

Introduction

The Mungo Enterprises dDS is a two channel synthesiser for the production of percussive sounds.

Both channels have independent outputs for further processing and they can be triggered independently or together.

All the parameters are available as individual knobs on the front panel and can be automated over midi.

Memory

The unit is equipped with 128 patch memories that store all the settings of the front panel.

To retrieve a patch send a program change message to the device. To store a patch press and hold the save button while sending a program change message to the device.

Link Mode

The noise channel can be transposed to play together with the tone channel for combination drum sounds such as snares.

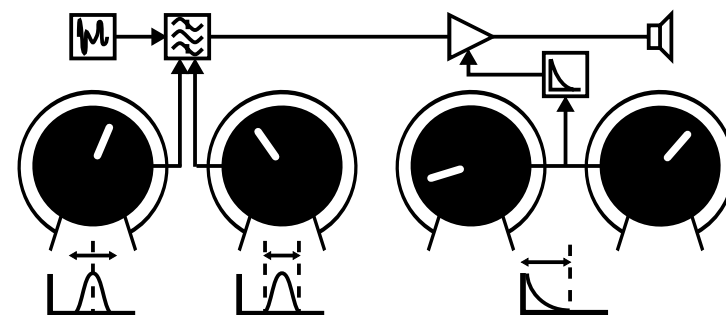
To enable the link mode press and hold the button between the two channels. The activity light of the noise channel inverts to indicate the link mode is operating.

Tone Channel

A sine wave oscillator fed through a constant power limiter and an amplitude envelope with adjustable curve.

The controls, from left to right:

- Attack**, initial phase of the signal when triggered.
- Pitch**, base frequency of the oscillator.
- Pitch Envelope Gain**, amount of pitch modulation.
- Pitch Envelope Decay**, time constant.
- Drive**, gain of signal before the limiter.
- Amplitude Curve**, blend from exponential to linear.
- Amplitude Decay**, time constant.



Noise Channel

This channel comprises a noise source fed through a constant power bandpass filter and an exponential amplitude envelope.

The controls from left to right:

- Filter Frequency**, center frequency of passband.
- Filter Width**, total width of passband.
- Amplitude Decay 1**, time constant for the lower note.
- Amplitude Decay 2**, time constant for the higher note.



Midi Implementation

Function		Transmitted	Recognized	Remarks (O=Yes, X=No)
Basic Channel	Default	X	10	
	Changed	X	1-16	(Set Internally)
Mode	Default	X	3	(Omni Off, Poly)
	Messages	X	X	
	Altered	*****	X	
Note Number		X	36,38,42,46	(42,46 are swapped
	True Voice	*****	36,42,46	to 38,39 in link mode)
Velocity	Note On	X	O	
	Note Off	X	X	
After Touch	Key's	X	X	
	Channel	X	X	
Pitch Bend		X	X	
Control Change	70	X	O	Tone, Amplitude Decay
	71	X	O	Tone, Amplitude Curve
	72	X	O	Tone, Drive
	73	X	O	Tone, Pitch Envelope Decay
	74	X	O	Tone, Pitch Envelope Gain
	75	X	O	Tone, Pitch
	76	X	O	Tone, Attack
	77	X	O	Noise, Decay 2
	78	X	O	Noise, Decay 1
	79	X	O	Noise, Filter Width
80	X	O	Noise, Filter Frequency	
Program Change		X	1-128	
	True Number	*****	1-128	
System Exclusive		X	X	
System Common	Song Position	X	X	
	Song Select	X	X	
	Tune Request	X	X	
System Real Time	Clock	X	X	
	Commands	X	X	
Aux Messages	Local On/Off	X	X	
	All Notes Off	X	X	
	Active Sensing	X	X	
	System Reset	X	X	

Connections

The connections on the rear of the unit from left to right are:
Noise Channel output, balanced TRS.
Midi Input, common to both channels.
Tone Channel output, balanced TRS.
Power Input, 2.1mm, 7.5V AC 100mA

Caution! Exceeding the rated input voltage may cause a fire hazard or permanent damage to the unit.

Warranty

This product is offered with a lifetime warranty. Any broken item returned to the manufacturer will be repaired at no cost. This warranty applies only to the original purchaser and proof of purchase must be submitted with any item for repair.

Return postage shall be free for cases of defect in material or workmanship. In all other cases the cost of postage will be the responsibility of the customer.

Internal Settings

Access to the internal settings is gained by removing the nuts on the TRS connectors and sliding off the rear casing.

The midi channel can be changed by cutting/connecting both sets of labelled tracks on the underside of the board. Also the audio grounding comes preset for compatibility. To ground the device properly, find the exposed track junction (upside down T) under each TRS connector and:
 For unbalanced connections cut the track leading to the left.
 For balanced connections cut the track leading upwards.