Cygnus 26 User Guide

Krakli · Version 1.0.0 · 15 November 2026

What Cygnus 26 is

Cygnus 26 is a polyphonic synthesizer and sampler from Krakli: VST3, AU and a standalone program on Mac, and VST3 and a standalone program on Windows. It grows out of **Cygnus**, a SynthEdit instrument Krakli released in 2005. Its design and all 128 of its factory patches were recovered from the old 32-bit plug-in and rebuilt for today's computers. It also adds things the original never had: a sampler that can record and resample, the sample as a part of the FM sound, pitch shifting that keeps a sample's length, and a panel drawn live in the spirit of the original's photographic space background.



Every note plays four sound sources at once, each with its own envelope and its own place in the stereo picture:

- **Osc 1, Harmonics:** eight harmonics you draw like an organ's drawbars, each of which the envelope can open, plus a sync sweep.
- **Osc 2, FM:** three operators in a chain, with seven arrangements of frequency ratios. The sample can take the place of any of them.
- **Osc 3, Noise Tones:** filtered noise ringing through three tuned resonators: breathy, whistling, glassy tones.
- **The sampler:** any sound you load or record, played across the keyboard.

Three eight-step sequencers move the pitch of the oscillators in time with your song. Two choruses, one on each side, then a stereo echo, put the sound in space.

Installing

Mac

Open **Cygnus26-1.0.0-mac.pkg** and follow the installer. It's signed and notarised by Apple, so it opens without warnings. **Customise** lets you choose which parts to install:

- **VST3 plug-in:** into `/Library/Audio/Plug-Ins/VST3`.
- **Audio Unit plug-in:** into `/Library/Audio/Plug-Ins/Components`, for Logic Pro, GarageBand and other AU hosts.
- **Standalone application: Cygnus 26** in Applications.

It needs macOS 12 or later, and runs natively on Apple Silicon and Intel Macs. If your DAW doesn't list Cygnus 26 straight away, ask it to rescan its plug-ins.

Windows

Run **Cygnus26-1.0.0-windows-setup.exe**. The installer isn't code-signed, so Windows SmartScreen may warn you the first time: choose **More info**, then **Run anyway**. It installs:

- **The standalone program**, with an entry in the Start menu.
- **The VST3 plug-in** into `C:\Program Files\Common Files\VST3`.

It needs 64-bit Windows 10 or later. Remove it from **Settings > Apps** if you ever need to.

The standalone program

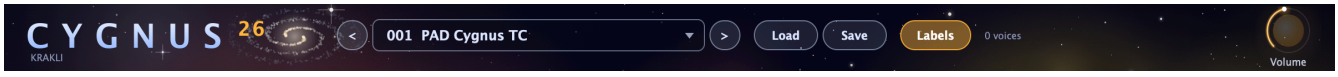
The standalone program plays without a DAW. Open **Options > Audio/MIDI Settings** to choose your audio output, your MIDI keyboard and, if you want to record into the sampler, your audio input. The keyboard along the bottom of the window plays too, with the mouse or the computer's keys.

How the sound flows

Stage	What happens
The sources	Osc 1, Osc 2, Osc 3 and the sampler, each shaped by its own envelope
The sends	Each source has a level into Chorus 1 and a level into Chorus 2
The choruses	Chorus 1 is the **left** output and Chorus 2 the **right**, so the sends also place each source in the stereo picture
Volume	The sun at the top right
The echo	A stereo tempo echo, with a Width that blends the two sides

Sending a source more to one chorus than the other moves it towards that side. Two choruses set differently make a sound wide and moving.

Around the window



- **Patches:** the list holds the 128 factory patches. The arrows step through them. Changing patch fades the sound out over a hundredth of a second, stops any held notes and clears the echo, so nothing from the old patch carries into the new one.

- **Load and Save:** save the whole sound as a `.cygnus` patch file and load it back. A patch file holds every setting, including the sampler's, but not the sample itself (save that from the sampler).
- **Labels:** shows or hides the notes on the panel, like the original's Labels switch.
- **Voices:** how many of the eight voices are sounding.
- **Volume:** the sun.

Using the controls:

- **Knobs** are planets. Drag up and down to turn them; the moon on the orbit shows the value. **Faders** are comets: drag them up and down.
- **Hover** over any control to read its exact value; the name comes back when you move away.
- **Double-click** a control to reset it.
- **Switches** are the small rounded buttons. One with two settings toggles when you click it; one with more opens a list. The mouse wheel steps through them too.
- **Scale** the window by dragging its bottom-right corner, from 60% to 150%.

Each section sits in a nebula of its own colour, which glows while that source is sounding.

Osc 1: Harmonics

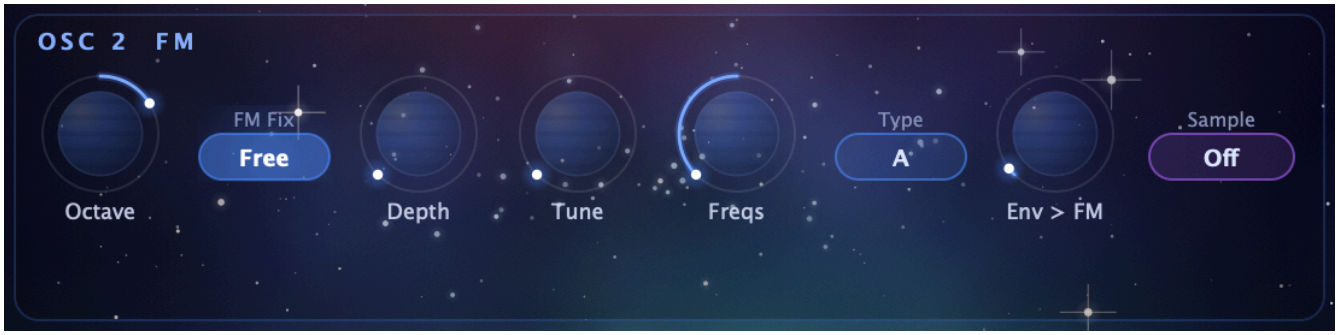


Osc 1 builds its sound from eight sine-wave harmonics: the note itself and the seven above it. The eight comets set how much of each you hear, like an organ's drawbars. Under each comet, its **env** knob sets how much Envelope 1 adds to that harmonic as the note plays, so a sound can open up as the envelope rises and close again as it falls.

Control	What it does
Octave	Moves Osc 1 by whole octaves, two down to two up
Sync	Off or On. On ties Osc 1 to a hidden oscillator at the note's pitch, which restarts it every cycle
Sync Pitch	With Sync on, raises Osc 1 above the note (up to four octaves). Because the hidden oscillator keeps restarting it, this changes the tone rather than the pitch: the classic sync sweep
Env > Sync	How far Envelope 1 raises Osc 1's pitch (up to an octave). With Sync on, it sweeps the sync tone with every note
1 to 8	The level of each harmonic
env	How much Envelope 1 adds to each harmonic

Sequencer 1 moves Osc 1's pitch.

Osc 2: FM



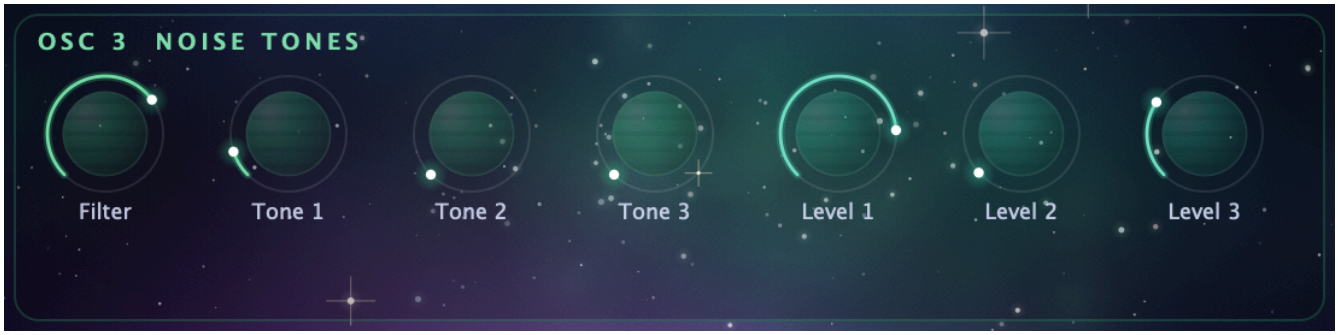
Osc 2 is frequency modulation (FM): three sine-wave operators in a chain. **Mod 2** modulates **Mod 1**, and Mod 1 modulates the **Carrier**, the one you hear. Modulation adds harmonics, bright and metallic or soft and woody, depending on the operators' frequency ratios and how deep the modulation goes.

Control	What it does
Octave	Moves Osc 2 by whole octaves, two down to three up
FM Fix	**Key**: the modulators follow the keyboard, so the tone stays the same up and down it. **Free**: the modulators stay at a fixed frequency, for clangorous, bell-like and inharmonic sounds
Depth	How deep the modulation goes: the brightness
Tune	Detunes Mod 1 up and Mod 2 down by a few cents, for a slow beating. In Free, it sweeps the modulators over a wide range
Freqs	Moves both modulators in semitones, from two octaves down to three up
Type	The frequency ratios between the operators (below)
Env > FM	How far Envelope 2 raises the modulators' pitch as the note plays: a "twang" that brightens the attack
Sample	Puts the sample in place of an operator (see "The sample in the FM sound")

Type	Mod 1	Mod 2	Character
A	the note	the note	The modulators are also heard: full and buzzy
B	the note	an octave up	Bright, still harmonic
C	the note	two octaves up	Brighter and thinner
D	an octave up	an octave up	Hollow, clarinet-like
E	an octave up	two octaves up	Glassy
F	two octaves up	two octaves up	Bell-like
G	about two octaves and eight semitones up	the note	Inharmonic, metallic

Sequencer 2 moves Osc 2's pitch.

Osc 3: Noise Tones



Osc 3 starts from noise. A resonant filter shapes it, then three tuned resonators ring at pitches set above the note you play. Each resonator is very narrow, so it sings a pitch out of the noise: whistles, breath, wind across bottles, glassy shimmer.

Control	What it does
Filter	The tone of the noise before the resonators: from a dark rumble (110 Hz) to a bright hiss (7 kHz). It doesn't follow the keyboard
Tone 1, 2, 3	Each resonator's pitch above the note, up to ten octaves. Small settings sit close to the note; whole numbers are octaves above it
Level 1, 2, 3	Each resonator's level

A resonator only sings if the noise reaches its pitch, so a dark Filter quietens high Tones. Sequencer 3 moves all three resonators together.

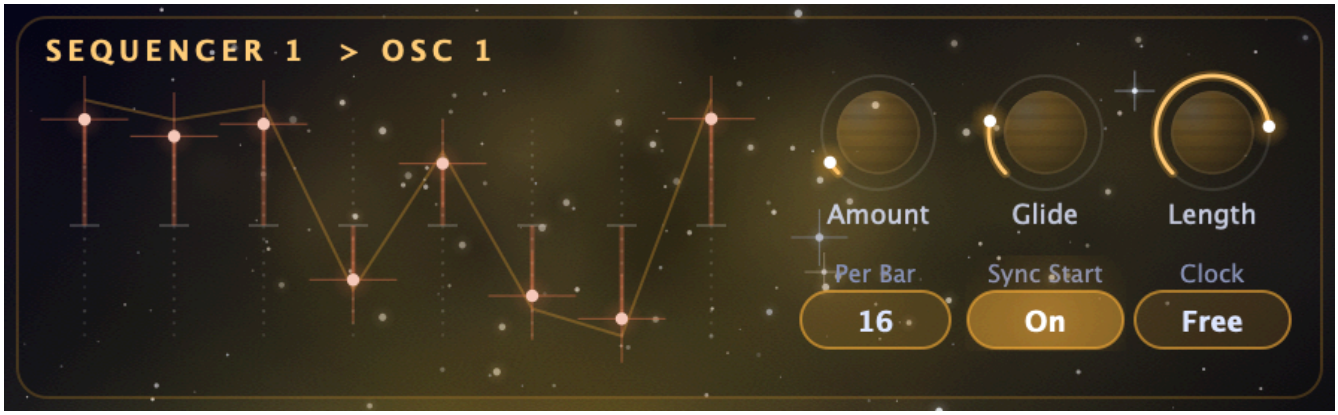
The envelopes



Each source has its own envelope: Envelope 1 for Osc 1, 2 for Osc 2, 3 for Osc 3, and the Sample envelope for the sampler. Each shapes its source's volume over the note: **A**ttack, **D**ecay, **S**ustain and **R**elease. Envelope 1 also drives the harmonics' env knobs and Env > Sync, and Envelope 2 drives Env > FM.

Vel sets how much the keyboard's velocity matters. At 0% every note plays at full level; at 100% soft notes are quiet and hard notes loud.

The sequencers

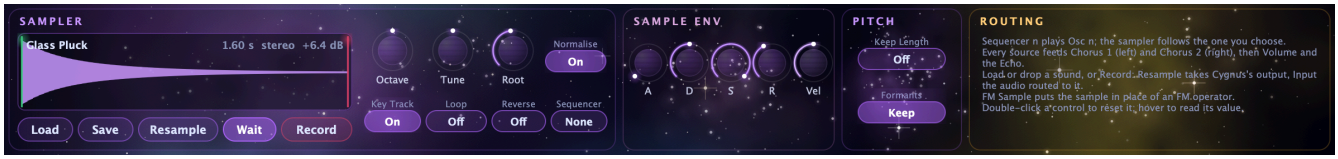


Each sequencer has eight steps, joined like a constellation. Each step moves its oscillator's pitch up or down by up to twelve semitones (drag the star up or down; the current step glows while notes play). Sequencer 1 plays Osc 1, Sequencer 2 plays Osc 2 and Sequencer 3 plays Osc 3. The sampler can follow any of them.

Control	What it does
Steps 1 to 8	Each step's pitch, in semitones
Amount	Scales every step, from none to twice as far. At 0 the sequencer is silent; at 2, a step of +12 is two octaves
Glide	How smoothly the pitch moves from step to step, from a sharp jump to a slow slide
Per Bar	How many steps per 4/4 bar, from 1 to 64
Sync Start	**On**: every note starts the sequence at step 1. **Off**: the sequence runs on its own, and a new note joins it wherever it is
Clock	**Free**: the steps run for as long as the note sounds. **Timed**: they run only for the first Length after the note starts, then stop where they are
Length	With Clock on Timed, how long the steps run after the note starts (up to a second)

The sequencers follow your DAW's tempo, and lock to its bars while it plays. The standalone program runs them at 120 BPM.

The sampler



The sampler plays any sound you give it across the keyboard, through its own envelope, beside the three oscillators. It's empty until you load or record something, so the factory patches sound as they always did. A sample stays when you change patch, so you can try it with every patch in turn.

Getting a sound in

- **Load** a file, or **drop** one onto the waveform. WAV, AIFF, FLAC, Ogg and MP3 files work, mono or stereo, up to 60 seconds (a longer file loads its first minute).
- **Record** a new one (see below).

The waveform shows the sample, its name, length and whether it's stereo. Drag the **green marker** to set where it starts and the **red marker** to set where it ends.

Recording

Cygnus 26 can record two things:

- **Resample** (the default): Cygnus 26's own output. Play a note or a sequence, and capture it as a new sample to play across the keyboard, stretch or use in the FM sound.
- **Input:** the audio coming into Cygnus 26. In a DAW, route a track or a microphone to it, usually as a side-chain; in the standalone program, choose the input in Options > Audio/MIDI Settings. On a Mac, the standalone program asks once for permission to use the microphone.

Click the source button to switch between them. With **Wait** on (the default), recording starts at the first sound rather than straight away, so there's no silence at the start. Click **Record**, play, then click **Stop**. Recording also stops by itself after 60 seconds. The new sample is trimmed of silence at both ends and raised to just below full level.

Playing the sample

Control	What it does
Octave	Moves the sample by whole octaves
Tune	Moves it in semitones (and fractions of one), up to an octave either way
Root	The key that plays the sample at its own pitch
Normalise	**On** (the default): brings any sample to the same loudness as the oscillators, so its send faders balance with theirs. The gain it applies shows beside the waveform. **Off**: the sample plays at its own level. The sample itself is never changed
Key Track	**On**: the sample follows the keyboard. **Off**: every key plays it at the same pitch, for drums and effects
Loop	**Off**: plays once. **Forward**: repeats between the markers. **Ping-pong**: plays forwards and backwards between them
Reverse	Plays the sample backwards
Sequencer	Which sequencer moves the sample's pitch, or None

The **Sample envelope** shapes it like the others, and the **S** faders in the two chorus sections set how much of it goes to each side. A stereo sample keeps its two sides apart: its left goes to Chorus 1 and its right to Chorus 2.

Keeping the length: the Pitch section

Normally the sampler plays like tape: higher notes play the sample faster, so they're shorter, and lower notes longer.

- **Keep Length: On** changes the pitch without changing the speed, so every note lasts as long as the recording, a phrase stays in time, and a loop keeps its tempo. Notes still start straight away.
- **Formants: Keep** (the default) holds a voice's or instrument's character as it's pitched, so a voice pitched up doesn't turn into a chipmunk. **Shift** lets the character move with the pitch, which can be just the effect you want.

Pitch shifting is cleanest within a few semitones; past about an octave it starts to sound processed. Keep Length takes more processing power than tape playback, but eight notes at once are comfortable on a current computer.

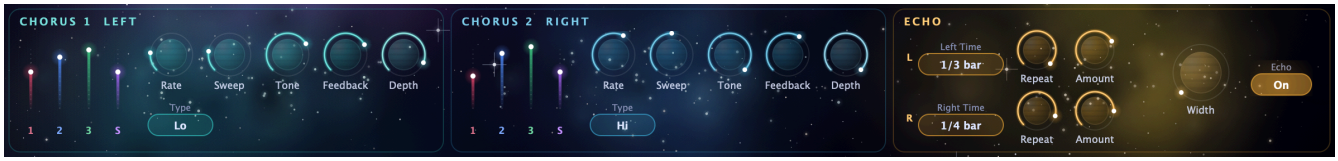
The sample in the FM sound

The **Sample** switch at the end of Osc 2 puts the sample in place of one of the FM operators. It plays at the sampler's own pitch settings (Root, Key Track, Tune, the markers and the loop) and is shaped by Envelope 2 and Osc 2's sends.

- **Carrier:** you hear the sample, and the two sine operators modulate it: Depth roughens, brightens and growls it.
- **Mod 1:** the sample modulates the carrier, colouring a pure tone with the sample's character.
- **Mod 2:** the sample modulates Mod 1, which then modulates the carrier: a more indirect, often wilder result.

A looped sample suits this best, since a sample that plays once falls silent when it ends. The sampler's own sends work separately, so you can hear the sample plain and through FM at the same time.

Chorus, Volume and Echo



The choruses

Chorus 1 makes the left output and Chorus 2 the right. The four faders at the left of each are the sends: **1**, **2** and **3** for the oscillators and **S** for the sampler.

Control	What it does
Rate	How fast the chorus moves, from one sweep every minute or so to about two a second
Sweep	How far it moves
Tone	The shortest delay: short settings give a metallic, flanging edge
Feedback	How much of the chorus feeds back into itself: more gives a stronger, ringing effect
Depth	How much chorus you hear against the dry sound
Type	The range of the sweep: **Hi** (small, shimmering), **Lo** (a classic chorus) or **Lo+** (wide and woozy)

The echo

The echo repeats each side in time with your DAW's tempo (120 BPM in the standalone program).

Control	What it does
Left Time, Right Time	How often each side repeats, from a sixteenth of a bar to four bars (up to two seconds)
Repeat	How many times it repeats: more feedback, longer tails
Amount	How loud the echoes are
Width	Mixes each side, dry and echo, into the other: blends and narrows the stereo picture
Echo	Turns the echoes on and off. The dry sound and Width stay

Changing a Time while you play briefly dips that side's echo and jumps to the new time, rather than sweeping the pitch of what's already echoing.

Tips

- **Find each source in a patch:** turn down a source's send faders in both choruses to hear what the others are doing, then bring it back.
- **Make a pad wide:** send a source more to one chorus and another source more to the other, and set the two choruses differently.
- **Turn a patch into a sample:** play a chord or a sequence with Record on Resample, then play the result across the keyboard. With Keep Length on, it stays in time.
- **Make bells:** set FM Fix to Free, Type to F or G, and raise Depth with a long Envelope 2 decay.
- **Give a voice to Osc 3:** set the three Tones to a chord's intervals above the note and raise Level on each.
- **Keep a sample's phrasing across the keyboard:** turn on Keep Length, with Formants on Keep for voices.

Technical notes

- **Voices:** eight. A ninth note takes over the oldest released voice, then the oldest held one.
- **Pitch bend:** twelve semitones up and down.
- **Saving with your song:** your DAW saves every setting and the sample (as lossless FLAC) with the song, so it reopens as you left it on any computer.
- **Sample length:** up to 60 seconds. A longer file loads its first minute.
- **Patch files** (`.cygnus`) hold every setting but not the sample.
- **Formats:** VST3 and standalone on Windows; VST3, AU and standalone on Mac.

Credits

Cygnus 26 © 2026 Krakli.

Cygnus (2005) was designed by Ian Webster (Krakli) in SynthEdit, with modules by Chris Kerry and David Haupt. Its 128 patches, included here, are by Tim Conrardy (TC), Ian Webster (IW) and vurt (v).

Cygnus 26 uses **Signalsmith Stretch** and **Signalsmith Linear** by Signalsmith Audio (MIT licence) for Keep Length; their licences are in `THIRD-PARTY-NOTICES.md`, installed with the program and inside each plug-in. It's built with **JUCE**.

The factory patches

The prefixes say what each one is for: **PAD**, **ATMO** (atmospheres), **SYN** (leads and synths), **SEQ** (sequenced), **SFX** (effects), **KBD** (keyboards), **SPACE**, **LED** (leads) and **BAS** (bass).

No.	Name	No.	Name	No.	Name	No.	Name
1	PAD Cygnus TC	33	ATMO PlanetWatch TC	65	IW-Chinese	97	spacecake:v
2	SYN Alcor TC	34	SEQ XoPlanet TC	66	ATM_WhiteCoats_IW	98	spacehawks:v
3	SFX Tunnel TC	35	ATMO Cold Space TC	67	BAS_SPBass_IW	99	brainfreeze:v
4	KBD Space Organ	36	PAD Central Core TC	68	KBD_Steel-Piano_IW	100	daisydaisy:v
5	PAD M13 Cluster	37	SYN Voyager 2 TC	69	Led_Kett1L_IW	101	violince:v
6	SYN Sirius TC	38	KBD Steel Crumbs TC	70	Led_Orbit_IW	102	ambulanceinspac
7	ATMO Hypergate TC	39	KBD Spica TC	71	LED_SpaceTrumpets_IW	103	intheweb:v
8	SEQ Wild Bull TC	40	PAD Creator TC	72	LED_TheScream_IW	104	warpphase104:v
9	ATMO Sprockets TC	41	SPACE Fripperspace TC	73	PAD_Dramah_IW	105	dangerwill:v
10	PAD Stellar Search TC	42	SYN SycoSpace	74	PAD_KASMOS_IW	106	robinson:v
11	PAD Dark Nebula TC	43	KBD ChimerString TC	75	PAD_SaturnsRings_IW	107	batsinspace:v
12	SYN Sci Fy TC	44	PAD Brilliant Nova TC	76	PAD_SlowImpact_IW	108	fftmmm:v
13	ATMO UniversEdge TC	45	SFX FlyByBasser TC	77	PAD_Space-FF_IW	109	lazeraid:v
14	SEQ Orb Peel TC	46	SEQ Hold and Run TC	78	SEQ_Alee-ENZ_IW	110	gravityzer0:v
15	PAD SombraroGalaxy TC	47	SEQ Ozrical TC	79	SFX_Random_IW	111	in space:v
16	ATMO Far Quest TC	48	KBD OrganaTanna TC	80	SFX_Snatchers_IW	112	noonecan hear:v
17	SEQ Tele Vue TC	49	SEQ BlueSnowBall TC	81	SFX_SpookBells_IW	113	you gossip:v
18	ATMO AlgoVari TC	50	SEQ Cycles TC	82	SFX_Tubed_IW	114	atmospheric:v
19	SPACE Planet Ten	51	SEQ M31 galaxy TC	83	KBD Pretty_IW	115	pressure:v

No.	Name	No.	Name	No.	Name	No.	Name
20	SPACE Denebola TC	52	SEQ Warp Driver TC	84	PAD Cathedral_IW	116	ghostship:v
21	SPACE Star Gazer TC	53	SFX Meteor TC	85	PAD CelloSphere_IW	117	final:v
22	PAD Glass Nebula TC	54	ATMO CoalSack TC	86	PAD Drama2_IW	118	front:v
23	KBD Steller Bottle TC	55	SFX Growl in Space TC	87	PAD Endless_IW	119	ear:v
24	SYN BackStar TC	56	SFX Alien 4 TC	88	PAD Film_IW	120	astronimy:v
25	PAD Sitarium TC	57	SFX Wild Bull2 TC	89	PAD Orch1_IW	121	domine:v
26	PAD Orion nebula TC	58	ATMO Aquah TC	90	PAD Stadium_IW	122	soupdragon:v
27	PAD Final Frontier TC	59	ATMO Deep Rumble TC	91	PAD TheyreComing_IW	123	dronevessel:v
28	SPACE Isotope TC	60	ATMO Comet Trail TC	92	PAD Twinkle_IW	124	blow me:v
29	SEQ Spral Galaxy TC	61	SPACE Astroider TC	93	SEQ SpaceMO_IW	125	chime v axe:v
30	PAD Quasi-Steller TC	62	SYN Star-tacus TC	94	SFX InAncTimes_IW	126	darkwind:v
31	ATMO Deep Field TC	63	PAD SunRa TC	95	SFX Isao_2Metre_IW	127	alarms:v
32	SPACE Sky Quest TC	64	PAD Universal Love TC	96	SFX SpaceChimes_IW	128	voicesinmyhead: