

**ALM-002**

**'Beast's Chalkboard'**

**- Operation Manual -**



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# Introduction

'Beast's Chalkboard' is dual channel stepped voltage source and adder for your eurorack modular synthesizer system. It primarily is intended as a dual octave switcher for VCO's but has many other uses including sequence transposition, FM ratio creation, buffered CV distribution and VCO calibration.

## Features

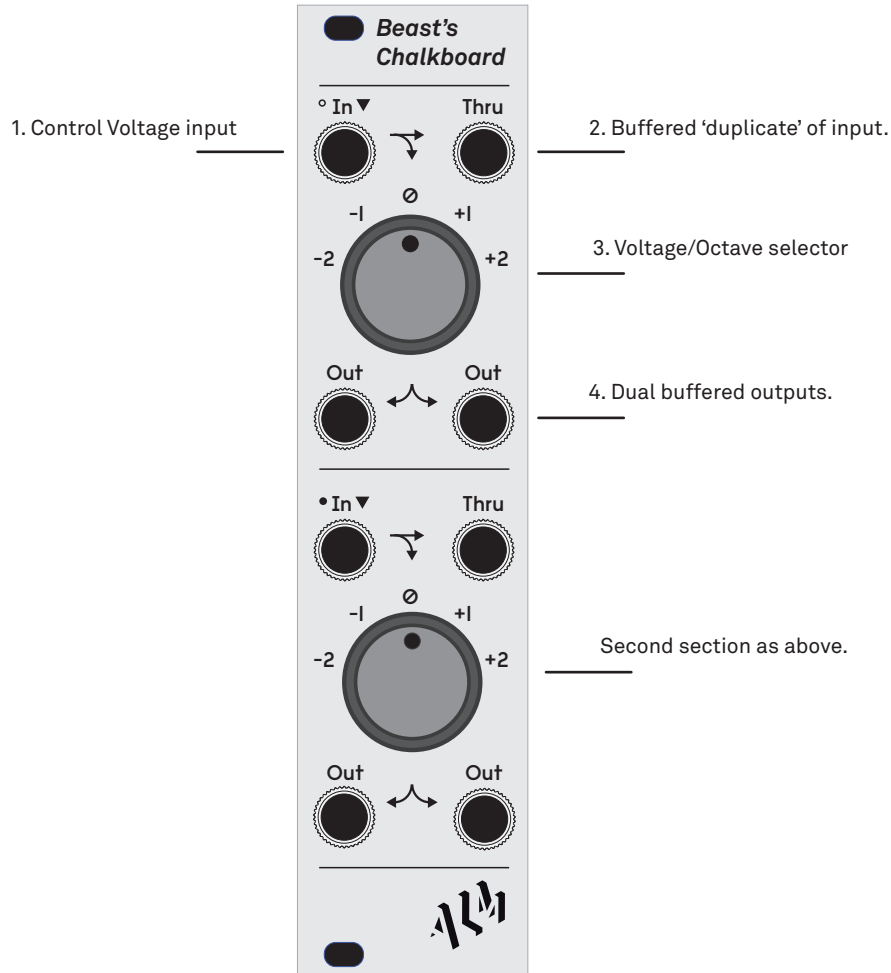
- Dual channel fixed voltage adder and source with 1V stepped range of -2 to +2 volts (i.e 5 Octaves)
- Two Buffered outputs and a through output per channel
- Top input normalized to bottom. Allows single top input to be varied across both channel outputs
- Bottom octave switcher can be chained to top extending range to 9 octaves.
- Also functions as 1->6 or dual 1->3 buffered mult.
- Skiff friendly
- Designed and built in England.

## Technical Specifications

- Supply: +/-12V
- Current Draw: ~30ma
- Size: 6 HP
- Depth: 22mm (including power header)
- Offset error +/- 10mV

# Core Operation

## Panel Layout



## Usage

With nothing patched into either input either output will provide -2V to +2V dependent on the position of the voltage selector rotary switch.

With a CV source (from example from a sequencer) patched into the top input the outputs will present the input CV with the addition of -2V to +2V dependent on the

position of the corresponding rotary switch. If the CV source represents musical tone and the output is connected to the 1v/octave input of a VCO the switch will function as an octave switcher similar to that found on many popular analog synths.

With the CV source connected to the top input and the bottom input left unpatched the input signal is normalized to the bottom section allowing the single input to be modified independently across both section of the Chalkboard.

The range of the octave switcher can be extended by patching a top output to the lower input. By then using both switches the voltage addition and source range is -4V to +4V.

All outputs and 'thru' are buffered so the module can also function as a 'buffered mult' with the voltage selector(s) at zero. This will buffer any control input signals across up to 6 outputs.

# 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 mis-use.
- 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.

# Support

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

Please send any questions or comments to [info@busycircuits.com](mailto:info@busycircuits.com)

