QUAID MEGASLOPE

http://busycircuits.com/alm020

The 'Quaid Megaslope' is a five stage function generator or modulator which operates in one of 3 modes; a multistage 'CZ' or 'Juno' style complex envelope, a super flexible LFO and a step sequencer with per step programmable slew or slides. Each mode produces a varying output voltage moving from point to point across a set number of chained together stages. Each stage features a destination level, an overall rate or time to reach its destination level and a variable slope for the output path to take. As well as direct control, every stage features voltage control of both level and rate. There are both unipolar and bipolar voltage outputs together with triggers emitted for the end of each stage and the end of a full cycle.

The Quaid Megaslope is designed to be fun, flexible and intuative to use.

ALM020 / QUAID MEGASLOPE

TECHNICAL SPECIFICATIONS

Power: +12V 70ma / -12V 35ma
Size: 19HP
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.

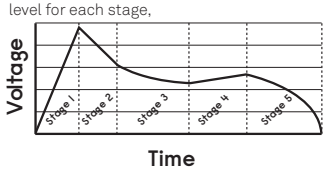
The red stripe on the cable should be orientated to match the text 'RED' marked on the rear of the module near the power connector (this is -12V). Connect the other 16 pin end of the cable to your eurorack bus board (Refer to your bus board documentation for the correct orientation).

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.

All ALM modules feature reverse power protection.

OPERATION MODE OVERVIEW
There are 3 functioning modes;

'Env'elope : In response to a trigger or gate the megaslope will output a classic 5 stage envelope with the set rate, slope and end level for each stage,



Loop : The Megaslope will automatically cycle across the number of set stages moving between levels at the requested rate. The final stage will move to the set level of the initial one.

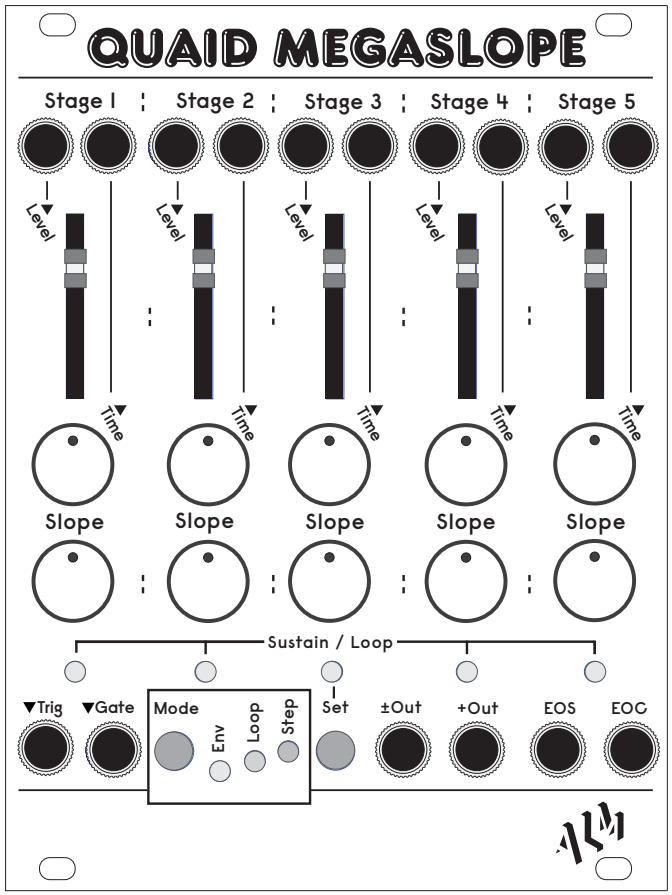
Step : In response to a trigger signal the Megaslope will step to the next stage level (cycling back to the intial stage when the set number of stages is reached). With time set greater than zero (ie not full CCW) the level will not change instantly allowing for variable slew like or 'slide' effects.

TRIGGER INPUTS
Dependent on mode these two inputs perform the following:

Env : 'Trig' triggers a single cycle of all 5 stages. Gate will also trigger but will sustain (i.e hold) the envelope at the selected stage level whilst the gate is high before completing full 5 stages. If the gate goes low before the sustain stage the envelope will end immediately. A retriggered envelope (that hasn't finished a full cycle) will start from its current level as to avoid clicks.

Loop : Both trig and gate inputs reset the cycle to the beginning of the first stage. This mode automatically cycles.

Step : 'Trig' input steps the sequencer to the next stage. Gate becomes a reset restarting the sequence from the first stage.



MODE BUTTON
Switches the current operating mode of the Megaslope from Envelope to Looping (LFO) to Step sequencer mode.

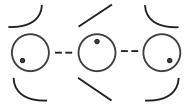
'SET' SUSTAIN/LOOP BUTTON
Sets the stage for sustain in envelope mode or the loop point in step and loop mode. The selected stage is indicated by the row of green LEDs above.
In Env mode, holding this button for 1 second will add prior stages to a 'looping' sustain mode.

CONTROL VOLTAGE INPUTS
Per stage voltage control of level and time. Expects 0-5V. Values set by controls are added to this input value.

LEVEL CONTROLS
Level control sets the final output voltage for a stage.

TIME CONTROLS
Sets the time that the stage will take to reach the set destination level. Control goes clockwise from approx 1-2ms to 100ms at 12 o'clock, to 3sec at 9 o'clock to approx 3 minutes at 5 o'clock.

SLOPE CONTROLS
Varys the slope type from log to lin to exp.



OUTPUTS
+/-Out outputs an approx -5v to 5v bipolar signal. When not active this will sit at approx -5v

+Out Main unipolar output between approx 0-8v

EOS - 'End of stage' outputs a trigger when a stage is completed.

EOC - 'End of cycle' outs a trigger when a full cycle is completed

TIPS AND TRICKS

Watch out for clicky envelopes. Stages can be very quick, alway make sure the final stage has a bit of a slope as to avoid clicks.

Use with Pamelas New Workout flexible triggering patterns to cleverly use the 5 stages across 16 steps in sequencer mode. For example a 16 step euclidean pattern with 5 triggers or patch a /4 output into the gate reset. Use a different pattern for the step vs the vca envelope trigger.

Use an initial stage with level of 0 and set time for delayed envelopes.

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.

Firmware Upgrades

The Quaid Megaslope firmware is user updateable via the usb connector on the side of the module.

Please visit busycircuits.com/alm020 for the latest firmware and details on how to perform the upgrade .

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 for 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.