



ALM028 / Pip Slope (Rev II)

TECHNICAL SPECIFICATIONS

Power: +12V 30ma / -12V 10ma
Size: 4HP
Depth: 38mm

Module Installation

With your modular synth powered **off** connect the 10 pin end of the supplied standard eurorack power connector cable to the 10 pin power connector on the rear of the module.

The red stripe on the cable should be orientated to match the text 'RED' marked on the rear of the module near the power connector (this is -12V). Connect the other 16 pin end of the cable to your eurorack bus board (Refer to your bus board documentation for the correct orientation).

You are now safe to power up your modular synth. If the module fails to power up check you have the power cable correctly orientated and have carefully read this manual.

Pip Slope

<http://busycircuits.com/alm028>

The 'Pip Slope' (Rev II) is a compact envelope generator. It supports both Attack/Decay and Attack/Sustain/Decay type envelopes with both direct and voltage control of Attack and Decay times. Envelope stage shapes can be morphed between exponential, linear and logarithmic type slopes. Envelopes can be made to loop, repeating infinitely or decreasing with time or amplitude for echo and bouncing ball type effects. An 'End of Slope' trigger output further extends the envelope's functionality for both clocking and burst type effects.

TRIGGER INPUT

Trigger input for initiating an envelope. Decay stage will immediately follow attack stage. Will reset in loop mode.

ATTACK AND DECAY CONTROLS

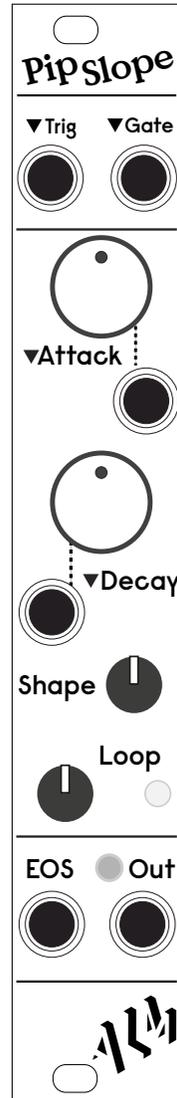
Offset knob controls for setting the times for the attack and decay stages, Time range from approx 1ms to 7 minutes per stage.

LOOP

Controls if and how the output envelope cycles. See 'Loop modes' box for more info.

EOS

The *End Of Slope* output fires a trigger signal at the end of the decay stage.



GATE INPUT

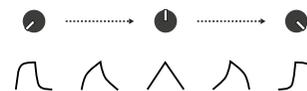
Gate input for creating envelopes with a sustained middle section. After Attack stage, output will remain high (i.e sustained) whilst gate is held high before entering decay stage when low.

ATTACK AND DECAY INPUTS

Control voltage inputs further offset stage times. Input voltage (-5-5v) is added to the offset knob position.

SHAPE CONTROL

Varies the stage slope shape- from log to lin to exp.

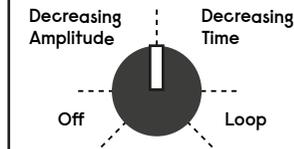


OUT

Envelope voltage output with red LED indicator. See above 'Output Voltage Range Selection' section for info on output levels.

LOOP MODES

The Pip Slope provides 3 different loop (or LFO) modes which cycle the output envelope in various ways dependant on the 'loop' control position.



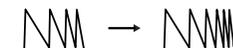
1. Decreasing amplitude

Envelope amplitude halves with each repeat. Controlling a VCA in this mode can sound similar to an echo effect.



2. Decreasing Time

Envelope time reduces by approx 2/3rds with each repeat. Turning the thumb control further to the right increases the number of repeats or 'bounces'.



3. Loop

The envelope cycle continuously retriggers itself, essentially acting as an LFO. Loop is indicated by the yellow LED light.

Output Voltage Range Selection

The envelope voltage output can range from either 0-5V or 0-8V depending on the presence of a 'jumper' on the lower rear of the module. (marked '5V_ENV')

The default range, with jumper present, is 0-5V which matches the original Pip Slope and is typically expected by other ALM modules for modulation. With the jumper removed the range is increased to 0-8V which may be preferential to some users.

Support

Need help? Email your questions to help@busycircuits.com

For the latest news, additional info, downloads and firmware updates please visit the ALM website at <http://busycircuits.com> and follow @busycircuits on Twitter and Instagram.

Limited Warranty

From the date of manufacture this device is guaranteed for a period of 2 years against any manufacturing or material defects. Any such defects will be repaired or replaced at the discretion of ALM. This does not apply to:

- Physical damage arising from mis treating (i.e dropping, submerging etc).
- Damage caused by incorrect power connections.
- Overexposure to heat or direct sunlight.
- Damage caused by inappropriate or misuse.
- Use of incorrect or non official firmware

No responsibility is implied or accepted for harm to person or apparatus caused through operation of this product. By using this product you agree to these terms.