

FFB914

RESONANT FIXED FILTER BANK

[RACK EXTENSION]
MANUAL



FX device by Turn2on Software



The *Moog 914 Fixed Filter Bank*, released in the 1960s, was a groundbreaking tool for sound manipulation. It featured 12 fixed bandpass filters along with lowpass and highpass filters, each precisely tuned to a specific frequency. This filter bank became renowned for shaping the tone of modular synthesizers by isolating, boosting, or cutting certain frequencies, producing rich and evolving textures. Unlike dynamic EQs, the original 914 lacked resonance control—each filter remained static, serving as a tool for passive tonal adjustment.

Our **FFB914** Resonant Fixed Filter Bank builds on this foundation with the addition of variable resonance, offering greater versatility for modern sound design.

This effect merges the character of the original 12-band filter design with modern enhancements, providing deeper sound sculpting capabilities and unique stereo modulation. Whether you're shaping frequencies in the studio or performing live, the **FFB914** unlocks a wealth of sonic potential through intuitive controls.

The **FFB914** Resonant Fixed Filter Bank combines the classic essence of the Moog 914 with modern flexibility, featuring resonance control and advanced stereo routing. Whether you're after subtle tonal enhancement or bold sound transformation, this plugin is the perfect tool for precise and musical frequency sculpting.

Try the **FFB914** resonant fixed filter bankas part of your Reason Rack today.

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Inspired by legendary Moog Fixed Filter Bank 914, improved in modern way

FFB914



MAIN FILTER BANK CONTROLS

LOWPASS LP BAND 24 dB/oct	The filter frequency is fixed at 100 Hz. This control adjusts the level of the lowpass filter (24 dB/oct), affecting frequencies at and below 100 Hz.
BANDPASS BP BANDS, 12 dB/oct	The center frequencies are fixed at 125, 175, 250, 350, 500, 700, 1000, 1400, 2000, 2800, 4000, and 5600 Hz. Each control adjusts the level of its corresponding bandpass filter (12 dB/oct), shaping the signal around its specified frequency.
HIGHPASS HP BAND, 24 dB/oct	The filter frequency is fixed at 7.5 kHz. This control adjusts the level of the highpass filter (24 dB/oct), affecting frequencies at and above 7.5 kHz.
BAND MODE	Classic: Replicates the behavior of the original 914 module, where the knobs only attenuate the signal from 0 dB down to -∞. Boost: Allows both attenuation and amplification, reducing the signal to -∞ or boosting it up to +12 dB.
RESONANCE	Controls the sharpness of the bandpass filter peaks, adding harmonics and enhancing the presence of specific frequencies. This feature transforms the filter bank from a static EQ into a resonant filter bank, ideal for dynamic sound design.
RESONANCE x1/x2 Switch	Doubles the resonance intensity, creating sharper peaks and more pronounced harmonic content. Use with caution to avoid distortion.
HP/LP RESO ENABLE	Activate or deactivate resonance for the Lowpass and Highpass filters based on adjustments to the Resonance control knob.
FREQ OFFSET	Offset (-10% to +10%): Shifts the central frequency of each filter up or down by a percentage, allowing subtle detuning of the bands. Adjust this knob to align the filter bank with the tonality of your material.
SMOOTH OFFSET	Controls how quickly the frequency offset reacts to changes, adding a glide effect to the shifts.



ALL & EVEN/ODD OUTS: STEREO ROUTING & OUTPUT OPTIONS

EVEN/ODD OUTPUTS	Routes Even and Odd frequency bands to separate stereo outputs for advanced mixing and effects processing.
CHANNEL SWAP	Swaps the left and right channels for either the Even or Odd bands, creating interesting stereo effects. Swap modes: Off / Only Even / Only Odd
ODD/EVEN BAND INVERT	Switches the routing of Even and Odd bands between their corresponding outputs.
ODD & EVEN BAND PHASE INV	Inverts the phase of the Left or Right channels, or both, for creative phase-based modulation. Phase invert modes: Off / Only L / Only R / On
ODD & EVEN BANDS PAN	Controls the stereo panning of even and odd bands independently.

LIMITER SECTION

LIMITER ON/OFF	Prevents signal clipping and ensures a clean output.
RELEASE	Adjusts how quickly the limiter reacts after signal peaks.
DRIVE	Controls the input gain to the limiter, allowing you to push the signal harder into compression for added color. Adds subtle to intense harmonic distortion, enriching the signal with analog-style warmth.

OTHER CONTROLS

ODD LEVEL ADDITIONAL OUT	Set output level of the Odd bands
EVEN LEVEL ADDITIONAL OUT	Set output level of the Even bands
DRY	Level of the dry (unprocessed) input signal before it goes to the main device output (ALL Out)
WET	Level of the wet (processed) signal before it goes to the main device ouput (ALL Out)
ENABLE BYP/ON/OFF	BYPASS - disable effect ON - enable effect OFF - mute incoming signal
BYPASS	Soft Bypass with smoothed fade in/out functionality. LED light up when fx processing is disabled

HOW TO USE

Using the FFB914 Resonant Fixed Filter Bank Effectively

- **1/ Explore the Resonance:** Use the resonance controls to highlight specific harmonics. Switching to x2 mode will introduce sharper peaks—perfect for aggressive or experimental sound design.
- **2/ Offset Frequencies for Movement:** Experiment with the bands frequency offset and smooth control to introduce subtle modulation, making static sounds more dynamic.
- **3/ Creative Stereo Processing:** Route even and odd bands to separate outputs, apply phase inversion, or swap channels to create evolving stereo fields.

Top 3 Features

- **1/ Resonance Control & Switch** Introduces dynamic resonance to each filter, allowing sharper peaks and increased harmonic textures.
- **2/ Advanced Stereo Routing & Outputs** Unique routing of Even/Odd bands to separate outputs, with phase inversion and channel swap options.
- **3/ Limiter & Drive Section** Built-in drive for harmonic enhancement and a limiter to prevent peaks and maintain clean output.



REAR PANEL



CONNECTORS

AUDIO I/O

Mono or Stereo connections for audio signals.



ODD/EVEN Outputs: Routes Even and Odd frequency bands to separate stereo outputs for advanced mixing and effects processing.

ODD Level: Set output level of the Odd bands. **EVEN Level**: Set output level of the Odd bands.

CV INPUTS

Use these CV inputs to control the main parameters by external CV source curves



SIGNAL ROUTING

Spreading fx



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RESONANT FIXED FILTER BANK

Reason Studios Add-on Shop



Turn2on

Rack Extension Developer

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Thanks to all beta-testers



Thank you very much for supporting us by choosing our products.



This allows us to develop future interesting and creative effects / utilities / instruments in the Rack Extension format.

We try to keep prices as low as possible. Don't hesitate to contact support with any questions regarding our products or to offer your own ideas for product updates or even new products you would like developed.