Erica Synths and Gamechanger Audio — Plasma Drive

• Manual PDF

Erica Synths Fusion Plasma Drive Manual (PDF)

Using the Erica Fusion Plasma Drive for Percussive, Bass, and Atmospheric Sounds

The **Erica Synths Fusion Plasma Drive** is a unique eurorack distortion module based on high-voltage xenon tube technology. It features voltage-controlled distortion, dry/wet mix, switchable EQ, and octave-tracking oscillators for harmonic enhancement. Below are some creative patching and modulation ideas tailored for:

- Distorted percussive sounds
- Complex basslines
- Atmospheric pads

1. Fundamentals of Modulation

Key modulation inputs: - **Voltage CV Input**: Controls distortion depth. - **Dry/Wet CV Input**: Blends original and processed signals. - **Octave Trigger Inputs (OCT TRIG / SUB TRIG)**: Dynamically activate harmonic oscillators (octave up, down, subs). - **EQ Switch (CV-free but manual switch)**: Choose EQ pre or post-distortion for different coloration.

2. Distorted Percussive Sounds

Goal: Create punchy, rhythmic, and gnarly percussion (e.g., kicks, snares, hats).

Patch Example: 1. **Input Source**: Use a short envelope generator (EG) or trigger-driven percussion module to supply sharp, high-level transients to the Plasma Drive input. 2. **Voltage CV Input**: Patch the same/related envelope to the VOLTAGE CV. This will dynamically crank up the distortion at transient peaks, making attacks more explosive. 3. **Dry/Wet CV Input**: Modulate with a slow triangle or stepped random voltage for variable texture on each hit. 4. **Octave Triggers**: Send rhythmic gates to OCT TRIG and/or SUB TRIG from a sequencer or clock divider. This introduces harmonic accents or glitches at chosen moments. 5. **EQ Switch**: Try both ON and OFF positions. EQ ON (pre-distortion) makes frequency boosting more aggressive/distinct.

Tips: - Overdrive may need to be turned up quite high for classic aggressive industrial hits. - Experiment with output EQ to shape post-distortion thump (boost lows for kicks, highs for snares/hats).

3. Crazy Basslines (Dubstep/Drum & Bass)

Goal: Achieve tearing, modulated, formant-rich bass.

Patch Example: 1. **Input Source**: Fat analog VCOs, FM, or wavetable oscillators, ideally with lots of sub content. 2. **Voltage CV Input**: Use complex LFOs, envelopes, or sequenced modulation for wild distortion movement (e.g., fast LFO synced to tempo for "wub" patterns). 3. **Dry/Wet CV Input**: Modulate with gates, random voltage, or a second LFO (out of phase) for dynamic clean/dirty blends within the groove. 4. **Octave Triggers**: Send rhythmic or randomized gates to Octave triggers to activate the "+1" or "-1/2/3" sub oscillators in sync with your bass riff, generating growls and artifacts. 5. **EQ**: Set EQ ON with boosted lows and cut highs for classic dark, woolly bass; or cut lows and boost highs for metallic snarl.

Tips: - Sub octave tracking is essential for dubstep "growl" – automate with trigger patterns closely tied to your groove. - Drive the input hard for maximum harmonic content.

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4. Haunting Atmospheric Pads

Goal: Dense, shifting, spooky textures.

Patch Example: 1. **Input Source**: Slowly evolving pads, granular, or spectral sources. 2. **Voltage CV Input**: Very slow random or sample & hold CV to create evolving timbral "drift" in distortion flavor. 3. **Dry/Wet CV Input**: Crossfade between states with an LFO or dynamic envelope follower to respond to pad intensity. 4. **Octave Triggers**: Use clock dividers, burst generators, or generative gates to bring +1/-1 tracking oscillators in and out in slow, unpredictable patterns. 5. **EQ**: ON for extra pre-distortion swirl; off for more faithful input texture. Boost highs subtly for air, or cut for gloom.

Tips: - Combining octave triggers with reverb, delay, and VCAs downstream can produce spectral "ghost tones" and eerie, evolving beds. - Moderate drive settings retain more pad detail; extreme drive makes for haunting, noisy, tape-distressed vibes.

Additional Patching Ideas

- **Rhythmic Distortion Patterns:** Use clocked trigger sequences into Oct Trig/Sub Trig for "beats" within the distortion itself.
- **Dynamic Expressivity:** Patch velocity from a MIDI-to-CV or sensor module to the Voltage or Dry/Wet CV for real-time performance morphing.
- **Layer With Clean Signal:** Multi the input to another path, then blend dry and Plasma outputs in a mixer for complex depth.

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