

# ACME Audio



## Opticom XLA-3 Plugin Manual

Powered by

brainworx 

# Quick Start

## Install and Authorize your New Plugin:

- If you do not have an account, [register for free on the Plugin Alliance website](#)
- Double-click the .mpkg (Mac) or .exe (Win) file
- Follow the installation instructions
- Open the plugin in your DAW of choice and click on the interface to activate
- If your computer is connected to the internet, click the "I'm Online" button and enter your Plugin Alliance credentials on the following page

For offline activation instructions and additional information, please refer to the Activation Manual included in the installation folder of this plugin  
You may also follow this link to the [online version of the manual](#)

For more information, please visit: [www.plugin-alliance.com](http://www.plugin-alliance.com)

[System Requirements and supported Platforms](#)

For latest System requirements & Supported Platforms, please click the link above, and visit the [product list page](#) on the Plugin Alliance website to see particular details for your product.



# Acme Opticom XLA-3

## Optical Compressor and Leveling Amplifier



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# Introduction - Acme Opticom XLA-3

## Introduction

The Acme Opticom XLA-3 is a powerful and flexible optical compressor with glorious tube-powered, triple optoelectric, cold-rolled steel covered military-grade componentry. Slap it across the drum buss for solid and seamless LA-2A styled leveling. Force vocals through the input to add grit and attitude to even the wimpiest of studio performances. Use Amp mode to add harmonic color to a guitar or bass line without even touching the dynamics.

The Opticom XLA-3 is a bombproof beast of an optical compressor, and thanks to Brainworx it's now available in plugin form to tame and/or soothe any sound you throw at it.



The XLA-3 hardware features three compression responses that each treats sounds in a totally different way, affecting spectral regions with varying envelope behaviors and distortion characteristics. On top of that, an Amp mode allows for gain boosting without dynamics reduction.

Whether using the Fast, Normal or Slow setting, optical CdSe (Cadmium Selenide) photocells will always leak a perfect little transient through while allowing you to smash sounds to oblivion, or simply tame your peaks. Brainworx faithfully emulated the XLA-3 and captured these features in plugin form, right down to the Light History behavior exhibited by light-dependent resistors when returning from a resting state, or being constantly assaulted with input. Additionally, several new features were added to the plugin version, including a parallel mix knob, an output trim control, and an adjustable noise floor.

The Acme Opticom XLA-3 is the simple solution for powerful optical compression and harmonic coloration.

Drive the input. Set the behavior. Level to taste. Done.

# Acme Opticom XLA-3 Gain Stage and Metering



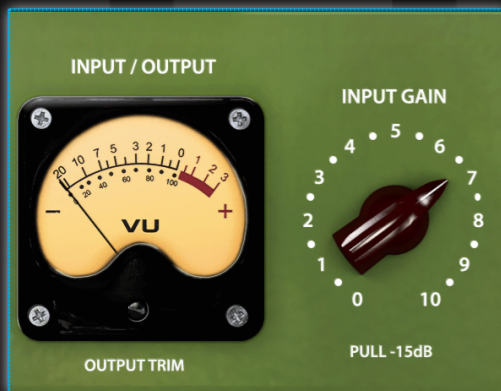
  
 OPTICOM MODEL XLA-3  
 LEVELING AMPLIFIER  
 ACME AUDIO MANUFACTURING CO.  
 MADE IN U.S.A.  
 brainworx 

## Subtle Leveling to Intense Tone Coloration

The Opticom XLA-3 can be used to completely level anything you throw at it. Driving the input gain will produce harmonics that color your sound, from subtle addition to total distortion. This can easily be controlled by balancing input gain with output gain to achieve the desired drive against the make-up amplifier. Included in the plugin version is an output trim that will help prevent digital clipping when things get a little hairy.

### INPUT GAIN: continuous from 0 - 10

The Input Gain control allows for adjustment of the input signal strength that is applied across the fixed limiter threshold of the XLA-3. Higher settings of this control will allow the input signal to drive the limiter harder, yielding a stronger compression effect (indicated by the Gain Reduction meter).



**PULL -15dB:** discrete 2 steps 0dB to -15dB  
Activated by double-clicking on the knob, this attenuates the input signal by -15dB when engaged.

**OUTPUT TRIM:** continuous from -20dB to 0dB  
Provides linear output attenuation to help damp your overall output level. This feature is not available on the original hardware.

### INPUT/OUTPUT: Peak Meter

Shows level of input vs. output based on the setting of the adjacent METER switch (see below). When set to INPUT, 'Threshold Drive' mode is active, which shows the "relative amount of instantaneous signal being applied to the XLA-3 *in excess of the fixed limiting threshold.*" Meter movement indicates engagement of the limiter and gives a visual feel for the amount of effect the XLA-3 is imposing on the original signal. While this is not a true indicator of Gain Reduction in dB, it is useful for observing ballistics in regards to the loudness of audio events being fed into the unit.

### OUTPUT GAIN: continuous from 0 - 10

The Output Gain control allows for adjustment of the final signal level (makeup gain) after limiting.

**STEREO LINK:** discrete 2 steps Link / Unlinked  
Only available in stereo instances, this unlinks the sidechains of both channels when engaged by double-clicking the knob.

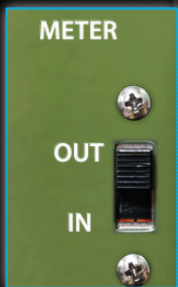
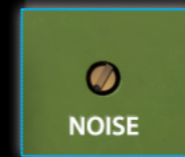
**DRY/WET MIX:** continuous from 0% to 100%  
You can use this parameter to mix your WET and DRY signal (parallel compression). Fully counterclockwise is an unprocessed signal, fully clockwise is a processed signal. This parameter is not available on the original hardware.



### GAIN REDUCTION: Peak Meter

Monitors the Gain Reduction performed by the XLA-3 in dB.

**Noise Level:** continuous from -120 to -60dB (default -90dB)  
This parameter is not include in the original hardware. The original level from the Hardware unit is at -84dB. Turning the knob to -120dB turns off the noise floor altogether.



**Meter Mode:** discrete 2 steps IN / OUT  
You can use this parameter to show the Input or the Output Level.



# Acme Opticom XLA-3 Response Curves



## Three Compression Curves in One Unit

The XLA-3 can leave sounds relatively clean, or smash them to harmonic overload. Selecting the appropriate curve is achieved most through listening tests and knowing your content. The effect that each setting (a different modeled opto device) has on sounds is primarily frequency dependent and thusly has a different effect on different parts of the spectra.

**RESPONSE:** discrete 3 Steps (Slow, Normal, Fast)

### Slow:

- Moderate attack that becomes audibly stronger at increased reduction levels.
- Medium recovery speed.
- Smooth highs, fat mids, foggy lows.
- Clean at all reduction levels.

### Normal:

- Flat attack at all reduction levels.
- Fast recovery speed.
- Leveled highs, pumped mids, blurry lows.
- Frequencies below 300Hz become progressively distorted at increased reduction levels. Additional harmonic spectrum is a mix of even and odd-ordered overtones.

### Fast:

- Slight attack that becomes audibly stronger at increased reduction levels.
- Instantaneous recovery speed.
- Hammered highs, leathery mids, distorted lows.
- Frequencies below 3kHz are distorted at all reduction levels.

Overall sound quality becomes progressively “clobbered” at increased reduction levels. Additional harmonic spectrum consists primarily of even-ordered overtones.



# Acme Opticom XLA-3 Bypass Controls

## No Dynamic Range? No Problem.

The Opticom XLA-3 can not only bypass the compression circuit, but can also only implement the Gain Stage in order to take advantage of the harmonic coloration offered by the unit. If your content needs no more reduction in dynamics, consider using the XLA-3 as a tone box or gain stage somewhere in your effects chain.

## Mode: discrete 3 Steps AMP, OUT, IN

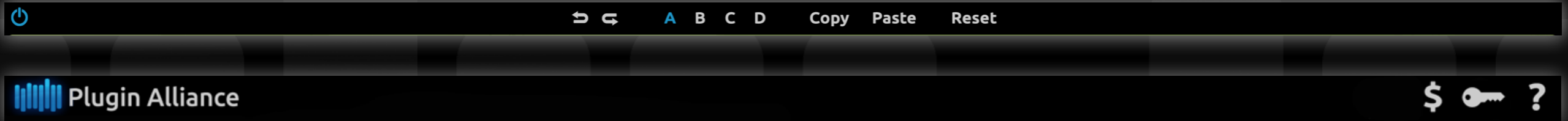
Bypasses the GR circuit when in AMP mode, bypasses the unit when in the OUT setting. Use the AMP mode and balance Input/Output gains to yield distortion effects without compression by only using the gain stage of the Opticom XLA-3.



**POWER:** discrete 2 Steps ON / OFF  
Use this to power off and on the Opticom XLA-3 to compare the active plugin with its bypassed state. The indicator LED will light when the XLA-3 is active. This parameter is linked to the BYPASS button in the Plugin Alliance Toolbar.



# The Acme Opticom XLA-3 Toolbars



## Plugin Settings Toolbar

### **BYPASS**

Bypasses processing done by the Opticom XLA-3.

### **UNDO/REDO (Arrows)**

Up to 32 steps of parameter history.

### **Settings A / B / C / D**

Select banks of parameter settings; use the A/B/C/D settings to copy a complex channel setting and alter it slightly for different parts of your song, for example. These settings can be automated by your DAW system, so you can jump from setting A (in the verse) to setting B (in the chorus, for example).

### **COPY / PASTE / RESET**

Copy and Paste between setting banks, reset parameters of selected bank.

## Plugin Alliance Toolbar

### **“KEY” ICON**

Opens the plugin Activation Dialog.

### **“?” ICON**

Opens a dialog through which one can access the plugin's help documentation, online product page, or any available updates.

### **“\$” ICON (When Applicable)**

If you've purchased your plugin using the Plugin Alliance Installment Payments option, the “\$” icon, links to your account so you can make a payment on your Lease-License.