DEUXD

CUTOFF

FREQUENCY

1 FREQUENCY 1

LOWPASS 2 2 LOWPASS

HIGHPASS HIGHPASS

8

RESONANCE 3 3 RESONANCE

9

DIRTY OPPOSE

10 11

FILTHY SYNC

X-MOD

4 4

5 5

FM FREQ CUTOFF FREQ FM

12

IN OUT SUM OUT IN

6 7 13 7 6

1 Filter cutoff	8 Global Cutoff control
2 Lowpass/Highpass switch	9 X-MOD Control
3 Resonance Control	10 Distortion switch for SUM
4 CV input for cutoff modulaiton	11 Global Cutoff modifier switch
5 FM Input w/Attenuator	12 Global Cutoff CV input w/Attenuator
6 Audio Input	13 SUM Audio Output
7 VCF Output	

1 Each side (each filter) has a dedicated frequency cutoff control. The frequency control acts as an offset to the Global control. With global pointed at noon, the frequency controls will have full throw, (fully open to fully closed).

2 HP/LP: Each filter has its own Lowpass / Highpass switch

3 Resonance: Two resonance controls for the two filter cores. Resonance will being to self oscillate very quickly, at around 10 o'clock.See page on resonance for information on how it affects FM.

4 CV input for Frequency modulation. This input in unattenuated and contain no internal normalled connections.

5 FM Input w/Attenuator: with no cables patched into these jacks, the audio input from the opposite side will be normalled to these points. Use the attenuator controls to dial in pre-filter audio rate modulation. When a signal is patched into either FM jacks, the normalled connection will be broken. An audio signal patched into audio input 1 is normalled to FM 2. The opposite is also true. Audio input 2 is normalized to FM1. See the normalization flow chart for more information

6 VCF Inputs

7 VCF Outputs

8 Global Cutoff control affects both filters at the same time. Depending on the sync/oppose switch, the global control affect both filters in a parallel motion, or opposite motion. See the Sync/Oppose graphics for more info.

9 X-MOD Control manages post-filter modulation. turning the X-mod knob clockwise will send the output of filter 1 to the cutoff of filter 2, while also sending the output of filter 2 to the cutoff of filter 1. resoannce plays a large role in how Deuxd responds to X-Mod

10 Distortion switch for SUM Output

11 Global Cutoff modifier switch that can toggle between paralell and opposite responses

12 Global Cutoff CV input w/Attenuator: This CV input affects both filters and is connected to the Global cutoff control.With nothing patched into the CV input jack, the attenuator acts as a trimmer for the global control.

13 SUM Audio Output takes the output of both filters and sums them together in mono.

Audio Normalization
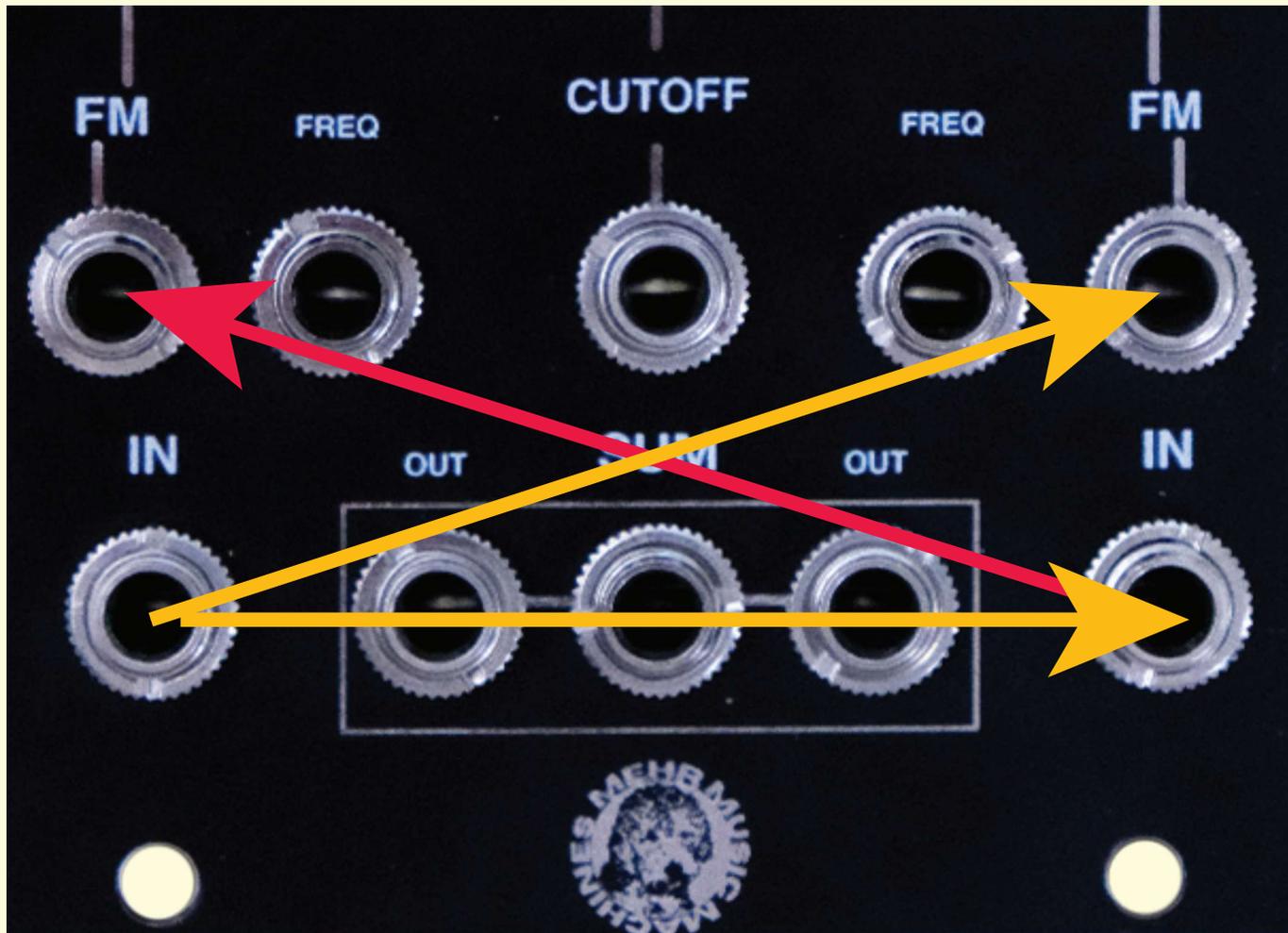
● Audio Input 1 is normalled to Audio Input 2 and FM2.
● Audio Input 2 is normalled to FM1

THE AUDIO TO FM NORMALLED CONNECTIONS ARE FOR
PRE-FILTER CUTOFF-MODULATION

X-MOD

DEUXD

CUTOFF

FREQUENCY — FREQUENCY

LOWPASS — HIGHPASS

RESONANCE — RESONANCE

DIRTY — FILTHY

OPPOSE — SYNC

XMOD
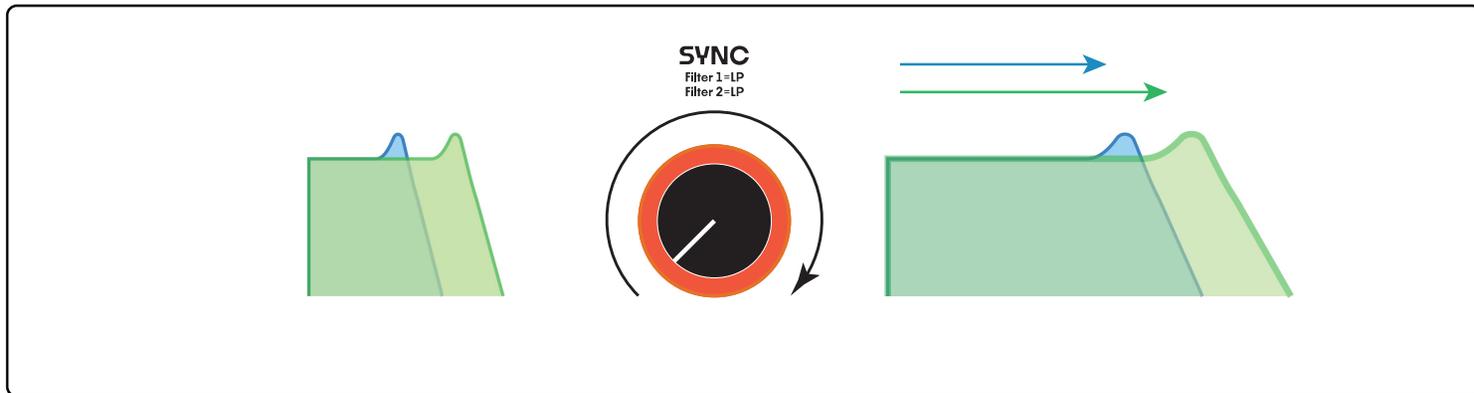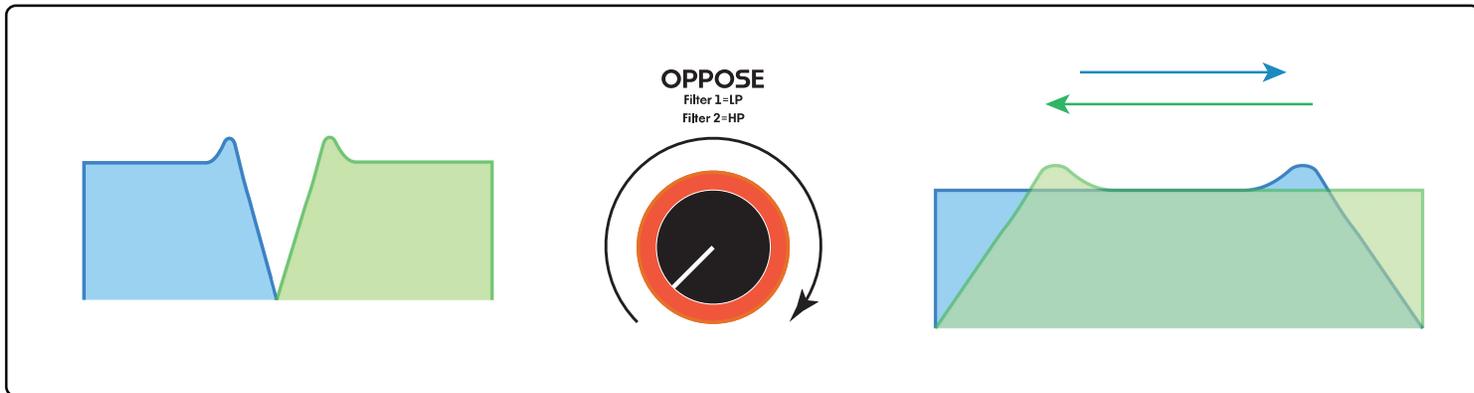
FM — FREQ — CUTOFF — FREQ — FM

IN — OUT — SUM — OUT — IN

The X-MOD knob feeds the **output** of filter 2 to the cutoff of filter 1, and the output of filter 1 to the cutoff of filter 2. v

Higher resonance on both/either side will produce a deeper X-MOD effect

SYNC & OPPOSE

OPPOSE
Filter 1=LP
Filter 2=HP

SYNC
Filter 1=LP
Filter 2=LP

Parallel

A mono to stereo configuration.
Input 1 is normalled to input 2.
With no cable patched into input 2, the audio
patched into IN 1 will be processed
by both filters independently

AUDIO INPUT 1

FILTER 1   FILTER 2

OUTPUT 1   OUTPUT 2

SUM
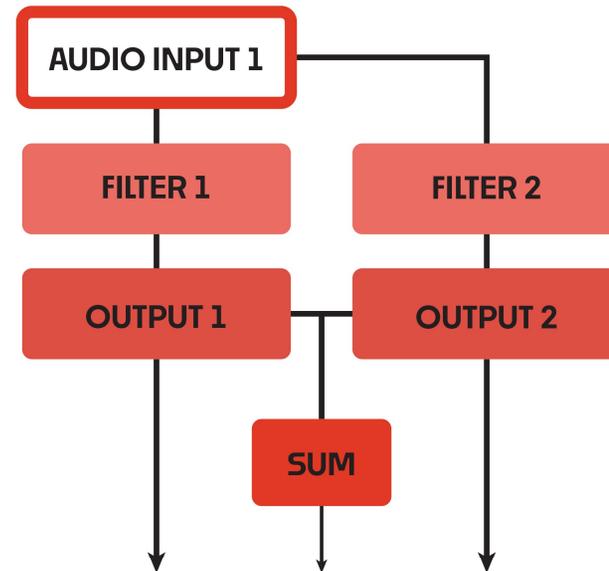
BANDPASS

Set Filter 1 to HP mode, Filter 2 to LP.
Patch audio into IN 1, Output 1 to Input 2.
Set each frequency knob slightly offset from "noon"
Use the global cutoff control to hold that shape
across the spectrum.

You can change the width of the bandpass
by changing the position of the two frequency knobs.
Experiment with different resonances on both sides.
You will get different results when swapping LP/HP per side.

Switch between OUT 2 and SUM out for added variation.