POSITRONIC TRANSIENT GATE

PATCH BOOK

1.02

The patch examples contained in this collection were designed to showcase the versatility of the PTG while giving the user maximum freedom - patching to external modules. Results may vary depending on your choice of modules and external settings. In some cases the controls may have to be tweaked a bit to get the proper response. Just about every patch is a starting point for more complex patching - and combining the different techniques provided. By trying every patch in this book, the user will fully survey and ultimatley master the nuances of the Positronic Transient Gate. The PTG can be a subtle beast or a wild animal and can only be truely understood with patience and practice. However, the vactrol heart of this beast is a kind one - and rewards those of all skill levels. Now go forth and learn what it truely means to be POSITRONIC!

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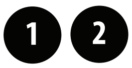
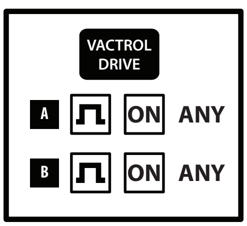
LEGEND

BOX
Square boxes with text denote external signals or modules and key information specific to each patch.

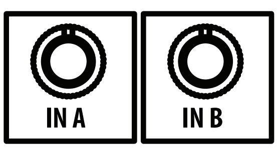
AB DESIGNATORS
These are used when a specific PTG channel is used for a patch.
They are found at the start of patches, as designators for inputs and outputs and patch specific controls.



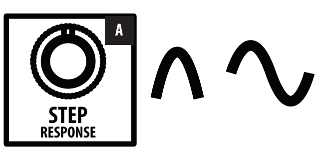
 # DESIGNATORS
These indicate alternate options for one or two of the patches in the book. But most options for patches are described in the corresponding patch control and notes section.

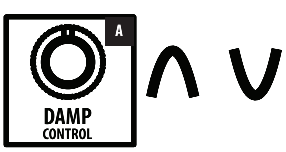


VACTROL DRIVE KEY
Look for this KEY in just about every patch for the proper vactrol drive setting. It is important to follow these settings for proper functioning of the exact patch described. Only one of the choices for A/B will be listed at a time. if this KEY is not found in a patch, then it is either irrelevant or the details are in the notes.

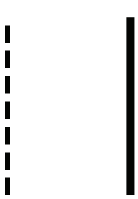


VACTROL DRIVE INPUTS
These icons designate the IN A and IN B jacks at the top of the PTG. They will always be clearly marked unless the actual input used is irrelevant.

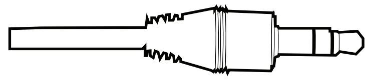




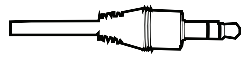
STEP RESPONSE and DAMP CONTROL CV INPUTS
These icons designate the CV input jacks. Note the channel designator in the upper right hand corner. The symbols to the right designate the CV setting for the inputs. One or both will be placed next to this jack icon when a specific or both settings are used for a patch.



INTERNAL CONNECTIONS
On most patches, a solid black line is used to show an internal relation or connection that one parameter has to another. Not all patches incorporate these lines for sake of clarity.
The dashed line represents an internal normalization - that can be broken when a jack is inserted.



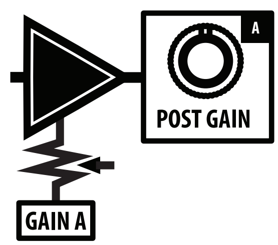
LARGE PATCH CABLE
This icon represents the start of a patch - when some external source is plugged into the PTG's inputs.



SMALL PATCH CABLE
This icon represents a self - patch or internal patch from one PTG output parameter to another PTG input parameter.

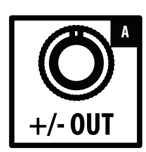
VERY SMALL PATCH CABLE
Used rarely when space for the patch illustration is limited. Will be explanatory when used.

BULLET
Bullets are used to signify the final output patch - out of the PTG, the last step, or as a meta symbol for patches accomplished externally with other modules



GAIN STAGE and POST GAIN OUTPUT
When patches utilize the internal GAIN amplifier, the amplifier/GAIN symbol will be used in front of the POST GAIN icon. Otherwise the POST GAIN icon will be used alone. Some patches may still call for specific GAIN settings in the control and notes section. Also note the channel designators on both icons.

VCA INPUT
Denotes a PTG VCA input and channel designator in the upper right hand corner



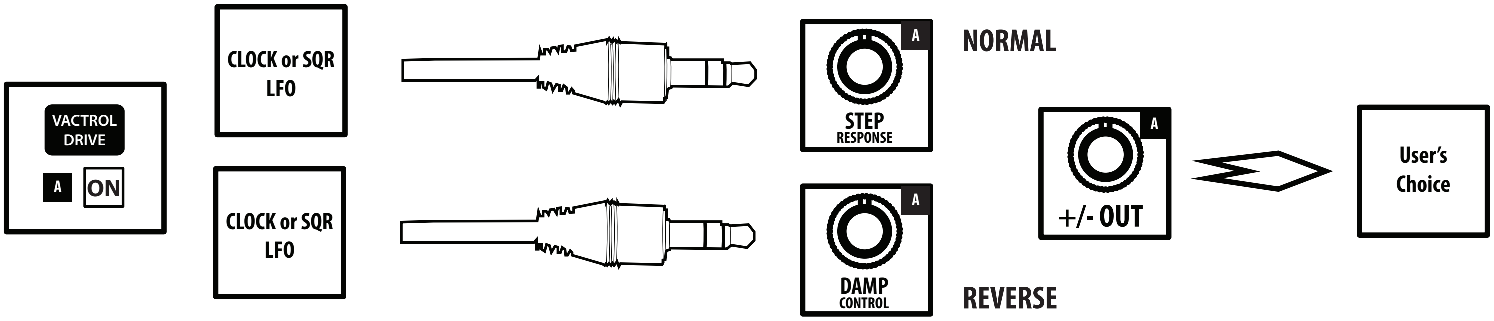
OUTPUTS
Denotes the Transient/VCA outputs and channel designator. Also note that the label will designate the use of a single +OUT, -OUT or both +/-OUT if either can be used.

DETAILS:
CONTROLS:
NOTES:

PATCH SPECIFICS
Every patch has one or more of these. Be sure to read them carefully as they contain important information about properly using the patch as well as tips and suggestions for expanding on the ideas presented.

ENJOY!!
-

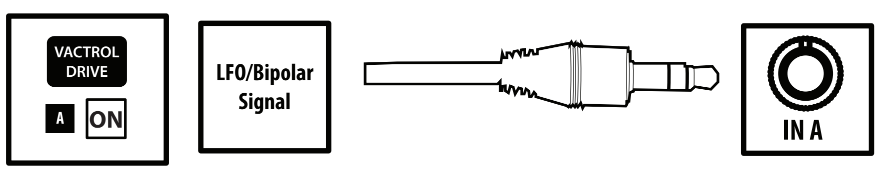
DIODE SLEW



DETAILS:

This patch is a basic building block for larger patches and to familiarize the user with the effect.
The DIODE SLEW works like a traditional resistor capacitor (RC) passive slew - with the exception that the slewing effect is strictly due to the charge injection/recombination rate of the vactrol's LED. Keep in mind that there *is* a small intrinsic capacitance of the LED itself ~ 15pF.
This effect is directly related to the device's actual Step Response to a signal shape (square, sine, triangle etc.) and how that shape corresponds to the current flowing into the LED. A square or step (on/off) produces a first order response - non linear, similar to the charging of a capacitor. A triangle or ramp will produce a 2nd order response like an "S" curve at the extreme top and bottom of the output. A third order response would be something like a ringing or fading out sine wave. While a sine wave input will not produce the full response, it will produce the first half cycle of a 3rd order response. In other words, it is similar to the 2nd order, but while the bottom of the "S" curve is short and quick, the top is long and slow. This is characteristic of the initial overshoot and first half cycle of a 3rd order response (oscillation).
NORMAL DIODE SLEW is accomplished via the STEP RESPONSE CV input. We can control the flow of current into the LED with the STEP pot and in turn, control the speed and amount of current flowing into it - creating the slewing effect. REVERSE DIODE SLEW is accomplished via te DAMP CONTROL CV input and respective reverse attenuator. These responses are the basis of the "Transient Gate" effect.
The -OUT provides an inverted (negative polarity) DIODE SLEW.
Experiment with different modes and settings.

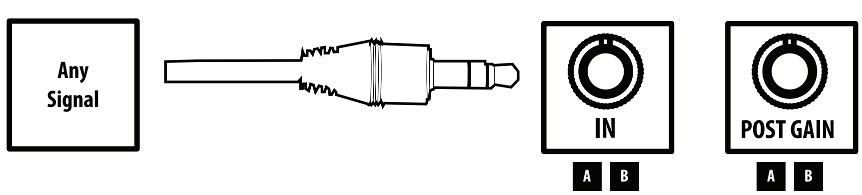
Bipolar Gate (Inverted PTG Gating)



DETAILS:

A very general patching technique that can be used on almost any patch that uses VACTROL DRIVE in ON mode.
Since ON mode biases the vactrols with +5V DC, you can trigger the PTG *off* - by using any signal that goes negative enough to bring the bias down below ~2V.

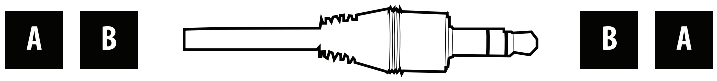
Signal/Gate THRU



DETAILS:

In either of the VACTROL DRIVE modes, any signal that enters the main IN A or IN B is THRU'd to the POST GAIN Output. The signal can also be amplified or attenuated by the GAIN control - so pay attention to this setting. IN A is normalized to IN B as well.
This is convenient for passing the same gate signal through the PTG to another module without needing an external multiple.

Patch Pals



DETAILS:
This may seem obvious but remember that any of PTG A's outputs can be used to modulate PTG B's parameters or the other way around for some vactrol-modulated vactrol effects. Vactrol on vactrol action anyone?
While PTG IN A *is* normalized to IN B, keep in mind that they are completely separate circuits.

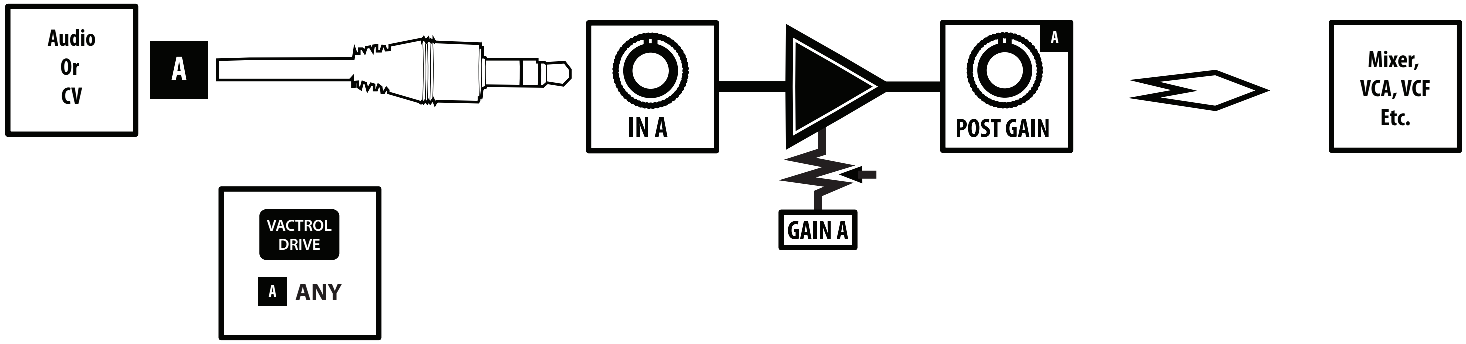
Combinations

DETAILS:
Using an external DC mixer, try mixing PTG A and B's transient outputs for even more interesting combined shapes.

Remote Control

DETAILS:
During heavy patching, space to wiggle can diminish rapidly as patch cables get cramped into tight spaces. Reaching those control pots can become next to impossible or just not practical. Use the PTG's +OUT patched to that hard to reach parameter's CV input. While in VACTROL DRIVE - ON mode, the PTG will output a constant DC voltage that can be attenuated by STEP and/or DAMP. The PTG was designed with plenty of wiggle room, even for the biggest paws. This way you can control parameters in tight spaces from a comfortable remote location, far from the rats nest. The response will be vactrol influenced.

Overdrive/Distortion - External Signal Amplifier

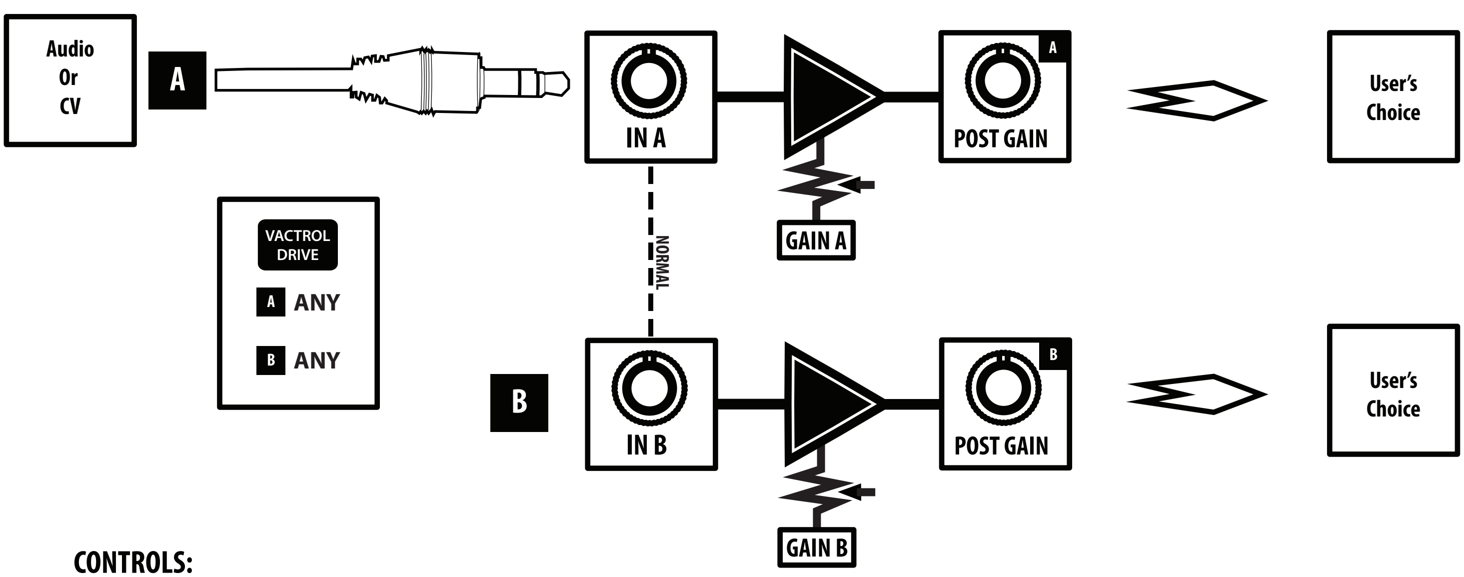


CONTROLS:

A GAIN ➤ Adjusts the GAIN for all input levels and the Overdrive/Distortion for modular level signals

Notes: To bring really low signals into overdrive/distortion or just make them louder - try multiple stages of this patch by patching POST GAIN A into IN B and applying further gain with GAIN B - and taking the output from POST GAIN B.

Multiples with Independent Gain

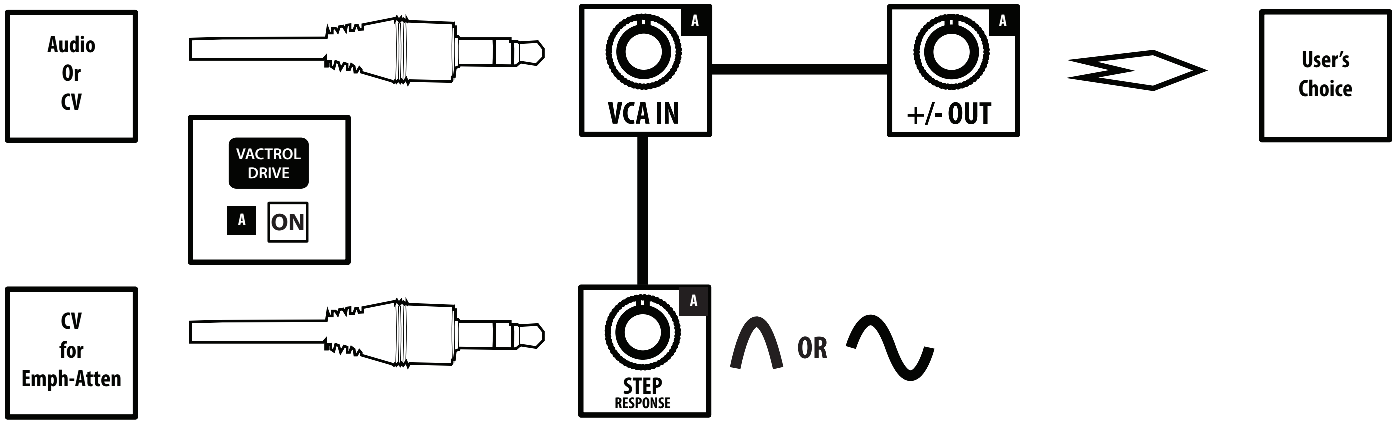


CONTROLS:

A **B** GAIN ➤ Start with the GAIN set at 1.0 for unity multing - or adjust the dedicated gain for each output up to distortion

Notes: If VACTROL DRIVE is set to gate mode for A and/or B - try utilizing the multed signal as a gate trigger source for the PTG's Transient outputs. Adjust STEP and DAMP to shape the envelope. This will work only for dynamic signals that cross the ~2V threshold to trigger the PTG. Levels that remain above or below this threshold will simply keep the transient on/off respectively.

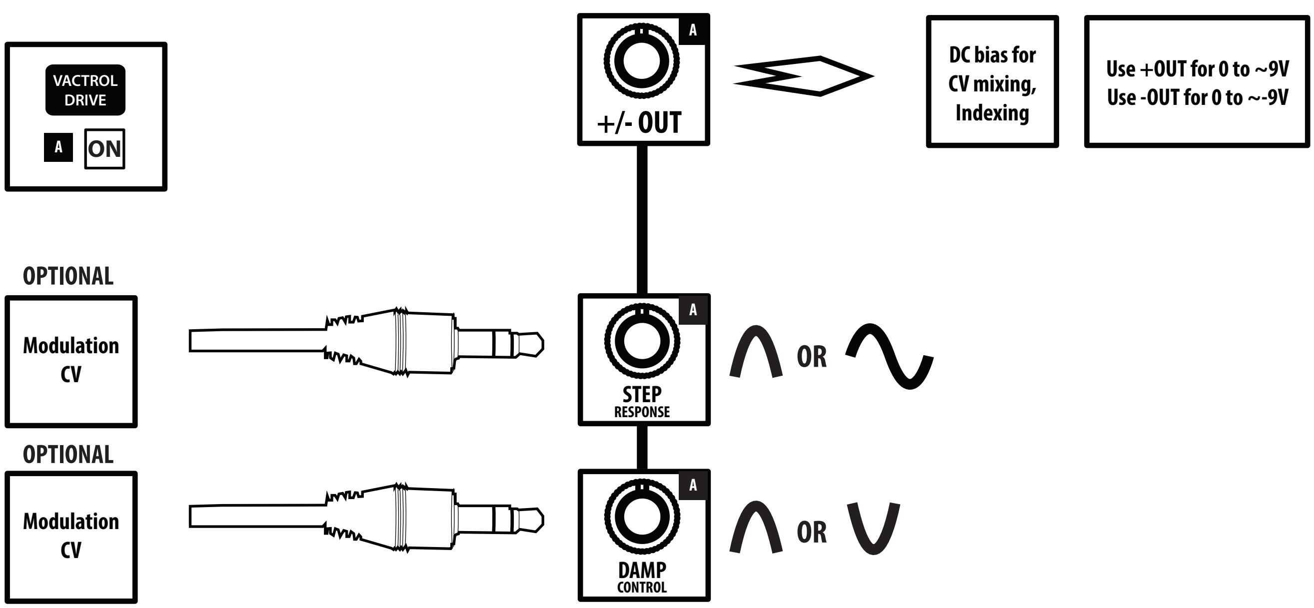
VC Emphasis-Attenuator



CONTROLS:

STEP RESPONSE ➨ **Adjust the amplitude of the control source voltage**
DAMP CONTROL ➨ **Adjust the overall amplitude level of the signal source - gain is possible with settings above NATURAL**

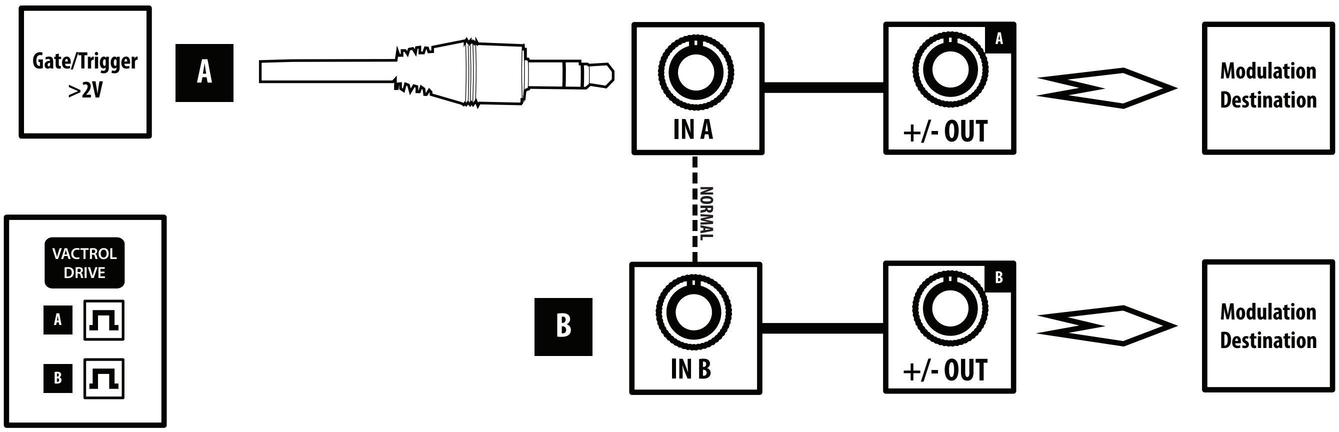
DC Bias Source & CV-able DC Bias Source



CONTROLS:

STEP RESPONSE ➨ **Leave fully CW unless adjusting external CV modulation input level**
DAMP CONTROL ➨ **Adjust DC bias level or amplitude of input CV (Remember this is a reverse attenuator)**

Positronic Transient(s)



CONTROLS:

A **B**

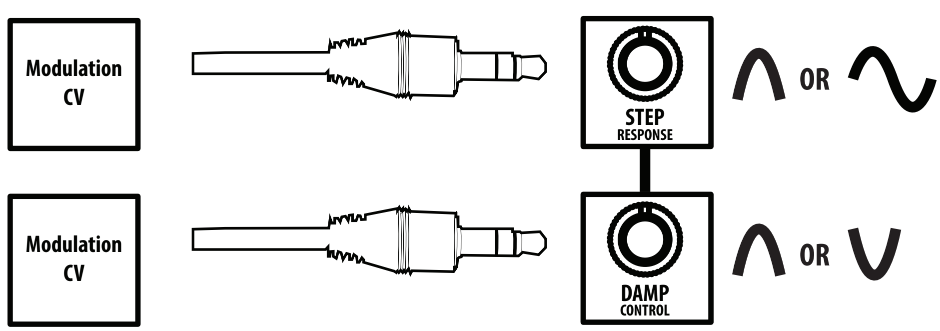
STEP RESPONSE ➨ Transient dynamic attack/amplitude. Max CW setting for fast attack and strongest amplitude

DAMP CONTROL ➨ Transient dynamic release(ringing)/amplitude. Ringing increases while turning CW. Take note of the OPEN marking on this control. Significantly longer ringing times are capable in this region but the min output level will be raised to a degree and a few hundred mV of bleed is possible in some cases. Also take note of the difference when applying 0V (jack inserted but no gate/trigger) to VACTROL DRIVE IN A and when no jack is inserted into IN A - when the DAMP CONTROL is in the OPEN region.

GAIN ➨ Keep the GAIN set at 1.0 (unity) unless intentionally amplifying a low gate/trigger/signal to the ~2V threshold

Complex Positronic Transient

Follow the Positronic Transient(s) Patch and the following additional connections to side A and/or B.



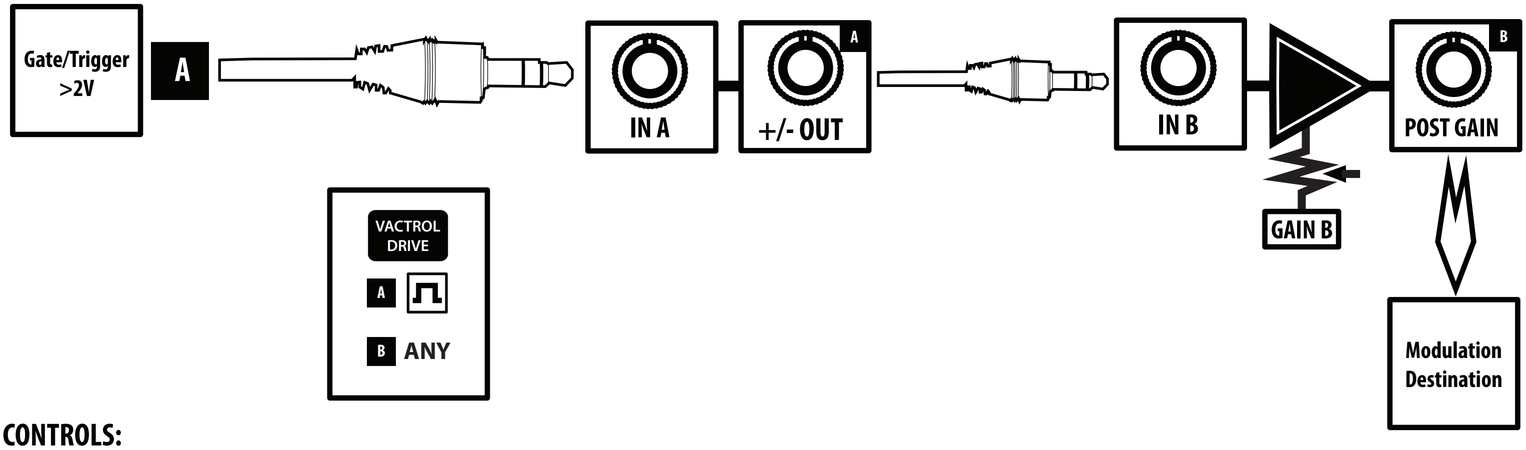
CONTROLS:

STEP RESPONSE ➨ Adjust the amplitude of the control source voltage

DAMP CONTROL ➨ Adjust the amplitude of the control source voltage (Remember this is a reverse attenuator)

Notes: Modulate one or both parameters for some interesting and unique transients. Experiment with clocked/synced and random/asynced sources.

Amped Positronic Transient #1 (ultra non-linear attack)

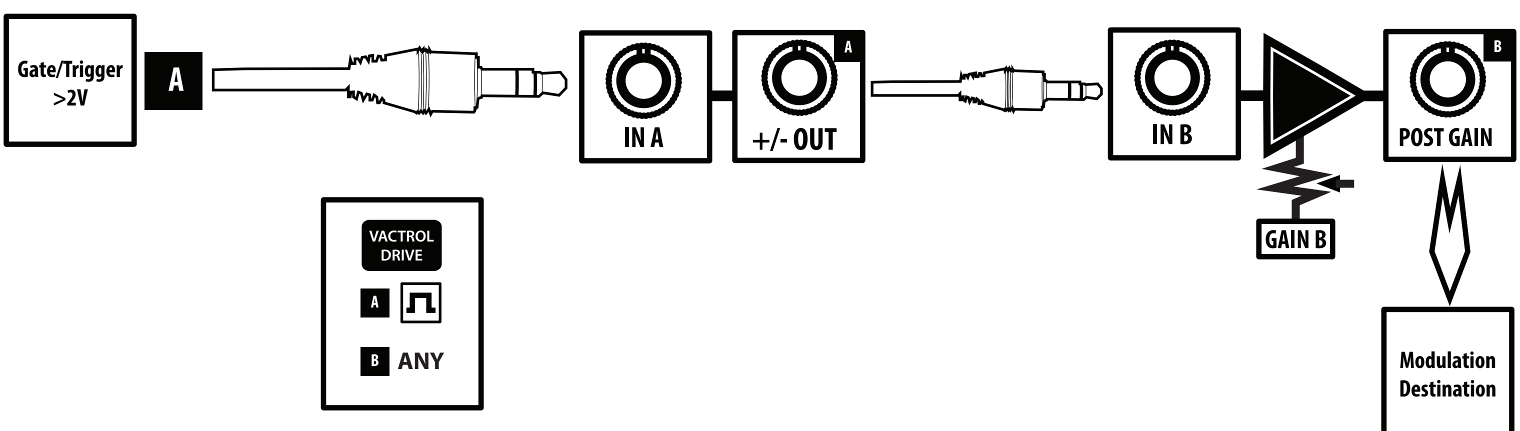


CONTROLS:

A	STEP RESPONSE	See the Positronic Transient Patch - but use specifically from fully CCW to ~8-11 o'clock for best results
	DAMP CONTROL	See the Positronic Transient Patch - but use specifically from fully CCW to about 12 o'clock for best results.
B	GAIN	Adjust GAIN along with DAMP CONTROL to amplify the low level vactrol envelope produced by the very low STEP RESPONSE settings

Notes: The attack phase will last as long as the GATE input signal is held high. If possible, use an oscilloscope when first experimenting with this patch. Notice the initial super fast "soft knee" shape and following slow rise attack as the vactrol charges up.
Also note the sensitivity of the controls and variety of response that can be achieved. Patience and subtle changes are rewarded.
Experiment with triggers and different gate lengths.

Amped Positronic Transient #2 (Punchy Attacks, trapezoidal envelopes and auto-hold)

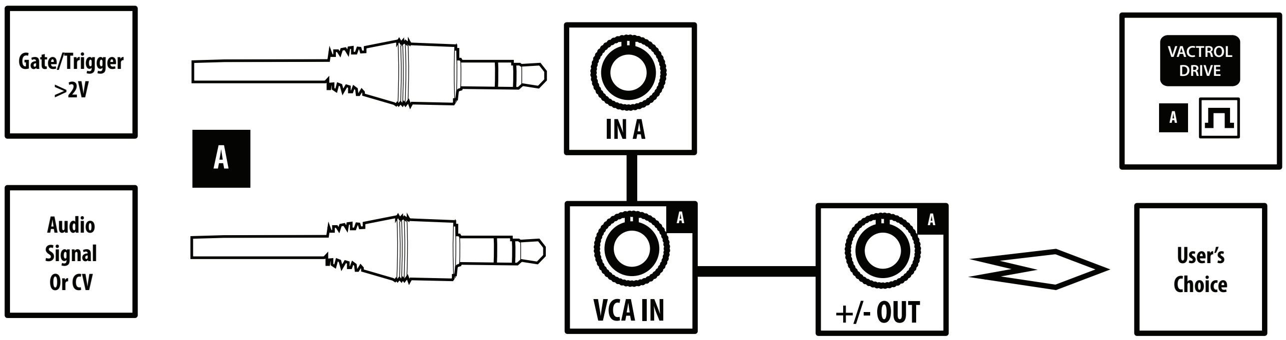


CONTROLS:

A	STEP RESPONSE	See the Positronic Transient Patch - experiment with the full range and different GAIN settings
	DAMP CONTROL	See the Positronic Transient Patch - experiment with the full range and different GAIN settings
B	GAIN	Adjust GAIN along with DAMP CONTROL to amplify the envelope just enough to add some punch and a bit more for trapezoidal shapes. Even further produces an auto-hold stage as the envelope is overdriven.

Notes: This patch is just a further extension of the ultra-non linear attack patch. Use of an oscilloscope when first experimenting is useful but not a necessity. Use of the GAIN function really opens up a huge range of pure vactrol transients. Also try this with the complex transient patch.

Transient VCA



CONTROLS:

A

STEP RESPONSE ➨ **VCA transient dynamic attack/amplitude. Max CW setting for fast attack and strongest amplitude**

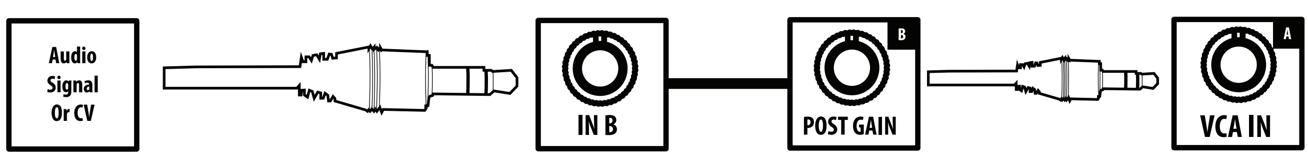
DAMP CONTROL ➨ **VCA transient dynamic release(ringing)/amplitude. Ringing increases while turning CW. Take note of the OPEN marking on this control. Significantly longer ringing times are capable in this region but the min output level will be raised to a degree and a few hundred mV of bleed is possible in some cases. Also take note of the difference when applying 0V (jack inserted but no gate/trigger) to VACTROL DRIVE IN A and when no jack is inserted into IN A - when the DAMP CONTROL is in the OPEN region.**

GAIN ➨ **Keep the GAIN set at 1.0 (unity) unless intentionally amplifying a low gate/trigger/signal to the ~2V threshold**

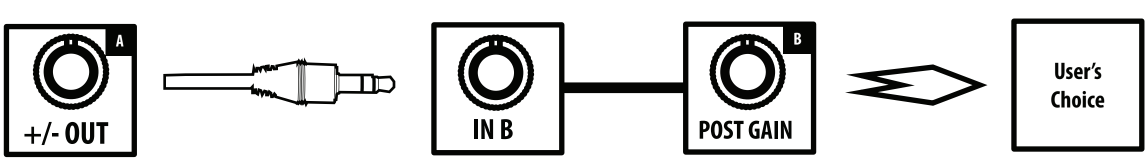
Notes: The PTG adds a bit of gain to the signals inserted into the VCA inputs. The PTG is factory set to add a gain of ~1.5 at fully CW DAMP settings. As a rule of thumb, settings below ~12 o'clock are attenuated and above are amplified. Please keep this in mind when applying summed signals to these inputs - as they can clip if not properly attenuated. The PTG's LED may not illuminate brightly with lower amplitude AC signals. Please take note of this if using the LED as a signal "present" indicator.

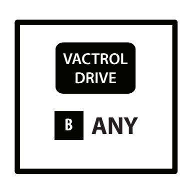
High Gain Transient VCA (Pre or Post Gain/Overdrive)

Follow the Transient VCA patch above - but first insert the Audio Signal into IN B for *Pre-Gain* and patch POST GAIN B into VCA A



Follow the Transient VCA patch above - but patch the +/-OUT into IN B for *Post-Gain* and patch POST GAIN B into your destination module



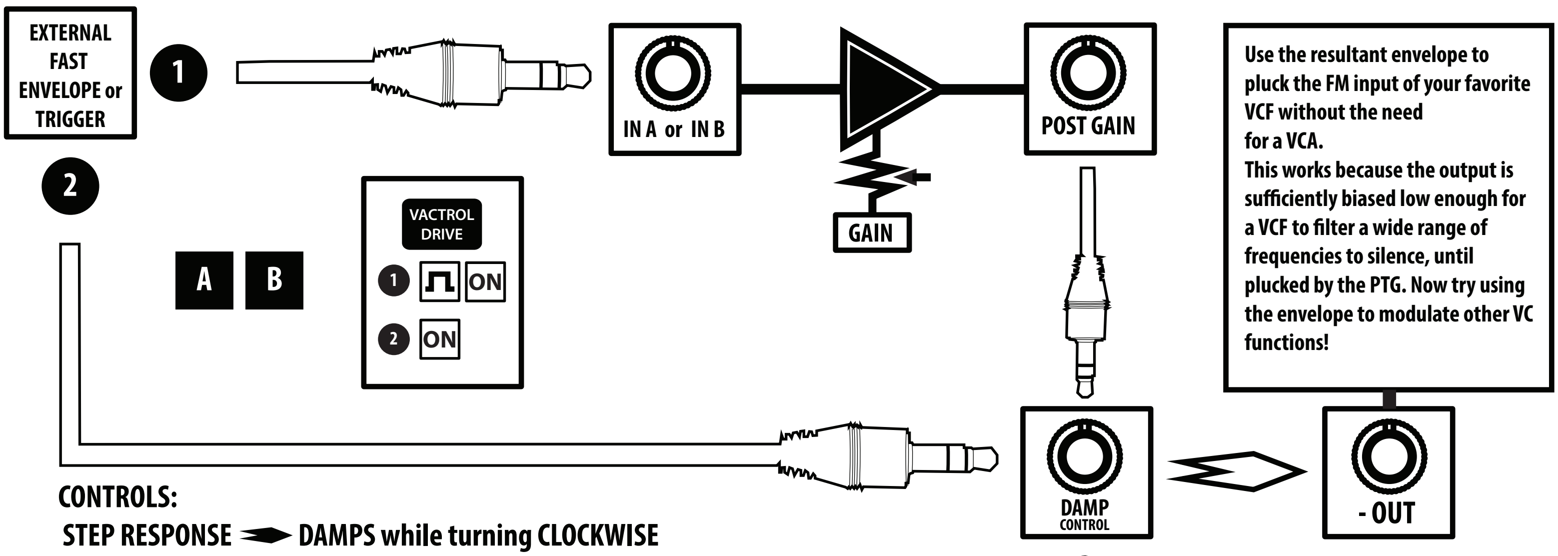


CONTROLS: Follow the Transient VCA controls and Additionally,

B

GAIN ➨ **Controls the volume/gain of the audio signal path - capable of ~22dB of gain for raising line level to Modular and/or overdriving/distorting your signal**

Universal “PLUCK”



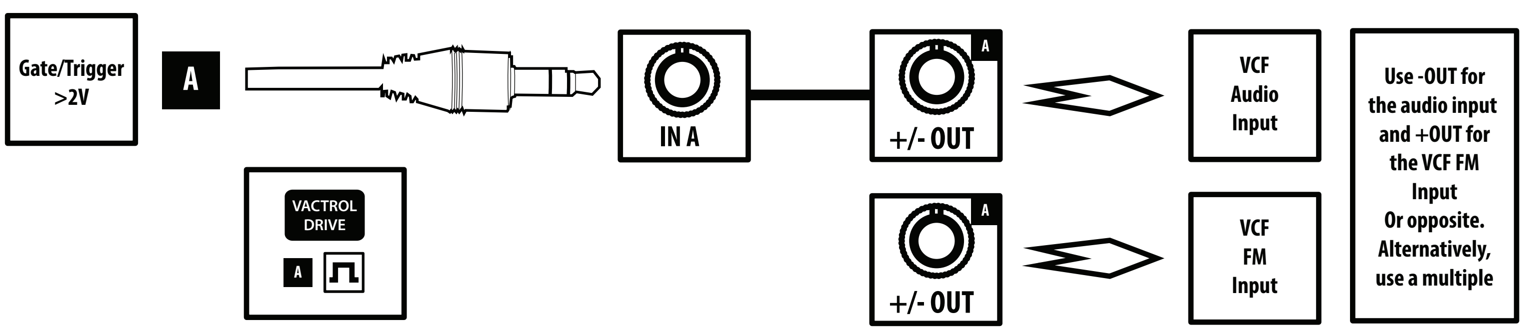
CONTROLS:

STEP RESPONSE ➤ DAMPS while turning CLOCKWISE

DAMP CONTROL ➤ ATTENUATES while turning CLOCKWISE

1 GAIN ➤ ADJUSTS the amplitude of the modulator

Universal LPG #1 - Audio rate/transient FM



CONTROLS:

A

STEP RESPONSE ➤ VCA transient dynamic attack/amplitude. Max CW setting for fast attack and strongest amplitude

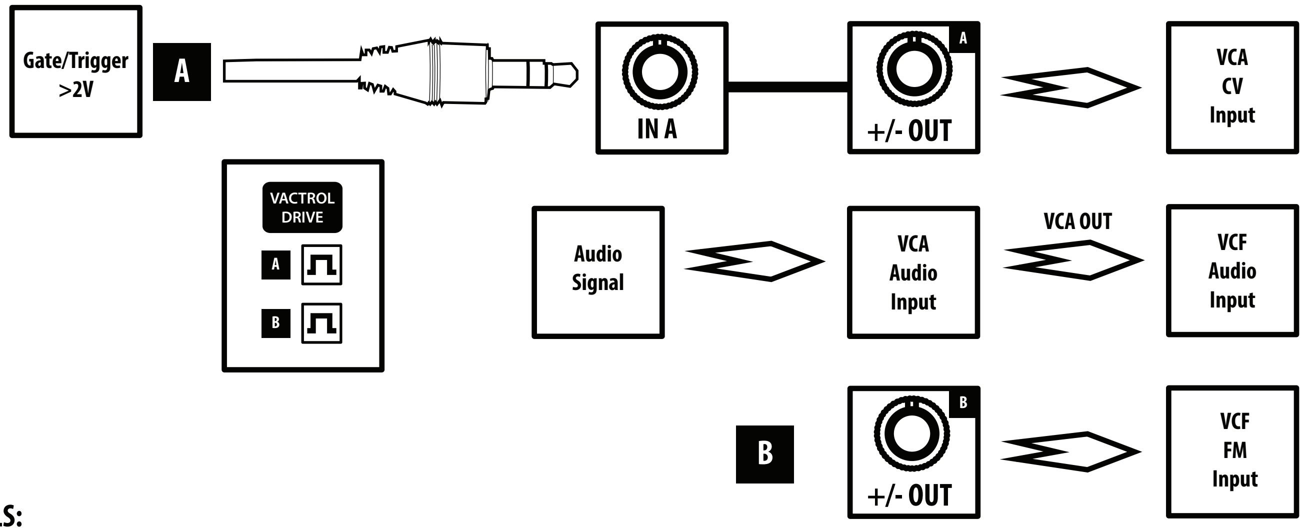
DAMP CONTROL ➤ VCA transient dynamic release(ringing)/amplitude. Ringing increases while turning CW. Take note of the OPEN marking on this control. Significantly longer ringing times are capable in this region but the min output level will be raised to a degree and a few hundred mV of bleed is possible in some cases. Also take note of the difference when applying 0V (jack inserted but no gate/trigger) to VACTROL DRIVE IN A and when no jack is inserted into IN A - when the DAMP CONTROL is in the OPEN region.

GAIN ➤ Keep the GAIN set at 1.0 (unity) unless intentionally amplifying a low gate/trigger/signal to the ~2V threshold

Notes: If your VCF FM input has an attenuator, start by setting this to maximum and use the PTG’s controls to vary the Emphasis - then adjust the attenuator if needed. Many levels of control are possible.
This patch is capable of some very cool sounds. Try using this with an audio rate FM’d or ring modulated VCO input signal for some serious metallic effects.

Try modulating other parameters and modules other than a VCF!

Universal LPG #2 - external VCA



CONTROLS:

A

STEP RESPONSE ➨ VCA transient dynamic attack/amplitude. Max CW setting for fast attack and strongest amplitude

DAMP CONTROL ➨ VCA transient dynamic release(ringing)/amplitude. Ringing increases while turning CW. Take note of the OPEN marking on this control. Significantly longer ringing times are capable in this region but the min output level will be raised to a degree and a few hundred mV of bleed is possible in some cases. Also take note of the difference when applying 0V (jack inserted but no gate/trigger) to VACTROL DRIVE IN A and when no jack is inserted into IN A - when the DAMP CONTROL is in the OPEN region.

GAIN ➨ Keep the GAIN set at 1.0 (unity) unless intentionally amplifying a low gate/trigger/signal to the ~2V threshold

B

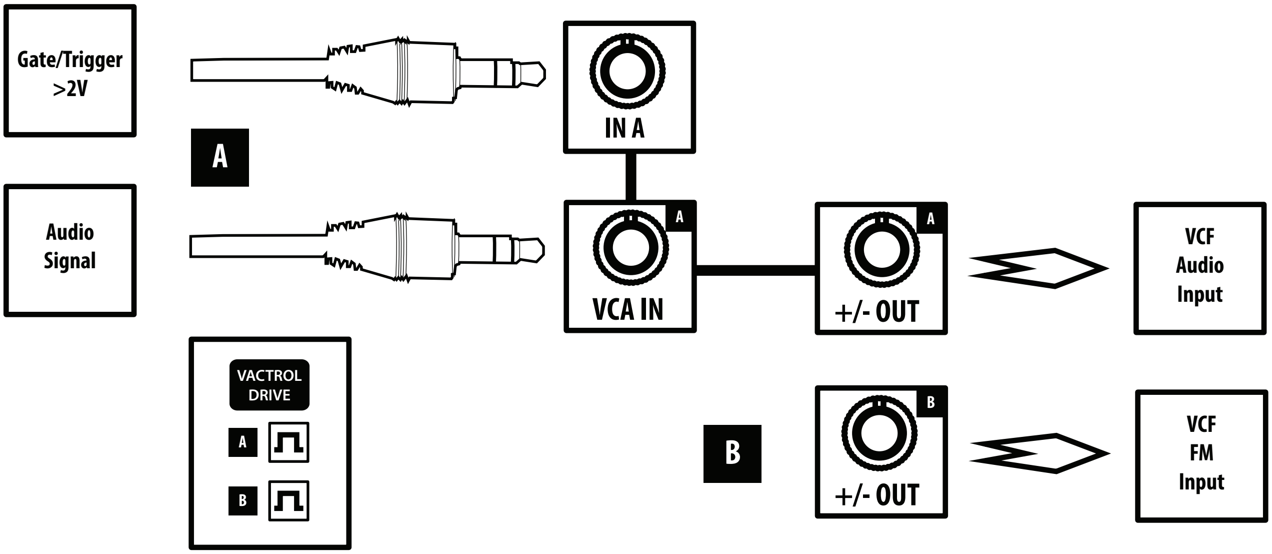
STEP RESPONSE ➨ VCF transient dynamic attack/amplitude. Max CW setting for fast attack and strongest amplitude. Settings between 12 and 3 o'clock exhibit a very pleasing PTG attack transient

DAMP CONTROL ➨ VCF transient dynamic release(ringing)/amplitude. Ringing increases while turning CW. Info above also applies

Notes: If your VCF FM input has an attenuator, start by setting this to maximum and use the PTG's controls to vary the Emphasis - then adjust the attenuator if needed. Many levels of control are possible.

Try modulating other parameters and modules other than a VCF!

Universal LPG #3 - internal VCA



CONTROLS:

A

STEP RESPONSE ➡ VCA transient dynamic attack/amplitude. Max CW setting for fast attack and strongest amplitude

DAMP CONTROL ➡ VCA transient dynamic release(ringing)/amplitude. Ringing increases while turning CW. Take note of the OPEN marking on this control. Significantly longer ringing times are capable in this region but the min output level will be raised to a degree and a few hundred mV of bleed is possible in some cases. Also take note of the difference when applying 0V (jack inserted but no gate/trigger) to VACTROL DRIVE IN A and when no jack is inserted into IN A - when the DAMP CONTROL is in the OPEN region.

GAIN ➡ Keep the GAIN set at 1.0 (unity) unless intentionally amplifying a low gate/trigger/signal to the ~2V threshold

B

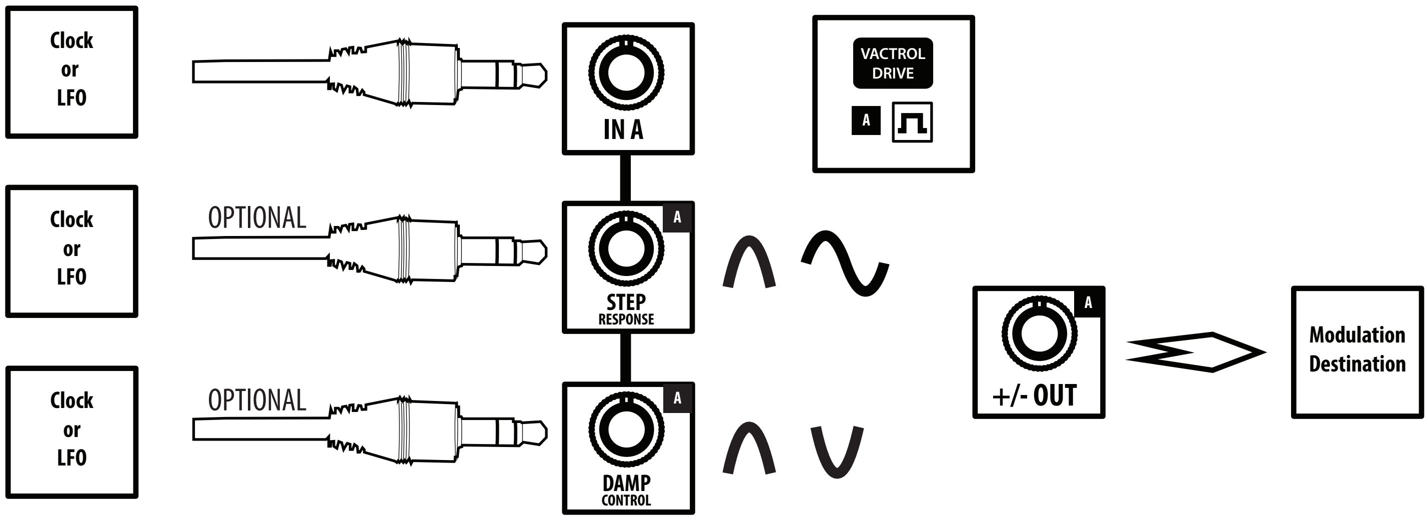
STEP RESPONSE ➡ VCF transient dynamic attack/amplitude. Max CW setting for fast attack and strongest amplitude. Settings between 12 and 3 o'clock exhibit a very pleasing PTG attack transient

DAMP CONTROL ➡ VCF transient dynamic release(ringing)/amplitude. Ringing increases while turning CW. Info above also applies

Notes: If your VCF FM input has an attenuator, start by setting this to maximum and use the PTG's controls to vary the Emphasis - then adjust the attenuator if needed. Many levels of control are possible.

Try modulating other parameters and modules other than a VCF!

Gated Transient LFO



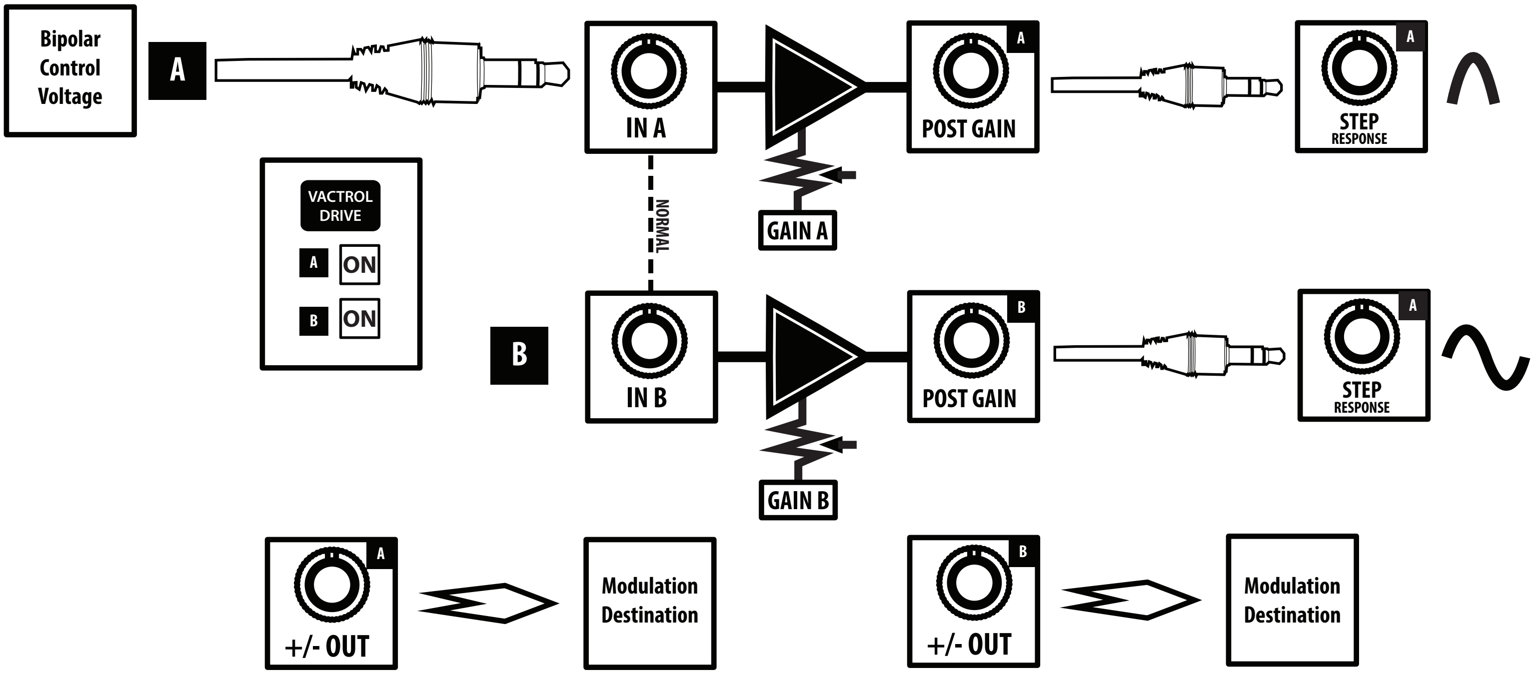
CONTROLS:

A B

GAIN → **GAIN should be set at 1.0 but can be higher if amplifying the CV is desired**
STEP RESPONSE → **Adjust the attack of the repeating transient**
DAMP CONTROL → **Adjust the decay of the repeating transient**

Notes: This patch is really good for creating rhythmic filtering and amplitude modulation with a VCF and VCA. Also try Pitch, PWM CV and other parameters. If using a clock source and divisions, try using twice or four times the clock speed to modulate the CV inputs. Use a clock and divisions to gate and modulate one CV input, and an LFO to modulate the other CV input. Vary the LFO speed - you will get a continuously varying rhythmic output that is always in time with your clock tempo. Now try other sources of modulation and different combinations - mash them up vactrol style! You are only limited by your imagination and modulation sources.

Bipolar CV - Phase Delayed Dual Transient LFO



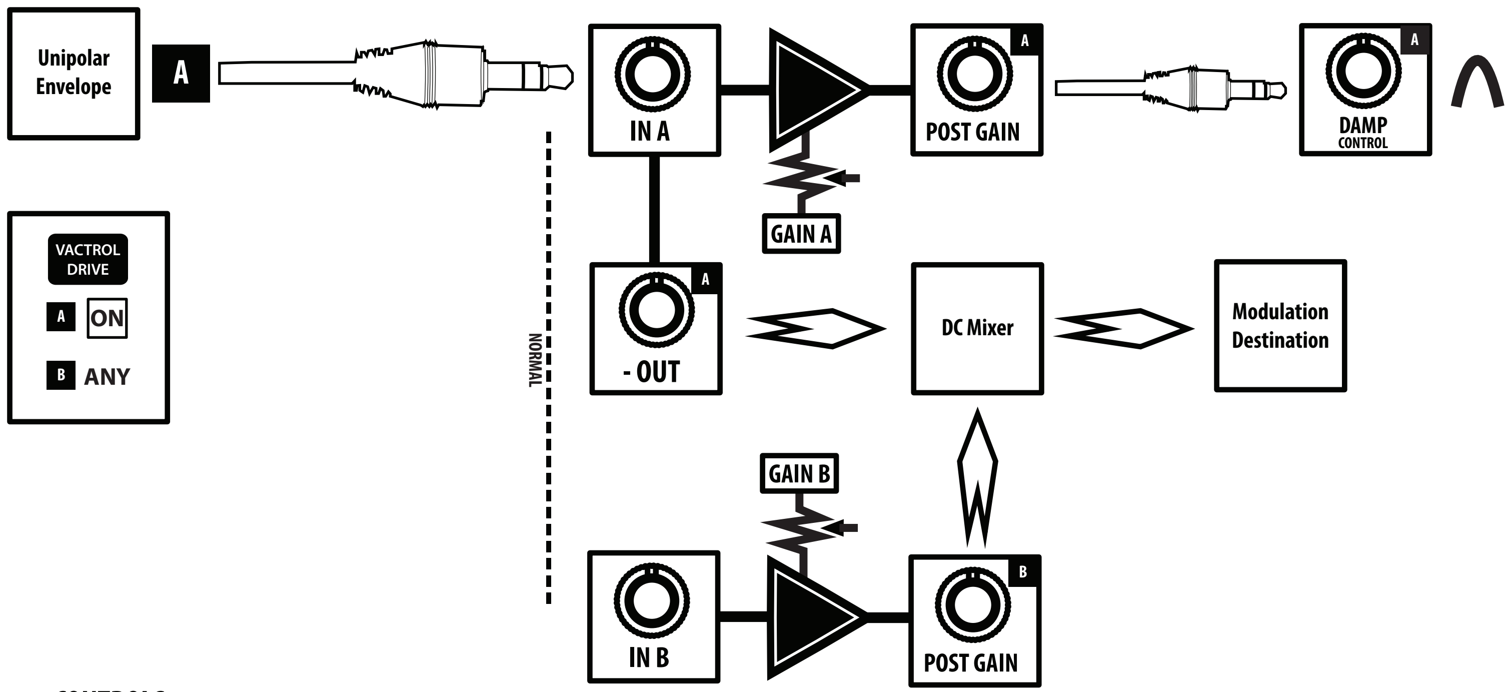
CONTROLS:

A B

- **GAIN** ➨ **GAIN should be set at 1.0 but can be higher if amplifying the CV is desired**
- **STEP RESPONSE** ➨ **Adjust the attack response of the envelope to taste - will also affect the timing of the delay to a degree**
- **DAMP CONTROL** ➨ **Adjust the release response of the envelope to taste - will also affect the timing of the delay to a degree**

Notes: This is a very general patch and it's uses are up to the imagination of the user. One example would be to mult a VCO to two different filters, then FM each filter with the PTG outputs. Try this with other parameters and modules - or even the same module if it has two of the same or different CV inputs. Makes a great timing emphasis effect or for producing deeper and delayed modulation.

Envelope Chaser LFO



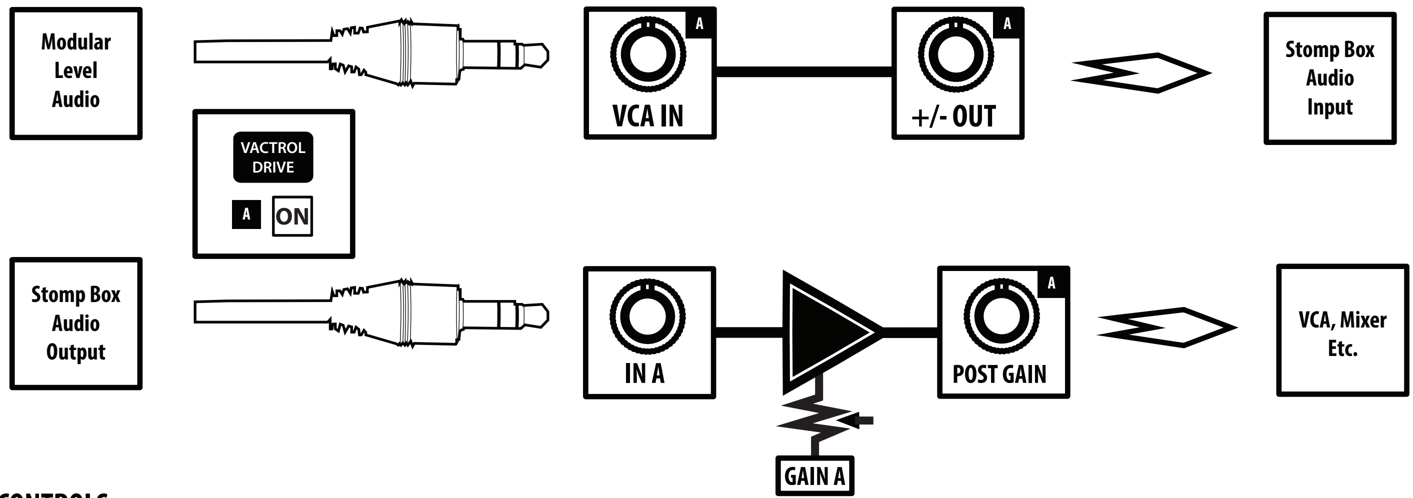
CONTROLS:

A B GAIN ➡ GAIN A set at 1.0 or less and adjusts the input level of the external envelope*.
GAIN B set at 1.0 or less and adjusts the output level of the external envelope, set higher to overdrive it.

A STEP RESPONSE ➡ Adjust the attack response of the envelope. Turning from CW to CCW attenuates the negative cycle.
DAMP CONTROL ➡ Adjust the CV amplitude. Turning from CW to CCW amplifies and bias' the positive cycle.

Notes: This patch turns an external envelope into a bipolar asymmetrical LFO - made up of the original envelope CV (positive cycle) and an inverted vactrol morphed version of the envelope (negative cycle). DAMP's unique response to CV creates the illusion that the PTG's transient output is chasing or following after the original envelope. Also try this with the +OUT for a unipolar chaser.
*+5V envelopes work best. For larger amplitude signals, set GAIN below 1.0 to attenuate for best response.

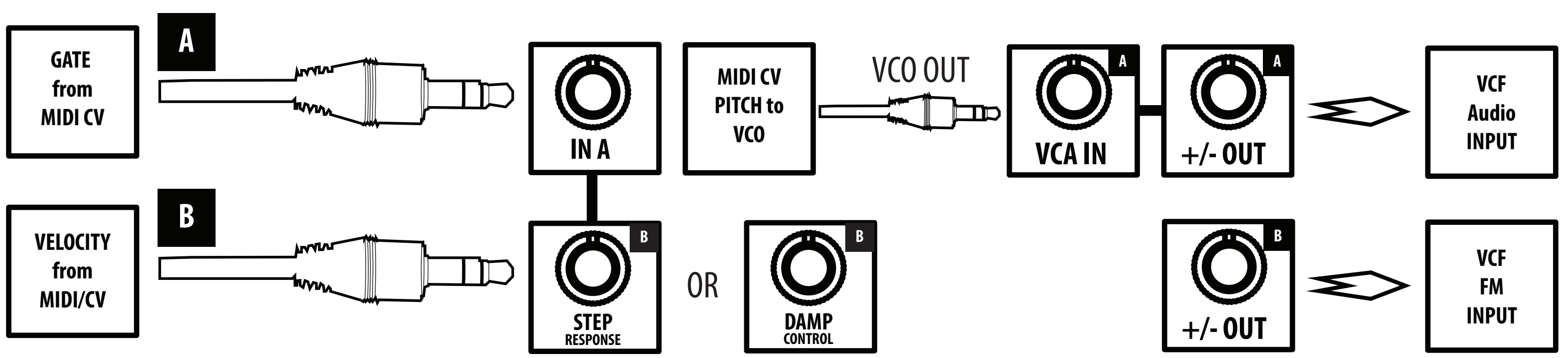
Stomp Box Adapter

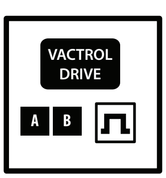


CONTROLS:

- **STEP RESPONSE** ➡ **Stomp Box input amplitude - leave this at about 1 o'clock for best DAMP range.**
- **DAMP CONTROL** ➡ **Stomp Box input amplitude - adjust from fully CCW to about 12 0'clock for +/-5V signals before clipping**
- **GAIN** ➡ **Adjust to recover Stomp Box output to modular amplitude level.**

PTG Expression (MIDI/CV Keyboard)





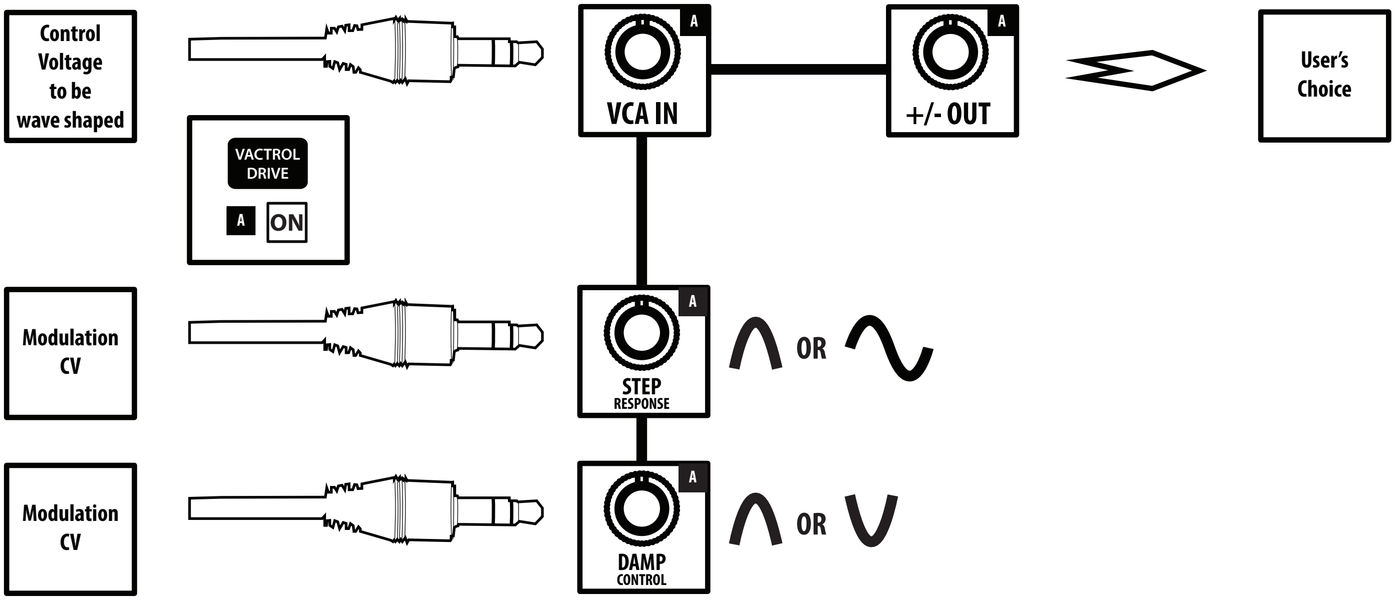
CONTROLS:

A B

- **GAIN** ➡ **GAIN should be set at 1.0 but can be higher if amplifying the CV is desired**
- **STEP RESPONSE** ➡ **Adjust the attack of the VCA/VCF transient or amplitude of modulation CV**
- **DAMP CONTROL** ➡ **Adjust the decay/ringing of the VCA/VCF transient or amplitude of modulation CV**

Notes: This patch is a great controller for your MIDI CV keyboard interface. It provides an envelope modulated VCA and velocity expression from the keys to a velocity sensitive envelope to modulate a filter or similar. All from one module and an external filter. The vactrol velocity response is really cool, especially when controlling DAMP - lighter touch produces a greater effect. Use other CV sources to modulate the other CV inputs for the VCA and VCF. Also remember that DAMP is a reverse attenuator to incoming CV.

CV Wave-shaper

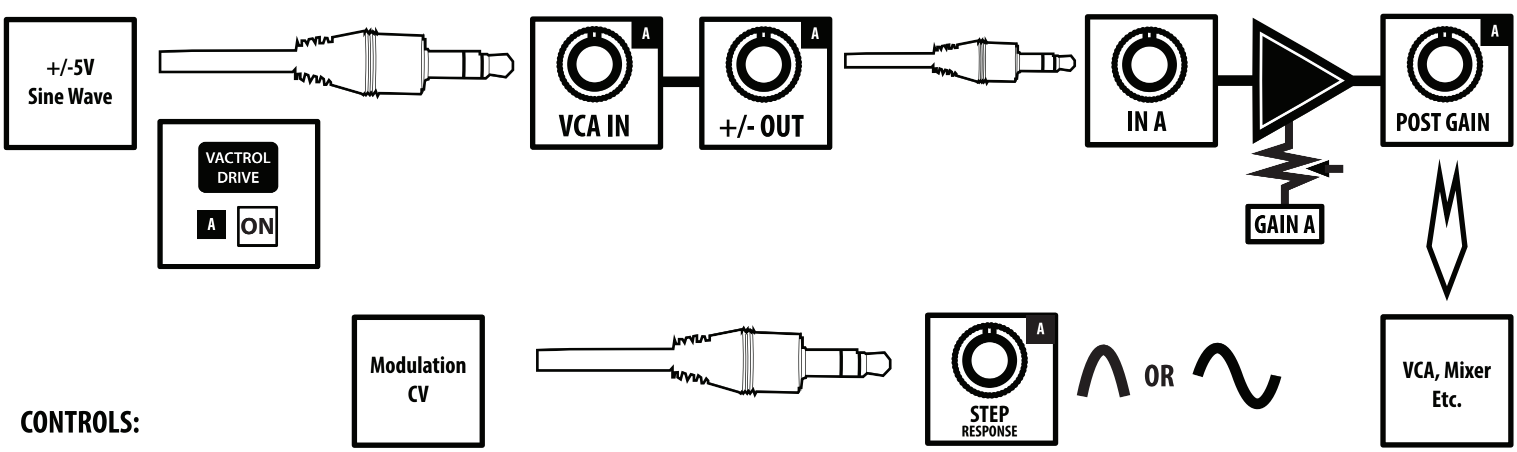


CONTROLS:

STEP RESPONSE ➨ **Adjust the amplitude of the control source voltage**
DAMP CONTROL ➨ **Adjust the amplitude of the control source voltage (Remember this is a reverse attenuator)**

Notes: **This is a really great patch that you can run all of your modulation through. Turns static CV into multi-dimensional dynamic mdulation, due to the juxtaposed STEP and DAMP response!**

Sine to Sqr Wave shaper

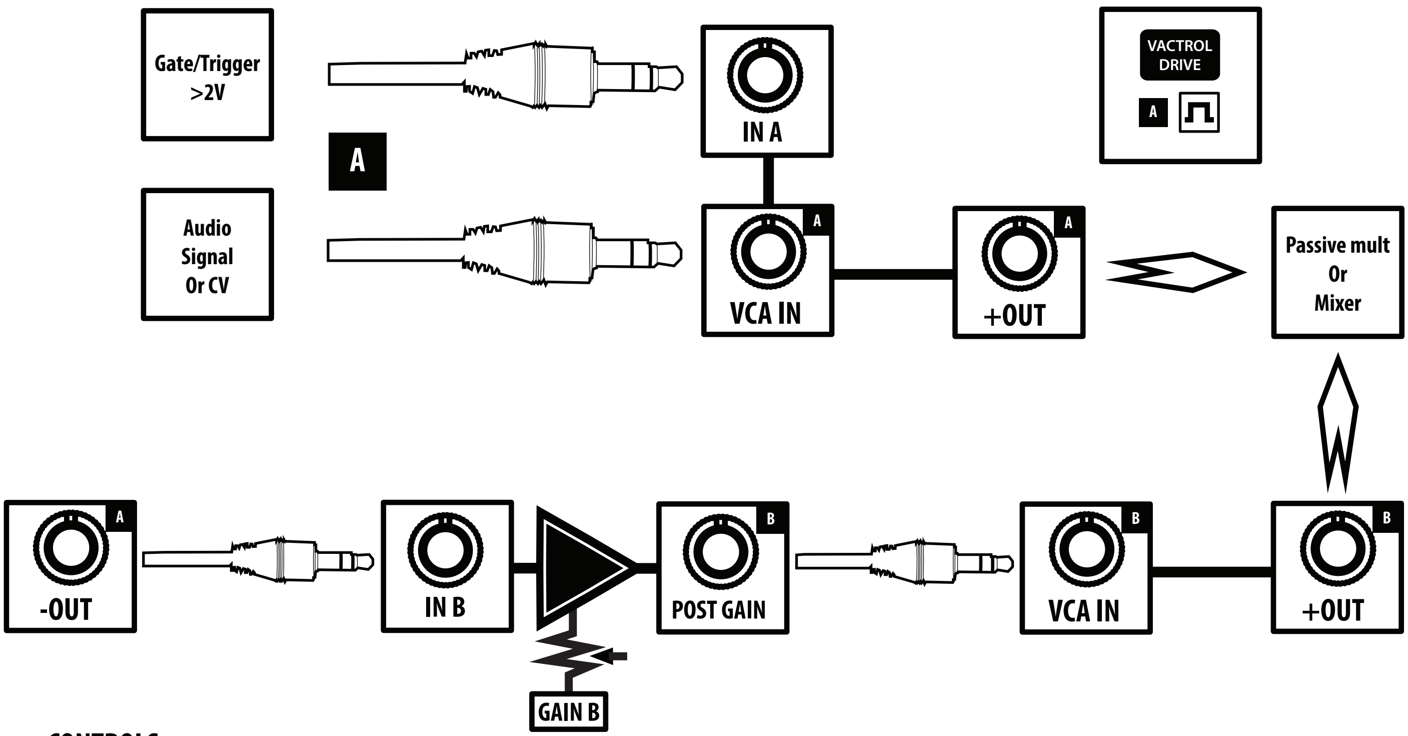


CONTROLS:

STEP RESPONSE ➨ **CV Modulation attenuator - set to maximum for full effect. Without CV this control will morph the Sine into a Square by means of hard clipping the signal.**
DAMP CONTROL ➨ **Set just below NATURAL ~10-11 o'clock**
GAIN ➨ **Set to maximum - or adjust to taste.**

Notes: Try using other wave shapes and control voltages as the input.

Dynamic Self-Wave shaping VCA (requires one stackable, passive multiple or mixer)



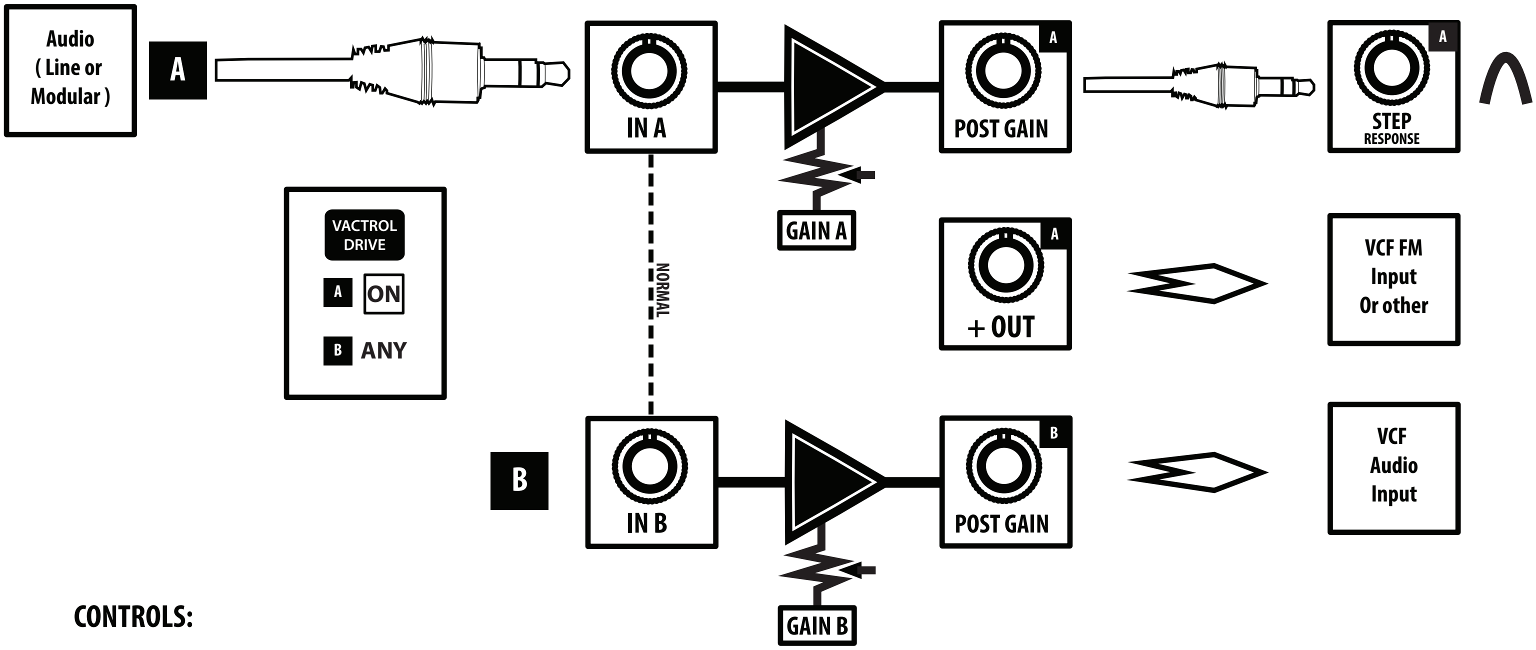
CONTROLS:

A **Follow Instructions for the Transient VCA Patch.**

B

GAIN	**Adjust for overall level and shape depth**
STEP RESPONSE	**Interactive with DAMP & GAIN - Low levels produce a nice light phaser effect**
DAMP CONTROL	**Interactive with STEP & GAIN - Alters wave shapes and clipping of the waveform**

New Classic Envelope Follower



CONTROLS:

A

- **GAIN** — START with the GAIN set at 1.0 or less for modular levels - use higher gain settings for line level and to Adjust the threshold/emphasis for a variety of effects
- **STEP RESPONSE** — Interactive with DAMP - Adjust the attack response of the envelope to taste
- **DAMP CONTROL** — Interactive with STEP - Adjust the release response of the envelope to taste

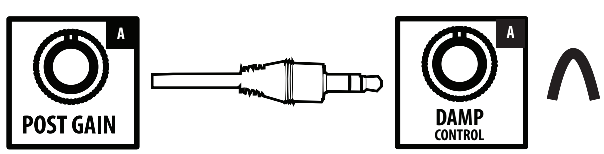
B

- **GAIN** — Controls the volume/gain of the audio signal path - capable of ~22dB of gain for raising line level to Modular and overdriving/distorting your signal

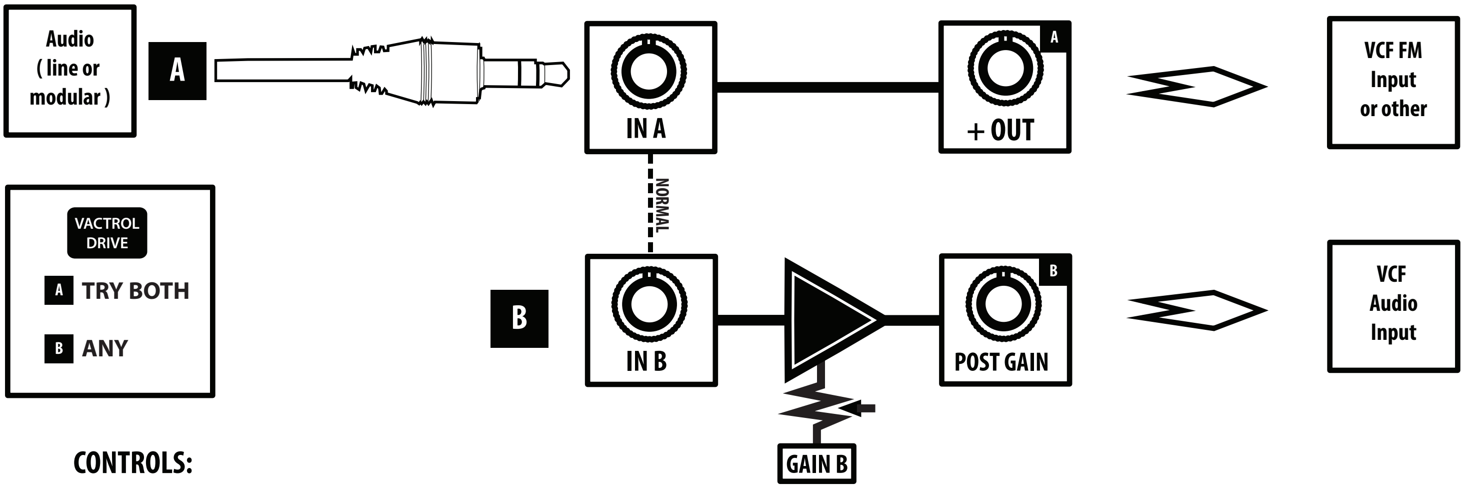
Notes: The above parameters will vary depending on your source and choice of VCF - due to the unique behavior of the PTG, A huge variety of effects are possible with different setting combos of GAIN, STEP and DAMP

Reverse - New Classic Envelope Follower

This is the same as above with the exception of the following change to PTG side 'A' below...



Threshold based Envelope Follower



CONTROLS:

A

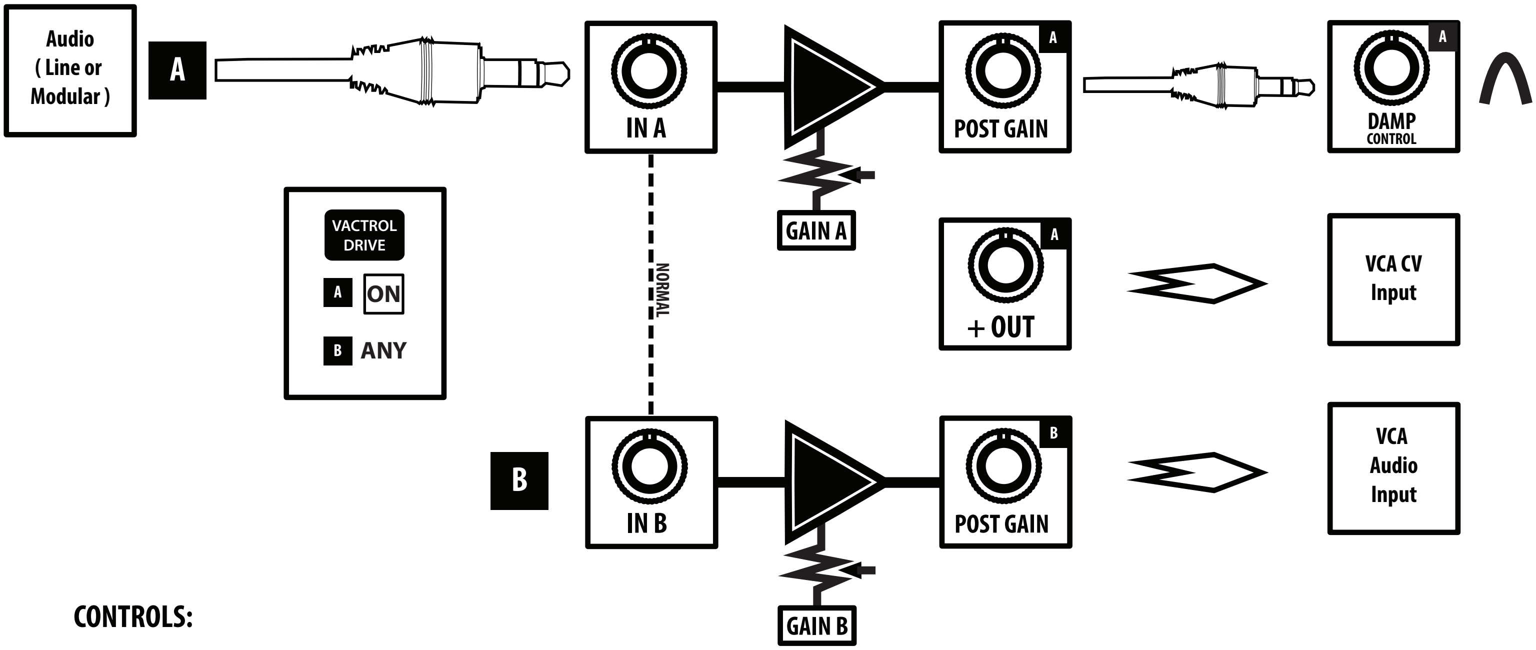
GAIN	➡	**START with the GAIN set at 1.0 or less for modular levels - use higher gain settings for line level and to adjust the transient gate threshold level for a variety of effects**
STEP RESPONSE	➡	**Interactive with DAMP - Adjust the attack response of the envelope to taste**
DAMP CONTROL	➡	**Interactive with STEP - Adjust the release response of the envelope to taste**
VACTROL DRIVE		**Try both settings as results will vary depending on source material amplitude and desired effect**

B

GAIN	➡	**Controls the volume/gain of the audio signal path - capable of ~22dB of gain for raising line level to modular and overdriving/distorting your signal**

Notes: This EF responds with a PTG transient that is triggered by the audio as it passes the GAIN A set threshold level. All parameters will vary depending on your source and choice of VCF - due to the unique behavior of the PTG, a huge variety of effects are possible with different setting combos of GAIN, STEP and DAMP

PTG Compressor



CONTROLS:

A

- **GAIN** — START with the GAIN set at 1.0 or less for modular levels - use higher gain settings for line level and to Adjust the threshold/emphasis for a variety of effects
- **STEP RESPONSE** — Interactive with DAMP - Adjust the attack response of the envelope to taste
- **DAMP CONTROL** — Interactive with STEP - Adjust the release response of the envelope to taste

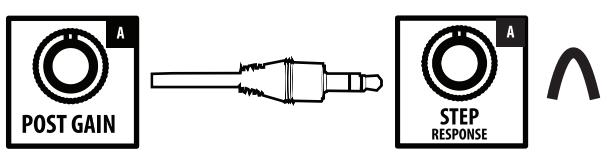
B

- **GAIN** — Controls the volume/gain of the audio signal path - capable of ~22dB of gain for raising line level to Modular and overdriving/distorting your signal

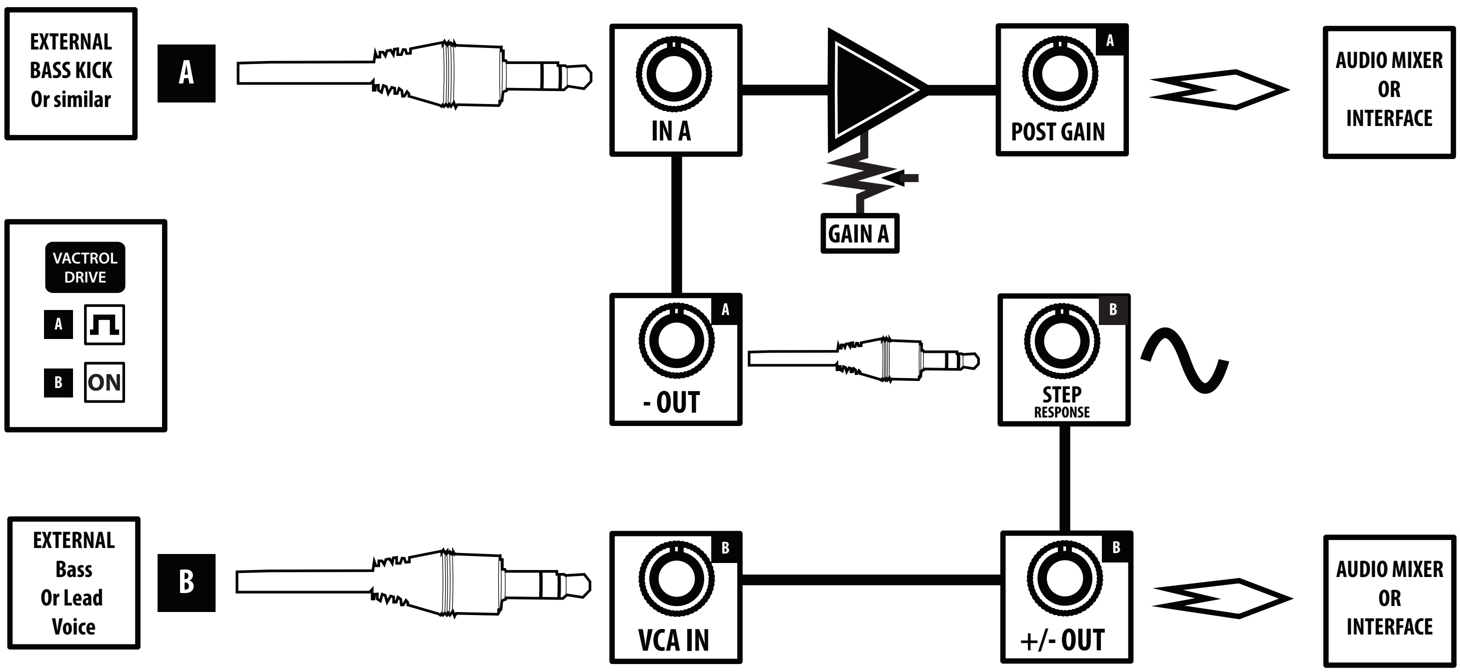
Notes: The above parameters will vary depending on your source and choice of VCA - due to the unique behavior of the PTG, A huge variety of effects are possible with different setting combos of GAIN, STEP and DAMP

Reverse - PTG Compressor

This is the same as above with the exception of the following change to PTG side 'A' below...



Side-chain Compression - Duck-a-Bass Kick -submitted by Radiokoala



CONTROLS:

A

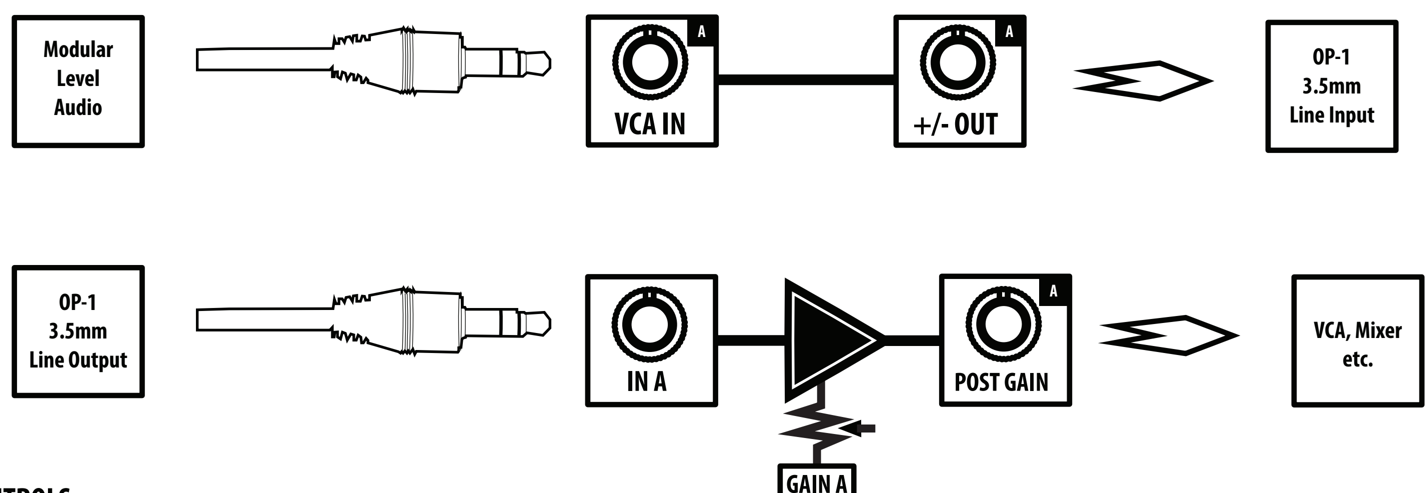
- GAIN ➨ START with the GAIN set at 1.0 - higher settings will compress the voice on channel B
- STEP RESPONSE ➨ Interactive with DAMP - Adjust between the SOFT and MAX CW settings
- DAMP CONTROL ➨ Interactive with STEP - Adjust between the NATURAL and MAX CW settings

B

- STEP RESPONSE ➨ Leave at the MAX CW setting
- DAMP CONTROL ➨ Adjust for the amplitude/sensitivity of your patched Voice - CW rotation increases amplitude

Notes: The above parameters will vary depending on the side-chain source amplitude and decay - experiment for different timing and effects.

Teenage Engineering OP1 Interface - Submitted by Mrdave1981

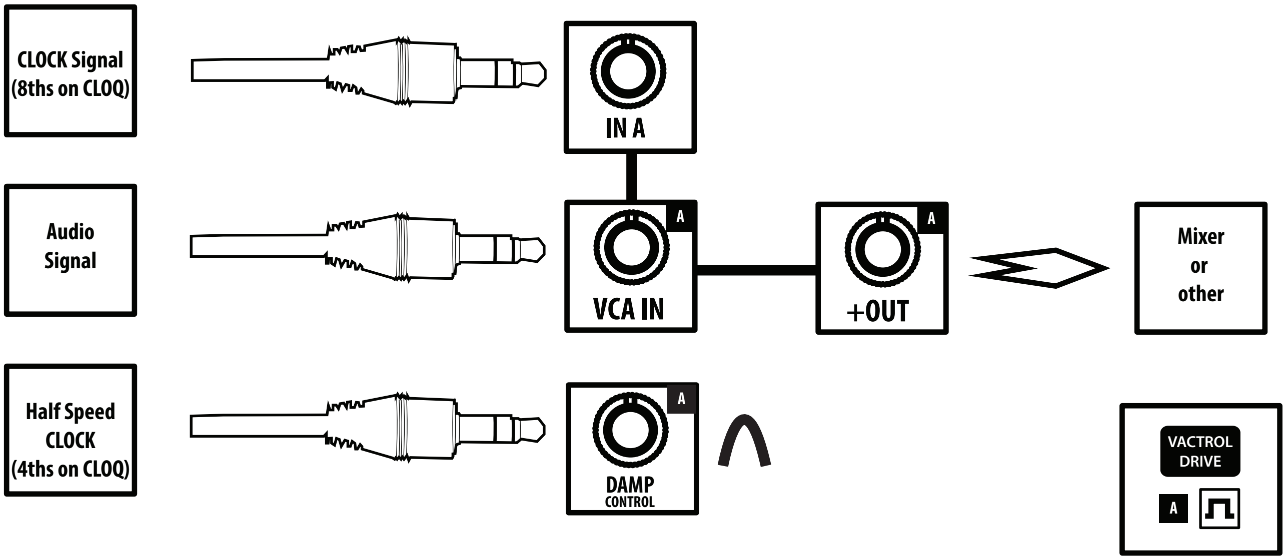


CONTROLS:

- STEP RESPONSE ➨ OP-1 input amplitude - leave this at about 1 o'clock for best DAMP range.
- DAMP CONTROL ➨ OP-1input amplitude - trim level to avoid clipping the input.
- GAIN ➨ Adjust to recover OP-1 output to modular amplitude level.

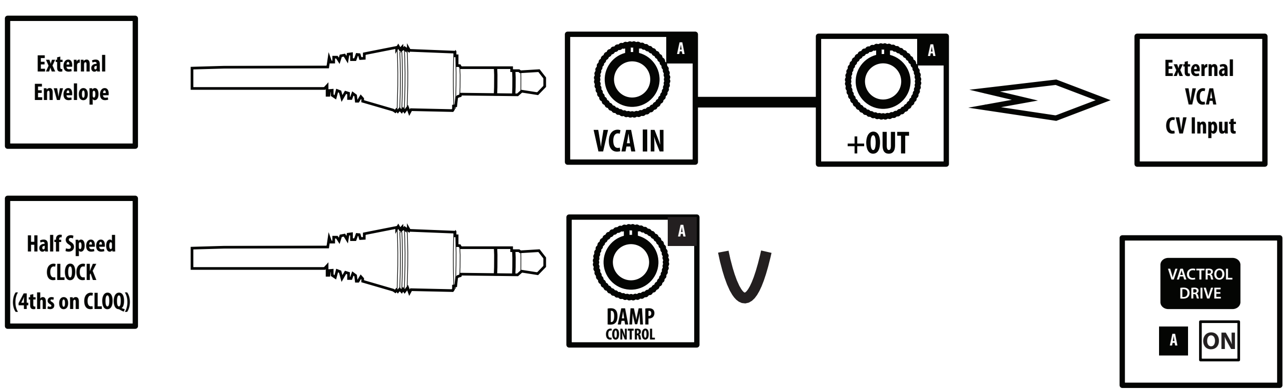
Use for the OP-1 effects and for leveraging the sampler and on-board synths!

PUMPER- Submitted by qu.one



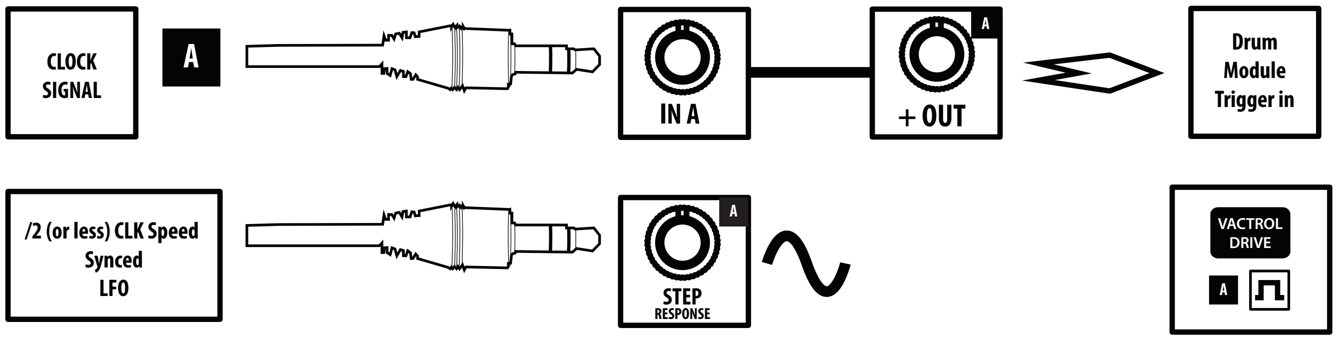
PUMPER PATCH DETAILS
Audio signal to VCA A input (or external VCA input)
Clock signal to PTG IN A (8ths on CLOQ)
1/2 Clock signal into DAMP CV IN and vary DAMP CONTROL to taste for various pumping effects
STEP RESPONSE set in the EXPONENTIAL range
+OUT to mixer (or +OUT to external VCA CV input, signal to mixer)
(switch between ∧ and ∨ on the DAMP CV for some live tweaking performance style fun)
Audio example @ qu-one.com/PTG/PTG_CLOCK_PUMPER.aif

FAUX CV-able Envelope- Submitted by qu.one



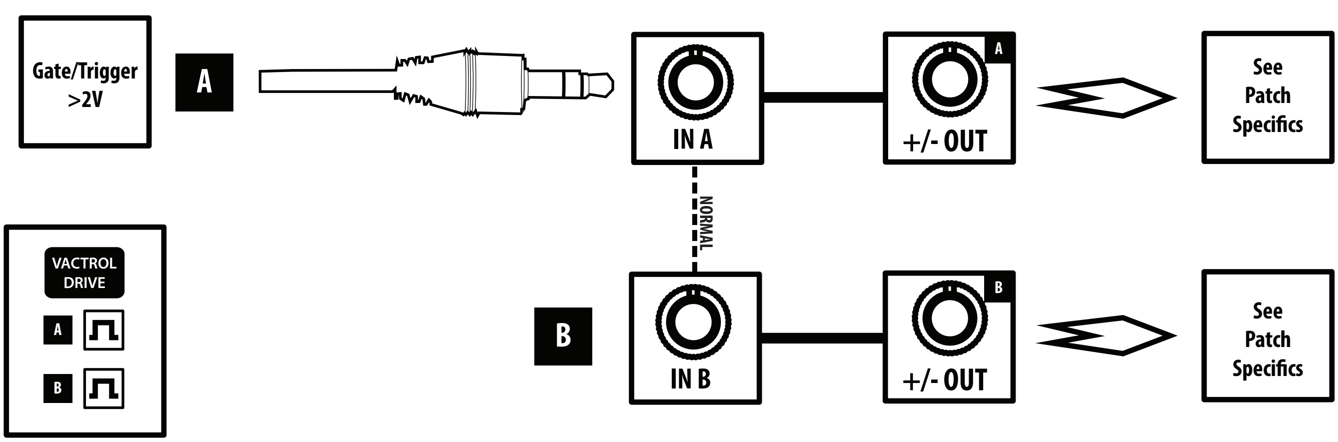
FAUX CV ENVELOPE PATCH DETAILS
To fake A CV-able envelope, send your envelope signal into PTG VCA A
LFO to DAMP CV IN and set the CV switch to ∨
Vary DAMP CONTROL CV reverse attenuator for depth
+ OUT to an external VCA or other CV input
The envelope will open/close with every LFO cycle
(change step response and damp control for variation.)
Audio example @ qu-one.com/PTG/PTG_CLOCK_FAUX_CV_ENV.aif

Drum Trigger SHUFFLER- Submitted by qu.one



SHUFFLER PATCH DETAILS
Clock signal to PTG IN A
Temp/Clock synced LFO STEP RESPONSE CV A
+OUT to drum trigger input
Set STEP RESPONSE attenuator to max - playing with DAMP CONTROL pot creates trills and off beats
Using a CLOQ and adjusting SPACE will yield even more "swing" style patterns
Try different clock outputs/divisions and PTG CV inputs and experiment with the controls. Some combinations yield different results.
Audio example @ qu-one.com/PTG/PTG_CLOCK_OFFBEAT.aif

LZX Video Transients - Submitted by Matos

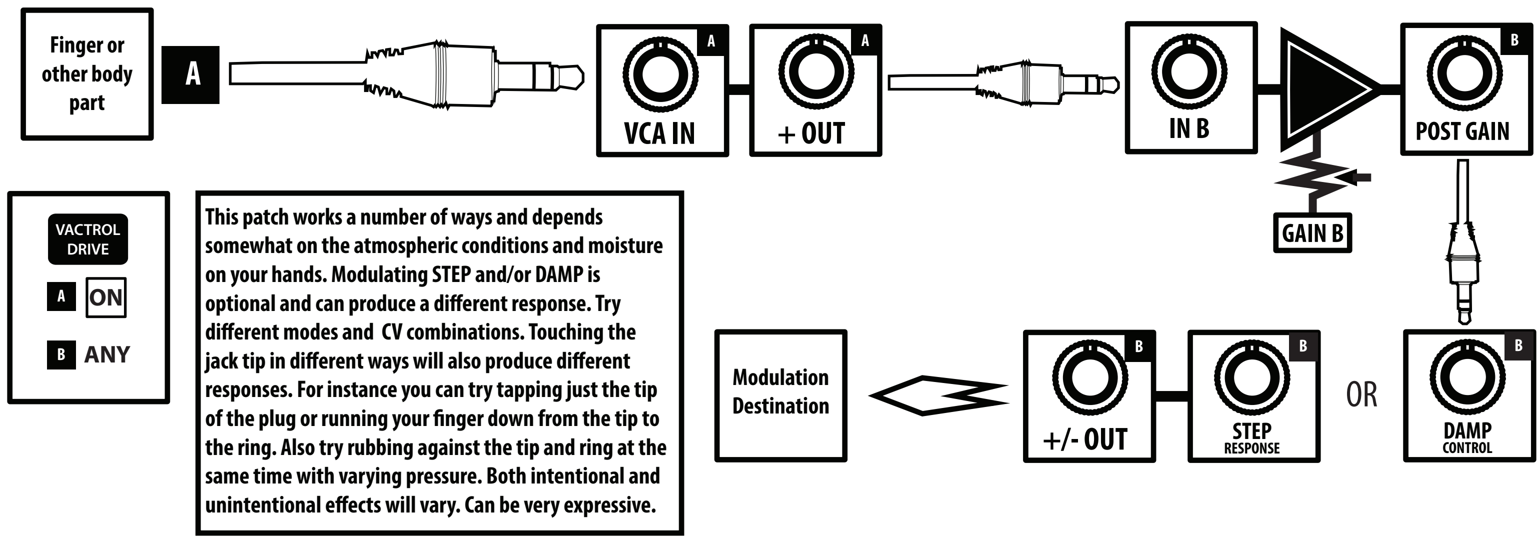


SPECIFIC PATCH DETAILS

A little patch using the ptg as a modulator for an lzx system. . .
CLOQ Divider OUT into a143-1
Envelope out from 143, ch. 1 and ch. 2 into PTG IN A
PTG, +OUT A into y input on LZX Color space Mapper
y output from Color space Mapper into Triple Video fader & Key Generator
g output from Color space Mapper into FM in of Video Waveform Generator
PTG, -OUT B into CV of the Key Generator
+ output ptg ch. 2 into channel 1 of vbm
+ output ch. 2 multi into channel 2 of vbm
vmb mixed with various outputs of vwg and csm
tweak damp response to taste.

Example @ https://vimeo.com/63867258

Trigger Finger Modulator



CONTROLS:

A

- **STEP RESPONSE** ➤ **Any setting.**
- **DAMP CONTROL** ➤ **Set Above 12 o'clock**

B

- **STEP RESPONSE** ➤ **Transient dynamic attack/amplitude. Settings will vary depending on DRIVE mode and use of the CV input. Experiment.**
- **DAMP CONTROL** ➤ **Transient dynamic release(ringing)/amplitude. Settings will vary depending on DRIVE mode and use of the CV input. Experiment.**
- **GAIN** ➤ **Sets the trigger level when GATE mode is used. Using GATE or BIAS mode, GAIN B Increases the amplitude of the human body modulation signal when modulating STEP and/or DAMP CV via the POST GAIN output.**