



## POTENTIOMETERS / SLIDERS

NAME	FUNCTION
TUNE	PITCH CONTROL FOR BOTH VCO
CUT OFF	FILTER CUT OFF FREQUENCY
RESONANCE	FILTER FEEDBACK CONTROL
ECHO TIME	ECHO TIME. ABOVE 50% DELAY GETS DIRTY
VCO2 (VCO'S)	VCO2 TUNING
LVL1 (VCO'S)	VCO1 LEVEL
LVL2 (VCO'S)	VCO2 LEVEL
A (ENVELOPE)	ENVELOPE ATTACK TIME
D (ENVELOPE)	ENVELOPE DECAY AND RELEASE TIME
S (ENVELOPE)	ENVELOPE SUSTAIN LEVEL
LVL (ENVELOPE)	ENVELOPE LEVEL (HARD-WIRED WITH CUT OFF)
MIX (ECHO/AMP)	BLEND BETWEEN CLEAN SOUND AND DELAYED
FEED (ECHO/AMP)	NUMBER OF ECHO REPEATS
MASTER (ECHO/AMP)	MASTER LEVEL OF THE SYNTH
RATE (LFO)	LFO RATE ( 2SEC UP TO ABOUT 8 HZ)
TRIANGLE (LFO)	LFO SQUARE WAVE OUT
SQUARE (LFO)	LFO SQUARE WAVE OUT



## PATCH POINTS

NAME	TYPE	FUNCTION
CV IN	CV IN	PITCH CONTROL FOR BOTH VCOs
GATE IN	CV IN	GATE INPUT (0V - 5V PULSE)
CV OUT	CV OUT	MIDI TO CV OUT ( 1V/OCV - 5 OCTAVES RANGE)
GATE OUT	CV OUT	MIDI TO GATE OUT (0V - 5V PULSE)
MIDI IN	MIDI	MIDI INPUT. USE THE PROVIDED CABLE
CV2	CV IN	PITCH CONTROL FOR VCO 2
PW2	CV IN	PULSE WIDTH CONTROL FOR VCO2
AUDIO	SIGNAL	SIGNAL INPUT (TO FILTER)
CUT	CV IN	CONTROL INPUT FOR THE CUT OFF. (0V - 5V )
ENV	CV OUT	ENVELOPE OUTPUT
VCA	CV IN	VCA LEVEL INPUT. CANCELS INTERNAL TRIGGER
TIME	CV IN	DELAY TIME CONTROL (0V - 5V)
OUT	SIGNAL	MASTER OUTPUT
CV	CV IN	LFO RATE CONTROL
TRI	CV OUT	LFO TRIANGLE WAVE OUT (6 V PP)
SQU	CV OUT	LFO SQUARE WAVE OUT (10V PP)

## MIDI TO CV

Lil' Erebus has a very simple midi to cv convertor:

- midi notes to cv (1v/octv - 5 octaves range from 0V to 5V)
- midi trigger to gate (0V - 5V pulse)
- channels from OMNI up to 7
- can be used as a duophonic or monophonic device
- can be polychained up to 2 Lil' Erebus

The 4 channel DIP switch located on the back ,is responsible for the channel selection, play mode and polychain. To set on which polychain order the unit is, during the first 5 sec that you power the module, turn DIP4 on-off at least 3 times.

## DIP SWITCH

	1	2	3	4
CHANNEL 1	0	0	1	X
CHANNEL 2	0	1	0	X
CHANNEL 3	0	1	1	X
CHANNEL 4	1	0	0	X
CHANNEL 5	1	0	1	X
CHANNEL 6	1	1	0	X
CHANNEL 7	1	1	1	X
OMNI	0	0	0	X
MONO	X	X	X	0
DUOPHONIC	X	X	X	1

0 = OFF

1 = ON

X = does not matter

## TUNING AND STABILITY

Lil' Erebus needs at least 20 min of warm up until the oscillators are stable. If your module is out of tune, leave it to warm up for 35 min and follow the calibration procedure described on the construction manual.

### FAQ:

#### **Is Lil' Erebus identical to the V2?**

-No, this is a workalike but not an identical circuit. It would be very difficult to make a DIY project of the V2 that would allow an average DIYer with low soldering skills to successfully complete it

#### **My Lil' Erebus play in duophony only when i hit 3 notes.**

-Your synth is set to a polychain mode. To set on which polychain order the unit is, during the first 5 sec that you power the module, turn DIP4 on-off at least 3 times.

#### **My Lil' Erebus is out of tune.**

-Follow the tuning procedure after a 35 min warm up

#### **When I patch something to the VCA , i get no sound**

-The VCA needs at least 3,5V so as the synth starts producing sound

#### **My envelope generator is slow**

-The module has the exact same envelope as the V2 erebus did. This envelope is slow in general. But if you still think you do not get the correct result, check if the optional capacitor 470n is placed. If it is, just remove it. Additionally, you can reduce the envelope capacitor (check the board on the construction manual) to a lower value.