ALM-005

'Dinky's Taiko'

- Operation Manual -

Introduction

Dinky's Taiko' is a 12 bit digital drum voice with full voltage control and an analog EQ output path.

The drum voice consists of 3 parts; a digital noise source with controllable frequency and release time, a wavetable oscillator with start and end frequency settings together with a variable rate (and release time, and finally a mix and tone control for the audio output. All settings, bar the tone control, are both direct and voltage controllable.

The drum voice includes a trigger input as well as accent and choke trigger inputs to add further expressive and rhythmic control.
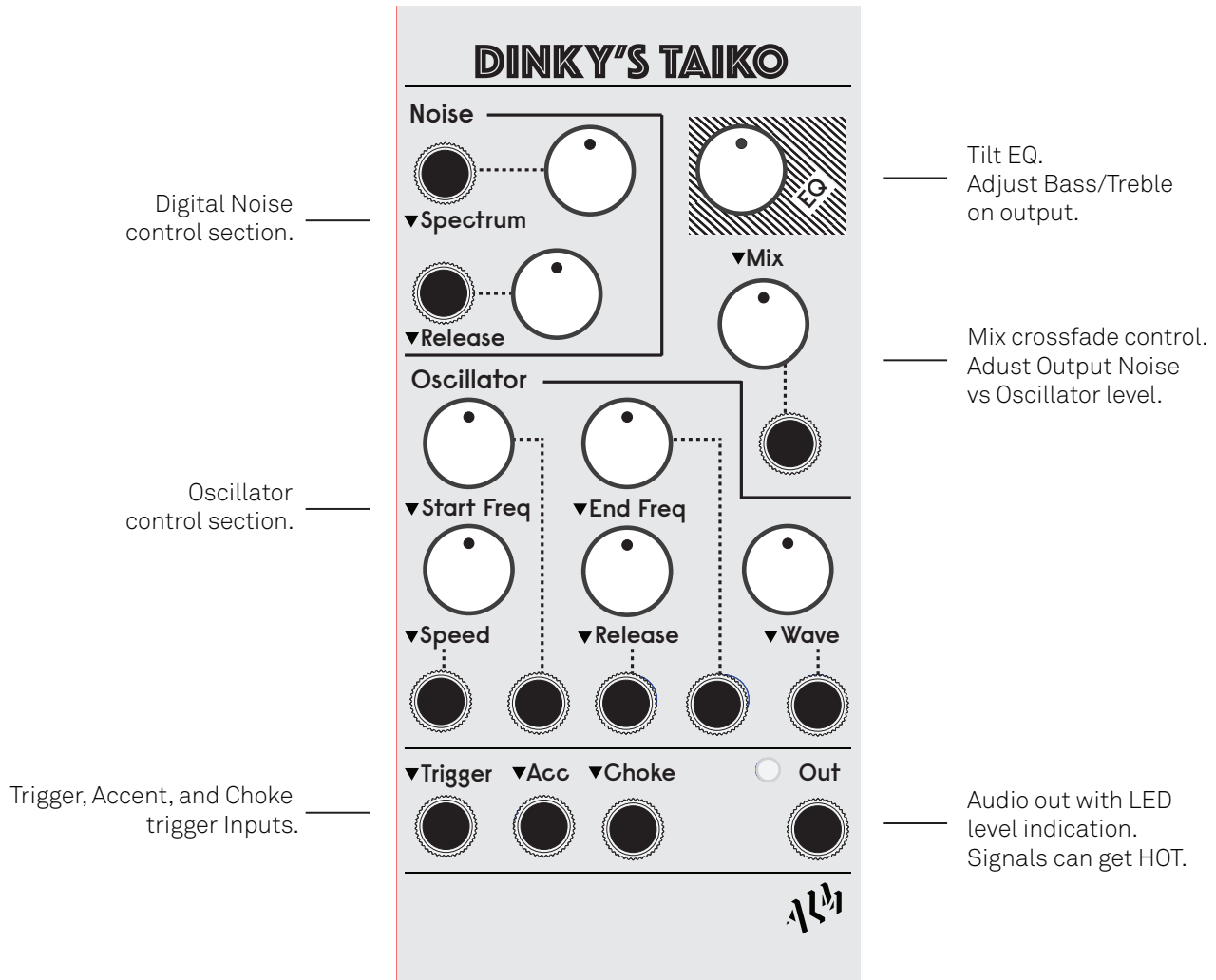
Features include:

- Wide varied 12 Bit digital drum sound source through fully analog EQ.
- Extremely wide pallet of sounds with lots of modulation possibilities.
- Digital noise generator combined with variable wavetable (24 waveforms) oscillator through an EQ and mix output.
- Trigger, accent and choke trigger inputs.
- Reverse polarity protection.
- Skiff friendly.
- Designed and Made in the UK.

Technical Specifications

- Supply: *+/-12V (Reverse voltage protection)*
- Current Draw: *~80ma*
- Size: 12 *HP*
- Depth: *32mm (including power header)*

Core Operation

Panel Layout

DINKY'S TAIKO

Digital Noise control section.

Noise
▼Spectrum
▼Release

Tilt EQ.
Adjust Bass/Treble on output.

▼Mix

Mix crossfade control. Adust Output Noise vs Oscillator level.

Oscillator

Oscillator control section.

▼Start Freq ▼End Freq

▼Speed ▼Release ▼Wave

Trigger, Accent, and Choke trigger Inputs.

▼Trigger ▼Acc ▼Choke   Out

Audio out with LED level indication. Signals can get HOT.

General Usage

'Dinky's Taiko' produces a drum 'hit' sound when a trigger signal (approx. +3v rising edge) is applied to the trigger input. The two other trigger inputs - Acc (Accent) and Choke - respectively either further emphasise the hit sound or immediately stop it in the presence of a trigger signal.

The actual 'hit' sound is defined by the control knob positions and control voltage input levels. All control knobs are offsets - any incoming control voltage is added to them. They do not attenuate incoming control signals.

These controls are split into 3 sections: A digital noise section, an oscillator section and an output section. They are described as follows;

The Noise section:

• *Spectrum* - Frequency of generated digital noise.

• *Release* - The release time of the exponential noise envelope.

Oscillator section:

• *Freq Start* - The oscillator start frequency when triggered. Roughly exponential - but don't expect 1v/octave!

• *Freq End* - The oscillator end frequency. When the end frequency is reached the oscillator resets immediately back to the start frequency.

• *Speed* - The speed of the oscillator frequency moves for the start to end frequency. Higher values mean more metallic and FM like sounds as the oscillator rolls over on itself being reset.

• *Release* - The release time of the exponential oscillator envelope.

• *Wave* - Selects the oscillator wave shape from a table of 24 varied wave shapes. Wave shapes beginning with sines with increasing overtones, to various squares, saws, blips, crunchy noise and vocal tracts.

Output section:

- *EQ* - A tilt style EQ filter on the output emphasiser either high (CCW) or low (CW) frequencies on the final output.

- *Mix* - Adjusts the relative levels of the Noise and Oscillator sound sources on the final output. When set fully CW the oscillator only output levels can get hot reaching +/- 10v.

All input and control values are 'snapshotted' when a trigger is received - once a drum hit is playing the controls have no effect on its sound (The accent and choke trigger input however do have an effect).

The Taiko has a very wide palette of available sounds. Modulating inputs really emphasises this and leads to interesting rhythms. It pairs very well with ALM001 - 'Pamela's Workout' especially combined with swing and/or divides in the Accent & Choke input.

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 mistreating (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.

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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