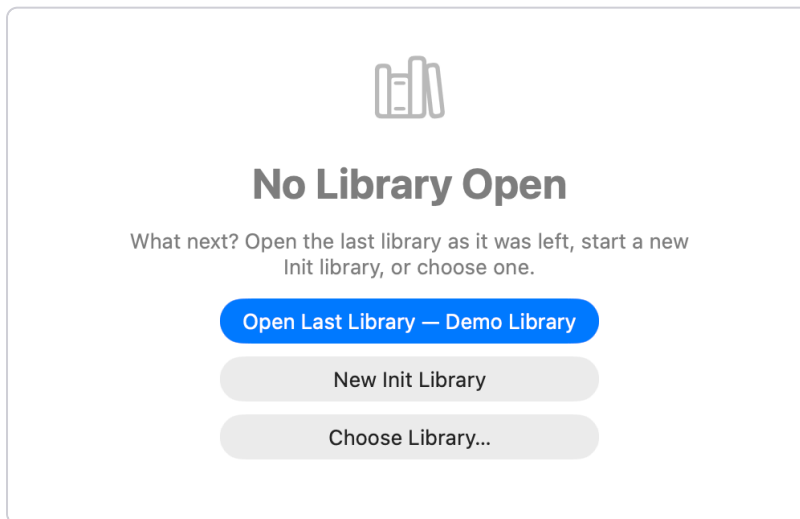


Figure 5-1. The No Library Open page.

Importing a V-Synth project folder

The V-Synth saves projects as folders ending in **.prj**, on a memory card or in its internal memory. The Mac can reach the internal memory when the V-Synth is in USB Storage mode. To bring a project in:

1. Choose **File > Import Project Folder...** and select the **.prj** folder.
2. Read the confirmation. Importing replaces the whole Work Area, System, the Patch Palette and the Sampling Templates with the project's. It lists how many patches, wave names and samples the project holds, and the samples' size. Setup's other settings and the Temporary Area are left alone.
3. Click **Import Project**.

Importing cannot be undone. Save the library first if you want to keep what it holds now.

- A Work Area slot the project does not use is initialized, as on the V-Synth.
- The project's samples are copied into the library, so they are still there after the card is removed or the V-Synth's USB drive is ejected.
- Imported patches show no green check. Revert returns an imported patch to what the project held.
- A project without a Patch Palette or Sampling Templates gets the factory's.

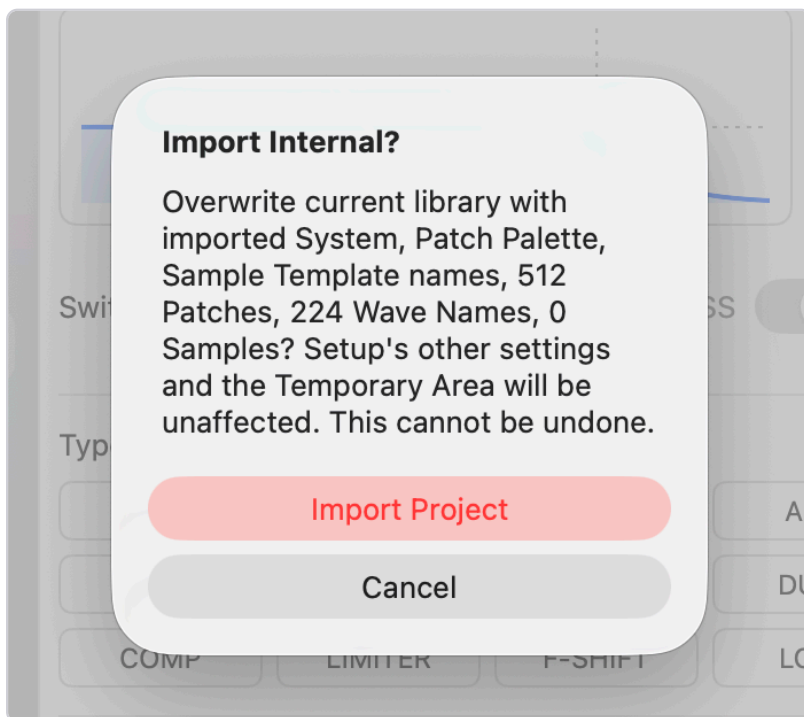


Figure 5-2. The import confirmation lists what the project holds.

Exporting a project for the V-Synth

Choose **File > Export Project Folder...** to write the library's contents as a **.prj** folder the V-Synth can load, onto a card or onto the V-Synth in USB Storage mode. It writes over an existing project or into an empty folder, and changes nothing in the library. Keywords and notes are not exported.

A few settings live only in project files and cannot be sent over MIDI: the Patch Palette, the Sampling Templates' names and some System settings such as Powerup Mode, Panic Key and V-LINK. The editor marks each of them with an asterisk (*). They reach the V-Synth only when it loads a project you exported.

Check Device ID and Rx Sys-Ex before exporting. If a V-Synth loads a project with a different Device ID or with Rx Sys-Ex off, it no longer answers the app. The editor warns under each of those settings.

Waves and samples

A V-Synth PCM Oscillator plays a wave by number. Its row shows the wave's name. Click **List...** to choose from all of them, searchable by name, number or category.

Click a wave's Play button to hear it. Only samples stored in a project can be played on the Mac. The factory waves are built into the V-Synth, so the app can name them but not play them. Beside a sample the app shows its length and a circled 1 or 2 for mono or stereo. The Play button on an Oscillator's wave row starts from the patch's Start Offset, so you hear what the patch plays.

Wave names come from the project you imported, because a project's numbering can differ from the factory's. Until you import a project, the factory names are shown.

Starting over

Data > Initialize Library... initializes System, Setup and the Temporary Area, and erases the Work Area, the samples and every keyword and note. It keeps the library's name and file, so Save writes the initialized library over it. It always asks first, and it cannot be undone.

CHAPTER 6

Editing with the Sound Designer layout

The Sound Designer layout follows the V-Synth's own screens: an Overview of the signal path, then the groups along the bottom of the instrument's display, each with its tabs. Most settings are drawn as well as listed. It is the default layout. The other layout, the Engineer layout, is described in [Chapter 7](#).

The Overview

The Overview shows the signal path of the Zone on screen: the two Oscillators, the Modulator, the two COSM blocks, the Amplifier (TVA) and the three Effects. Each box names its type and a setting or two. Click a box to open its group, or an MFX, CHO or REV box to open its tab of the Effects group. A part that is switched off is dimmed, with the lines to and from it.

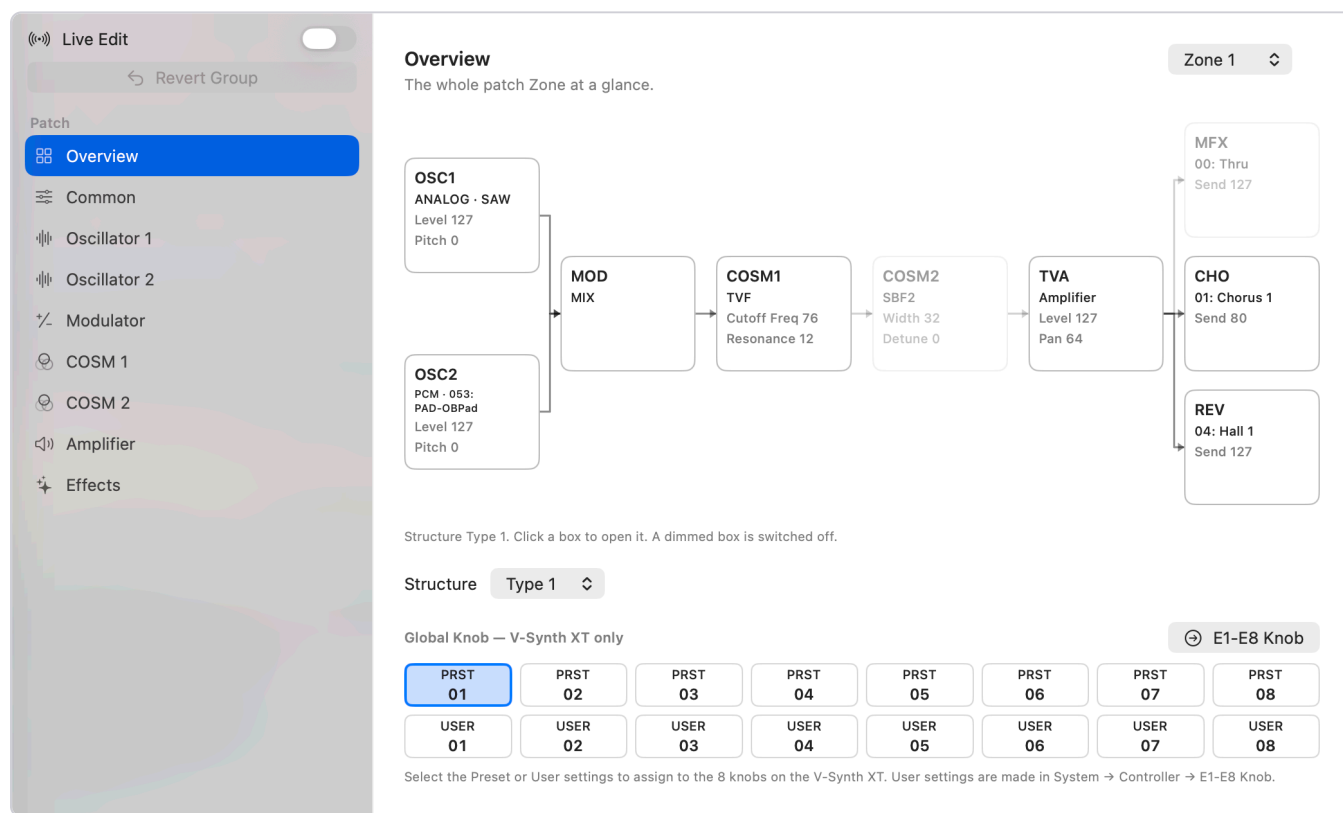


Figure 6-1. The Overview of Warm Horizon. COSM2 and the MFX are switched off, so they are dimmed.

The boxes are arranged by the Zone's Structure Type, which you can change with the **Structure** pop-up under the drawing:

Structure Type	The signal path
Type 1	OSC1 and OSC2 into MOD, then COSM1, COSM2 and the TVA.
Type 2	OSC1 through COSM1 into MOD, with OSC2 into MOD directly, then COSM2 and the TVA.
Type 3	OSC1 through COSM1 and OSC2 through COSM2, both into MOD, then the TVA.

In every type, the TVA feeds the multi-effects (MFX), the chorus and the reverb.

Under the Structure pop-up, **Global Knob** chooses one of the V-Synth XT's sixteen knob sets for each Zone: PRST 01 to 08 and USER 01 to 08. It has no effect on a V-Synth keyboard. The **E1-E8 Knob** button beside it opens System > Controller > E1-E8 Knob, where the user sets are made.

Groups and tabs

The group list beside the editor holds the Overview and eight groups, as the V-Synth's display has them along its bottom. Each group opens with its tabs across the top of the editor. When a group has more tabs than fit on one row, they wrap onto a second row.

Group	Tabs
Common	General, D Beam / Bender, TT Pad, Matrix Ctrl, Arpeggio, Tune, Zone and Step Mod.
Oscillator 1 Oscillator 2	OSC Type, Pitch, two tabs named for the Oscillator type and waveform, OSC TVA and LFO.
Modulator	MOD Type.
COSM 1 COSM 2	COSM Type, the COSM type's own tabs, and LFO.
Amplifier	TVA and LFO.
Effects	Routing, MFX, CHO and REV.

A group with an on/off switch shows it as the first row of each of its tabs, with a little space below it.

Common

- **General** holds the Zone's Structure Type, chosen by its diagram, with the portamento, Mono/Poly and Legato settings.
- **Matrix Ctrl** holds the eight Matrix Controls. Each destination pop-up groups its choices as the V-Synth's LIST window does.
- **Arpeggio** draws the arpeggio pattern as a grid of sixteen lines by thirty-two steps. See "Drawings you can drag" below.
- **Tune** draws the twelve scale tuning settings on a keyboard.
- **Zone** sets the Zones' key ranges. See "Zones" below.
- **Step Mod** is the Multi Step Modulator, with a page for each of its four tracks, Track A to Track D.
- **TT Pad** also shows four of System's pad settings, as the V-Synth's own tab does. Changing them changes System, not the patch.

Oscillator 1 and Oscillator 2

OSC Type chooses ANALOG, PCM or EXTIN. The third and fourth tabs are named for what the Oscillator's type and waveform do with them, as on the V-Synth:

Oscillator	Third and fourth tabs
PCM	Time, Formant
SUPER-SAW	Detune, Mix
FBACK-OSC	Harmonics, FBK Amount
X-MOD-OSC	X-Mod, Fat
Other analog waveforms	Pulse Width, and Fat (or Detune when the sub-oscillator is on)

A tab shows only the settings that belong to the Oscillator's type. A PCM Oscillator shows its wave number with the wave's name, a **List...** button, a Play button and, for a sample stored in the project, a drawing of the sample with a dashed line at the Start Offset. See [Chapter 5](#) for waves and samples.

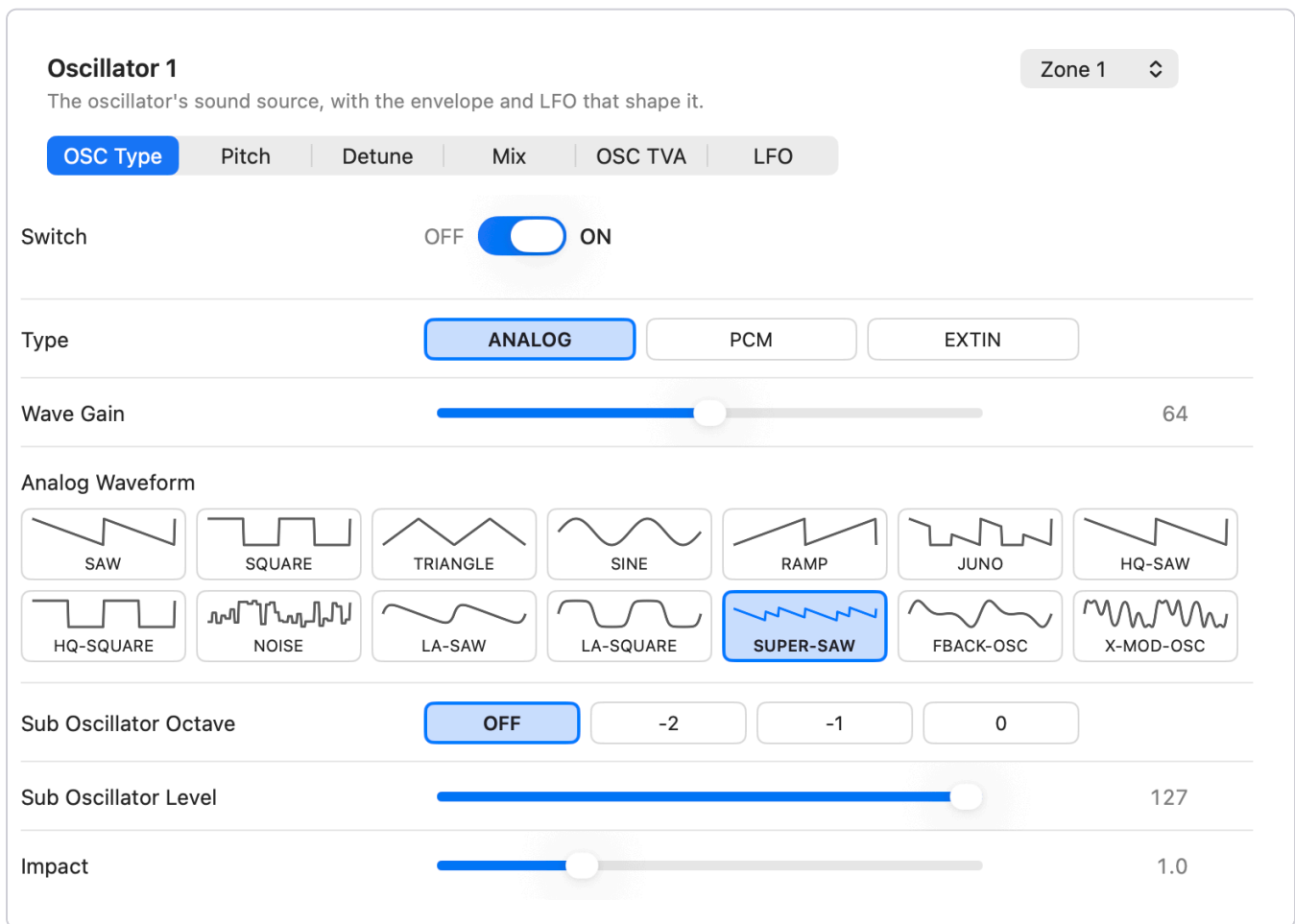


Figure 6-2. An analog Oscillator set to SUPER-SAW. Its third and fourth tabs are named Detune and Mix.

Modulator

The Modulator combines the two Oscillators. Its five types are MIX, RING, FM, ENV RING and OSC SYNC, each drawn on its button as the V-Synth draws it. The tab shows only the settings the type uses: Original Level on RING and FM, and Attack Time and Release Time on ENV RING, with a drawing of the envelope.

COSM 1 and COSM 2

COSM Type chooses one of the seventeen COSM types, from THRU to TB FILTER. The tabs that follow are the type's own, as on the V-Synth: a TVF has Cutoff and Resonance, an OD/DS has Drive and Tone, and so on. Each carries the envelope that shapes it. A type with nothing to set, such as THRU or SPEAKER, shows COSM Type alone.

Most types are drawn: a filter's response, a distortion's effect on a sine wave, a compressor's and a limiter's effect on a note, the sideband filters' peaks and more.

Amplifier

The **TVA** tab holds the Zone's level, pan and the Amplifier's envelope, drawn above its settings. The **LFO** tab holds the Amplifier's LFO.

Effects

- **Routing** draws how the Zone's signal reaches the three Effects and the outputs, following Output Assign and the System's Mix/Parallel setting. Click an MFX, CHO or REV box to open its tab.
- **MFX**, **CHO** and **REV** hold the multi-effects, the chorus and the reverb. Each effect's switch and type lead every page.
- An effect type with several pages of its own on the V-Synth, such as Hall 1 or the Amp Simulator, has a second, smaller row of tabs for them. Each type opens on its main page.
- Choosing another MFX or reverb type sets all of its settings to the V-Synth's starting values, and one   takes the change back. The app remembers each type's settings while you work, so going back to a type returns what you had. The chorus types share one set of settings.

Effects

Multi-effects, chorus and reverb, and how the patch's Zone is routed to them.

Zone 1

Routing

MFX

CHO

REV

Pre EQ

Reverb

Damp EQ

Chorus

Switch

Off

On

Type

04: Hall 1

Vertical lines illustrate reflective surfaces. The curved line is reverb level over time. Gray for high frequencies, bright for low frequencies. Density and Release change the number of reflective surfaces.

Low Rev Time		6.00 sec
Hi Rev Time		5.00 sec
Xover Freq		800 Hz
Pre Dly Time		20.0 ms
Density		90
Room Size		32.6 m
Early Ref Level		60

Figure 6-3. Hall 1 has four pages of its own: Pre EQ, Reverb, Damp EQ and Chorus.

Drawings you can drag

Envelopes, LFOs, filters, equalizers, the Zone keyboard, the scale tuning, the Step Modulator, the arpeggio pattern, samples and most effects are drawn above the settings that shape them. Most drawings have round points you can drag. A drag changes the same settings as the sliders below it, and moves those sliders as it goes. One drag is one step to undo.

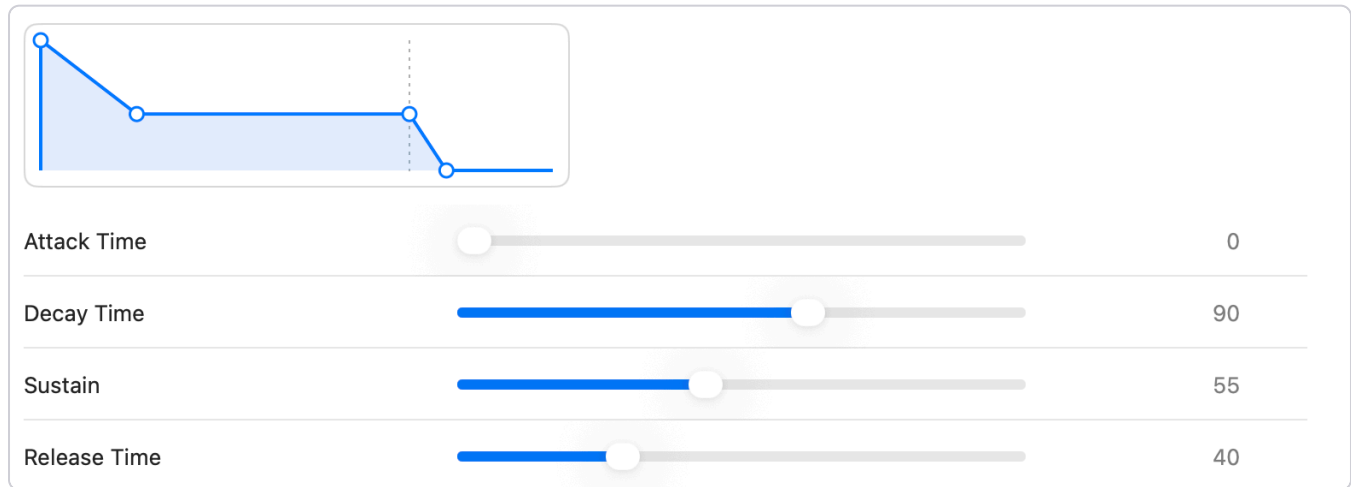


Figure 6-4. An Oscillator's level envelope, on its OSC TVA tab. Each point is a stage you can drag.

Drawing	What a drag does
Envelope	Four points: the attack across, the decay across and the sustain up and down, the sustain level at key-off, and the release across.
LFO	Two points for the delay and the fade time, each across. Drag anywhere else in the drawing to change the rate (across) and the offset (up and down).
Filter	The point at the cutoff: the cutoff across, the resonance up and down.
Equalizer	A point for each band: the frequency across, the gain up and down.
Zone keyboard	Each Zone's right-hand edge, across. A click on a Zone's band makes it the patch's Current Zone.
Scale tuning	A key, up or down, one cent at a time.
Sample	The dashed Start Offset line, across.
Step Modulator	Painted. The pointer's height sets each step's value as you drag across the steps.
Arpeggio pattern	Click a step to cycle it from empty to a note, a tie and empty again, or drag along a line or down a column to do the same to several. Shift-drag up or down to change a step's value. Click a line's name to show that line's settings below.
Effects	The points each drawing's caption names, such as a delay's time and feedback or a reverb's time.

A drag stops at the end of each setting's range. A grayed setting cannot be dragged. The settings below each drawing are always there too, for exact values.

Choices as buttons

Where a setting is one of a handful of things, each choice is a button, and one click chooses it. Many are drawn as the V-Synth draws them: the analog waveforms, the LFO waveforms, the envelope velocity curves, the Modulator types, the W-SHAPE curves, the AMP and SPEAKER cabinets, the RESONATOR's instruments and the filter types. A setting with two values is a switch, with both values named beside it. A longer list stays a pop-up menu.

Zones

A V-Synth patch has sixteen Zones, each with its own Oscillators, envelopes, LFOs and COSM blocks, and each playing a range of the keyboard. The Zone pop-up at the top right of the editor chooses which Zone you are editing.

- A Zone with edits has an orange pencil beside its name in the pop-up.
- The pop-up is grayed on tabs whose settings are the same for every Zone.
- Switching groups keeps the same Zone, so you can move between a Zone's Oscillators, COSM blocks and envelopes without choosing it again.

The Zone tab

Common › Zone sets where each Zone's range ends, on a keyboard drawing.

- Drag a Zone's right-hand edge to move it. The note it is at appears beside it as you drag.
- Click **Single**, **Split** or **Drum** for the V-Synth's three ready-made arrangements: one Zone across the keyboard, Zone 1 up to B3 with Zone 2 above it, or Zone 1 up to C4 with one key for each of Zones 2 to 15. The arrangement the patch matches is lit.
- Click a Zone's band to make it the patch's Current Zone. The Current Zone pop-up on the same tab sets it too.
- The sixteen range settings are under the **Zone Ranges** disclosure, closed at first.

A Zone's range cannot end below the previous Zone's. Zone 16 always ends at G9. A Zone whose range is raised past the Zones above it hides them, as on the V-Synth, until it is brought back down.



Figure 6-5. The Zone tab after clicking Split. The tab's name now carries a pencil, because the patch has changed.

The patch name and category

The patch's name is at the top of the editor. Click it to edit the patch name. A V-Synth name is up to twelve plain characters: letters, digits and punctuation, without accents. The category is the pop-up beside it.

Undo, edited marks and Revert

Every change can be undone with **Edit > Undo** ( ) and redone with **Edit > Redo** ( ): slider drags, drawings, pastes, reverts, loads and Auto Compose turns. A drag of a slider or a drawing is one step. Sending cannot be undone, because it changes the V-Synth.

An orange pencil  marks every patch, group, Zone and setting changed since the patch was last loaded, sent, imported, opened or saved. A tab with changes shows a pencil character () after its name. Undoing a change back to where it was clears the mark.

Revert Group, above the group list, returns the group on screen to that point, in every Zone. **Revert Patch**, in the sidebar, does the whole patch.

Tips

- Hover over a setting to see its full name.
- A grayed setting does nothing with the current choices. Hover over it to see why, for example a setting that only applies to the other Oscillator type.
- A wave row's Play button plays the sample from the patch's Start Offset, so you hear what the patch plays.
- System and Setup have groups and tabs of their own. See [Chapter 8](#).

CHAPTER 7

The Engineer layout

The Engineer layout lays a patch out as the V-Synth's MIDI Implementation does: one section for each block of the patch's memory, with every setting of the block on one scrolling page.

Switching layouts

Choose the layout in **Settings > General > Interface**. Both layouts edit the same settings, with the same undo history and edited marks, and you can switch at any time.

Sections

The section list beside the editor replaces the Sound Designer's group list. The number beside each section is how many settings it shows for the Zone on screen.

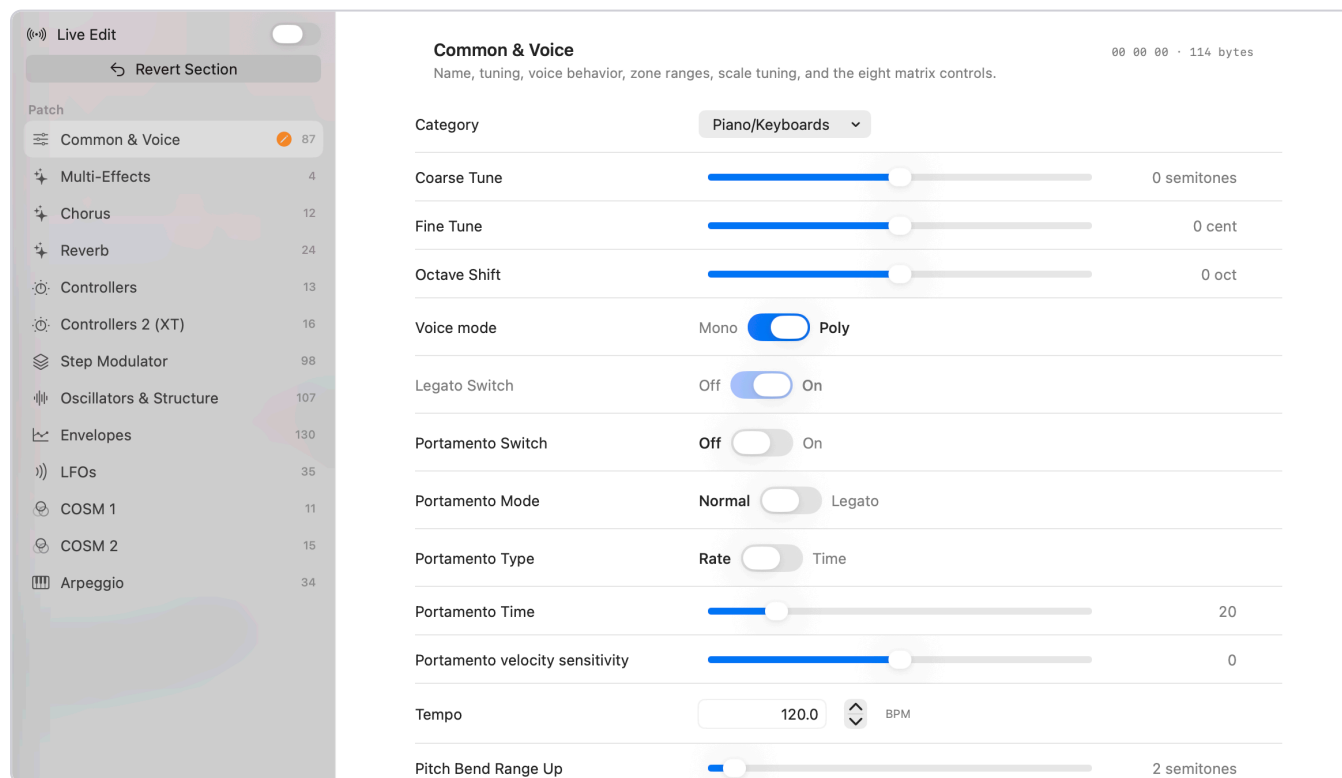


Figure 7-1. The Engineer layout, showing Common & Voice. Its pencil shows it has been edited.

Section	What it holds
Common & Voice	The patch name and category, tuning, tempo, portamento, Mono/Poly, the Zone ranges, the scale tuning and the eight Matrix Controls.
Multi-Effects, Chorus, Reverb	The three Effects.
Controllers, Controllers 2 (XT)	The patch's D Beam, pad, arpeggio and XT knob settings.
Step Modulator	The four tracks and their steps.
Oscillators & Structure	Both Oscillators, the Modulator, the Amplifier's level and pan, the effect sends and the Structure Type, for one Zone.
Envelopes	All thirteen envelopes of one Zone, each named for what it shapes.
LFOs	All five LFOs of one Zone.
COSM 1, COSM 2	The COSM type and its settings, for one Zone.
Arpeggio	The arpeggio's sixteen pattern lines, one at a time, chosen with the Note pop-up.

System has System & Equalizer, Controllers, Knob Assignments and Project File Settings. Setup has Multitimbral Setup.

Reading a section

- Repeating settings are grouped under headings, such as OSC 1 and OSC 2, Matrix Control 1 to 8, and each envelope and LFO by what it modulates: "Env 9 — COSM1 Cutoff Freq" when COSM 1 is a TVF.
- The Zone pop-up chooses the Zone, as in the Sound Designer layout. The section's address on the V-Synth, for the Zone on screen, is shown beside it.
- A setting that does nothing with the current choices is grayed. Hover over it to see why.
- Hover over any setting to see its name as Roland's MIDI Implementation prints it, and its offset in the block. For example: "OSC1 Pitch Attack Time — Env 1 Attack Time in the MIDI document, offset 00H".

Section commands

- **Revert Section**, above the section list, returns the section on screen to what it held when the patch was last loaded, sent, imported, opened or saved, in every Zone.
- **Edit › Copy** and **Edit › Paste** copy a whole section, every Zone of it, while the section list has focus. [Chapter 10](#) describes copying sections and Zones.
- **File › Export Section...** (  E) saves the section as a MIDI file. The menu item is named for the section on screen, such as Export Envelopes....

When to use it

- When you want every setting of a block on one page, rather than spread over tabs.
- When you are reading Roland's MIDI Implementation alongside the app.
- For the few settings the Sound Designer layout leaves off a screen because the V-Synth's own screen does, such as the COSM envelopes of a type with no tabs of its own.

CHAPTER 8

System and Setup

System and Setup hold the V-Synth's global settings: everything that is not part of a patch. Select either under **Synth** in the sidebar. Their groups and tabs follow the V-Synth's SYSTEM screens.

Loading and sending System and Setup

System and Setup are loaded and sent like a patch, with **Load from V-Synth** and **Send to V-Synth**. Load them before you edit them, so the app starts from what the V-Synth holds.

- They can be reverted, but not initialized.
- Every edit can be undone, as in a patch.
- A change written to the V-Synth's System or Setup takes effect immediately. It is kept after the V-Synth is turned off only if you touch **Write** on the V-Synth's SYSTEM screen, then **EXECUTE**.

System holds the V-Synth's MIDI receive settings. Check the Part MIDI tab before sending System: a Part whose Receive Switch is off, or whose channel is changed, no longer hears what the app or your keyboard sends it.

System

System has three groups. A tab marked (KBD) is used only by the V-Synth keyboard, and one marked (XT) only by the V-Synth XT. The app shows both, so a library can be shared between the two instruments.

Group	Tabs
Common	Master, IO, EQ, MIDI USB and Part MIDI.
Controller	Tx, KBD, TT Pad / Knob, Beam (KBD), Pedal (KBD), E1-E8 Knob (XT) and E1-E8 ExtCC (XT).
V-LINK	Tx, TT Pad / Knob, Beam (KBD) and Lever (KBD).

Common

- **Master** holds Master Tune, Master Key Shift, Master Level, Remain and Powerup Mode.
- **IO** holds the External Input Type, Mix/Parallel, Output Gain and the Digital Output Frequency. Mix/Parallel also changes the Routing drawing on each patch's Effects group.
- **EQ** is the V-Synth's master equalizer, drawn as a curve. Drag a band's point across for its frequency and up or down for its gain.
- **MIDI USB** holds the same settings as the V-Synth's own MIDI USB screen (Figure 2-1), under their full names: Device ID, Clock Source, Receive Program Change (Rx PC), Receive Bank Select (Rx Bank), Receive System Exclusive (Rx Sys-Ex), Transmit Edit Data (Tx Edit), Clock Out and USB-MIDI Thru.
- **Part MIDI** holds each Part's Receive Switch and Receive Channel. The **Part Patches** button above them opens Setup's Part Patches page, where each Part's patch is chosen.

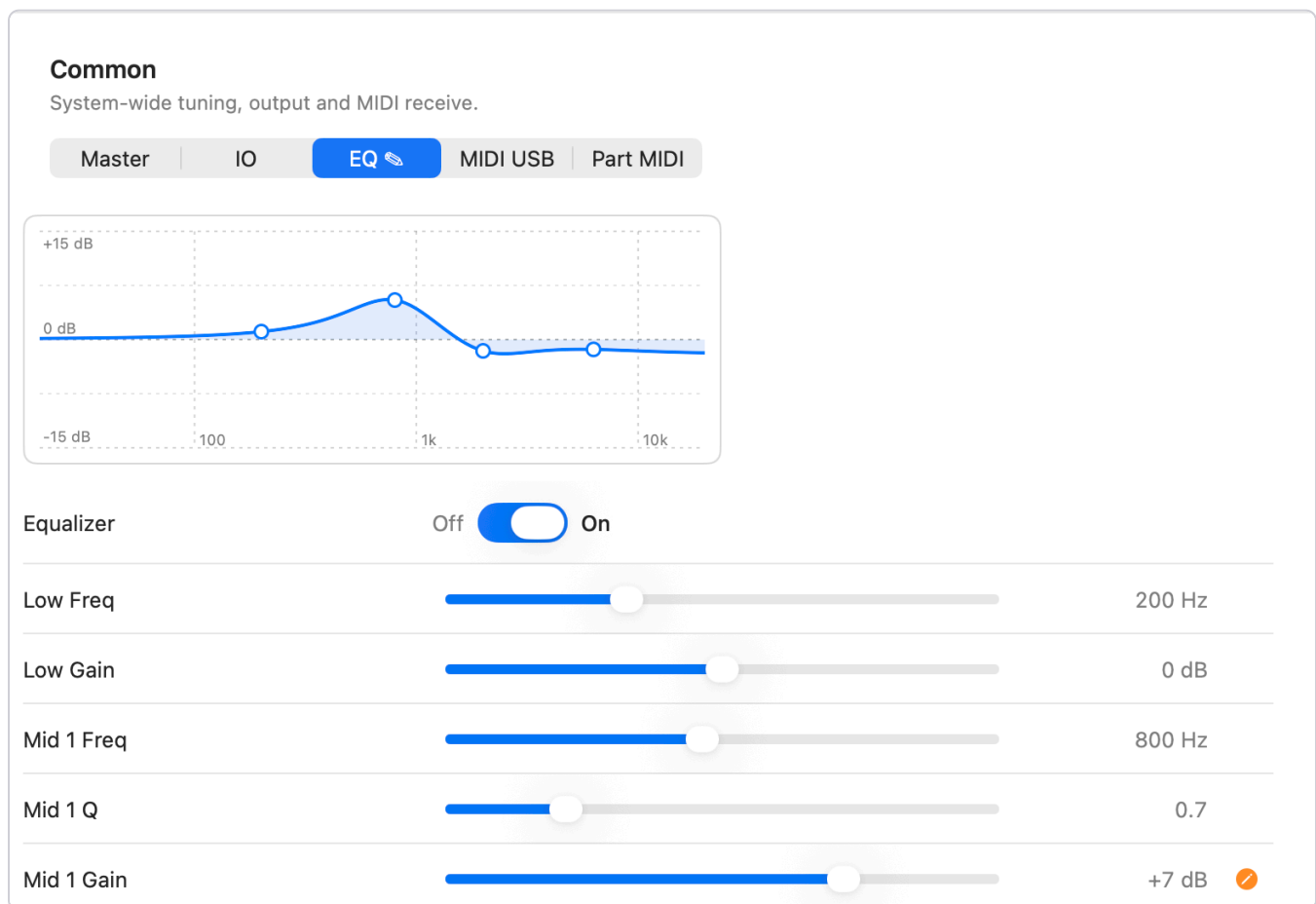


Figure 8-1. The master equalizer, with Mid 1 raised and Mid 2 lowered.

Controller

- **Tx** holds the Transmit Channel, what the V-Synth transmits when you choose a patch, and Transmit Active Sensing.
- **KBD** holds Keyboard Sens, Keyboard Velocity, Aftertouch Sens, Local Switch, Remote Keyboard Switch and the Panic Key.
- **TT Pad / Knob** sets what the Time Trip Pad and the two assignable knobs control. A controller is chosen by name from a pop-up, such as CC74.
- **Beam** and **Pedal** set the D Beam's sensitivity and assignments, and the pedals' assignments and polarity.
- **E1-E8 Knob** holds the XT's eight user knob sets, one page each, User 1 to User 8. **E1-E8 ExtCC** sets the controller each knob sends.

A patch's Common > TT Pad tab shows four of these pad settings too, under the heading "Pad Assign". Changing them there changes System, not the patch, and marks System as edited. The **TT Pad / Knob** button beside that heading opens this tab.

V-LINK

V-LINK holds the settings for controlling a V-LINK video device from the V-Synth. Every V-LINK setting is kept only in project files. See "Settings kept only in project files" below.

Setup

Setup has three groups.

Group	What it holds
Setup	Transpose, Octave Shift, Beep, the Sampling Template and the Patch Palette bank and number.
Part Patches	The patch each of the sixteen Parts plays.
Patch Palette	The patches the eight PATCH PALETTE buttons call up, in each of eight banks.

Setup

The **Sampling Template** buttons show the eight templates by name. The chosen template is applied to the V-Synth's sampler. The names come from the library's V-Synth project, so a project with renamed templates shows its own names. Only the template's number is sent over MIDI.

Palette Bank and Palette Number choose the palette button that is lit. The **Patch Palette** button above them opens the Patch Palette page.

Part Patches

Each Part has one pop-up menu for its patch, with the 512 Work Area patches in four banks of 128. Choosing a patch sets the Part's Bank Select and Program Number together, as one step to undo.

- A Part whose Receive Switch is off in System is marked **Receive Switch Off**.
- The **Part MIDI** button opens System's Part MIDI tab.
- Sending Setup with Live Edit on for a Part whose patch changed loads that Part from the V-Synth again a moment later, so the app shows the patch the Part now plays.

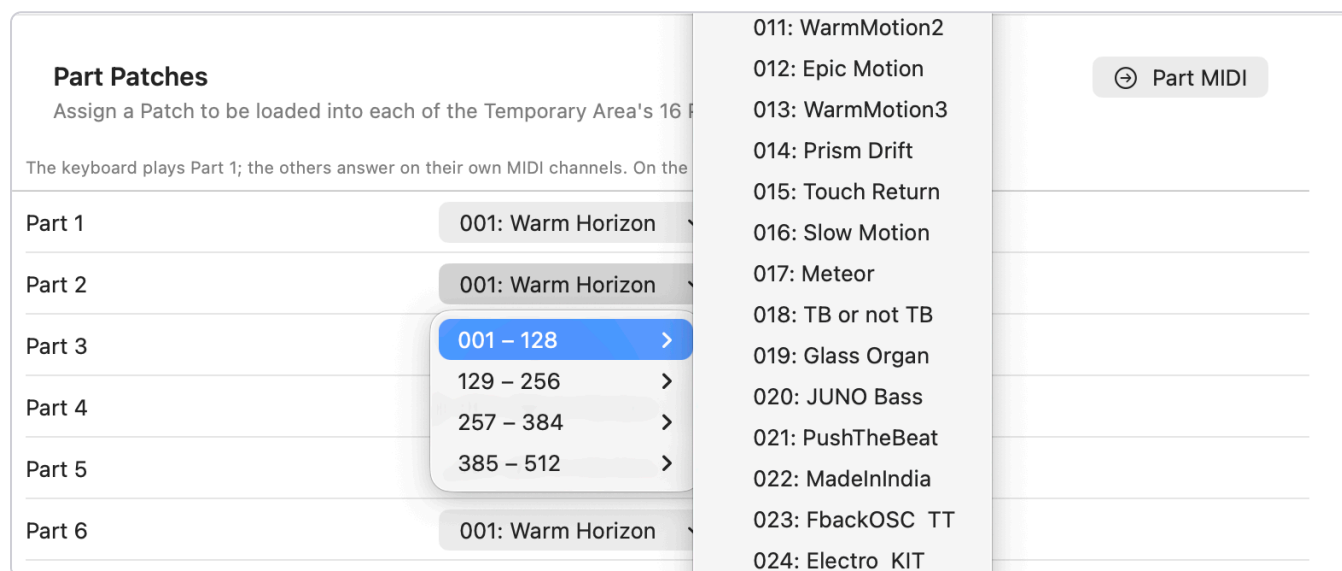


Figure 8-2. Choosing the patch Part 2 plays from the Work Area's four banks.

Patch Palette

The Patch Palette page is a grid of 64 cells: the V-Synth's eight PATCH PALETTE buttons across, and its eight palette banks down. Each cell shows the number and name of the Work Area patch that button calls up. Click a cell to choose another patch from the same four banks of 128. The slot that Setup's Palette Bank and Palette Number choose is outlined.

- Palette edits mark Setup as edited in the sidebar. Revert Setup returns the palette too.
- The **Setup** button opens Setup's page.
- The palette is kept only in project files. The V-Synth has no screen for editing it. It reaches the V-Synth only when the V-Synth loads a project you exported.

Patch Palette * ⊞ Setup

The Work Area Patch each PATCH PALETTE button calls up, in each of the eight banks.

	1	2	3	4	5	6	7	8
Bank 1	033 Amster-jam	006 FM TubeBell	096 TB SqrDistBs	158 EnjoyCtrls	206 Paddington	290 China E-Pno	337 3o3 Hero	445 Modular KIT
Bank 2	034 Phoney Beat	036 PilliChepprs	037 Cavin'Dance	042 TrashTripPad	044 BlownSpeaker	045 Cyklotronik	048 AnalogNuWave	050 MyChillout
Bank 3	067 Capital M	068 Jungle Feeva	069 Z-Bass	070 Boot-Cebass	075 Snappin'Key	081 DoubleKickBs	086 Hover Bass	091 Bass Of Ace
Bank 4	100 Pocket TB	104 Arpstar	112 Satsumatic	114 Planet V	125 Ruined World	134 Let me C 1-2	144 Shimmer Pad	148 Bananza
Bank 5	159 Sync Twice	161 Humanoid	338 Flange Floor	340 4-SQR PWM	341 PG Dreamer	347 Zapata	355 eVangelic	396 Dual Reso
Bank 6	207 Ambient Hold	228 Fear Texture	230 Abyss	242 Spacey Fizzz	264 Fear Radio	266 Metal Wrap	280 RingmodCntrl	289 V-Explosion
Bank 7	291 Electro P	313 Old Timer	320 Bell Vox	328 Nylon Guitar	335 Get Fonky	402 aAaaaaaaahh	429 WheresDa-Loop	438 Holy Oboe
Bank 8	446 Analogic KIT	448 V-lectricKIT	454 BigSmack KIT	458 Scratchy KIT	462 nuTR KIT	468 Gangsta KIT	472 T-Rex KIT	480 Khatt KIT

Each bank's eight PATCH PALETTE buttons call up the Work Area Patches set here.

* Only saved in this library and V-Synth project exports. Not accessible through MIDI.

Figure 8-3. The Patch Palette. Bank 1's first button is outlined because Setup's Palette Bank and Palette Number choose it.

Settings kept only in project files

Some System and Setup settings are not sent or received over MIDI. They are saved in the library and written to V-Synth project folders you export:

- System: Powerup Mode, External Input Type, Output Gain, Digital Output Frequency, Device ID, Receive System Exclusive, Transmit Edit Data, USB-MIDI Thru, Transmit Active Sensing, Local Switch, Remote Keyboard Switch, Panic Key, and every V-LINK setting.
- Setup: the Patch Palette and the Sampling Templates' names.

Each is marked with an asterisk (*) after its name, and a page that shows one ends with the note "* Only saved in this library and V-Synth project exports. Not accessible through MIDI." They reach the V-Synth only when it loads a project you exported. Loading or sending System leaves their orange pencils in place, because the V-Synth has not seen them. Saving the library clears the pencils.

Two of these settings can stop the V-Synth answering the app after it loads a project: a **Device ID** different from the app's, and **Receive System Exclusive** off. A yellow warning appears under either one. Set the two Device IDs to match, and leave Receive System Exclusive on.

Common

System-wide tuning, output and MIDI receive.

Master

IO

EQ

MIDI USB

Part MIDI

Device ID *

17

Clock Source

Internal

MIDI

Receive Program Change

Off

On

Receive Bank Select

Off

On

Receive System Exclusive *

Off

On

⚠ A V-Synth that loads a project saved with Rx Sys-Ex Off ignores this app and answers nothing, until Rx Sys-Ex is turned back on at the instrument.

Transmit Edit Data *

Off

On

Clock Out

Off

On

USB-MIDI Thru *

Off

On

* Only saved in this library and V-Synth project exports. Not accessible through MIDI.

Figure 8-4. Settings kept only in project files are marked with an asterisk. Turning Receive System Exclusive off shows a warning.

CHAPTER 9

Loading, sending and Live Edit

The app and the V-Synth exchange patches, System and Setup over MIDI. Load brings what the V-Synth holds into the library, Send writes the library's copy to the V-Synth, and Live Edit keeps a Part in step as you edit.

Loading from the V-Synth

Select a patch, System or Setup in the sidebar and click **Load from V-Synth** in the editor's header, or choose **Data > Load Patch from V-Synth** (⌘ L). The menu item is named for what is selected: Load System from V-Synth, Load Setup from V-Synth. The app reads the whole patch from the same place on the V-Synth and replaces what the library held.

- A patch takes about five seconds. System and Setup take less than a second.
- A progress bar appears in the editor's header and in the status bar.
- When the load finishes, the patch shows a green checkmark ✓, and its orange pencils are cleared.
- A load can be undone with ⌘ Z. The library gets back what it held before. Nothing on the V-Synth changes.

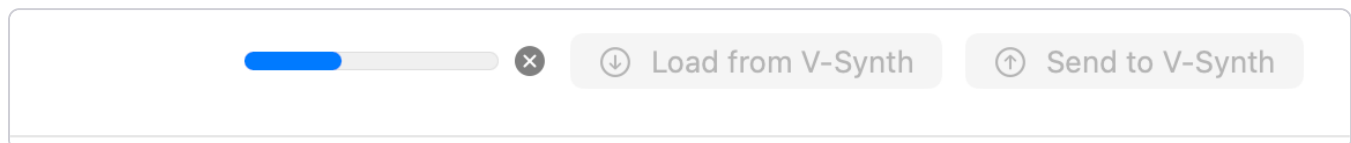


Figure 9-1. A load in progress. The stop button is beside the bar, and Load and Send are grayed until it finishes.

Sending to the V-Synth

Click **Send to V-Synth** to write the patch, System or Setup on screen to the same place on the V-Synth. A patch takes about five seconds. When the send finishes, the patch shows a green checkmark.

Before it sends anything, the app checks that the V-Synth answers. If it does not, nothing is sent and a dialog says what to check. See "When the V-Synth does not answer" below.

Sending to	What happens on the V-Synth
A Temporary Area Part	The Part plays the sent patch immediately. It is lost when the V-Synth loads another patch into that Part or is turned off.
A Work Area slot	The patch replaces what was in that slot of the V-Synth's working memory. It is lost when the V-Synth is turned off, unless you save the project on the V-Synth.
System	The global settings change immediately. They are lost when the V-Synth is turned off, unless you write them on the V-Synth.
Setup	The settings change immediately. Parts affected by changes to Setup's Part Patches take immediate effect.

Sending cannot be undone on the V-Synth. Undo in the app changes only the library. To keep what a Work Area slot or a Part holds, load it into the library before you send over it.

Send to V-Synth has no keyboard shortcut, so a stray key press cannot write to the V-Synth.

Keeping what you sent

A V-Synth keeps its Work Area, System and Setup in working memory, loaded from the current project when it is turned on. What the app sends lasts until the V-Synth is turned off. To keep it:

- For Work Area patches, save the project on the V-Synth in the DISK › Save Project screen.
- For System settings, touch **Write** at the bottom right of the V-Synth's SYSTEM screen, then touch **EXECUTE** when the V-Synth asks "Are You Sure?".
- A patch you are playing in a Temporary Area Part can be written to the Work Area on the V-Synth with PATCH Write, which also saves it in the project.

One transfer at a time

Only one load or send runs at a time. While one is running, Load from V-Synth, Send to V-Synth and the Data menu's other MIDI commands are grayed.

To stop a transfer, click the stop button (an x in a circle) beside the progress bar.

- A stopped load leaves whatever had arrived in the library, and the load can be undone.
- A stopped send leaves the V-Synth holding a partly written patch. The status bar says so. Send it again, or load it back, to bring the two into step.

When the V-Synth does not answer

If the V-Synth does not answer a load, a send, Load Patch Names or Live Edit, a dialog titled **The V-Synth Did Not Answer** says what was not done and what was found on the MIDI ports. Click **Open MIDI Settings...** to check the ports and the Device ID.

The app asks every instrument on the ports who it is, and names what it finds:

- Nothing answered: check the V-Synth's power, the MIDI cables and the chosen ports.
- A V-Synth on another Device ID: set the app's Device ID to match in Settings > MIDI, or click **Find** to find the V-Synth's Device ID.
- A V-Synth running a V-Card such as VC-1 or VC-2: restart the V-Synth as a V-Synth.
- Another instrument: choose the V-Synth's ports instead.

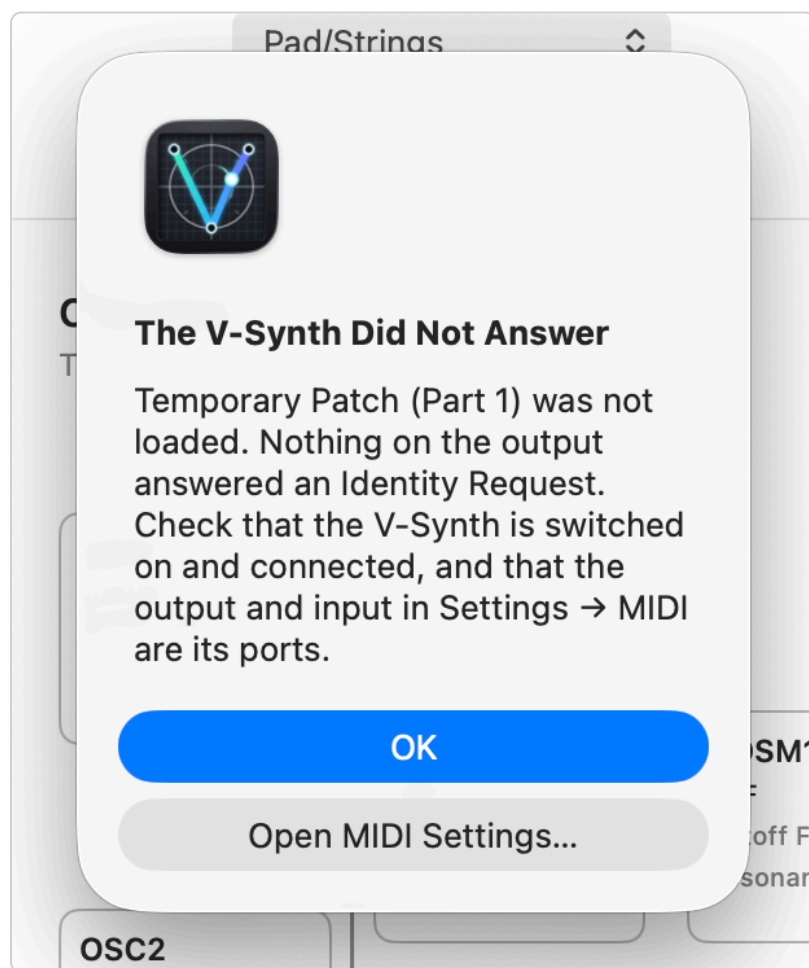


Figure 9-2. A load with the V-Synth switched off. Nothing answered, so the dialog says to check the power, the connection and the ports.

[Chapter 15](#) has more about finding the cause.

Live Edit

Live Edit links a Temporary Area Part in the app to the same Part on the V-Synth, so you hear each change as you make it. Select a Part and turn on the **Live Edit** switch above the group list. Each Part has its own switch, and the Part shows radio waves ((.)) in the sidebar while it is on.

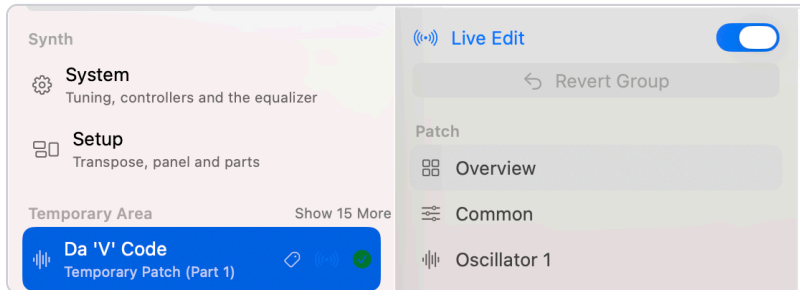


Figure 9-3. Live Edit on for Part 1: the switch above the group list, and the radio waves and green check beside the Part.

Turning Live Edit on

When you turn Live Edit on, the app first brings the two into step:

- If the Part in the app is marked edited, the app sends it to the V-Synth.
- Otherwise the app loads the Part from the V-Synth, replacing what the library held.

To start from the library's copy of a Part that is not marked edited, click **Send to V-Synth** first, then turn on Live Edit.

While Live Edit is on

- Every change in the app goes to the V-Synth a moment after you make it: sliders, drags, buttons, the patch name, pastes, Undo, Redo, Revert, Init Patch and Auto Compose. Only the changed settings are sent.
- The Part keeps its green check, because the V-Synth holds everything the app does.
- With Transmit Edit Data (Tx Edit) on in the V-Synth's SYSTEM > MIDI USB settings, changes made on the V-Synth's panel come back into the app too. Those changes cannot be undone in the app.
- Revert returns the Part to what it was when you turned Live Edit on, and the V-Synth follows.
- Init Patch initializes the Part on the V-Synth too.

- Notes, controllers, aftertouch and pitch bend are decoded too, so notes played on the Musical Keyboard appear beside the patch messages.
- When the app ignores a message, the Monitor says why, such as a message from another Device ID or a bad checksum.
- The **Rx Clock** and **Rx Active Sense** lamps light while MIDI Clock or Active Sensing messages arrive. Those messages are not listed.
- Select rows and press   to copy them. Right-click for **Copy Bytes Only**. A copy of the rows is useful when asking for support.
- **Clear** empties the list. The Monitor keeps the last 500 messages.

CHAPTER 10

Copying, pasting and exporting

Copy and Paste carry a sound, not a slot. A paste replaces the sound in the patch, Zone or part of a patch you paste into, and that patch keeps its own slot. Every paste can be undone with **Edit > Undo**, and **Revert Patch** brings back what the patch held before the paste.

What can be copied

What	Where to copy and paste it
A whole patch	The sidebar: Edit > Copy and Edit > Paste , or the patch's shortcut menu.
One Zone	Edit > Copy Zone and Edit > Paste Into Zones... , or the shortcut menus of the sidebar and the group list.
Part of a patch	The shortcut menu of a group in the group list, in the Sound Designer layout.
A section	The shortcut menu of a section in the section list, in the Engineer layout.

Whole patches

Select a patch in the sidebar and choose **Edit > Copy** ( ). Select another patch and choose **Edit > Paste** ( .

- The whole patch is copied, all sixteen Zones, with its keywords and note.
- The patch you paste into keeps its own slot. Pasting into User Patch 7 gives you User Patch 7 holding the copied sound. This is how you move a sound to another slot.
- The pasted patch is marked edited, and **Revert Patch** brings back what the slot held before the paste.
- A patch cannot be pasted into System or Setup.
- To put a Work Area patch into a Temporary Area Part, you can also drag the Work Area patch onto the Part. See [Chapter 4](#).

Copied content can also be pasted into another library. After copying the item, open the other library (save the current library if prompted), then paste into the destination.

Zones

A Zone is one layer of a patch: its Oscillators, envelopes, LFOs and COSM blocks. Copying a Zone and pasting it elsewhere is how you build a layered sound, or move a sound from Zone 1 to another Zone.

1. Select the patch, then choose **Edit > Copy Zone** and pick the Zone from the submenu.
2. Select the patch to paste into. The destination can be the same patch or a different patch.
3. Choose **Edit > Paste Into Zones....**
4. Check the Zones to fill, then click **Paste**. The dialog opens with no Zones checked, so nothing is overwritten by accident.

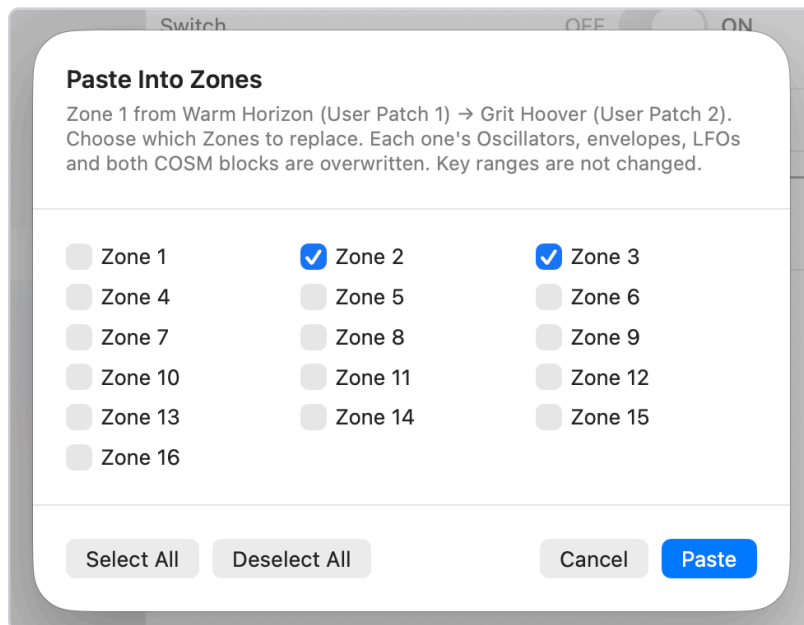


Figure 10-1. Zone 1 of Warm Horizon about to be pasted into Zones 2 and 3 of Grit Hoover.

The Zones' key ranges are not copied. Set key ranges on the Common group's Zone tab. See [Chapter 6](#).

Parts of a patch

In the Sound Designer layout, Control-click (or right-click) a group in the group list. The group's shortcut menu copies and pastes the same units as the V-Synth's PATCH Copy screen.

Group	What the group's shortcut menu copies
Common	The Arpeggio and the Step Modulator.
Oscillator 1, Oscillator 2	The Oscillator in the Zone on screen, with the Oscillator's envelopes and LFO.
COSM 1, COSM 2	The COSM block in the Zone on screen, with the COSM block's envelopes and LFO.
Amplifier	The Amplifier in the Zone on screen, with the Amplifier's envelope and LFO.
Effects	The MFX, the Chorus and the Reverb, each on its own.

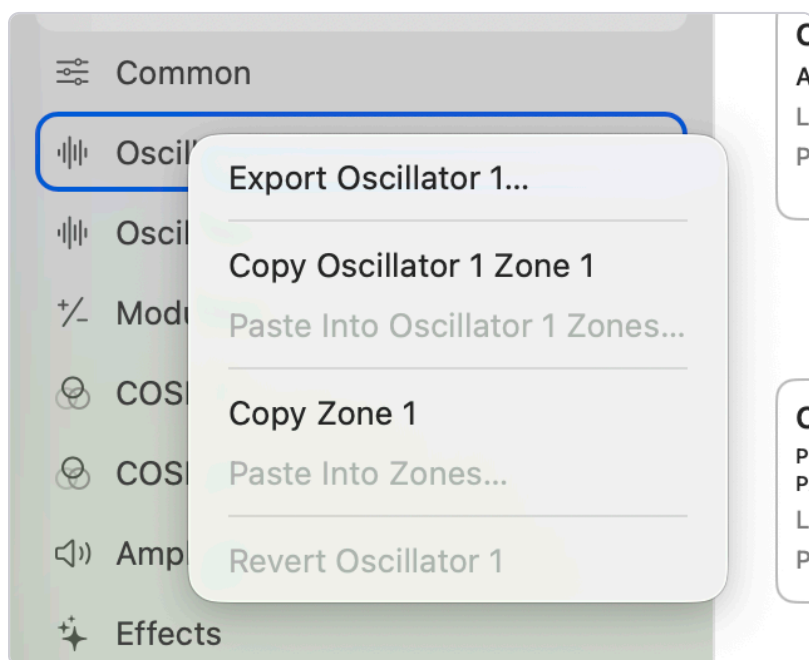


Figure 10-2. Oscillator 1's shortcut menu. The Paste items are grayed until a matching item is copied.

- An Oscillator, a COSM block or the Amplifier is copied from the Zone on screen. When you paste an Oscillator, a COSM block or the Amplifier, a dialog asks which Zones to paste into, the same way **Paste Into Zones...** does for a whole Zone.
- Oscillator 1 can be pasted onto Oscillator 2, and COSM 1 onto COSM 2, or the other way round. The paste goes into the group you Control-clicked.
- The MFX, the Chorus, the Reverb, the Arpeggio and the Step Modulator belong to the whole patch, so they apply to all Zones.
- Every group except Common and Effects also offers **Copy Zone** and **Paste Into Zones...** for the whole Zone on screen.

- The same shortcut menu also offers **Export** and **Revert** for each group.

Sections, in the Engineer layout

In the Engineer layout, Control-click a section in the section list. The items in the section's shortcut menu are named for the section. The examples below use the Envelopes section.

- **Copy Envelopes** copies the Envelopes section of all sixteen Zones. **Paste Envelopes** replaces the Envelopes section of all sixteen Zones with the copied Envelopes section. A copied section can only be pasted into the same section, of the same patch or of another patch.
- **Paste Envelopes Zone for Zone...** opens a dialog for choosing Zones. In each Zone you check, the Envelopes section is replaced by the Envelopes section of the same-numbered Zone on the clipboard. The other Zones are not changed. In the Arpeggio section, the menu item is **Paste Arpeggio Note for Note...** and the dialog chooses notes instead of Zones.
- **Copy Envelopes Zone** copies the Envelopes section of one Zone, chosen from its submenu. **Paste Into Envelopes Zones...** opens a dialog for choosing Zones, and pastes the copied Envelopes section into each Zone you check. The other sections of those Zones are not changed.
- **Copy ... Zone** and **Paste Into ... Zones...** are offered for the Oscillators & Structure, Envelopes, LFOs, COSM 1 and COSM 2 sections.

Every section's shortcut menu is named the same way, such as **Copy LFOs** or **Paste Into COSM 1 Zones....**

Exporting MIDI files

A patch, System or Setup can be saved as a Standard MIDI File of System Exclusive messages. These are the same messages **Send to V-Synth** sends, spaced out so that a DAW can play the messages to the V-Synth through any MIDI interface. Playing the MIDI file to the V-Synth writes each exported patch to the patch's original slot on the V-Synth, such as User Patch 7 or Part 1. An exported System or Setup is written to the V-Synth's System or Setup.

To export	Do this
The selected patches	File > Export Patch...   The menu item is named for what is selected, such as Export 2 Items....
The group or section on screen	File > Export Oscillator 1... , named for the group or section   
Without a Save dialog	Drag patches from the sidebar to the Finder, or onto a MIDI track in a DAW such as Logic Pro.

- Several selected patches are exported as one MIDI file, in sidebar order.
- A group's or a section's MIDI file holds only the settings of that group or section, so playing the MIDI file changes only those settings on the V-Synth.
- A patch's keywords and note are included in the MIDI file as text a DAW can show. The keywords and note are not sent to the V-Synth when the MIDI file is played.
- Playing a Work Area patch's MIDI file writes the patch into the same Work Area slot of the V-Synth's memory, as **Send to V-Synth** does. The V-Synth loses the patch when the V-Synth is turned off, unless you save the project on the V-Synth's DISK > Save Project screen.

The settings kept only in project files, such as V-LINK, cannot be exported to a MIDI file. To take those settings to the V-Synth, export a project folder. See [Chapter 5](#).

CHAPTER 11

Keywords, notes and searching

Each patch can carry keywords and a note, so that you can find the patch again and remember what the patch is for. Keywords and notes are kept in the library. Keywords and notes are never sent to the V-Synth.

The inspector

Choose **View > Show Inspector** (  ) , or click the inspector button  at the top right of the window. The inspector opens at the right side of the window and shows the selected patch's name, keywords and note.

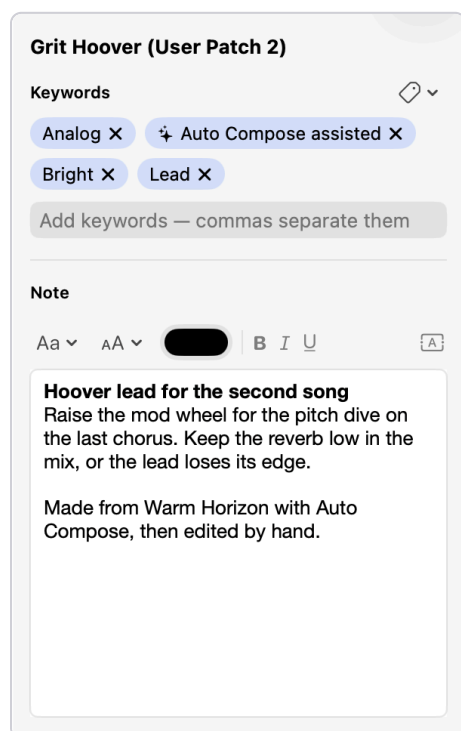


Figure 11-1. The inspector, showing Grit Hoover's keywords and note.

- On a screen narrower than 1428 points, the inspector opens as a floating window instead.
- System and Setup have a note but no keywords.
- With several patches selected, the inspector says how many patches are selected. To tag several patches at once, use the sidebar's **Keywords** submenu (below).

Keywords

A keyword can be one word or a short phrase, such as Pad or Electric Piano. Capital letters make no difference when keywords are matched, so pad and Pad are the same keyword.

To	Do this
Add keywords to the patch on screen	Type in the field under Keywords and press Return. Separate several keywords with commas, such as Pad, Warm, Analog. As you type, keywords the library already has appear under the field. Click a suggested keyword to add the keyword to the patch.
Choose from the library's keywords	Click the tag button  at the right of Keywords . Every keyword in the library is listed, with a checkmark beside the keywords the patch has. Choose a keyword to add the keyword to the patch or remove the keyword from the patch.
Remove a keyword from the patch	Click the × on the keyword.
Tag several patches at once	Select the patches in the sidebar, Control-click one of the selected patches and choose from the Keywords submenu. A keyword is checked when every selected patch has the keyword. Choosing a keyword adds the keyword to every selected patch, or removes the keyword from every selected patch.

Adding and removing keywords can be undone with **Edit > Undo**. In the sidebar, a tag  at the right of a patch's row means the patch has keywords or a note.

The Edit Keywords window

Choose **Window > Edit Keywords** (  ). The window lists every keyword in the library and how many patches have it.

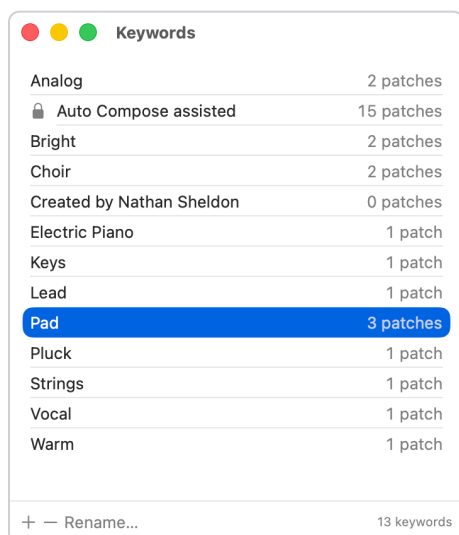


Figure 11-2. The Keywords window. The lock marks the keyword Auto Compose adds.

To	Do this
Add a keyword	Click + , type the keyword and click Add . A keyword added here is on no patch until you add the keyword to a patch.
Rename a keyword	Select the keyword and click Rename... , or Control-click the keyword and choose Rename... . Every patch with the keyword gets the new name. Renaming a keyword to the name of another keyword merges the two.
Delete a keyword	Select the keyword and click - , or press Delete. The keyword is removed from every patch that has it. A dialog asks first.

Renaming and deleting keywords cannot be undone.

The keyword **Auto Compose assisted**  is always in the list. Auto Compose adds the keyword to every patch Auto Compose changes. The keyword can be removed from a patch, but the keyword cannot be renamed or deleted. To stop Auto Compose adding the keyword, turn off **Tag patches "Auto Compose assisted"** in **Settings > Auto Compose**. See [Chapter 13](#).

Notes

Click in the box under **Note** and type. The note is saved as you type. The bar above the box sets the font, size, color, bold, italic and underline of the selected text, and so does the **Format** menu. Text colors adjust for dark appearance, so a note written in light appearance can still be read in dark appearance.

When **Add the first request and model to the patch's note** is on in **Settings > Auto Compose**, Auto Compose adds a paragraph to the end of the patch's note. The paragraph holds the date, the model, the Zone and the first request of the conversation.

Where keywords and notes go

When you	The keywords and note
Copy and paste a patch	Go with the patch. Pasting a patch with no keywords or note clears the keywords and note of the patch you paste into.
Drop a Work Area patch on a Part	Go with the patch, as a paste does.
Initialize a patch	Are cleared.
Import a project folder	Are cleared from every Work Area patch. The Temporary Area Parts keep theirs.
Save and open a library	Are saved in the library and come back when the library is opened.
Export a patch as a MIDI file	Are included as text a DAW can show. See Chapter 10 .
Click Send to V-Synth	Are not sent. The keywords and note stay in the app.

The search field

Type in the **Search patches** field at the top of the sidebar. The list shows only the patches whose name, slot (such as User Patch 7) or keywords contain what you type. The grayed factory names of slots that have not been loaded are searched too. Delete the text to show every patch again.

Notes are not searched from this field. To search notes, use Advanced Search.

Advanced Search

Click the filter button  at the right of the search field. Advanced Search opens below it.

1. Click **+ Condition**.
2. Click the condition's first pop-up menu and choose what to search, such as a patch's name, keywords or note, or one of the patch's settings.
3. Set what the condition looks for, in the controls beside it.
4. Add more conditions, then choose **all**, **any** or **none** from the **Match** pop-up menu.

The number of patches found appears at the bottom right of Advanced Search, and the sidebar shows only those patches. Click outside Advanced Search to close it.

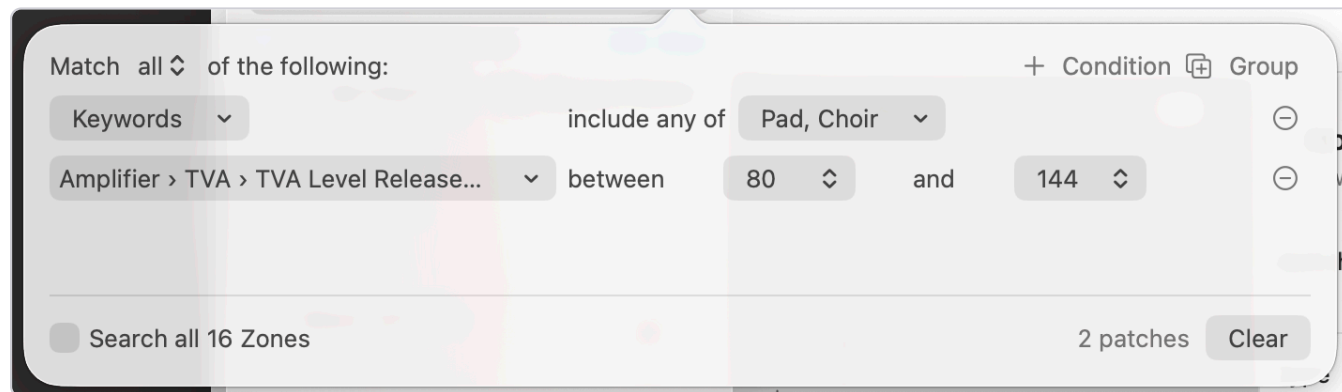


Figure 11-3. Pads and choirs with a long release.

Condition	What it finds
Name	Patches whose name contains the text you type.
Keywords	Patches that have any of the keywords you check.
Any Keyword	Patches that have at least one keyword.
Note	Patches whose note contains every word you type, each as the start of a word. For example, warm str finds "Warm, slow strings". Capital letters and accents make no difference.
Any Note	Patches that have a note.
A setting	For a setting with a list of values, such as a waveform, choose is or is not and check one value or several. For a setting with a range, such as a time or a level, choose the lowest and highest value to find.

Choosing a setting

- The settings are listed the same way as the layout you are using. In the Sound Designer layout, choose the group, then the tab, then the setting, such as **Amplifier > TVA > TVA Level Release Time**. In the Engineer layout, choose the section, then the setting.
- A COSM or effect setting that belongs to one type is listed under that type, such as **Effects > REV > 05: Hall 2 > Reverb Time**. A condition on that setting finds only patches that use that type.
- A setting the V-Synth grays out never matches. For example, **OSC 1 Wave Number** does not match a patch whose Oscillator 1 is ANALOG.

Zones

A setting that belongs to a Zone matches when any Zone with keys matches. A Zone with no keys is ignored. To include every Zone, turn on **Search all 16 Zones**. Each condition checks the Zones on its own, so two conditions can be matched by two different Zones.

Groups

Click **Group** to add a group of conditions with its own **Match** pop-up menu. A group lets you mix all and any, such as a keyword and either of two reverb types. To remove a condition or a group, click the – button at the right of the condition or group.

While a search is on

The filter button turns blue , and a line under the search field says how many conditions there are and how many patches the conditions find. Click **Edit** to change the search, or **Clear** to end it.

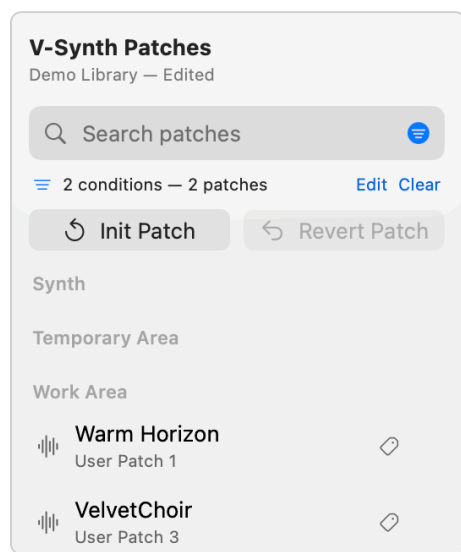


Figure 11-4. The sidebar while the search in Figure 11-3 is on.

- When you also type in the search field, the list shows only patches that match both.
- The results update as you edit patches.
- The search is kept when you quit, and is still on at the next launch.
- System and Setup are never in the results.

Examples

To find	Set up
Pads and choirs with a long release	Choose all from Match . Add Keywords with Pad and Choir checked, and Amplifier > TVA > TVA Level Release Time between 80 and 144. This search is shown in Figure 11-3.
Patches that use the Hall 2 reverb	Add Effects > REV > Reverb Type is 05: Hall 2 .
Patches with a super-saw in either Oscillator	Choose any from Match . Add Oscillator 1 > OSC Type > OSC 1 Analog Waveform is SUPER-SAW , and Oscillator 2 > OSC Type > OSC 2 Analog Waveform is SUPER-SAW .
Patches nobody has tagged yet	Choose none from Match , and add Any Keyword .
Patches whose note mentions a song	Add Note , and type words from the song's title.

CHAPTER 12

The Musical Keyboard

The Musical Keyboard plays the V-Synth from the Mac, so you can hear an edit without reaching over to the instrument. Choose **Window > Musical Keyboard** (  **K**).

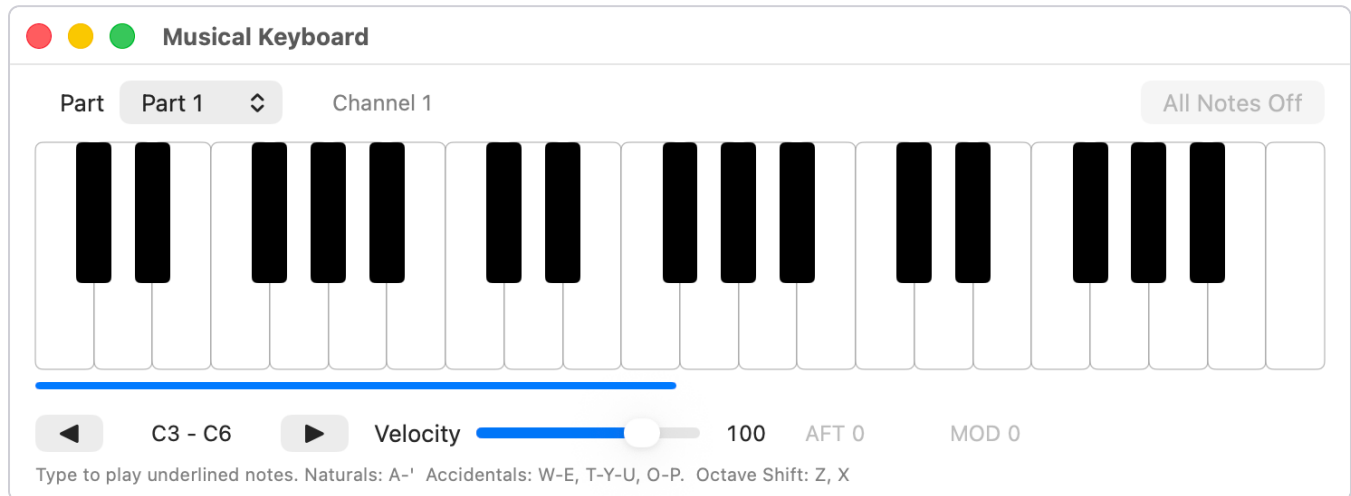


Figure 12-1. The Musical Keyboard. The blue bar under the keys shows the keys the computer keyboard plays.

Choosing the Part

The V-Synth plays only its Temporary Area Parts, so the keyboard plays a Part. When a Temporary Area Part is selected in the sidebar, the keyboard plays that Part. Otherwise choose a Part from the **Part** pop-up menu. The MIDI channel the Part receives on is shown beside the pop-up menu, as set in System's Part MIDI settings.

A Work Area patch cannot be heard from the keyboard. To hear a Work Area patch, drag the patch onto a Part, then play that Part. When the sidebar shows a patch the keyboard's Part is not playing, the line at the bottom of the window says so.

Playing

With	Do this
The mouse	Click a key, or drag across the keys. The Velocity slider sets how hard each note is played, from 1 to 127.
The computer keyboard	The home row, A to ' , plays the naturals (white keys) under the blue bar. The row above, W to [, plays the accidentals (black keys) between them. The line at the bottom of the window lists which letters play accidentals.
A Force Touch trackpad	Press harder on a held note to send aftertouch. A normal click sends none. AFT shows the amount.
Scrolling	Scroll with two fingers, or turn a mouse wheel, over the keys to move the modulation wheel. Scroll up to raise it. MOD shows its position. The modulation wheel stays where you leave it, like the wheel on an instrument.

A note sounds for as long as the mouse or a key holds it. A key held down does not repeat the note.

Moving the range

- The window shows three octaves. The range is shown between the arrow buttons, such as C3 - C6. Click the arrow buttons, or press **Z** and **X**, to move the keyboard down or up an octave. The top octave stops at G9, the highest MIDI note.
- Drag the blue bar to start the computer keyboard's range on any natural (white key). The letters that play accidentals (black keys) change with the bar's position, and the line at the bottom of the window lists them.

Typing from other windows

The Musical Keyboard window floats above the app's other windows. While it is open, typing plays it from any of the app's windows, except while you are typing text, such as a patch name, a search or an Auto Compose request. Keyboard shortcuts that use **⌘** still work. When you switch to another app, the window is hidden until you come back.

Stopping

All Notes Off silences every note and returns aftertouch and the modulation wheel to zero. Closing the window or switching to another app does the same.

Notes played on the Musical Keyboard appear in the MIDI Monitor beside the System Exclusive messages. See [Chapter 9](#).

CHAPTER 13

Auto Compose

Describe a sound in words, such as "a warm analog pad with a slow attack", and a language model sets up the patch. Then ask for changes, as in a conversation, until the patch sounds right.

Auto Compose is best at basic starting points. Complex patches still need adjusting by hand, and results vary widely from one language model to another.

What you need

Auto Compose is off until you set it up, and it needs a language model you provide. The language model can run on your own Mac, in a server such as LM Studio or Ollama, or it can be a cloud service you have an account with, such as OpenAI or Anthropic (Claude).

A cloud service charges for usage, usually by the model you use and the amount of text sent and received. Each request to Auto Compose sends the patch's settings, so each request is large. Keep close track of your usage and costs.

Setting it up

1. Choose **Settings > Auto Compose** and turn on **Enable Auto Compose**.
2. Choose the **API Format**. Choose **OpenAI-compatible** for LM Studio, Ollama, OpenAI and most other servers, or **Anthropic Messages** for Anthropic (Claude).
3. Enter the **Base URL**, the server's address, such as `http://127.0.0.1:1234` for LM Studio on this Mac. For a cloud service, the service's documentation gives the API base URL.
4. Enter an **API Key** if the service needs one. A local server usually does not.
5. Click **Fetch Models** and choose a model from the **Model** pop-up menu.
6. Click **Test Connection**. The result appears below the buttons. The result says how fast the model answers, how long the model takes to start answering, and whether the model thinks before answering.

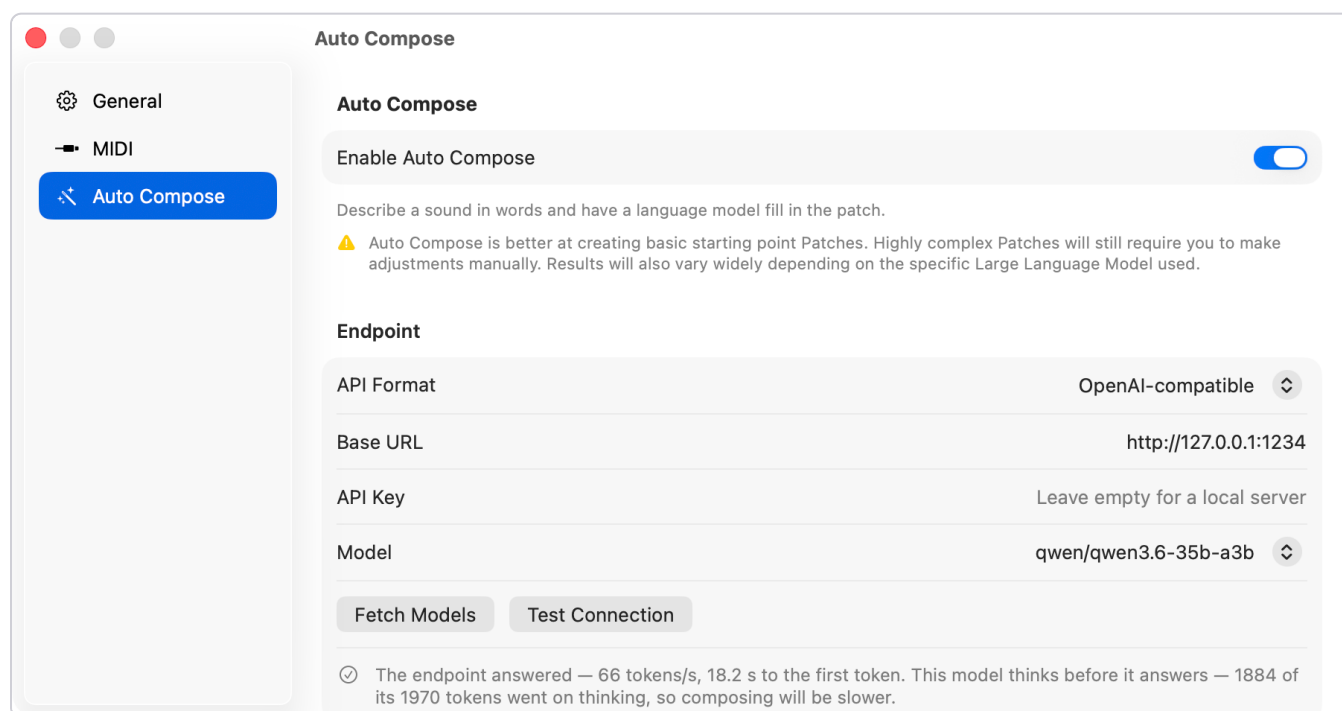


Figure 13-1. Auto Compose set up for LM Studio on the same Mac, after Test Connection.

- Changing the **Base URL** clears the **Model**, because each server has its own models. Click **Fetch Models** again.
- macOS allows a plain `http://` address only for an IP address, such as `127.0.0.1`, or a `.local` name. For a server with any other name, use `https://`.
- A thinking model can take a minute or more to answer **Test Connection**.

Starting a conversation

1. Select a patch in the sidebar and choose the Zone to compose with the Zone pop-up menu. To hear each change as it is made, choose a Temporary Area Part and turn on Live Edit for the Part.
2. Click **Auto Compose** at the left of the editor's header. A window opens for that patch and Zone.
3. For the first request, choose **Start from. Init Patch** starts from an initialized patch. **This Patch** keeps the patch's settings and changes only what you ask for.
4. Type what you want in the field at the bottom of the window and press Return. To start a new line, press -Return.

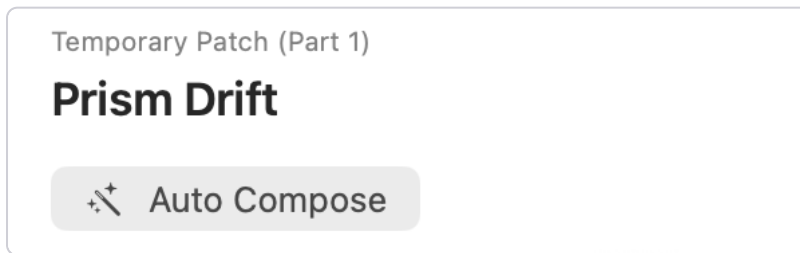


Figure 13-2. The **Auto Compose** button in the editor's header.

The window's header names the patch and Zone, the server requests are sent to, and whether Live Edit is on. The conversation stays with that patch and Zone, whatever you select in the sidebar. Clicking **Auto Compose** for another patch or Zone opens another window.

The first time you send to a server, a dialog says what will be sent and asks first. Click **Allow and Send** to send, or **Cancel**. The dialog asks once for each server.

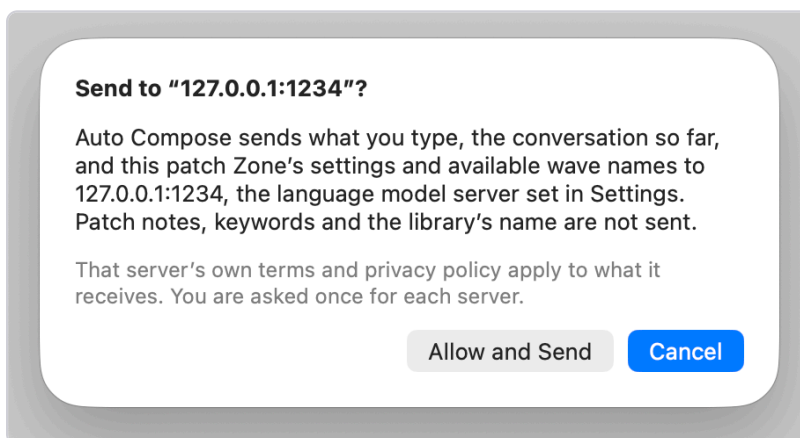


Figure 13-3. The dialog shown before the first request to a server.

Reading a turn

While the model works, a progress line says whether the model is thinking or writing, and how many characters have arrived. Click **Show Reply** to watch the reply arrive. Click **Stop** to end a turn that is taking too long.

When the turn is done, the model's reply says what it changed, and the settings change in the editor immediately.

Part 1 — Auto Compose

Warm Analog — Temporary Patch (Part 1), Zone 1

Turn on Live Edit for this part to hear each turn on the V-Synth.

Sends to 127.0.0.1:1234

You

A warm analog pad with a slow attack and a little chorus.

Auto Composer

Set the oscillators and TVA to maximum level, enabled the chorus and set it to a moderate send and master level, and adjusted the filter envelope for a slow attack pad sound with a warm filter cutoff and resonance.

> Thought process

> 8 parameters applied

Not recognized: Attack, Sustain

> ↻ Requesting a response clarification.

Auto Composer

Corrected the envelope parameter names to 'OSC1 Pitch Attack Time' and 'OSC1 Pitch Sustain' and set a slow attack with full sustain for the pad sound.

> 2 parameters applied

Not recognized: Attack, Sustain

> ↻ Requesting a response clarification.

Auto Composer

Corrected the envelope parameter names to 'COSM1 Cutoff Freq Attack Time' and 'TVA Level Attack Time' (and their Sustain counterparts) to create the slow attack pad sound. Also turned ON Oscillator 2 and raised the MFX Send Level to 127 for full volume.

> 7 parameters applied

Made audible: Multi-effects set to Bypass to let the Zone's chorus send through

Ask for a change

Total tokens: In 77,790, Thinking 2,162, Out 728 [Copy Prompt](#)

Send

Figure 13-4. A first request, with two automatic corrections.

In the turn	What it means
Thought process	What the model thought before answering. Click the triangle to read it.
8 parameters applied	How many settings the model changed. Click the triangle to list each setting and its new value.
Not recognized	Settings the model named that the patch does not have, or values a setting cannot take. These settings were not changed.
Requesting a response clarification.	The app asked the model to correct what was not recognized. This happens automatically, up to two times a turn. Click the triangle to read what the app asked.
Made audible	The model's settings would have made the patch silent, such as a level at zero or a switch off. The app changed the settings listed so that the patch can be heard.
No parameters were changed.	The model answered without changing any settings.
You stopped this turn.	You clicked Stop . Settings already changed in the turn stay changed.

The line at the bottom of the window totals the tokens the conversation has used, as the server reports them: In, Thinking and Out.

Refining the patch

Ask for changes in the same window, such as "make it a little brighter" or "a longer release". Each change is made on the patch as it is now, including any changes you made by hand since the last turn.

- Each turn is one undo step. **Edit > Undo** ( ) in the Auto Compose window or the main window takes back the whole turn.
- With Live Edit on for the Part, you hear each turn on the V-Synth as it is applied. Otherwise click **Send to V-Synth** when you are happy with the patch. See [Chapter 9](#).
- Closing the window keeps the conversation. Clicking **Auto Compose** again for the same patch and Zone reopens it.
- Conversations are not saved when you quit the app.
- Initializing the patch starts its conversations over.

What Auto Compose can change

Auto Compose can change the Zone's Oscillators (analog or PCM, with the wave), envelopes, LFOs, the Modulator, both COSM blocks, the Amplifier, the eight Matrix Controls, the patch's voice settings, and the MFX, Chorus and Reverb. Auto Compose does not change the Zones' key ranges, the scale tuning, the Step Modulator, the Arpeggio or the controllers.

What is sent

Each request carries what you typed, the conversation so far, the Zone's settings, and the names of the waves the patch can use. Requests do not carry your notes, your keywords or the library's name. The server's own terms and privacy policy apply to what the server receives. See [Appendix C](#).

Other settings

These are in **Settings > Auto Compose**, below the Endpoint settings.

Setting	What it does
Let the model think before answering	On by default. A thinking model takes longer to answer. Thinking mostly saves correction rounds rather than making better sounds. Some models think whatever this setting is.
Send full parameter list	On by default. Gives the model every COSM and effect type's settings at once. Turn it off for a small local model. With this setting off, a change of COSM or effect type takes two requests to the model.
Tag patches "Auto Compose assisted"	On by default. Adds the keyword Auto Compose assisted to every patch Auto Compose changes. See Chapter 11 .
Add the first request and model to the patch's note	On by default. Adds a paragraph to the end of the patch's note with the date, the model, the Zone and the conversation's first request.
Show in Finder	Shows the log file. Every Send is recorded on this Mac, with the settings applied and refused, the timing and the token counts. The API key is never written to the log.

Copy Prompt, at the bottom of the Auto Compose window, puts the whole request on the clipboard, so you can read exactly what the model is told.

Tips

- Describe the sound the way you would to another musician: its character, its attack and release, and the effects you want.
- Ask for one or two changes at a time when refining. Smaller requests are applied more reliably.
- To adjust a patch you already have, choose **This Patch** under **Start from** before the first request.
- A local model sometimes repeats the same settings over and over, and the progress line keeps counting. Click **Stop**, then send the request again, or reword it.
- If many settings come back as not recognized, try another model. Larger models usually name the settings correctly more often.

CHAPTER 14

Settings

Choose **V-Synth Patch Composer > Settings...** ( ). Settings has three panes: General, MIDI and Auto Compose. The Settings window opens on the pane you used last.

Settings belong to the app on this Mac. Settings are not saved in a library, so opening another library does not change them.

General

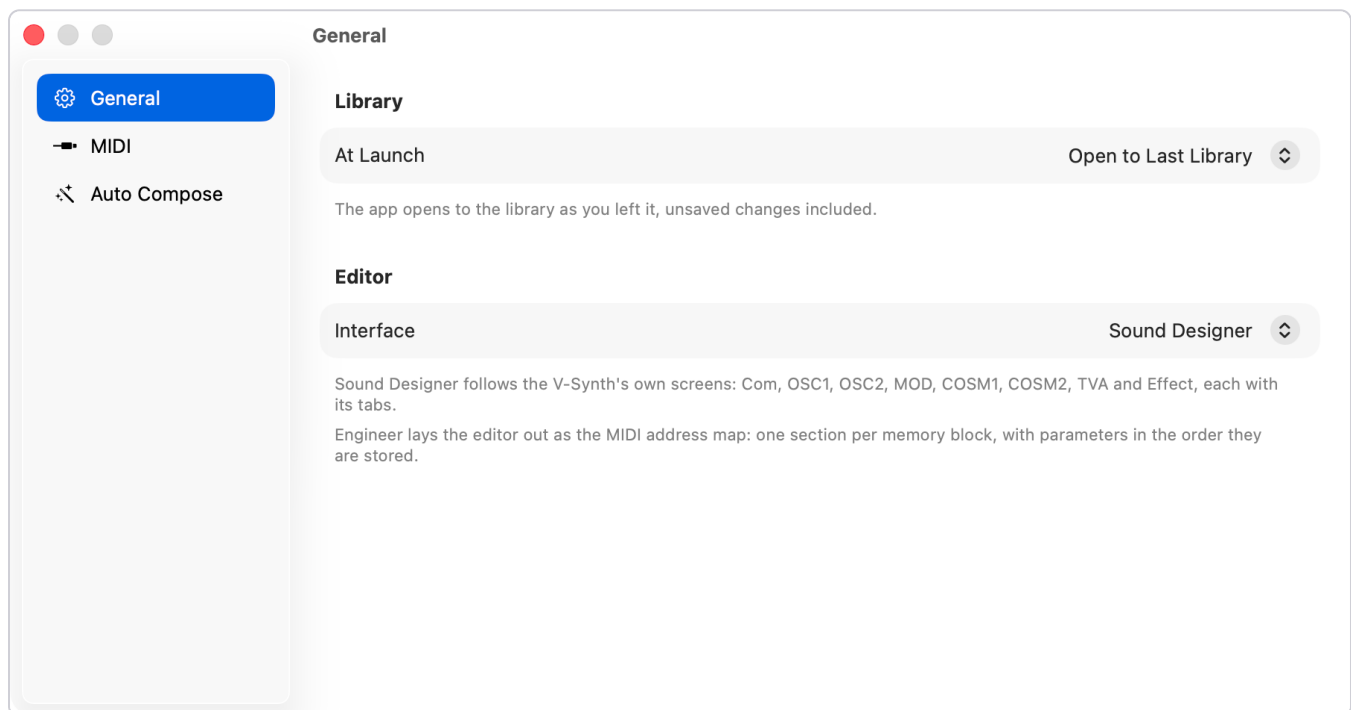


Figure 14-1. The General pane.

Setting	What it does
At Launch	Chooses what the app opens when it starts. Open to Last Library , the default, opens the library as you left it, unsaved changes included. Open to Init Library starts a new Init library. Ask What to Open opens the No Library Open page, where you choose. See Chapter 5 .
Interface	Chooses the editor's layout. Sound Designer , the default, follows the V-Synth's own screens. Engineer lists every section of the V-Synth's memory. See Chapter 6 and Chapter 7 .

MIDI

The MIDI pane chooses which V-Synth the app works with.

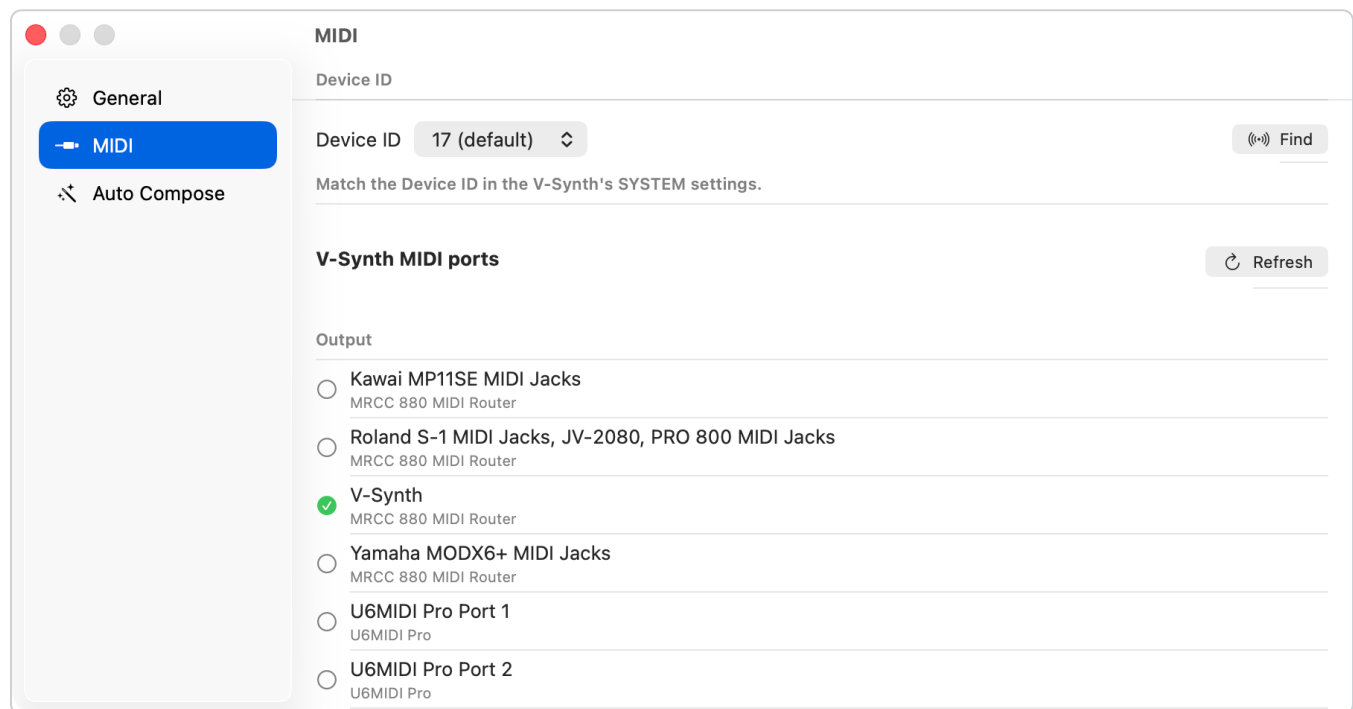


Figure 14-2. The MIDI pane. This is the same as Figure 2-2 in [Chapter 2](#).

Setting	What it does
Device ID	The Device ID of the V-Synth to send to and receive from, 17 to 32. 17 is the V-Synth's factory setting. Set this Device ID setting to match the Device ID on the V-Synth's SYSTEM › MIDI USB screen.
Find	Asks every V-Synth on the chosen output for its Device ID. If one V-Synth answers, the app sets the Device ID to match. If several answer, the app lists their Device IDs so you can choose one.
Refresh	Lists the MIDI ports again, after you connect or switch on an interface.
Output	The port the app sends MIDI messages to. Click the port the V-Synth's MIDI IN is connected to.
Input	The port the app receives MIDI messages from. All MIDI inputs , the default, listens on every input. To listen to one port only, click the port the V-Synth's MIDI OUT is connected to.

- Changing the Device ID ends Live Edit for every Part, because the app is now working with another instrument.
- The Device ID cannot be changed while a load or a send is running.
- If the chosen input is not connected, a warning says that nothing will be received until the input is connected or another input is chosen.

Auto Compose

The Auto Compose pane sets up the language model Auto Compose uses, and the options for thinking, the parameter list, tagging and the log. [Chapter 13](#) describes each setting.

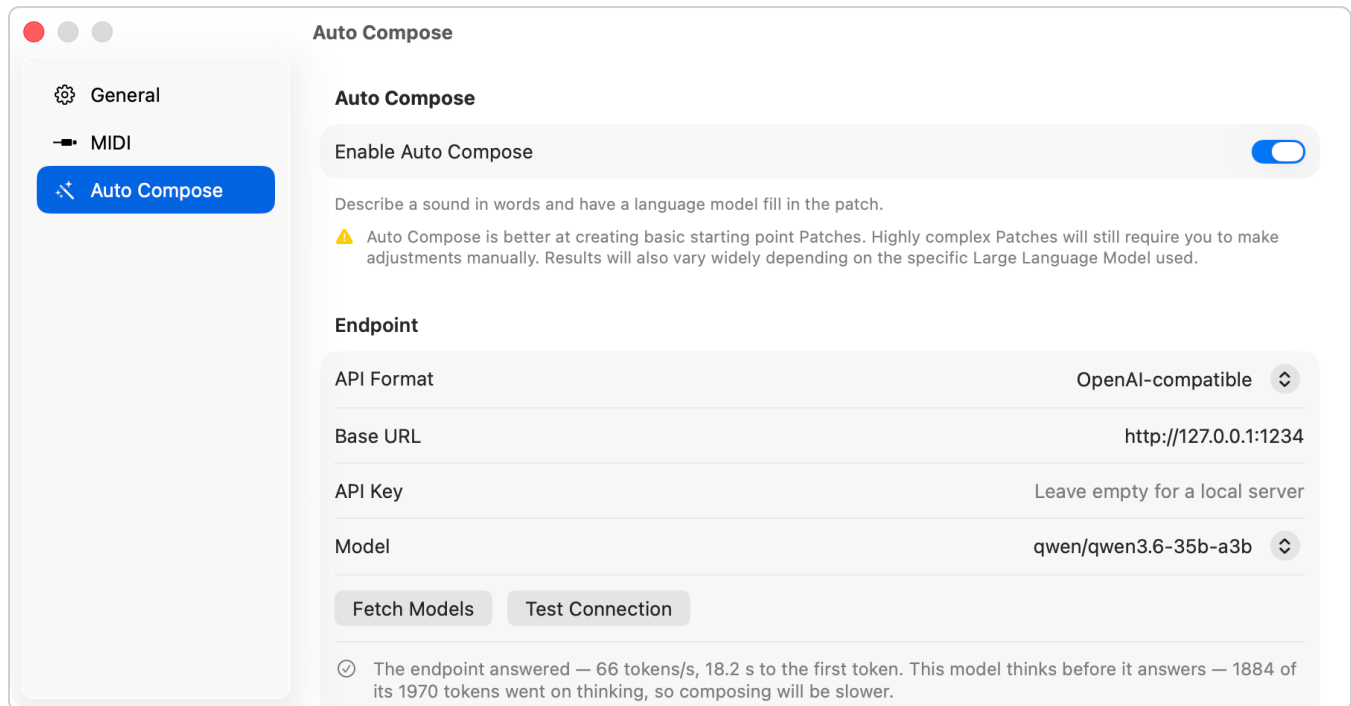


Figure 14-3. The Auto Compose pane. This is the same as Figure 13-1 in [Chapter 13](#).

CHAPTER 15

Troubleshooting

Most problems come from the MIDI connection or from a setting on the V-Synth. The MIDI Monitor (**Window** > **MIDI Monitor**, ) shows every message the app sends and receives, and is the first place to look.

“The V-Synth Did Not Answer”

This dialog appears when the app waited for the V-Synth and heard nothing back. Nothing was loaded or sent. Check, in this order:

1. The V-Synth is switched on and has finished starting up.
2. Both MIDI cables are connected: from the Mac's interface to the V-Synth's MIDI IN, and from the V-Synth's MIDI OUT back to the interface.
3. In **Settings** > **MIDI**, the Output and Input are the ports those cables use.
4. The Device ID in Settings matches the Device ID on the V-Synth's **SYSTEM** > **MIDI USB** screen. Click **Find** to find the V-Synth's Device ID.
5. **Rx Sys-Ex** is on, on the V-Synth's **SYSTEM** > **MIDI USB** screen.

The dialog's **Open MIDI Settings...** button opens the MIDI pane of Settings. Figure 9-2 in [Chapter 9](#) shows the dialog.

Before the dialog appears, the app asks what else is on the connection. The dialog then says what answered instead, if anything:

The dialog says	What to do
A V-Synth on another Device ID	Set the Device ID in Settings > MIDI to the one named, or click Find .
Another instrument, named by its maker	The chosen ports reach a different instrument. Choose the ports the V-Synth is connected to.
A V-Synth running VC-1 or VC-2	A V-Card replaces the V-Synth's own software, and the V-Synth then answers as another instrument. VC-1 answers as a D-50. Restart the V-Synth as a V-Synth.
Nothing answered	Check the power, the cables and the ports again.

A load stops partway

The app asks the V-Synth for a patch in several pieces. If some pieces do not arrive, the app asks for those pieces again, one at a time. If pieces are still missing, the MIDI Monitor says "Patch load incomplete". Click **Load from V-Synth** again. If a load keeps stopping partway, try connecting the V-Synth to the Mac without a MIDI router or merger between them.

Panel edits do not appear while Live Edit is on

The V-Synth sends panel edits only when **Tx Edit** is on, on its SYSTEM > MIDI USB screen. Tx Edit is not kept when the V-Synth is switched off unless you touch **Write** at the bottom right of that screen after turning Tx Edit on, then touch **EXECUTE** when the V-Synth asks "Are You Sure?".

Live Edit also ends by itself when the V-Synth loads another patch into the Part, such as when a patch is chosen on the V-Synth's panel. The MIDI Monitor then says "Live Edit off for ... the V-Synth loaded another patch". Turn Live Edit on again for the Part.

A patch sent to the Work Area is gone

The Work Area is the V-Synth's working memory. A patch sent to a Work Area slot is kept only until the V-Synth is switched off. To keep the patch, save the project on the V-Synth's DISK > Save Project screen before switching off. See [Chapter 9](#).

A setting did not reach the V-Synth

Settings marked with an asterisk (*) cannot be sent over MIDI. Those settings reach the V-Synth only when the V-Synth loads a project exported with **File > Export Project Folder....** See [Chapter 8](#).

The Musical Keyboard makes no sound

- The keyboard plays a Temporary Area Part. Check the Part shown in the keyboard window, and that the Part's Receive Switch is on in System's Part MIDI settings.
- The V-Synth must be listening on the channel the keyboard window shows.
- Check the Output port in **Settings > MIDI**, and open the MIDI Monitor to see the notes going out.

A note keeps sounding

Click **All Notes Off** in the Musical Keyboard window.

A wave will not play on the Mac

The factory waves are built into the V-Synth, and the Mac has only their names. Only samples imported from a project can be played on the Mac.

Auto Compose problems

Problem	What to do
"macOS blocked a plain http:// request to a named server"	Use an https:// address, or the server's IP address or .local name.
Test Connection fails	Check that the server is running and a model is loaded or available, then click Test Connection again in Settings > Auto Compose .
Test Connection warns that the model's context is small	Turn off Send full parameter list , or load the model with a larger context.
The progress line keeps counting and the turn never ends	The model is repeating itself. Click Stop , then send the request again, or reword it.
Many settings come back as not recognized	Try another model. See Chapter 13 .

The library could not be read

If the app's working copy of the library is damaged, the app does not overwrite it. The app moves the working copy into a folder named "VSynthLibrary unreadable" with the date, starts an empty library, and says where the old working copy went in the status bar at the bottom of the window. Your saved library files are not changed. To open a saved library, choose **File > Open Library...**

Messages in the MIDI Monitor

Besides the messages sent and received, the MIDI Monitor shows lines that explain what happened. The ones most often seen:

Message	What it means
No MIDI output selected	No Output port is chosen in Settings > MIDI . Nothing was sent.
No answer from the V-Synth with Device ID 17	The V-Synth did not answer a load, a send or Live Edit. See “The V-Synth Did Not Answer” above.
Ignoring messages from the V-Synth with Device ID 18	A V-Synth with a different Device ID is sending on the input. The app ignores its messages. Shown once for each Device ID.
Patch loaded: 9082 bytes across 103 block copies	A whole patch arrived.
Re-requesting ... block copies individually	Some pieces of a load did not arrive, and the app is asking for them again.
Patch load incomplete	Pieces were still missing after asking again. See “A load stops partway” above.
Sent ... — 103 messages, 9082 bytes	A whole patch was sent.
DT1 ignored: bad checksum or unrecognized format	A message from the V-Synth arrived damaged, or was not a V-Synth message. It was not used.
DT1 ignored: reply is for ...	A reply arrived for a different patch or Part than the one being loaded. It was not used.
Live Edit on for ... / Live Edit off for ...	Live Edit started or ended for a Part. When it ends by itself, the line says why.
MIDI send failed	macOS could not send to the Output port, for example because the interface was disconnected. Check the connection and click Refresh in Settings > MIDI .

Still stuck?

Choose **Help > Contact Support....** See [Appendix C](#).

APPENDIX A

Keyboard shortcuts

Every keyboard shortcut in V-Synth Patch Composer, organized by topic and menu. **Send to V-Synth** has no shortcut, so a stray key press cannot write to the V-Synth.

Libraries and files

File menu	Keys
New Library...	 N
Open Library...	 O
Close Library	  W
Save Library	 S
Save Library As...	  S
Export Patch... (or System or Setup)	 E
Export Oscillator 1... (or any group or section)	  E

Editing

Edit menu	Keys
Undo	 Z
Redo	  Z
Copy: the selected patch, or the selected section in the Engineer layout	 C
Paste: into the selected patch, or the selected section in the Engineer layout	 V

The V-Synth

Data menu	Keys
Load Patch from V-Synth (or System or Setup)	 L
Load Patch Names from V-Synth	  L

Windows

Menu item	Keys
Window › Patch Library, the main window	 0
View › Show Inspector	  I
Window › Musical Keyboard	  K
Window › MIDI Monitor	  M
Window › Edit Keywords	  T
V-Synth Patch Composer › Settings...	 ,
Help › V-Synth Patch Composer Help	  /

The Musical Keyboard

Action	Keys
Play the naturals (white keys) under the blue bar	A to ' (apostrophe)
Play the accidentals (black keys)	W to [(left bracket)
Move down an octave	Z
Move up an octave	X

Auto Compose

Action	Keys
Send the request	Return, or ⌘-Return
Start a new line in the request	⇧-Return
Stop a turn	Escape

Notes

Format menu	Keys
Bold	⌘ B
Italic	⌘ I
Underline	⌘ U

APPENDIX B

Glossary

The terms this guide uses, and what each means in V-Synth Patch Composer.

Term	Meaning
Amplifier	The Sound Designer group for a Zone's TVA, which shapes the Zone's level over time, with its envelope and LFO.
Arpeggio	The patch's arpeggiator: a pattern of sixteen lines by thirty-two steps, played from the notes held.
Auto Compose	The app's feature that sets up a patch from a description in words, using a language model you provide. See Chapter 13 .
Chorus, Reverb, MFX	The patch's three effects. MFX is the multi-effects, with 41 types.
COSM	Roland's Composite Object Sound Modeling. Each Zone has two COSM blocks, COSM 1 and COSM 2, each set to a type such as a filter, an amp or a resonator.
Device ID	The number a V-Synth answers to in System Exclusive messages, 17 to 32. The app and the V-Synth must use the same Device ID.
Engineer layout	The editor layout that lists every section of the V-Synth's memory. See Chapter 7 .
Envelope	A shape over time, from a note's start to its release, that moves a setting such as pitch, a filter or level. Each Zone has thirteen, used by the two Oscillators, the two COSM blocks and the Amplifier.
Group	One of the Sound Designer layout's divisions of a patch, such as Common, Oscillator 1 or Effects, listed beside the editor.
Init Patch	The patch the V-Synth's own Patch Init produces. Initializing a patch replaces it with the Init Patch.
Inspector	The area at the right side of the main window that shows the selected patch's keywords and note. See Chapter 11 .

Keyword	A word or short phrase attached to a patch, for finding the patch later. See Chapter 11 .
LFO	Low-Frequency Oscillator: a slow, repeating wave that moves a setting such as pitch or a filter. Each Zone has five, used by the two Oscillators, the two COSM blocks and the Amplifier.
Library	Everything the app holds: the System, Setup, the sixteen Temporary Area Parts, the 512 Work Area patches, and the patches' keywords and notes. A library is saved as one file. See Chapter 5 .
Live Edit	A link between a Temporary Area Part in the app and the same Part on the V-Synth, so each edit is heard immediately. See Chapter 9 .
Matrix Control	One of a patch's eight routings from a controller, such as aftertouch or the modulation wheel, to one or two settings.
MIDI Monitor	The app's window that lists every MIDI message sent and received. See Chapter 9 .
Modulator	The block that combines a Zone's two Oscillators: mixed, ring modulated, frequency modulated or synchronized.
Oscillator	The sound source of a Zone. Each Zone has two, each set to one of three types: ANALOG (a synthesizer waveform), PCM (a sampled wave) or EXTIN, External In (the audio coming into the V-Synth's rear-panel inputs).
Part	One of the sixteen Temporary Area patches the V-Synth plays. Part 1 is what plays unless the V-Synth is in a multi-part mode.
Patch	A complete sound: up to sixteen Zones, the Effects, the Arpeggio, the Step Modulator and the controller settings.
Patch Palette	The eight PATCH PALETTE buttons, in eight banks, each set to call up a Work Area patch. Only the V-Synth keyboard has PATCH PALETTE buttons. The V-Synth XT does not.
PCM	Sampled audio: the kind of wave a PCM Oscillator plays.

Project	A V-Synth project folder (.prj): the Work Area patches, the waves and samples, and the System settings, as the V-Synth saves them to a card or its internal memory.
Revert	Returns a patch, group or section to what it held when it was last loaded, sent, imported, opened or saved.
Rx Sys-Ex	The V-Synth's setting for receiving System Exclusive messages. It must be on for the app to load or send.
Section	One of the Engineer layout's divisions of a patch, matching one block of the V-Synth's memory.
Setup	The V-Synth's settings for transpose, the panel, and the patch each Part plays.
Slot	A numbered place for a patch, such as User Patch 7 or Part 1. Pasting a patch keeps the slot and replaces the sound in it.
Sound Designer layout	The editor layout that follows the V-Synth's own screens, with groups, tabs and drawings. See Chapter 6 .
Step Modulator	Four tracks of sixteen steps that move settings in time with the tempo.
Structure Type	How a Zone's Oscillators, Modulator and COSM blocks are connected. There are three.
System	The V-Synth's global settings: tuning, MIDI, controllers and the equalizer.
System Exclusive	MIDI messages for one maker's instruments. The app loads and sends patches as System Exclusive messages.
Temporary Area	The sixteen Parts the V-Synth plays now. Changes to the Temporary Area are lost when the V-Synth is switched off.
TVA, TVF	Time Variant Amplifier and Time Variant Filter: an amplifier and a filter whose settings change over time with envelopes and LFOs.
Tx Edit	The V-Synth's setting for sending panel edits over MIDI. Live Edit needs it on to receive edits made on the V-Synth.

V-Card	A Roland card, such as VC-1 or VC-2, that replaces the V-Synth's own software with another instrument until the V-Synth is restarted.
VariPhrase	Roland's technology for changing a sample's pitch, time and formant separately.
Wave	An audio sample a PCM Oscillator plays. The factory waves are built into the V-Synth. A project can also carry its own samples.
Work Area	The 512 patch slots the V-Synth loads from its project at startup. Changes sent to the Work Area are lost when the V-Synth is switched off, unless the project is saved on the V-Synth.
Working copy	The app's own copy of the library, saved as you work. It is what the app opens at the next launch.
Zone	One layer of a patch, with its own Oscillators, envelopes, LFOs and COSM blocks, and its own key range. A patch has sixteen.

APPENDIX C

Support and privacy

Questions, problems and suggestions are all welcome.

Contacting support

Email support@nathansheldon.com. In the app, **Help > Contact Support...** starts an email with the app's version and your macOS version already filled in.

A problem is much quicker to solve with these details:

- The app's version, from **V-Synth Patch Composer > About V-Synth Patch Composer**, and your macOS version.
- Your V-Synth model and its system version, and the MIDI interface you use.
- What you did, what you expected, and what happened instead, including the exact words of any message.
- For a MIDI problem, the lines from the MIDI Monitor. Select the lines in **Window > MIDI Monitor**, press  , then paste the lines into the email.
- For an Auto Compose problem, the server and model you use. Do not send your API key.

Before writing, see [Chapter 15](#) for the most common problems.

The latest guide

The latest version of this guide is at

<http://www.nathansheldon.com/software/support/v-synth-patch-composer/user-guide.pdf>. In the app, choose **Help > User Guide (PDF)**.

Privacy policy

This is the same policy as **Help > Privacy Policy** in the app.

Effective October 22, 2026.

In short

V-Synth Patch Composer does not collect any information about you. It has no accounts, no advertising, no analytics and no tracking, and it sends nothing to its developer.

What stays on your Mac

Your libraries, patches, keywords, notes, samples and settings are stored on your Mac: in the app's own container, and in library and project files where you save them. They are not uploaded anywhere by the app.

MIDI

The app exchanges MIDI messages with the instruments connected to your Mac. Those messages do not leave your studio.

Auto Compose

Auto Compose is off unless you turn it on and enter the address of a language-model server of your choosing, which may be on your own computer or a service run by someone else.

- When you send a request, the app sends that server what you typed, the conversation so far, the patch Zone's settings and the names of the waves it can use. It does not send your notes, keywords or the library's name.
- The first time you send to each server, the app asks for your permission and says what will be sent.
- **Fetch Models** and **Test Connection** in Settings also contact that server. The test sends a short fixed question, nothing from your library.
- If you enter an API key, it is stored in the app's settings on your Mac and sent only to that server.
- That server's own terms and privacy policy govern what it receives. The developer of V-Synth Patch Composer does not receive it.
- A log of each request's counts and timings is kept on your Mac, in the app's container, for your own use. It does not contain your API key.

Crash reports

If you choose to share analytics with app developers in macOS's Privacy & Security settings, Apple may pass crash reports for this app to its developer. They are anonymous, and are used only to fix problems.

Children

The app collects no information from anyone, including children.

Changes

If this policy changes, the new version will be published with a new app version as well as at <http://www.nathansheldon.com/software/support/v-synth-patch-composer/privacy.html> with a new effective date.

Contact

Questions about privacy: support@nathansheldon.com.