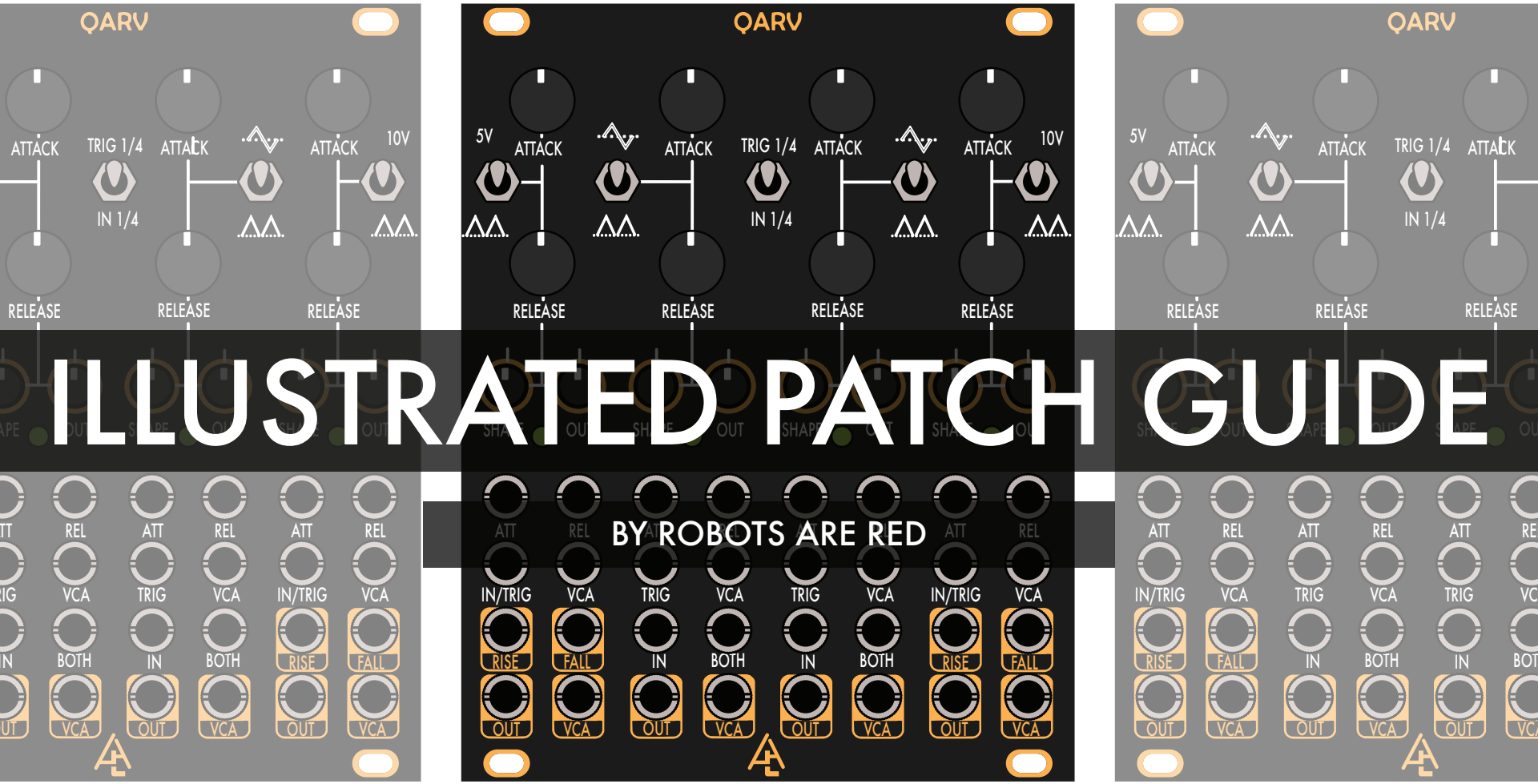
QARV

BY AFTER LATER AUDIO



ILLUSTRATED PATCH GUIDE

BY ROBOTS ARE RED

VOL.1.2

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KNOBS AND SWITCHES

ADDS A BIPOLAR WAVEFORM, NOTHING, OR CYCLES A UNIPOLAR WAVEFORM TO THE SIGNAL

ADDS A BIPOLAR WAVEFORM, NOTHING, OR CYCLES A UNIPOLAR WAVEFORM TO THE SIGNAL

CONTROLS THE RISE/ATTACK SPEED OF ANY INTERNAL OR EXTERNAL WAVE

ADDS 5V, NOTHING, OR CYCLES A UNIPOLAR WAVEFORM TO THE SIGNAL

ADDS 10V, NOTHING, OR CYCLES A UNIPOLAR WAVEFORM TO THE SIGNAL

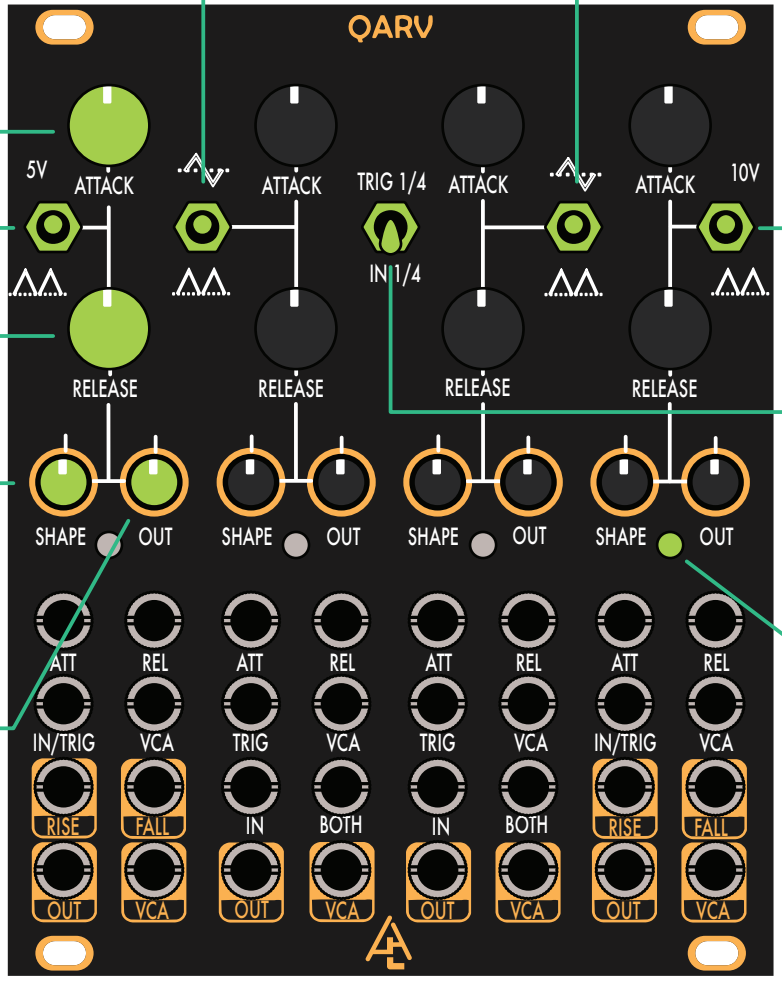
CONTROLS THE FALL/RELEASE/ DECAY SPEED OF ANY INTERNAL OR EXTERNAL WAVE

SWITCHES BETWEEN THE CH.2/CH.3 INPUTS ACCEPTING TRIGGERS (UP) TO CREATE ENVELOPES OR BEING A SIMPLE INPUT (DOWN)

CONTROLS THE CURVE OF THE ATTACK AND RELEASE:
FULLY CCW - EXPONENTIAL
12 O'CLOCK - LINEAR
FULLY CW - LOGARITHMIC

LEDS TO INDICATE THE VOLTAGE LEVELS OF THE SIGNAL:
RED - NEGATIVE SIGNAL
GREEN - POSITIVE SIGNAL

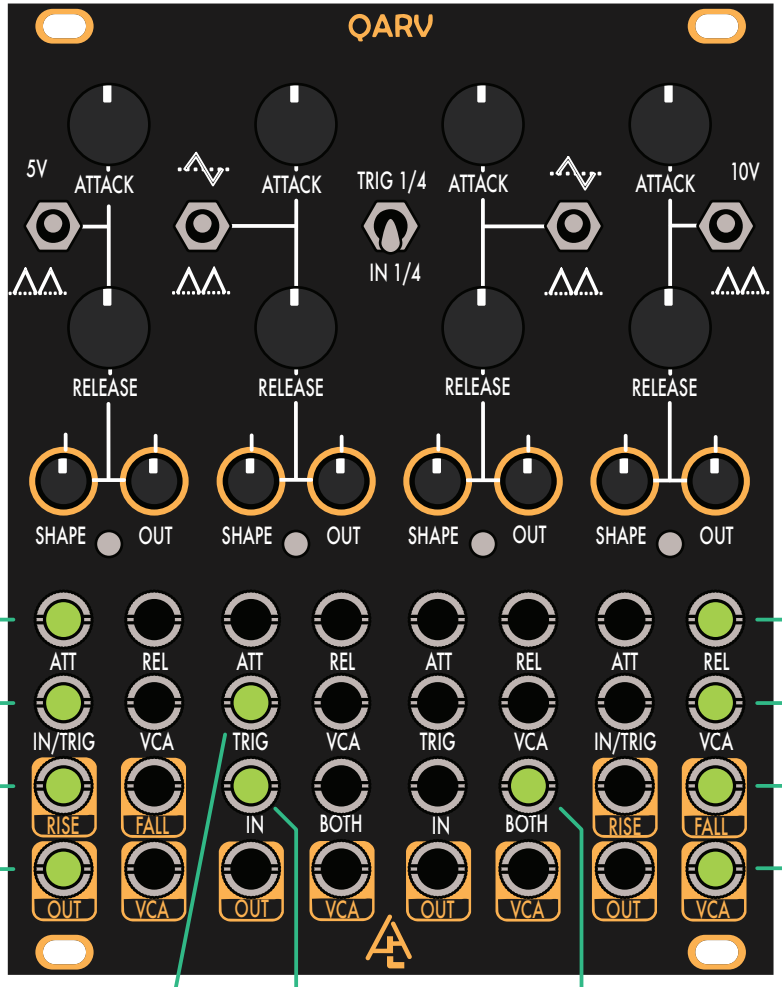
CONTROLS THE OUTPUT VOLUME/AMPLITUDE OF THE SIGNAL FOR BOTH THE OUT AND VCA OUT, AND CAN INVERT THE SIGNAL



CHANNELS 2/3/4 KNOBS HAVE THE EXACT SAME BEHAVIORS AS CH.1

INPUTS AND OUTPUTS

ALL UNLABELED INPUTS AND OUTPUTS HAVE
THE SAME FUNCTIONS AS THEIR LABELED COUNTERPARTS.



CONTROLS THE ATTACK KNOB,
+VOLTAGE FOR LONGER TIMES
-VOLTAGE FOR SHORTER TIMES

SIGNAL IN WITH 1/4 SWITCH SET
GATE IN WITH 1/4 SWITCH SET

GATE OUTPUT WHEN SIGNAL
IS IN THE ATTACK/RISE STAGE

SIGNAL OUTPUT ATTENUVERTED
BY THE OUT KNOB

TRIGGER INPUT

SIGNAL INPUT

CV/
ALMOST 1V/OCT
TRACKING INPUT

CONTROLS THE RELEASE KNOB,
+VOLTAGE FOR LONGER TIMES
-VOLTAGE FOR SHORTER TIMES

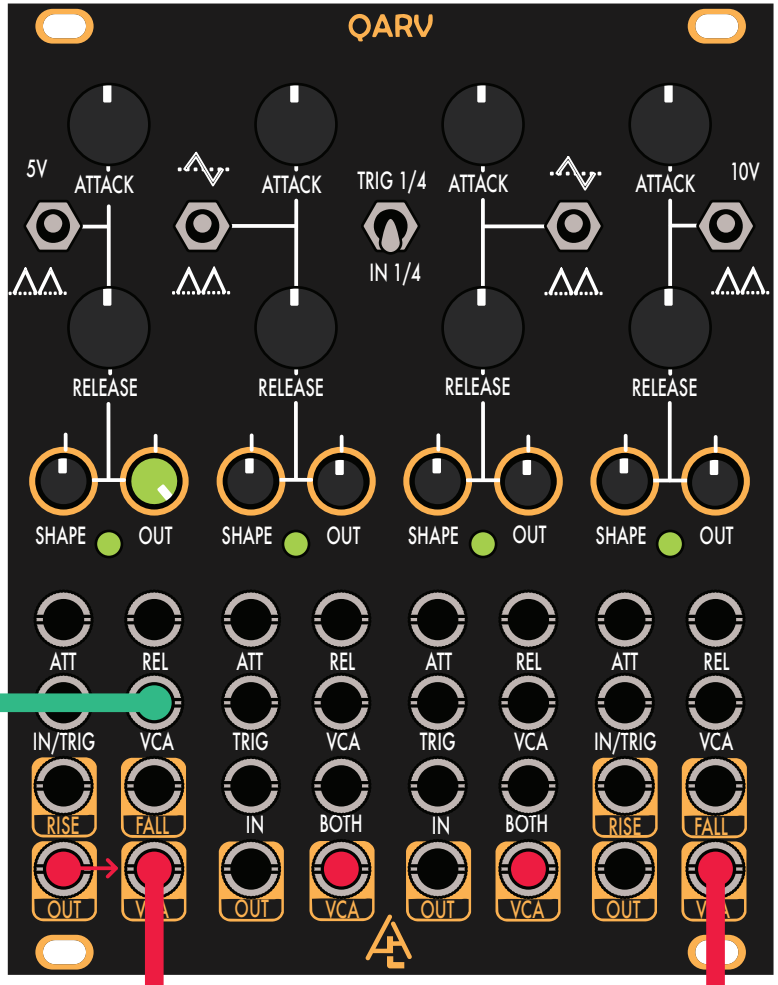
POSITIVE VOLTAGE AMPLIFIES
THE OUTPUT SIGNAL

GATE OUTPUT WHEN SIGNAL
IS IN THE FALL/RELEASE STAGE

VCA OUTPUT ATTENUVERTED
BY OUT KNOB AND AMPLIFIED
BY THE VCA INPUT

VCAS

EACH VCA OUTPUT NORMALS TO THE NEXT CHANNEL'S VCA WHEN
THE PRIOR VCA OUT IS LEFT UNPATCHED. CREATING AN UP TO 4 CHANNEL MIXER.



VCA SIGNAL INPUT

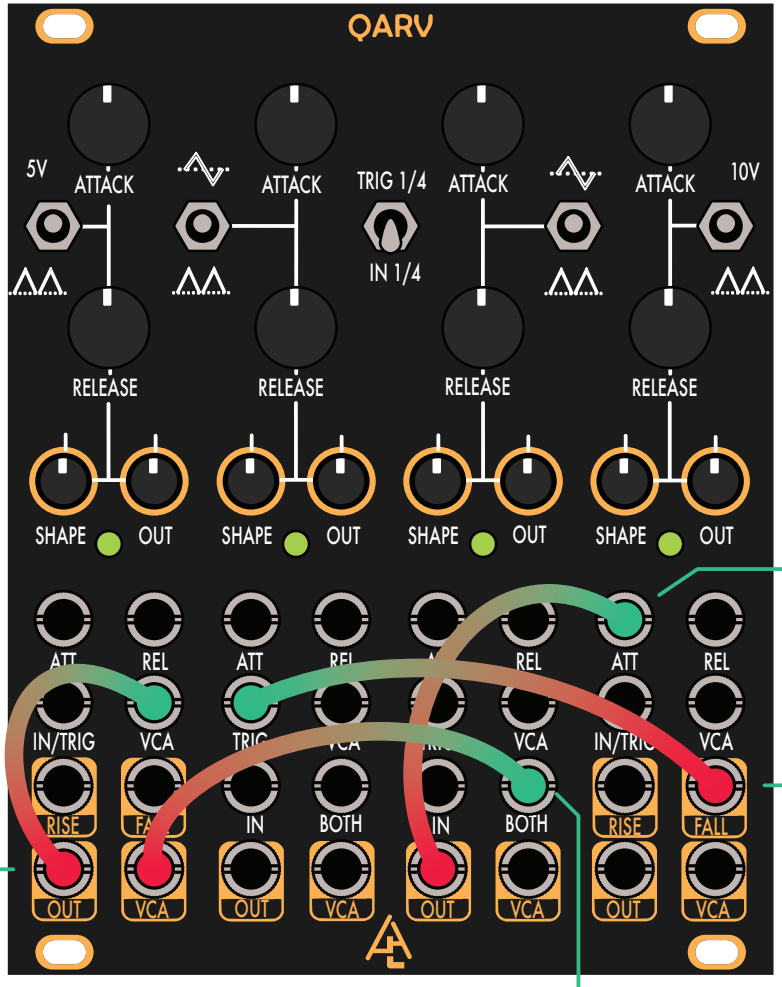
OUTPUT INTERNALLY ROUTES
TO CONTROL THE VCA CV

VCA OUTPUT

MIXED VCA OUTPUT

SELF PATCHING

REMEMBER AND BE AWARE OF ALL THE SELF-PATCHING CAPABILITIES OF QARV.



USE OTHER CHANNELS TO MODULATE PARAMETERS

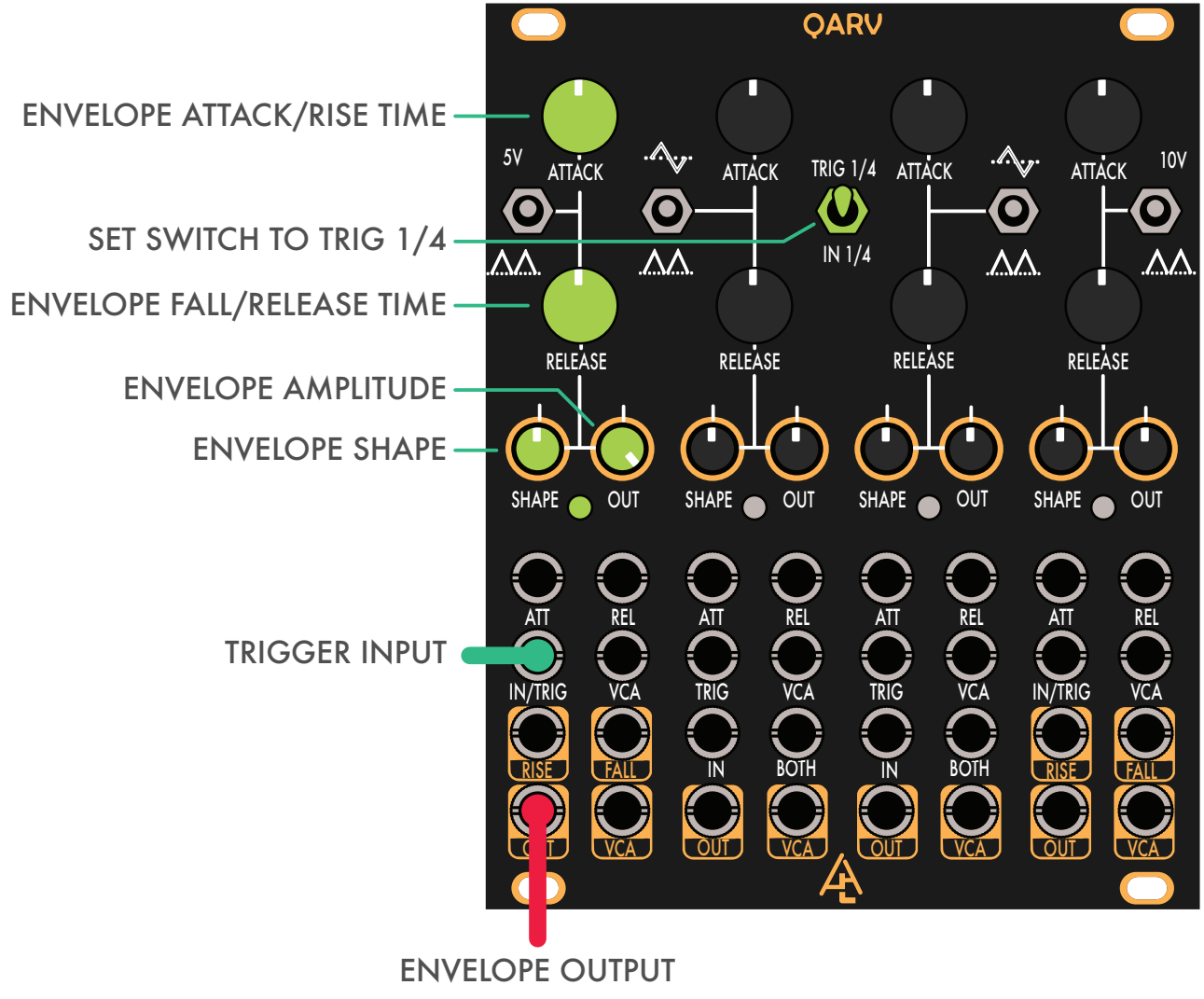
USE THE RISE/FALL GATES FROM ONE CHANNEL TO TRIGGER OTHER CHANNELS (USE THE ALA G&T MODULE TO CONVERT THE GATES INTO TRIGGERS)

CREATES AN EXPONENTIAL SIGNAL OUTPUT FROM THE VCA (OUT KNOB CONTROLS VOLUME)

USE ONE CHANNEL TO CONTROL THE PITCH/FREQUENCY OF ANOTHER WITH THE BOTH INPUT

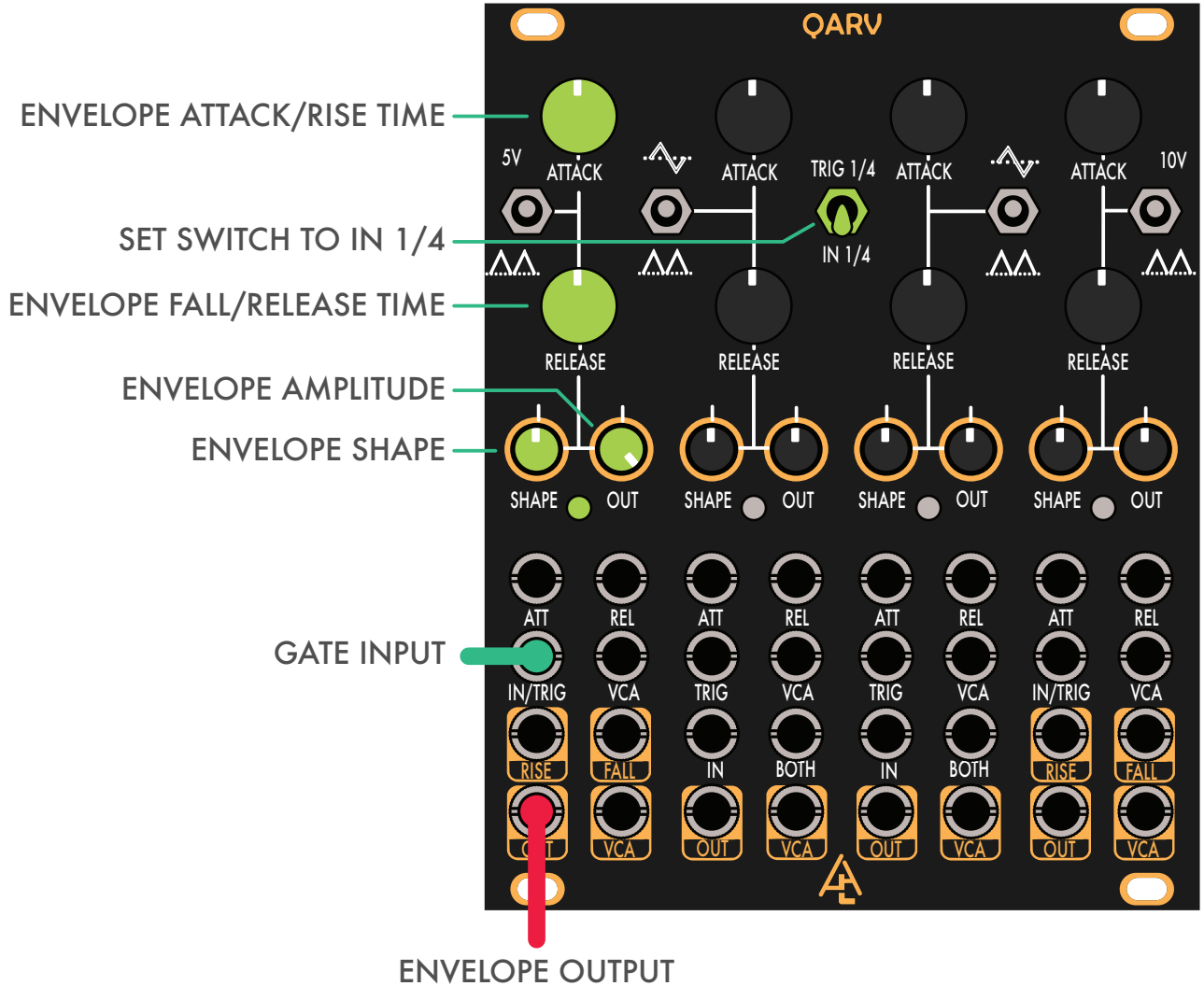
AR ENVELOPE

ANY CHANNEL CAN BE USED. IF CHANNEL 2 OR 3 ARE USED, BE SURE TO PATCH INTO THE TRIG INPUT.



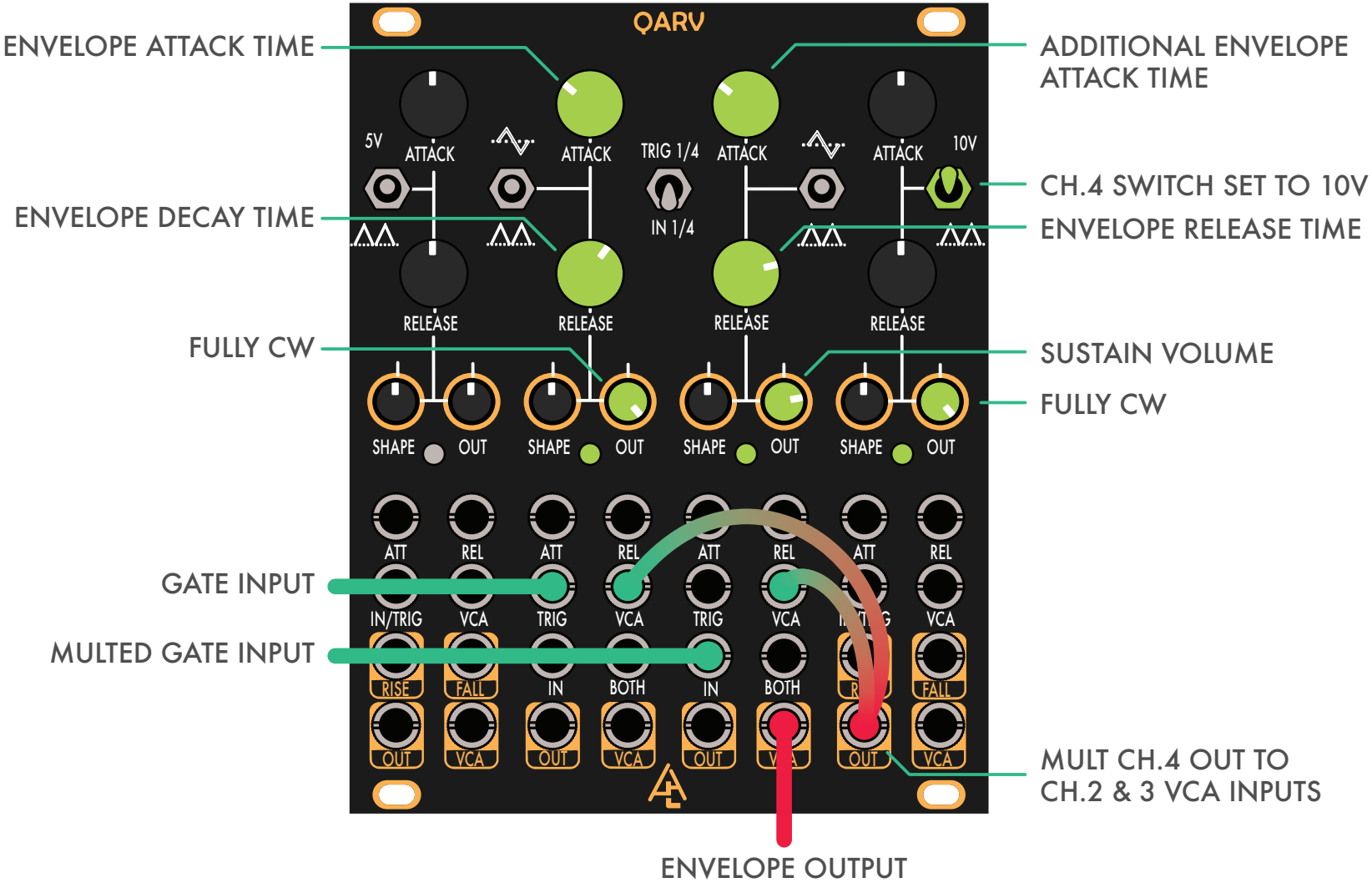
ASR ENVELOPE

ANY CHANNEL CAN BE USED. IF CHANNEL 2 OR 3 ARE USED, BE SURE TO PATCH INTO THE “IN” INPUT.

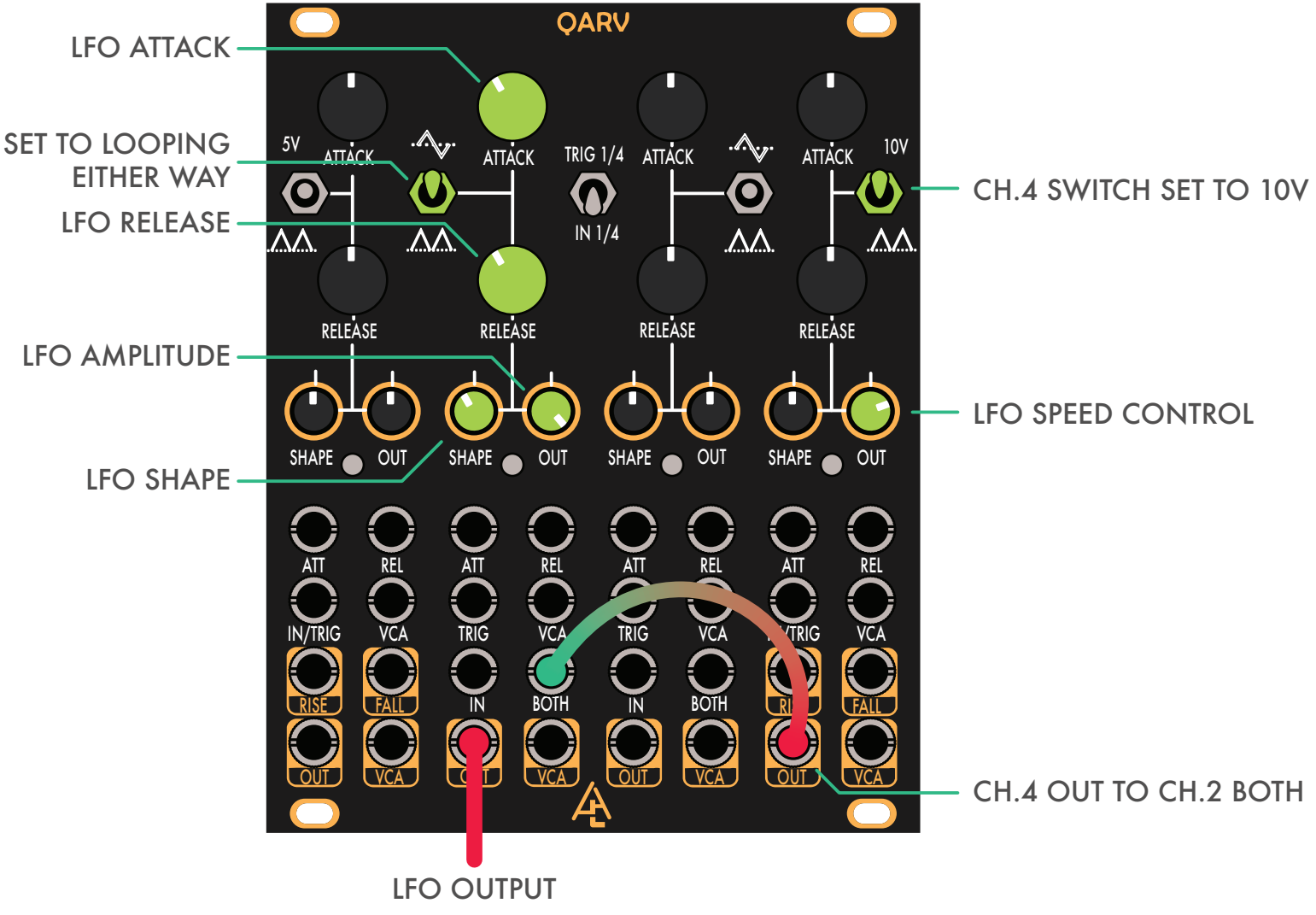


ADSR ENVELOPE

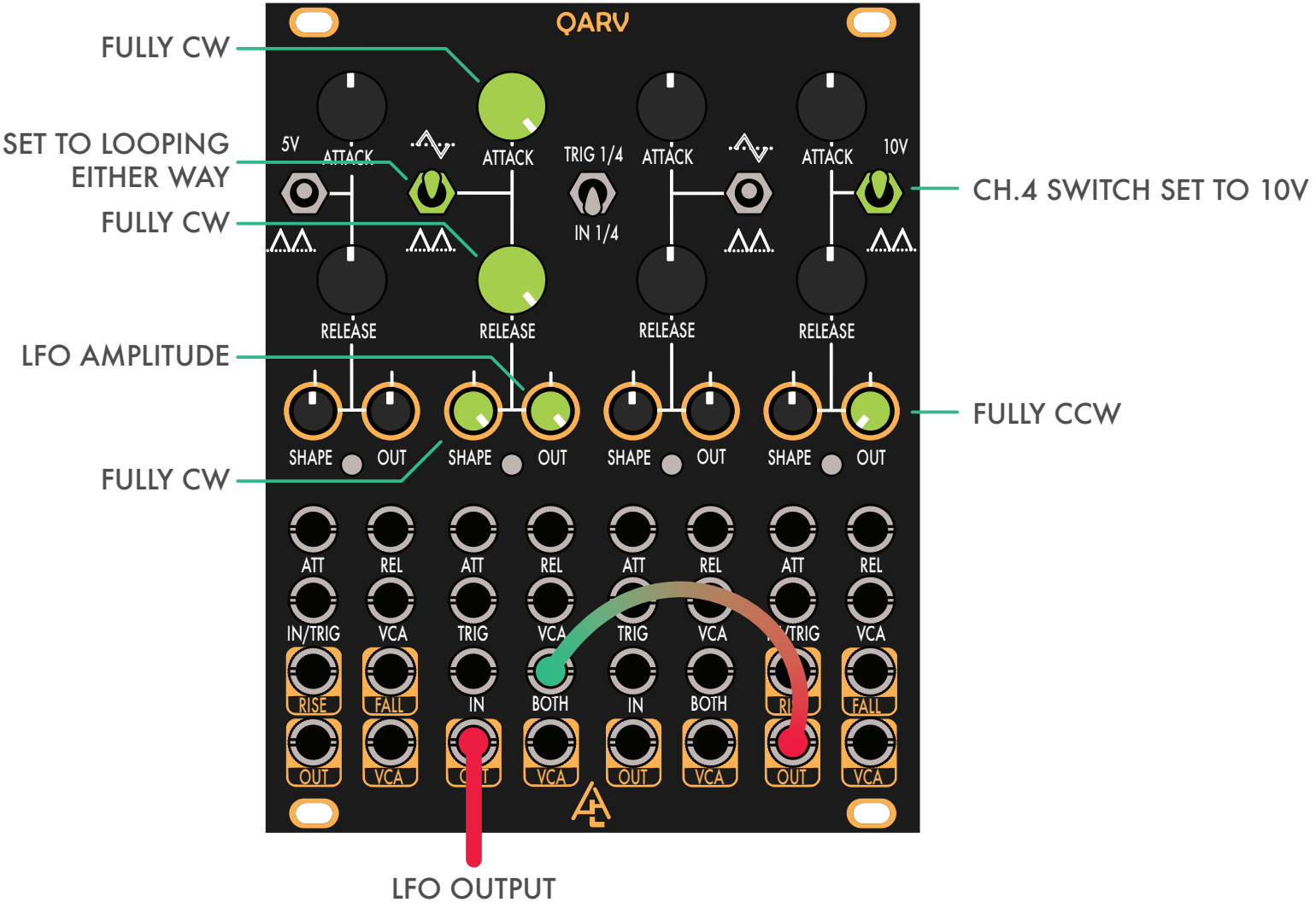
MULTS OR STACKABLE/SPLITTER CABLES ARE NEEDED FOR THIS PATCH.
TRY PLAYING AROUND WITH THE TWO ATTACK TIMES AT DIFFERENT
AMOUNTS FOR ADDITIONAL MODULATION. ALSO REMEMBER CH.1 IS STILL OPEN.



VOLTAGE CONTROLLED LFO

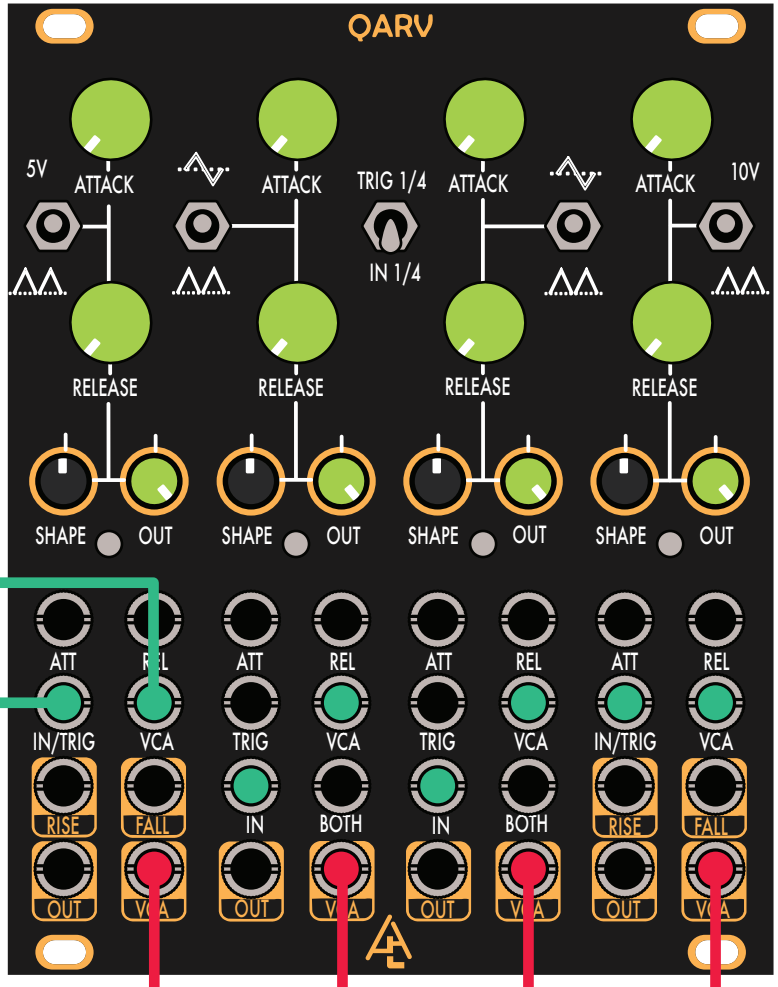


40+ HOUR LONG LFO CYCLE



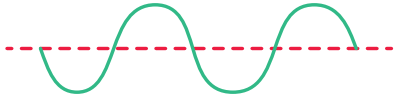
HALF WAVE RECTIFICATION

BY TREATING THE INTERNALLY ROUTED SIGNAL AS THE MAIN SIGNAL AND THE VCA INPUT AS THE GATE, THE VCAS BECOME HALF WAVE RECTIFIERS WHICH ALSO CASCADE MIX DOWN THE VCAS.



GATE SIGNAL INTO ANY CHANNEL'S "VCA" INPUT

SIGNAL INPUT INTO ANY CHANNEL'S "IN" INPUT



INPUT WAVEFORM

HALF WAVE RECTIFICATIONS

CH.1 (INVERTED)

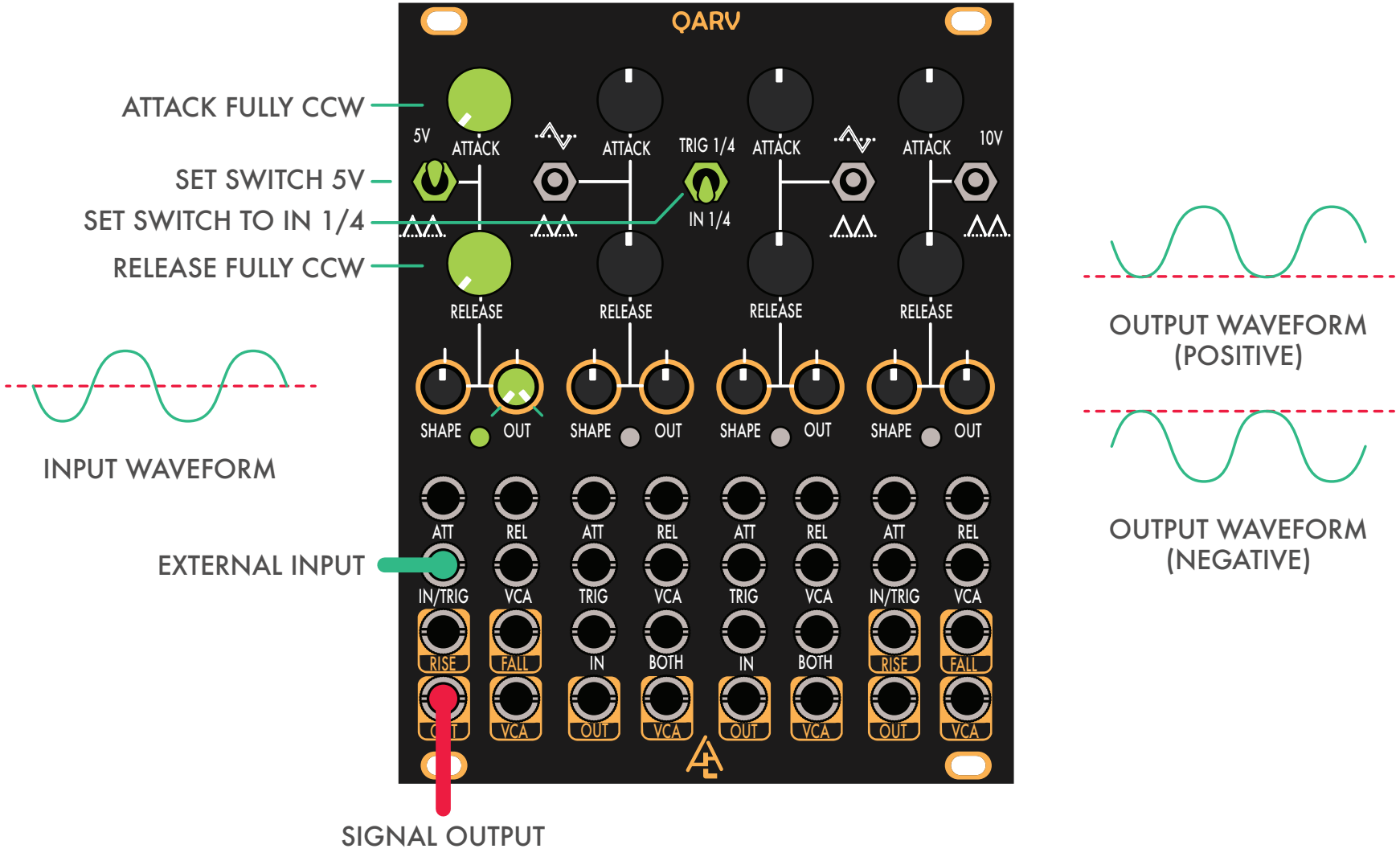
CH.2

CH.3

CH.4

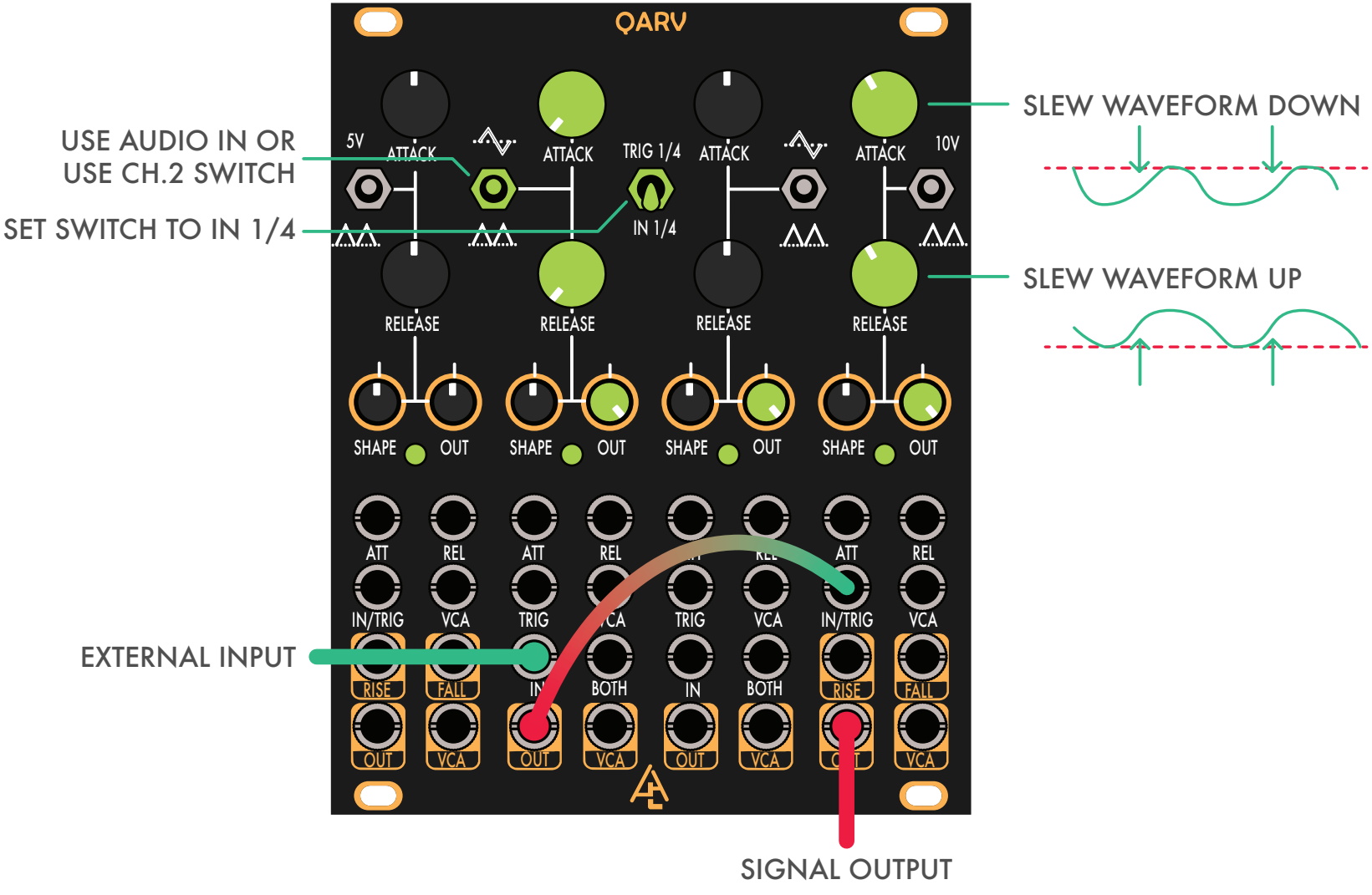
BIPOLAR TO UNIPOLAR WAVEFORM

CHANGE YOUR WAVEFORM FROM BIPOLAR TO UNIPOLAR (POSITIVE) WITH OUT 1FULLY CLOCKWISE.
CHANGE IT TO A NEGATIVE UNIPOLAR WAVE WITH OUT 1 FULLY COUNTER-CLOCKWISE.



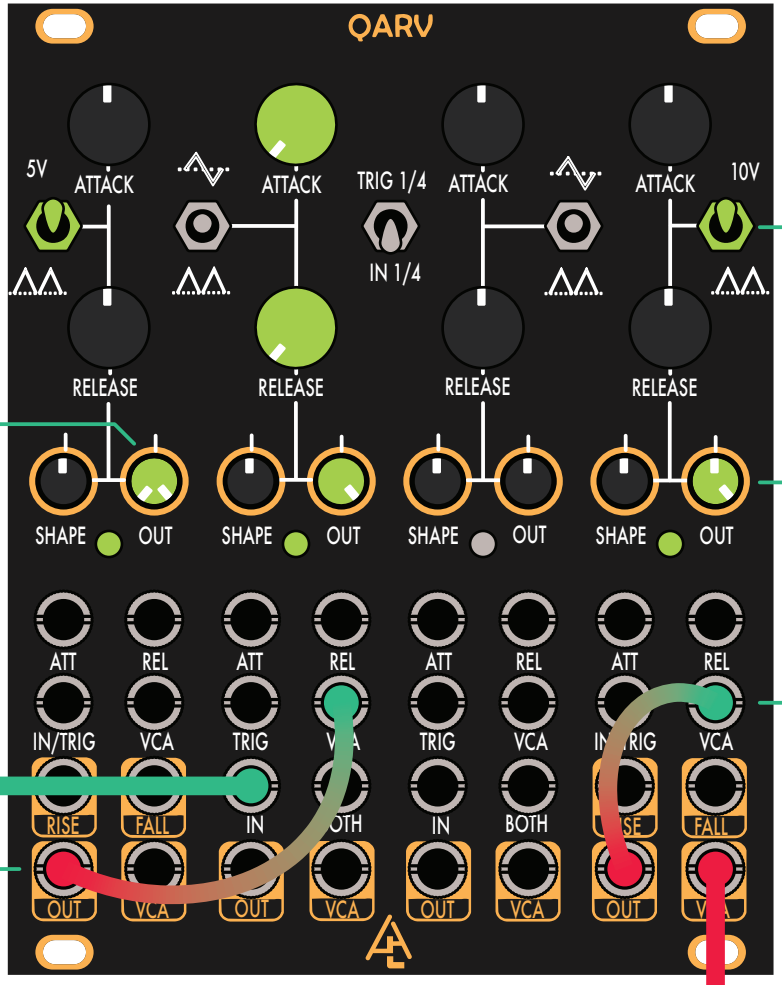
WAVEFORM OFFSETTING WITH SLEW

ALSO INSTEAD OF USING AN EXTERNAL INPUT, YOU CAN CYCLE CHANNEL 1 OR 3 INSTEAD.



UNIPOLAR CLIPPED OFFSETTING

ALSO INSTEAD OF USING AN EXTERNAL INPUT, YOU CAN CYCLE CHANNEL 2 OR 3 INSTEAD.



SET SWITCH 5V

FULLY CW FOR FULL 5V GATE OR
CCW FOR INVERTED SIGNAL

EXTERNAL INPUT INTO CH.2 OR 3
OR LOOP THE WAVEFORMS

5V GATE TO OPEN THE VCA

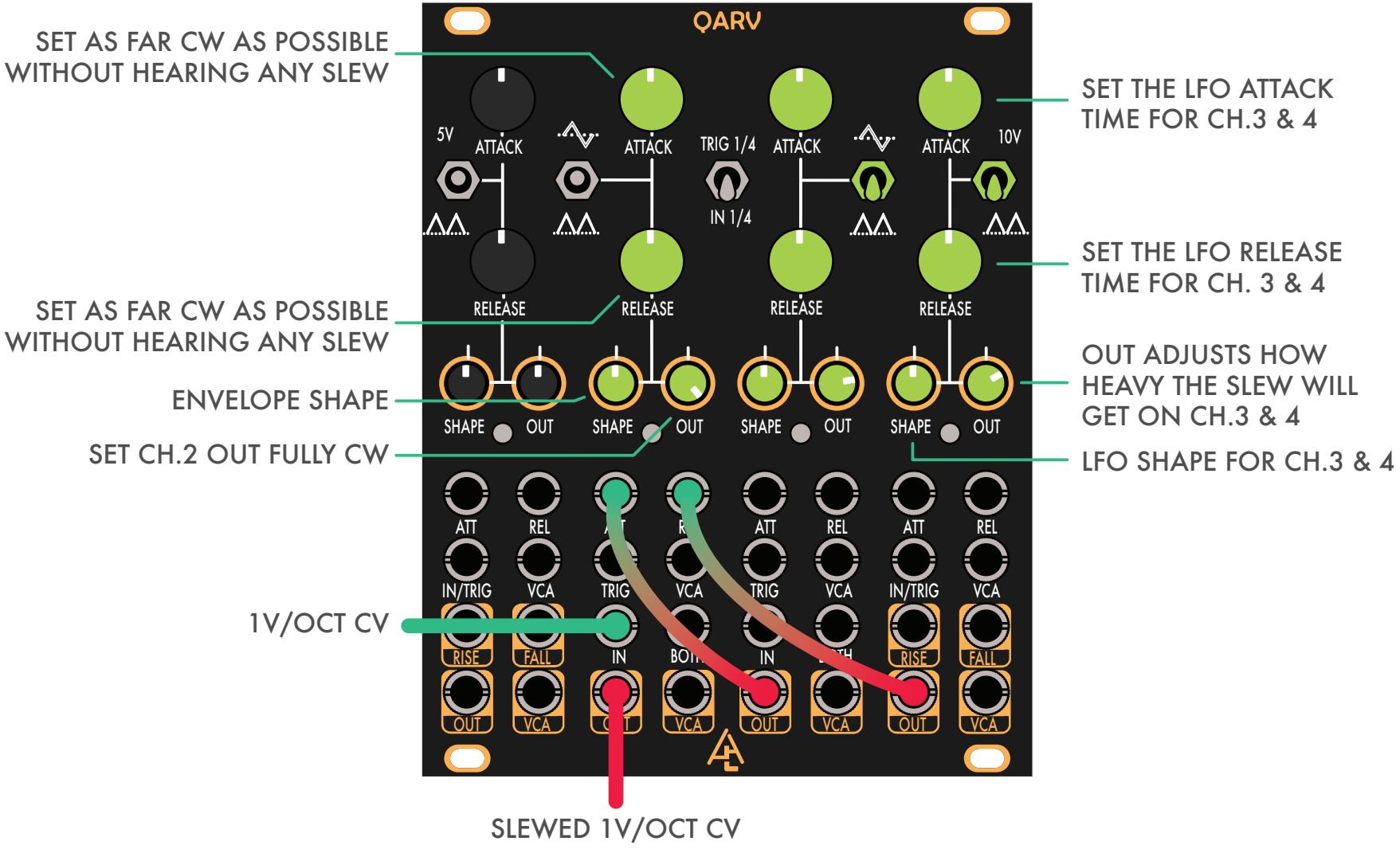
SET CH.4 TO 10V

OFFSET AMOUNT/DIRECTION

CREATES AN EXPONENTIAL
CURVE TO THE OFFSET,
BUT FREES UP OTHER GATES.

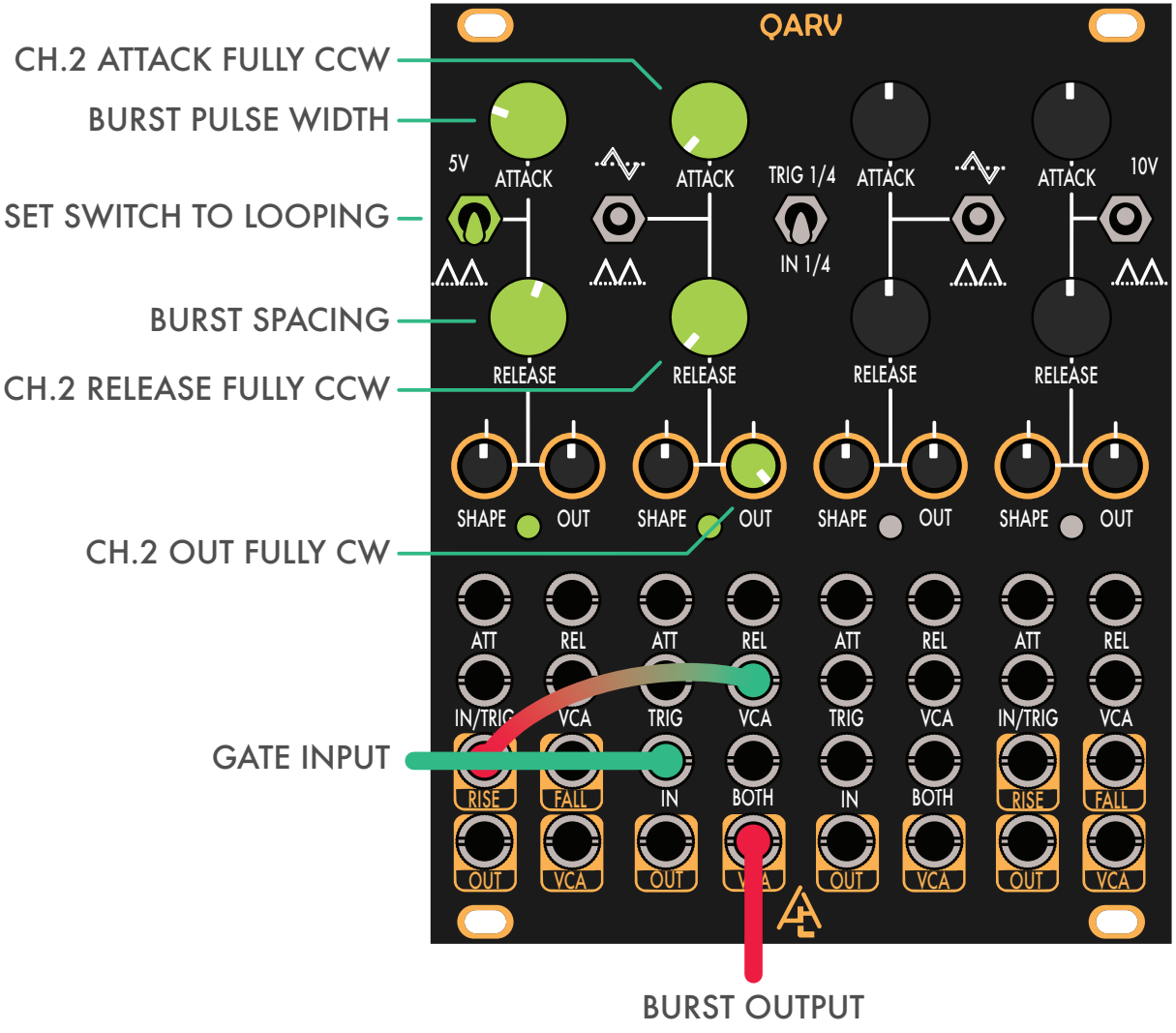
AUDIO OUTPUT

DYNAMIC SLEW



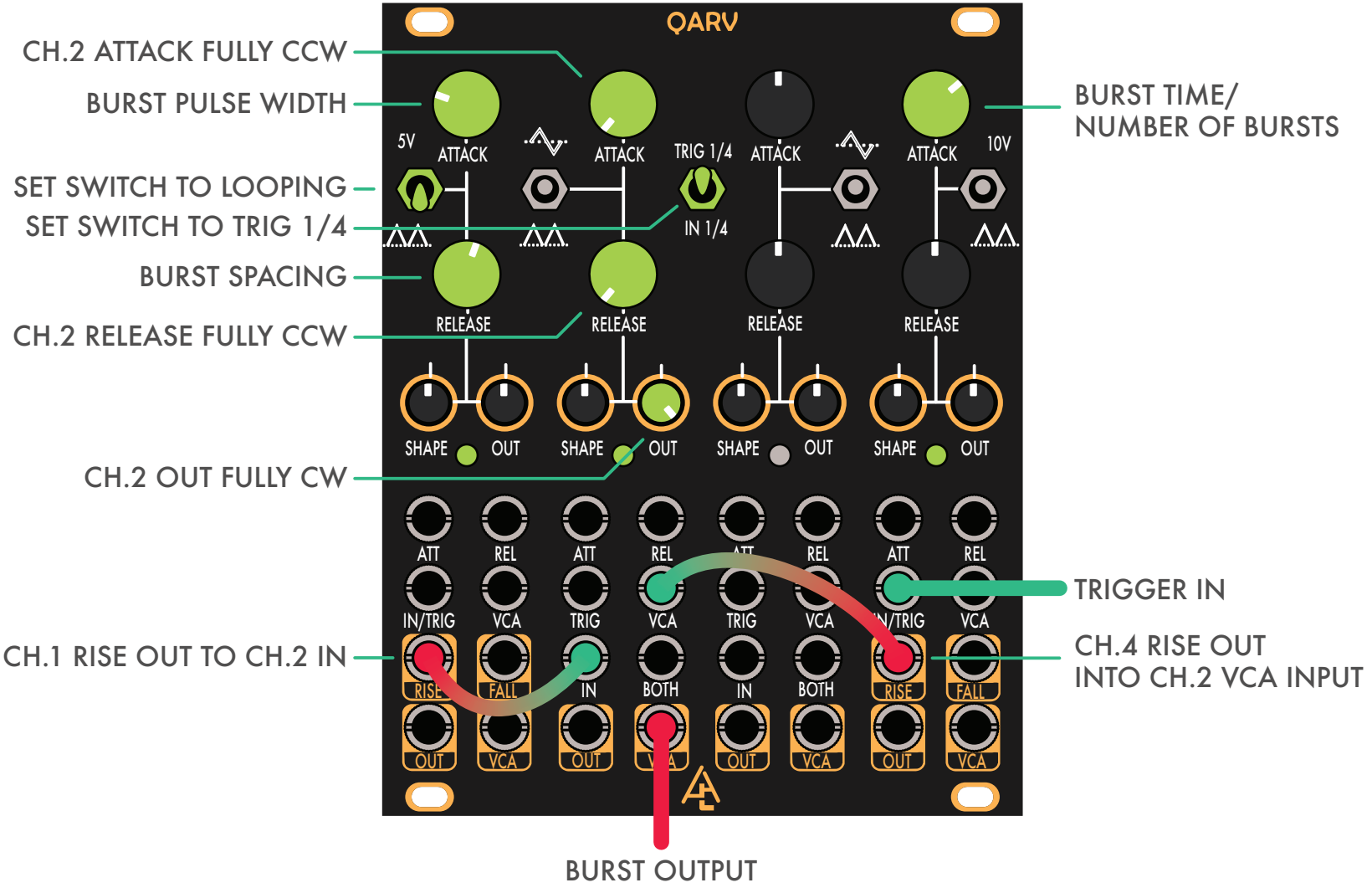
GATED BURST GENERATOR

GENERATES BURST OUTPUTS WHEN RECEIVING A HIGH GATE SIGNAL.



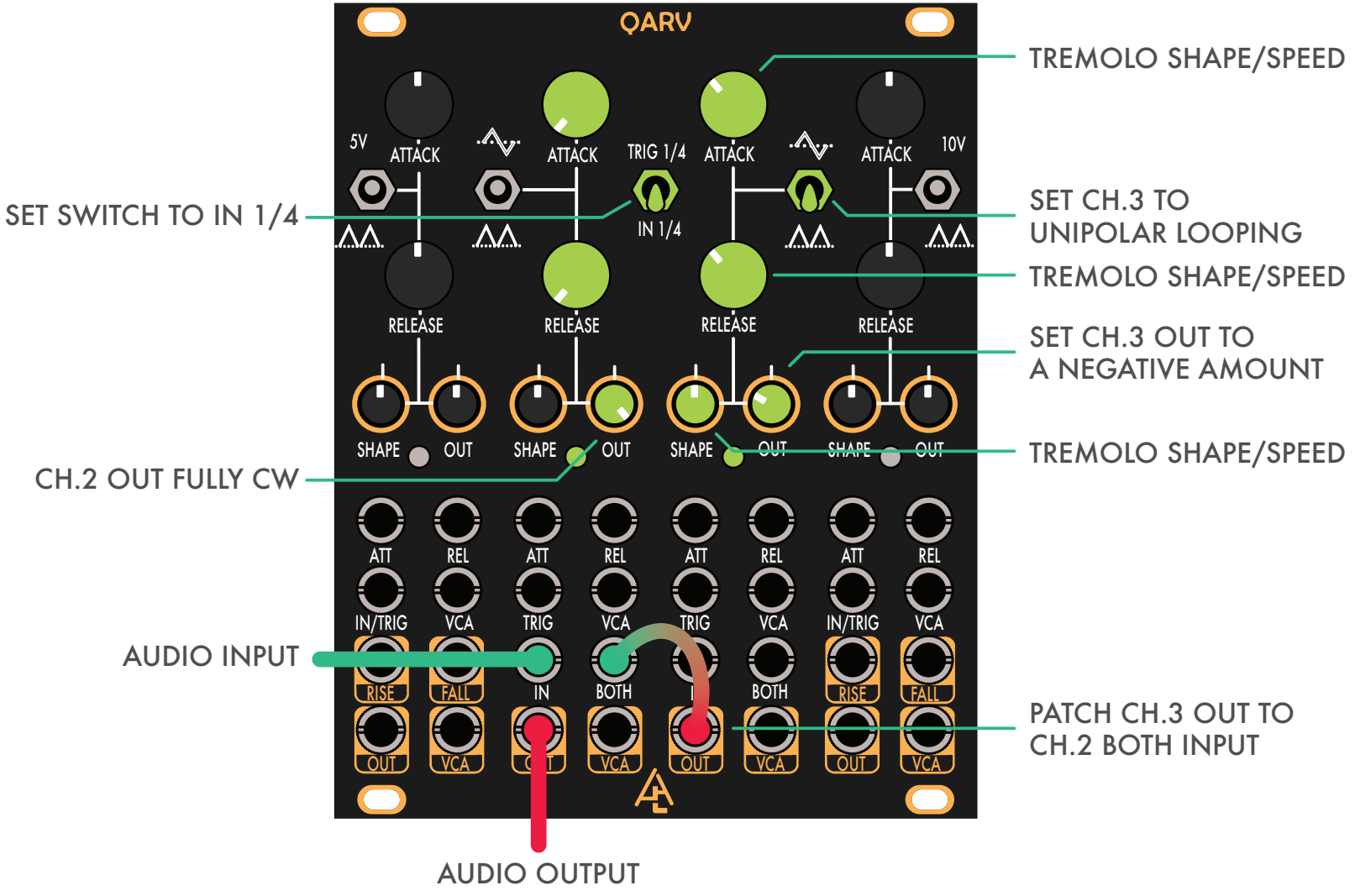
BURST GENERATOR

GENERATES A LENGTH OF BURSTS DETERMINED BY CH.4 ATTACK TIME.



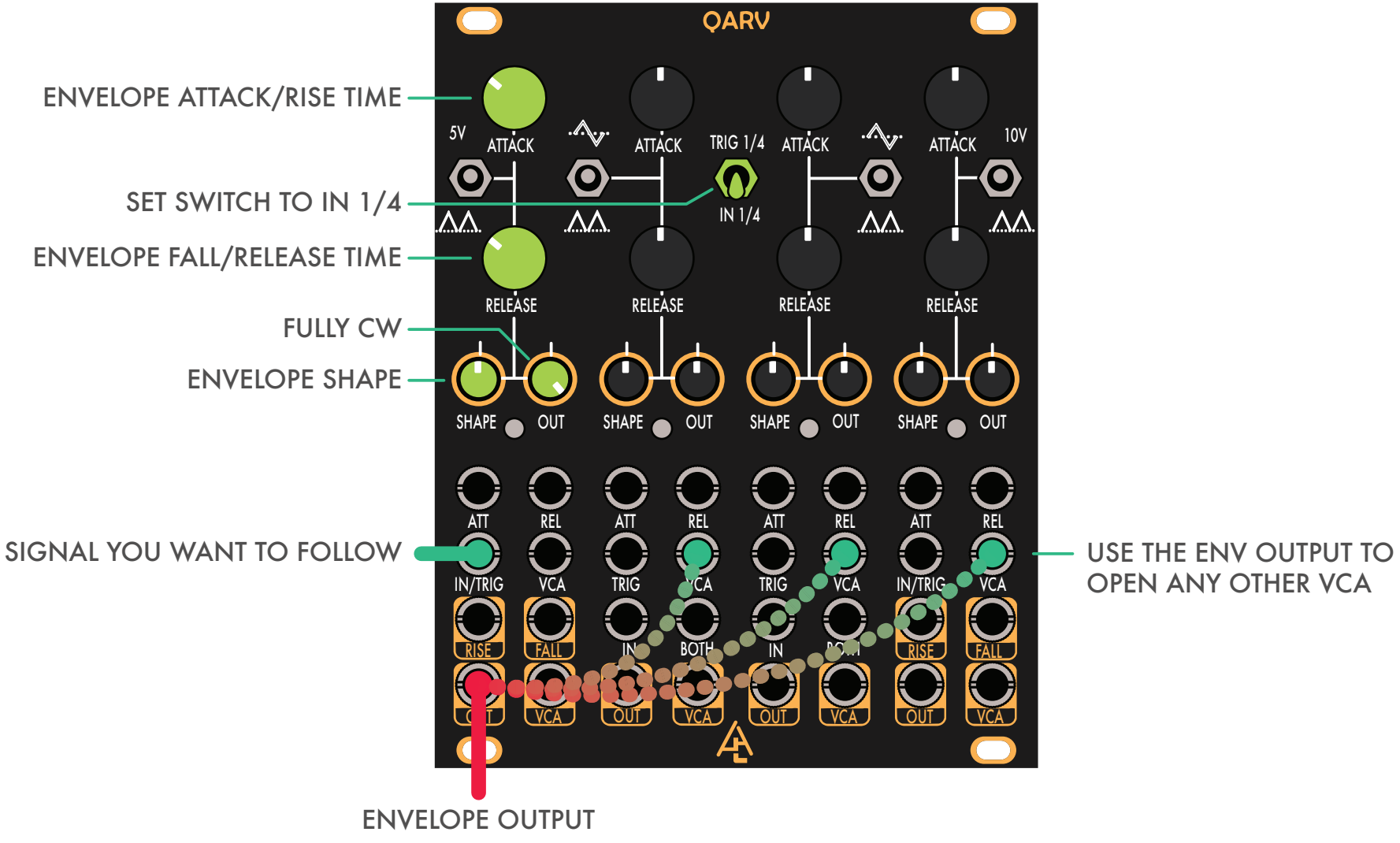
TREMOLO-LIKE EFFECT

THE TREMOLO AFFECTS THE ATTACK/RELEASE TIMES OF THE SIGNAL,
GIVING THE AUDIO A SLIGHTLY FILTERED TREMOLO EFFECT.

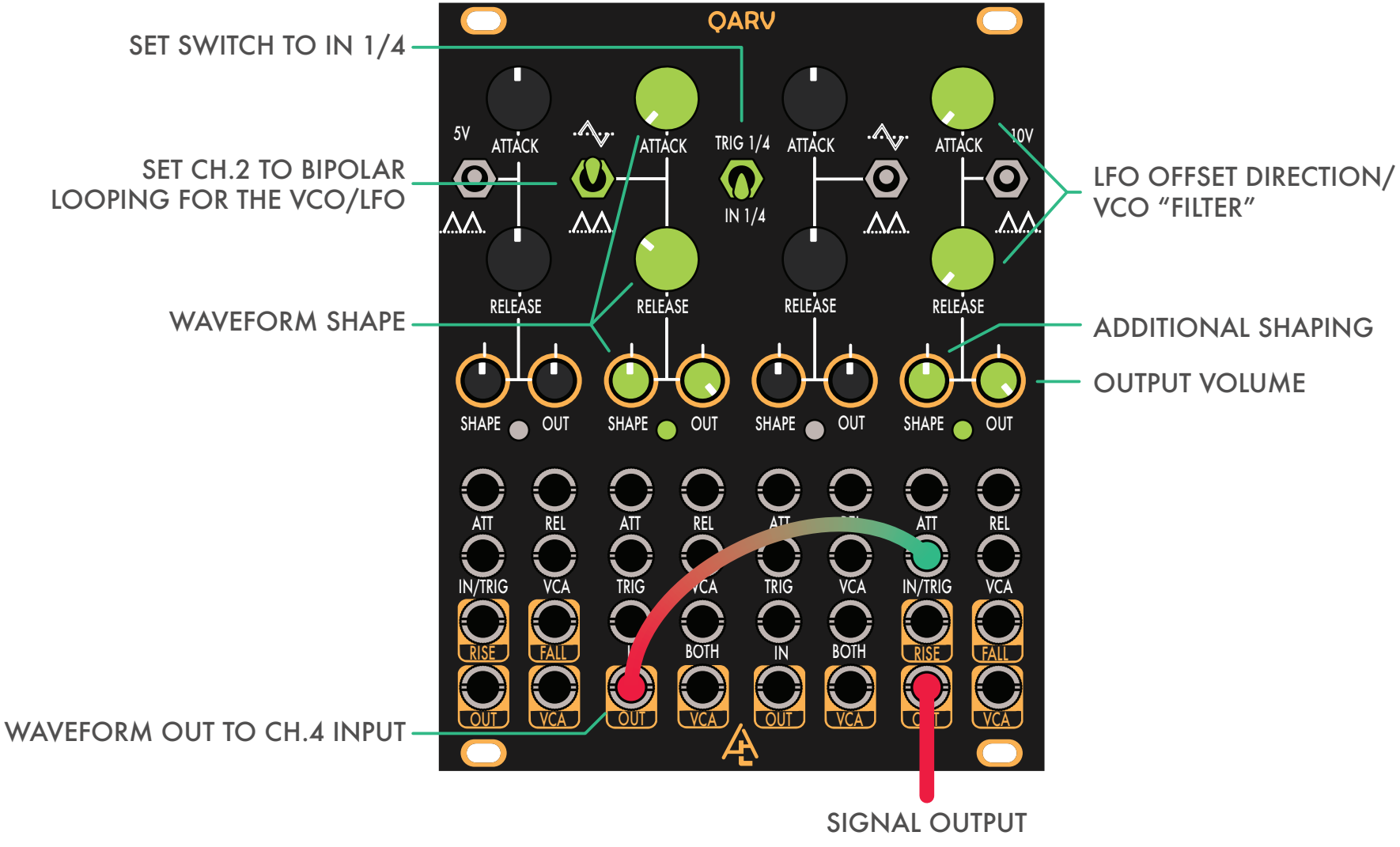


ENVELOPE FOLLOWER

FINE TUNE THE ATTACK AND RELEASE TO GET THE RESPONSE DESIRED.
TRY FOLLOWING DRUMS AND SENDING TO THE VCA FOR A VCO.



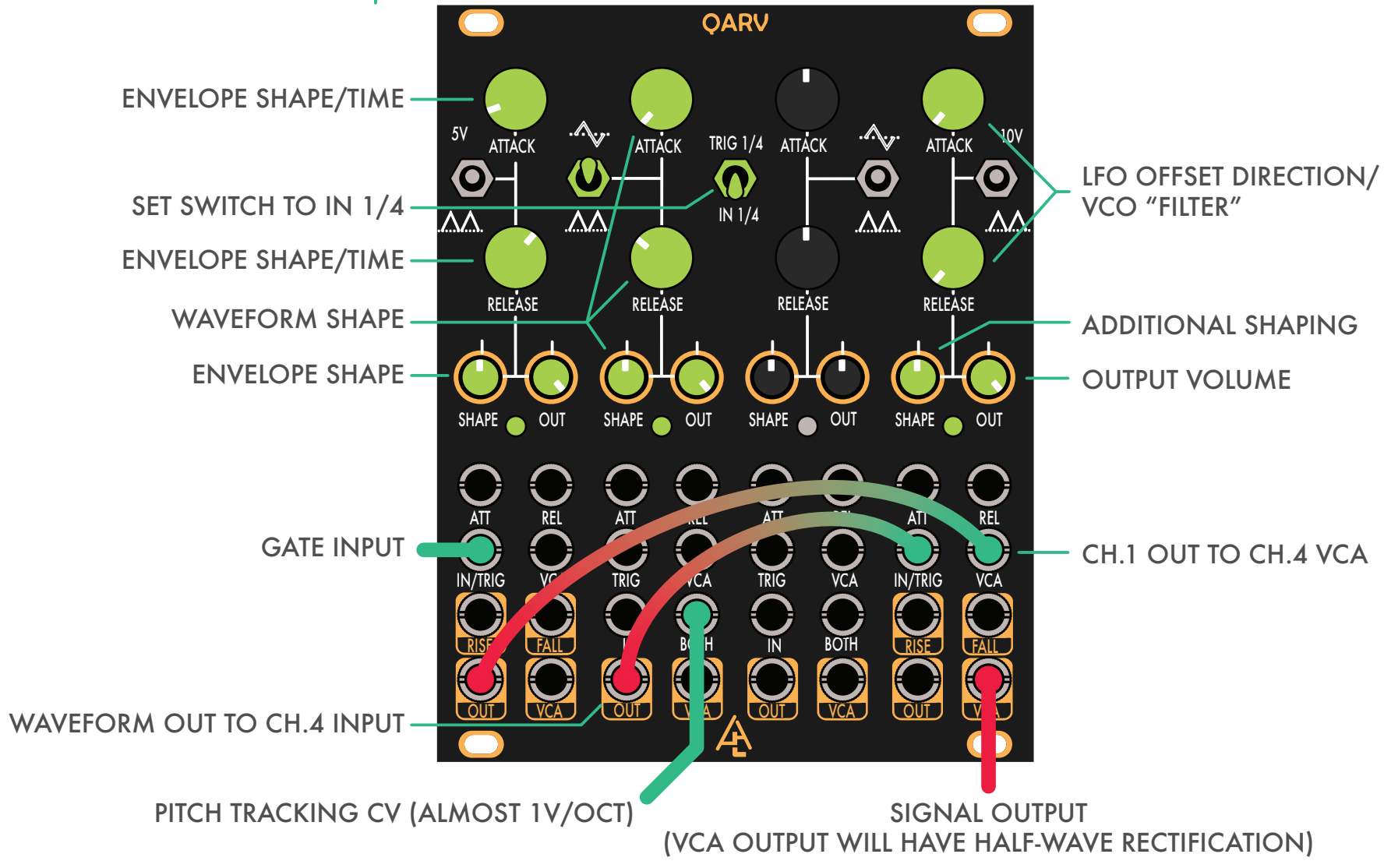
VCO – PSEUDO FILTER
LFO – PSEUDO WAVEFORM OFFSET



FULL VOICE SYNTH -ADDING AN ENVELOPE GENERATOR & PITCH TRACKING

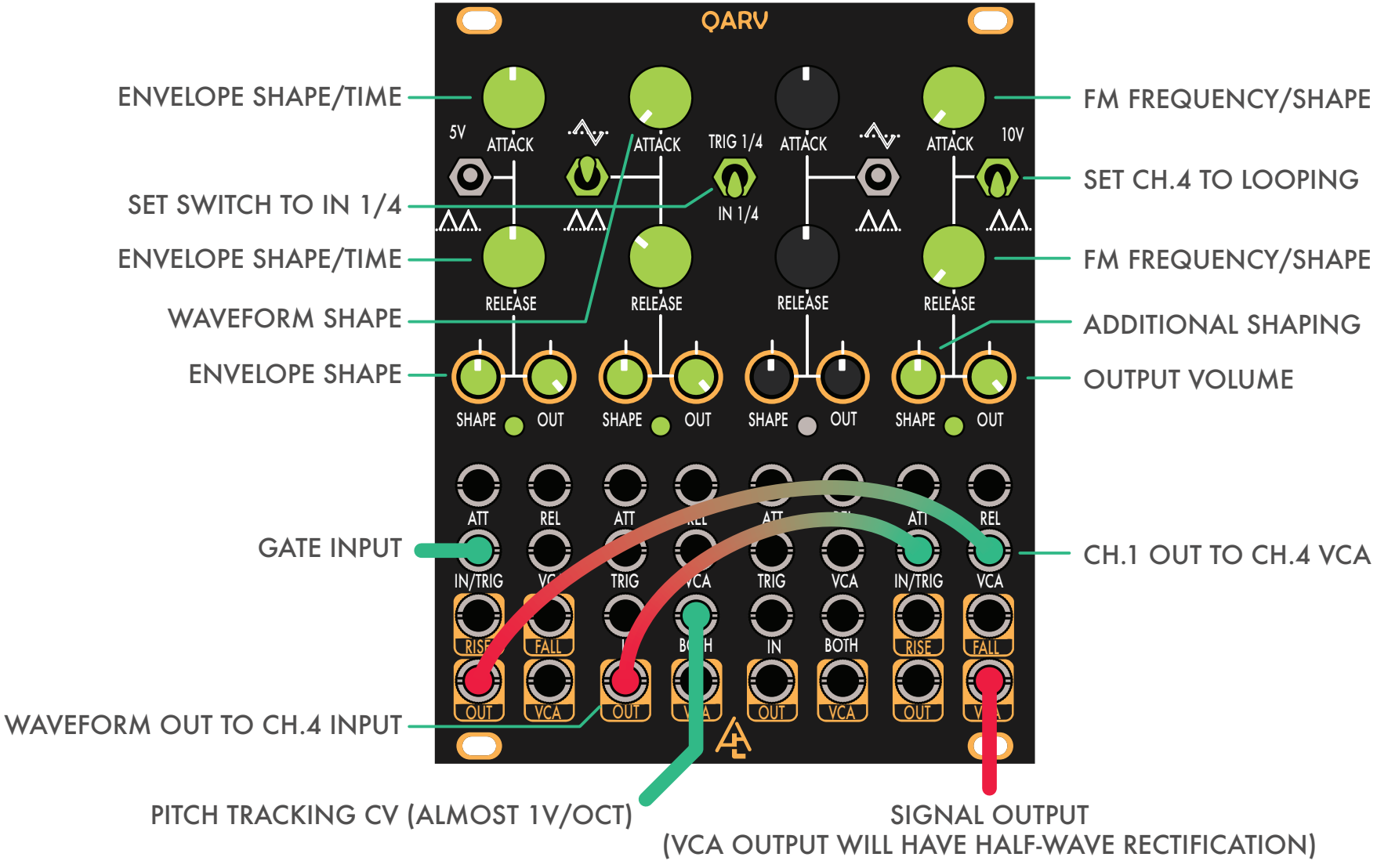
BUILDING OFF OF THE PREVIOUS PAGE PATCH

THIS WON'T TRACK 1V/OCT, THIS SHOULD INSPIRE, NOT HINDER.



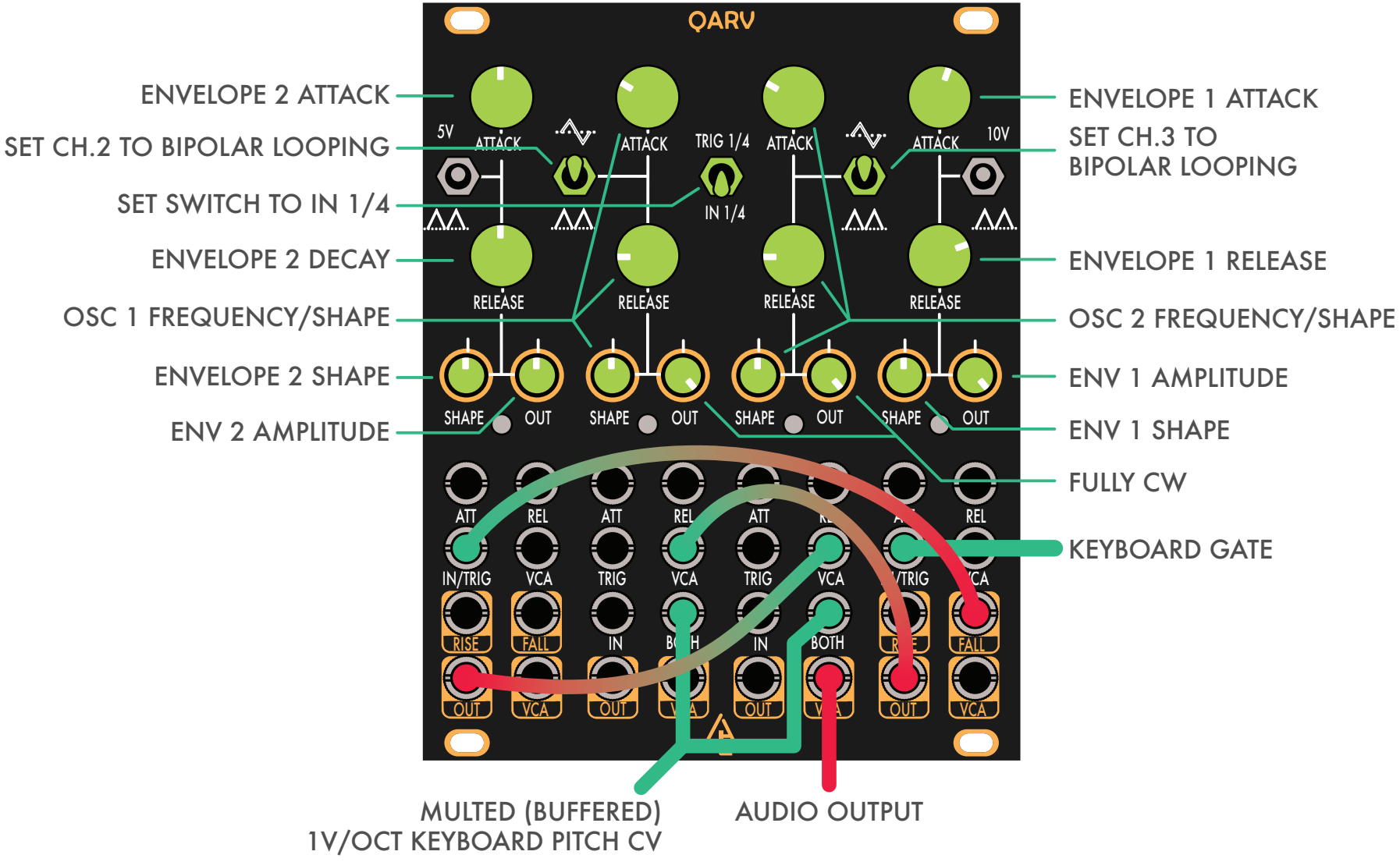
FULL VOICE SYNTH - FM MODULATION

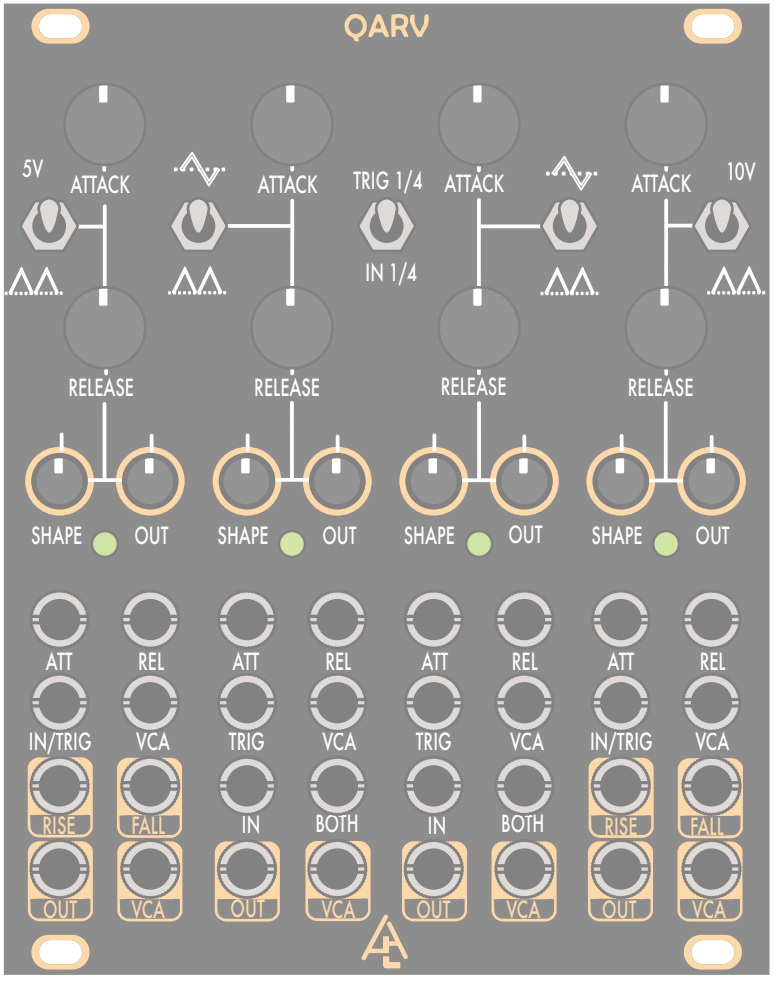
BUILDING OFF OF THE PREVIOUS PAGE PATCH | DON'T FORGET TO USE THE EMPTY CH.3 FOR ADDITIONAL MODULATION. (BE SURE TO PUT AN UNPATCHED CABLE INTO CH.3 VCA OUT IF UNUSED)



2 VOICE HALF-RECTIFIED RISE/FALL SYNTH

PLAYS OSC 1 ON HIGH GATE, OSCILLATOR 2 ACTIVATES ON RELEASE.
CH.4 IS ENVELOPE FOR CH.2 (OSCILLATOR 1).
CH.1 IS ENVELOPE FOR CH.3 (OSCILLATOR 2).



QARV

BY AFTER LATER AUDIO