



INSTRUO | SPECIALIST
SYNTHESIZERS

àradh
Transistor Ladder Filter

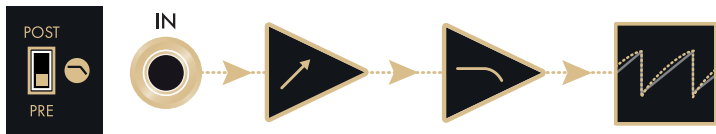
Pre/Post Switch

The **Pre/Post Switch** configures the internal routing of the VCA in relation to the low pass filter.

In its upward position, the VCA is routed after the low pass filter, similar to a traditional east coast synth voice.



In its downward position, the VCA is routed before the low pass filter.

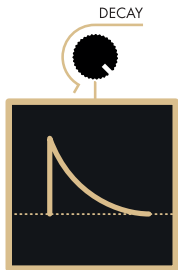
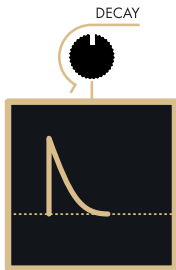


Strike Envelope

Rising edge signals present at the **Strike Input** will trigger the decay/impulse envelope which modulates both the cutoff frequency of the low-pass filter and the amplitude of the VCA.

This can create a low-pass gate style effect with the transistor ladder filter.

The **Decay Knob** controls the decay time of the envelope.



Primary CV Assignment

CV can be assigned to multiple parameters simultaneously. Press the **CV Assign Button** to set primary user-defined parameters.

(Primary user-defined parameters can work simultaneously with the secondary user-defined parameters.)



Unilluminated
No Parameter



White
VCA



Amber
Cutoff
Frequency



White/Amber
VCA + Cutoff
Frequency

Secondary CV Assignment

To set secondary user-defined parameters, press and hold the **CV Assign Button (1)** and tap the **Strike Button (2)** 4 times. With the **CV Assign Button** still held down subsequent **Strike Button** taps will cycle through the four secondary parameters.



Unilluminated

No Routing



Blinking White

Resonance



Blinking Amber

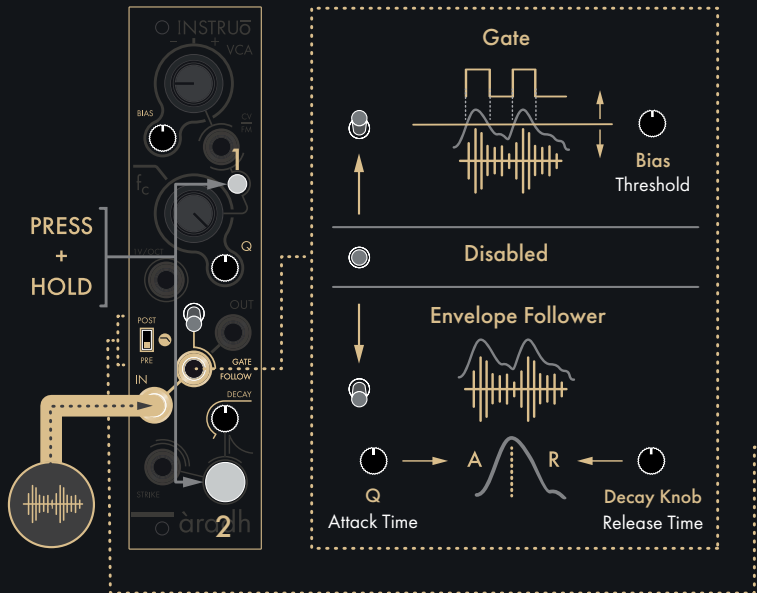
Impulse Envelope
Decay



Blinking White
/ Amber

Resonance + Envelope
Decay

Envelope Follower & Comparator



Press and hold **CV Assign Button (1)** and **Strike Button (2)** to access alternate parameters.

BIAS 	Q 	DECAY 	POST  PRE
Gate Threshold	Envelope Attack Time	Envelope Release Time	Envelope Follower signal source (pre/post filter)

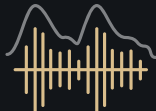
POST



PRE



Envelope Follower



POST



PRE



Compressor Patch

The ratio of compression is defined by a combination of the threshold and make-up gain parameters.

Bias Knob

Set to desired position.
This acts as a make-up
gain parameter
for compression

Filter Cutoff

Set fully clockwise

Resonance (Q)

Set fully anticlockwise

Pre/Post Switch

Route VCA pre-filter

Input

Kick Drum



CV Attenuverter

Set to desired negative position.
This acts as a threshold parameter
for compression.

CV Assign Button

Set to its white primary
user-defined parameter

Gate/Follow Toggle

Set to its downward position to
access the envelope follower

Normal

The envelope follower
signal is normalised to the
CV Input

Output

Compressed
Kick Drum

