Driver Synthesizer

Driver is a 9-Oscillator, 12-voice Polyphonic Synthesizer with 2 built-in effects (Reverb and Saturation). Sporting an LFO, and two-stage envelope (Attack & Release) that can be applied to most any of the Oscillator parameters, and an assignable 16-step Sequencer, this little puppy packs quite a whallop. There's also four CV inputs that can be assigned to most paramters, and 2 CV output curves that can be sent from the device to control other Reason parameters. This device is a great compact synth that is very fun to use. Simple, intuitive, and inventive, especially given the limitations imposed on developers to constrain devices inside the SDK. Ochen K. is the manufacturer. Visit his website here: http://res.ochenk.com/

Patch Controls: Click the **Patch Name Label** window or **Browse Patch** folder icon to open the Reason browser where you can search for & load a patch. Use the **Up / Down** arrows to select the previous / next patch in the current folder. Click the **Disk** icon to open the "Save As" dialog to save the current front panel settings as a patch (Opt / Alt + Click to resave the current settings without opening the "Save As" dialog).

Global Controls: V (Volume): Master Volume. Range is 50%. Default is 50%. **A** (A Stage Duration). Default is 4/1 Synced, or 50% unsynced. **B** (B Stage Duration). Default is 2/1 Synced or 50% unsynced. **S** (Sync) determines whether the A & B stages are synced (on; default) or unsynced (off). **L** (Latch Mode 1-4) determines how the envelope stages operate, based on your keyboard performance. Options are: **L1** plays A to B, then stops, if you lift up on keys, stop is immediate. **L2** plays A for as long as keys held down. When keys are lifted, B is played through to the end and sound stops. **L3** is like a trigger or unlatched mode. Press down and both A & B are played through like a one-shot. **L4** is similar to L3, but is continued to B after lifting up on the keys.

Curve Draw Area: Here is where you can draw your Envelope Curves. There are two stages that are viewable. Use the **A/B** button to switch from showing stage **A** (attack), and stage **B** (release). Note that changing the end point of Stage A also changes the start point of Stage B. These are both the same points in the curve. **L** is the LFO Apply button and **S** is the Sequencer Apply button. First, select an Oscillator parameter. Then click L or S, and a slider pops up in the draw area. use the Slider to adjust the amount to which the LFO or Sequencer affects the selected parameter. **R** is used to Reset the Curve that has focus. You are asked if you want to reset the parameter or not (select **Yes** or **No**). The **Note On** LED displays as a red dot at the top right of the Draw Area; indicating when the device is being played.

OSC / SAW / NOISE: Turns on or off the 3 Oscillators.

C1 / C2: Use these buttons to select the CV1 & CV2 Curves. Adjust these curves to determine how the CV is output via the CV Outputs on the back of the device.

R / D / S: R enables the Reverb effect. **D** and **S** open the Reverb Decay and Saturation Curves, respectively. Note that these two effects are global and applied to the final output sound.

L / D / R / S: L is the LFO Wave rotary. Turning it accesses the 6 different LFO waves (default off). Waves are: Sine, Triangle, Square, Random, Reverse Ramp, and Ramp. **D** opens the LFO Depth Curve. **R** opens the LFO Rate Curve, and **S** turns the LFO Sync On (when lit) or Off (unlit; default).

OSC / SAW / Noise Common Controls: F1 sends the Oscillator to Filter 1, and **F2** sends the Oscillator to Filter 2. If both are enabled (lit), then the Oscillator is sent in series (Osc > F1 > F2). **V** opens the Oscillator Volume Curve. **P** opens the Oscillator Pan Curve.

OSC / SAW Common Controls: O is the Oscillator's Octave rotary, and allows you to adjust between 5 Octaves (-2 to +2, with 0 centered). **PT** opens the Oscillator Pitch Curve.

Other OSC Controls: The bottom left button in this section is the **Waveshape** selector, where you can select 4 different Oscillator shapes: Sine, Triangle, Saw, and Pulse. **PW** opens the Pulse Width Curve. The Pulse Width narrows or widens the shape of the wave cycle.

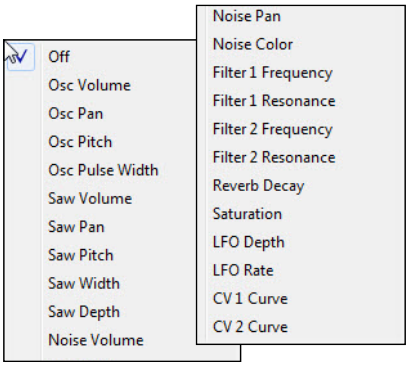
Other SAW Controls: W opens the SuperSaw Width Curve. Since the SuperSaw is made up of 7 Oscillators, this controls the width or phase between those 7 Oscillators, either narrow or wide. **D** is opens the SuperSaw Depth Curve. Depth controls the relative volume between the 7 Oscillators.

Other Noise Controls: C opens the Noise Color Curve, which controls the Noise Timbre.

CV 1 & CV 2 Out: You can send the CV 1 & 2 Curve from the front of the device out to any other CV input in any other Reason devices.

Filter Section: F1 and **F2** are where you select Filters in the F1 and F2 slots. They are both rotaries. Each Filter slot has the same 4 Filter selections: Low Pass, High Pass, Band Pass, and Notch (Band Reject). **F** opens the Filter Frequency Curve and **R** opens the Filter Resonance Curve.

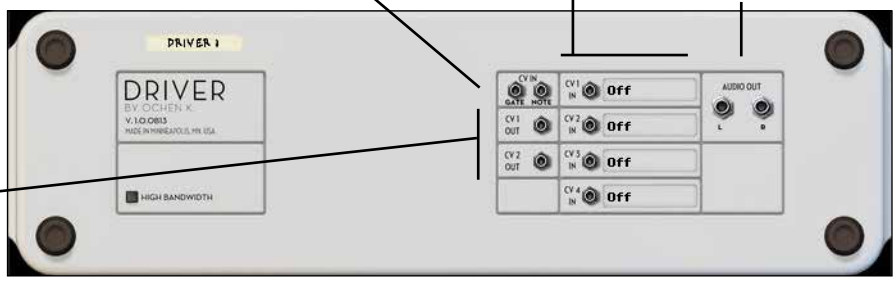
Sequencer Section: The two Buttons at the left side of the Sequencer section are the **Resolution** (top) and **Step Count** (bottom) selections. There are 5 Choices for Sequencer Resolution: 8 (1/8), 8T (1/8T), 16 (1/16), 16T (1/16T), and 32 (1/32). Step Count allows you to select how many of the steps within the Sequencer are used for your sequences. By default, Resolution is 16 (1/16) and Step Count is 16 (all steps used). **A** opens the Sequencer's Attack Curve, and **R** opens th Sequencer's Release Curve. At the bottom of the Sequencer section are the **16 steps**. To enable a step, press it, and the red LED will light up. When a step is off, it acts as a "rest."



Sequencer Gate / CV: Lets you to control / play the device via external CV input. **Gate** input uses an external CV source to control the note on / off and velocity, while the **CV** input receives an incoming source to control the note pitch.

CV 1-4 In: Allows you to send CV from other Reason devices (as sources) into Driver. Clicking directly on the "Off" area opens the above submenu of Target selections.

Audio Out: Standard Left (L) & Right (R) Audio outputs.



Driver Synthesizer Modulation Targets (Within a Combinator)

Target	*Explanation*	*Min / Max*
Master Controls	[Master Controls submenu]	--
Volume	Sets the global volume level for the device	0% / 100%
A Stage Duration	Sets the global length of time for the A Stage when the A Stage is not synced	0% / 100%
A Stage Duration Sync	Sets the global length of time for the A Stage when the A Stage is synced	16/1 / 1/128 (13 stages)
B Stage Duration	Sets the global length of time for the B Stage when the A Stage is not synced	0% / 100%
B Stage Duration Sync	Sets the global length of time for the B Stage when the A Stage is synced	16/1 / 1/128 (13 stages)
Sync	Determines whether or not the A and B Stages are synced to the song tempo	Off / On
Latch Mode	Determines how the A and B Stages react to performance (key down / up)	1 / 4 (4 modes)
Oscillator Controls	[Oscillator Controls submenu]	--
Osc Enable	Turns the Oscillator Section Off or On	Off / On
Osc to Filter 1 / 2	Determines whether or not to sends the Oscillator to Filter 1 or Filter 2	Off / On
Osc Octave	Selects the Octave range for the Oscillator	-2 / +2 (5 octaves)
Osc Wave Shape	Selects the Wave Shape for the Oscillator (Sine / Triangle / Sawtooth / Pulse)	Sine / Pulse (4 wave shapes)
LFO to Osc V / P / PT / PW	Sends the LFO to modulate the Oscillator Volume / Pan / Pitch / Pulse Width	0% / 100%
SEQ to Osc V / P / PT / PW	Sends the Sequencer to control the Oscillator Volume / Pan / Pitch / Pulse Width	0% / 100%
Supersaw Controls	[Supersaw Controls submenu]	--
Saw Enable	Turns the Supersaw Section Off or On	Off / On
Saw to Filter 1 / 2	Determines whether or not to sends the Supersaw to Filter 1 or Filter 2	Off / On
Saw Octave	Selects the Octave range for the Supersaw	-2 / +2 (5 octaves)
LFO to Saw V / P / W / D	Sends the LFO to modulate the Supersaw Volume / Pan / Width / Depth	0% / 100%
SEQ to Saw V / P / W / D	Sends the Sequencer to control the Supersaw Volume / Pan / Width / Depth	0% / 100%
Noise Controls	[Noise Controls submenu]	--
Noise Enable	Turns the Noise Section Off or On	Off / On
Noise to Filter 1 / 2	Determines whether or not to sends the Noise to Filter 1 or Filter 2	Off / On
LFO to Noise V / P / C	Sends the LFO to modulate the Noise Volume / Pan / Color	0% / 100%
SEQ to Noise V / P / C	Sends the Sequencer to control the Noise Volume / Pan / Color	0% / 100%
Filter Controls	[Filter Controls submenu]	--
Filter 1 Type	Selects the Filter used in slot 1 (Low Pass / High Pass / Band Pass / Band Reject)	Off / Band Reject (5 modes)
Filter 2 Type	Selects the Filter used in slot 2 (Low Pass / High Pass / Band Pass / Band Reject)	Off / Band Reject (5 modes)
LFO to Filter 1 Freq / Res	Sends the LFO to modulate the Filter 1 Frequency or Resonance	0% / 100%
LFO to Filter 2 Freq / Res	Sends the LFO to modulate the Filter 2 Frequency or Resonance	0% / 100%
SEQ to Filter 1 Freq / Res	Sends the Sequencer to control the Filter 1 Frequency or Resonance	0% / 100%
SEQ to Filter 2 Freq / Res	Sends the Sequencer to control the Filter 2 Frequency or Resonance	0% / 100%
Sequencer Controls	[Sequencer Controls submenu]	--
Sequencer Resolution	Sets the timing for the Sequencer (1/8; 1/8T; 1/16; 1/16T; 1/32)	8 / 32 (5 stages)
Sequencer Step Count	Sets the amount of Steps used in the Sequencer	1 / 16 (16 steps)
Sequencer Step 1 - 16	Determines whether the associated Sequencer step is enabled or at rest	Off / On
LFO to Sequencer Attack	Sends the LFO to modulate the Sequencer's Attack stage	0% / 100%
LFO to Sequencer Release	Sends the LFO to modulate the Sequencer's Release stage	0% / 100%
Reverb Controls	[Reverb Controls submenu]	--
Reverb Enable	Turns the Reverb effect Off or On	Off / On
LFO to Reverb Decay	Sends the LFO to modulate the Reverb effect's Decay	0% / 100%
SEQ to Reverb Decay	Sends the Sequencer to control the Reverb effect's Decay	0% / 100%
Saturation Controls	[Saturation Controls submenu]	--
LFO to Saturation	Sends the LFO to modulate the Saturation effect	0% / 100%
SEQ to Saturation	Sends the Sequencer to control the Saturation effect	0% / 100%
LFO Controls	[LFO Controls submenu]	--
LFO Wave	Selects the global LFO Wave (Sine / Triangle / Square / Rnd / Rev Ramp / Ramp)	Off / Ramp (7 modes)
LFO Sync	Determines whether or not the LFO is synced to the song tempo	Off / On
Screen Controls	[Screen Controls submenu]	--
Screen A/B Mode	Toggles the Draw Screen area mode between the A Stage and B Stage	Off / On (A / B)
LFO Apply Mode	Turns the LFO Apply Mode off or on	Off / On
Sequencer Apply Mode	Turns the Sequencer Apply Mode off or on	Off / On
CV Controls	[CV Controls submenu]	--
LFO to CV 1 / CV 2 Curve	Sends the LFO to modulate the CV 1 or CV 2 Output Curve	0% / 100%
SEQ to CV 1 / CV 2 Curve	Sends the Sequencer to control the CV 1 or CV 2 Output Curve	0% / 100%
Receive Notes	Determines whether the device receives incoming notes when the Combi is played	0 / 1 (Not Received / Received)