# Riser Studio 1.2

## Sample editing and community presets

This update guide describes the new V1.2 workflows. The complete instrument reference follows these two pages.

## Cloud presets: use your existing account

Open the preset-name menu, then choose **Cloud**. An active online Riser Studio activation connects automatically. You do not need a separate Cloud password. If prompted, choose **Manage activation** and use your existing Riser activation key. Return to Cloud and retry.

Search by preset name, tag or artist, and filter Riser or Shepard. Each row shows the preview duration, waveform and attribution. **My shares** shows presets published by your account.

| Control | What it does |
| --- | --- |
| Play / Stop | Auditions the rendered audio preview without replacing your current sound. Cancel stops a pending preview request. |
| Download / Saved | Saves the full preset to Local presets in the Cloud category. Saved is checked against the actual local file after reopening. |
| Load | Saves and opens the preset in its Riser or Shepard workspace. This replaces that workspace's current preset. |

## Keep and organise downloaded sounds

Downloads are ordinary editable .riser presets in your local library. A Cloud outage does not remove them. Existing edited files are protected from overwrite. Presets that reference protected factory textures require the matching installed Riser library.

## Connection problems and content reports

For a temporary connection failure, choose **Retry connection** or **Refresh**. Use **Report** on another user's preset to choose a reason and send it for review. Reporting does not reveal your account identity to that preset's creator.

## Community reuse permission

You may modify downloaded community presets and use the resulting sounds in finished commercial and non-commercial music, films, games and other projects without credit. You may not resell or reupload the raw preset or its embedded recordings.

# Share deliberately. Edit directly.

## Share a Riser or Shepard preset

1. Choose the workspace and sound you want to share, then select **Share current sound**.
2. Choose **Prepare audio preview**. This makes a frozen copy of the current workspace. The audio preview is at most 12 seconds; the preset retains its complete sound settings.
3. Review the prepared preview. Add a preset name and comma-separated tags.
4. Choose an artist name and whether to show it on this preset. Your registered name is the initial suggestion; an artist override and show-name preference are remembered.
5. Confirm that you can redistribute the preset and any embedded recordings, then choose **Share to Cloud**.

Preparing does not publish. Changes made after preparation are not part of that snapshot; prepare again to include them. Saving a local preset remains private.

## What sharing includes

The shared copy includes enabled-layer source recordings needed by the preset. Original filenames, local paths, other-workspace recordings, A-D snapshots and personal MIDI mappings are omitted. Protected factory recordings remain installed-library references. Only share recordings you have the right to redistribute.

**Unshare** removes your entry from community browsing and withdraws its server media. Copies already downloaded by other users remain on their computers. Hiding your artist name hides public attribution; the service retains private ownership for your account.

## Sample Editor: preserve the source character

Choose an imported layer, then **Edit sample**. Adjust the original waveform's trim handles or enter the start/end in seconds. Reverse is available in the same view. Choose **Keep character** for direct sample playback, **Loop** for repeated source material, or **Smooth** for a more transformed sustained sound.

Use **Original / Edited** with the editor's Play/Stop control to compare the source selection. The main instrument transport plays the full riser, including its pitch evolution and effects. Opening the editor or previewing a draft does not change the patch; **Apply to layer** commits the edit as one undoable action.

The original recording and its source rate remain in the preset. Steady-region analysis and advanced controls are optional. Smooth processing is intentionally transformative; it is not a promise of transparent time-stretch.

Imported recordings are embedded in full, including audio outside the trim selection. Review and, if necessary, shorten the recording itself before sharing it.

The Share confirmation records agreement to the community permission on the previous page. Only share material for which you can grant those rights. Choosing to hide your artist name changes attribution, not the recipient permission.

RISER STUDIO

CINEMATIC SOUND DESIGN

# Riser Studio
# *User Guide*

Shape short recordings, synthesis and continuous Shepard motion into cinematic ascents — designed, layered and delivered on your Mac or PC.

VERSION 1.1.1 · RELEASE EDITION · REVISED 14 OCTOBER 2026



*Build a moment.*
*Shape an endless ascent.*

RISER · SHEPARD LAB · NATIVE PORTAL
USERISERSTUDIO.COM

WELCOME · RELEASE EDITION EDITION

# Make the ascent *your own*

A practical guide to cinematic risers, continuous Shepard motion and an optional assistant connection.

*i*

## This edition

Prepared for the Riser Studio 1.1.1 release edition on 14 October 2026. It includes the managed preset library, selectable installers, update controls and Mac standalone MCP setup. Check the download page for the version and platforms actually available; this guide is not a release or compatibility certificate.

*ii*

## Two workspaces

Riser creates finite builds with a chosen arrival. Shepard Lab creates continuous ascent or descent. Both offer up to eight layers, curves, effects and editable presets. Infinite Alloy is the fresh Shepard starting sound; a saved session or DAW project restores its own sound.

*iii*

## Read with the instrument

Bold words identify controls. Earlier native-editor screenshots illustrate the shared interface; labels and workflow instructions in this edition take precedence. Explanatory diagrams are not measured audio traces.

*iv*

## Keep your work

Save named presets before major changes. Imported source audio remains embedded for recall. Your user library, activation and DAW projects are separate from the installed application.

*v*

## Local audio, optional assistance

Synthesis, sample preparation and effects run locally. MCP lets a compatible assistant operate those controls; it does not add neural audio generation. Your assistant client has its own privacy and account policies.

| | | | |
|---|---|---|---|
| 1 | A numbered marker on a screenshot matches the list beside or beneath it. | **Bold** | The name of a control, exactly as it reads on screen. |
| OPEN | The path to the page you need, from the Portal. | ILLUSTRATION | A diagram that explains behaviour. It is not a measured trace. |
| MOCK-UP | A redrawn picture of a Windows or macOS window. Wording varies a little between versions. | LAYOUT | A folder diagram: what a download holds and where each part goes. |

GOOD TO KNOW

undefined

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RISER STUDIO · 1.1.1

# Choose the *right download*

Download from the official Riser Studio store or the link in your purchase email.

## 01 Mac

Choose the Universal Mac installer for Intel or Apple Silicon. It offers the standalone app, VST3 and Audio Unit. The current build target is macOS 12.3 or later; consult the download page for tested configurations.

## 02 Windows

Choose the x64 Windows installer for Windows 10 or 11. It offers the standalone app and VST3. The embedded editor needs Microsoft Edge WebView2 Evergreen Runtime. Publisher signing is still pending for the Windows installer.

## 03 Before upgrading

Save your sounds, close Riser Studio and quit every DAW that may have loaded it. Keep the previous installer until your important projects reopen correctly.

## 04 Release status

Use Updates & downloads for the current installer, version, checksum and known limitations. Automated native tests and installer tests do not establish acceptance in every audio driver or commercial DAW.

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→ INSTALL ON A MAC 6

RISER STUDIO · 1.1.1

# Install *on a Mac*

The standard package places the components in their normal locations.

## 01 Run the package

Open the downloaded .pkg, follow Installer and choose the components you need. macOS may ask for administrator authorization for system folders.

## 02 Installed locations

Standalone: `/Applications/Riser Studio.app`
VST3: `/Library/Audio/Plug-Ins/VST3/Riser Studio.vst3`
AU: `/Library/Audio/Plug-Ins/Components/Riser Studio.component`

## 03 Guide and notices

The installer includes the guide and third-party notices under `/Library/Application Support/Riser Studio/Documentation`.

## 04 Old beta copies

If your DAW opens an older version, check your user plug-in folders for a second beta copy. Keep a backup outside plug-in scan folders, then restart and rescan the host.

## 05 Presets and activation

An application upgrade should preserve your user presets, imported media and activation. Verify the installed version and reopen a saved sound before removing your previous installer.

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→ CHECK THE MAC PUBLISHER 7

RISER STUDIO · 1.1.1

# If macOS *will not open it*

The 1.1.1 Mac installer uses a Developer ID signed, Apple-notarized package.

## 01 Expected identity

The installer publisher is DYAUDIO SDN. BHD. The release package includes a trusted signing timestamp and an Apple notarization ticket. Check the exact download against its published checksum.

## 02 If macOS refuses it

Keep the warning text, redownload the official package and confirm that you chose the supported Mac build. Do not remove quarantine attributes or disable Gatekeeper to work around an unexplained warning.

## 03 If a plug-in is missing

Quit the DAW, install its selected plug-in component and restart the host for a rescan. Check for a stale user-folder beta copy before assuming the new component failed.

## 04 Get help

Send support your macOS version, installer filename, DAW version and warning text. Signing and notarization identify the distributed package; your own DAW project still needs a recall and playback check.

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→ ACTIVATE YOUR INSTRUMENT 15

RISER STUDIO · 1.1.1

# Windows: download *and keep the file*

Use the official x64 setup file and its published verification information.

## 01 Download

Save the Riser Studio Windows setup .exe from the official download page. Do not run an attachment from an unexpected message.

## 02 Verify the checksum

In PowerShell, use `Get-FileHash` with the exact downloaded filename and `-Algorithm SHA256`. Compare the complete result with the checksum supplied beside that release.

## 03 Signing status

The Windows publisher account is awaiting verification. The unsigned Windows installer may show an unknown publisher. Check the release-specific status before deciding to run it; a checksum identifies the file but is not a publisher signature.

## 04 Close audio applications

Save your projects and quit Riser Studio and your DAW before installation or upgrade.

NEXT

→ WINDOWS: CHECK A WARNING 9

RISER STUDIO · 1.1.1

# Windows: *unblock the ZIP*

Read the file identity and the current release notes before continuing.

## 01 Expected source

Confirm that the setup filename and checksum match the official release. A mismatched or unexpected file should not be installed.

## 02 Publisher verification

An unsigned installer does not carry a verified publisher identity. The current Windows signing delay is separate from native build and installer tests.

## 03 Managed computers

If organizational policy blocks the installer, ask your administrator. Do not disable antivirus or system-wide protection to install the instrument.

## 04 Ask for help

Send support the warning text, Windows version and installer filename. Do not include your license code in a public screenshot.

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→ WINDOWS: RUN SETUP 10

RISER STUDIO · 1.1.1

# Windows: *extract and place*

Use the installer instead of manually moving folders from an older beta ZIP.

## 01 Choose components

Follow setup and select the standalone app and/or VST3. Use the installer's proposed destinations unless your administrator requires another arrangement.

## 02 Keep the resources together

The installer places the instrument and its required resources. Moving only the .exe or the binary inside a .vst3 bundle breaks the installation.

## 03 WebView2

The native editor uses Microsoft Edge WebView2 Evergreen Runtime. If the editor cannot open, check that the official runtime is installed, then restart the instrument.

## 04 Upgrade and uninstall

Keep your own preset and project backups. The prepared installer preserves the Riser user-data area when removing application files; verify important sounds after an upgrade.

NEXT

→ WINDOWS: OPEN THE INSTRUMENT 11

RISER STUDIO · 1.1.1

# Windows: *open the app*

After setup, start Riser Studio from its Start menu shortcut.

## 01 First launch

Open Riser Studio and let its starting sound prepare. Choose the audio device and a practical buffer size in the standalone audio settings. Inside a DAW, use the host's device settings instead.

## 02 Editor runtime

If the editor is missing or reports a WebView2 problem, install Microsoft's official WebView2 Evergreen Runtime and reopen the app. The runtime is shared by Windows applications.

## 03 Publisher warning

The Windows installer is unsigned while publisher verification is pending. Check its official source and checksum. If your computer blocks it, keep the warning and contact support or wait for the signed build; do not turn off system protection.

## 04 Activate and test

Open License, paste your Riser code and select Activate. Load a preset, play and release a note, save the sound, close the app and reopen it. Listen to a short exported WAV before using the instrument in an important session.

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→ WINDOWS: OPEN THE VST3 12

RISER STUDIO · 1.1.1

# Windows: *add the plug-in*

Select VST3 during setup, then allow your DAW to scan it.

## 01 Standard destination

The system VST3 location is `C:\Program Files\Common Files\VST3`. The complete Riser Studio.vst3 bundle belongs there; the installer manages its internal layout.

## 02 Rescan

Restart the DAW and rescan its VST3 instruments if necessary. Remove stale beta copies from custom scan folders only after retaining a backup outside those folders.

## 03 Make a small test

Create an instrument track, load a preset, play a note, release it, save the project and reopen it. Bounce a short passage and listen to the exported file.

## 04 Current acceptance

Windows automated native and test-host evidence is separate from interactive driver and commercial-DAW acceptance. Report the exact host, buffer size and sample rate if something fails.

NEXT
→ WINDOWS SIGNING AND TEST SCOPE 13

RISER STUDIO · 1.1.1

# Why Windows *is cautious*

An installer, its publisher signature and a successful audio session are different checks.

## 01 Current Windows release

The Windows installer is prepared without an Authenticode publisher signature. The developer account is still being verified. Build and installer checks are separate from publisher signing.

## 02 Know the source

Use the official Riser download and compare its checksum with that exact release. A matching checksum confirms file identity; it does not replace a publisher certificate.

## 03 Windows checks

Native build, test-host, installer and standalone checks are recorded separately. A hosted Windows runner does not exercise your physical audio interface, ASIO driver or every commercial DAW.

## 04 Your first session

Begin at 48 kHz and 512 or 1024 samples where your driver offers them. Try import, layers, curves, save/reopen and WAV export. Report the exact host, driver and buffer if playback fails.

## 05 Keep protection enabled

Do not turn off Windows Security, SmartScreen or organisational policy to install the instrument. Ask your administrator or Riser support if the official package cannot run.

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→ IF SOMETHING DOES NOT APPEAR 14

INSTALL · TROUBLESHOOTING

# If something *does not appear*

Most problems come down to a folder, a blocked file or a missing runtime. Check these in order.

| WHAT YOU SEE | WHAT TO CHECK |
|---|---|
| **Windows will not start the app** | SmartScreen shows Run anyway only after More info. Unblock the ZIP before extracting. |
| **The plug-in is missing in your DAW** | Windows: the complete Riser Studio.vst3 folder is in C:\Program Files\Common Files\VST3. Mac: the VST3 is in ~/Library/Audio/Plug-Ins/VST3, the Audio Unit in ~/Library/Audio/Plug-Ins/Components. Rescan, or restart the DAW. Make sure the DAW scans that folder. |
| **The plug-in window is empty or shows a message** | On Windows the editor needs the Microsoft Edge WebView2 Runtime. See below. The sound engine still works without the editor. |
| **The plug-in loads but has no sounds** | You copied only the file inside the folder. Copy the complete .vst3 folder; the sound banks are in its Contents\Resources folder. |
| **A file was removed or a Mac says it cannot be opened** | Windows: use Allow on device, as described below. Mac: use Open Anyway in System Settings, Privacy & Security. |
| **An Audio Unit is missing in Logic Pro** | Restart Logic Pro. In Logic Pro open Settings, Plug-in Manager, select Riser Studio and choose Reset & Rescan Selection. |

## 01 If Windows Security removes a file

Open **Windows Security**, then **Virus & threat protection**, then **Protection history**. Choose the Riser Studio item, open **Actions** and choose **Allow on device**. Restore alone puts the file back and Windows may flag it again. Do this only for a file you got from the official page. If the item is gone, download the file again. If another antivirus product removes it, allow the file in that product.

## 02 The editor needs the WebView2 Runtime

Windows 11 includes it; Windows 10 usually, but not always, has it. Look in **Settings**, **Apps**, **Installed apps** for Microsoft Edge WebView2 Runtime. If it is missing, get the Evergreen Standalone Installer for x64 from developer.microsoft.com/microsoft-edge/webview2 and run it. Edge alone is not enough.

## 03 Work, school and managed computers

A standard account cannot write to Program Files: Windows asks for an administrator password. A managed PC or Mac may hide Run anyway or Open Anyway, or block unsigned apps. Ask your administrator to allow the app, or use a personal computer.

## 04 Update Riser Studio

Close your DAW. Replace the complete app folder and the complete .vst3 folder. Windows asks for permission again. Your presets and settings are kept.

## 05 Remove Riser Studio

Close your DAW, then delete the app and the plug-in files you copied. Your presets and settings stay in %APPDATA%\Riser Studio (Windows) or ~/Library/Application Support/Riser Studio (Mac). Delete them only if you also want to remove your saved work.

## 06 Still stuck?

Write to contact@dyaudiomx.com with your Windows or macOS version, the name of the file you downloaded and a screenshot of any message.

NEXT
→ ACTIVATE YOUR INSTRUMENT 15

RISER STUDIO · 1.1.1

# Activate your *instrument*

Your personal Riser code unlocks playback and export. The signed licence supplies the displayed owner name.

---

## 01 Use your purchase email

Find the Riser Studio licence email sent to the address used at checkout. It contains your personal purchase code. The payment receipt is sent separately by Polar.

## 02 Paste and activate

Open **License**, paste the complete code into **Activation key** and choose **Activate**. Purchase-code activation requires an internet connection. Success displays **Licensed to** and the signed owner name.

## 03 Work offline

A valid stored activation continues to work during a temporary connection outage. Keep the code private. Your activation is separate from user presets and DAW state.

## 04 Move between computers

A named-owner licence covers two computers you use. Deactivate a seat before moving it to another machine. Contact support if a lost computer prevents you from releasing its seat.

## 05 Private beta keys

An existing signed Riser beta key remains a separate device-bound route until its expiry. If the developer asks for a device request, use **Copy device request** in the licence panel. An Impact Studio key cannot activate Riser.

---

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→ KEEP ACCESS DEPENDABLE 16

START HERE · OFFLINE USE & RENEWAL

# Keep access *dependable*

Activation belongs to this computer. Your musical work remains separate from the licensing record.

OPEN License, Activate Riser Studio, or Licensed to near About

| STATE | WHAT TO EXPECT |
|---|---|
| **Active key** | Playback and audio delivery are unlocked until any signed expiry. |
| **Offline computer** | A valid saved activation remains usable without a network connection. |
| **Expired or removed key** | Playback and audio export stop. Editing, saving and recalling projects remain available. |

## 01 Private beta and purchase codes

A signed private beta key can be activated and reopened offline. In a build with purchase-code activation configured, the short purchase code needs an initial connection to obtain its signed activation. **Check license** is available when that online service is configured. A network outage alone does not invalidate an unexpired key.

## 02 Renew before expiry

The activation panel shows the end date carried by your beta key. Request a renewed key before that date and paste it into the same panel. The date in the activation dialog figure is only an example; your signed key determines your own access period.

## 03 Deactivate deliberately

Choose **Deactivate this computer** to remove the activation. A locally issued beta key can be removed offline. A remotely managed purchase activation needs the service to release its seat; if that request cannot connect, the current key is kept. Explicit server revocation takes effect when the app next connects.

## 04 Move the project, not the key

Keys and licensing details are not embedded in presets or DAW sessions. A new computer needs its own activation or device-bound beta key. Copy its **Device request** and keep a named .riser checkpoint and any final audio while moving your work.

> CAREFUL
> Do not delete presets, recordings or exports to fix an activation problem. If a valid-looking key is rejected, confirm the product, computer and system date before requesting help.

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START HERE · FIVE MINUTES

# Your first *finished rise*

Start with a factory template, make one musical change, then save and export something you can use.

## 1 Choose a sound

Open **Riser**. Click the preset name at the top, choose a category and select a template. Use the arrows to move through the current selection. Wait for preparation to finish before judging a newly loaded source.

## 2 Set the destination in time

Click the length/tempo readout near the graph. Choose a duration, or enable bars and host tempo in a plug-in. An eight-second rise is a useful first experiment.

## 3 Shape the arrival

Open **Evolution**, set **Target** to **Master**, and drag an interior point. Keep the main trajectory ascending. The first point controls how audible the opening is; starting at zero can create an intentionally quiet lead-in.

## 4 Give each layer a job

**Solo** layers to hear their contribution. Keep a continuous body, a quieter air/detail layer, and optional sub or Pulse. Balance with the rack faders before adding more layers.

## 5 Save and deliver

Choose **Save preset** for the editable .riser design. Choose **Export** for example a stereo WAV at 48 kHz / 24-bit PCM. Listen to the file through its tail, then reopen the saved preset.

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→ EXPORT THE SOUND YOU DESIGNED 92

ORIENTATION · THE PORTAL

# The studio *at a glance*

The sound field is the overview. **Edit sound** is the detailed workbench. Both show the same native instrument state.

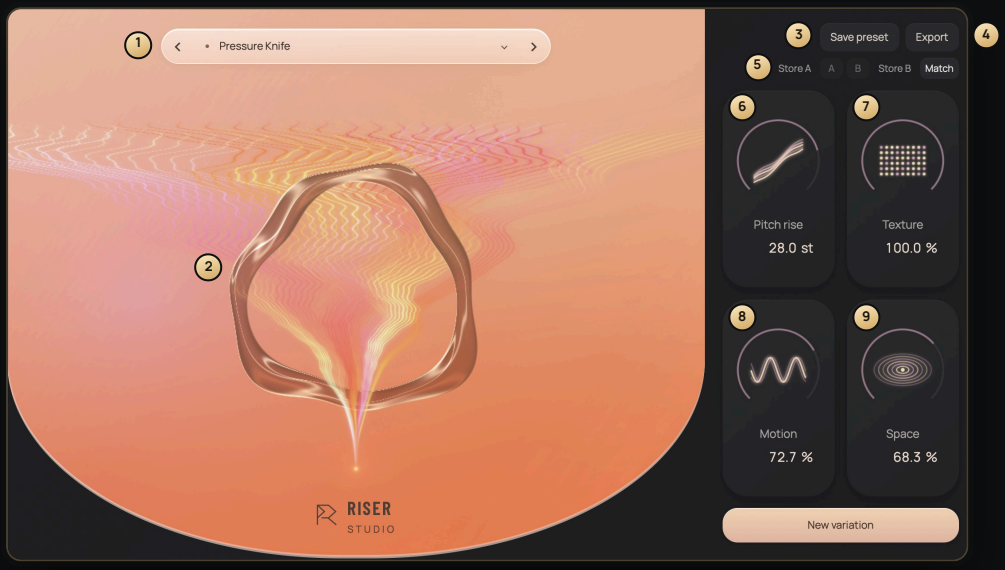



FIG A.1 Actual 0.90 native sound-field detail, with overview controls at right. Example settings.

1. **Preset selector.** Browses the preset library using the arrows either side of the current preset name, here Pressure Knife.
2. **Sound field.** An artistic perspective view informed by the native curves and playback, giving an overview of the sound.
3. **Save preset.** Preserves the editable design of the sound, so it can be reopened and changed later.
4. **Export.** Preserves the rendered audio rather than the editable design.
5. **Store A/B and Match.** Together with the A and B buttons, these support comparison between two versions of a sound.
6. **Pitch rise.** A broad overview control for the pitch rise, set here to 28.0 st; Shepard puts Tune in its place.
7. **Texture.** A broad overview control for texture, set here to 100.0 %, covering the whole sound rather than one layer.
8. **Motion.** A broad overview control for motion, set here to 72.7 %; individual layer controls remain in Edit sound.
9. **Space.** The fourth overview control, set here to 68.3 %, shaping the space of the sound as a whole.

## 01 Across the top

**Riser** and **Shepard Lab** choose the workspace. The translucent preset selector browses its library. **Save preset** and **Export** preserve different things: the editable design and rendered audio. **Store A/B** and **Match** support comparison.

## 02 Around the Portal

The selected-layer panel chooses a source and opens its editor. The four large overview controls are broad sound controls. In **Riser** they shape **Pitch rise**, **Texture**, **Motion** and **Space**. Shepard substitutes **Tune** for the first control. Individual layer controls remain available in **Edit sound**.

## 03 Below the sound field

The rack holds your layers. The graph switches directly between **Evolution**, **Waveform**, **Layer timing** and **Pulse**. The footer reports preparation/playback status, trigger mode and output level.

> GOOD TO KNOW
>
> The perspective sound field is an artistic view informed by native curves and playback. Use the **Waveform** tab and actual meters when you need signal information.

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ORIENTATION · VIEW & FEEDBACK

# Make room for *the work*

Resize the instrument and its graph while keeping ordinary controls at a useful size.




ILLUSTRATION Decorative: a build rising to its arrival.

## 01 Portal and graph height

Use **Resize portal** beneath the artwork to change the overview balance. **Resize graph** gives the drawn curve, waveform, timing or Pulse more room. These are view choices; they do not change the sound duration.

## 02 Sound field and Edit sound

The overview keeps the selected source, broad controls and rack together. **Edit sound** replaces that work area with a focused page. Use **Back to sound field** to return; the same native design remains loaded.

## 03 Compact pages and Fit view

Short editor pages end after their controls instead of stretching into unnecessary empty space. **Fit view** in the footer asks the native window to fit the current page. Tab switching keeps your chosen window size; larger pages retain the room they need. The host and screen can limit the fitted size, and manual resizing remains available.

## 04 Numeric precision

Click a value entry when a mouse gesture is too coarse. A rotary control also accepts keyboard arrows; Shift-drag provides finer adjustment. A chosen menu value and the displayed native value should agree after preset or automation updates. Unavailable controls ignore clicks, keys and drags.

## 05 Idle motion

**Idle on/off** controls decorative motion, not audio. In Shepard, **Idle On** shows an explicitly labelled stopped octave preview at the configured direction and speed; **Idle Off** freezes it. Playback uses native voice phase. Numeric octave readouts remain native and stopped when audio is stopped.

## 06 Read the footer

Ready, preparation progress and error feedback identify the state of the accepted operation. The footer also gives trigger selection and output level. **About** describes the native editor/telemetry boundary; it is not a platform certification.

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ORIENTATION · PAGE MAP

# Find the *right page*

Follow a source from its raw material to its final mix, then use the production pages to save and deliver it.

| PAGE | PURPOSE |
| --- | --- |
| **Sound field** | Overview controls, selected source, layer rack and the four graph views. |
| **Tone / Texture or Synth** | Layer engine, tuning and mix; grain/spectral controls, or dual-oscillator synthesis. |
| **Effects / Shared space** | Local colour and time effects; three shared room, hall and echo returns. |
| **Pulse / Stereo / Master** | Rhythmic amplitude, stereo image and whole-mix finishing. |
| **Performance / Motion** | Macros, groups, snapshots and MIDI; modulation sources and routes. |
| **Variation / Parameter index** | Constrained new versions; searchable native parameter names and IDs. |
| **Scenes / Delivery / Takes** | Stored A-D sound states, morphing, passage/transfer/export and batch takes. |
| **Library / Storage** | Categories, favourites, bulk tags and collections; content/cache locations and drive recovery. |
| **Settings** | A button next to About: the sound new instances open with, and a reset for the window size. |

## Return paths

Use **Back to sound field** to return to the overview. The **Editing layer** selector changes the focused layer, selects **All layers**, or opens **Master finishing**. Advanced reverb and room details expand in place rather than adding another window.

NEXT

→ WHAT HAPPENS TO THE SOUND 21

SEE ALSO

→ ONE LAYER, ALL LAYERS, OR THE MIX 29

→ EVERY CONTROL, BY FAMILY 103

ORIENTATION · SIGNAL FLOW

# What happens to *the sound*

A source becomes a layer; layers become a mix. Keeping these stages separate makes complex patches easier to understand.




ILLUSTRATION Explains behaviour; it is not a measured audio trace.

## 01 Source preparation

A palette, synth or imported recording provides the material. **Make riser** preparation finds useful body and builds a sustained source. The original recording is retained. Source choices and preparation require worker time; they are not ordinary live knob movements.

## 02 Layer shaping

Each layer has its own timing, pitch, Evolution, level, Pulse and local effects. A shared master control affects linked layers; an independent layer can depart from it. The rack fader balances that layer in the arrangement.

## 03 Space and finishing

Shared room, hall and echo combine sends from several layers. Stereo finishing and master dynamics affect the complete workspace. Ordinary exports retain effect tails; circular Shepard passages have a different boundary policy.

## 04 Live sound and prepared waveform

Live controls change the native DSP during playback, including switching an effect on or unmuting a layer while a sound is already playing. The waveform overview is prepared asynchronously and can lag behind a source or design edit. A preparation failure retains the last successful sound. A changing graph is not a recording of every host automation pass.

> GOOD TO KNOW
> If a control seems inaudible, first check the selected layer, mute/solo, amount, follow link, modulation depth, performance routing and active scene morph. These are different ownership mechanisms.

NEXT
→ SIX WAYS TO BUILD A LAYER 23

# *I*

# Start with *material*

A short hit, a sustained texture or a synthetic voice can become the body of a rise. Choose the source and its treatment before polishing the mix.


| | | |
|---|---|---|
| 01 | Choose an engine | 23 |
| 02 | Drop or import your audio | 24 |
| 03 | Turn a short hit into a riser | 25 |
| 04 | Sustain assistant | 27 |
| 05 | Layers and the layer editor | 28 |




SOURCES · RISER ENGINES

# Six ways to *build a layer*

I

Choose the engine for the role you want in the arrangement, not merely for the source file you started with.

OPEN Selected layer › Choose source, or Edit sound › Tone › Engine

| ENGINE | MUSICAL USE |
|---|---|
| **Spectral** | Smooth, smeared sustain and broad evolving body. A strong starting point for turning a hit into a continuous rise. |
| **Granular** | Overlapping fragments reveal texture and movement. Longer grains and denser overlap usually sound smoother; sparse settings can deliberately flutter. |
| **Air** | Noise-like lift and high-frequency energy. Useful as a quiet layer above a fuller body. |
| **Sub** | A controlled low foundation with Frequency and **Harmonics**. Keep the octave movement modest and check the mix in mono. |
| **Sampler** | Preserves more of the recording character. Use **Raw sampler** when you want the existing performance or transient; it is distinct from **Make riser** preparation. |
| **Synth** | Two oscillators, up to seven voices, filter shaping and animated texture. Build tonal pressure without an imported file. |

## Source and engine are separate

Changing a palette chooses material; changing the engine chooses how that material is played. **Synth** and **Sub** generate their own signal. Shepard has a separate **Tone / Granular / Spectral** source-mode system, explained in its chapter.

NEXT
→ DROP AUDIO WHERE IT BELONGS 24

SEE ALSO
→ YOUR RECORDING, ENDLESS MOTION 63
→ SMOOTH BODY OR MOVING FRAGMENTS 31

SOURCES · DRAG AND DROP

# Drop audio *where it belongs*

I

Drag a single recording into the instrument for the fastest import workflow.

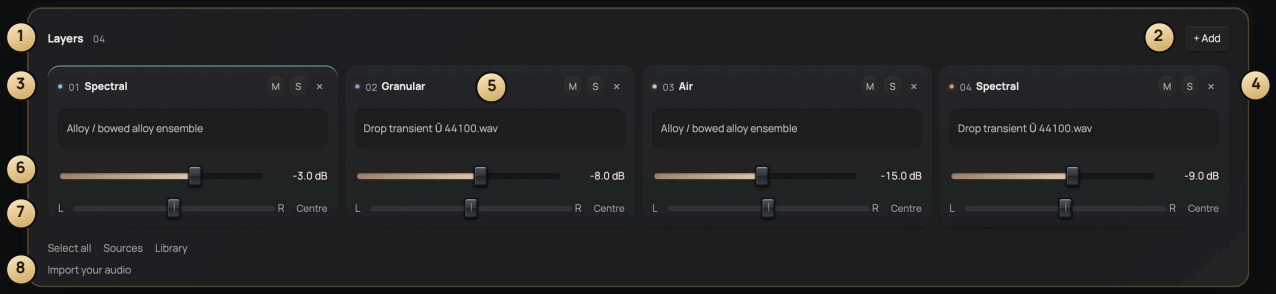



FIG 1.1 Actual AU editor after native OS file drops. Layer sources and the added slot are visible; this is not a browser-only mock.

1. **Layers.** Shows how many layers are loaded, four here, out of a rack that holds eight.
2. **+ Add.** Adds a layer to the rack without a drop; the rack stops at eight layers.
3. **Layer card.** Each layer is its own card and a drop target; drop a recording onto it to replace that layer source.
4. **Remove layer.** Takes a layer out of the rack, which frees a slot when all eight are in use.
5. **Layer source.** Names the sound behind the layer, and after a drop it shows the dropped file name; level, pan, timing and effects stay.
6. **Layer level.** Sets how loud the layer is, in decibels; a replacement recording keeps the level you set.
7. **Layer pan.** Positions the layer between L and R, currently Centre; a replacement recording keeps the pan too.
8. **Import your audio.** Brings in a recording without dragging; it accepts WAV, AIFF and FLAC files.

## 1 Replace an existing layer

Drop onto its card. The hover label identifies the target. The recording replaces that layer source while retaining the layer level, pan, timing and effects.

## 2 Add another layer

Drop into empty instrument space. The first unused slot receives a prepared source. A full eight-layer rack requires replacing or removing a layer first.

## 3 Let preparation finish

WAV, AIFF and FLAC are accepted, one file per gesture, up to 30 seconds and 128 MB. Preparation happens locally. Failed or cancelled imports keep the current sound and do not leave an empty layer.

GOOD TO KNOW

The same drop actions are available in Riser and Shepard. Save a preset or DAW session to retain the imported audio. **Undo** restores the previous layer state.

NEXT
→ FROM A SNARE TO AN ASCENT 25

SEE ALSO
→ CHOOSE AND SHARE A SOURCE 26

RECIPE · TRANSIENT TO SUSTAIN

# From a snare to *an ascent*

I

The key is to sustain the body of the recording, then design the rising trajectory. Repeating its attack is usually the wrong starting point.

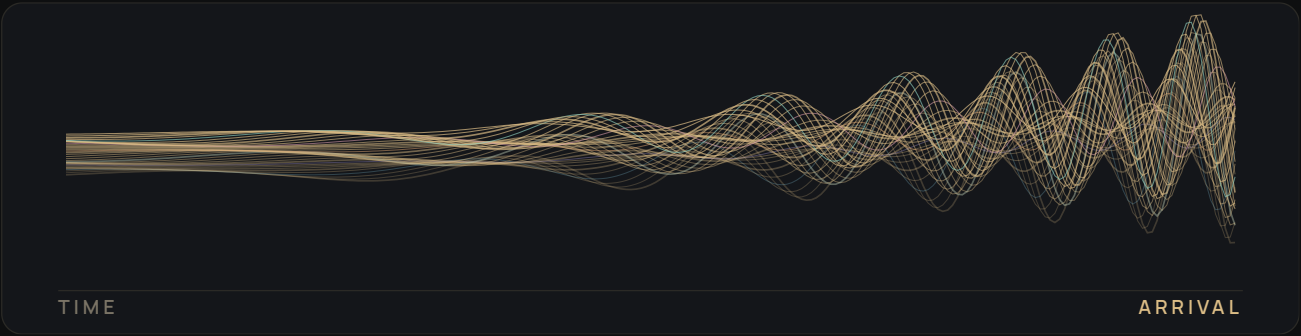



ILLUSTRATION Explains behaviour; it is not a measured audio trace.

1 **Prepare the body**

Drop a short snare, scrape or resonant hit onto a layer, or choose **Import · Make riser**. Start with **Spectral** and a high **Atmosphere** amount. The source preparation removes the original hit-envelope pattern from the sustained material.

2 **Give the rise a direction**

Set an eight-second duration and a mostly ascending Master **Evolution** curve. Add a moderate positive **Pitch rise**. Keep the first point above zero if you want sound immediately.

3 **Build depth, then movement**

Add a restrained hall and balance its return. Bring in a separate **Air** layer later in the take. Add **Pulse** or stereo movement only to a detail layer so the continuous body still carries the ascent.

4 **Judge the actual result**

**Solo** the transformed layer and listen for recurring quiet gaps, harsh high-frequency buildup or repetitive attacks. Adjust the selected region or source treatment before increasing effects. **Save** and export to check the whole tail.

> GOOD TO KNOW
> These are starting directions, not a promise that every snare produces the same musical result. A noisy hit becomes a texture; a resonant hit can retain a clearer pitch impression.

NEXT
→ CHOOSE AND SHARE A SOURCE 26

SOURCES · PALETTE

# Choose and *share a source*

I

The source palette keeps shared material and independent layer assignments distinct.

OPEN Click a layer source name, or Choose source

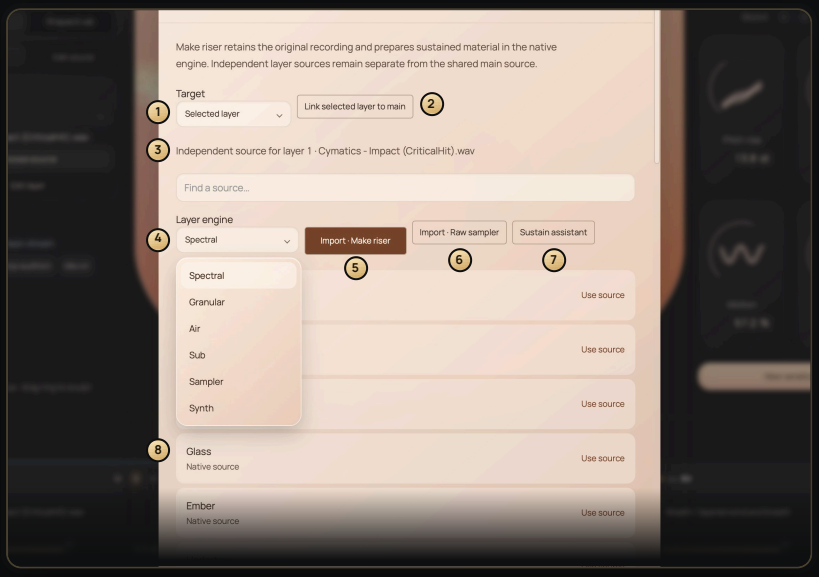



FIG 1.2 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Target.** Offers Selected layer or Shared main source, and currently reads Selected layer, so the source shown below belongs to layer 1.
2. **Link selected layer to main.** Makes the selected layer use the shared main material, rather than an independent source of its own.
3. **Independent source.** Names the source assigned to this layer alone, here a Cymatics impact file for layer 1, kept separate from the shared main source.
4. **Layer engine.** Picks the engine for the selected layer; the open list shows Spectral, Granular, Air, Sub, Sampler and Synth.
5. **Import · Make riser.** Prepares sustained material in the native engine while retaining the original recording.
6. **Import · Raw sampler.** Keeps a more direct source workflow than Make riser, which prepares sustained material.
7. **Sustain assistant.** Opens region and treatment controls for material already in the layer.
8. **Palette sources.** Each palette is listed as a native source with its own Use source button.

## 01 Selected layer or shared main source

In Riser, the **Target** menu offers **Selected layer** and **Shared main source**. Linking the selected layer to main makes it use that shared material. Independent source assignments remain separate. Shepard assigns sources to the selected scene layer.

## 02 Three useful import paths

**Import · Make riser** prepares sustained material. **Import · Raw sampler** keeps a more direct source workflow. **Sustain assistant** opens region and treatment controls for material already in the layer.

## 03 Palettes and protected textures

The twelve procedural palettes are **Alloy**, **Breath**, **Circuit**, **Glass**, **Ember**, **Undertow**, **Helix**, **Reactor**, **Choir**, **Bowed**, **Fracture** and **Prism**. Designed textures add processed material with their own descriptive names. Factory protected sources are not a dry-sample browser or a route to the original recordings.

NEXT
→ PREPARE A STABLE SUSTAIN 27

SOURCES · SUSTAIN ASSISTANT

# Prepare a *stable sustain*

I

Use a useful region of the recording, then choose the treatment that matches its character.

OPEN Choose source › Sustain assistant

| CONTROL | WHAT IT DOES |
|---|---|
| **Find region** | Analyses the original and suggests steady audible material. Inspect and edit the selection; a suggestion is not a musical verdict. |
| **Start / End** | Normalized positions from 0 to 1. Drag the region handles or type exact values. Exclude unrelated late events, silence and unwanted attacks. |
| **Loop** | A level-controlled overlapping loop. Best when the selected material already has a reasonably steady body. |
| **Spectral reservoir** | Builds a sustained body from the analysed spectrum and removes repeated attack/decay history. Especially useful for short hits and uneven recordings. |
| **Level matching / Loop crossfade** | Level correction is bounded; it cannot create missing material. **Loop crossfade** is the overlap in milliseconds for the loop method. |
| **Audition original / prepared** | After **Find region** prepares a draft, compare **Audition original region** and **Audition prepared sustain**. **Stop audition** ends the preview. These checks do not commit the draft to the layer. |
| **Reverse source / Apply / Revert** | **Reverse** is a draft choice. **Apply prepared sustain** commits the treatment. **Revert to original** restores the untampered source treatment; **Cancel** stops preparation. |

## Work non-destructively

Your original recording remains embedded. Draft changes do not become the new playing source until preparation succeeds. If you change another source while a job is running, an obsolete job cannot silently replace your newer choice.

GOOD TO KNOW

Protected factory textures disable both source auditions; use processed layer **Solo**. The Choose source › Sustain assistant dialog, completed region analysis and enabled audition/Apply controls were verified for imported audio in the offline macOS 13.7.4 guest. Physical M1, original macOS 13.0 and real DAW acceptance remain separate.

NEXT
→ CHOOSE WHAT THE NEXT LAYER DOES 28

RISER STUDIO · 1.1.1

# Build a *purposeful stack*

I

Every layer has its own source, level, pan, timing and effects.

OPEN Riser › Layers › + Add layer

## 01 Riser layer choices

Choose **+ Add layer**, then Synth, **Air**, Your sample, Raw sampler, Spectral, Granular or Sub. Synth starts from oscillators. **Air** adds lift. Sub adds low weight. Spectral and Granular begin with the current source.

## 02 Your sample or raw sampler

**Your sample** prepares a recording into a sustained riser layer. **Raw sampler** keeps direct playback of the original recording. Both open the native audio-file picker and retain your original source.

## 03 Build a purposeful stack

Give the main body a clear role before adding detail. Keep low weight centered, place supporting layers gently left and right, and use different entrance times so the entire stack does not arrive at once.

## 04 Hear one layer

Use **Solo** while learning the source or an effect, then judge the full mix again. Mute temporarily removes a layer from playback; remove deletes it from the current rack, with normal Undo available.

## 05 Eight slots

When the rack is full, replace a selected source or remove a layer before adding another. Failed or cancelled sample preparation does not occupy a new slot.

NEXT
→ ONE LAYER, ALL LAYERS, OR THE MIX 29

LAYERS · SELECTION & OWNERSHIP

# One layer, all layers, *or the mix*

I

Editing scope is a musical decision. Choose it before changing a control.

| SCOPE | MEANING |
| --- | --- |
| One layer | Select its card or its entry in **Editing layer**. Values belong to the focused native layer. |
| A selection | Command-click cards on Mac; Alt-click on Windows. Selected-layer edits apply to the chosen layers. Readouts show the focused layer, not a computed average. |
| All layers | Use **Select all** in the rack or **All layers** in **Editing layer**. A shared edit sets that control across the selection; source-specific choices apply only where supported. |
| Master finishing | Choose **Master finishing** in **Editing layer** or open **Master**. These controls process the complete workspace mix; they are not eight duplicated effects. |
| Named groups | Performance groups create saved musical roles and linked gain/mute/solo control. They are different from a temporary rack selection. |
| Curve target | The graph **Target** chooses the curve or envelope owner. In the Pulse graph, **Master** applies Pulse edits across the active layers. |

## When a sound owns the controls

An enabled scene morph owns its interpolated sound. Recall an A-D anchor before changing its underlying sources and sound controls. Performance macro routing can also influence a control; use direct editing, route settings and Follow links deliberately.

NEXT

→ TUNE THE BODY AND THE CLIMB 30

SEE ALSO

→ PERFORM MUSICAL ROLES TOGETHER 73

→ STORE COMPLETE SOUND STATES 67

LAYER EDITOR · TONE

# Tune the body *and the climb*

I

Root tuning places the sound in the cue. **Pitch rise** controls how far it travels.

OPEN Edit sound › Tone › Pitch & ascent

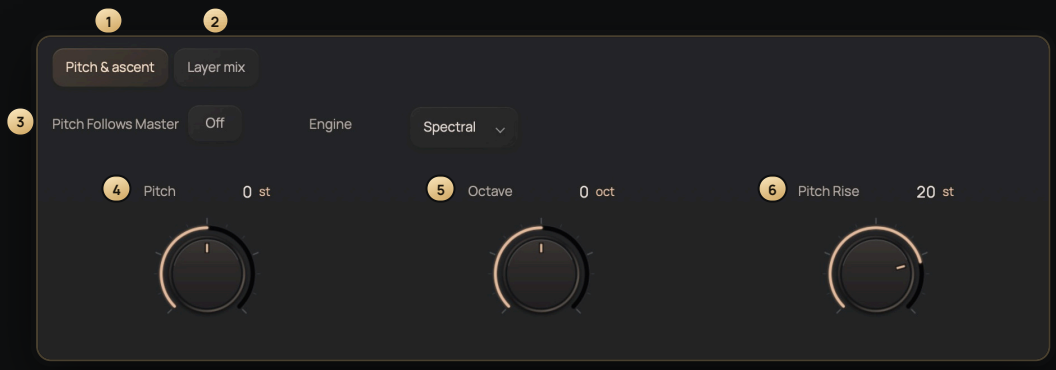



FIG 1.3 Actual compact Tone controls in the native editor. Example settings.

1. **Pitch & ascent.** Selected page holding Pitch, Octave, Pitch Rise and the follow-master switch for tuning the body and the climb.
2. **Layer mix.** Switches to On, Mute, Solo, level and pan, which control the balance of the layer.
3. **Pitch Follows Master.** When on, the layer shares the master rise; left off, as here, it can use its own climb, even a negative one.
4. **Pitch.** Transposes the layer by semitones, independently of the drawn rise.
5. **Octave.** Adds coarse transposition steps on top of Pitch, again independent of the drawn rise.
6. **Pitch Rise.** Sets how far the sound travels, here a climb of 20 semitones.

| ROLE | STARTING DIRECTION |
|---|---|
| A sustained body | Moderate positive climb with an ascending **Evolution** curve. |
| A stable low anchor | Small climb or neutral rise; restrained harmonics and centred bass. |
| A moving accent | More independent pitch or modulation, mixed below the continuous body. |

## 01 Pitch and Octave

**Pitch** transposes the layer by semitones; **Octave** adds coarse steps. Both are independent of the drawn rise, so low and bright layers can keep different root registers.

## 02 Pitch rise and Follow master

The master rise is a common trajectory for linked layers. An independent layer can use a different climb, including a negative movement. Keep most of the audible body rising if the patch must read clearly as a riser.

## 03 Layer mix

On, **Mute**, **Solo**, level and pan control the layer balance. Off disables it; **Mute** suppresses its contribution and **Solo** isolates it. The rack offers the same quick balance controls.

## 04 Sub source

**Sub Frequency** places the fundamental; **Sub Harmonics** adds upper content. Keep the final pitch low enough to preserve the intended bass foundation.

NEXT
→ SMOOTH BODY OR MOVING FRAGMENTS 31

SEE ALSO
→ MAKE A CURVE AUDIBLE 37
→ A VOICED SYNTHETIC FOUNDATION 32

LAYER EDITOR · TEXTURE

# Smooth body or *moving fragments*

I

Texture controls decide how much of the source becomes atmosphere and how much remains articulated.

OPEN Edit sound › Texture

| CONTROL | HOW TO USE IT |
|---|---|
| **Grain size** | The fragment length, 10–300 ms. Larger grains can feel smoother; smaller ones can emphasize detail or a buzzy texture. |
| **Density** | Controls grain activity/overlap. Sparse settings reveal fragments. Dense layers can support a continuous body but may mask other detail. |
| **Atmosphere** | Balances the spectral contribution. High values are useful for sustained pads and the body of transformed short hits. |
| **Brightness** | Shapes high-frequency energy. A restrained opening can make the later rise feel stronger without making the final sound painfully sharp. |
| **Movement** | Adds source movement. Use a little for life; use an independent detail layer for more extreme motion. |
| **Follow master links** | Linked layers follow the workspace controls. Editing an independent amount lets that layer keep its own settings. |

## Avoid the glitch trap

If the whole patch stutters or wobbles, first simplify the continuous body: use a stable region, spectral preparation, larger grains, dense overlap and restrained motion. Put aggressive granular behaviour on one quieter accent layer.

> GOOD TO KNOW
> Source preparation and texture are different stages. No amount of grain density will make a badly chosen silent source region into a stable sustain.

NEXT
→ A VOICED SYNTHETIC FOUNDATION 32

LAYER EDITOR · SYNTH · OSCILLATORS

# A voiced *synthetic foundation*

I

The dual-oscillator engine can add stable pitch, broad ensemble weight or unusual harmonic colour.

OPEN Use a Synth layer › Edit sound › Synth › Oscillators




FIG 1.4 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Oscillator weave.** Draws oscillator A, oscillator B and the blended mix, with the balance and tuning shown beneath.
2. **Patch.** Loads one of the nine native patch starting points, which you can then refine with the controls below.
3. **Oscillator A.** Picks the first waveform from Sine, Triangle, Saw, Pulse, Bowed, Reed and Prism.
4. **Oscillator B.** Picks the second waveform from the same seven shapes, with its level and pitch set by Osc B Mix and Osc B Tune.
5. **Voices.** Sets how many ensemble voices play, from one to seven.
6. **Root.** Sets the oscillator frequency, shown here as 55 Hz.
7. **Osc B Mix.** Balances the second oscillator against the first, and the display shows the resulting split between A and B.
8. **Osc B Tune.** Offsets the second oscillator in semitones, shown here as 7 st.
9. **Detune.** Separates the ensemble voices in cents, here 12 ct; too much, together with noise and reverb, can blur the rise.
10. **Unison Spread.** Distributes the ensemble voices across the stereo field.

## 01 Choose the material

Oscillator A and B offer **Sine**, **Triangle**, **Saw**, **Pulse**, **Bowed**, **Reed** and **Prism**. Choose one of the nine native patch starting points, then refine it. The **Voices** menu ranges from one to seven.

## 02 Root, blend and tuning

**Root** sets the oscillator frequency. **Osc B Mix** balances the second oscillator; **Osc B Tune** offsets it in semitones. **Detune** separates ensemble voices in cents. **Unison Spread** distributes those voices across stereo.

## 03 Keep a clear centre

A single sine-like or triangle-like voice is useful under a dense source stack. Wider saw or bowed voices can carry a cinematic body, but too much detune, noise and reverb together can blur the rise.

NEXT
→ COLOUR THAT OPENS WITH THE RISE 33

SEE ALSO
→ MOVEMENT INSIDE THE VOICE 34

LAYER EDITOR · SYNTH · FILTER & TEXTURE

# Colour that *opens with the rise*

I

Harmonics, noise and filtering create a second trajectory beyond pitch.

OPEN Synth › Filter & texture

| CONTROL | PURPOSE |
|---|---|
| **Wave shape** | Changes the applicable oscillator shape, including pulse width. It is a tonal control, not the Pulse amplitude effect. |
| **FM colour** | Introduces frequency-modulation colour. Raise it carefully when you need metallic edge or tension. |
| **Noise** | Adds a noisy component to the oscillator signal. Use it to bridge a tonal body into an **Air** layer. |
| **Follow Evolution** | Lets the source voicing develop with the drawn ascent rather than staying spectrally static. |
| **Filter ceiling** | Sets the upper filter frequency. A low ceiling can keep a bright waveform restrained. |
| **Resonance / Filter sweep** | **Resonance** emphasizes the filter region. **Sweep** determines its movement in octaves. Strong resonance requires careful level and high-register listening. |

## Build a controlled contrast

Start dark and coherent; let the filter and upper content open as the arrival approaches. If the ending gets shrill, reduce the ceiling or resonance before reducing the whole patch level.

GOOD TO KNOW

Oscillator wave selection is an authored source choice. Prepare it before recording automation; automate the exposed continuous sound controls for performance.

NEXT
→ MOVEMENT INSIDE THE VOICE 34

LAYER EDITOR · SYNTH · MOVEMENT

# Movement *inside the voice*

I

Use small changes inside a coherent ascent. Large modulation on every layer can obscure the direction.

OPEN Synth › Movement

| CONTROL | PURPOSE |
|---|---|
| **Voice drift** | Slow pitch differences in cents. A little can soften a static ensemble without making it sound out of tune. |
| **Texture speed** | The rate of internal source movement. Lower values give broad changes; higher values become more animated. |
| **Vibrato / Vibrato speed** | Depth in cents and rate in Hz. Keep the continuous body subtle; exaggerate an accent layer when desired. |
| **Pulse motion** | Moves the oscillator pulse/shape behaviour. This is distinct from amplitude gating in the **Pulse** page. |
| **Motion build** | Controls how strongly internal motion develops across the rise. |
| **Source shaping** | The remaining brightness and source movement controls have their own group, allowing the synthetic material to join the same layered workflow. |

## One useful combination

Keep the main body wide but steady. Give a second voice a quieter offset octave and small drift. Animate a third detail source with **Pulse** or pan. This produces complexity without requiring every oscillator to wobble.

NEXT
→ DRAW THE ASCENT 36

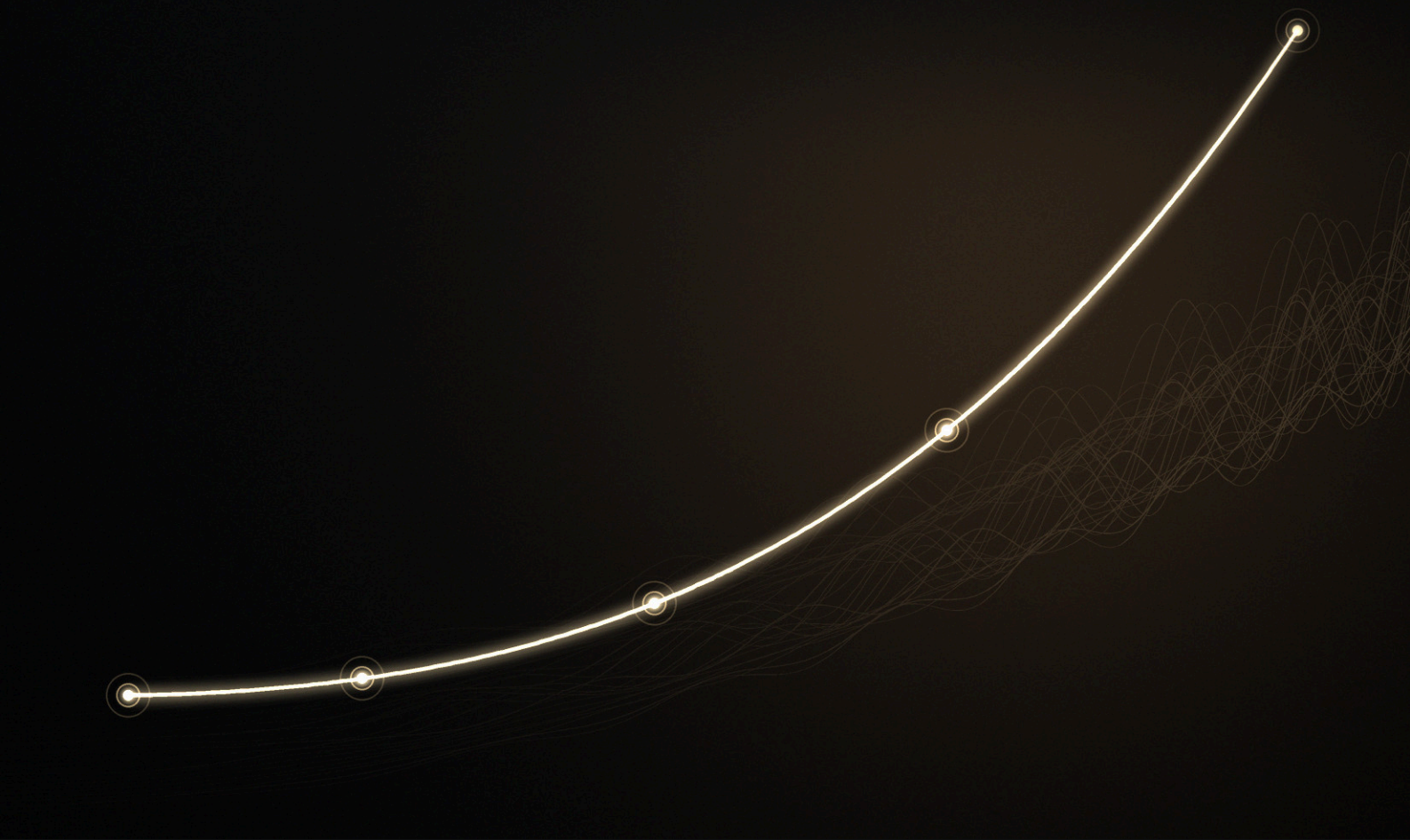
SEE ALSO
→ ROUTE MOTION DELIBERATELY 46
→ MAKE THE RHYTHM ACCELERATE 43

# II

# Draw *the movement*

Shape how the rise unfolds, when layers arrive, and how rhythm accelerates. Curves, clip volume and Pulse are related, but they do different jobs.


| | | |
|---|---|---|
| 01 | Evolution | 36 |
| 02 | Waveform volume and fades | 40 |
| 03 | Layer timing | 41 |
| 04 | Pulse rates and patterns | 43 |
| 05 | Motion routes and sources | 46 |

GRAPH · EVOLUTION

# Draw the *ascent*

II

Evolution is a normalized shape over the Riser duration, or over a repeating Shepard modulation cycle.

OPEN Sound field › Evolution




FIG 2.1 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Depth readout.** Reports the current depth and that native curve modulation is enabled, with an Edit depth link beside it.
2. **Level axis.** The 0 to 100 scale on which each point is measured; type a Level for precision.
3. **End point.** Last point of the curve; it remains at the boundary, unlike interior points, which can be removed.
4. **Evolution curve.** Shows the effective inherited curve when a layer follows another owner; an inherited lane should still show a useful shape.
5. **Interior point.** Drag it to reshape the curve, or type Time and Level for precision; interior points can be removed.
6. **Start point.** First point of the curve, held at the left boundary; a higher opening point brings the sound in earlier.
7. **Time axis.** Marks time across the Riser duration, here 0.0 to 11.7 s, with a Time value for each point.

## 01 Choose a target and lane

**Target** selects **Master** or a layer. Control selects Evolution or an effect/modulation lane. The displayed curve is the effective inherited curve when a layer follows another owner; an inherited lane should still show a useful shape.

## 02 Add and move points

Double-click between points or use **Add point**. Drag a point, or type Time and Level for precision. The first and last points remain at the boundaries; interior points can be removed. The Portal editor supports up to 32 editable curve points.

## 03 Hear the musical direction

A higher opening point brings the sound in earlier. A late surge reserves energy for the arrival. Lower sections are valid design choices, but a dominant up-and-down body may stop sounding like a continuous rise.

> GOOD TO KNOW
>
> Curve playback fill and cursor show time. The perspective Portal waveform follows the Evolution shape, but its colour and perspective are presentation, not a spectral analyser.

NEXT
→ MAKE A CURVE AUDIBLE 37

SEE ALSO
→ SHAPE EACH SEGMENT 38

GRAPH · OWNERSHIP & DEPTH

# Make a curve *audible*

II

A saved line is only one part of modulation. The relevant sound amount and its depth must also allow the line to affect the signal.

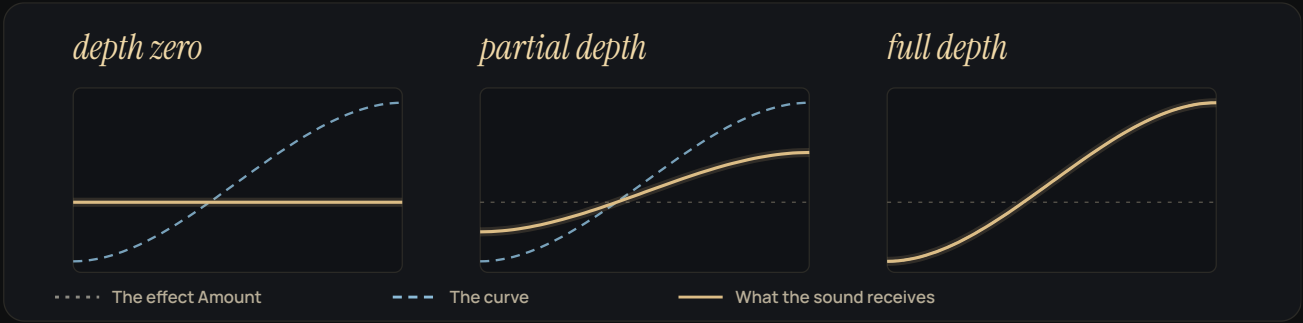



ILLUSTRATION Explains behaviour; it is not a measured audio trace.

## 01 Master to layer to effect

A layer Evolution can follow Master. An effect lane can follow the layer or become **Independent**. The follow button identifies the current relationship. Turning a link off gives that lane its own editable shape.

## 02 Amount is not depth

An effect **Amount** supplies the base treatment. **Follow curve** or **Curve depth** controls how its chosen line shapes that treatment. At zero depth the points can be stored without changing the sound. At zero effect amount some effects remain effectively absent.

## 03 Use the effect shortcut

From **Effects**, choose **Edit effect curve**. It returns to the overview with that layer and effect lane selected. The graph status reports the actual modulation depth and offers **Enable depth** or **Edit depth**.

## 04 Keep other owners in mind

Performance routes, Motion routes and scene morph can also affect the result. If a manual change seems to be overridden, check those owners before redrawing the curve. An active scene morph requires recalling an anchor before ordinary editing.

> GOOD TO KNOW
> For a quick proof, solo one layer, raise an obvious effect amount, enable its curve depth, and compare a low flat line with a high flat line. Then draw the musical shape you need.

NEXT
→ SHAPE EACH SEGMENT 38

GRAPH · SEGMENTS

# Shape *each segment*

II

The same points can feel very different depending on the path between them.




ILLUSTRATION Explains behaviour; it is not a measured audio trace.

| SHAPE | BEHAVIOUR |
|---|---|
| **Linear** | A direct straight transition between values. |
| **Smooth** | An eased connection with a softer departure and arrival. |
| **Bend** | An earlier or later build. **Tension** changes the bias of the segment. |
| **Hold** | Retains one value before stepping to the next. Use carefully on sensitive parameters. |

## 01 Selection and precision

The selected point controls the following segment. At the last point the shape buttons and **Tension** are unavailable, so select the previous point to edit the final segment. Time and Level change point placement; **Tension** changes **Bend** shape, not duration.

## 02 Copy, Paste and Undo

Copy captures the current lane points for use in another lane or workspace during the editor session. Paste applies those points to the selected destination. **Undo** restores the previous authored change. Save a named preset to preserve the complete design.

> GOOD TO KNOW
> **Curve tools** also opens the native pattern library and .risercurve save/load workflow. Curve patterns remain separate from Pulse step patterns.

NEXT
→ KEEP A USEFUL CURVE 39

GRAPH · CURVE PATTERNS

# Keep a *useful curve*

II

Reuse a shape across designs while preserving its points, segment shapes and tension.

OPEN Sound field › Evolution › Curve tools

| BUILT-IN SHAPE | MUSICAL USE |
|---|---|
| **Linear rise** | A direct ascent from zero to full level. |
| **Smooth ascent** | An eased continuous build. |
| **Slow ignition / Late bloom** | Hold energy back, then intensify toward the arrival. |
| **Stepped climb** | Distinct rising stages with a smoother final approach. |
| **Breathing detail** | An up-and-down accent shape. Best on a secondary layer when the main body should keep rising. |

## 01 Choose the destination first

Select the intended workspace, graph **Target** and Control lane before opening **Curve tools**. Choosing a built-in pattern applies it to that destination as an undoable curve change.

## 02 Save or load a pattern

**Save .risercurve** writes the selected lane through the native file dialog. **Load .risercurve** stages a saved pattern without changing the sound. Choose **Apply loaded pattern** when ready. Points, segment shapes and Bend tension travel with the pattern.

## 03 Protect a newer edit

Changing the target or editing its curve while the dialog is open invalidates that earlier destination. Reopen **Curve tools** before applying. A pattern stores a reusable curve; **Save preset** stores the complete sound and source arrangement.

> GOOD TO KNOW
> A file pattern may contain 2–1,024 ordered points within the native 256 KB limit. The normal point-adding interface is intended for concise hand-drawn curves. Imported patterns do not turn effect depth on automatically.

NEXT
→ SHAPE LEVEL ON THE WAVEFORM 40

SEE ALSO
→ MAKE A CURVE AUDIBLE 37
→ SHAPE EACH SEGMENT 38

GRAPH · WAVEFORM

# Shape level *on the waveform*

II

Use the **Waveform** tab for clip-volume envelopes and fades without redrawing the main Evolution trajectory.

OPEN Sound field › Waveform

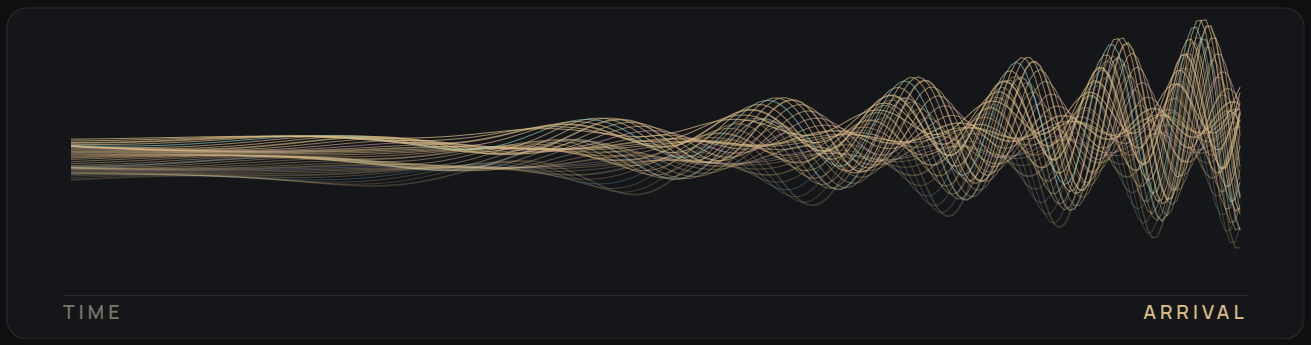



ILLUSTRATION Explains behaviour; it is not a measured audio trace.

## 01 Select the envelope owner

**Target Master** adjusts the complete mix envelope. A layer target adjusts that layer. The display identifies a native mix waveform, native layer waveform or live output scope so you can tell what you are looking at.

## 02 Add volume points

Choose Edit volume points, use **Add point**, then drag the handle to shape level. Up to 64 volume points are supported. Reset returns the envelope to a flat full-level line with no entry/exit fades. A volume envelope is separate from an effect modulation curve.

## 03 Fade in and Fade out

Type their durations in seconds. Choose an In and Out shape independently: **Linear**, **Slow**, **Fast**, **Smooth** or **Equal power**. Line chooses the interpolation character for the clip-volume points.

## 04 Prepared overview, live performance

A prepared Riser waveform summarizes the authored render. Live automation can change what is heard without turning that overview into a complete recording. **Export** or bounce the performance when you need a final waveform you can inspect.

> GOOD TO KNOW
>
> Use clip gain for a deliberate fade, Evolution for the musical build, and layer exit timing when the source should release into its reverb tail. Those operations are not interchangeable.

NEXT
→ LET LAYERS ARRIVE IN STAGES 41

SEE ALSO
→ EXPORT THE SOUND YOU DESIGNED 92

GRAPH · LAYER TIMING

# Let layers *arrive in stages*

II

A staggered arrangement creates complexity without crowding the opening.

OPEN Sound field › Layer timing

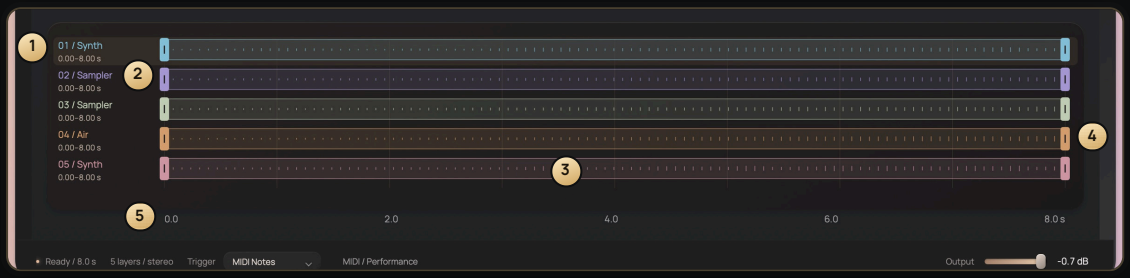



FIG 2.2 Actual native layer-timing editor. The layers here are untrimmed; drag an edge to stagger them. Example values.

1. **Layer row.** Select a row, then type Start or End for exact placement; the time under the name shows where that layer sits.
2. **Start edge.** Drag this edge to trim where the layer begins, or type an exact Start for the selected row.
3. **Coloured region.** Drag it to move the layer in time; this region sets when the layer exists, separate from any Pulse region.
4. **End edge.** Drag this edge to trim where the layer ends, or type an exact End for the selected row.
5. **Time axis.** Reads in seconds from 0.0 to 8.0 s, so you can compare where each layer starts and ends within the take.

## 01 Move or trim a layer

Drag its coloured region to move it in time, or drag its start/end edge to trim. Select a row and type **Start or End** for exact placement. The focused row shows its source region and entry/exit values.

## 02 To end and Endless

In Riser, **To end** follows the finite take. In Shepard, **Endless** removes the finite source endpoint. A Shepard entry happens once after triggering; it does not restart at every modulation-cycle boundary.

## 03 Let effects ring

**Fade out** and its **Curve** shape reduce source emission before the effects. Delay and reverb can continue naturally after the source ends. This is useful for a detail layer that disappears before the final arrival.

## 04 Keep the whole rise coherent

A body layer can start immediately; Air can enter at one-third, rhythm halfway and sub reinforcement near the end. These are arrangement choices, not a required recipe.

> CAREFUL
>
> Do not confuse source timing with a Pulse region. **Layer timing** determines when the layer exists; Pulse regions determine where rhythmic depth is applied.

NEXT
→ CHOOSE THE LENGTH DIRECTLY 42

SEE ALSO
→ PLACE RHYTHM ONLY WHERE NEEDED 44

RISER STUDIO · 1.1.1

# Choose the *length directly*

II

Riser supports 1–120 seconds. Set a quick value beside the graph or open Timing for musical bars.

OPEN Riser › duration slider / seconds field / Timing

## 01 Drag the duration slider

The wide slider in the Length row above the graph changes the total Riser length. Drag to choose a duration; release to prepare the new sound. It does not start a new render for every pixel.

## 02 Type an exact duration

Click the seconds field to select its value, type a length such as 45.5 or 120, then press Enter or click away. Escape restores the current value. The waveform and layer timing update from the native engine.

## 03 Use musical bars

Open **Timing** in the timeline toolbar. The dialog includes a larger slider, direct seconds entry, bars, tempo and time signature. Seconds controls are disabled while Length in bars is enabled; turn it off to return to manual seconds.

## 04 Choose the ending

Enable **Hard cutoff at climax** in the Length row or Timing dialog to stop the mix, stems, reverb and delay at the selected duration. A 1 ms de-click ramp reaches silence at the boundary. Leave cutoff off for natural tails. Version 1.1.1 removes obsolete factory exit fades when older factory sessions are restored, while retaining other controls. Fades newly drawn and saved in 1.1.1 are respected.

## 05 Keep older sessions consistent

Existing DAW automation retains its original 1–30 second mapping. Version 1.1 adds duration and layer-timing extension parameters. Presets containing long timing require 1.1; keep the previous preset when working with an older installation.

## 06 Allow preparation time

Long, layered sounds use more memory and render time. Watch actual progress and preserve the previous successful take if a job fails. Shepard's modulation cycle remains 1–30 seconds; it is separate from its continuous playback and capture length.

NEXT
→ MAKE THE RHYTHM ACCELERATE 43

GRAPH & EDITOR · PULSE

# Make the rhythm *accelerate*

II

Pulse shapes amplitude. Use it on one detail layer, several selected layers, or every active layer.

OPEN Sound field › Pulse, or Edit sound › Pulse




FIG 2.3 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Depth.** Sets how strongly the pulse shapes amplitude, shown here at 75 percent; keep it high while testing so the pulse is obvious.
2. **Tempo sync.** Offers musical divisions for the rate, including dotted and triplet values.
3. **From.** Sets the starting rate of the sweep; choose 1/4 here for acceleration. With a fixed rate, this value is held.
4. **To.** Sets the ending rate of the sweep; choose 1/32 here for acceleration.
5. **Sweep on.** Switches on automatically when From and To differ, setting up a usable rate ramp if one is needed.
6. **Reset sweep.** Restores a simple rising rate trajectory for the sweep.
7. **Rate curve.** Determines when the speed moves between the two endpoints; the glide is continuous, not a set of quantized divisions.
8. **Shape.** Choose Gate while testing so the pulse is obvious; this example is set to Sine.
9. **Pulse envelope preview.** Shows how the pulse shapes amplitude, here accelerating as the pulses grow denser from left to right.

## 01 Start with a clear test

**Solo** one layer. Use **Gate**, high Depth, no stereo offset, and little delay/reverb. This makes the pulse obvious before you add the continuous layers and tails back.

## 02 From and To

**Tempo sync** offers musical divisions, including dotted and triplet values. Set **From** to 1/4 and **To** to 1/32 for acceleration. Different endpoints enable **Sweep on** automatically and initialize a usable rate ramp when necessary. **Fixed rate** holds the **From** value.

## 03 Free rate and Rate curve

**Free rate** uses pulses per second. **Rate curve** determines when the speed moves between endpoints; **Reset sweep** restores a simple rising rate trajectory. The glide between endpoints is continuous, not a sequence of quantized rhythmic divisions.

> GOOD TO KNOW
>
> At 120 BPM, straight 1/4 pulses are 0.5 seconds apart; 1/32 pulses are 0.0625 seconds apart. A dotted value is 1.5 times its straight period; a triplet is two-thirds.

NEXT

→ PLACE RHYTHM ONLY WHERE NEEDED 44

GRAPH · PULSE REGIONS

# Place rhythm *only where needed*

II

A Pulse region is a time-shaped modulation-depth envelope. It does not cut or move the source audio.

OPEN Pulse › Draw region

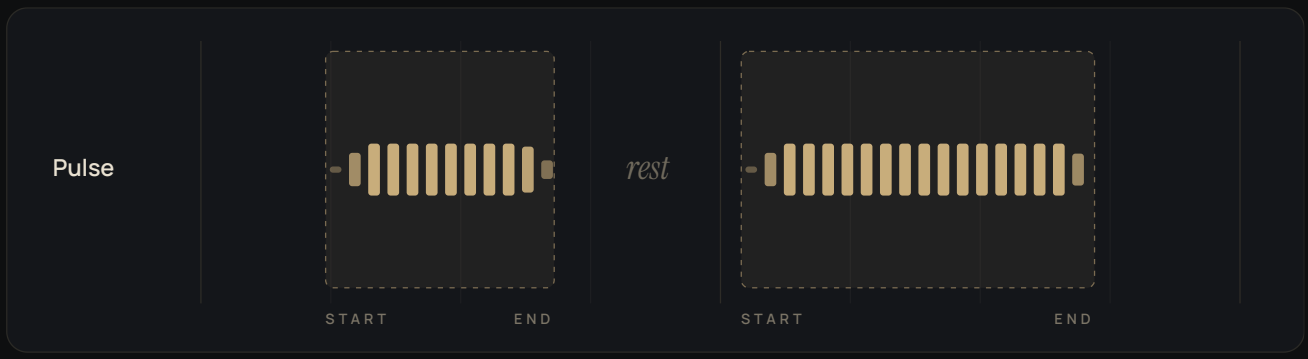



ILLUSTRATION Explains behaviour; it is not a measured audio trace.

## 01 Draw, move and trim

Enable **Draw region** and draw a span on the graph. Drag the edges to change its boundaries. The Start and End fields provide precise times; **Fade in** and **Fade out** soften the modulation entering and leaving that region.

## 02 Several regions

Use separate spans for short rhythmic passages. Overlapping spans are joined into a coherent region. **Clear regions** removes their active envelope. The native Pulse depth curve carries these edits with the preset.

## 03 Master target

**Master** in the Pulse graph means edits apply across active layers. The preview identifies one representative layer; it is not a claim that all selected layers currently sound identical.

## 04 Pulse strength and stereo

Depth controls the amount. **Sine** gives smooth tremolo, **Triangle** gives a sharper swell and **Gate** creates chopping. Width changes the open fraction of **Gate** pulses and enabled pattern hit windows, and stays unavailable for plain **Sine** or **Triangle** pulses. **Stereo phase** and per-side depth trim live in **More Pulse controls**.

GOOD TO KNOW

Large stereo offset, partial depth, continuous layers and long tails can fill the gaps. If you want unmistakable silence between hits, establish that on a solo dry layer first.

NEXT

→ WRITE A RHYTHMIC PHRASE 45

EDITOR · PULSE · PATTERN

# Write a *rhythmic phrase*

II

Patterns turn the running pulse clock into hits, rests, ties and subdivisions.

OPEN Pulse › Pattern, or More Pulse controls

| CONTROL | BEHAVIOUR |
|---|---|
| **Pattern on / Steps** | Enable the pattern and choose its length. The detailed editor supports 1–16 steps; the overview offers common lengths. |
| **Hit** | Triggers an amplitude event for the step. |
| **Rest** | Leaves a gap in source emission while downstream effect tails may continue. |
| **Tie** | Extends the preceding hit, including its final ratchet, into the tied step. |
| **Accent** | Scales the selected step, from 0–150%. A stronger accent changes relative emphasis; it is not a substitute for output headroom. |
| **Ratchets** | Divides a hit into 1–8 repeats. Use selectively to create a tightening fill. |
| **Swing** | Delays the alternate step while retaining each pair duration. Available from 0–45%. |
| **Reset pattern** | Returns the authored pattern to its reset state; use **Undo** if the change was not intended. |

## Build one clear accent

Keep a continuous body layer underneath. Put a 1/8-to-1/32 sweep on a quieter detail layer, add a rest early in its pattern and a short ratcheted fill near the arrival. Listen to the full mix before making every step busy.

NEXT
→ ROUTE MOTION DELIBERATELY 46

SEE ALSO
→ MAKE THE RHYTHM ACCELERATE 43

EDITOR · MOTION

# Route motion *deliberately*

II

The **Motion** page adds modulation without forcing every change into the main Evolution line.

OPEN Edit sound › Motion › Routes 1–4 through Routes 13–16

| ROUTE FIELD | MEANING |
|---|---|
| Source | **Master curve**, **Layer curve**, **LFO 1**, **LFO 2**, **Steps** or **Smooth random**. |
| Destination | Pitch, pan, brightness, filter octaves, Ember, distortion, chorus depth, phaser feedback, echo feedback, Space send, reverb size or decay. |
| Targets | Choose a layer mask or a named performance group. A group follows its saved membership. |
| Depth | Signed normalized amount from −1 to 1, scaled for the chosen destination. Reverse the sign to reverse the movement. |
| Bipolar / unipolar | **Bipolar** moves on both sides of its centre; unipolar uses a one-sided source range. |
| Smoothing | Softens changes, especially stepped values or abrupt curve transitions. |
| Enabled | A route must be enabled to contribute, and the modulation matrix itself (Matrix enabled) must also be switched on. The destination effect must also be audible for its detail modulation to be heard. |

## Keep the body rising

A small pan route on one accent and slow brightness motion on another can add width and detail. Heavy pitch oscillation on every layer can cancel the perception of steady ascent.

GOOD TO KNOW

Layer masks are bit values in advanced controls: layer 1 = 1, layer 2 = 2, layer 3 = 4, through layer 8 = 128. Add values to select several; 255 means all eight.

NEXT

→ CHOOSE A MOTION SOURCE 47

EDITOR · MOTION · MODULATORS

# Choose a *motion source*

II

Modulation timing is its own design layer. A slow source can create detail inside a much faster riser.

OPEN Motion › Modulators

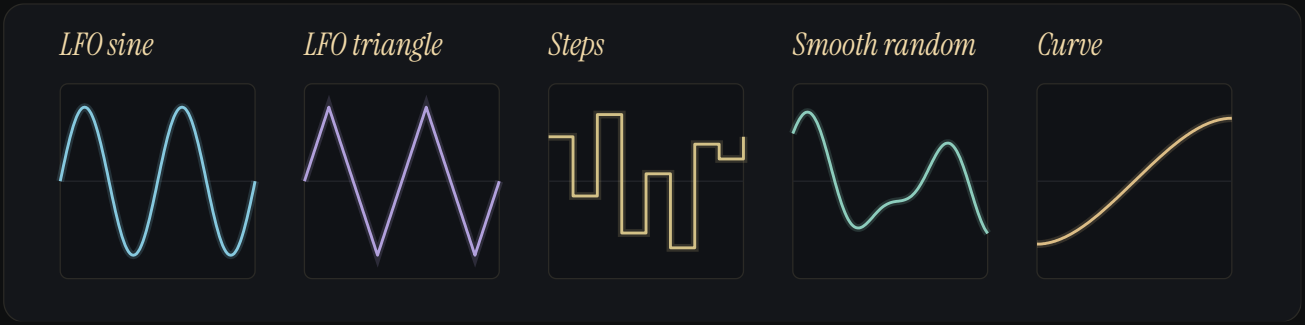



ILLUSTRATION Explains behaviour; it is not a measured audio trace.

## 01 Two LFOs

Each has a waveform, free rate or tempo synchronization, division and phase. **Sine** and **Triangle** are useful for smooth movement; Rise and Fall make directional ramps. A phase offset changes where the motion starts.

## 02 Steps

The sequence holds authored values rather than Hit/Rest/Tie amplitude events. Route those values to pan, pitch or effect detail. It is separate from the Pulse pattern sequencer.

## 03 Smooth random

A repeatable seeded motion source adds variation without hard jitter. Rate and smoothing control its pace and continuity. Use a known seed when you want a saved design to repeat predictably.

## 04 Curves as sources

**Master curve** follows the workspace shape. **Layer curve** follows each target layer shape. Combining a mostly ascending body with modest LFO/random movement creates a more detailed sound without changing its broad destination.

## 05 Avoid unnecessary routes

Use one route with a clear musical purpose before adding more. Check the final output level and mono result after modulating space, width or bright resonances.

NEXT
→ WORK WITH THE EFFECT CHAIN 49

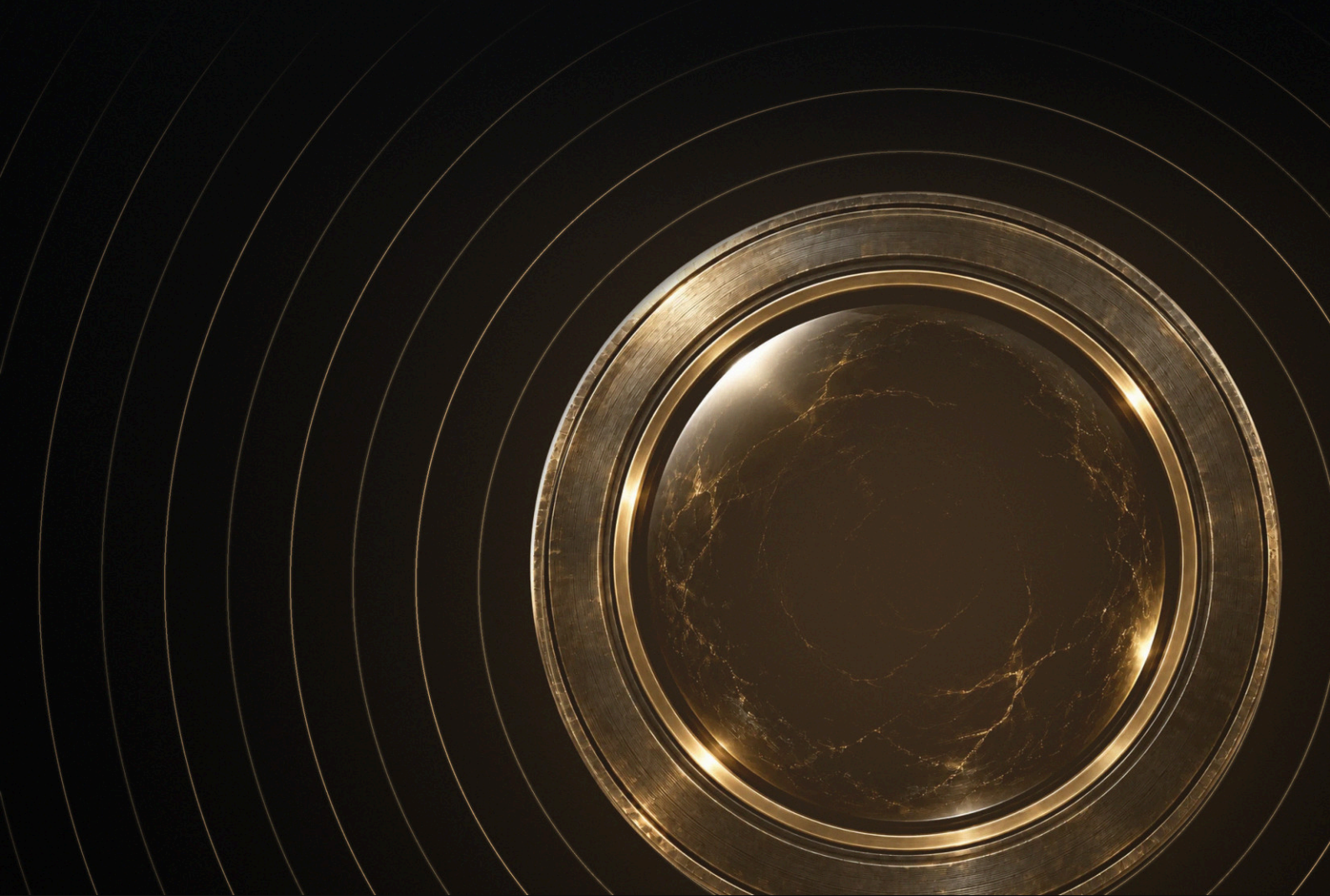
SEE ALSO
→ SIX CONTROLS FOR A WHOLE DESIGN 72
→ EVERY CONTROL, BY FAMILY 103

# *III*

# Colour *and space*

Use local effects for character, shared buses for a coherent acoustic world, and the master section for the finished mix.


| | | |
|---|---|---|
| 01 | Ember and distortion | 50 |
| 02 | Reverb | 54 |
| 03 | Shared space | 56 |
| 04 | Stereo and master finishing | 59 |

EDITOR · EFFECTS

# Work with *the effect chain*

III

The **Effects** page keeps character processors separate from Pulse, stereo width and the shared return network.

OPEN Edit sound › Effects

| AREA | ROLE |
|---|---|
| **Ember / Distortion** | Saturation and more assertive nonlinear colour. |
| **Chorus / Phaser** | Ensemble thickening and moving spectral notches. |
| **Delay / Reverb** | Local echoes and room treatment for the selected layer. |
| **Resonator** | Tuned harmonic, metallic or glass-like response. |
| **Amount / Follow curve** | The base effect and the depth of its selected modulation lane. |
| **Left / Right level** | Separate contribution controls for each channel. These are not the layer pan knob. |
| **Edit effect curve** | Returns to the graph with the actual layer/effect lane selected. |

## 01 Build and compare

Solo the layer when learning an effect, then judge it in the full mix. Use **Store A/B** and **Match** to compare at a similar listening level. A louder or wider version is not automatically the stronger design.

## 02 About the response illustrations

The effect-page graphics illustrate how settings relate. They are not measured impulse responses, a spectrogram or a replacement for the actual output meters. The native audio engine remains authoritative.

NEXT
→ HEAT WITHOUT LOSING SHAPE 50

SEE ALSO
→ MAKE A CURVE AUDIBLE 37
→ THREE KINDS OF MEMORY 69

EDITOR · EMBER & DISTORTION

# Heat *without losing shape*

III

Ember adds evolving saturation; Distortion supplies a more direct aggressive edge.

OPEN Effects › Ember or Distortion




FIG 3.1 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Effect tabs.** Switches the editor between effects; Ember is selected here, with Distortion beside it for a more direct aggressive edge.
2. **Response study.** Shows a waveform and harmonic bars for the effect; the on-screen hint says dragging here adjusts amount and follow curve.
3. **Edit effect curve.** Lets you shape how the effect builds, for example an ascending curve for a crescendo of grit.
4. **Amount.** Raise this gradually; the animated glass dial and particles only respond visually and are not a loudness measurement.
5. **Follow Curve.** A per-layer control for how the effect follows its curve, alongside Amount; it reads 41.4 percent here.
6. **Left Level.** Per-layer control for the left channel contribution of the effect; it sits at 0 dB here.
7. **Right Level.** Matching per-layer control for the right channel contribution, also at 0 dB here.

## 01 Ember

Raise **Amount** gradually and use its curve to bring heat toward the arrival. The animated glass dial and particles respond visually to the setting; they are presentation rather than a loudness measurement.

## 02 Distortion

Use a restrained amount on the body, or push a dedicated accent. A bright source can become harsh after pitch climbing, so audition the ending as well as the opening.

## 03 Mix and modulation

**Amount**, **Follow curve** and left/right contribution controls are available per layer. For a crescendo of grit, choose an ascending independent effect curve and make sure depth is active. Keep a clean or smoother layer underneath to preserve definition.

> GOOD TO KNOW
>
> If increasing the effect only makes the patch seem louder, compare with **Match** or lower the layer level temporarily. Judge density, edge and articulation at a fair listening level.

NEXT
→ WIDEN THE ENSEMBLE 51

EDITOR · CHORUS

# Widen *the ensemble*

III

Chorus uses time-varying differences to make a source feel broader and more layered.

OPEN Effects › Chorus

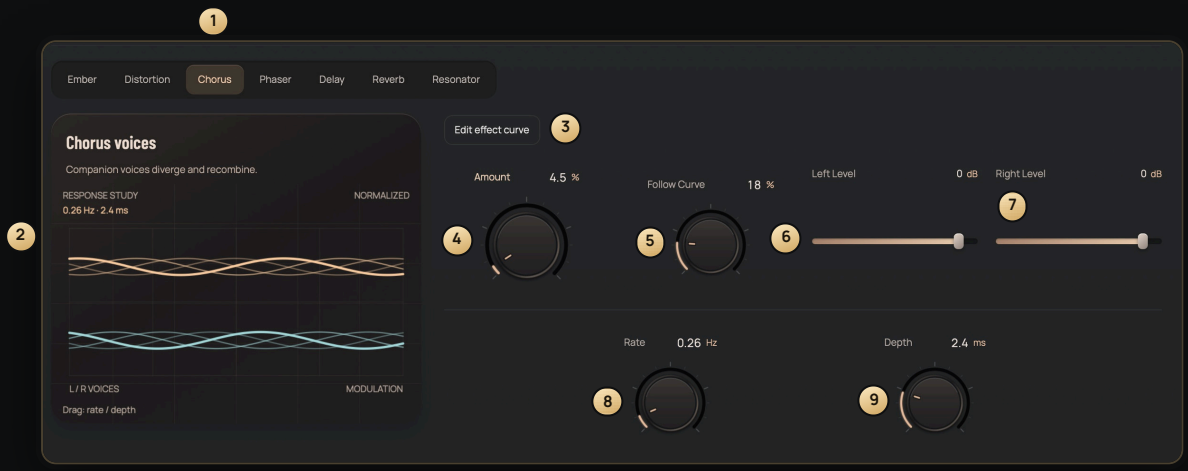



FIG 3.2 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Chorus tab.** Selects the Chorus effect, which uses time-varying differences to make a source feel broader and more layered.
2. **Response study.** Shows the current rate and depth as moving left and right voices; drag it to change rate and depth.
3. **Edit effect curve.** Jumps to the timeline so you can edit the chorus modulation lane that shapes the effect.
4. **Amount.** Blends the chorus contribution into the layer.
5. **Follow Curve.** Shapes the effect with its modulation lane.
6. **Left Level.** Balances the chorus contribution on the left channel.
7. **Right Level.** Balances the chorus contribution on the right channel.
8. **Rate.** Sets the speed of the chorus motion.
9. **Depth.** Sets the delay modulation excursion in milliseconds; keep it modest, as faster and deeper chorus becomes obvious pitch movement.

| CONTROL | PURPOSE |
|---|---|
| **Amount** | Blends the chorus contribution into the layer. |
| **Rate** | The speed of the chorus motion. |
| **Depth** | Its delay modulation excursion in milliseconds. |
| **Follow curve** | Shapes the effect with its modulation lane. |
| **Left / Right** | Balances the contribution per channel. |

## Use it musically

A restrained slow chorus can enrich a synthetic body. Faster/deeper chorus becomes obvious pitch movement. Avoid adding large chorus depth to every layer; retain a stable centre and check mono.

NEXT

→ MOVE THROUGH THE SPECTRUM 52

EDITOR · PHASER

# Move through *the spectrum*

III

Phaser adds a sweeping hollow or metallic colour without changing the source choice.

OPEN Effects › Phaser




FIG 3.3 Actual native Portal editor, captured bypassed (Amount 0 %), so its response study is at rest. Captured 4 October 2026; example values.

1. **Phaser tab.** Selects the Phaser effect, which adds a sweeping hollow or metallic colour without changing the source choice.
2. **Phase interference.** Shows moving notches crossing the spectrum, with the current rate and feedback, and lets you drag to change both.
3. **Edit effect curve.** Jumps to the timeline so you can edit the phaser curve that the effect follows.
4. **Amount.** Controls how much phaser you can hear in the sound.
5. **Follow Curve.** Lets the effect develop with the chosen curve.
6. **Left Level.** Balances the effect across the channels, with this slider covering the left side.
7. **Right Level.** The matching slider for the right channel, balancing the effect across both channels.
8. **Rate.** Controls the speed of the moving spectral pattern.
9. **Feedback.** Intensifies the resonant sweep, so check level and high frequencies when it is set high.

| CONTROL | PURPOSE |
|---|---|
| **Amount** | Controls the audible phaser contribution. |
| **Rate** | Controls the speed of the moving spectral pattern. |
| **Feedback** | Intensifies the resonant sweep. High settings need level and high-frequency checks. |
| **Follow curve** | Lets the effect develop with the chosen curve. |
| **Left / Right** | Balances the effect across the channels. |

## Keep the rise legible

Phaser can create an up-and-down impression even when pitch rises continuously. Use it quietly on the body, or make it a distinctive secondary layer rather than the only movement in the patch.

NEXT

→ LEAVE A TRAIL BEHIND THE SOURCE 53

EDITOR · DELAY

# Leave a trail *behind the source*

III

Echo can connect a broken texture, enlarge a detail layer or add a rhythmic halo.

OPEN Effects › Delay




FIG 3.4 Actual native Portal editor, captured bypassed (Amount 0 %), so its response study is at rest. Captured 4 October 2026; example values.

1. **Stereo echo field.** Shows the repeats as dots along a time axis, and dragging it sets echo time and regeneration together.
2. **Edit effect curve.** Jumps to the timeline so you can edit the delay curve that the effect follows.
3. **Amount.** Sets how much of the echo contributes to the layer.
4. **Follow Curve.** Sets how closely the echo follows its modulation curve.
5. **Left Level.** Balances the echo contribution on the left channel.
6. **Right Level.** Balances the echo contribution on the right channel.
7. **Echo Time.** Sets the repeat timing of the echoes, shown here in milliseconds.
8. **Stereo Offset.** Sets the channel difference between the repeats, shown here as a percentage.
9. **Regeneration.** Centre keeps the base repeat behaviour; negative values shorten the trail and positive values extend it.
10. **Feedback Tone.** Darkens or brightens the repeats in the feedback path, and is set in hertz.

| CONTROL | PURPOSE |
|---|---|
| **Echo time / Stereo offset** | Set the repeat timing and channel difference. |
| **Regeneration** | Centre retains the base repeat behaviour. Negative values shorten the trail; positive values extend it. |
| **Feedback tone** | Darkens or brightens the repeats in the feedback path. |
| **Ducking** | Lets the source lead, bringing echoes forward as it releases. It is an extra delay control rather than one of the main knobs; the control directory lists it. |
| **Amount / Follow curve / Left / Right** | Balance the contribution and its modulation. |

GOOD TO KNOW

Delay follows source gating, so echoes may bridge a Pulse rest. Reduce delay while establishing the rhythm, then add it back intentionally. Use **Shared space › Echo** for a common return fed by several layers.

NEXT

→ PUT THE RISE IN A ROOM 54

EDITOR · REVERB

# Put the rise *in a room*

III

Reverb is a complete layer effect with independent character, timing, colour and stereo controls.

OPEN Effects › Reverb




FIG 3.5 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Reverb style.** Picks the reverb character: Legacy studio, Room, Chamber, Scoring hall, Grand hall, Cathedral or Plate. It is saved as a design choice.
2. **Dry Signal.** Decides whether the direct component of the layer stays in the mix alongside the reverb.
3. **Edit effect curve.** Jumps to the timeline so you can edit the reverb curve.
4. **Amount.** Sets how much reverb contributes to the layer.
5. **Size.** Shapes the virtual space, and a larger size is not the same as a longer tail.
6. **Decay.** Controls how long the reverberant tail persists.
7. **Pre-Delay.** Separates the early source from the reverberant response.
8. **Damping.** Darkens the reverb response.
9. **Diffusion, colour & width.** Expands to reveal the extra reverb controls, such as low cut, diffusion, motion, early reflections and wet width.

## 01 Choose a character

**Reverb style** offers **Legacy studio**, **Room**, **Chamber**, **Scoring hall**, **Grand hall**, **Cathedral** and **Plate**. Use **Room** for proximity, halls for scale, and **Plate** for a distinct diffuse character. Style is a saved design choice.

## 02 Amount, size, decay and pre-delay

**Amount** sets the contribution. Size shapes the virtual space, **Decay** controls its persistence and **Pre-delay** separates the early source from the reverberant response. A larger size is not the same as a longer tail.

## 03 Shape the tail

**Damping** darkens the response; **Low cut** controls low-frequency buildup. Expand **Diffusion, colour & width** for diffusion, motion, early reflections and wet width. **Dry signal** controls whether the direct component of the layer remains.

NEXT
→ KEEP THE SPACE CINEMATIC 55

SEE ALSO
→ LET LAYERS SHARE AN ACOUSTIC WORLD 56

EDITOR · REVERB DETAILS

# Keep the space *cinematic*

III

A large room should enlarge the sound without hiding its arrival or filling every rhythmic gap.

| CONTROL | PRACTICAL MEANING |
| --- | --- |
| **Size** | The layer control spans 25–400% of its nominal scale. It changes the response structure rather than the file duration. |
| **Decay** | 0.2–12 seconds. The audible tail depends on the signal, damping and processing as well as this time. |
| **Pre-delay** | 0–250 ms. Separates the direct onset from the reverb response. |
| **Damping / Low cut** | Reduce bright ringing and low-end wash. Preserve deliberate sub energy in the direct layer. |
| **Diffusion / Motion** | **Diffusion** changes density; **Motion** adds movement within the response. |
| **Early reflections / Wet width** | Shape proximity and the spatial spread of the reverberant field. |
| **Dry signal / Channel contribution** | Choose the direct component and balance the effect channels. Avoid unintended level changes when comparing. |

## Release rather than truncate

Ordinary source stop or note-off releases into the effect tail. Allow sufficient time in the export or DAW range. A master clip fade or a hard host boundary can still cut that tail; inspect the rendered file.

> GOOD TO KNOW
>
> To keep a pulsed layer legible, shorten its local reverb and feed a little into a shared hall. The body can carry the wider sustained ambience.

NEXT

→ LET LAYERS SHARE AN ACOUSTIC WORLD 56

EDITOR · SHARED SPACE

# Let layers share *an acoustic world*

III

Three shared returns make a layered design feel connected without placing a separate large space on every voice.

OPEN Edit sound › Shared space




FIG 3.6 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Close room / Large hall / Echo.** Picks which shared bus you are editing; each of the three has its own separate page.
2. **Send Follow Layer Curve.** Shapes the send together with Send Curve Depth, following the layer curve.
3. **Shared Space.** Enables the shared network; if you hear no shared reverb, check this is on first.
4. **Room.** Enables the chosen bus, which must be on to be heard; Hall and Echo pages have their own matching switch.
5. **Send Amount.** Sets how much signal from the selected layer enters the bus; each layer keeps its own send.
6. **Send Curve Depth.** Adjusts how deeply the send is shaped; it works alongside the Send Follow Layer Curve switch.
7. **Send Left Channel.** Trims the send feeding the left channel; the Send Right Channel slider beside it does the same for the right.
8. **Size.** Shapes the virtual space of this bus, so a change here reaches every layer feeding it.
9. **Decay.** Controls how long the shared space persists, shown here in seconds.
10. **Pre-Delay.** Separates the early source from the reverberant response, shown here in milliseconds.
11. **Return.** Sets the level of the shared output coming back from the bus; check it when no shared reverb is audible.
12. **Room colour & stereo.** Expands extra settings for damping, low cut, diffusion and width.

## 01 Select the bus

**Close room**, **Large hall** and **Echo** have separate pages. **Shared Space** enables the network; **Room**, **Hall** or **Echo** enables that bus. Sends belong to the selected layer while bus settings affect every layer feeding that return.

## 02 Send and return

**Send Amount** controls how much layer signal enters the bus. **Send Curve Depth** and **Follow Layer Curve** shape that send; left/right send trims control its channel feed. Return level controls the resulting shared output.

## 03 Room and hall

The main controls are Size, **Decay**, **Pre-delay** and Return. Expand **Room colour & stereo** for damping, low cut, diffusion and width. A bus change can alter several layers at once, which is the purpose of a shared space.

GOOD TO KNOW

If there is no audible shared reverb, check three things: **Shared Space** on, the chosen bus on, and a nonzero send from an audible layer. Then check Return.

NEXT
→ A COMMON ECHO RETURN 57

SEE ALSO
→ DELIVER A RECONSTRUCTABLE MIX 93

EDITOR · SHARED SPACE · ECHO

# A common *echo return*

III

The shared echo is a mix resource. It receives several layers and remains independently deliverable as a return stem.

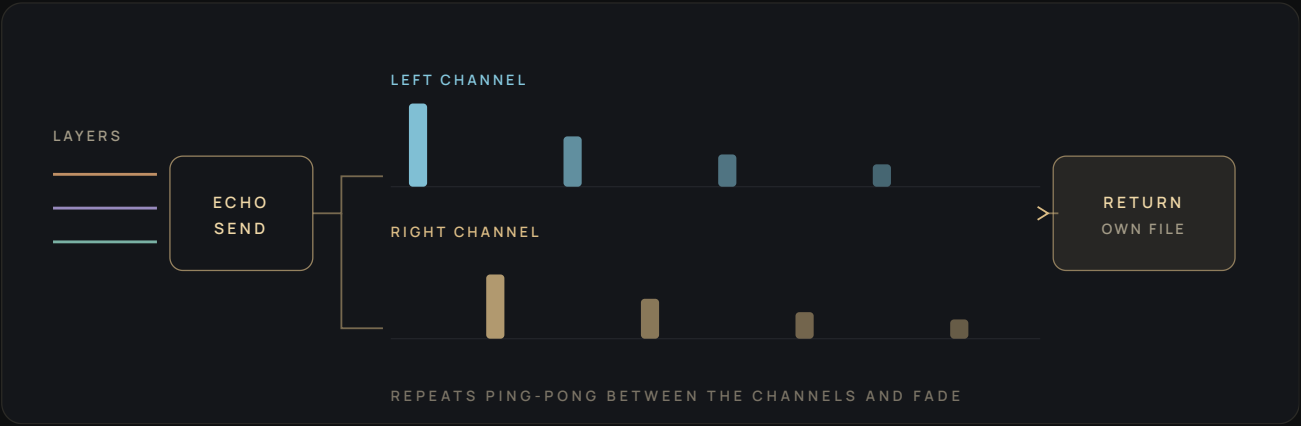



ILLUSTRATION Explains behaviour; it is not a measured audio trace.

| CONTROL GROUP | PURPOSE |
|---|---|
| **Send controls** | Each layer has its own amount, depth, follow relationship and channel trims for **Echo**. |
| **Tempo sync / Time** | Choose synchronized timing or the available time control. Confirm the workspace tempo and host-follow setting before judging the rhythm. |
| **Ping-pong** | Uses the stereo return for alternating movement. |
| **Feedback / Tone** | **Feedback** sets continuation; **Tone** colours the repeats. |
| **Return** | Sets the common echo output level. |
| **Echo diffusion & movement** | Expands the less frequently used colour, stereo and motion details. |

## 01 Design an echo accent

Send a quieter, percussive detail layer into **Echo** while keeping the body more direct. Increase feedback only as far as the transition needs. **Export** its return separately when the mixer needs independent tail control.

## 02 Respect rhythmic masking

If Pulse appears ineffective, a long shared return may be filling its rests. Listen to the direct layer and the return separately rather than changing the Pulse clock to compensate.

NEXT
→ FIND A TUNED IDENTITY 58

EDITOR · RESONATOR

# Find a *tuned identity*

III

The resonator emphasizes a structured set of frequencies, turning noise and texture into a more pitched object.

OPEN Effects › Resonator




FIG 3.7 Actual native Portal editor, captured bypassed (Amount 0 %), so its response study is at rest. Captured 4 October 2026; example values.

1. **Modal structure.** Draws the resonant bands from 20 Hz to 20 kHz, with a drag hint for frequency and decay.
2. **Follow Pitch.** Together with the base tuning, decides whether the resonances travel with the layer.
3. **Follow Layer Curve.** Shown On here, so the resonator uses the layer curve instead of an independent one.
4. **Structure.** Chooses Harmonic, Metal or Glass, where harmonic tends to reinforce pitch and the others add more inharmonic character.
5. **Edit effect curve.** Returns to the graph with the actual layer and effect lane selected for editing.
6. **Amount.** Sets the resonator contribution, working with Follow curve to decide how strongly it emerges.
7. **Follow Curve.** Acts as the curve depth, setting how strongly the effect curve modulates the resonator.
8. **Root.** Sets the base tuning of the resonances, currently 220 Hz.
9. **Decay.** Controls how long the resonance persists, currently 1.2 seconds.
10. **Damping.** Controls how much upper ringing persists, and helps tame a narrow high-frequency whistle.
11. **Spread.** Separates the stereo image of the resonances, set here to 25 percent.

## 01 Structure

**Harmonic**, **Metal** and **Glass** create different resonant relationships. A harmonic structure tends to reinforce pitch; the others introduce more inharmonic character.

## 02 Tune and follow

Use the base tuning and **Follow pitch** relationship to decide whether resonances travel with the layer. **Damping** controls how much upper ringing persists.

## 03 Decay, spread and modulation

**Decay** controls persistence; spread separates the image. **Amount** and Follow curve determine how strongly the resonator emerges. Use damping and available colour controls to tame a narrow high-frequency whistle.

GOOD TO KNOW

Resonance can become much more intense as a riser climbs. Listen to the final second at a comfortable monitor level and leave master headroom.

NEXT
→ WIDE, BUT STILL DEPENDABLE 59

SEE ALSO
→ EVERY CONTROL, BY FAMILY 103

EDITOR · STEREO

# Wide, but *still dependable*

III

A wide sound needs a coherent centre. Judge width in stereo and check what survives a mono fold-down.

OPEN Stereo › Layer image or Master image

| ROLE | MIX APPROACH |
| --- | --- |
| **Body and Sub** | Keep a stable centre; use less extreme stereo movement. |
| **Air and detail** | Useful places for wider movement, while checking mono compatibility. |
| **Long returns** | Can supply space around the direct body without forcing every source hard left/right. |

## 01 Layer image

**Pan** locates a layer; left/right trims balance its channels. **Width** shapes its stereo contribution and can follow a curve. Mono-like sources and already-wide imported sources respond differently.

## 02 Master image

**Stereo finishing** separates Mid and Side. **Mid Body/Air** and **Side Body/Air** shape their tone independently. Side level adjusts the width contribution, and Centre bass centres the low frequencies below the Centre-bass cutoff.

## 03 Mono audition

Mono folds the output even if stereo tone processing is bypassed. Switch it off to evaluate the original stereo relationship. A design that nearly disappears in mono needs a more coherent body or less opposing stereo motion.

## 04 Read the meters correctly

**Correlation**, side/mid energy and mono level difference are derived from the final output. Silence has no useful reading. The numbers help identify problems but do not judge musical width for you.

NEXT
→ FINISH THE COMPLETE MIX 60

EDITOR · MASTER FINISHING

# Finish *the complete mix*

III

Master processing is saved separately for Riser and Shepard. It shapes the sum, including the effect returns.

OPEN Edit sound › Master

| CONTROL | PURPOSE |
|---|---|
| **Finishing enabled** | Bypass or engage the whole finishing chain. |
| **Low cut** | Removes unwanted rumble; zero bypasses this high-pass stage. |
| **Body / Presence / Air** | Broad tonal balance, around 120 Hz, 2.4 kHz and 8 kHz respectively. |
| **Threshold / Ratio** | Set how much of the signal receives compression. |
| **Attack / Release** | Set how dynamics react and recover. |
| **Comp Mix** | Blends compressed and natural movement for parallel control. |
| **Makeup / Peak ceiling** | **Makeup** changes level before stereo-linked sample-peak protection. This is not a claim of intersample true-peak limiting. |
| **Output level** | The footer output remains an accessible final balance control. |

## 01 Preserve the crescendo

Do not compress every part of the rise to the same density. Make sure the final arrival still feels larger than the opening. Excessive limiting can hide whether the individual layers were balanced well.

## 02 Stems retain the finishing relationship

Aligned delivery uses common processing/gain relationships so layer and return stems reconstruct the finished mix. Do not independently normalize each file if you want that balance preserved.

NEXT
→ MEET SHEPARD LAB 62

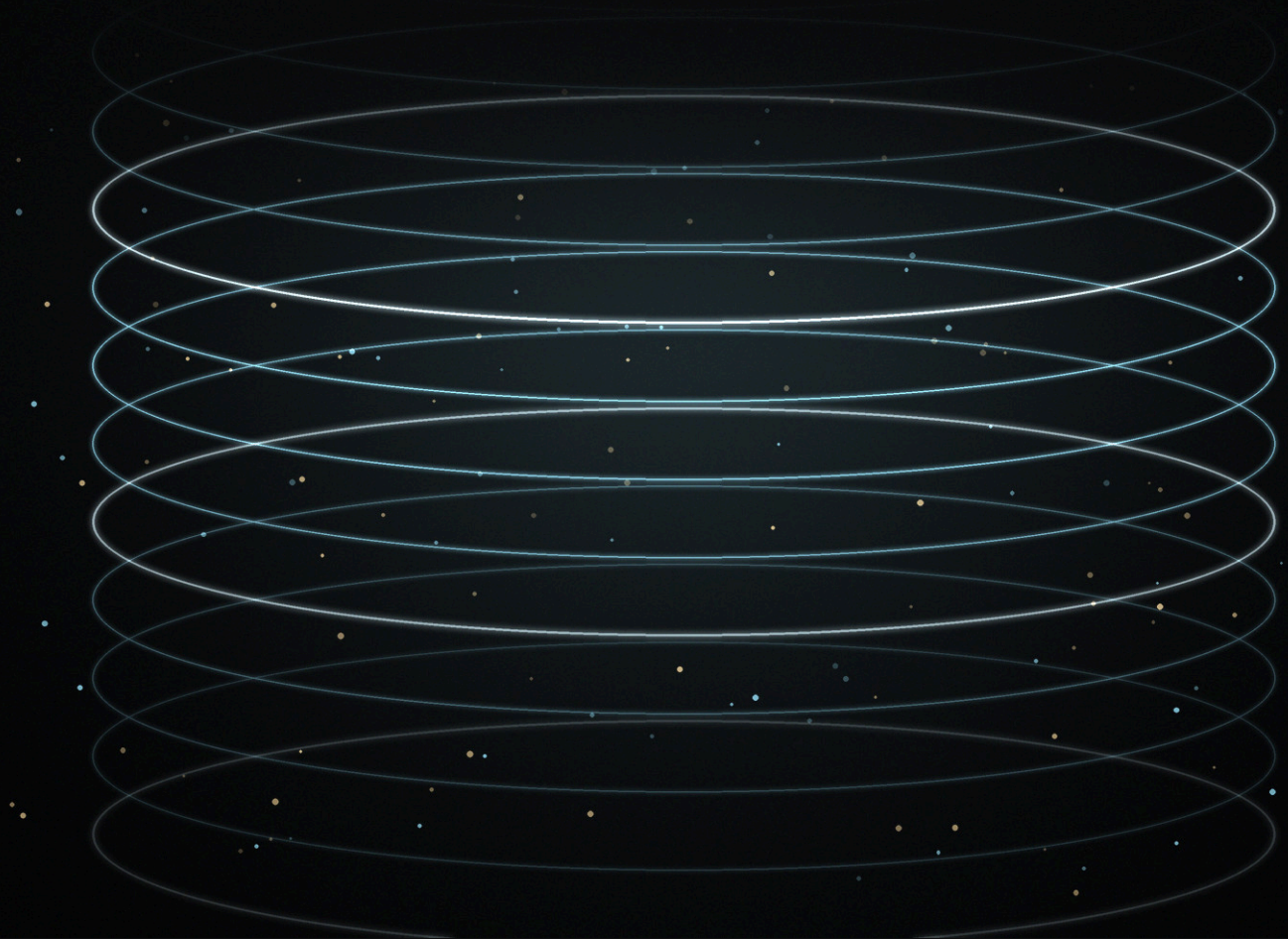
SEE ALSO
→ DELIVER A RECONSTRUCTABLE MIX 93

# *IV*

# An *endless ascent*

Shepard Lab combines repeating octave motion with layered sound design. The illusion comes from changing voices, not from endlessly increasing loudness.


| | | |
|---|---|---|
| 01 | The Shepard workspace | 62 |
| 02 | Characters and sources | 63 |
| 03 | Octave motion and cycles | 64 |
| 04 | Scenes and morphing | 67 |

SHEPARD LAB · OVERVIEW

# Meet *Shepard Lab*

IV

The workspace has its own eight-layer scene, preset library, source material and processing.

OPEN Top workspace selector › Shepard Lab

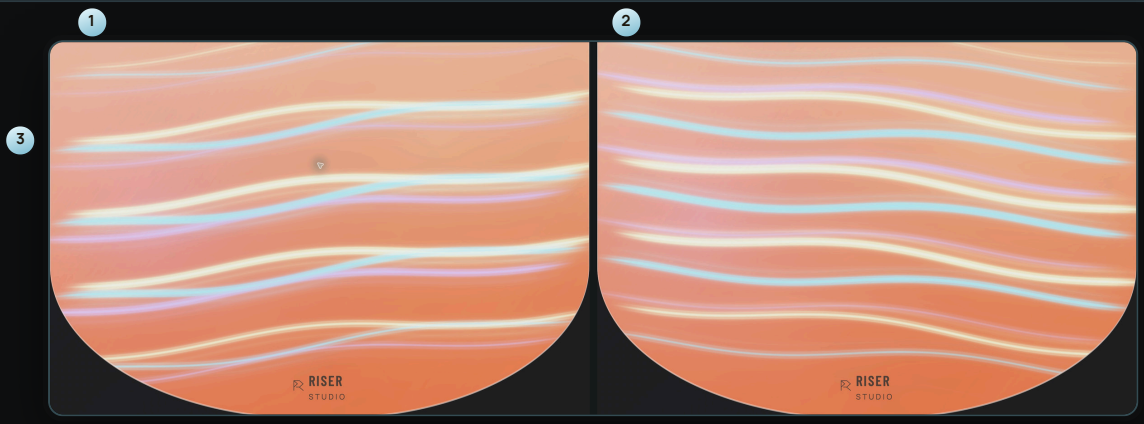



FIG 4.1 Actual native VST3 field for Triplet Beacon: rising motion (left) and falling motion (right). No liquid ring is used.

1. **Rising field.** The actual native VST3 field for Triplet Beacon with rising motion, drawn without a liquid ring.
2. **Falling field.** The right field shows Triplet Beacon with falling motion; its bands slope downward, opposite to the rising field.
3. **Octave bands.** Vertically spread and coloured; octave contributions fade through a frequency window, and other octaves enter as voices rise or fall.

## 01 Continuous pitch illusion

Octave-spaced contributions fade through a frequency window. As voices rise or fall, other octave contributions enter, creating an impression of travel without requiring a single oscillator to climb forever.

## 02 A different sound field

Shepard uses vertically spread coloured octave bands and separate voice readouts, with no liquid ring. During playback, motion follows native voice phase and direction. When stopped, **Idle On** offers a labelled octave preview using the configured direction and speed; **Idle Off** freezes that decorative drift.

## 03 Same editing language

Layer faders, sources, effects, shared space, Pulse, stereo, master finishing and performance remain familiar. Curves repeat over the scene modulation cycle. **Export** captures a finite duration without changing the basic endless performance model.

GOOD TO KNOW

For a clear illusion, start with a restrained tonal character. Sample-based scenes can become evolving textures whose motion is richer but less overtly pitch-like.

NEXT
→ YOUR RECORDING, ENDLESS MOTION 63

RISER STUDIO · 1.1.1

# Make scenes *sound different*

IV

Turn your own WAV, AIFF or FLAC into a rising or falling Shepard texture.

OPEN Shepard Lab › + Add layer / Use your sample

## 01 Choose the layer type

In Shepard Lab, choose **+ Add layer**. Pick **Synth tone** for an oscillator character, **Your sample · Smooth** for a sustained spectral texture, **Your sample · Granular** for more grain and detail, or **Air texture** for the original Breath source.

## 02 Import your file

Choose either sample option and select your audio in the native file picker. Wait for preparation to finish. The new layer becomes selected only after success; cancelling or choosing an unreadable file keeps your existing scene.

## 03 Add or replace

The rack's **Use your sample** button lets you choose **Add a new layer** or replace a named existing layer. When all eight slots are in use, replace a source or remove a layer first.

## 04 Set its movement

Use **Rise** or **Fall**, then adjust the selected layer's octave travel and sample controls. Solo it to hear what the imported recording contributes, then return to the full scene and balance its level and pan.

## 05 Keep it editable

Save a Shepard preset, reopen it and audition the result. The original recording is embedded for recall. Export a finite WAV when you need audio in a session; the preset remains your editable design.

NEXT
→ CONTROL THE OCTAVE TRAVEL 64

SHEPARD LAB · TONE

# Control the *octave travel*

IV

Direction and speed belong to each voice, so a scene can combine a dominant rise with subtler contrary motion.

OPEN Tone › Glide, Character, Mix & tuning

| CONTROL | PURPOSE |
| --- | --- |
| Speed | The time for an octave of travel. Longer values produce slower movement. Linked-cycle controls can take ownership of this speed. |
| Direction | Rise or Fall for the selected voice. The dedicated overview buttons change every voice at once. |
| Centre / Range | Place the frequency window and its octave span. Keep the scene in a useful register rather than relying on excessive top-end intensity. |
| Harmonics / Harmonic tilt | Control overtone density and how energy slopes across harmonics. |
| Odd / even | Balances overtone families for a different colour. |
| Spread / Movement / Motion period | Control stereo and evolving character around the octave travel. |
| Pitch / Octave / Level / Pan | Ordinary layer tuning and mix controls remain independent editing tools. |

## Avoid a static shrill ending

Listen for sustained energy gathering at the top of the range. Lower the centre, reduce harsh harmonic content, adjust damping and balance any bright layers. The intended scene should remain bounded, not grow louder without limit.

NEXT
→ LINK THE CYCLES INTENTIONALLY 65

SHEPARD LAB · LINKED CYCLES

# Link the cycles *intentionally*

IV

Octave travel, modulation and export length are separate clocks. Link them only when the scene needs a repeating relationship.

OPEN Scenes › selected layer cycle controls

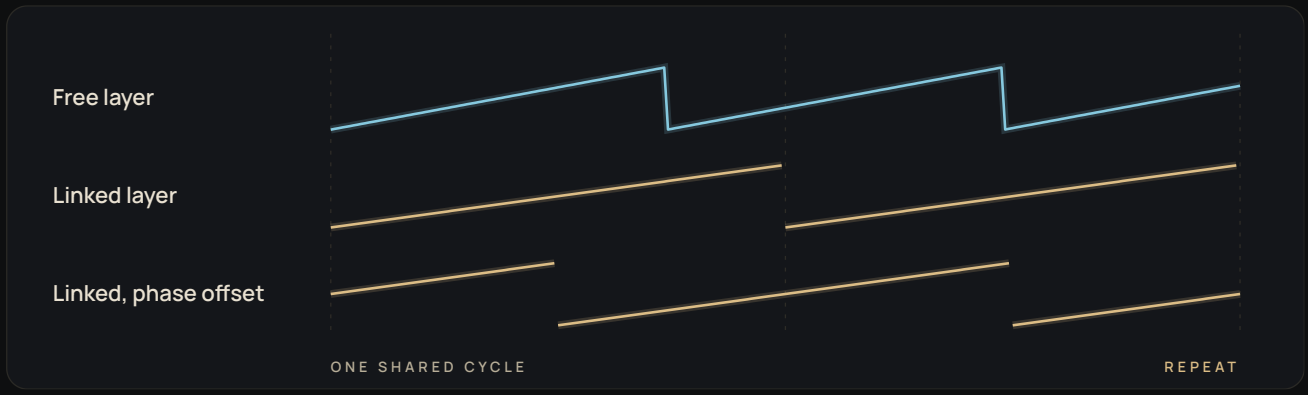



ILLUSTRATION Explains behaviour; it is not a measured audio trace.

## 01 Free or linked travel

A free layer uses its own octave Speed. A linked layer derives octave travel from the shared cycle relationship and its multiplier/phase settings. The linked control owns travel, so editing an unrelated speed field is not the way to change that relationship.

## 02 Phase and direction

Phase offsets keep layers from reaching the same part of their cycle together. Rise and Fall remain musical direction choices. Use a coherent dominant direction with a few quieter counter-moving layers if you want a clear rising scene.

## 03 Repeating curves

The graph cycle repeats effect and Evolution shapes. Layer entrance happens once after the scene starts; it is not replayed every cycle. A finite layer end stops that source, which matters for circular export eligibility.

## 04 Capture length

A finite WAV capture can be longer than one modulation cycle. Its length limits the file, not a held Shepard MIDI performance. Circular passages are a separate delivery mode with specific continuity requirements.

GOOD TO KNOW

If a source-control field is unavailable while morphing, recall a stored anchor first. If Speed is linked, edit the cycle relationship that owns it.

NEXT
→ READ WHAT THE SCENE IS DOING 66

SEE ALSO
→ EXPORT A CONTINUOUS PASSAGE 94

SHEPARD LAB · VISUAL FEEDBACK

# Read what *the scene is doing*

IV

Native voice telemetry and the output meters make it easier to separate motion from decoration.

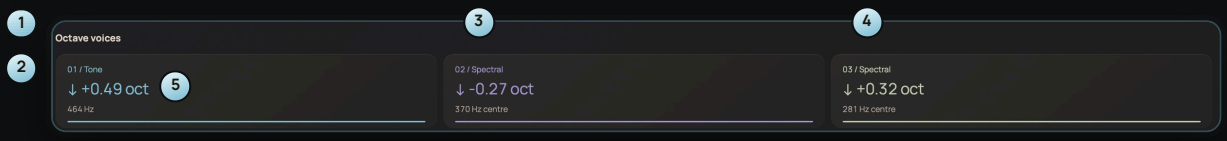



FIG 4.2 Actual native voice readouts during playback. Each layer retains its own direction and octave position.

1. **Octave voices.** One card per layer, each retaining its own direction and octave position while the scene plays.
2. **01 / Tone.** Layer number and source mode; a native tone, granular sample or spectral texture can share an octave clock yet sound very different.
3. **02 / Spectral.** Second layer, using a spectral texture with its own octave reading and a 370 Hz centre.
4. **03 / Spectral.** Third layer, also spectral, with its own octave reading and a 281 Hz centre, tracked apart from the others.
5. **Octave readout.** Pairs an arrow for native voice direction with the octave travel in numbers; it stays stopped when no native audio is progressing.

## 01 Octave readouts

Per-layer numeric readouts show native voice direction and octave travel. They remain stopped when no native audio is progressing, even if the decorative idle octave preview is drifting. Idle motion never generates audio or invents numeric playback values.

## 02 Source identity matters

A native tone, a granular sample and a spectral texture can share an octave clock but sound very different. The bands are not an exact picture of the sampled waveform and do not tell you whether the result is musically good.

## 03 Level and stereo

Use the actual output to assess level and balance. A very bright animated display is not evidence of more headroom. Check a long scene through a complete cycle and through release.

## 04 A practical scene check

**Solo** each layer. Confirm its direction, speed and source. Re-enable the whole stack, lower any voice that dominates the upper register, then save and reload. Capture a finite passage and listen to the exported boundary and tail.

NEXT
→ STORE COMPLETE SOUND STATES 67

SEE ALSO
→ TURN A SCENE INTO A FINITE RISE 70
→ WHEN THE SOUND IS WRONG 98

EDITOR · SCENES

# Store complete *sound states*

IV

A-D anchors preserve the sound design of a workspace so you can return to it or use it as a morph endpoint.

OPEN Edit sound › Scenes

| CONTROL | MEANING |
|---|---|
| **Store A-D** | Captures a complete native sound state, including source references, controls, curves and routing. Preparation finishes before a new state is published. |
| **Recall** | Restores the chosen anchor for ordinary editing. Workspace-scoped anchors preserve the other workspace. |
| **Clear** | Removes that stored anchor. Use the scene **Undo/Redo** controls for scene-slot edits. |
| **From / To** | Select which two stored anchors define the morph pair. |
| **Enabled / Position / Transition time** | Enable the prepared pair, move between endpoints and smooth the transition time. |

## 01 Scenes are not A/B takes

Scenes retain authored states and can morph. The header A/B comparison evaluates completed sound alternatives. Performance snapshots retain macro/group settings. Choose the mechanism that matches what you want to preserve.

## 02 Media remains portable

Current source material and anchors share stored media rather than copying the same original for every slot. The combined portable-media budget remains bounded; a large import or anchor set can be refused without discarding the previous project.

NEXT
→ MOVE BETWEEN TWO SOUND WORLDS 68

SEE ALSO
→ THREE KINDS OF MEMORY 69

EDITOR · SCENE MORPH

# Move between *two sound worlds*

IV

Morph interpolates controls and transitions prepared sources. It is more than moving a single macro.

OPEN Edit sound › Scenes › From / To / Enabled / Position

1 **Prepare the endpoints**

Make a sound, **Store A**, then make or load a different sound and **Store B**. Retain a named project if the work matters. Stored anchors are a separate collection from ordinary preset browsing.

2 **Choose and enable the pair**

Set **From** and **To**, then enable morph. Wait for native preparation if required. A missing or invalid pair retains the last usable sound and reports the issue.

3 **Perform the transition**

Move **Position**, or automate the native morph parameter in the host. **Transition time** smooths the change. Changed sources blend through the prepared native engine; this can be more demanding than a simple static scene.

4 **Return to authoring**

**Recall** an anchor before changing the underlying sound. Source, curve and ordinary sound controls are protected while morph owns them. This avoids making an edit that is immediately replaced by the interpolated state.

> GOOD TO KNOW
> Current-morph exports capture an immutable native request. Editing after a render starts does not rewrite the request already being delivered. Musical approval of the transition still requires listening.

NEXT
→ THREE KINDS OF MEMORY 69

SEE ALSO
→ EXPORT THE SOUND YOU DESIGNED 92
→ BUILD A COMPLETE TAKE SET 95

WORKFLOW · A/B, SNAPSHOTS & SCENES

# Three kinds *of memory*

IV

Comparison slots, performance snapshots and scene anchors serve different tasks.

| SYSTEM | USE IT WHEN... |
| --- | --- |
| **Header Store A / Store B** | Compare completed alternatives. Recall A or B to hear a stored choice. |
| **Match** | Adjusts audition loudness for a fair comparison. It is an audition aid, not a request to change exported gain. |
| **Performance snapshots** | Eight named sets of macro and group settings for a performance. Editing a recalled value returns that setting to manual control while preserving the remaining heard state. |
| **Scenes A-D** | Complete authored sound anchors, including source and curve state. They also define morph endpoints. |
| **Saved .riser preset** | A named portable design on disk. Use it for deliberate recovery and exchange; it is not merely an audition slot. |

## 01 A practical comparison

Store a conservative version in A. Add more **Ember**, hall or stereo movement and store B. Enable **Match**, compare at a comfortable level, and listen for musical impact rather than loudness alone.

## 02 Saving still matters

Temporary comparisons and undo are useful while designing, but a named saved project and a DAW session are the durable checkpoints. Reopen one before delivering a critical cue.

NEXT
→ TURN A SCENE INTO A FINITE RISE 70

SEE ALSO
→ PERFORM MUSICAL ROLES TOGETHER 73
→ SAVE THE DESIGN, NOT JUST THE AUDIO 83

DELIVERY · SHEPARD TO RISER

# Turn a scene *into a finite rise*

IV

Capture Shepard motion into Riser when the cue needs a deliberate start and arrival.

OPEN Shepard Lab › Edit sound › Delivery › Capture Shepard into Riser

## 01 Choose what to capture

**Selected voice** creates one layer in the next free Riser slot. **All voices – append to Riser** adds the scene to free slots. Both use the existing Riser duration. **All voices – new Riser scene** replaces the Riser rack with the capture and allows a new 1–30 second duration.

## 02 Respect the shared mix

**Append** requires shared space, master finishing and global motion to be off in both scenes. Choose **New Riser scene** when those shared treatments are part of the sound. Selected-voice capture is unavailable while a scene morph owns the scene; recall an anchor first.

## 03 What remains intact

The source Shepard scene remains available. No original recording is overwritten. The native transaction publishes only after successful preparation; cancellation or invalid sources keep the previous workspaces.

## 04 A transformation, not an identical continuation

The finite Riser engine has its own source playback and arrival envelope. A captured scene is not promised to be sample-identical to letting the endless engine run. Listen to timing, tuning, modulation and effects after transfer.

## 05 Work within the destination

Use the Riser duration and layer timing to shape the new build. Save a new named project, then export a finite WAV with its tail. Check that late entrances fall within the chosen take length.

> GOOD TO KNOW
> Captures require available destination capacity and valid source material. A successful new-scene capture can be undone. Save a named Riser checkpoint before replacing a valuable arrangement.

NEXT
→ SIX CONTROLS FOR A WHOLE DESIGN 72

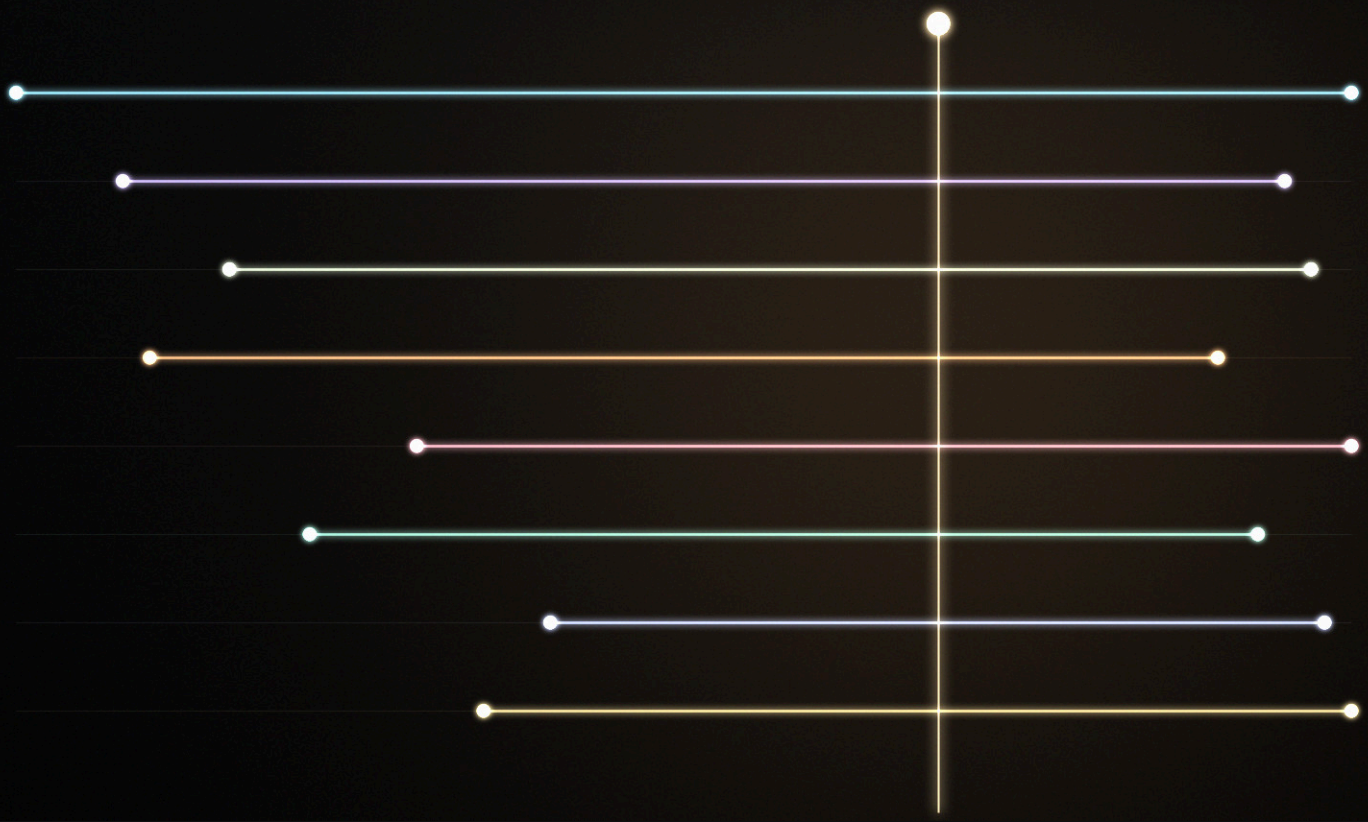
SEE ALSO
→ EXPORT A CONTINUOUS PASSAGE 94
→ LET LAYERS ARRIVE IN STAGES 41

# V

# Play *and recall*

Use macros, MIDI and host automation to perform the sound. Preserve the source design, route ownership and release behaviour when you save. Choose the sound that new instances open with.


| | | |
|---|---|---|
| 01 | Performance macros | 72 |
| 02 | Groups and snapshots | 73 |
| 03 | Host setup and MIDI triggering | 74 |
| 04 | Bounce and recall | 78 |
| 05 | Choose your starting sound | 84 |

EDITOR · PERFORMANCE

# Six controls *for a whole design*

V

Performance macros map musical gestures to several layer or effect settings.

OPEN Edit sound › Performance

| MACRO | TYPICAL MUSICAL ROLE |
|---|---|
| **Tension** | A useful home for increasing pitch, brightness or intensity. |
| **Weight** | A useful home for low body and layer balance. |
| **Air** | A useful home for upper content or master Air tone. |
| **Movement** | A useful home for grain, modulation or rhythmic energy. |
| **Space** | A useful home for layer space and shared sends. |
| **Edge** | A useful home for saturation and aggressive colour. |

## 01 Mappings define the meaning

These labels are not fixed effects. Choose a **Macro**, then a **Route** slot, **Destination**, target layers/group and **Low/High** range. Enable the route and **Apply route**. Up to sixteen mappings per macro provide a detailed performance design.

## 02 Ranges and precedence

Reversed ranges are valid. When several macro mappings target the same setting, the later mapping wins. A routed control can override a simple base value; inspect the mapping when an expected manual change is not heard. A direct edit of a routed control takes precedence until its macro is moved again.

## 03 Neutral starting point

Factory templates use macro mappings designed around their voicing. A zero macro value retains the authored starting relationship; higher values follow the assigned ranges. Master Air requires master finishing to be enabled.

NEXT
→ PERFORM MUSICAL ROLES TOGETHER 73

SEE ALSO
→ MAP YOUR HARDWARE 76

EDITOR · PERFORMANCE · GROUPS & SNAPSHOTS

# Perform *musical roles together*

V

Saved groups give you a durable way to control body, detail, rhythm, air and sub layers.

---

OPEN Performance › Groups and Snapshots

## 01 Assign a group

Select the intended rack layers, expand **Groups**, choose a role in **Assign selected layers** and press **Assign group**. Rename a group to suit the patch, then press **Apply group** to store its name, Level, **Mute** and **Solo**. Each layer membership is saved with the design.

## 02 Balance the group

**Group Level** adds to the existing layer levels. Group **Mute** and **Solo** let you audition or suppress that role. Keep individual faders for the mix inside the group.

## 03 Map a macro to a group

A route can use **Direct layer mask** or a named group. A group route follows that group membership, which makes the mapping easier to reuse as the arrangement changes.

## 04 Store performance snapshots

Name a slot and **Store** its current macro/group settings. **Recall** selects the performance state; **Clear** removes it. There are eight slots plus **Manual**. These snapshots do not replace the full source/curve states held by Scenes A-D.

## 05 Edit after recall

Changing a recalled control returns to manual authoring while preserving the other heard snapshot values. Save the result if you want the new performance state to become a named template.

> GOOD TO KNOW
> Temporary rack multi-selection answers “what am I editing now?” A named performance group answers “which layers form this musical role when I reopen the project?”

---

NEXT
→ LOAD IT AS AN INSTRUMENT 74

HOST WORKFLOW · SETUP

# Load it *as an instrument*

V

The standalone and plug-ins share the native sound engine; a DAW supplies routing, transport, automation and bounce.

---

1 **Create a stereo instrument track**

Load Riser Studio VST3 in a compatible host, or AU on macOS. Route the MIDI track to this specific instance. The plug-in **Play preview** button alone does not prove the DAW MIDI route works.

2 **Choose the workspace and trigger**

Select Riser or **Shepard Lab**. Choose **MIDI Notes** to play from notes, or host transport mode when the host playhead should trigger the sound. Host-trigger modes belong to the plug-in workflow.

3 **Start with a simple note**

Use the configured root note, initially MIDI note 60, and a moderate velocity. A different note transposes the sound without changing the selected Riser duration or the Shepard octave-cycle speed.

4 **Include the tail**

Place the MIDI note and bounce range to cover the intended source duration plus its reverb/delay release. Check the exported audio file, not only the live transport.

GOOD TO KNOW

The current instrument uses a monophonic retriggering performance model. A chord does not create an independent complete rise for every held note.

NEXT
→ CHOOSE HOW SOUND STARTS AND STOPS 75

SEE ALSO
→ RECORD THE REAL CONTROLS 77
→ BOUNCE IT, REOPEN IT, TRUST IT 78

HOST WORKFLOW · TRIGGERING

# Choose how sound *starts and stops*

V

The trigger source and the **MIDI playing mode** are separate choices.

| CHOICE | BEHAVIOUR |
|---|---|
| **Riser + MIDI** | A note starts the finite rise. Root-relative pitch changes preserve its duration. A finite rise still ends at the selected length if held longer. |
| **Shepard + MIDI** | A note starts the continuous scene. Note-off releases its source according to the playing mode; the capture/export length does not limit a held scene. |
| **Host transport** | Host Play starts the workspace; Stop releases it. Looping or seeking retriggers. MIDI notes do not retrigger this mode. |
| **Gate** | Note-off releases the held source. The effect tail can continue. |
| **One-shot** | Riser runs for its selected duration. Shepard releases after the capture length set when that note started. |
| **Latch** | The same key releases the latched sound; another key retriggers at its pitch. |
| **Sustain / velocity** | Sustain pedal holds release where supported. Velocity controls level; it is separate from the saved layer mix. |

## Root and expression

**Performance** exposes **MIDI root**, pitch-bend enable/range, and destinations for mod wheel and aftertouch. Pitch bend preserves duration. Use a sensible range and listen at the high end of a climb.

NEXT
→ MAP YOUR HARDWARE 76

HOST WORKFLOW · MIDI LEARN

# Map *your hardware*

V

**MIDI Learn** connects an absolute controller to an exposed native parameter.

OPEN Right-click a bound control, or Performance › MIDI Learn

| TYPE | SCOPE |
|---|---|
| **Supported** | Absolute 7-bit **CC**, channels 1–16. |
| **Reserved** | CC64 sustain; channel-mode messages CC120–127. |
| **Not supported** | Relative encoders, 14-bit **CC**, NRPN and MPE. |

1 **Choose the target**

Right-click the knob and choose **Learn MIDI CC**. Alternatively, open **MIDI Learn** on the **Performance** page, select the **Native parameter** and press **Learn selected control**.

2 **Move the controller**

Send the desired **CC** to the instrument track. The mapping remembers its MIDI channel and controller number. The native learn status shows the target/assignment.

3 **Enter or remove a mapping**

Use **Channel** and **CC** with **Map CC** for an explicit assignment. **Unmap selected control** removes that target mapping; **Cancel learn** exits the pending capture.

4 **Save and recall**

Assignments are part of saved templates and DAW state. Factory browsing preserves your controller assignments; opening a saved project restores the map saved with it.

CAREFUL

Route controller MIDI to the plug-in instance. A hardware movement cannot be learned if the DAW filters or sends it to a different track.

NEXT
→ RECORD THE REAL CONTROLS 77

HOST WORKFLOW · AUTOMATION

# Record *the real controls*

V

Host automation uses the native parameter identities, including controls in both workspaces.

## 01 Touch/write or draw

Enable the DAW automation mode you intend to use, move a bound knob, or choose the parameter in a host automation lane. Layer names begin Riser 1, Shepard 1 and so on. **Parameter index** helps locate an exact control.

## 02 Closed-editor operation

Automation and MIDI are processed by the native engine, not by the visible editor window. They can work with the editor closed and in offline rendering. Actual host validation is still a separate acceptance step for each DAW/version.

## 03 Base values, curves and routes

A knob sets a base control; its internal curve can shape it over the take. Performance or Motion routes may add their own ownership. Avoid accidentally automating a base field that a route intentionally overrides.

## 04 Follow relationships

Directly editing a linked amount can make it independent. Use its **Follow master** control to restore the relationship. Scene-morph Position is the appropriate automation target while a morph owns the scene.

## 05 Authored choices are different

File selection, engine/source menus, oscillator waveform choices, reverb style, curve point layouts and export destinations are stored design choices, not conventional continuous automation lanes. Prepare these before recording the performance.

> GOOD TO KNOW
> For a reliable recall check, close the editor, render a short automated test, save the DAW project, reopen it and compare the new bounce with the first one.

NEXT
→ BOUNCE IT, REOPEN IT, TRUST IT 78

SEE ALSO
→ EVERY CONTROL, BY FAMILY 103

HOST WORKFLOW · BOUNCE & RECALL

# Bounce it, reopen it, *trust it*

V

A saved preset, an active MIDI track and a rendered audio file prove different parts of the workflow.

---

*1* **Establish the performance**

Confirm workspace, MIDI/host trigger, root note, playing mode, duration, tempo, Pulse and automation. Start from silence and include the intended retrigger.

*2* **Render the complete interval**

Allow source time plus effect tail. A host selection may end exactly at the MIDI part boundary; extend the range if the release is being truncated.

*3* **Inspect the audio**

Listen to the beginning, the transition into the final arrival, and the tail. Check clipping, missing layers, Pulse acceleration and stereo/mono behaviour.

*4* **Reopen the project**

Save the DAW session and a named .riser checkpoint. Close/reopen the project, confirm the source and controls, then render again. Imported media should travel with the saved native state.

*5* **Keep a dependable delivery**

Retain the final WAV/stems and the editable source project. Offline render success does not establish low-latency performance on every machine or audio interface.

GOOD TO KNOW

If changing a preset takes time, let preparation finish. The current engine keeps a usable prior sound on failure, and queues the latest browsing choice. Do not mistake retained old audio after an error for a successfully loaded new preset.

NEXT
→ BROWSE WITHOUT LOSING CONTEXT 79

LIBRARY · PRESET BROWSER

# Browse *without losing context*

V

Riser and Shepard each have a separate factory collection and their own saved designs.

OPEN Click the header preset name




FIG 5.1 Actual native Portal editor. Captured 4 October 2026; example values.

1. **Previous and next arrows.** Step to the previous or next preset one at a time, straight from the header.
2. **Header preset name.** Click the name of the loaded preset in the header to open the preset browser.
3. **Find a preset.** Type here to search the list by preset name.
4. **All categories.** A collapsible menu for filtering by factory category, your own custom categories or Favourites.
5. **Preset list.** Each entry shows the preset name, its category and a short description of the sound.
6. **117 presets.** Counts the presets in the current selection; user designs may push it above the 100 factory templates.

## 01 Find a starting point

Search by name and use the collapsible category menu for factory categories, your custom categories or **Favourites**. The header arrows step through the whole workspace list, while the Up and Down keys move the highlight through the filtered results. Factory libraries contain 100 Riser templates and 100 Shepard scenes; user designs may increase the displayed total.

## 02 Preparation and switching

A source-heavy preset may require preparation. The latest browsing request is queued when you move faster than it can load. During playback, the engine transitions to a prepared replacement; no UI should imply a new sound is ready before it is usable.

## 03 Save your own design

Use **Save preset** to write a named .riser file. Factory files are separate from your user presets. Reopen a deliberate checkpoint after major import, scene or routing work.

NEXT
→ ORGANISE THE COLLECTION 80

SEE ALSO
→ SAVE THE DESIGN, NOT JUST THE AUDIO 83

EDITOR · LIBRARY

# Organise *the collection*

V

Use categories and favourites for quick browsing, with tags and collections for more specific working sets.

OPEN Edit sound › Library

| CONTROL | BEHAVIOUR |
|---|---|
| **Refresh presets** | Reads the current native list for the workspace. |
| **Refresh tags & collections** | Reads saved organisation metadata; this is separate from reloading the sound. |
| **Search / Select all shown** | Search names, categories and tags. Select the displayed subset or choose individual rows for a bulk action. |
| **Your categories** | **New category**, **Rename category** and **Delete category** manage custom groupings. **Add selected** or **Remove selected** changes membership for the chosen preset rows. |
| **Favourite** | The star button on each row marks that preset. Open **Favourites** in the main preset browser to narrow the list. |
| **Tags** | Enter comma-separated tags, then **Add tags** or **Remove tags**. These operations apply to the selected preset keys. |
| **Collections** | Create, rename and remove named collections; add or remove the selected presets from membership. |
| **Load / Header check** | Load opens the design. Header check reports compatibility for a saved user file before the full native load validation. |
| **Check exact duplicates** | Compares file bytes for selected user presets. Equal files are reported; no automatic deletion occurs. |

## 01 Categories and collections differ

Categories are the main preset-browser grouping. Tags describe multiple qualities; collections assemble a working set for a cue or project. Removing a custom category preserves the preset and audio files. Metadata does not rewrite protected factory sounds.

## 02 Compatibility is more than a header

A current or older schema header is useful feedback, but full source/control validation still occurs on load. A newer or malformed file should not replace the current usable project.

NEXT
→ EXPLORE WITHOUT STARTING OVER 81

EDITOR · VARIATION

# Explore *without starting over*

V

Variation changes selected sound qualities while preserving the structural intent of the design.

OPEN New variation, or Edit sound › Variation

| CONTROL | PURPOSE |
|---|---|
| **Amount** | The strength of the variation. Begin modestly when the patch is close to finished. |
| **Seed** | A repeatable whole-number identity for the generated variation, up to 16777215. |
| **Target layers** | The allowed layer mask. **Use selected layers** fills this from your rack selection. |
| **Protected layers** | The layer mask that should not change. Locked layers are protected as well. |
| **Tone / Effects / Movement / Balance** | Enable only the aspects you want varied. |
| **Save constraints / Create variation** | Store the allowed scope, then apply a new native version. **Undo** restores the previous design. |

## 01 What stays anchored

Duration, tuning, source identity, layer timing and drawn curves remain fixed in the constrained variation design. The aim is a related version, not a wholesale replacement of the musical arrangement.

## 02 Compare fairly

Store the original in A before exploring. If the new variant is louder or wetter, use matched audition to compare character and shape rather than apparent size alone.

NEXT
→ KEEP LARGE CONTENT ON THE RIGHT DRIVE 82

SEE ALSO
→ BUILD A COMPLETE TAKE SET 95

EDITOR · STORAGE

# Keep large content *on the right drive*

V

Storage tools manage owned content and processed preview cache without treating your whole audio library as disposable cache.

OPEN Edit sound › Storage

| CONTROL | MEANING |
|---|---|
| **Refresh storage usage** | Reports actual configured locations, availability, owned usage, file count and free space. |
| **Optional content** | The managed factory recipe and protected-texture location. **Installed read-only content** is reported separately. |
| **Processed preview cache** | An opt-in disk cache of processed mixes and aligned stems. It is not the live source-preparation engine or a dry-source archive. |
| **Copy to another drive** | Creates a dedicated destination, copies and verifies data, then changes the preference. The prior folder is retained. |
| **Reconnect existing folder** | Reconnects an existing managed folder with the expected ownership marker. |
| **Unavailable drive** | Keeps the selected path and error visible. Installed bundled content can remain available; an absent external drive is not silently recreated. |

## 01 Relocation is not cleanup

Disabling the cache does not delete its files. The interface has no blanket delete-everything action. Keep saved presets, source recordings, DAW projects and exports separate from optional caches.

## 02 Use a stable destination

Do not disconnect a drive during writing. If preparation or a batch reports insufficient space, choose an available volume or reduce the batch rather than deleting unrelated media.

NEXT
→ SAVE THE DESIGN, NOT JUST THE AUDIO 83

RISER STUDIO · 1.1.1

# Save the design, *not just the audio*

V

A preset keeps the editable layers, source arrangement and sound controls.

## 01 Save a new sound

Choose **Save preset**. Enter a name, choose or type a category, and add useful tags. Saving places the sound in the managed user library, makes it current and refreshes the User browser.

## 02 Overwrite deliberately

The current user preset offers an explicit **Overwrite** action. A factory preset is saved as a user copy. If the file changed while the save dialog was open, reopen the dialog before replacing it.

## 03 Separate workspaces

Riser and Shepard Lab have separate user libraries. Save from the workspace you intend to keep. An audio export is a rendered file, not an editable preset.

## 04 Choose the library folder

Open **Settings → User preset folders**. Choosing another folder selects a library; it does not move or delete your existing files. Keep external drives connected when their libraries are in use.

## 05 Verify the result

Reload the named preset and audition it. Keep your original audio and a project backup for important work; a successful write is separate from listening approval.

NEXT
→ CHOOSE YOUR STARTING SOUND 84

WORKFLOW · SETTINGS

# Choose your *starting sound*

V

New instances can open with the sound you choose. Open Settings, the button next to About, and store the sound you are editing.

OPEN Settings › Startup sound

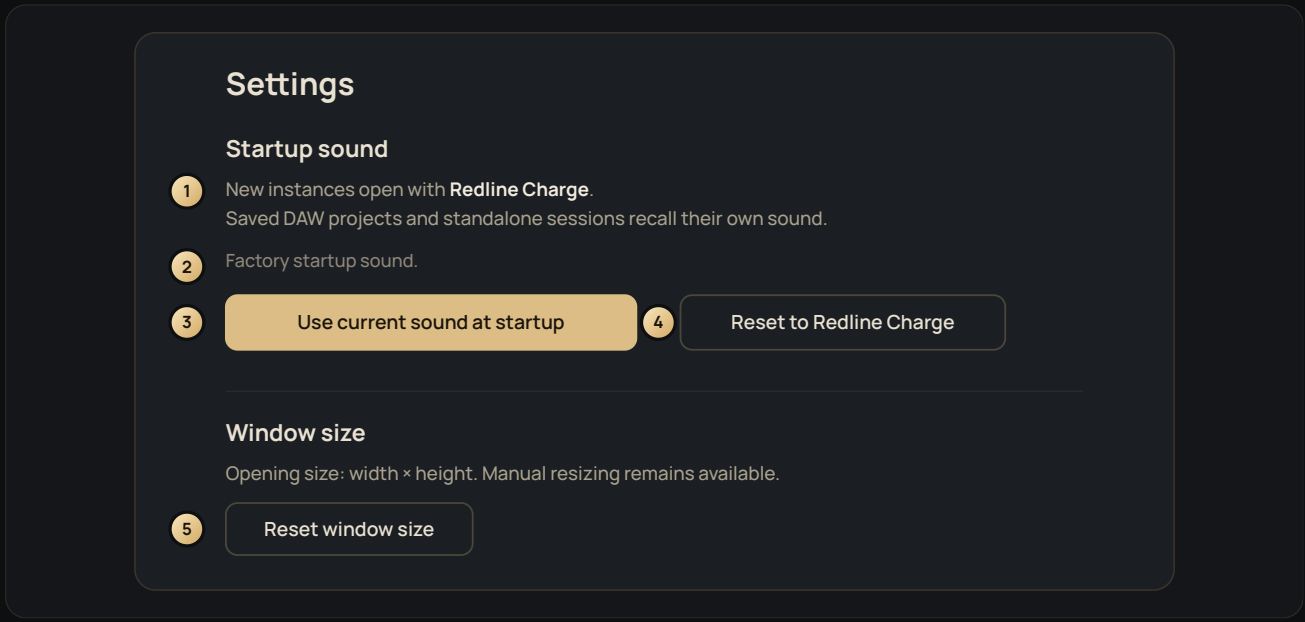



ILLUSTRATION The Settings dialog redrawn from its interface text. It is not a screenshot.

1. **Startup sound.** Names the sound new instances open with. It reads Redline Charge until you store a sound of your own.
2. **Status line.** Reads Factory startup sound while the factory choice is active. Once you store a sound it says that the stored sound includes its layer edits and original sources, and it reports a problem if the saved choice cannot be read.
3. **Use current sound at startup.** Stores the sound you are editing, with its layer edits and original sources, as the sound new instances open with.
4. **Reset to Redline Charge.** Returns new instances to the factory sound and removes the stored copy from this computer.
5. **Reset window size.** Returns the editor to the opening size shown in the line above it. You can still resize the window by hand.

## 01 Store the sound you want

Build or load the sound, open Settings and choose **Use current sound at startup**. The name in the line under Startup sound changes to the name of that sound, or to the scene name in Shepard Lab. The stored copy includes the layer edits and the original sources, so a new instance opens as you left it. It is a copy: editing the sound afterwards does not change it, so choose the button again to update it.

## 02 Return to the factory sound

Choose **Reset to Redline Charge**. New instances open with the factory sound again, and the stored copy is removed from this computer.

GOOD TO KNOW

The buttons wait while an import, preparation or export is running. If another Riser Studio instance is saving the startup sound at that moment, try again shortly.

NEXT
→ WHAT OPENS, AND WHEN 85

SEE ALSO
→ BROWSE WITHOUT LOSING CONTEXT 79
→ SAVE THE DESIGN, NOT JUST THE AUDIO 83

WORKFLOW · SETTINGS · RULES

# What opens, *and when*

V

The startup sound is for new instances only. Saved work always recalls its own sound.

OPEN Settings › Startup sound

| WHEN | WHAT OPENS |
|---|---|
| **A new plug-in instance** | Opens with your startup sound, or with Redline Charge if you have not stored one. |
| **A saved DAW project** | Recalls the sound saved inside that project. The startup sound is not applied. |
| **The standalone app, fresh session** | Opens with your startup sound. Normally the app restores its Last session instead, so you meet the startup sound on a first launch or when there is no session to restore. |
| **An instance that is already open** | Keeps its sound. A new choice affects the instances you open afterwards. |

## 01 Where the choice is kept

The choice is a local preference. It is kept apart from presets, DAW projects and standalone sessions, and it is not shared with other computers. One startup sound is stored at a time; storing another replaces the first. It lives in a Startup Sounds folder inside the Riser Studio data folder: on a Mac ~/Library/Application Support/Riser Studio, on Windows %APPDATA%\Riser Studio. A sound larger than 160 MB cannot be stored, and the previous choice stays in place.

## 02 If the stored sound cannot be opened

A missing or unreadable startup sound never stops an instance from opening: it opens with Redline Charge instead. The status line explains when the saved preference itself cannot be read. Store the sound again to repair the choice.

## 03 Window size

The Window size section of the same dialog shows the opening size of the editor. **Reset window size** returns the window to it. Manual resizing remains available.

NEXT
→ PLAY FROM YOUR MIDI KEYBOARD 86

SEE ALSO
→ SAVE THE DESIGN, NOT JUST THE AUDIO 83
→ BROWSE WITHOUT LOSING CONTEXT 79

RISER STUDIO · 1.1.1

# Play from your *MIDI keyboard*

V

The Mac and Windows standalone apps can receive MIDI without a DAW.

OPEN Standalone › Settings › Audio & MIDI

## 01 Connect the keyboard

Connect or switch on your MIDI device. Newly discovered inputs are enabled automatically. Give the standalone a moment to finish restoring its session and discover the device.

## 02 Choose your input and output

Open **Settings → Audio & MIDI → Audio & MIDI devices**. Choose your audio output and enabled MIDI inputs. On Mac, the application's Settings menu also opens this window.

## 03 Play Riser or Shepard

Choose the workspace, then MIDI Notes in Trigger. Use a moderate output level and play a note. The standalone starts in MIDI trigger mode; the instrument's playing mode determines note-off and sustain behaviour.

## 04 Keep your choices

Disabled MIDI inputs stay disabled after reconnecting or reopening. New devices are discovered automatically. A disconnected input sends note-release messages so held notes do not remain stuck.

## 05 If no sound arrives

Check that the device appears and is enabled, that an audio output is selected, and that Riser Studio is activated. Check the device cable and driver. In a VST3 or AU plug-in, configure MIDI routing in the DAW instead.

NEXT
→ CONNECT YOUR ASSISTANT 87

RISER STUDIO · 1.1.1

# Connect *your assistant*

V

Use Model Context Protocol to work with the native instrument from a compatible assistant.

OPEN Mac standalone › Settings › MCP setup

## 01 Open the standalone app

MCP is available in the Mac standalone app. It does not control a VST3 or AU instance inside a DAW. Keep the app running and wait for its sound to finish loading.

## 02 Enable local access

Open **Settings → MCP setup** and enable local agent access. Access is off by default. The Settings panel shows the current status and recent activity.

## 03 Copy the exact setup

Choose **Copy client setup**, then add the copied configuration to a client that supports local stdio MCP servers. Restart or reconnect that client. The bundled helper needs no customer Python or Node installation.

## 04 Choose folders

Use **Manage access and folders** to choose permitted source locations and the export destination. The assistant cannot grant itself additional folder access.

## 05 First request

Ask the assistant to describe the current Riser and Shepard sounds before changing anything. Confirm it has connected to the instance you intend to edit.

NEXT
→ DESCRIBE THE CHANGE YOU HEAR 88

RISER STUDIO · 1.1.1

# Describe the change *you hear*

V

Use specific musical instructions, then inspect and audition the result.

## 01 Shape a sound

For example: “Make the upper layers wider, keep the sub centered, and add a little more reverb without changing the duration.” The assistant edits native parameters and curves; every result remains your sound to judge.

## 02 Explore alternatives

For example: “Make three variations of this riser, preserve the locked sub, and save each as an editable preset.” Take Builder and seeded variation retain editable outputs and the original design.

## 03 Work in Shepard Lab

Ask for a named scene, a direction, cycle and capture length. The assistant can edit layers, prepare a finite passage, or transfer a supported Shepard capture into editable Riser layers.

## 04 Finish the job

Ask for a render and an explicit WAV mix or stems at your chosen sample rate. Long jobs expose progress and cancellation. A requested export is not finished until the job reports completion and an output path.

## 05 Stay in control

UI and assistant edits share the same native state. Incompatible edits may be refused while a workflow is preparing. Wait or cancel, then reread the current state before trying again.

NEXT
→ ACCESS, PRIVACY AND TROUBLESHOOTING 89

RISER STUDIO · 1.1.1

# Access, privacy *and troubleshooting*

V

The connection is local; the assistant client has its own data handling.

## 01 Revoke access

Turn local agent access off in Settings to disconnect assistants. Reenable it only when needed. The app controls access and approved folders; an assistant cannot enable its own connection.

## 02 Understand what is shared

Audio processing stays in Riser Studio. State or source information read by an assistant may be sent to its provider by the client. Review that client's privacy policy before sharing sensitive work.

## 03 If connection fails

Keep the standalone app open, confirm local access is on, and copy setup from the installed app you are actually running. Moving the app can change the helper path; copy setup again afterward.

## 04 If a job is refused

Check source/export permissions, active workflows and the latest state revision. A stale edit is rejected to preserve newer work. Query the existing job before retrying a timed-out request.

## 05 Client and platform scope

The native helper was tested with the official TypeScript MCP SDK and MCP Inspector. Other clients require their own configuration and validation. Windows MCP and DAW plug-in MCP are outside the current supported scope.

NEXT
→ KEEP THE INSTRUMENT CURRENT 90

RISER STUDIO · 1.1.1

# Keep the *instrument current*

V

Update controls help you find a new installer while preserving your working version.

## 01 Check for updates

Use the update controls in Settings to check manually or choose automatic checks. A connection failure should not remove a valid offline activation or change your current sound.

## 02 Download and verify

When a published update is available, the app verifies the signed feed and downloaded installer checksum. Wait for completion before revealing or opening the installer.

## 03 Install deliberately

Save your sound and close Riser Studio and your DAW. Run the installer, reopen the application, confirm the version and test a saved project.

## 04 Keep a way back

Retain the previous installer and your own preset/project backups until your session works. Older 0.90 builds without an update checker need their first update downloaded manually from the official page.

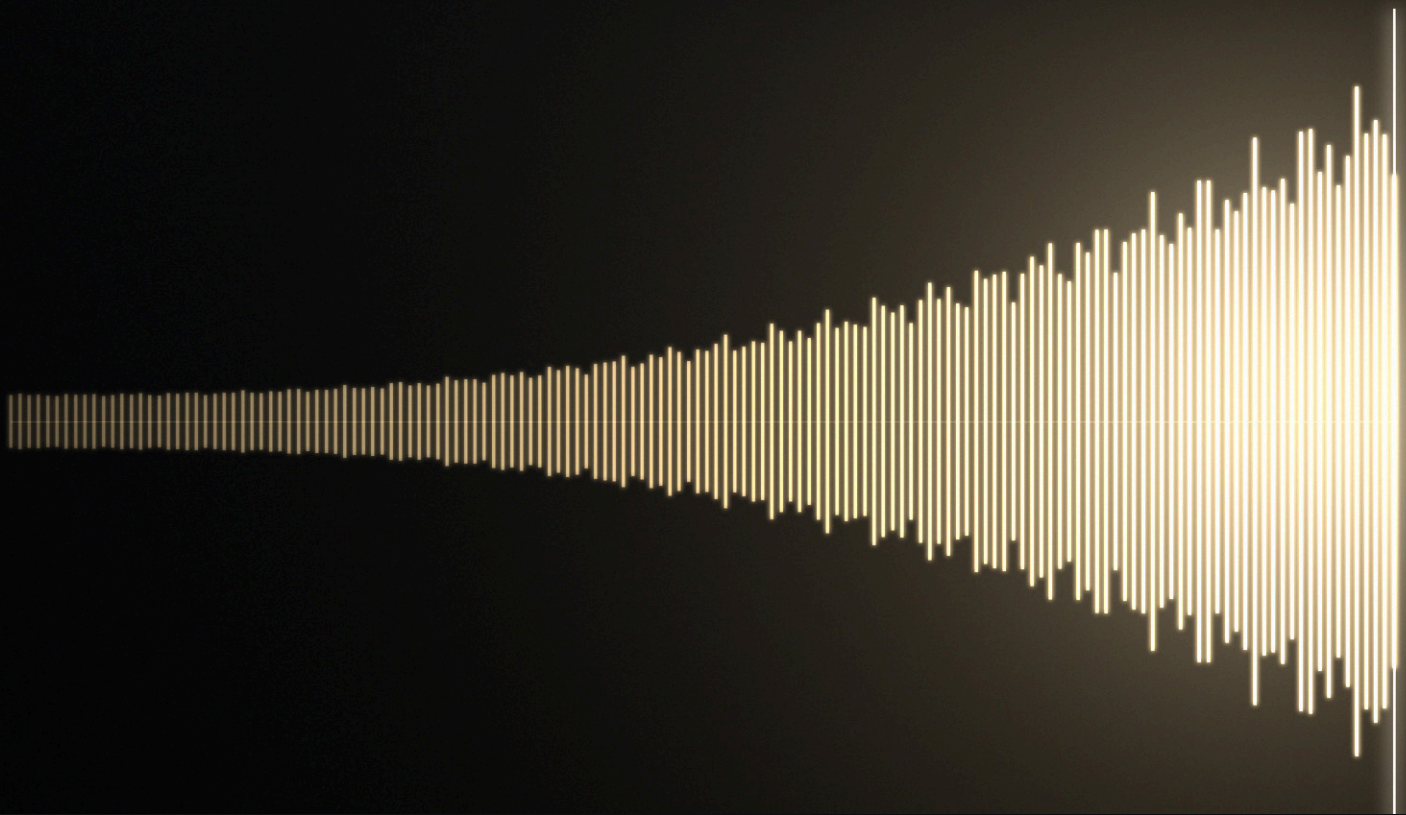
NEXT
→ EXPORT THE SOUND YOU DESIGNED 92

# VI

# Finish *and deliver*

Export a single mix, supply aligned stems or build an organised set of variations. Keep the editable design alongside the audio.


| | | |
|---|---|---|
| 01 | WAV export | 92 |
| 02 | Aligned stems | 93 |
| 03 | Circular Shepard passages | 94 |
| 04 | Take Builder | 95 |
| 05 | Four useful starting designs | 96 |

DELIVERY · WAV

# Export *the sound you designed*

VI

The native renderer uses the current authored sound and retains effect tails for an ordinary finite export.

OPEN Header Export, or Edit sound › Delivery

| CHOICE | RESULT |
| --- | --- |
| **Stereo mix** | A complete stereo WAV. |
| **Layer / shared return** | Choose an individual layer or **Close room**, **Large hall** or **Echo return**. |
| **Aligned stems** | An organised set of layer and return files sharing the delivery timeline. |
| **Sample rate** | 44.1, 48 or 96 kHz. |
| **Format** | **24-bit PCM WAV** or **32-bit float WAV**. |
| **Shepard capture length** | Ordinary finite capture is 1–120 seconds. **Circular passage** uses 1–30 seconds. Gate-mode held performance is separate. |
| **Cancel render** | Cancels the worker job. Previously published files and the current successful sound are preserved. |

## 01 Choose the destination

The native file dialog selects the actual folder/file. Use a clear take name and an available drive. Wait for successful completion, then inspect the WAV rather than inferring success from the button click.

## 02 Drag to DAW

The export dialog can prepare a durable WAV for an OS drag. Drag it into an audio track or media pool in a host that accepts file drops. The audio file remains available beyond the transient drag gesture.

NEXT
→ DELIVER A RECONSTRUCTABLE MIX 93

DELIVERY · LAYERS & RETURNS

# Deliver a *reconstructable mix*

VI

Aligned files let the mixer rebalance roles and returns while retaining your timing and processing relationships.




ILLUSTRATION Explains behaviour; it is not a measured audio trace.

## 01 Layer stems

Each active contribution shares the delivery start, source timeline and release duration. Local effects belong to their layer processing; shared effects are delivered as separate returns.

## 02 Three shared returns

**Close room**, **Large hall** and **Echo** are not repeated into every layer stem. Keep their files aligned with the layers. A solo return may sound sparse or quiet because it is only the wet contribution.

## 03 Master treatment

Linear finishing and common dynamics/protection relationships are applied consistently so the delivered parts reconstruct the finished mix. These are processed delivery stems, not a promise of dry source extraction.

## 04 Reconstruction check

Import every stem at the same timestamp, leave file gains at unity and avoid independent normalization. Compare the sum with the supplied mix. Differences caused by changing gains, extra DAW processing or missing returns are not evidence that the original delivery was misaligned.

## 05 Tails and loops

Ordinary finite files include the release tail. Circular passages use exactly one loop period and wrap continuing returns rather than appending a tail. Choose the delivery type that matches the destination.

GOOD TO KNOW

**Float WAV** is useful for a processing handoff; **24-bit PCM** is a conventional fixed-resolution delivery. Either still needs an intentional output level and a listened-to ending.

NEXT
→ EXPORT A CONTINUOUS PASSAGE 94

DELIVERY · SHEPARD CIRCULAR PASSAGE

# Export *a continuous passage*

VI

Shepard circular delivery is designed for looping a settled scene rather than replaying its initial entrance.

OPEN Shepard Lab › header Export, or Edit sound › Delivery › Circular passage

## 01 Ordinary take versus passage

A normal take begins the scene and releases it into a tail. A circular passage warms up the ongoing sources and effects, records continuous material and prepares the boundary for looping. It has no appended release tail.

## 02 Boundary handling

The native exporter uses a controlled overlap transition with shared stereo alignment and consistent layer/return timing. It does not claim that arbitrary oscillator or grain phases naturally repeat at every requested length.

## 03 Choose a compatible arrangement

Finite layer endpoints are not appropriate for an endless passage. Use **Endless** source timing and make the modulation/linked-cycle relationship musically suitable. A seamless sample edge alone cannot guarantee a satisfying musical loop.

## 04 Choose duration and transition

Both entry points open the same passage options: 1–30 seconds, transition time, sample rate, format and mix or aligned stems. The transition defaults to 250 ms and must stay valid for the chosen duration. A zero-transition request is refused.

## 05 Export and inspect

Choose the destination, then wait for successful completion. Reimport the file, repeat it several times at the exact boundary and listen to pitch continuity, energy and stereo balance. Check aligned returns if supplying passage stems.

## 06 The initial swell is different

Settled warmup intentionally omits the initial entrance of the scene. Use an ordinary take if that beginning is part of the cue. Keep a finite transition and a loop as separate assets when the arrangement needs both.

> CAREFUL
> A clean boundary is a delivery check, not a guarantee that every sound makes a satisfying musical loop. Listen through several repetitions at the intended cue tempo.

NEXT
→ BUILD A COMPLETE TAKE SET 95

EDITOR · TAKES

# Build a *complete take set*

VI

**Take Builder** renders combinations from an immutable snapshot, with organised audio and optional source projects.

OPEN Edit sound › Takes

| FIELD | MEANING |
|---|---|
| **Set name** | The delivery identity used in names and metadata. |
| **Lengths / seconds** | Comma-separated values from 1–30 in the Portal. Example: 4, 8, 12. |
| **Intensity** | Comma-separated values from 0–1; 0.5 preserves the current intensity relationship. |
| **Variation seeds / amount** | Seeds define repeatable variations; **Amount** controls their strength. |
| **Space** | Keep current authored space, or create Current, Intimate and Expansive alternatives. |
| **Mix / Aligned stems / Portable source project** | Choose delivery components. Include at least a mix or stems. |
| **Scale layer timing** | Adapts layer timing to the variant duration when enabled. |
| **Build take set / Cancel build** | Choose a new destination, render with real progress, or stop the batch. |

## 01 Count combinations before starting

Three lengths × two intensities × three spaces × two seeds creates 36 takes. The native limit is 256 takes and a bounded delivery budget. Use an adequately sized drive and keep heavy renders serial.

## 02 Keep the snapshot dependable

The request captures the sound when you begin. Subsequent live edits do not silently change later items in that accepted batch. Metadata and optional portable projects make each variation traceable.

NEXT
→ FOUR USEFUL STARTING DESIGNS 96

PRACTICE · CINEMATIC DESIGN

# Four useful *starting designs*

VI

Use these as arrangement directions, then adapt them to the cue and source material.

---

### 01 Broad hybrid ascent

Use a smooth spectral body from a resonant recording. Add a quieter wide **Synth** and later **Air** entrance. Keep the main **Evolution** mostly rising. Add hall space with a controlled low cut; let **Ember** build near the end.

### 02 Tight rhythmic lift

Keep the body continuous. Put **Gate Pulse** on one detail layer, **From 1/4 to 1/32**, with a late-steep rate curve. Use a short pattern with a few rests and one ratcheted accent. Add only enough echo to connect the rhythm without masking it.

### 03 Subtle transition

Use a darker source, modest pitch movement and a small opening level. Let brightness and room send create the growth. Avoid heavy distortion or deep vibrato. A shorter, quieter rise can remain cinematic without becoming aggressive.

### 04 Endless tension scene

In Shepard, combine a slow bowed or choir-like tone with a prepared textured layer and restrained air. Offset their cycle phases and registers. Keep a dominant direction, then use a modest counter-moving accent. Listen through several cycles before exporting.

> GOOD TO KNOW
> Level-match comparisons. Wide, loud and busy are separate qualities; none automatically means a better cinematic sound.

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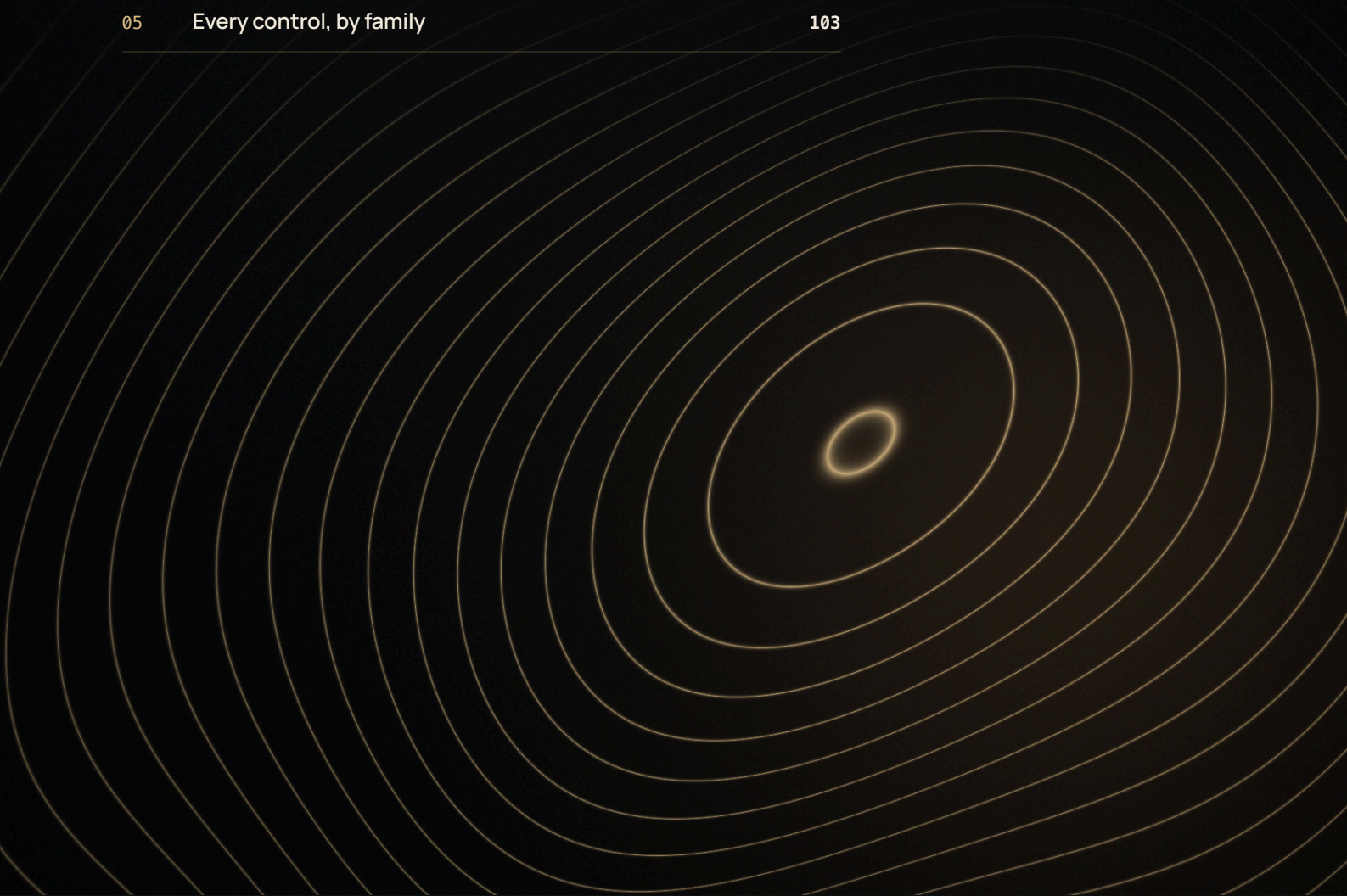
NEXT
→ WHEN THE SOUND IS WRONG 98

# VII

# Look it *up*

When something sounds wrong or a workflow stalls, look it up here: troubleshooting, gestures, vocabulary, platform limits and every control in the instrument.


| | | |
|---|---|---|
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REFERENCE · SOUND TROUBLESHOOTING

# When *the sound is wrong*

VII

Reduce the design to one audible cause before changing several unrelated controls.

| SYMPTOM | CHECK FIRST |
|---|---|
| The opening is silent | Check the first **Evolution**/volume point, layer Start, **Pulse** depth/region and trigger mode. A long quiet build may be authored, not a missing source. |
| Imported audio is too quiet | Confirm the selected source name, layer **On/Mute/Solo**, level, channel trims, envelope and processing. Compare **Raw sampler** with **Make riser** preparation if the source role differs. |
| Repeated bursts or quiet gaps | Use a steady region or **Spectral reservoir**. A loop overlap can soften an edge without removing the source attack/decay history. |
| Granular sound is glitchy | Increase grain overlap/size, reduce movement, or move the body toward spectral sustain. Keep deliberately fragmented layers quieter. |
| Pulse stays at one rate | Check different **From/To** values, **Sweep** on, a rising **Rate curve**, nonzero Depth and the intended layer target. |
| Pulse is hidden | Solo the layer, reduce delay/reverb, set **Gate** and high depth, and remove stereo offset. Add the rest of the mix back deliberately. |
| Shepard becomes piercing | Lower centre or range, reduce bright harmonic content/resonance, damp the space and rebalance the offending layer. Test more than the first few seconds. |
| Effects seem disconnected | Check **Amount**, **Curve Depth**, follow ownership, send/bus enable/return, performance routing and scene morph. |

GOOD TO KNOW

If a reproducible defect remains, save a small .riser example, note the exact source and steps, and provide a short exported audio example. A screenshot alone cannot prove an audio problem.

NEXT

→ WHEN THE WORKFLOW STALLS 99

REFERENCE · WORKFLOW TROUBLESHOOTING

# When *the workflow stalls*

VII

Preserve the usable state, read the native status and retry the smallest failing action.

| SYMPTOM | ACTION |
|---|---|
| **Old preset still heard** | Read preparation/error status. A queued load may not yet be committed; failure intentionally retains prior audio. Let the latest request complete before judging the result. |
| **Drop rejected** | Use one WAV/AIFF/FLAC within 30 seconds and 128 MB. Check rack capacity, available drive and whether active morph owns the source. |
| **Curve cannot be edited** | Check **Target**/lane and whether the scene morph is active. **Recall** an anchor for ordinary editing. Inherited curves need the correct follow relationship. |
| **Reverb tail cut in bounce** | Extend the DAW render range; check master clip fades and source exit. Ordinary export and circular passage have different tail rules. |
| **MIDI does nothing** | Confirm the track route, instrument instance, **MIDI Notes** trigger, channel and host monitoring. Editor preview is a different trigger. |
| **High CPU or dropouts** | Use fewer dense layers, higher device buffer and lower sample rate while designing. Run one heavy export at a time. Compare with the editor closed. |
| **Missing external drive** | Reconnect it or use **Storage** › **Reconnect existing folder**. Do not create unrelated replacement folders at the missing path. |
| **Save or batch fails** | Check destination, free space, naming and combined media limits. Existing successful work should remain; save a new named checkpoint when possible. |

NEXT

→ GESTURES AND PRECISE ENTRY 100

SEE ALSO

→ PLATFORMS AND RELEASE STATUS 102

→ KEEP LARGE CONTENT ON THE RIGHT DRIVE 82

REFERENCE · SHORTCUTS

# Gestures *and precise entry*

VII

Use the visible controls and focused keyboard actions; host shortcuts may take precedence in plug-in windows.

| ACTION | RESULT |
|---|---|
| **Drag a rotary knob** | Adjust the native parameter. Use its value entry for exact settings. |
| **Shift while dragging a knob** | Fine adjustment where the custom control supports it. |
| **Double-click a knob** | Return to its default where offered by the control. |
| **Right-click / context-menu key** | Open **MIDI Learn** actions on a bound control. |
| **Command-click / Alt-click layer** | Add individual layers to the selection on Mac / Windows. |
| **Double-click curve background** | Insert a point between existing points. |
| **Time / Level entries** | Set the selected curve point exactly. |
| **Arrow Up / Down on volume point** | Adjust its level in focused keyboard editing. |
| **Arrow Left / Right on timing handle** | Nudge the focused timing edge/region. |
| **Escape** | Dismiss an open menu/dialog where supported. |
| **Command/Ctrl-Z / Shift-Command/Ctrl-Z** | **Undo** / **Redo** outside text-entry fields. |
| **Drag a file onto card / empty space** | Replace that layer / add a prepared audio layer. |

## Selection is for editing, not page text

The instrument suppresses accidental browser text selection while dragging controls. Text-entry fields remain editable so preset names, numeric values and searches can be changed.

NEXT

→ A SHARED VOCABULARY 101

REFERENCE · GLOSSARY

# A shared *vocabulary*

VII

The same terms appear in the rack, graph, effects and delivery pages.

| TERM | MEANING |
| --- | --- |
| **Ascent / riser** | A finite sound that builds toward an arrival, often through pitch, brightness, level and density. |
| **Evolution** | The drawn normalized trajectory used by the workspace/layer and linked modulation lanes. |
| **Grain** | A small windowed fragment of a recording, overlapped with other grains. |
| **Spectral reservoir** | Prepared sustained material derived from a source spectrum rather than repeated dry attack history. |
| **Send / return** | A layer contribution into a shared effect / the resulting shared output. |
| **Mid / Side** | The common centre information / the left-right difference used in stereo processing. |
| **Pulse / ratchet** | Amplitude rhythm / repeated subdivisions within a pattern hit. |
| **Shepard tone** | An octave-layered pitch illusion that can seem to rise or fall continuously. |
| **Scene / snapshot** | Complete sound anchor / performance macro-and-group memory. |
| **Stem** | A rendered layer or return contribution aligned with the mix. |
| **Sample peak / true peak** | Measured sample maximum / reconstructed intersample maximum. The master protection makes a sample-peak claim. |
| **Recall** | Restoring saved controls, sources and routes so the design can be played or rendered again. |

NEXT

→ PLATFORMS AND RELEASE STATUS 102

RISER STUDIO · 1.1.1

# Platforms and *release status*

VII

Use the release page for the exact installer and currently tested configurations.

## 01 Mac

Universal standalone, VST3 and AU are build targets. The MCP connection belongs to the Mac standalone application. Keep the app open while a connected assistant works.

## 02 Windows

x64 standalone and VST3 are prepared, with WebView2 required for the editor. Native automated tests do not replace interactive audio-driver and commercial-host checks. Windows publisher signing is pending.

## 03 Performance

Start with 48 kHz and a practical buffer such as 512 or 1024 samples. Dense eight-layer designs, multiple instances and higher rates increase processing cost. Measure your real session before reducing the buffer.

## 04 Support

Include version, OS, DAW, sample rate, buffer size, preset name and reproduction steps. A small shareable preset is more useful than an unrelated full project.

## 05 Scope of this guide

This guide covers Riser Studio 1.1.1. Use the official Updates & downloads page for current installers, signing status and platform requirements.

NEXT
→ EVERY CONTROL, BY FAMILY 103

REFERENCE · CONTROL DIRECTORY

# Every control, *by family*

VII

Use this appendix with the **Parameter index** to find a control, understand its range and see what it changes. Repeated slots are shown once.

---

## 01 Find a control in the instrument

Open **Edit sound** › **Parameter index**, then search by the visible control name. The host parameter name identifies the workspace and layer. The companion machine-readable map retains every native identity for technical support and automation auditing.

## 02 Repeated controls

The same layer controls appear across up to eight Riser and eight Shepard slots. LFOs, routes, steps and groups repeat too. This compact directory accounts for 3434 native host identities without printing the same control eight times. Different Riser/Shepard ranges are identified explicitly.

## 03 Ranges and display

Percent values are shown as percentages. A normalized 0–1 value means zero to full scale; a signed −1 to 1 value spans both directions. Hz means cycles per second, st means semitones, ct means cents, and beat values are quarter-note beats. A range is not a recommendation to use its maximum.

## 04 Design choices

Audio file selection, source-engine menus, oscillator wave menus, reverb style, curve point layouts, scene storage and export destinations are authored commands, not ordinary scalar automation lanes. They are covered in the workflow chapters.

## 05 Snapshot scope

This reference reflects the 14 October 2026 native inventory, build version 1.1.0. Long Riser presets use schema 33; ordinary short presets retain their earlier format. Host and musical acceptance are recorded separately.

---

NEXT
→ THE CONTROL DIRECTORY 104

REFERENCE · CONTROL DIRECTORY

# The *control directory*

VII

Every native control, grouped by family, with its range and what it changes. Repeated layer, step and route controls are listed once.

## Workspace and scene controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Duration | 1 to 30 s | Legacy 1–30 second duration lane; Duration extension adds time for longer takes. |
| Pitch rise | 0 to 36 st | Workspace climb for linked layers. |
| Grain size | 10 to 300 ms | Fragment length for linked layers. |
| Grain density | 0 to 100 % | Activity/overlap of linked grains. |
| Atmosphere | 0 to 100 % | Spectral contribution for linked layers. |
| Brightness | 0 to 100 % | Top-end control for linked layers. |
| Movement | 0 to 100 % | Source motion for linked layers. |
| Space | 0 to 100 % | Shared overview of linked layer space amounts. |
| Width | 0 to 100 % | Workspace width for linked layers. |
| Output level | −24 to 0 dB | Workspace output balance. |
| Manual tempo | 20 to 300 BPM | Tempo when the manual clock is used. |
| Shepard Output level | −60 to 12 dB | Workspace output balance. |
| Shepard curve cycle | 1 to 30 s | Length of the repeating modulation cycle. |
| Shepard Manual tempo | 20 to 300 BPM | Tempo when the manual clock is used. |
| Shepard Pitch rise | 0 to 36 st | Workspace climb for linked layers. |
| Shepard Grain size | 10 to 300 ms | Fragment length for linked layers. |
| Shepard Grain density | 0 to 100 % | Activity/overlap of linked grains. |
| Shepard Atmosphere | 0 to 100 % | Spectral contribution for linked layers. |
| Shepard Brightness | 0 to 100 % | Top-end control for linked layers. |
| Shepard Movement | 0 to 100 % | Source motion for linked layers. |
| Shepard Space | 0 to 100 % | Shared overview of linked layer space amounts. |
| Shepard Width | 0 to 100 % | Workspace width for linked layers. |
| Morph enabled | Off / On | Use the prepared scene pair. |
| From scene | A / B / C / D | Stored anchor at the start endpoint. |
| To scene | A / B / C / D | Stored anchor at the end endpoint. |

## Workspace and scene controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Morph position | 0 to 1 normalized | Zero = From; one = To. |
| Transition time | 20 to 1000 ms | Smoothing of position/source transitions. |
| Duration extension | 0 to 90 s | Adds up to 90 seconds beyond the legacy Duration value. The main seconds field manages both together. |
| Hard cutoff at climax | Off / On | Stops all Riser audio and effect tails at the chosen duration. Off retains natural tails. |

## Layer source, mix and timing

| CONTROL | RANGE | MEANING |
|---|---|---|
| Layer level | −60 to 24 dB | Gain of one layer before the complete mix. |
| Pan | L 100 / C / R 100 | Left, centre or right placement. |
| Left level | −60 to 6 dB | Trim of the source left channel. |
| Right level | −60 to 6 dB | Trim of the source right channel. |
| Mute | Off / On | Suppress the layer without removing it. |
| Solo | Off / On | Isolate the layer with other soloed layers. |
| Layer on | Off / On | Enable this source slot. |
| Start time | 0 to 29.98 s | Time before the layer enters. |
| Pitch | −24 to 24 st | Independent semitone transposition. |
| Octave / Riser | −3 to 3 oct | Coarse octave transposition. |
| Octave / Shepard | −4 to 4 oct | Coarse octave transposition. |
| Pitch follows master | Off / On | Use the workspace value instead of an independent layer amount. |
| Pitch rise / Riser | −36 to 36 st | Independent climb over the layer trajectory. |
| Pitch rise / Shepard | −48 to 48 st | Independent climb over the layer trajectory. |
| Grain follows master | Off / On | Use the workspace value instead of an independent layer amount. |
| Grain size / Riser | 10 to 300 ms | Duration of each source fragment. |
| Grain size / Shepard | 8 to 400 ms | Duration of each source fragment. |
| Density follows master | Off / On | Use the workspace value instead of an independent layer amount. |
| Density | 0 to 100 % | Grain activity and overlap. |
| Atmosphere follows master | Off / On | Use the workspace value instead of an independent layer amount. |
| Atmosphere | 0 to 100 % | Amount of spectral texture. |
| Brightness follows master | Off / On | Use the workspace value instead of an independent layer amount. |

## Layer source, mix and timing

| CONTROL | RANGE | MEANING |
|---|---|---|
| Brightness | 0 to 100 % | Layer high-frequency character. |
| Movement follows master | Off / On | Use the workspace value instead of an independent layer amount. |
| Movement | 0 to 100 % | Layer source movement. |
| Space follows master | Off / On | Use the workspace value instead of an independent layer amount. |
| Width follows master | Off / On | Use the workspace value instead of an independent layer amount. |
| Reverb size | 25 to 400 % | Scale of the local reverb structure. |
| Reverb decay | 0.2 to 12 s | Local reverb persistence. |
| Reverb pre-delay | 0 to 250 ms | Delay before the reverberant response. |
| Reverb damping | 0 to 100 % | Darkening of the local reverb tail. |
| Reverb low cut | 20 to 1000 Hz | Low-frequency cleanup inside the reverb. |
| Reverb diffusion | 0 to 85 % | Density of the reverb response. |
| Reverb motion | 0 to 100 % | Movement within the local response. |
| Early reflections | 0 to 100 % | Proximity/reflection character. |
| Reverb width | 0 to 150 % | Stereo spread of the wet response. |
| Dry signal | Off / On | Retain the direct layer component. |
| Sub frequency | 20 to 120 Hz | Sub-oscillator fundamental. |
| Sub harmonics | 0 to 100 % | Upper content in the low foundation. |
| Source end | 0 to 30 s | Zero means automatic end / endless in Shepard. |
| Exit fade | 0 to 30 s | Fade source emission before its effects. |
| Exit shape | 5 fade shapes | Shape of the source exit fade. |
| Air type | 0 to 5 | Original air, Soft breath, Silk, Metallic shimmer, Dust / flutter or Wind. |
| Start time extension | 0 to 90 s | Additional seconds beyond the legacy layer start range. |
| End time extension | 0 to 90 s | Additional seconds beyond the legacy layer end range. |
| Exit fade extension | 0 to 90 s | Additional seconds beyond the legacy exit-fade range. |

## Pulse and pattern controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Tempo sync | Off / On | Use musical divisions rather than Hz. |
| Rate sweep | Off / On | Move between the From and To rates. |
| From rate | 0.1 to 40 Hz | Starting pulse rate in free mode. |

## Pulse and pattern controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| To rate | `0.1 to 40 Hz` | Ending pulse rate in free mode. |
| From division | `0.0625 to 16 beats` | Starting musical period in quarter-note beats. |
| To division | `0.0625 to 16 beats` | Ending musical period in quarter-note beats. |
| Pulse width | `5 to 95 %` | Open fraction of the pulse cycle. |
| Stereo phase | `0 to 0.5 cycle` | Offset the right-channel pulse in time. |
| Pulse shape | `Sine / Triangle / Gate` | Shape of each amplitude event. |
| Pulse amount | `0 to 100 %` | Base effect contribution. |
| Pulse curve depth | `0 to 100 %` | Strength of the effect modulation lane. |
| Pulse left | `−60 to 6 dB` | Left-channel contribution/depth trim. |
| Pulse right | `−60 to 6 dB` | Right-channel contribution/depth trim. |
| Pattern enabled | `Off / On` | Use the authored Pulse step phrase. |
| Pattern length | `1 to 16` | Number of active steps. |
| Swing | `0 to 45 %` | Delay alternate steps within each pair. |
| Step accent | `0 to 150 %` | Relative strength of each step. |
| Step ratchets | `1 to 8` | Repeated hits within the step. |
| Step mode | `Hit / Rest / Tie` | Hit triggers the step; Rest leaves a gap; Tie extends the preceding hit. |

## Layer effects

| CONTROL | RANGE | MEANING |
|---|---|---|
| Ember amount | `0 to 100 %` | Base effect contribution. |
| Ember curve depth | `0 to 100 %` | Strength of the effect modulation lane. |
| Ember left | `−60 to 6 dB` | Left-channel contribution/depth trim. |
| Ember right | `−60 to 6 dB` | Right-channel contribution/depth trim. |
| Distortion amount | `0 to 100 %` | Base effect contribution. |
| Distortion curve depth | `0 to 100 %` | Strength of the effect modulation lane. |
| Distortion left | `−60 to 6 dB` | Left-channel contribution/depth trim. |
| Distortion right | `−60 to 6 dB` | Right-channel contribution/depth trim. |
| Chorus amount | `0 to 100 %` | Base effect contribution. |
| Chorus curve depth | `0 to 100 %` | Strength of the effect modulation lane. |
| Chorus left | `−60 to 6 dB` | Left-channel contribution/depth trim. |
| Chorus right | `−60 to 6 dB` | Right-channel contribution/depth trim. |
| Phaser amount | `0 to 100 %` | Base effect contribution. |

## Layer effects

| CONTROL | RANGE | MEANING |
|---|---|---|
| Phaser curve depth | 0 to 100 % | Strength of the effect modulation lane. |
| Phaser left | −60 to 6 dB | Left-channel contribution/depth trim. |
| Phaser right | −60 to 6 dB | Right-channel contribution/depth trim. |
| Delay amount | 0 to 100 % | Base effect contribution. |
| Delay curve depth | 0 to 100 % | Strength of the effect modulation lane. |
| Delay left | −60 to 6 dB | Left-channel contribution/depth trim. |
| Delay right | −60 to 6 dB | Right-channel contribution/depth trim. |
| Reverb amount | 0 to 100 % | Base effect contribution. |
| Reverb curve depth | 0 to 100 % | Strength of the effect modulation lane. |
| Reverb left | −60 to 6 dB | Left-channel contribution/depth trim. |
| Reverb right | −60 to 6 dB | Right-channel contribution/depth trim. |
| Width amount | 0 to 100 % | Base effect contribution. |
| Width curve depth | 0 to 100 % | Strength of the effect modulation lane. |
| Width left | −60 to 6 dB | Left-channel contribution/depth trim. |
| Width right | −60 to 6 dB | Right-channel contribution/depth trim. |
| Chorus rate | 0.02 to 3 Hz | Speed of the ensemble motion. |
| Chorus depth | 0.1 to 10 ms | Delay modulation excursion. |
| Phaser rate | 0.02 to 4 Hz | Speed of spectral sweep. |
| Phaser feedback | 0 to 75 % | Intensity of the resonant sweep. |
| Echo time | 20 to 1200 ms | Local delay repeat time. |
| Stereo offset | 0 to 50 % | Difference between the echo channels. |
| Regeneration | −100 to 100 % | Negative shortens repeats; positive extends them. |
| Feedback tone | 500 to 12000 Hz | Tone of the repeating signal. |
| Ducking | 0 to 100 % | Suppress echoes while the source is prominent. |

## Synth controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Root | 25 to 2000 Hz | Oscillator fundamental. |
| Oscillator B mix | 0 to 100 % | Balance between oscillators A and B. |
| Oscillator B tune | −24 to 24 st | Semitone offset of oscillator B. |
| Detune | 0 to 50 ct | Pitch separation between unison voices. |
| Unison spread | 0 to 100 % | Stereo distribution of the voices. |

## Synth controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Wave shape | 10 to 90 % | Waveform shape / pulse width. |
| FM colour | 0 to 100 % | Frequency-modulation character. |
| Noise | 0 to 50 % | Noisy contribution to the source. |
| Follow Evolution | 0 to 100 % | Evolution-driven source voicing. |
| Filter ceiling | 80 to 20000 Hz | Upper filter frequency. |
| Resonance | 0 to 90 % | Emphasis near the filter region. |
| Filter sweep | 0 to 8 oct | Filter travel in octaves. |
| Voice drift | 0 to 30 ct | Slow unison pitch movement. |
| Texture speed | 0.02 to 4 Hz | Rate of internal texture motion. |
| Vibrato | 0 to 100 ct | Pitch modulation excursion. |
| Vibrato speed | 0.05 to 20 Hz | Rate of the vibrato. |
| Pulse motion | 0 to 40 % | Movement of oscillator shape. |
| Motion build | 0 to 100 % | Evolution of internal movement. |

## Shepard tone and cycles

| CONTROL | RANGE | MEANING |
|---|---|---|
| Speed (octave time) | 0.5 to 60 s / octave | Seconds for one octave of travel. |
| Direction | Rise / Fall | Ascending or descending octave travel. |
| Centre frequency | 110 to 1760 Hz | Middle of the octave voice window. |
| Octave range | 3 to 9 octaves | Width of the voice window in octaves. |
| Harmonic colour | 0 to 100 % | Character-dependent overtone content. |
| Stereo spread | 0 to 100 % | Spread of the octave-bank voice. |
| Movement | 0 to 100 % | Amount of tone-character animation. |
| Motion period | 2 to 60 s | Seconds for the character movement cycle. |
| Harmonic tilt | −6 to 6 dB / octave | Overtone energy slope per octave. |
| Odd / even balance | −100 to 100 % | Negative favours odd; positive favours even. |
| Modulation link | Off / On | Derive this clock from the linked scene cycle. |
| Modulation ratio | 0.125× to 8× | Relative clock speed, not an absolute duration. |
| Modulation phase | 0 to 1 cycle | Offset within the linked cycle. |
| Octave travel link | Off / On | Derive this clock from the linked scene cycle. |
| Octave travel ratio | 0.125× to 8× | Relative clock speed, not an absolute duration. |
| Octave travel phase | 0 to 1 cycle | Offset within the linked cycle. |

## Master and stereo finishing

| CONTROL | RANGE | MEANING |
|---|---|---|
| Finishing enabled | Off / On | Enable master tone/dynamics/protection. |
| Low cut | 0 to 240 Hz | Zero bypasses low-frequency cleanup. |
| Body | −9 to 9 dB | Broad shelf around 120 Hz. |
| Presence | −9 to 9 dB | Broad tone around 2.4 kHz. |
| Air | −9 to 9 dB | Broad shelf around 8 kHz. |
| Threshold | −48 to 0 dB | Level at which compression reacts. |
| Ratio | 1:1 to 4:1 | Compression strength. |
| Attack | 2 to 150 ms | Dynamics response time. |
| Release | 40 to 1000 ms | Dynamics recovery time. |
| Comp mix | 0 to 100 % | Parallel compressed contribution. |
| Makeup gain | −12 to 12 dB | Level before peak protection. |
| Peak ceiling | −12 to −0.5 dB | Stereo-linked sample-peak protection ceiling. |
| Stereo finishing | Off / On | Enable Mid/Side tone processing. |
| Centre bass | Off / On | High-pass the Side component. |
| Mono audition | Off / On | Fold the output to mono for checking. |
| Centre-bass cutoff | 20 to 500 Hz | Frequency below which Side is reduced. |
| Mid body | −9 to 9 dB | Low-shelf balance of the centre. |
| Mid air | −9 to 9 dB | High-shelf balance of the centre. |
| Side body | −9 to 9 dB | Low-shelf balance of the stereo difference. |
| Side air | −9 to 9 dB | High-shelf balance of the stereo difference. |
| Side level | −12 to 6 dB | Balance of the stereo difference. |

## Performance, groups and MIDI

| CONTROL | RANGE | MEANING |
|---|---|---|
| Performance enabled | Off / On | Enable the workspace macro/group system. |
| Performance snapshot | Manual / 1–8 | Manual or one of eight stored states. |
| Tension | 0 to 1 normalized | Mapped macro; zero retains the authored starting relation. |
| Weight | 0 to 1 normalized | Mapped macro; zero retains the authored starting relation. |
| Air | 0 to 1 normalized | Mapped macro; zero retains the authored starting relation. |
| Movement | 0 to 1 normalized | Mapped macro; zero retains the authored starting relation. |
| Space | 0 to 1 normalized | Mapped macro; zero retains the authored starting relation. |
| Edge | 0 to 1 normalized | Mapped macro; zero retains the authored starting relation. |

## Performance, groups and MIDI

| CONTROL | RANGE | MEANING |
|---|---|---|
| Group level | `−60 to 24 dB` | Adds to member-layer levels. |
| Group mute | `Off / On` | Suppress the assigned musical role. |
| Group solo | `Off / On` | Isolate the assigned musical role. |
| MIDI root note | `0 to 127 MIDI note` | Note that plays at the authored pitch. |
| Pitch bend enabled | `Off / On` | Allow duration-preserving bend. |
| Pitch bend range | `0 to 24 st` | Maximum bend excursion in semitones. |
| Mod wheel destination | `Off / six macros` | Macro controlled by MIDI modulation. |
| Aftertouch destination | `Off / six macros` | Macro controlled by MIDI channel pressure. |
| MIDI playing mode | `Gate / One-shot / Latch` | Gate releases on note-off; One-shot runs to its set length; Latch holds until the same key is pressed again. |

## Modulation matrix

| CONTROL | RANGE | MEANING |
|---|---|---|
| Motion enabled | `Off / On` | Enable the modulation matrix. |
| Smoothing | `0 to 250 ms` | Time used to soften modulation changes. |
| Step rate | `0.01 to 20 Hz` | Free sequence speed. |
| Step division | `0.0625 to 16 beats` | Sequence period in quarter-note beats. |
| Step tempo sync | `Off / On` | Use musical timing for the sequence. |
| Step count | `1 to 16` | Number of sequence values in use. |
| Random rate | `0.01 to 5 Hz` | Pace of smoothly changing random values. |
| Random seed | `0 to 16,777,215` | Repeatable random-motion identity. |
| LFO rate | `0.01 to 20 Hz` | Free oscillator speed. |
| LFO division | `0.0625 to 16 beats` | Period in quarter-note beats. |
| LFO phase | `0 to 1 cycle` | Start offset within one cycle. |
| LFO tempo sync | `Off / On` | Use musical timing instead of Hz. |
| LFO waveform | `4 waveforms` | Sine, Triangle, Rise or Fall. |
| Step 1–16 value | `−1 to 1 normalized` | Authored bipolar modulation value for each of the sixteen steps. |
| Route enabled | `Off / On` | Enable the selected modulation route. |
| Target layers | `0 to 255` | Bit mask: add 1, 2, 4, 8, 16, 32, 64, 128. |
| Target group | `Mask / five groups` | Use a named group or direct layer mask. |

## Modulation matrix

| CONTROL | RANGE | MEANING |
|---|---|---|
| Motion source | 6 sources | Master curve, Layer curve, LFO 1, LFO 2, Steps or Smooth random. |
| Motion destination | 12 destinations | Sound control that receives modulation. |
| Motion depth | −1 to 1 normalized | Signed normalized depth; scaled per destination. |
| Bipolar | Off / On | Two-sided source instead of one-sided motion. |

## Shared space controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Shared space / Enabled | Off / On | Turn the whole shared-space section on or off. |
| Room / Enabled | Off / On | Enable the shared room. |
| Room / Size | 0 to 100 % | Shared room scale, independent of decay. |
| Room / Decay | 0.2 to 12 s | Shared room persistence. |
| Room / Pre-delay | 0 to 250 ms | Space between source and room response. |
| Room / Damping | 0 to 100 % | High-frequency tail darkening. |
| Room / Low cut | 20 to 1000 Hz | Low-frequency cleanup of the return. |
| Room / Diffusion | 0 to 80 % | Density of the return. |
| Room / Width | 0 to 150 % | Stereo spread of the return. |
| Room / Return level | −60 to 6 dB | Common output gain for this bus. |
| Hall / Enabled | Off / On | Enable the shared hall. |
| Hall / Size | 0 to 100 % | Shared hall scale, independent of decay. |
| Hall / Decay | 0.2 to 12 s | Shared hall persistence. |
| Hall / Pre-delay | 0 to 250 ms | Space between source and hall response. |
| Hall / Damping | 0 to 100 % | High-frequency tail darkening. |
| Hall / Low cut | 20 to 1000 Hz | Low-frequency cleanup of the return. |
| Hall / Diffusion | 0 to 80 % | Density of the return. |
| Hall / Width | 0 to 150 % | Stereo spread of the return. |
| Hall / Return level | −60 to 6 dB | Common output gain for this bus. |
| Echo / Enabled | Off / On | Enable this shared bus/network. |
| Echo / Tempo sync | Off / On | Use beat division rather than free time. |
| Echo / Ping-pong | Off / On | Alternating stereo echo behaviour. |
| Echo / Tempo division | 0.03125 to 4 beats | Echo period in quarter-note beats. |
| Echo / Free time | 10 to 2000 ms | Echo period when tempo sync is off. |
| Echo / Feedback | 0 to 92 % | Amount fed back into the repeats. |

## Shared space controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Echo / Tone | 300 to 18000 Hz | Colour of the feedback path. |
| Echo / Low cut | 20 to 1000 Hz | Low-frequency cleanup of the return. |
| Echo / Diffusion | 0 to 75 % | Density of the return. |
| Echo / Motion depth | 0 to 5 ms | Echo delay modulation excursion. |
| Echo / Motion rate | 0.01 to 2 Hz | Speed of echo delay modulation. |
| Echo / Width | 0 to 150 % | Stereo spread of the return. |
| Echo / Return level | −60 to 6 dB | Common output gain for this bus. |

## Layer sends

| CONTROL | RANGE | MEANING |
|---|---|---|
| Room send | 0 to 100 % | Layer feed into this shared effect. |
| Room curve depth | 0 to 100 % | Strength of send modulation. |
| Room send left | −80 to 12 dB | Left-channel feed trim. |
| Room send right | −80 to 12 dB | Right-channel feed trim. |
| Room follow layer | Off / On | Use the layer curve for the send. |
| Hall send | 0 to 100 % | Layer feed into this shared effect. |
| Hall curve depth | 0 to 100 % | Strength of send modulation. |
| Hall send left | −80 to 12 dB | Left-channel feed trim. |
| Hall send right | −80 to 12 dB | Right-channel feed trim. |
| Hall follow layer | Off / On | Use the layer curve for the send. |
| Echo send | 0 to 100 % | Layer feed into this shared effect. |
| Echo curve depth | 0 to 100 % | Strength of send modulation. |
| Echo send left | −80 to 12 dB | Left-channel feed trim. |
| Echo send right | −80 to 12 dB | Right-channel feed trim. |
| Echo follow layer | Off / On | Use the layer curve for the send. |

## Resonator controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Structure | Harmonic / Metal / Glass | Harmonic, Metal or Glass response. |
| Follow pitch | Off / On | Track the layer/performance pitch. |
| Root | 20 to 2000 Hz | Base resonator tuning. |
| Decay | 0.05 to 6 s | Persistence of the resonant body. |

## Resonator controls

| CONTROL | RANGE | MEANING |
|---|---|---|
| Damping | `0 to 100 %` | Resonant high-frequency decay. |
| Spread | `0 to 100 %` | Stereo separation of resonant structures. |
| Amount | `0 to 100 %` | Resonator contribution. |
| Curve depth | `0 to 100 %` | Strength of resonator modulation. |
| Left contribution | `−80 to 12 dB` | Left-channel resonator trim. |
| Right contribution | `−80 to 12 dB` | Right-channel resonator trim. |
| Follow layer curve | `Off / On` | Use the layer curve instead of an independent one. |

RISER STUDIO

# *Build a moment.*
# *Shape an endless ascent.*

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Riser Studio 1.1.1 · Release edition · Revised 14 October 2026
Riser and Shepard Lab run locally. There is no AI audio model, prompt service or model installation in this product.

