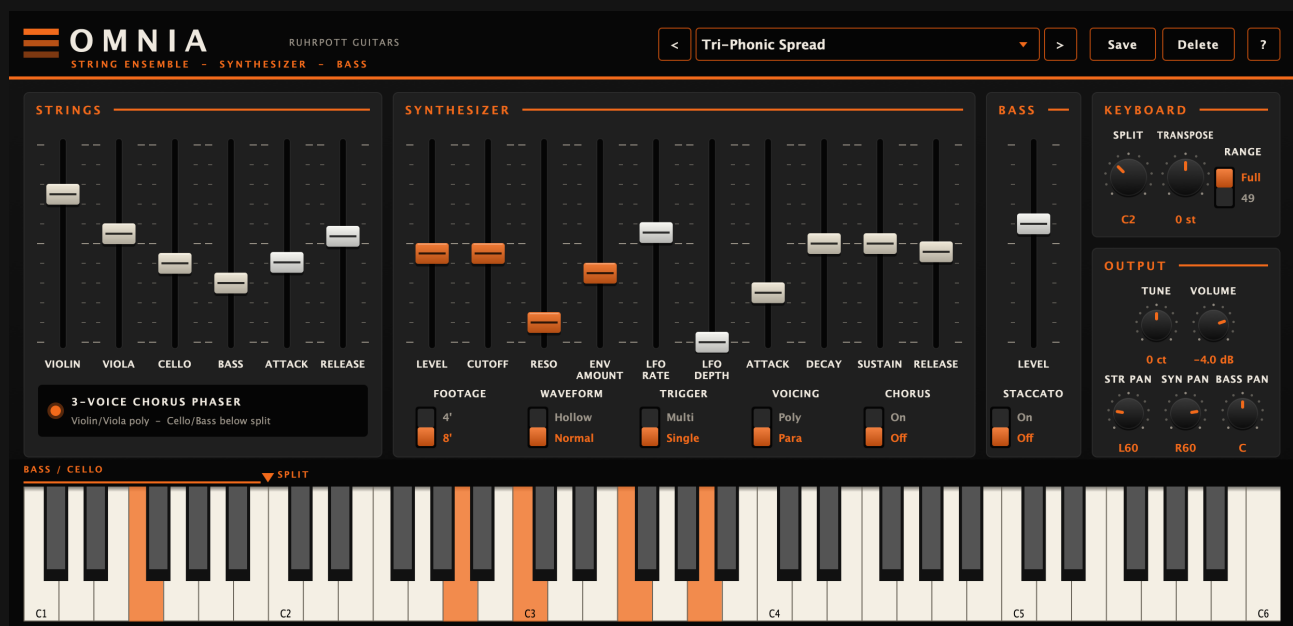




OMNIA

STRING ENSEMBLE · SYNTHESIZER · BASS

User Manual · Version 1.0
Audio Unit · VST3 for macOS



A virtual instrument in the spirit of the 1978 string ensemble / polysynth: lush strings through a three-voice chorus phaser, a paraphonic synthesizer with a 24 dB filter, and a monophonic bass – all playable at the same time.

Welcome

Omnia rebuilds the idea of a classic late-seventies string machine with a synthesizer and a bass section in one box. Every key has its own oscillator, so you can hold as many notes as you like. The three sections **Strings**, **Synthesizer** and **Bass** share the keyboard and are mixed together – or spread across the stereo field like the original's three separate outputs.

Contents

2	Installation
3	How Omnia makes its sound
4	The panel at a glance
5	Strings
6	Synthesizer
7	Bass
8	Keyboard and Output
9	Presets
10	The Joy Division presets
11	MIDI, tips and troubleshooting
12	Specifications and credits

Quick start

- Install Omnia (chapter 2) and restart your DAW.
- Load Omnia on a software-instrument track (Logic: AU Instruments → Ruhrpott Guitars → Omnia).
- Play: everything above the split point (C2) plays violin and viola, the lowest key below it plays cello, string bass and the bass synthesizer.
- Browse the presets with < and >. The ? button opens this manual.

Installation

The download **Omnia-v1.0-macOS.zip** contains:

File	Copy it to
Omnia.component	/Library/Audio/Plug-Ins/Components (Audio Unit: Logic, LUNA, GarageBand, ...)
Omnia.vst3	/Library/Audio/Plug-Ins/VST3 (VST3 hosts: LUNA, Cubase, Studio One, Reaper, ...)
Omnia-v1.0-Manual.pdf	anywhere – it is also built into the plug-in (? button)

Step by step

- Unzip the file (double-click).
- In the Finder choose Go → Go to Folder... and enter the folder from the table. Drag the file in. macOS asks for your password because these folders are shared by all users.
- Quit and restart your DAW. Logic checks new Audio Units on start; if Omnia is missing, open Logic Pro → Settings → Plug-in Manager and click Reset & Rescan Selection.

macOS says the plug-in "can't be opened" or is "damaged"

Omnia is not notarised by Apple. Files that come from the internet or a mail are flagged by macOS. Remove the flag once in the Terminal (one command per line), then restart the DAW:

```
sudo xattr -dr com.apple.quarantine /Library/Audio/Plug-Ins/Components/Omnia.component
sudo xattr -dr com.apple.quarantine /Library/Audio/Plug-Ins/VST3/Omnia.vst3
```

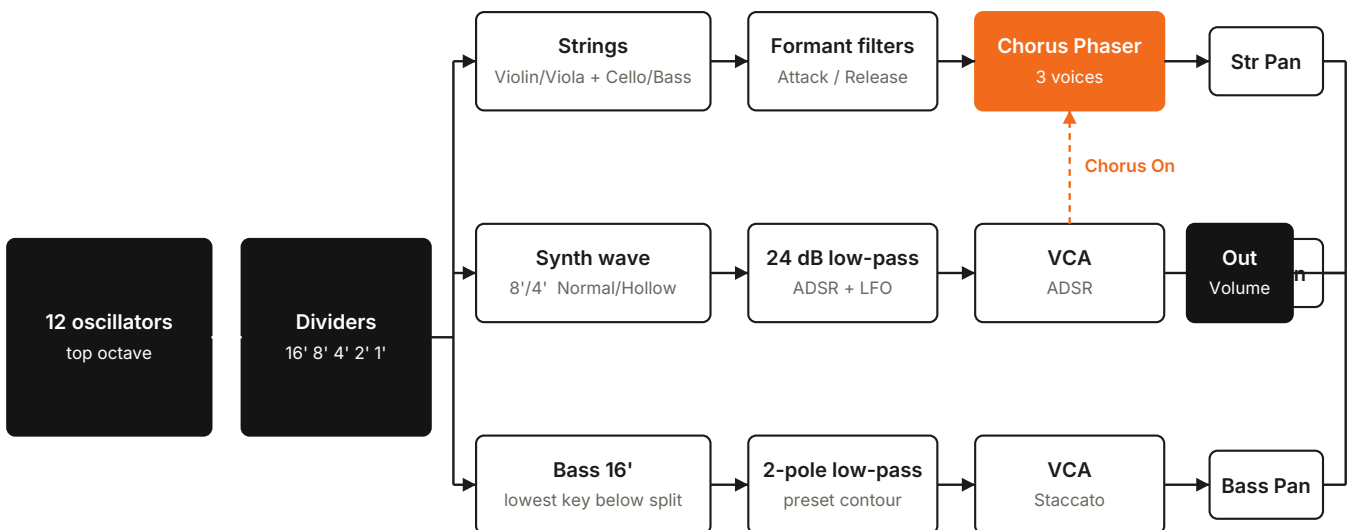
Omnia runs natively on Apple Silicon and Intel Macs (macOS 11 or newer).

How Omnia makes its sound

Divide-down. Like the string machines of the seventies, Omnia starts with only twelve oscillators – one for each note of the top octave. Every lower note is made by halving those frequencies again and again. That is why all keys can sound at once and why octaves are perfectly locked in phase: the smooth, slightly organ-like steadiness of the sound comes from here.

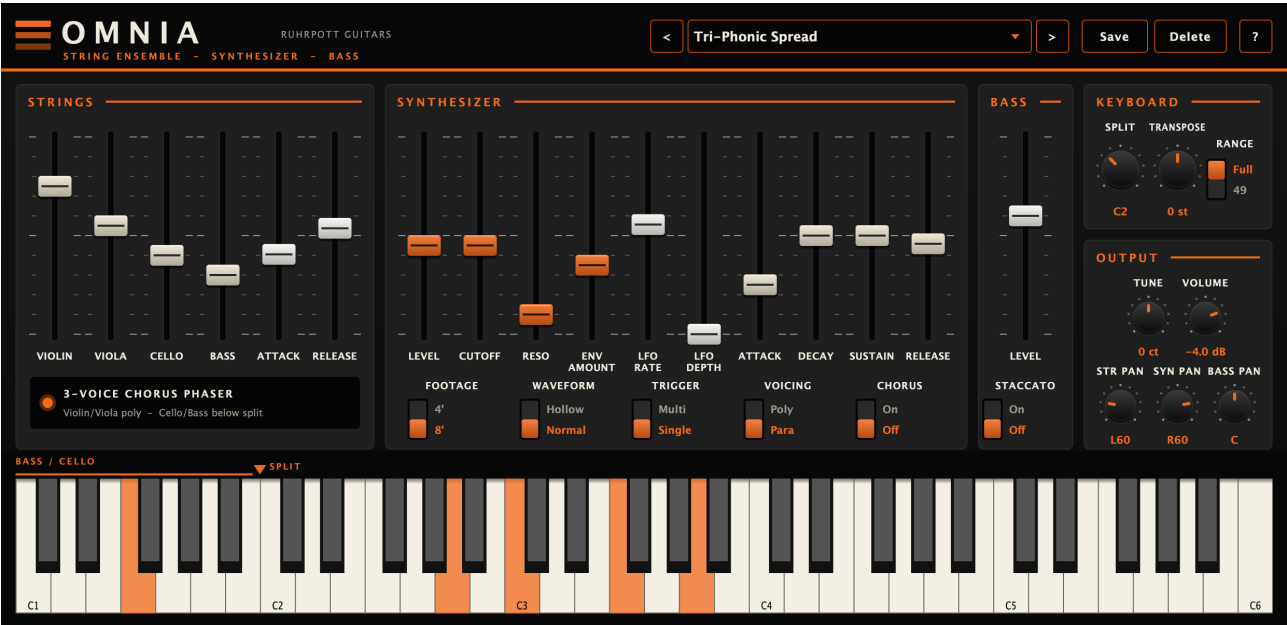
Quasi-sawtooth. The divider outputs are square waves. Adding the squares of several octaves with falling levels gives a staircase that sounds like a sawtooth – the typical bright, buzzy string-machine raw tone.

Chorus phaser. The strings pass a three-voice ensemble: three chains of modulated all-pass filters, driven by a slow and a fast wave, 120° apart, spread across left and right. This is what turns the static divider tone into a moving, wide string section.



Signal flow. The dashed path is active when **Chorus** is on in the synthesizer section.

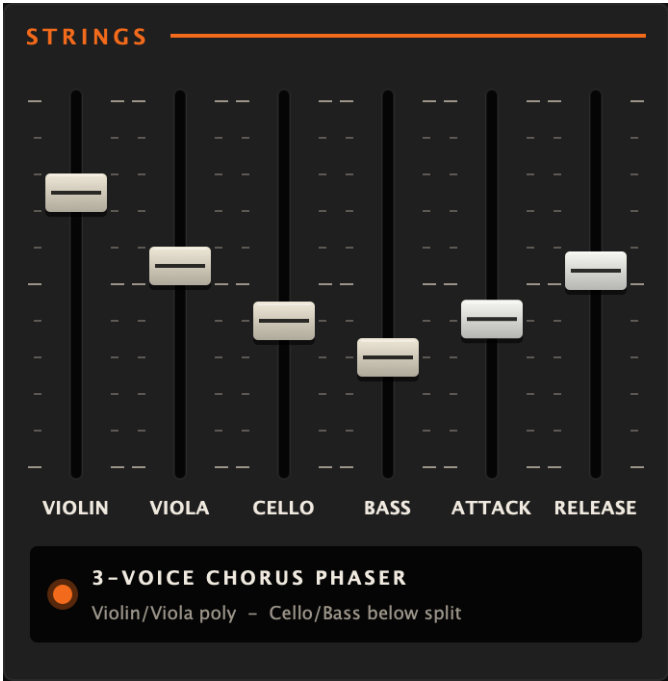
The panel at a glance



Area	Purpose
Header	Preset menu with < / >, Save, Delete and ? (this manual).
Strings	Levels of the four string voices, common Attack and Release.
Synthesizer	Level, filter, LFO, ADSR and five switches.
Bass	Level and Staccato of the monophonic bass synthesizer.
Keyboard	Split point, Transpose and key Range.
Output	Tune, Volume and one pan control per section.
Keyboard strip	Playable with the mouse. The orange arrow marks the split point; the line on the left shows the bass / cello range. With Range set to 49, keys outside C1–C5 are greyed out.

- **Double-click** a fader or knob to reset it to its default.
- While dragging, a small bubble shows the exact value.
- Rocker switches: click to toggle. The lit half shows the active setting.
- All controls can be automated in the DAW.

Strings

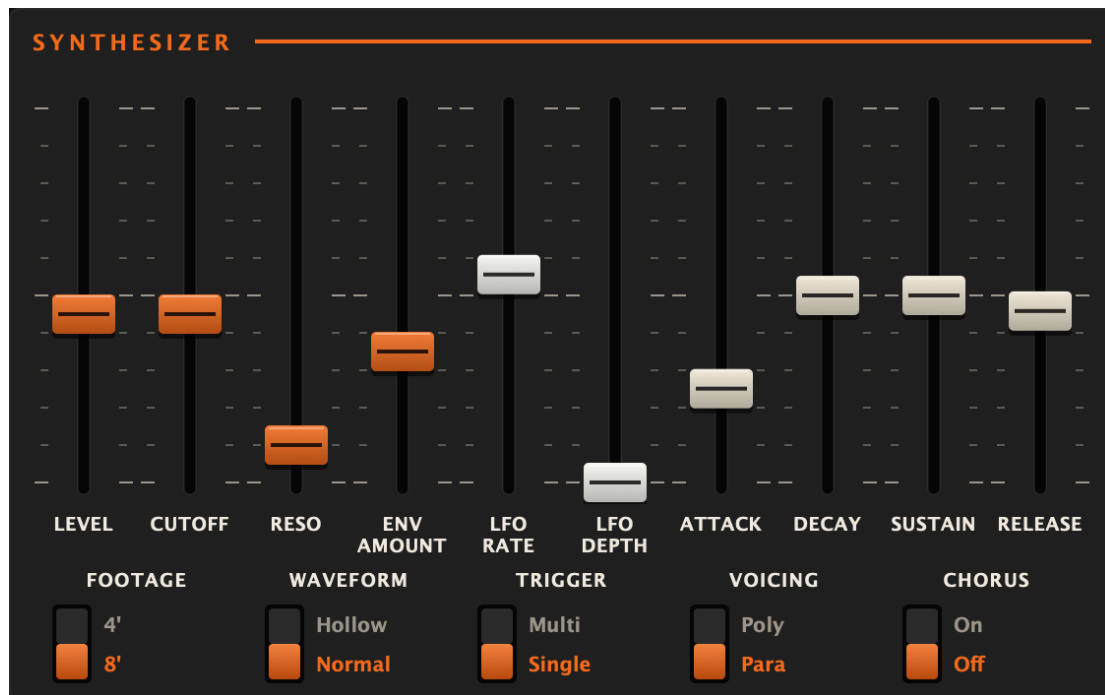


Control	Range	What it does
Violin	0–100 %	4' voice, polyphonic over the whole keyboard. Bright, the classic "string machine" top end.
Viola	0–100 %	8' voice, polyphonic. Warmer and fuller; the body of the ensemble.
Cello	0–100 %	8' voice, monophonic: plays the lowest held key below the split point.
Bass	0–100 %	String bass, 16' (one octave down), monophonic like Cello.
Attack	5 ms – 4 s	Fade-in time of every string note. Short for staccato lines, long for swelling pads.
Release	20 ms – 6 s	Fade-out after the key is released.

Tip

Fader travel is shaped like a level control: the upper half does most of the work. For a balanced ensemble start with Violin around 8, Viola 6, Cello 5 and Bass 4.

Synthesizer



Control	Range	What it does
Level	0–100 %	Volume of the synthesizer section. At 0 the section is silent.
Cutoff	20 Hz – 20 kHz	Base frequency of the 24 dB/octave low-pass filter.
Reso	0–100 %	Resonance. Near the top the filter starts to whistle (self-oscillation).
Env Amount	0 – +7 oct	How far the ADSR opens the filter above Cutoff.
LFO Rate	0.05 – 20 Hz	Speed of the triangle LFO.
LFO Depth	0 – ±2.5 oct	How far the LFO moves the filter. Small amounts give a vocal wobble, large amounts a slow sweep.
Attack	2 ms – 5 s	ADSR: time to open.
Decay	5 ms – 8 s	ADSR: time to fall to the sustain level.
Sustain	0–100 %	ADSR: level while the key is held.
Release	5 ms – 8 s	ADSR: fade-out after the last key is released.

Switches

Switch	Settings
Footage	8' normal pitch or 4' one octave up.
Waveform	Normal = quasi-sawtooth. Hollow = square wave, a hollow, clarinet-like tone (called "Waveform Enhancement" on the first model).
Trigger	Single : the envelope starts only when you play after all keys were released – legato playing keeps it running. Multi : every new key restarts the envelope.

Switch	Settings
Voicing	Para (original): all keys share one filter and one envelope. Poly : 16 voices, each with its own filter and envelope.
Chorus	On sends the synthesizer through the chorus phaser and slows it down – just like the Chorus switch on the Omni-2. The synthesizer then follows the Strings pan.

Para or Poly?

Para is the authentic behaviour: the filter and the volume envelope act on the whole chord. A new chord played legato does not restart the envelope (Single), so pads breathe as one. Notes you release together still ring out with the Release time. **Poly** gives every note its own envelope – better for brass stabs and overlapping lines, but less “vintage”.

CHAPTER 7

Bass

A separate monophonic synthesizer for the left hand. It always plays the **lowest held key below the split point**, one octave down (16'), through a preset two-pole low-pass filter with its own contour.

Control	Range	What it does
Level	0–100 %	Volume of the bass section.
Staccato	Off / On	Off : the note sustains at full level while the key is held, like an organ bass. On : the note decays by itself in about a quarter second – good for picked, driving bass lines.

The Synthesizer's **Trigger** switch also applies here: with **Multi**, every new bass note restarts the contour; with **Single**, legato bass lines change pitch without a new attack.

CHAPTER 8

Keyboard and Output

Control	Range	What it does
Split	C0 – C6	Keys below the split play Cello, String Bass and the Bass section. Default C2.
Transpose	±24 semitones	Shifts the pitch of everything. The split stays on the same keys.
Range	49 / Full	49 : only the 49 keys C1–C5 respond, like the original keyboard; the other keys of the on-screen keyboard are greyed out. Full : the whole MIDI range.
Tune	±50 cents	Fine tuning of the whole instrument (A = 440 Hz at 0).
Volume	–36 – +6 dB	Master level. A soft saturation stage at the output rounds off peaks.
Str / Syn / Bass Pan	L100 – R100	Stereo position of each section – the plug-in version of the Omni-2's three separate “Tri-phonics” outputs.

Note names follow Logic's convention: middle C (MIDI note 60) is **C3**.

Presets

The preset menu shows the factory presets in two groups, followed by your own presets. < and > step through all of them. A preset recalls every control, including Volume and the pan settings.

Factory preset	Character
Init	Default ensemble: all four string voices with a little bass.
Ensemble Strings	Full, slow string section with long release.
Bright Violins	Violins up front, quick attack – for lines and stabs.
Low Strings	Viola, cello and bass, swelling attack.
Hollow Lead	4' square-wave lead with a light vibrato.
Chorus Synth	Synthesizer through the chorus phaser: a soft, wide pad.
Poly Brass	Poly voicing, filter envelope, multi trigger.
Strings + Sweep	Strings over a resonant, slowly sweeping synth.
Staccato Bass + Strings	Picked bass in the left hand, strings in the right.
Tri-Phonic Spread	All three sections spread: strings left, synth right, bass centre.

Your own presets

- **Save** stores the current sound under a new name. Factory names cannot be overwritten; Omnia adds "(User)" instead.
- **Delete** removes the selected user preset (factory presets stay).
- User presets are files and can be copied to another Mac:

```
~/Library/Audio/Presets/Ruhrpott Guitars/Omnia/
```

Your DAW also saves the complete state of Omnia with every project, independently of presets. The factory presets additionally appear in the DAW's own preset/program list.

The Joy Division presets

A string machine of this kind was part of the sound of Joy Division's last recordings in 1980. These six presets are sounds in the spirit of that era – starting points, not copies of any record.

Like the instrument itself they are dry. Much of the atmosphere of those records came from producer Martin Hannett's digital delays and reverbs in the studio, so add them in your DAW:

Preset	Idea	Add in the DAW
Decades - Strings	Dark, slowly swelling ensemble; the synth runs through the (slower) chorus.	Large plate or hall, 2–3 s
Decades - Lead	Mournful melody voice with a slight filter vibrato, through the chorus.	Hall plus a quarter-note delay
Isolation - Riff	Bright, short 4' synth for fast eighth notes, multi trigger.	Short room, otherwise dry
Atmosphere - Pad	High violins plus a hollow synth through the chorus, long release.	Long hall, 4 s or more
Heart and Soul - Drift	Resonant filter drifting slowly under soft strings; strings left, synth right.	Hall plus delay with feedback
Love Will Tear - Line	Fast, nasal violin/synth melody voice.	Short plate; double-tracking works well

Tip

For the lead presets play single lines in **Para** mode with **Multi** trigger, so each note gets its own attack. Turn up **Release** on the strings presets if the reverb tail feels too short.

MIDI, tips and troubleshooting

MIDI	Response
Notes	All notes, no velocity – like the original, every key plays at the same level.
Sustain pedal (CC 64)	Holds notes; on release they fade with the Release times.
All Notes Off / All Sound Off	Releases all notes.

Tips

- Layer: Strings for the body, the Synthesizer an octave up (4') with **Chorus On** for shimmer.
- Spread the three sections with the pan knobs and treat them like three instruments in the mix.
- Set the split to C1 to keep the left hand out of the way, or to C3 to play bass lines with the left hand.
- Double-track a string part with an ADT plug-in for an even wider ensemble.

Troubleshooting

Problem	Solution
Omnia doesn't appear in the DAW	Check the folders in chapter 2, restart the DAW, rescan in Logic's Plug-in Manager. If macOS reports it as damaged, remove the quarantine flag (chapter 2).

Problem	Solution
No sound below the split	Cello, Bass (strings) and the Bass section are all at 0 – or Range is set to 49 and you play below C1.
Synthesizer is silent	Synth Level at 0, or Cutoff very low with Env Amount at 0.
Notes hang	Send All Notes Off from the DAW, or press and release the sustain pedal.
The ? button doesn't open the manual	Some hosts block opening files. Omnia then offers to save the PDF and opens it from there.

CHAPTER 12

Specifications and credits

Formats	Audio Unit (instrument) and VST3; macOS 11+, Apple Silicon and Intel
Polyphony	Strings: all keys (divide-down). Synthesizer: all keys (Para) or 16 voices (Poly). Cello, String Bass and Bass: monophonic
Sections	Strings (Violin 4', Viola 8', Cello 8', Bass 16'), Synthesizer, Bass
Filters	Synth: 24 dB/oct low-pass with resonance. Bass: 2-pole low-pass. Strings: fixed formant filters
Modulation	ADSR (filter + VCA), triangle LFO (filter), 3-voice chorus phaser
Presets	16 factory presets, unlimited user presets
Version	1.0

Omnia is an independent re-creation of a sound concept and is not affiliated with ARP Instruments or its successors. ARP and Omni are trademarks of their respective owners and are used only to describe the inspiration. Joy Division and the song titles used in preset names refer to the band's recordings only as a description of the style; there is no affiliation.

Typeface: Inter, SIL Open Font License 1.1. Made with JUCE. · Ruhrpott Guitars, Dortmund