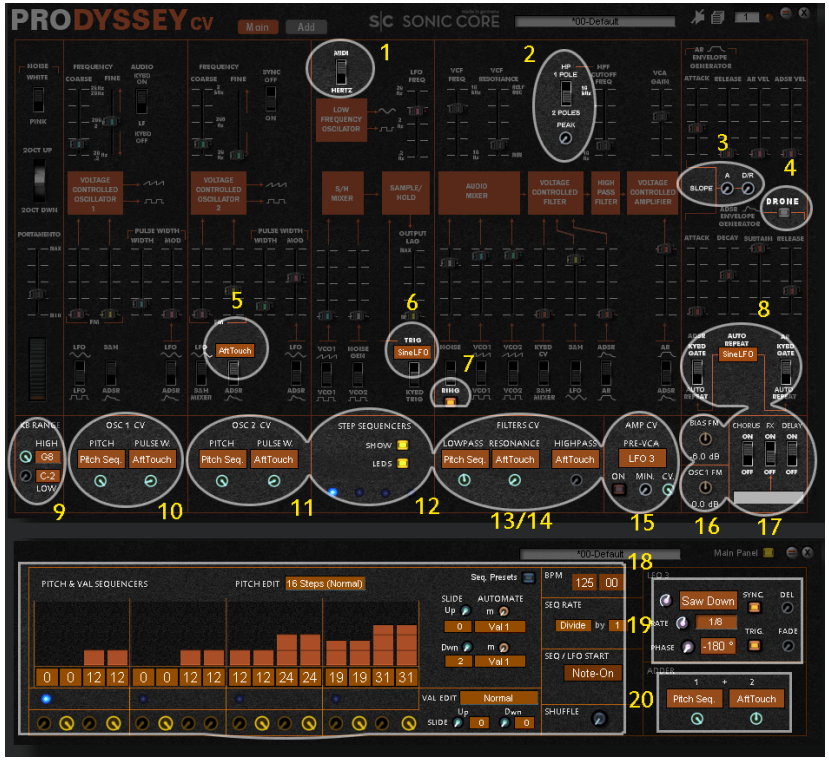
PRODYSSEY CV

Content

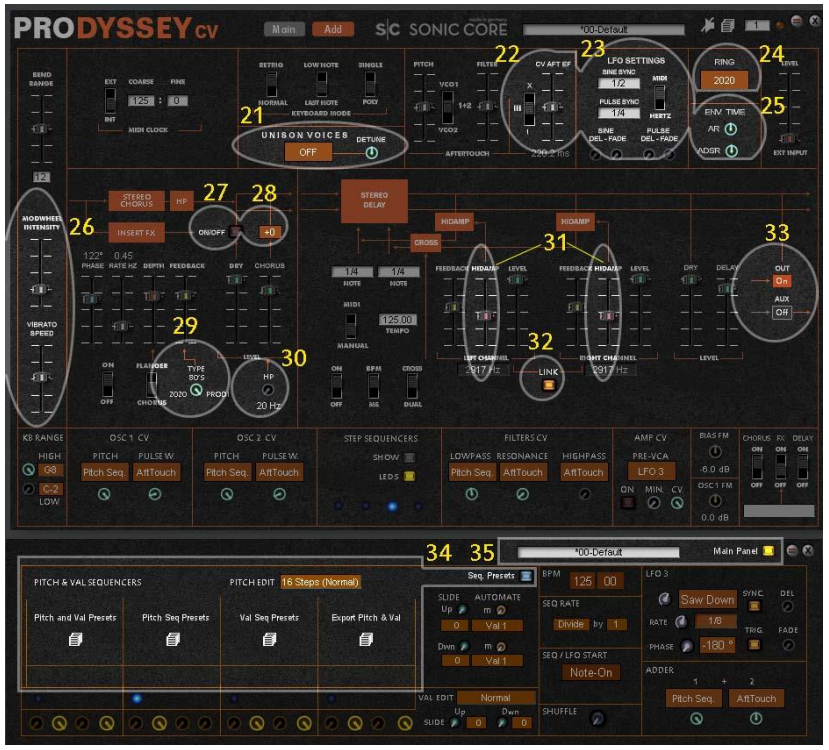
I. New Features at a glance

The Main Page



1. **MIDI/Hertz button:** a simple mirror of the sync/hertz functions which saves the need to go to the Add page.
2. **HP Mode:** High Pass Filter can now be 1 pole or 2 poles with 12dB resonance.
3. **EG Slopes:** you can set the attack and decay/release slopes.
4. **Drone mode:** envelopes are deactivated from the VCA and the Prodyssey will play continuously, responding only to note changes. The envelopes are still available as modulators.
5. **FM2 Modulation:** can be controlled by several controllers and a maximum value can be set, allowing reaching the exact effect that you are looking for.
6. **S&H triggers:** several modulators can be assigned as S&H triggers for more variety.
7. **Ring type:** a new "2020" ring modulator has been added with a darker and less noisy sound. Mirrors the function on the Add page.
8. **Auto-Repeat** can now be triggered by various modulators. The logic of the auto-repeat has also been simplified.
9. **Key Range:** allows using the Prodyssey CV on a limited range of your keyboard, to create splits.
10. **Osc 1 Pitch and Pulse Width modulators:** these are added to the original modulators and can be used independently.
11. **Osc 2 Pitch and Pulse Width modulators**.
12. **Show/Hide** Step Sequencers or LEDs. The LEDs show the sequencer cycles.
13. **Low Pass / Resonance / High Pass modulators:** these are added to the original modulators and can be used independently. You can modulate the Low Pass cutoff and the Resonance with 17 modulators (14+ 4 external CV).
14. **"Link to LP"** is a modulator available to the Low Pass Resonance and High Pass Frequency. The modulation is the same modulation sent to the Low Pass filter Frequency, including the "old" modulators accessible through the classic sliders, in addition to the CV modulator.
15. **Amp CV:** Modulates the volume of the Prodyssey CV, independently or in addition to the VCA. A smooth button is also available.
16. **Bias and Osc 1 FM levels:** used to set a maximum value to the Osc2/FM2 modulator (see "5" above)
17. **Front Panel effects on/Off and Insert FX:** allows switching effects on and off – or to check their status - without the need to go to the "Add" page. To Bypass effects, either use the Chorus/Delay level sliders on the "Add" page, or use the bypass icon at the top-right of the Prodyssey CV panel.
18. **Pitch and Val sequencers** with slide controls, edit modes, and presets.
19. **LFO 3:** multi-mode LFO with Hertz or tempo sync, pre-delay and fade-in controls.
20. **Adder:** Mixes two modulation signals together.

The “Add” Page

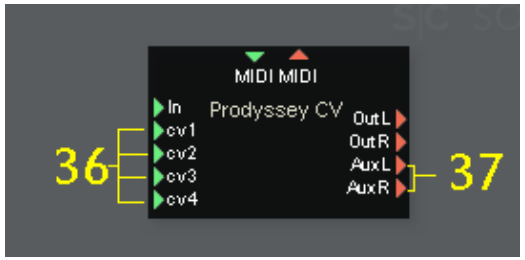


21. **Unison** mode and detune (see page 13 for more information).
22. **CV Aftertouch:** Prodyssey CV adds a 2nd aftertouch modulator with smooth controls (envelope follower) and 3 types of release time. You can mix the old and new aftertouch together.
23. **Sync LFO 1 & 2:** the LFOs can be synced to MIDI clock, and with Pre-Delay and Fade-in controls.
24. **Ring type menu:** you have access to “Original” or “2020” engines.
25. **Envelope Time expand:** allows multiplying or dividing the envelope time by values from 1 to 10. 0 is in the middle (12 o’clock) position. This control is available for each envelope independently.
26. **Vibrato Controls.** The Modulation wheel has its own, independent, LFO (a 4th LFO that is used only for the vibrato). You can set speed and intensity of the vibrato with this control. This LFO is sometimes available as a modulator.
27. **Stereo Insert slot** “Load State” button. Acts as an on/off or “Mute” of the insert slot. As shown by where this button is placed, the insert slot runs in parallel to the chorus.
28. **Chorus Boost:** The Wet output of the Chorus/Flanger can be boosted by 12dB, by increments of 3dB.
29. You can access **to 3 types of chorus/flanger**: original Prodyssey, “80s”, and “2020”, and all the values in between. This effect is more obvious with high feedback values.
30. **A High Pass filter** is placed on the wet output of the Chorus/Flanger
31. **The HI Damp filter** of the delay has been modified to achieve stronger filtering, allowing “vintage echo” types of sounds. A display shows the current frequency of the filter.
32. **Delay Parameter Link:** The left and right parameters of the delay can be linked for faster edition.
33. **Output routing:** You can output the Wet Delay on the main output, or on the Aux outputs, or both. This allows recording the dry and delay signals separately in one take (on 2 stereo tracks of your DAW). Also you can send the delay signal to extra filters and effects. You can also use these buttons as delay bypass.
34. **Preset Name and Main Panel show/hide:** The preset name mirrors the one on the main device. It is used not to confuse devices when using several Prodyssey CV in a single project, to avoid editing the sequencer of the wrong instance. The Main Panel button allows show/hide the main panel without having to reach the scope explorer or project.
35. **Step Sequencer Presets;** you can save the Pitch and Val parameters together, separately, or export them to compatible step sequencers.

A word on the delay BPM

The delay can be synced to tempo. The Tempo values of the delay is – like before- independent from the main device tempo.

The Project device



36. **CV inputs** are inputs for modulations from other Scope devices, VST Modulators, hardware synths or Eurorack/hardware modules. The term “cv” is a generic term for modulation inputs that actually means “sync modulation input”. To use hardware CV modulator, you need a “CV to Audio” converter. Also, signals coming from hardware may require – once converted - a gain boost of +6dB or more before the “cv” inputs. This boost can also be achieved inside the Prodyssey CV by adding the signal to itself in the "Adder" modulator. Signals coming from the VST/Native world are received by Scope through the ASIO busses, and may require an attenuation or boost of up to 12dB, that is achieved with the bus or send levels of your DAW.

37. **Aux outputs** for the wet delay signal (activated with the button described at #33 on page 4 of this manual)

Less obvious/hidden functions

Some modifications do not appear on the panel or in the form of controls because they are modifications of the internal circuitry.

38. **Sync timing improvement:** in order to use the drone mode, it is necessary to have perfect timing over *infinite* periods of time. The original Prodyssey could run out of sync after 16 measures and would require retriggering. Prodyssey CV can run in perfect sync for days without the need to retrigger the note or sequencer start.
39. **Envelopes:** they had to be changed to get a rid of a small bug that could cause Prodyssey unresponsive to notes-off.
40. **Para-Poly Step Sequencers:** the Pitch and Val sequencers will work in mono or polyphonic mode. In polyphonic mode, all notes of a chord will be transposed equally. “Paraphonic” means that you can control the Pitch of each oscillator independently.
41. **New Parameters default:** when loading a preset made on the original Prodyssey, the new parameters will be defaulted or deactivated. This allows loading your own presets or Prodyssey factory presets to hear them with almost no modification. The exception is the CV modulators levels, that are not reset to zero, which allows to listen to old presets with new modulators.
42. **Four LFOS:** Prodyssey CV includes 4 LFOS instead of 2. The 2 new LFOs are the Vibrato LFO and the LFO3.

New vs Old Modulators

Not all modulators are equal in the original Prodyssey. For example, Oscillator 1-FM 1 gives a choice between Sine LFO and Pulse LFO, but Oscillator 2-FM 2 gives a choice between Sine LFO and S&H. That is why Prodyssey CV modulators are not the same for all destinations, because

they give a choice between modulators that are not already available on the original panel. For example, Oscillator 1 Pitch CV does not include Pulse LFO which is already available elsewhere, while Oscillator 2 does include the Pulse LFO modulator that was never available previously.

Also, Oscillator 2 – FM 2 modulation selector looks like it includes only a few modulators, but no pitch or Val sequencer or LFO 3 etc. This is because these modulators are already available in the Pitch CV of Oscillator 2, and it was not necessary to add modulators that are already available for such and such control.

Recommended MIDI keyboard

Ideally, your MIDI keyboard should support modulation wheel as well as aftertouch. For the aftertouch, a basic keyboard is sufficient. If your keyboard does not include aftertouch, you will probably use the mod-wheel instead. You can deactivate the mod-wheel vibrato by setting the mod-wheel intensity slider – which is found on the "Add" page - to a value of Zero. Of course, if your keyboard has a great mod-wheel and aftertouch, in addition to a few rotary controllers or sliders, you will enjoy Prodyssey CV even more.

II. A few details

This part describes a few of the new functions. For more details about the Prodyssey original features, please refer to the Prodyssey manual.

Terminology:

- **"CV Panel"** refers to the lower part of the Prodyssey CV that is always apparent in the Main and Add pages.
- **"Step Sequencer Panel"** refers to **the floating panel** that contains the step sequencers, LFO 3 and Adder modulators.

1. Vibrato LFO

Prodyssey CV includes a dedicated vibrato with controls for speed and intensity (gain). If you do not want any vibrato when playing the mod-wheel, you will need to set the Mod-Wheel intensity to zero on the Add Page.

The Vibrato LFO is also available as a modulator. You will hear its effect only when you activate the Mod-Wheel. The only exception is in the S&H trigger control where the Vibrato LFO is used independently from the Mod-Wheel (modulator = "VibLFO").

Difference between "Mod-Wheel" and "Vibrato" Modulators

- The "Vibrato" modulator is the Vibrato LFO with a gain controlled by the Mod-Wheel. If mod-wheel is at zero, then you will hear no LFO modulation.

- The Mod-Wheel modulator is like a slider that you would move with the Mod-Wheel but which does not contain any LFO. It is equivalent to assigning the destination parameter to a MIDI CC, except that the Mod Wheel can be sent to several destinations (for example, cutoff + resonance + high pass) and can be set at different gain for each destination.

2. CV Aftertouch

The CV aftertouch is a second Aftertouch modulator that is independent from the original Aftertouch modulator.

It is displayed as ***"AftTouch"*** in the various modulation selectors. The Original and CV Aftertouch can be used together, in which case they will be added together. The CV Aftertouch can be modified through an envelope follower, allowing for better expressivity even with the worse MIDI keyboards.

You will find the new controls of this CV Aftertouch on the "Add" Page. The slider allows setting the basic "lag time" of the aftertouch, and a button allows setting the ratio between attack and release. **"I"** means that the attack and release will be the same (1:1). "**III"** means that the release will be 3 times longer than the attack, and **"X"** will set the release to 10 times the lag time.

In general, you will use the **"III"** release time factor when the slider is set to medium or long lag values (above 150 ms).

"X" is generally used with short lag times (below 100/150 ms). It can be used with higher values of course, but was designed for fast lag times. In any case, the maximum release time is 5000 ms and, logically, the lag time should not exceed 500 ms when using "X". If you use lag times higher than 500 ms, the maximum value of the release time will be 5000 ms anyways.

"I" is used when you want the attack and release time to be the same.

There is no good or bad choice between all these values. It is all a matter of the type of effect that you want to use.

3. Osc 2 – FM 2

Osc 2 FM 2 allows creating a famous effect achieved by manipulating the FM2 slider when oscillators are in Sync mode, but by using modulators rather than manipulating the FM fader. Moreover, controlling the FM slider with modulators allows setting a maximum value for the FM fader, which many of you will welcome as a necessary feature for the usability of this control.

Available modulators: S&H / AR / Pulse LFO / Mod-Wheel / BIAS / Osc 1 / AftTouch

When loading old presets, the modulator will be reset to "S&H" as provided by the original Prodyssey.
Other modulators (Pitch Sequencers, LFO 3 etc.) are already available through the "Osc 2 Pitch" CV modulator, so it was not necessary to add them on this second FM control of Osc 2 which is really dedicated to achieve an effect that made some soloist famous in the 70's and 80's .

BIAS modulator: is used in conjunction with the "Bias FM" level found at the right of the CV panel. The Bias FM Level sets the maximum value of the FM 2 fader. The Bias Level ranges from – inf to 0 dB.

Osc 1 Modulator: you can modulate Osc 2 with the shape of oscillator 1. The amount of modulation is set with the Gain of "Osc 1 FM" found at the right of the CV panel. The gain ranges from "-inf" to"+12 dB".

All other modulators: the maximum amount of these modulators is set by the FM slider itself.

4. S&H Triggers

In the original Prodyssey, the S&H engine could be triggered only by the Sine LFO. Now it can be triggered by many cycled modulators included inside the Prodyssey CV. When loading an old preset, the S&H trigger will revert back to Sine LFO.

Available modulators: Sine LFO / Pulse LFO / LFO 3 / Vibrato LFO / Pitch Sequencer / Val Sequencer / Adder

Please refer to § 6 below "Using Pitch and Val sequencers as triggers" for more information about how these triggers work.

5. Envelope Auto-Repeat

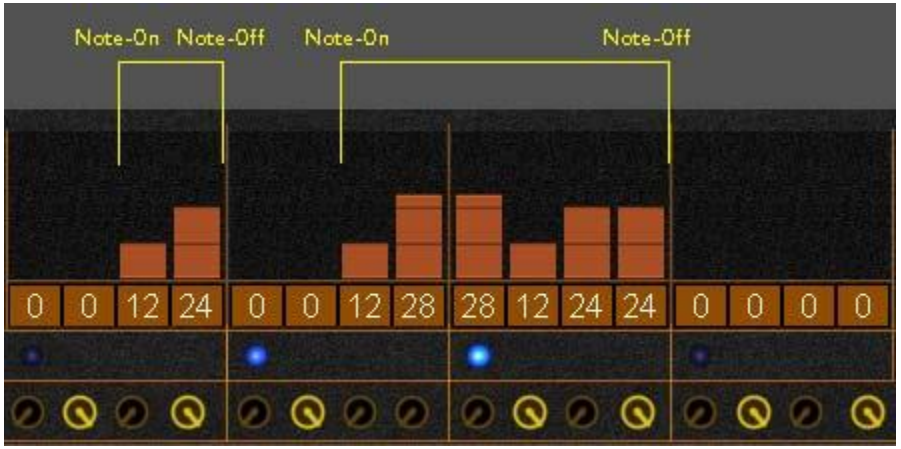
The Envelope auto-repeat could be triggered by the Sine LFO only. Now it can be triggered by most of the cycled modulators of the Prodyssey CV. In the same manner as in the original Prodyssey, the trigger is the same for both AR and ADSR envelopes. Please note that the Auto-Repeat is available only when the Prodyssey is in Mono mode, ie using a voice of 1. In polyphonic mode, the Auto Repeat will be deactivated, which is shown by an "Off" label replacing the trigger selection.

Available modulators: Sine LFO / Pulse LFO / Pitch Sequencer / Val Sequencer / LFO 3 / Adder / CV 1 / CV 2 / CV 3 / CV 4.

Please refer to § 6 below "Using Pitch and Val sequencers as triggers" for more information about how these triggers work.

6. Using Pitch and Val Sequencers as Triggers

Basically, a trigger is sent each time that a value changes from 0 to anything superior to zero. Before a new trigger can be sent, the value will have to come back to zero (trigger off) before a new trigger can be sent. It is equivalent to note-on / note-off messages. 2 or more consecutive steps will create a long trigger. It also means that you can have a maximum of 8 triggers per cycle of the Pitch or Val sequencers.



a) Using Pitch and Val sequencers with Auto-Repeat (triggering AR / ADSR envelopes)

The Pitch and Val sequencers can be used to generate note on and off messages with note duration. As long as the sequencers do not come back to zero, the Envelope will be sustained. Once the sequencer goes back to a value of zero, then it is the "Release" time of the envelope that will be activated.

In the above picture, using the Pitch sequencer (Orange sliders), we are generating a short envelope followed by a longer one.

The Val sequencer (Yellow rotary controls) would be fine to send short triggers or to modulate the Amp VCA. For Auto-Repeat, the Val Sequencer would be fine if the AR or ADSR are set to very fast values (e.g., pluck sounds, drums, with fast attack and release times).

b) Using Pitch and Val sequencers with S&H

A trigger will be sent each time a value goes from zero to something superior to zero. If we were using the Pitch sequencer pictured above, a new trigger would be sent on step 3 and step 7. This would be used to enhance the aleatory feeling of the S&H modulator.

7. Pitch & Val Sequencers controls

The Prodyssey CV contains two step sequencers: the "Pitch Sequencer" and the "Val Sequencer".

They are basically similar except that the Pitch sequencer is quantized to "perfect pitch" values on a range of 48 notes (4 octaves), while the Val Sequencer is not quantized and offers the full modulation range offered by scope DSP.

Both sequencers use the same "timeline", meaning that they cannot be "desynched" and will run at the same tempo and speed. This choice is mainly based on the DSP usage required to create independent timelines.

All the controls described below are common to both Pitch and Val Sequencers.

BPM: reflects the main tempo of the device which is on the "Add" page. Both displays are linked together, meaning that you can change the tempo on either the "Add" page or on the step sequencer panel.

Seq Rate: the sequencer will basically run at a speed of "1 cycle per measure" in relation to the tempo. You can divide or multiply this speed by dividing or multiplying the speed by 2, 3 or 4. "Divide by 1" or "Multiply by 1" is equivalent to no multiplication or division.

Seq/LFO Start: you can trigger the sequencer and LFO phase start by note on message (Note) or at the press of a button (Manual). The manual trigger is fun to create sequences that start independently from the note-on message received by the Prodyssey, and allow entering territories of higher rhythmic diversity. The sequencers will run independently from what is played on your keyboard, and independently from your playing mistakes or imprecisions.

The Seq/LFO start section applies to all sequencers and LFOs except the Vibrato LFO.

Shuffle: when at a value of "0" (full left) the rhythm will be binary rhythms. When at the max value (full right), the rhythms will be syncopated.

Slide Controls: they are simple envelope followers where you can set the time it takes for a step to go from a value to another. Instead of Attack and Release, you have access to "upward" and "downward" time. If you are looking for classic effects, it is the upward time that counts, and the downward time is generally left to zero.

Slide Modulate: The pitch sequencer slide time can be modulated by the Val Sequencer in its ***Raw*** output (the Up/Down slide time of the Val sequencer will not be taken into account), or **regular** output (Up/Down slide time will be taken into account, if any).

8. Sequencer Presets

In the top-middle of the sequencer panel, click on the button labelled "Seq Preset" to show the page with all step sequencers presets.

Those preset list will only save the sequencer values and the slide parameters.

- **Pitch and Val Presets:** saves a preset of the Pitch and Val Sequencers together.
- **Pitch Presets:** saves a preset of the Pitch Sequencer only
- **Val Presets:** saves a preset of the Val Sequencer only
- **Export Pitch and Val:** used to export / import Pitch and Val Sequencer presets to / from compatible devices.

The difference between the "Pitch and Val" presets and the "Export Pitch and Val" is the following: the "Pitch and Val" preset list is able to load the main preset list of the Prodyssey CV and will keep only the sequencer parameters. The" Export" preset list is for exporting the same parameters but in a way that can be used by other devices, but which is not compatible with the main preset list of any devices.

9. LFO 3

It is a simple multi-mode LFO with Tempo Sync and phase start controls, as well as pre-delay and fade-in time. It includes Sine, Triangle, Square, Saw Up, Saw Down, and Random wave shapes.

For perfect timing in sync mode, you would apply a phase start value of -180° or 0° depending on the wave shape.

- **Saw Up / Saw Down:** phase starts at **-180°**. (0° makes the phase start at "+ 1/8th of a measure")
- **Sine / Square / Triangle/Random:** phase starts at **0°**. (-180° makes the phase start at "+ 1/8th of a measure").

As seen on page 10, § "Seq/LFO Start", you can trigger the start of the phase with notes-on triggers or, in Manual mode, by pressing a button with the mouse or with a midi CC. The phase start needs to be retriggered each time you change the shape of the LFO.

If you would like an LFO to "free run", then deactivate the "Trig" button of the LFO that you want to "free run".

10. Adder

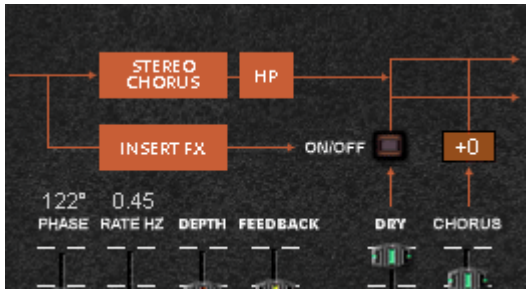
You can mix some modulators together in the Adder.

In the table below, we have highlighted the sources that are available only in one or the other input. This limitation was introduced in order to limit the default DSP usage.

Input 1		Input 2
CV 1		CV 1
CV 2		CV 2
CV 3		CV 3
CV 4		CV 4
Pitch Sequencer	+	Pitch Sequencer
Val Sequencer		Val Sequencer
LFO 3		LFO 3
CV Aftertouch		CV Aftertouch
Sine LFO		**Mod-Wheel**
Pulse LFO		**Vibrato**
Osc 1 Saw		**Osc 2 Saw**
Osc 1 Pulse		**Osc 2 Pulse**

11. Insert FX & Chorus

The Stereo Insert FX is placed on the Dry output of the chorus/flanger. In other words, it runs in parallel to the wet chorus /flanger. The Chorus/Flanger will not be affected by the FX loaded into the insert slot.



The routing diagram shows how the new chorus/flanger section is organized.

The Insert FX is placed on the dry line. The button will be lit when an insert is loaded. The button can also be used as a quick bypass.

The sound is stereo at the output of the chorus, HP, and Insert FX. The “Dry/Insert FX” and “Chorus” are like 2 stereo channels mixed together as 1 stereo channel.

The Wet chorus output includes a High Pass filter (HP) which is useful to remove bass frequencies from the Chorus/Flanger, making it easier to reach a fine sound by getting rid of unwanted bass frequencies.

Any stereo effect can be loaded into the insert slot, with a preference for distortion effects, equalizers, modulations effects and so on.

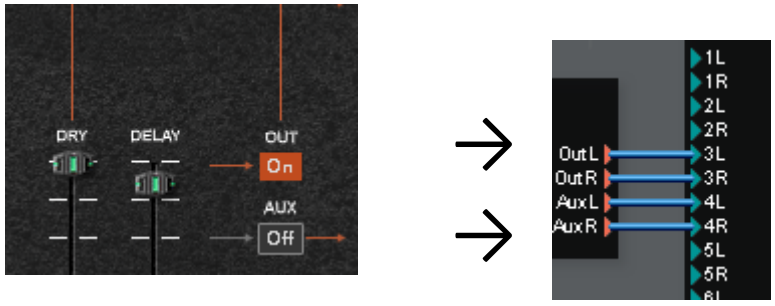
Then the sound is sent to the delay. The end of the diagram of this section somehow figures that mixing stage, as well as providing a transition to the Stereo Delay routing.

TIP: When storing your own presets, you should always save in the appropriate bank. For example, create three banks names “normal”, “with Inserts”, “polyphonic”. You could also add your name or initials in the preset bank names. This enhances a lot the preset experience on the long run, because effects are slow to load, or because polyphonic sounds may need a reminder that the preset was made for polyphony and for a particular number of voices.

12. Delay & Outputs

The Delay effect can be sent to the main mix (“Out”) or to the Aux outputs (“Aux”). The terms refer to the project module outputs. The On/Off buttons act as “Mute” and can be used to bypass the delay sound.

When recording the Prodyssey, it is a good idea to remove the delay from the main outputs (“Out” button is “off”), and to record it through the Aux outputs (“Aux” button is “on”).



13. Unison

The Prodyssey CV includes a Unison function which simulates stacking several synths together with a detune effect. The Unison requires polyphony, and the maximum number of Unison voices is limited by the current polyphony. For example, if you use a polyphony of 3, then the maximum Unison voices will be 3. If you use Prodyssey CV monophonically (voice count = 1), then Unison will have no effect ("off").

Additionally, using Unison will "steal" the voice number from the global polyphony. For example, if you use polyphony of 3 and a Unison setting of 3, then the Prodyssey CV will react like a monophonic synth, because all voices are used for Unison. But, if you use polyphony of 6 and a Unison setting of 3, then it is equivalent to a polyphony of 2: you will be able to play chords of 2 notes at the same time while keeping the full unison sound.

Note: the polyphony is set in the project explorer as with standard devices, and not from a parameter located on the Prodyssey CV panels.

Please also note that the Amp CV which modulates the volume of the output sound is not compatible with Unison even though it is compatible with polyphony: activating the Amp CV modulation will internally set Unison mode to "off", and Unison will be back once Amp CV is deactivated. These changes are not reflected by the Unison Voices settings. Please, check Part 15 below, section "The sound saturates" for additional tips.

14. Program Change

Program changes are of course available with the main preset list of the Prodyssey CV and work in the same manner as with other Scope devices. The presets must be" indexed" (automatically numbered with the "Autoindex" context menu of the preset list). The preset list window must be open and must display the presets of the bank where the presets that you want to change are located.

Using Program changes is an easy way to create changes in the sound and patterns, and to create suites of patterns like in a "song mode".

15. Troubleshooting & additional tips

Here is a list of the most common questions that you may ask yourself when editing the Prodyssey CV

Resonance does not seem to modulate	• The modulation is too fast (resonance does not respond well to fast modulations) • The modulation level is too high or too low (adjust modulation level or try other modulators) • The Cutoff frequency is not on a range where resonance has an obvious effect: change the cutoff frequency to hear more or less resonance. • The sound of the resonance modulation depends on many factors such as the cutoff frequency, the speed, type and amount of modulation. Some modulators will have little effect on the resonance. It really depends on the current sound and settings.
High Pass does not seem to modulate	• Try the "2 Poles" mode for a stronger High Pass filter. • A trick to verify that modulation is actually working is to add resonance (Peak) to hear better the frequencies at which the High pass is modulated. Once you are sure of your modulation, reset

	the HP Peak to the desired level. Some modulators will have a more obvious effect than others. • The High Pass frequency is too low (put the slider slightly higher than 0): the modulations are "multiplied" by the HP slider value, meaning that, for the same modulation amount, you will hear much more modulation when the HP slider is set at a high level than at a lower level. • The Low Pass frequency slider might be set too low for enough high frequencies to go through the high-pass filter. Set the Low Pass cutoff at higher frequency. The relation between Low Pass and High Pass frequency may be helpful to create temporary silences without using the "Amp CV" modulator.
S&H modulator does not seem to do anything	• Make sure you have set levels in the "S&H mixer" level sliders. • Make sure the S&H trigger is on the best modulator: try other modulators. • Make sure the S&H trigger source is not too slow: try faster modulators. • S&H may alternate between fast and slow modulations due to its random nature, it is not a bug.
The synth plays by itself	• Check if "Auto-Repeat" is engaged; it causes the synth to "play" by itself. • "Drone" mode might be engaged (it causes the synth to play continuously as VCA is deactivated).
Hung note plays continuously	• The synth has not received a proper note-off message or you are editing your daw at the same time as playing the synth or running a MIDI track (intense/contradictory MIDI activity). • **Solution:** drag the MIDI channel selector up and down to change the MIDI channel (causing the hung note to stop). This is more likely to happen with polyphony, when editing a MIDI channel or sequence in the DAW and restarting before a note off has been received. This is less likely to occur in mono mode.
I hear clicks when I use the Amp modulation	• The modulator goes from max to zero fast enough to create a click (fast transition/thru-zero). This is a natural phenomenon that happens in both digital and analog domains. • Try a higher offset and lower modulation level. • Try the "smooth" button at the right of Amp VCA label (available only when Amp CV is "on". The smooth button will make the modulation unipolar and slower. It works well with Pitch and Val sequencers, S&H and with Modulation Wheel, which are all unipolar modulators, but can have unexpected results with LFOs because LFOs are bipolar modulators.
Modulation is not loud enough	• In the adder, you can try adding a modulator to itself to double the modulation levels.
The sound saturates	• Use the "VCA Gain" fader to lower the sound output and get rid of unwanted saturation. • Saturation/distortion is likely to happen with high polyphony or Unison modes: lower the VCA Gain to adjust output levels. • Saturation-like sound may sometimes happen when using Unison & Polyphony with Amp CV modulation. You must save a preset then select a different preset to reset the values before going back to your current sound with the preset that you have just saved.
"Shuffle" does not seem to have any effect	• The sequence is not adapted to shuffling, either because the necessary steps are off or part of a "long note" (several subsequent steps on the same pitch). • The shuffle parameter of the step sequencers moves every second step of the sequences (that's step 2 / 4 / 6 / 8 / 10 / 12 / 14 / 16). It often happens that a sequence is not adapted to create an "obvious" shuffle/swing effect, but it does not mean that it will be incompatible with your shuffled/swing project.

What else?

Many functions were quickly described in the first chapter “New Features at a Glance”. You can also hoover over the controls of the Prodyssey CV to make tooltips appear. Just try and explore. Plug the Prodyssey CV and begin playing with it, mixing old and new features.

Sonic Core GmbH http://scope.zone/

Forum https://forums.scopeusers.com/

Many thanks to SpaceF-Devices https://spacef-devices.com/

Many thanks to all Scope users who have participated in making this manual better .

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