Physion

User Guide



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Welcome

夕 Physion 🕤 C	Reverb x MicroPitch	• • • •		Eventide
() TRANSIENT FX			Reverb 🔻	3.9 dB
67 1.9 s Size Decay	36 Low Damping	54 High Damping	1 49% Mix	Gain
() STRUCTURAL SPLIT	Focus Transient			
33 66 Smoothing Transient Dec Source 🔓 General 🗸	ay Tonal			+ +
பு TONAL FX		Poly Mono	Pitch 🔻	4.0 dB
Uni +3c Uni Voice 1 Voice 2	Uni Voice 3	-37 Tone	64% Mix	Gain A
Mix 100%		Gain 0.0 dB ——		Bypass

1.1 About This Product

Physion Mk II is a production toolkit which enables you to selectively apply effects to the Transient and Tonal elements of a signal, giving you greater creative freedom and flexibility to sculpt your sound. Our STRUCTURAL SPLITTM technology separates audio into TRANSIENT and TONAL elements: the rapidly changing parts of a signal are identified as TRANSIENT, and the remaining, sustaining elements are TONAL.

With the ability to affect the TRANSIENT portion of a signal without impacting the TONAL portion, or vice versa, many difficult mixing problems become trivial. For example, creating a smooth vocal reverb without transient sibilance, or retuning drums without degrading their attack. Independent adjustment of gain allows for auto-bowed effects, or transient isolation. Separate expanders or compressors on the attack and sustain of a drum allow for precise dynamic control.

As you explore Physion Mk II, you will discover just how many common mixing problems it can solve.

Physion Mk II features:

- STRUCTURAL SPLIT technology, which allows for complete separation of TRANSIENT and TONAL audio content.
- 7 custom Eventide effects on the TRANSIENT stream.
- 8 custom Eventide effects on the TONAL stream.
- Handy post-STRUCTURAL SPLIT waveform viewer.
- Preset bar for easily saving and recalling presets.

Introduction



The Physion Mk II user interface is divided into five main horizontal sections. The most important section to set first is the STRUCTURAL SPLIT section, which controls the flexibility and efficiency of the splitting algorithm.

The five sections are:

Preset Bar	Load and save presets, A/B Comparison, and Settings.
Transient Effects	Applies effects to the Transient content of your signal.
STRUCTURAL SPLIT	Performs the separation magic.
Tonal Effects	Applies effects to the Tonal content of your signal.
GLOBAL CONTROLS	Global mix, gain and bypass.

2.1 Signal Flow Diagram

These sections are connected as shown in the following signal flow diagram.



2.2 Mouse & Keyboard Input

The plugin's parameters may be changed by clicking and dragging up or down, or otherwise modified using the following key combos:

Action	Мас	Windows
Set To Default	double-click or 📼-click	double-click or Alt-click
Precision Drag	€ drag	Ctrl drag

Additionally, the tab and t-tab key commands can be used to navigate forwards or backwards, respectively, between text fields in the plugin.

Structural Split Processing



The STRUCTURAL SPLIT divides the incoming audio signal into TRANSIENT and TONAL signals. It does this by looking for regions of relative stability in terms of time and frequency and considers those to be TONAL. Subtracting those regions from the input, what remains is TRANSIENT. The advantage of this approach is that, unlike compressors or other dynamics-based tools, it is not level-dependent. After all, in the real world, transients can be loud or soft.

The TRANSIENT and TONAL signals are complementary: if you sum them back together, they perfectly reconstruct the incoming signal. Put another way, any part of the sound that is not considered TONAL is TRANSIENT, and vice versa. The word "considered" here is important: the controls in the STRUCTURAL SPLIT section simply affect which areas of the sound across time and frequency are considered TRANSIENT or TONAL, and do not alter the sound on their own.

The following steps are useful for configuring the STRUCTURAL SPLIT controls:

- 1. Choose the appropriate SOURCE TYPE for your program material.
- 2. Turn off the TRANSIENT and TONAL effects.
- 3. Solo either TRANSIENT OR TONAL.
- 4. Adjust STRUCTURAL SPLIT controls as necessary until you reach your desired results. The streams do not necessarily have to be completely distinct from each other.

Even if you do not apply any of the above suggestions to hear the separation, you'll still be able to see the split in the WAVEFORM VIEWER to the right of the STRUCTURAL SPLIT Controls. This viewer displays the resulting TRANSIENT / TONAL Split, with each color-coded waveform visually overlaid atop the gray original signal waveform.

Structural Split Enable	Turns the STRUCTURAL SPLIT process on and off. When off, it turns the TRANSIENT / TONAL Split into a simple volume crossfader be- tween two parallel effect channels. Essentially, for your conve- nience, we allow Physion Mk II to become a simple parallel ef- fects processor. When the STRUCTURAL SPLIT section is off, FOCUS becomes the pre-effect mixer for the parallel effects processor (all other Split controls do not function). For example, a cen- tered FOCUS divides the input audio volume evenly into each channel before the audio hits the effects.
Smoothing	A fine-tune control used to slow down the fastest transitions (in time and frequency) in both directions between TRANSIENT and TONAL. Basically, this controls how fast a piece of TRANSIENT or TONAL audio can switch to the other stream. This is primarily used to smooth out any artifacts that you may encounter with difficult source signals. It can also be musically useful in creating softer Transient attacks.
Transient Decay	An extension of Smoothing (but only in one direction), this con- trol limits how quickly audio is allowed to transition (in time and frequency) from TRANSIENT to TONAL, thus increasing the decay on the Transients. Larger values of TRANSIENT DECAY limit the transition rate substantially. Not only is this useful for smooth- ing out artifacts, but at larger values it allows for precision con- trol of auto-swelling the TONAL side of the audio, or conversely the "muted" or "choked" staccato sound of the Transients. For instance, by soloing the TONAL channel and using FOCUS and TRANSIENT DECAY you can turn struck or plucked string instru- ments into beautiful bowed sounding pads.

Source Type	This menu box includes coarse algorithmic tunings for different audio sources as suggestions for the separation task, so it's gen- erally best to match the SOURCE TYPE to the audio you're wanting to process through Physion Mk II. By all means, don't let these suggestions deter you from being adventurous in trying differ- ent tunings on different source material.
	These coarse SOURCE TYPE tunings essentially scale the internal algorithm parameters used by FOCUS to split the input audio. Tunings for higher polyphony or complexity (Full Mix, Full Drum Set, Electronic Beat, Piano, Guitar) tend to split best on source material that has higher polyphony or complexity.
Source Lock	This locks the SOURCE TYPE during Preset loading, ensuring that the splitting algorithm stays optimized as you try different presets on the same source material.
Focus	True to its name, this vertical slider control "focuses" the sonic energy towards either the TRANSIENT or TONAL audio chan- nel, with extreme settings pushing all the energy into either TRANSIENT (top of slider) or TONAL (bottom of slider). However, the real separation magic occurs in the middle settings, where Focus sets the main transition region or decision point where audio splits (in time and frequency) into the separate TRANSIENT and TONAL streams.
	Pushing more energy into the TRANSIENT channel will create mu- sical auto-swelling in the TONAL channel. Alternatively, pushing more energy into the TONAL Channel will trim the TRANSIENT au- dio into staccato transients devoid of tonal resonance. You can also use Focus to morph audio signals between two parallel ef- fects. But instead of a simple cross fade, the audio transitions through the "Split Domain".

WAVEFORM VIEWER Directly to the right of the STRUCTURAL SPLIT controls, the WAVE-FORM VIEWER displays the resulting post-STRUCTURAL SPLIT waveforms, with the TRANSIENT audio in the top viewer and the TONAL audio in the bottom viewer. All waveforms are displayed pre-Effect and pre-Gain.

> Each split signal is visually overlaid atop the original input audio in gray, highlighting the unique 3-dimensional (time, frequency, and signal magnitude) nature of the split. In other words, we're not just applying time domain dynamics processing here to pull out the attacks of signals.

> For stereo Physion Mk II instantiations, stereo waveforms will appear with the left channel magnitude in the positive direction and right channel magnitude in the negative direction.

Transient Processing

After the STRUCTURAL SPLIT, the TRANSIENT signal is independently processed through the selected TRANSIENT effect. The following controls apply to all TRANSIENT effects.



4.1 Controls

Transient FX Power	Turns the TRANSIENT FX effect processor on or off. The gain slider remains active when the effect is off.
Tempo Sync Mode	Select from Sync Off, Session, or Manual Tempo Modes.
Темро Sync BPM	Sets the BPM when in Manual Tempo Mode, and displays the session BPM when in Session Tempo Mode.
TRANSIENT FX SELECT	Selects the effect to be applied to the TRANSIENT signal.
Transient Gain	Amount of gain in dB (-96 to +18) applied to the Transient audio post-FX. This can be used to bring all the Transients up or down. Using this in conjunction with the TONAL GAIN alone can lead to dead simple parallel compression effects to easily increase or decrease the "punch" and "body" of percussive audio.
Transient Solo	Mutes the TONAL channel, effectively the same as turning the TONAL GAIN all the way down.
Transient Output Meter	Displays the output level of the TRANSIENT audio stream, post- Effect and post-Gain. Clipping is indicated by the red clip light, which can be cleared by clicking it.

Transient Delay

Delay/echo effect with tempo-sync capability and low and high cut filtering.

U TRANSIENT FX		Warp Delay		Delay 🔹
Dot 1/8	0%	25	25	1
Time	Feedback	Low Cut	High Cut	Mix
Controls				
WARP	Controls w glide (War	hether changing p on) or crossfac) delay time cause le (Warp off).	s a tape echo type
Тіме	Amount of Session or M Sync Off Tem	f delay, from 0 to Ianual Tempo Modes npo Mode: value is c	4 seconds. s: value is displayed i displayed in seconds.	n metrical units.
Feedback	Amount o above 100	f delay output t 1% produce self-c	hat is fed back in oscillation.	nto delay. Values
Low Cut	Amount of path.	f low frequency	rolloff. Low Cut	is in the feedback
Нідн Сит	Amount of path.	f high frequency	rolloff. Нідн Сит	is in the feedback
Міх	Ratio of de	elayed signal to c	lry signal.	

Transient Tap Delay

A multi-tap delay-line with tempo-sync capability. Useful for rhythmic delays, harmonic comb filtering, volume swells, or unique reverberant sounds.

① TRANSIENT FX 120 BPM				Tap Delay 🔻
1/4 Length	4 Taps	0 Taper	0 Spread	50% Mix
Controls				
Length	Total time Session or N Sync Off Ter	e over which the ta Manual Tempo Modes mpo Mode: value is c	aps are spaced, s: value is displayed displayed in second	up to 4 seconds. d in metrical units. ls.
Taps	The numb	per of delay taps,	up to 32 taps.	
Taper	Controls the amplitude fade of the taps through the delay tail. Increasingly negative values will cause the taps to swell towards the end of the tail, and increasingly positive values will cause the taps to fade out towards the end of the tail.			
Spread	Controls t tail. Incre beginning closer to t	the rhythmic space easingly negative g, while increasin the end of the tail	cing for the taps values will grou gly positive val	s through the delay up taps towards the ues will group taps
Міх	Ratio of d	elayed signal to c	dry signal.	

Transient Dynamics

A continuously variable Compressor/Limiter or Expander/Gate. The operating mode depends on the setting of the RATIO knob.

්) TRANSIENT FX				Dynamics 🔻
-60.0 dB Threshold	20.0:1 Ratio	5.0 ms Attack	112.9 ms Release	21.8 dB Makeup
Controls				
Threshold	The gain cr this level w signals bel	ossover point. Ir ill trigger gain r ow this level will	n Compression r eduction, while have gain redu	node, signals above in Expansion mode ction applied.
Ratio	Ratio of ga	in reduction abc	ove and below th	ne threshold level.
	lf turned le pander/Ga signal belo	ft-of-center (e.g. te and the redu w the threshold.	., 1:4), the effect ction applies to	functions as an Ex- the portion of the
	If turned r Compresso of the signa	ight-of-center(e or/Limiter and th al above the thre	e.g., 4:1), the e ne reduction ap eshold.	ffect functions as a plies to the portion
Аттаск	Determine: increase in	s how quickly th the input level.	e dynamics pro	ocessor reacts to an
Release	Determine: decrease ir	s how quickly the n the input level.	e dynamics proc	essor responds to a
Meter	Displays th	e amount of gai	n reduction beir	ng applied.
Μακευρ	Adjusts the sion/Gating	e output level, po g.	ost-Compressior	n/Limiting or Expan-

Transient Phaser

A classic multi-stage allpass based Phaser effect, which can be controlled via LFO or Envelope.

U TRANSIENT FX				Phaser 🔻
	4 6			
1/2 ENV LFO 💭	8 Poles	51% Feedback	33 Base	85% Depth

Controls	
Tempo Sync Mode	Select from Sync Off, Session, or Manual Tempo Modes. Only available in LFO mode.
Τεμρο Sync BPM	Sets the BPM when in Manual Tempo Mode, and displays the session BPM when in Session Tempo Mode. Only available in LFO mode.
LFO/Envelope Switch	Controls whether the Phaser is driven by an LFO, or by the en- velope of the TRANSIENT Effects section input.
LFO RETRIGGER	Retriggers the LFO. Only applies to LFO mode.
Release	The left-most knob in Envelope mode. Sets how quickly the envelope follower decays.
Rate	The left-most knob in LFO mode. Sets the speed of the LFO. Session or Manual Tempo Modes: rate is displayed in metrical units. Sync Off Tempo Mode: rate is displayed in Hz.
Poles	The number of allpass stages in the phaser. A higher number of poles results in a deeper, more intense sound.
Feedback	The amount of output from the phaser that is fed back into its input.
Base	The starting point for the phaser's modulation. Lower values will allow the phaser to sweep down to lower frequencies.
Depth	How far the modulation can sweep. Higher values will allow the phaser to sweep up to higher frequencies.

Transient Reverb

A room Reverb designed with high echo density, imparting a fast and smooth build-up of reflections. This pairs nicely with transient sounds to create a sense of space without obvious echo slap back.

也 TRANSIENT FX				Reverb 🔻
50 Size	1.0 s Decay	10 Low Damping	30 High Damping	33% Mix
Controls				
Size	The perce	eived "size" of the	reverberant spac	e.
Decay	How long -60dB (up	it takes the revert to 10 secs).	perated sound to	decay to a level of
Low Damping	Amount o	of low frequency fi	ltering in the reve	erberant tail.
High Damping	Amount o	of high frequency [.]	filtering in the rev	erberant tail.
Міх	Ratio of w	vet signal to dry sig	gnal.	

Transient Gate and EQ

A Gate followed by a 3-band overdriveable EQ.

じ TRANSIENT FX				Gate+EQ 🔹
-65.0 dB Threshold	0.0 dB Low Gain	2.0 kHz Mid Frequency	0.0 dB Mid Gain	0.0 dB High Gain
Controls				
Gate Threshold	The level	at which the Gate o	opens.	
Meter	Displays t	he amount of gain	reduction being	g applied.
Low Gain	Sets the g Q of 0.5).	ain for the low-free	quency band (20	00Hz low shelf with
MID FREQUENCY	Sets the fr with Q of	requency of the of t 0.707).	the mid-frequen	icy filter (peak filter
Mid Gain	Sets the gain of the mid-frequency filter.			
High Gain	Sets the g Q of 0.5).	gain of the high-fre	quency filter (5k	kHz high shelf with

Transient Reverse Delay

Reverse delays with dynamic retriggering, pitch and feedback controls for "granular" type FX.

් TRANSIENT FX		Pin	g Pong Crystals	Reverse Delay 🔻
🔒 120 BPM	eə			
5/16	-30.0 dB	0c	0%	100%
Time 🔉 • —	Env Retrigger	Pitch	Feedback	Mix

Controls	
Ping Pong	When on, the stereo sum feeds the Left Reverse Delay, which then feeds the Right Reverse Delay. When off, the effect acts as regular independent stereo Reverse Delays.
Crystals	Puts the pitched reverse delay into the feedback loop, caus- ing the grain to flip-flop direction and the pitch to climb or de- scend. Only heard with feedback applied.
Тіме	The duration of the reversed delay grain. Session or Manual Tempo Modes: value is displayed in metrical units. Sync Off Tempo Mode: value is displayed in seconds.
Env Retrigger	Enables the signal envelope to open the Reverse Delay Gate and retrigger the Reverse Delay, with the gate hold time set to the TIME parameter. Useful for allowing new note attacks to re- trigger the REVERSE DELAY mechanism. When off, disables the THRESHOLD knob, and the Reverse Delays are always fed the in- put. RETRIGGER will still reset the reverse grain.
Retrigger	Resets the REVERSE DELAY grain, and if ENV RETRIGGER is on, also opens the gate. LED will light on button press, or if the threshold is reached.
Threshold	When ENV RETRIGGER is on, control sets the threshold to the Gate that feeds the stereo Reverse Delays. Also sets the threshold for retriggering the start of reverse grains. The Gate hold time is set to TIME.

Sidechain	Toggles the use of an external sidechain as a retrigger source instead of the TRANSIENT signal's envelope.
Рітсн	Pitch, or speed, of the reverse grain delay. Stereo detuning will occur for any pitch setting not divisible by 10 cents.
Feedback	Amount of delay feedback.
Міх	Ratio of wet signal to dry signal.

Tonal Processing

After the STRUCTURAL SPLIT, the TONAL signal is independently processed through the selected TONAL effect. The following controls apply to all TONAL effects.



5.1 Controls

Tonal FX Power	Turns the TONAL FX effect processor on or off. The gain slider remains active when the effect is off.
Tempo Sync Mode	Select from Sync Off, Session, or Manual Tempo Modes.
Темро Sync BPM	Sets the BPM when in Manual Tempo Mode, and displays the session BPM when in Session Tempo Mode.
Tonal FX Select	Selects the effect to be applied to the TONAL signal.
Tonal Gain	Amount of Gain in dB (-96 to +18) we apply to the TONAL audio post-FX. Using this in conjunction with the TRANSIENT GAIN alone can lead to dead simple parallel compression effects to easily increase or decrease the "punch" and "body" of percussive audio.
Tonal Solo	Mutes the TRANSIENT channel, effectively the same as turning the TRANSIENT GAIN all the way down.
Tonal Output Meter	Displays the output level of the TONAL audio stream, post-Effect and post-Gain. Clipping is indicated by the red clip light, which can be cleared by clicking it.

5.2 Tonal Effects

Tonal Delay

Delay/echo effect with tempo-sync capability, modulation, and low and high cut filtering.

ථ TONAL FX			Nodulation Warp	Delay 🔻
🔒 120 BPM				
Dot 1/8 Time	0% Feedback	25 Low Cut	25 High Cut	50% Mix

Controls

Modulation	Adds random voice chorusing to the delay tap, the type of which is determined by the WARP control. WARP Off results in crossfading modulation, and WARP On results in regular delay line modulation.
WARP	Controls whether changing delay time causes a tape echo type glide (Warp on) or crossfading (Warp off).
Тіме	Amount of delay, up to 4 seconds. Session or Manual Tempo Modes: value is displayed in metrical units. Sync Off Tempo Mode: value is displayed in seconds.
Feedback	Amount of delay output that is fed back into delay. Values above 100% produce self-oscillation.
Low Cut	Amount of low-frequency rolloff. Low Cut is in the feedback path.
Нідн Сит	Amount of high-frequency rolloff. НIGH Сит is in the feedback path.
Міх	Ratio of delayed signal to dry signal.

Tonal Dynamics

A continuously variable Compressor/Limiter or Expander/Gate. Operating mode depends on setting of RATIO knob.

() TONAL FX				Dynamics 🔹
-20.0 dB Threshold	4.0:1 Ratio	10.0 ms Attack	100.0 ms Release	0.0 dB Makeup
Controls				
Threshold	The gain c this level v signals be	rossover point. In will trigger gain r low this level will	n Compression m eduction, while in have gain reduct	ode, signals above n Expansion mode tion applied.
Ratio	Ratio of ga	ain reduction abo	ove and below the	e threshold level.
	lf turned le pander/Ga signal bele	eft-of-center (e.g ate and the redu ow the threshold	., 1:4), the effect r uction applies to	functions as an Ex- the portion of the
	lf turned Compress of the sigr	right-of-center(or/Limiter and th nal above the thre	e.g., 4:1), the eff he reduction app eshold.	ect functions as a lies to the portion
Аттаск	Determine increase ir	es how quickly th In the input level.	ne dynamics proc	cessor reacts to an
Release	Determine decrease i	es how quickly th in the input level.	e dynamics proce	essor responds to a
Meter	Displays th	ne amount of gai	n reduction being	g applied.
Μακευρ	Adjusts th sion/Gatin	e output level, po 1g.	ost-Compression/	′Limiting or Expan-

Tonal Pitch

A 3-voice Pitch Shifter with +/- 1 octave shift per voice and fine-tuning control. Useful for retuning drums, creating harmonies, or micropitch chorusing/double-tracking – all without transient slap back or smearing (assuming FOCUS isn't all the way TONAL).



Controls

Ροιγ/Μονο Świtch	Sets the pitch shifting algorithm to use, polyphonic or mono- phonic. Polyphonic mode uses our new SIFT (Spectral Instanta- neous Frequency Tracking)-based pitch shifting algorithm opti- mized for polyphonic sources.
VOICE 1-3	The amount of shift for the voice (+/- 1 octave).
VOICE 1-3 ENABLE	Turns the voice on or off.
Voice 1-3 Fine Tune	Pitch fine tune for the voice (+/- 50 cents.
Tone	Adjusts the tone of the pitch-shifted signal.
Міх	Ratio of processed signal to dry signal.

Tonal Chorus

A deep multi-voiced Chorus with randomized modulation. STRUCTURAL SPLIT separation of Transients allows this chorus to go deep and wide on TONAL audio without transient slap or smearing.

එ TONAL FX				Chorus 🔹
50 Speed	50 Depth	100 Size	0 Tone	50% Mix
Controls				
Speed	Adjusts the	e modulation spe	ed of the chorus	ed voices.
Depth	How deep broader, n	o the chorus sou nore sweeping so	nds. Larger valu ound.	ues will result in a
Size	The spread	d of the chorused	l voices.	
Τονε	A tone cor signal.	ntrol for shaping t	he high or low er	nd of the chorused
Міх	Ratio of pr	rocessed signal to	o dry signal.	

Tonal Reverb

A large space Reverb designed with lower echo density (compared to TRANSIENT REVERB) and higher modal density. TONAL REVERB has little to no modulation to avoid a chorusing sound on the tails. This allows the TONAL audio to breathe in the space, yet evolve into dense pad-like reverberant tails.

じ TONAL FX				Reverb 🔻
50 Size	3.0 s Decay	100 Shape	30 Damping	50% Mix

Controls

Size	The perceived "size" of the reverberant space.
DECAY	How long it takes the reverberated sound to decay to a level of -60dB (up to 100 secs).
Shape	The perceived "shape" of the reverberant space.
Damping	Amount of high frequency filtering.
Міх	Ratio of wet signal to dry signal.

Tonal Tremolo

A standard Tremolo effect which is driven by an LFO. The LFO's rate and depth can be modulated by the input signal's amplitude envelope.

じ TONAL FX				Tremolo 🔻
1/8 Env Rate 2	Triangle Vaveform	0 Spread	0 Env Sensitivity	100% Env Depth
Controls				
Rate	The speed Session or Ma Sync Off Tem	of the LFO. anual Tempo Mode po Mode: rate is di	s: rate is displayed ir splayed in Hz.	n metrical units.
Rate Envelope Mod	Toggles wh	nether the envel	ope should mod	ulate the RATE.
Retrigger	Resets the ⁻	Tremolo's LFO t	o its starting posi	tion.
WAVEFORM	Selects the	waveform type	for the LFO.	
Spread	Controls th the right ch until they an Tremolo be available in	e stereo spread nannel LFO out re fully out of ph ecomes an Auto n mono instance	l of the Tremolo, of phase with th ase (180 degrees -Panner. Note tha s.	effectively pushing e left channel LFO, s). At maximum, the at this control is not
Envelope Sensitivity	Controls he modulate f Mod butto set Rate ar modulate f negative Se where Dep current valu	ow much the e Rate and/or Dep ns are toggled nd/or Depth val Depth and/or Ra ensitivity values oth and/or Rate ues.	envelope of the oth, depending o . This is in addi- lues. Positive Se te up from their c perform an Inver will be modulate	plug-in's input will on which ENVELOPE tion to the already nsitivity values will urrent values, while se Envelope effect, ed down from their
Dертн	Amount of	LFO depth.		
Depth Envelope Mod	Toggles wh	nether the envel	ope should mod	ulate the DEPTH.

Tonal EQ

A 3-band overdrive-able EQ.

也 TONAL FX			(EQ 🔹
0.0 dB Low Gain	1.0 kHz Mid Frequency	0.7 Mid Q	0.0 dB Mid Gain	0.0 dB High Gain
Controls				
Low Gain	Sets the ga Q of 0.5).	ain for the low-fre	equency band (20	0Hz low shelf with
MID FREQUENCY	Sets the fre	equency of the of	the mid-frequency	y filter (peak filter).
Mid Q	Sets the Q	of the of the mic	d-frequency filter.	
Mid Gain	Sets the ga	ain of the mid-fre	equency filter.	
High Gain	Sets the ga Q of 0.5).	ain of the high-fr	equency filter (2k	Hz high shelf with

Tonal Reverse Delay

Reverse delays with dynamic retriggering, pitch and feedback controls for "granular" type FX.

じ TONAL FX		Pit	ng Pong Crystals	Reverse Delay 🔻
•J 120 BPM	60			
5/16 Time	-30.0 dB	0c Pitch	0% Feedback	100% Mix
	Lin Retrigger	- non	reconduct	IIIIA

Controls	
Ping Pong	When on, the stereo sum feeds the Left Reverse Delay, which then feeds the Right Reverse Delay. When off, the effect acts as regular independent stereo Reverse Delays.
Crystals	Puts the pitched reverse delay into the feedback loop, caus- ing the grain to flip-flop direction and the pitch to climb or de- scend. Only heard with feedback applied.
Тіме	The time or "length" of the Reverse DeLay grain. Session or Manual Tempo Modes: value is displayed in metrical units. Sync Off Tempo Mode: value is displayed in seconds.
Env Retrigger	Enables the signal envelope to open the Reverse Delay Gate and retrigger the Reverse Delay, with the gate hold time set to the TIME parameter. Useful for allowing new note attacks to re- trigger the REVERSE DELAY mechanism. When off, disables the THRESHOLD knob, and the Reverse Delays are always fed the in- put. RETRIGGER will still reset the reverse grain.
Retrigger	Resets the REVERSE DELAY grain, and if ENV RETRIGGER is on, also opens the gate. LED will light on button press, or if the threshold is reached.
Threshold	With ENV RETRIGGER on, sets the threshold to the Gate that feeds the stereo Reverse Delays. Also sets the threshold for retrigger- ing the start of reverse grains. The Gate hold time is set to TIME.
Sidechain	Toggles the use of an external sidechain as a retrigger source instead of the signal envelope.

Рітсн	Pitch, or speed, of the reverse grain delay. Stereo detuning will occur for any pitch setting not divisible by 10 cents.
Feedback	Amount of delay feedback.
Міх	Ratio of wet signal to dry signal.

6.1 Preset Bar

The Preset Bar allows you to load and save presets, along with several other features.

🧭 Physion	C	Factory Default	•	• •	Ţ.	A 🕨 B	<i>i</i> •	Eventide

Presets

Presets for Physion Mk II are located in the following places:

Mac: <user>/Music/Eventide/Physion Mk II Windows: <user>/Documents/Eventide/Physion Mk II

This folder contains two subfolders: Factory Presets and User Presets. The Factory Presets folder contains the presets which were installed with the plugin. These presets cannot be overwritten from the plugin. The User Presets folder is for storing the presets you create; you can also create subfolders within it for organizing your presets.

Physion Mk II presets have a .tidex file extension and can be saved or loaded from the preset bar.

Physion Mk II is backwards-compatible with presets from Physion v1 via the Import... menu item. These presets have a .tide file extension.

A

Many DAWs include an additional generic preset bar that saves presets in a DAW-specific format to a separate location.

We recommend saving your presets using the Physion Mk II preset bar to ensure that your presets will be accessible from any DAW, and compatible across plug-in versions.

Controls

Undo	The Undo button undoes the last change and restores the plu- gin to the previous state. Pressing this button multiple times will move you backwards in the plugin's state history.				
Redo	The Redo button reverses the last undo command, if any. Press- ing this button multiple times will move you forwards in the plu- gin's state history.				
Previous Preset	Loads the preset before the current preset in the preset menu.				
Next Preset	Loads the preset after the current preset in the preset menu.				
Preset Chooser	Choose a preset from the Factory or User preset collections.				
	• Save as Save the preset with a new name or location.				
	• Load Open a preset from a location on disk.				
	• Import Copy a preset from a location on disk into the User preset collection.				
Save	Saves the preset to disk.				
A ► B	Switches between two temporary plugin states, A and B. This is useful for making A/B comparisons.				
	• Click A or B to switch states.				
	• Click \blacktriangleright to copy state A into B.				
	 Click ◄ to copy state B into A. 				
	The A and B states are not saved in your DAW session. When you load a session, the current settings for the plugin will be loaded into A and B.				

INFO (I) Opens a drop-down menu with various help topics and settings.

- User Guide Open this document.
- Webpage Launches the Physion Mk II webpage.
- Theme Select a color theme for the whole UI.
- Use OpenGL Enable or disable OpenGL for the WAVE-FORM VIEWER. After changing this value, you must close and re-open the plugin window for the change to take effect.

(N.B. OpenGL is unavailable on certain systems lacking sufficient support. If this is the case, this setting will be hidden.)

• **Tooltips** - Enable or disable tooltips.

6.2 Bottom Bar

The controls at the bottom of Physion Mk II control global plugin parameters.

Mix 36%	Gain -8.7 dB Bypass
GLOBAL MIX	Controls the Global Wet/Dry mix of the entire plug-in.
GLOBAL GAIN	Controls the overall gain for the entire plugin, -24 dB to +18 dB.
GLOBAL BYPASS	Bypasses the entire plugin.

Conclusion

We hope you enjoy the Physion Mk II plug-in and put it to good use in all of your mixes. Please be sure to check out Eventide's other native plug-in offerings for more unique and interesting effects.

For further questions or support, head over to the user forums.