

OC1

COMPRESSOR

**USER
GUIDE**

for the 500 Series enclosures

Introduction

Congratulations on your purchase of this 500 Series compatible MCAudioLab channel module.

It has been specifically designed to operate in a 500 Series enclosures (original API lunchbox® or its equivalent).

The nominal output level is +4 dBu. The OC1 is a single-width 500 Series compressor featuring the 816 Discrete OpAmp. **This compressor was designed to be easy to use, for everyone! The classic parameters are intuitive and easy to access.** With such simple controls, the OC1 offers a great sound everybody can achieve. The controls include selectable attack and release as well as HD (Hi-Dynamics) for a smoother compression plus controls of Peak, Comp and Out. The unit features a true bypass switch.

The OC1 Opto compressor is capable of creating huge and powerful drum sounds or to add that amount of attitude and depth to a recording. The compression is always smooth that seem transparent in the mix.

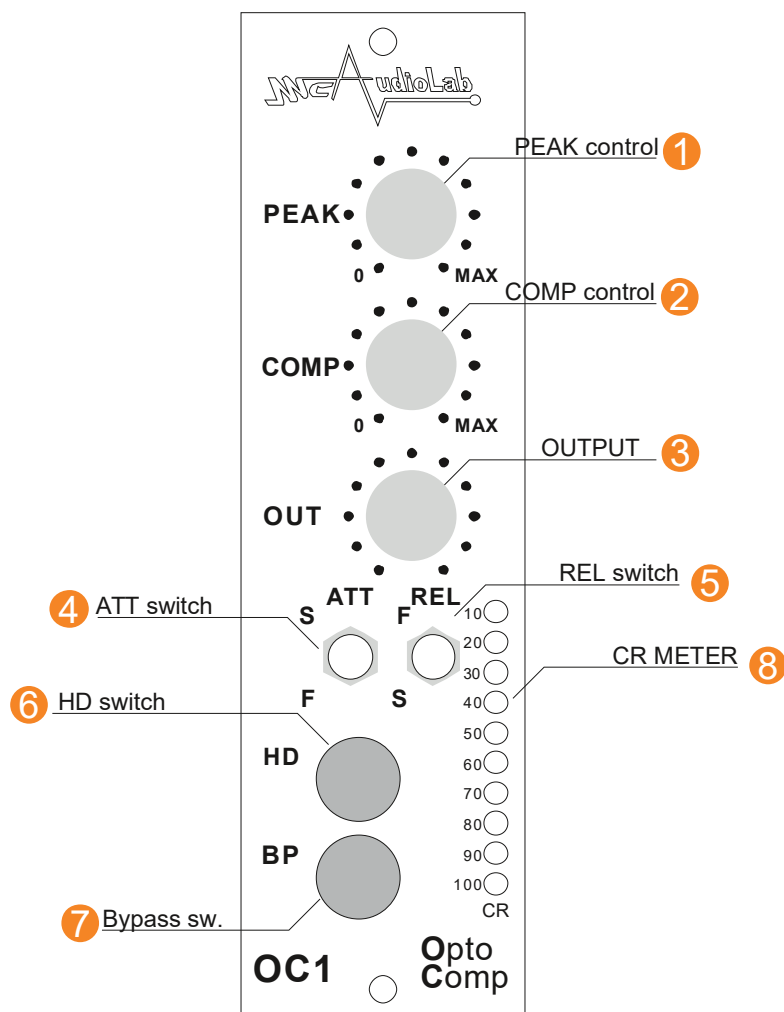
The OC1 respond exactly to any sound with its continuous control-set letting you balance the tone.

The traditional gain reduction meter has been replaced with a more intuitive LED Compression Rate meter.

Doesn't matter if your track is about classic or hard-rock genre, the OC1 fits well on every sound. Now you have the ability to create an entire classic channel all within a 500 series rack with the addition of the MCAudioLab MP1 preamp and the SE1 equalizer.

Operation

Please refer to the illustration below



- 1 PEAK control**
This control tells the unit when to compress. Compression mainly depends on the input level. It is advisable to have a not-too-high input level to allow greater precision on this parameter. If the knob is turned all the way left, the compression is not active.
- 2 COMP control**
sets the amount of compression. The more you turn the knob clockwise the greater the compression.
- 3 OUTPUT**
This control adjusts the output volume. It is an active control and therefore amplifies the signal to restore the loss of volume due to compression. The range is from mute (all the way turned left) to +6dB gain.
- 4 ATTak switch**
selects the compressor attack speed: S is for slow, F is for fast.
- 5 RElease switch**
Similarly to the attack, this switch sets the compressor release time: L is for slow, H is for fast
- 6 HD switch**
HD stands for Hi Dynamics. When you press this pushbutton switch, the compressor changes its behaviour turning into a more responsive (more gain reduction) and sensitive to low frequencies. The HD switch actually changes the way the compressor responds to the signal. Note you get more aggressive and punchy compression when HD is on.
- 7 BYPASS switch**
This is a true bypass. The incoming signal is redirected to the output when the pushbutton is pressed. The LED light turns on when the bypass is engaged. The unit keep working but it is excluded from the signal path.
- 8 CR meter**
This is a bar LED meter and it returns a percentage value of how much compression is being used. The 'rate' refers to the intrinsic capacity of the compressor.

NOTE about the compressor

The optical compressor uses light-sensitive electronic components. These components react with longer times than other types of electronic components such as diodes or VCAs. This is an advantage as longer reaction times result in a softer and smoother sound. Specifically, the OC1 manages to give a soft and effective compression and its effect is almost imperceptible. The audio signal passes through a discrete OpAmp (the MCAudioLab's 816) which is the heart of the OC1. The design along with the discreet OpAmp make this compressor very musical and suitable for any musical genre. Even at high compression ratio the distortion remains low.

Audio Specifications

Input and Output: Transformerless, electronically servo balanced

input impedance: 10 KOhm

Output impedance: < 50 Ohhm

Out Gain: +12dB

Frequency response 20Hz-20kHz +/- 3dB

Installation Instructions

Switch off the 500-series enclosure and remove mains power.

Carefully insert the OC1 module into the empty slot in the 500-series enclosure and ensure the rear edge connector on module and the edge connector of the 500-series enclosure mates correctly.

Screw into the 500-series enclosure to secure the module into the enclosure.

Apply mains power into the 500-series enclosure and switch on.

Disclaimer: The information in this manual has been carefully checked and is believed to be accurate at the time of publication. However, no responsibility is taken by us for inaccuracies, errors or omissions nor any liability assumed for any loss or damage resulting either directly or indirectly from use of the information contained within it.

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Health & Safety Notice

For your own safety and the protection of others, please observe the safety instructions below:

- Read these instructions, follow all instructions and keep these instructions.
- Heed all safety warnings.
- Do not use near water.
- Clean only with a dry cloth.
- Do not install near heat sources.
- Do not block ventilation openings.
- Unplug when unused for long periods of time.
- Refer all servicing to qualified personnel only.

CAUTION: Connecting & Mounting

- Never connect the output of a power amplifier to this device.
- Always install the unit in an appropriate lunchbox 500 series compatible.
- Use the device according to this manual only.

CAUTION: Temperature

- Surfaces of the device may become hot during operation.
- Do not install this device near any heat source such as radiators, stoves or other heat sources.
- Always allow enough ventilation space around the unit for air circulation.
- Do not cover circulation vents in the lunchbox.

CAUTION: Humidity

• If this device is moved from a warm to a cold room, condensation may occur inside the device. To avoid damaging the unit, please allow it to reach room temperature before switching it on again.

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