FLAME

FX-16 MULTI EFFEKT MODULE

FX-16 EFFECTS

PITCH/ECHO — ECHO-RPT
REVERB — AUTOWAH
PLATE — DISTORTION
TREMOLO — BITCRUSHER
VIBRATO — REV-BC-LP
FLANGER — REV-FL-LP
CHORUS — REV-HP-LP
PHASER — REV-PT-LP

CV1

CV2

CV3

CLIP

AUDIO

INPUT

LEVEL

L   R

FLAME
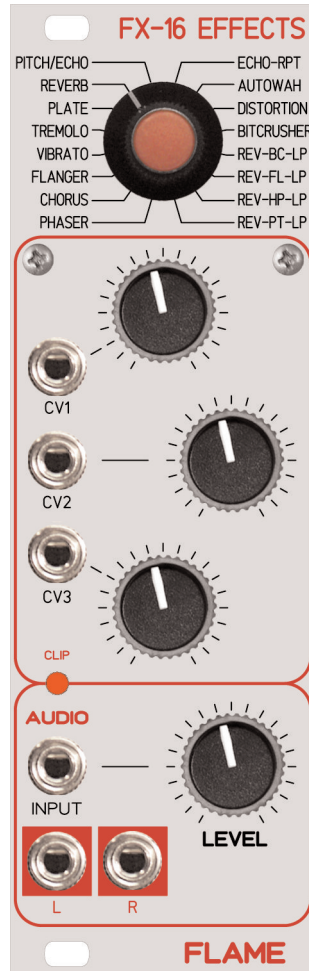
MANUAL

Version 1.01

Contents

1. Short description

The Flame "FX-16" module is a small DSP-based (Spin semiconductors FV-1, 24bit ADC/DAC) multi effect module, designed for small mobile euro racks. 16 different multi effect programs are available.
There are three knobs with additional CV inputs (0..+5v range) to change the effect parameters. Audio mono input and stereo output levels are adjusted for modular rack levels. The input can be attanuated and is protected against level peaks. The outputs are buffered by an op-amp. One red LED indicates clipping.

2. Hardware / Connection
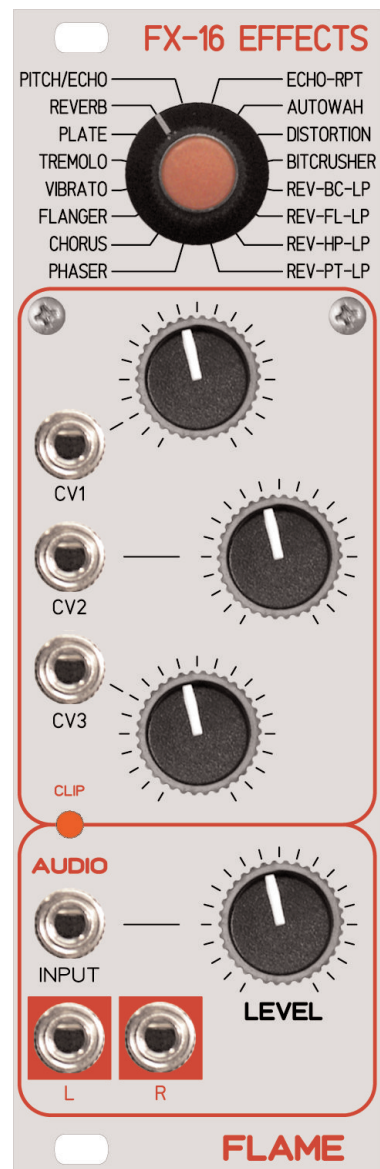
2.1. Module overview

Rotary switch effect select

CV-inputs and pots 1,2,3
for effect parameter control
CV range: 0..+5v

Clip LED

Audio mono input
and input attenuator
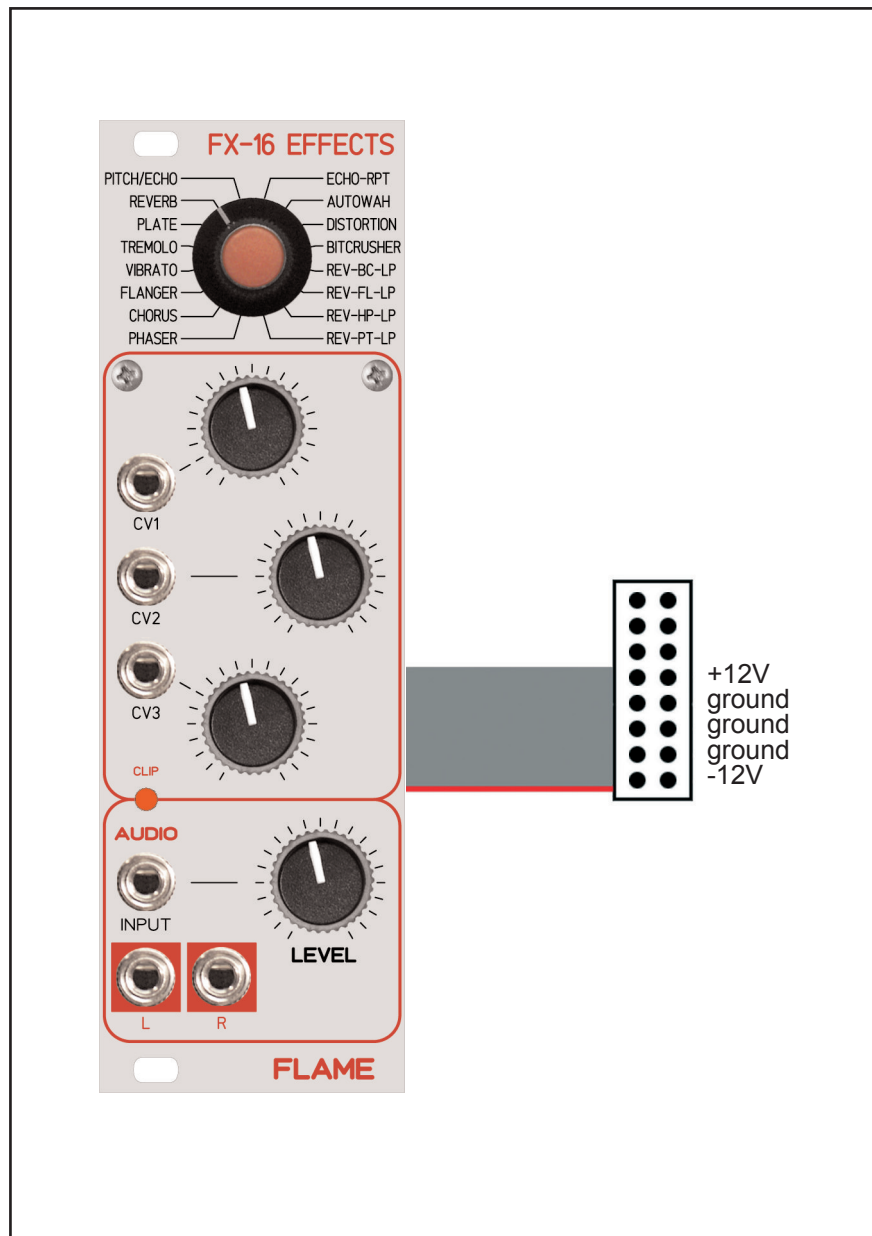
Audio stereo outputs left/right

2.2. Connection to the modular system (Doepfer Bus)

The module is delivered with a connected ribbon cable for the Doepfer bus. The red lead marks -12 volt. Connecting the module please note the right polarity!

If the module is poled accidentally wrong safety diodes avoid the immediate destruction of the module but further damages cannot be excepted.

So please pay attention: Check the connection various times before switching on!

FX-16 EFFECTS

PITCH/ECHO — ECHO-RPT
REVERB — AUTOWAH
PLATE — DISTORTION
TREMOLO — BITCRUSHER
VIBRATO — REV-BC-LP
FLANGER — REV-FL-LP
CHORUS — REV-HP-LP
PHASER — REV-PT-LP

CV1

CV2

CV3

CLIP

AUDIO

INPUT

LEVEL

L   R

FLAME

+12V
ground
ground
ground
-12V

3. Effect programms / parameters

Effect program	Pot 1 / CV1	Pot 2 / CV2	Pot 3 / CV3
PITCH/ECHO	Pitch shifter (for Echo left)	Echo delay (left and right)	Echo mix (left and right)
REVERB	Reverb Mix Diffusion	Reverb Time	Decay filtering
PLATE	Reverb Mix Low Pass Filter loss	Reverb Time	High pass filter loss
TREMOLO	Reverb mix	Tremolo rate	Tremolo mix
VIBRATO	Reverb mix	Vibrato rate	Vibrato width
FLANGER	Reverb mix	Flange rate	Flange mix
CHORUS	Reverb mix	Chorus rate	Chorus mix
PHASER	Reverb mix	Phase rate	Sweep width
ECHO-REPEAT	Echo delay (only output left)	Echo delay (only output right)	Echo repeat level
AUTO-WAH	Reverb mix (post effect)	Envelope sensitivity	Effect level / filter Q
DISTORTION	4 pole LowPass Cutoff (pre effect)	Distortion/Bypass Mix	Reverb Mix
BITCRUSHER	Intensity left and right	Intensity relation left <> right	4 pole lowpass cutoff (pre effect)
REV-BC-LP (Reverb-Bitcrusher-Lowpass)	Infinity reverb	Bitcrusher intensity	4 pole lowpass cutoff
REV-FL-LP (Reverb-Flanger-Lowpass)	Infinity reverb	Flanger intensity	4 pole lowpass cutoff
REV-HP-LP (Reverb-Highpass-Lowpass)	Infinity reverb	2 pole hipass cutoff	4 pole lowpass cutoff
REV-PT-LP (Reverb-Pitchshift-Lowpass)	Infinity reverb	Pitchshifter to zero	4 pole lowpass cutoff

4. Appendix and technical informations

4.1. Technical details

Connections:
       Ribbon cable adapter for Doepfer bus +/-12Volt
       Inputs: 1x mono audio, 1/8th inch mono jacks
                       3x CV 0..+5v, 1/8th inch mono jacks
       Outputs: stereo audio left, right, 1/8th inch mono jacks
Control elements:
       1 rotary switch to select effects
       4 knobs for effect parameters/gain input
       1 LED to indicate clipping
Current consumption: + 55mA / - 1mA
Size: Euro rack format 3U / 8HP   40,3x128,5mm

4.2 Warrenty

Beginning from the date of purchase a 2-year warranty is guaranteed for this device in case of any manufacturing errors or other functional deficiencies during runtime.The warranty does not apply in case of:
- damage caused by misuse
- mechanical damage arising from careless treatment (dropping, vigorous shaking, mishandling, etc)
- damage caused by liquids penetrating the device
- heat damage caused by overexposure to sunlight or heating
- electric damage caused by improper connecting
  (wrong power supply/ jacks/ MIDI connections/ voltage problems).
If you have any complaints please contact your dealer or send an e-mail to:
service@flame.fortschritt-musik.de

4.3 Terms of production

conformity: CE, RoHS, UL

4.4 Disposal

The device is produced with RoHS-conformity (subject to the regulations of the European Union) and is free of hazardous substances (like mercury, plumb, cadmium and hexavalent chrome). But electronical scrap is hazardous waste. Please don't add this to consumer waste. For an environment friendly disposal of waste please contact your distributor or specialist dealer.

4.5 Support

Updated and additional informations, updates, downloads and more see:
http://flame.fortschritt-musik.de

4.6 Acknowledgment

For help and assistance big thanks to: Alex4 Berlin, Schneiders Büro Berlin, Shawn Cleary (analoguehaven), Robert Junge, Sebastian Preller, Anne-Kathrin Metzler, Lena Bünger and Ebotronix.