

# Erica Synths – Octasource

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

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## Erica Synths Black Octasource Cheat Sheet

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### Overview

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The **Erica Synths Black Octasource** is an ultra-flexible LFO with 8 simultaneous outputs, advanced phase and waveform morphing, and extensive CV control. It can be the “heart and brain” of modulation in your modular system.

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### Controls, Inputs & Outputs

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#### Front Panel Diagram (Reference)

- **RATE (Large Knob):** Manual LFO speed control. At 12 o'clock, freezes current values on outputs. CW increases LFO rate and shifts phase CW; CCW increases rate and shifts phase CCW.
- **WAVE (Knob):** Selects principal waveforms and morphs between them. In MULTI mode, shifts waves between outputs.
- **MULTI/SINGLE (Toggle Switch):**
- **MULTI:** 8 different waves on 8 outputs, WAVE knob shifts assignment.

- **SINGLE:** Same wave on all outputs, phase-shifted (by 45° steps or CV control).
  - **FM LEVEL (Small Knob):** Attenuates FM control voltage (see FM IN).
  - **OUTPUT LEDs:** Bi-color, display signal level and output mode.
  - **SYNC (Jack):** Clock input to sync LFO frequency externally (disables RATE except at freeze).
  - **FM IN (Jack):** Frequency modulation input (-5V to +5V).
  - **WAVE CV (Jack):** Voltage control of waveform selection/morphing (-5V to +5V).
  - **PHASE CV (Jack):** Voltage control of phase shifting per output (-5V to +5V).
  - **OUTPUTS (8x Jacks):** Phase shifted/unshifted LFO outputs (-5V to +5V bipolar, switchable to 0V to +5V unipolar).
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## Input/Output Voltage Ranges

| Jack     | Function               | Voltage Range   |
|----------|------------------------|---|
| SYNC     | LFO Sync Input         | Clock / Trigger   |
| FM IN    | LFO FM Control Voltage | -5V to +5V  |
| WAVE CV  | Wave Selection CV      | -5V to +5V  |
| PHASE CV | Phase Shift CV         | -5V to +5V  |
| OUTPUTS  | LFO Output (default)   | -5V to +5V (bipolar)<br>0V to +5V (unipolar, see below) |

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## Features Reference

- **LFO Rate:** 0.03 Hz – 30 Hz
- **Output Amplitude:** 10Vpp (bipolar: -5V to +5V, unipolar: 0V to +5V selectable, see below)

- **CV Inputs:** All full sweep at  $\pm 5V$
  - **8 Simultaneous Outputs:** Each  $45^\circ$  phase apart (or 8 different waveforms in MULTI mode)
  - **Waveforms:** Sine, ramp, inverted absolute sine, triangle, pulse, absolute sine, saw, S&H (plus morphing between)
  - **Sync:** External clock input for LFO rate
  - **Freeze:** Set RATE to 12 o'clock in Sync mode or for output freeze
  - **LED Indicators:** Show signal amplitude and mode
  - **Phase, Wave, Rate:** All manually and CV controllable
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## Unipolar/Bipolar Output Mode

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- **Switching Output Mode:**
    - Set RATE knob to 12 o'clock ("freeze" position).
    - Flip the MULTI/SINGLE switch **6 times.**
    - **Unipolar (0V to +5V):** All LEDs blink same color.
    - **Bipolar (default, -5V to +5V):** LEDs blink two colors.
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## Safety & Other Notes

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- DO NOT use in wet or humid environments.
  - DO NOT expose to temps above  $+50^\circ C$  or below  $-20^\circ C$ .
  - Only ship in original packaging for warranty/repair.
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## Quick Workflow

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1. **Patch Outputs:** Use any of the 8 outputs for LFO modulation.
2. **Rate:** Adjust main speed with RATE knob or apply clock to SYNC jack for external sync.
3. **Waveform:** Manually select/morph between waveforms with WAVE knob or via CV.
4. **Phase:** Control phase rotation per output with knob or CV.
5. **MULTI/SINGLE:** Choose mode for "8 different" waves or "1 shifted wave."

**6. FM/Modulation:** Patch into FM IN for CV LFO frequency control, attenuate with FM LEVEL.

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## Useful Links

- [Erica Synths Black Octasource Manual PDF](#)
- [Generated With Eurorack Processor](#)