

# STEREO FIELD EFFECT LIMITER/COMPRESSOR MODEL 3706



The Overstayer Stereo Field Effect Model 3706 Limiter/Compressor is an evolution of our passion for FET compressors and classic analog recording chains. The Stereo Field Effect, or SFE, is a stereo unit with ganged controls that combines compression and limiting, with analog tone shaping and harmonics stages to evoke the tonality of a classic analog recording and mixing chain.

Classic FET ratios, as well as subtle low and hard limit ratios, allow the balance of compression to harmonics to be tailored, while wide-ranging attack and release options allow the envelope to shape exactly what hits the harmonics stages. The integrated sidechain filter and tone shaping of the discrete harmonics stages allows the signal to remain full even with large amounts of gain reduction. The Nonlinear mode engages an alternate aggressive personality, giving you new and unique dynamic textures.

### **FEATURES**

- Classic FET compression in stereo with single controls
- Discrete harmonics circuitry integrates rich color and character to the compression, integration that gives you a fluid recording/mix chain
- Parallel blend control; adjust compression and harmonics as aggressively as needed and balance to taste

- Multiple ratios allow for subtle control to harder limiting, while the external sidechain loop can be used to shape further or bypass compression altogether, driving only the analog harmonics
- Nonlinear mode brings creative and extreme punch, and energized compression balanced with additional harmonics
- Transformer balanced discrete output stage
- Power supply included with rugged 5 pin XLR connector and IEC cable

# CONNECTIONS

Line In, Line Out, Sidechain Send, Sidechain Return XLR pin 2 hot

#### **DC Power**

5 pin XLR

# IN USE

A good starting point is INPUT and OUTPUT at '3', BLEND 'wet', ATTACK '3', RELEASE '1', RATIO '8'. The meter LEDs are very responsive, and may indicate more compression than you are hearing, especially if you are used to analog VU meters. Due to the nature of the pots and to get maximum flexibility from the gain structure of the compressor, the INPUT and OUTPUT controls may live at relatively low settings.

In NON-LINEAR mode, the timing range gets much faster as the ratio increases, sometimes too fast for the detector with the SC FILTER engaged. If this is the case, just ease up on the ATTACK a bit.

The 3706, FET compressors, and analog gear in general have a bit of chaos in them, which is why we love them and build them! We trim for better than 1dB matching through a wide range of settings, but deviations are inevitable in certain circumstances. Generally these are more apparent visually on a meter than audibly.

#### **CONTROLS**

#### **ENGAGE**

Relay switched bypass.

### **HARMONIC**

Engages discrete harmonics stages, which are post compression. The harmonics circuit bends peaks and levels, as well as creating low order harmonics. It has a wide range (sweet spot) before if hard clips, and can be used for subtle thickening and inflating. Experimenting with transients, it will round before obvious clipping is heard, and will increase apparent volume. It will also 'push back' a bit when eqing into it, and can add cohesiveness. The HARMONIC circuit increases the gain to counter the limiting action, but at high levels the limiting action of the circuit can actually lower the level relative to the HARMONIC circuit disengaged.

### SC FILTER

Engages a 220Hz high pass filter in the sidechain path.

## **NON-LINEAR**

Alters the behavior of the compression, increasing the ratio and changing the shape of the knee, as well as speeding up the timing and creating extra harmonics. The timing controls get very fast in this mode, in some cases tracking the wave creating harmonic distortion - ease the controls up to decrease the effect if desired. Independent L to R tracking (unlinked) can create wild effects, if this is not desired, link the detectors.

## **INPUT**

Controls the level into the circuit, which determines the amount of compression and harmonic saturation.

#### OUTPUT

Sets the output level of the compressed side (wet), pre-BLEND.

## **BLEND**

Sets the balance between wet (compressed) and dry (uncompressed) signal paths.

#### **ATTACK**

Continuously variable control that sets the amount of time it takes for the compressor to respond to a level that exceeds the threshold.

# **RELEASE**

Continuously variable control that sets the amount of time it takes the compressor to return to its normal gain after the signal drops below the threshold.

# **RATIO**

- LOW Use this for Harmonics with slight peak compression
- 4, 8, 12 Classic FET Ratios
- LIMIT Hard peak limiting

## **SIDECHAIN**

Selects between INTERNAL linked (low position), INTERNAL unlinked (preferred middle position), and EXTERNAL sidechain send and return loop (high position). Using the send and return allows a device to be inserted into the sidechain signal while preserving the feedback action of the compression. Alternately, multing the input signal to the sidechain return and selecting EXTERNAL will force the compressor into feedforward compression.



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