

# Erica Synths – Black Multi Mode VCF

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- Manual PDF
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[Erica Synths Black Multimode VCF Manual \(PDF\)](#)

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## Erica Synths Black Multimode VCF – Cheat Sheet

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**Type:** Multimode Analog VCF

**Modes:** Simultaneous HP, BP, LP outs

**Core:** AS3320 (custom multimode chip, made in Riga!)

**Special feature:** Adjustable germanium diode overdrive on input

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## Controls & Jacks Overview

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### Inputs

Label	Type	Description	Range
IN	Audio	Audio input (apply overdrive via knob)	-
CUTOFF CV	CV	Modulates cutoff frequency	±5V (10Vpp)
RESO CV	CV	Modulates resonance	±5V (10Vpp)

## Outputs

Label	Type	Description	Range
LP OUT	Audio	Lowpass output	10Vpp
BP OUT	Audio	Bandpass output	10Vpp
HP OUT	Audio	Highpass output	10Vpp

## Knobs and Controls

- **CUTOFF:** Manual cutoff frequency
  - **RESONANCE:** Manual resonance (will self-oscillate at max)
  - **IN/DRIVE LVL:** Audio input/drive control
    - Up to 12:00 = increasing input level
    - Past 12:00 = adds germanium diode overdrive
  - **C-OFF CV:** Attenuverter for cutoff CV input (bi-polar modulation)
  - **RESO CV:** Attenuator for resonance CV input
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## Quick Operation Guide

### 1. Patch Audio Source:

Patch your waveform/signal into **IN (Audio Input)**.

### 2. Output Selection:

Use **LP OUT**, **BP OUT**, and/or **HP OUT** simultaneously.

### 3. Set Input Gain & Overdrive:

Adjust **IN/DRIVE LVL**.

### 4. Below 12 o'clock = clean gain

### 5. Above 12 o'clock = overdrive coloration (unique germanium diode circuit)

### 6. Shape With Filter:

7. **CUTOFF** for frequency sweep
  8. **RESONANCE** for resonance/squelch. Fully clockwise will self-oscillate.
  9. **Add Modulation:**
  10. Patch CV into **CUTOFF CV** for filter sweeps ( $\pm 5V$  for full sweep, attenuate/bipolar with **C-OFF CV**).
  11. Patch CV into **RESO CV** to modulate resonance amount (attenuate with **RESO CV** knob).
  12. **Experiment:**  
Use the outputs in parallel for creative patching (e.g., parallel HP/LP, band splitting, etc).
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## Voltage Ranges

- **CV Inputs:**  $\pm 5V$  (10V peak-to-peak) for full sweep
  - **Audio Outputs:** 10V peak-to-peak
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## Important Specs

- **Width:** 10HP
  - **Depth:** 35mm
  - **Power:** +12V: 27mA, -12V: 29mA
  - **Skiff-friendly construction**
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**Pro Tips** - Use the overdrive for aggressive textures. - Use external or internal modulation (LFO, envelope, sequencer) for dynamic filter sweeps. - The self-oscillation mode can be used as a sine wave oscillator.

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For warranty, maintenance, and more, see Erica Synths [official site](#).

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