Tiptop Audio — MODFX FSU

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Official Manual PDF (Tiptop Audio ModFx & FSU):

Tiptop Audio ModFx & FSU — Cheat Sheet

ModFx and FSU are 8hp digital multi-effects modules for Eurorack. Each module features **3 major effect banks**, each with 8 programs, for deep but immediate modulation, filtering, chorus, distortion, glitching, and looper-style sound design.

Panel & Controls Reference

JACKS

Jack	Description	Type	Voltage Range
L IN	Left Audio Input	Audio Mono	±5V expected
R IN	Right Audio Input	Audio Mono	±5V expected
L (MONO) OUT	Left / Mono Audio Output	Audio Mono	±5V typical output
R OUT	Right Audio Output		

Jack	Description	Type	Voltage Range
		Audio Mono	±5V typical output
CV 1	CV to first parameter (see below)	CV Input	0−5V (unipolar), ±5V safe
CV 2	CV to second parameter	CV Input	0−5V (unipolar), ±5V safe
CV 3	CV to third parameter	CV Input	0−5V (unipolar), ±5V safe
FIDELITY CV	(Shared) Analog clocking (low-level control over DSP rate)	CV Input	0−5V

MAIN CONTROLS

[BOTH MODULES — ModFX + FSU]

Knob/Button	Function	Voltage Control
Rate	Speed of LFO, modulation rate, playback speed, etc	CV1
Filter/Fdback	Filter cutoff, feedback amount, tuning, or other function	CV2
Depth	Depth of modulation, feedback, chorus range, etc	CV3

Knob/Button	Function	Voltage Control
Fidelity	DSP clock / LoFi effect / affects buffer length & character	CV (label-specific)
Mix	Dry/Wet balance (manual only)	–
Bank Buttons (3)	Select program banks (illuminated, labeled by mode)	–
Program Select	Push buttons to select one of 8 programs per bank	–

[FSU ONLY]

Control (FSU)	Function	Voltage Control
Gain	Output level (Distort bank), Record level (SOS bank)	Replaces "Rate" in some modes
Drive	Distortion/Input gain in Distort bank	(sometimes replaces "Depth")

[MODFX ONLY]

- **No unique extra controls** – all labeled as above according to effect.

BANKS AND EFFECTS

MODFX

- **Chorus**: 8 types (classic, ensemble, stereo, vibrato, random)

- **Flanger/Karplus**: stereo flange, tape/zero, Karplus-Strong, chord resonator, Haas panning
- **Filter/Phaser**: 12-stage phaser, bandpass LFO, tape/drive, tremolo pan, formant ping-pong, vowel/ahh

FSU

- **Distort**: tape saturation, bit crusher, clipper, rectifier, ring mod, freq shift (mono/dual)
- **Glitch/Warp**: random pitch, glitch chorus, varispeed, granular, grains w/ feedback
- **Sound on Sound (Looper/Granular)**: dual head, dual pitch, chorus scrub, varispeed, panning, buffered degrade, frozen plate

Each bank has 8 programs; see manual for full parameter assignment per effect.

VOLTAGE/CV INPUTS (per function)

Parameter	Typical CV Range	Effect (all banks/settings)
Rate/Gain	0–5V unipolar	LFO speed, playback speed, effect rate, gain input/output
Filter/ Fdback	0–5V unipolar	Filter cutoff, feedback amount, Q, feedback level
Depth/Drive	0–5V unipolar	Amount of modulation, distortion, detune, pitch
Fidelity	0–5V unipolar	Lowers clock for lo-fi, longer buffers on loopers

CV inputs typically expect 0–5V; -5V to +5V is tolerated but may invert or fold control ranges at extremes.

BUTTONS (MODFX/FSU)

- **Bank Buttons**: Choose current effects bank ([Chorus/Flanger/ Filter] or [Distort/Glitch/SOS]).
- **Program/Select**: Illuminated selectors, change active program.
- **SOS Shift/Hold**: Hold to clear or reload SoS buffer (FSU only).

USING THE MODULE

1. **Power Up and Patch Audio**:
2. Patch L/R IN to your audio source and OUT to mixer/speakers.
3. **Bank & Program Select**:
4. Use illuminated buttons to pick an effect bank, then select desired program.
5. **Adjust Main Controls**:
6. Rate, Filter/Fb, Depth, Mix (and Fidelity) shape the effect (see per-effect mapping, many are intuitive).
7. **Patch CV for Modulation**:
8. Send LFO, Envelope, Sequencer, etc. to any CV input to animate parameters in real time. 0–5V recommended.
9. **Experiment with Fidelity CV**:
10. Lower audio fidelity for lo-fi, pitch, and buffer time changes.
11. **Set Mix**:
12. For most Distort, Looper, Glitch programs, set to 100% wet. For Choruses/Flangers, try 50/50 or 100% wet.
13. **Monitor LEDs/Buttons**:
14. Bank selection will be color/LED-indicated.

QUICK TIPS

- **FSU Looper (SoS) buffer can clear**: Change preset for reset, or hold SoS button to clear in place.
- **Karplus/Flanger likes short, percussive inputs.**
- **Vowel and formant programs want harmonically rich sources (saw, square, etc).**

- Fidelity knob or CV can radically transform the feel of most effects.

Official Manual PDF

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