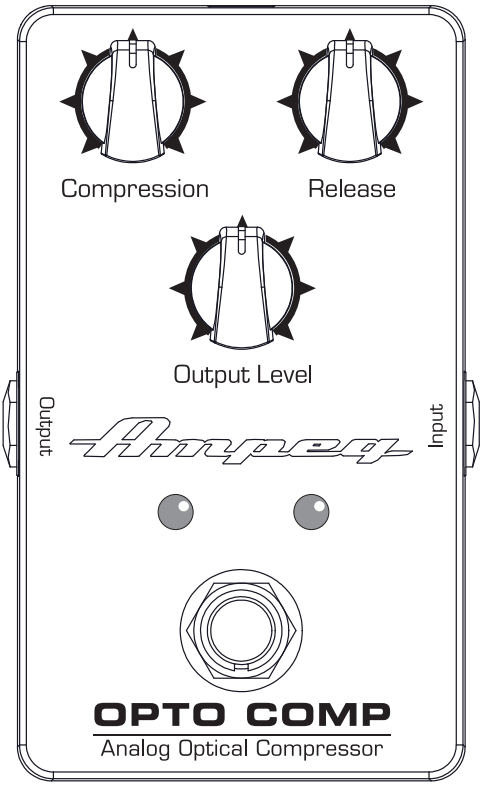
OPTO COMP

Analog Optical Compressor



Owner's Manual

TABLE OF CONTENTS

Introduction

The Ampeg Opto Comp Analog Optical Compressor pedal utilizes an optical circuit to deliver smooth, vintage style compression to add headroom and sustain to your guitar or bass.

Dial in a fast, subtle style to control peaks, or crank up the compression to add a unique character. Featuring a roadworthy, all-metal chassis and true bypass switching, the Opto Comp Analog Optical Compressor brings your tone to new heights.

Like all Ampeg products, your Opto Comp Analog Optical Compressor pedal is designed by musicians and built using only the best of components. Each pedal is tested to confirm that it meets our specifications, and we believe that this pedal is the absolute best that it can be.

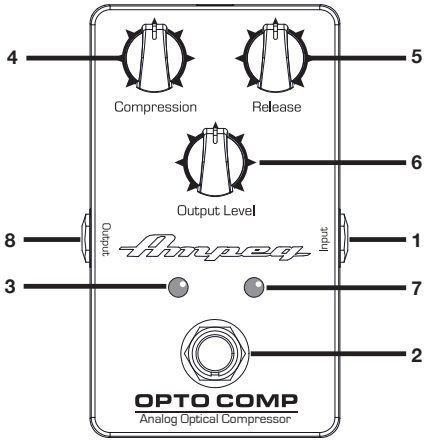
In order to get the most out of your new pedal, please read this manual before you begin playing. Best of luck in all of your musical endeavors!

And **thank you** for choosing Ampeg.

Features

- Delivers smooth, vintage style compression
- Dial in the perfect sound with Compression and Release controls
- Output control allows you to maximize sustain and make up for heavy compression
- True bypass, analog design with incredible signal-to-noise ratio
- Roadworthy, all-metal chassis construction
- 9V DC supply or battery capable (not included)

Top Panel Features



1. **INPUT:** The signal output from an instrument (active or passive) may be connected to this 1/4" input by means of an unbalanced (shielded) instrument cable.

   NOTE: There is a –15 dB Pad Jumper [11] located inside of the pedal (see page 5).

   NOTE: Unplug the input cable when not in use, as the 9V battery will drain (and eventually die). Details on replacing the battery may be found on page 4.

2. **OPTO COMP ON/OFF SWITCH:** Engage this switch to activate the Opto Comp pedal. This pedal is true bypass, meaning, the signal will pass through from input to output with no circuitry in between when the switch is disengaged.

3. **ON/OFF LED:** This LED illuminates purple when the pedal is engaged.

4. **COMPRESSION:** A compressor squeezes the dynamic range of a signal, reducing the volume of loud notes, which allows the overall volume to be boosted. It can really balance out very dynamic playing styles. Using a slight amount of compression can beef up your tone a bit. You can also get a "punchier" sound using compression.

   Rotate the Compression knob (also known as "ratio control") to adjust the overall amount of compression applied to a signal.

   The ratio ranges from a minimum of 1:1 (fully counter-clockwise) to a maximum of 10:1 (fully clockwise), landing at 3:1 at the center position.

5. **RELEASE:** The Release knob may also be thought of as a "time control" knob, as it determines how long it takes for the compressor to end gain reduction.

   The release time ranges from a minimum of 75 milliseconds (fully counter-clockwise) to a maximum of 600 milliseconds (fully clockwise).

6. **OUTPUT LEVEL:** Rotate this knob to control the overall output level, from mute (fully counter-clockwise) to +14 dB (fully clockwise). Use it wisely and turn it down when making connections or trying something new.

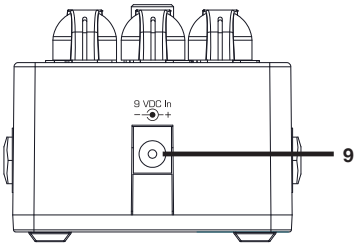
   NOTE: The Output Level control is active only when the pedal is engaged.

7. **GAIN REDUCTION LED:** This green LED increases in brightness as gain reduction increases.

8. **OUTPUT:** Typically, this 1/4" Output jack connects to the input of an external power amplifier – or powered loudspeakers, as long as they have their own input controls to adjust the volume level – by means of an unbalanced (shielded) instrument cable.

   However, it may be connected to an external mixer, recorder, or interface. In this way, you do not have to mic the speaker cabinet in order to add it to the main mix, or to record. The level of the signal is affected by the volume control, when the Opto Comp is active.

Rear and Bottom Panel Features



9. POWER CONNECTOR: This is where to connect the optional power supply.

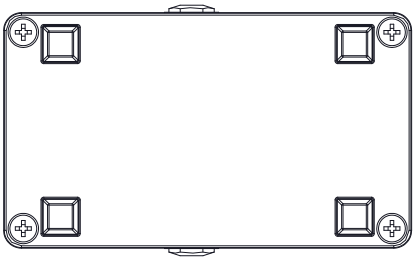
⚠ Before plugging in the power supply, make sure that you are using the correct model power supply for this product. Failure to do so may result in damage to your unit and void your warranty.

A **DC-1G Power Supply** may be purchased from an Ampeg Dealer, or you may purchase one directly from the Ampeg Online Shop, at shop.ampeg.com.

For residents outside of the US, please request the model **DC-1G Power Supply** when purchasing from an Ampeg dealer or distributor in your region.

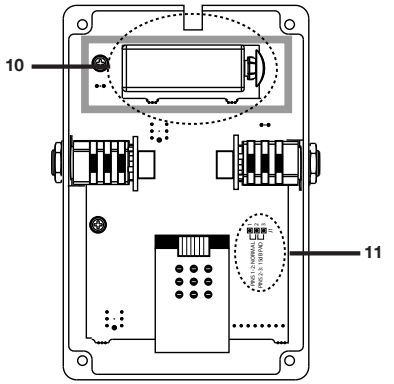
BOTTOM PANEL ACCESS

A –15 dB Pad Jumper [11] is located inside the bottom of the pedal. This is also where the 9V battery is housed [10].



Removing the bottom is easy. Simply start by placing the pedal top down on a soft, dry cloth.

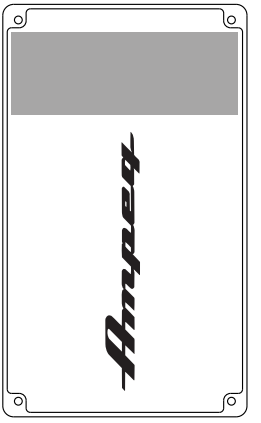
Remove each of the four screws by turning them counter-clockwise. Be sure to keep them in a safe place as you will need them again!



10. 9V BATTERY: The Opto Comp pedal may be powered by 9V battery instead of using a power supply. As seen in the illustration, it fits in nicely inside a compartment of the circuit board next to the edge of the pedal.

NOTE: Unplug the input cable when not in use, as the 9V battery will drain (and eventually die).

NOTE: When replacing the bottom of the pedal, line up the rectangular foam piece over the battery. Turn the screws clockwise to affix to the bottom to the pedal.



Rear and Bottom Features - Continued

11. **–15 dB PAD JUMPER:** Moving the jumper reduces the input signal by 15 dB and compensates for higher output instruments. This attenuation is suited for use with basses that have active electronics or high-output pickups.

    There are only two possibilities for the jumper setting:

    - Pins 1-2 (Normal – default)
    - Pins 2-3 (15 dB Pad)

    Ok, ok...there could be no jumper, but that just sets the pedal to its normal/ default, Pins 1-2 setting (with about 1/2 dB loss).

    Referencing the diagram to the left, slide the jumper out then back in on the pins that you want to use for your instrument. Fingers should work just fine, but it's ok to use needle-nose pliers to remove the jumper, if necessary.

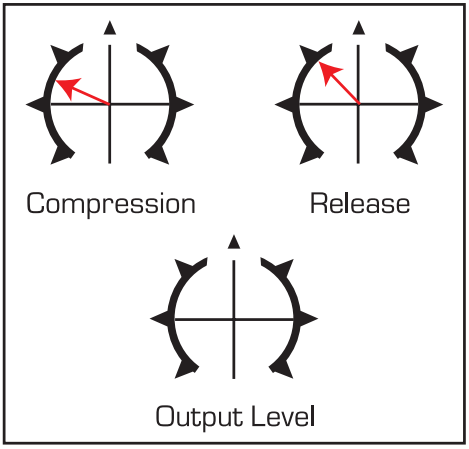
    NOTE: When replacing the bottom of the pedal, line up the rectangular foam piece over the battery. Turn the screws clockwise to affix to the bottom to the pedal.

    NOTE: If you are experiencing excessive distortion (distortion begins at approximately 1.5V RMS) then you might want to utilize the -15 dB Pad by moving the jumper to Pins 2-3.

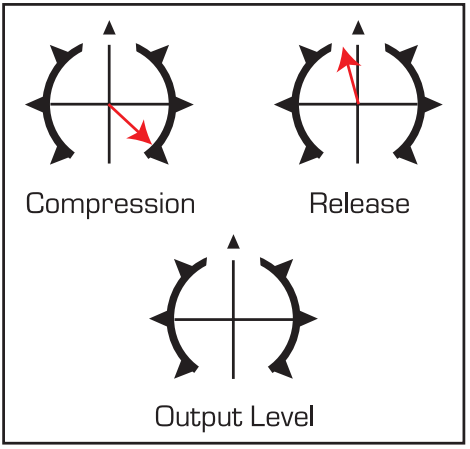
Suggested Settings

Set the Output Level to taste.

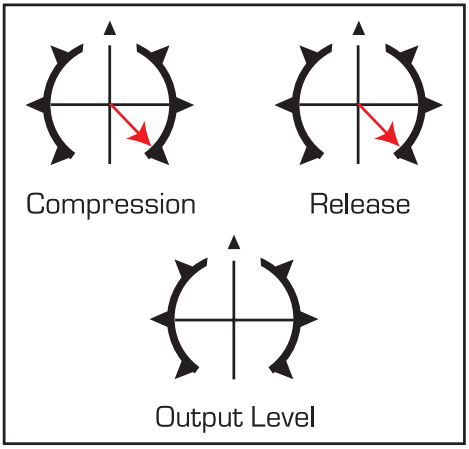
Easy Compression



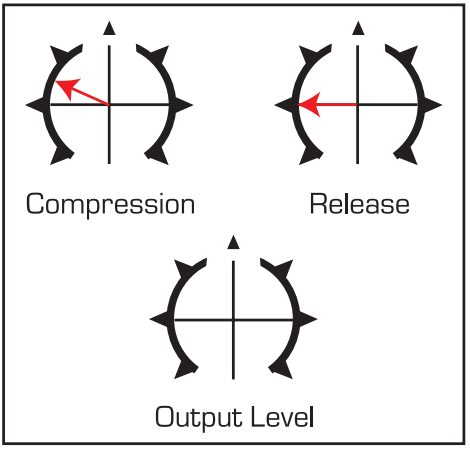
Fretless



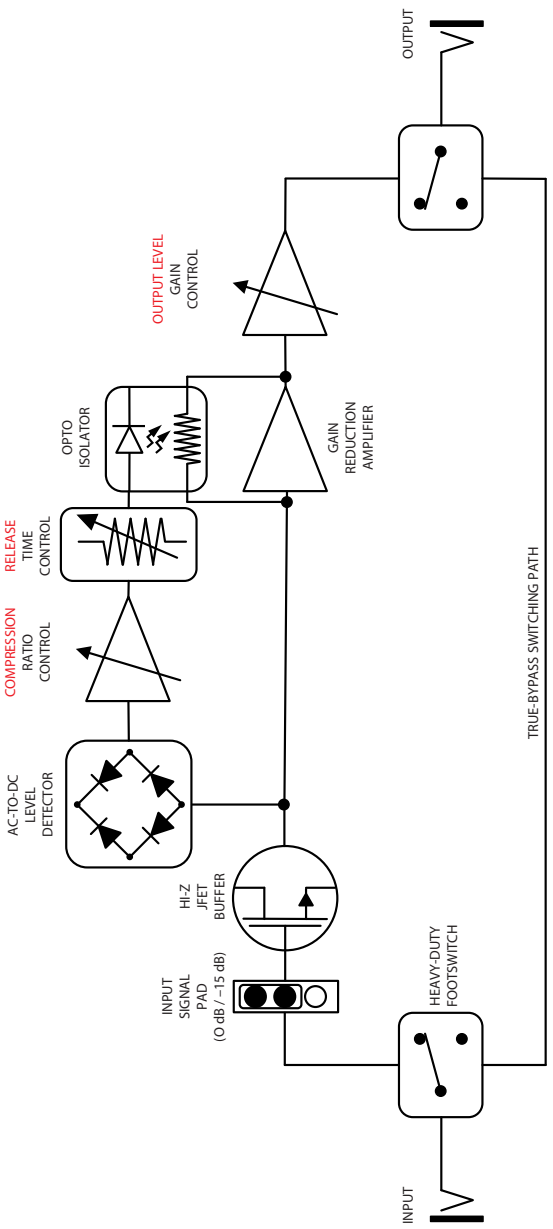
Totally Squished



Slap Happy



Block Diagram



Technical Specifications

Signal-to-Noise Ratio (100 Hz @ 1.00V RMS)		80 dB
Maximum Gain		+14 dB
Controls		
	Compression Ratio, dB (I/O)	Minimum: 1:1 Maximum: 10:1
	Release Time	Minimum: 75 milliseconds Maximum: 600 milliseconds
	Output Level Gain	Mute to +14 dB
Impedances	Input	1 M Ω @ NORMAL, 166 kΩ w/–15 dB PAD
	Output	200 Ω
Power Requirements		Internal: 9V Battery External: 9V DC, ≥25 mA, center negative
Size (H x W x D)		2.2 in x 2.6 in x 4.5 in 56 mm x 66 mm x 114 mm
Weight		0.6 lb / 0.3 kg (approximately)

The Opto Comp Analog Optical Compressor is housed in a corrosion resistant, die-cast zinc chassis, so be sure to clean it with a dry, lint-free cloth. Never spray cleaning agents on the Opto Comp Analog Optical Compressor. Avoid abrasive cleansers which would damage the finish.

Ampeg continually develops new products and improves upon existing ones. For this reason, the specifications and information in this manual are subject to change without notice.

Warranty and Support

Visit **WWW.AMPEG.COM** to...

(1) ...identify **WARRANTY** coverage provided in your local market. Please keep your sales receipt in a safe place.

(2) ...**REGISTER** your product.

(3) ...**CONTACT** Technical Support, or call 818-575-3600.

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Rev. A