

LUNA.5K

STEREO ANALOG
AMBIENT PROCESSOR

**USER
GUIDE**

for the 500 Series enclosures

Introduction

Congratulations on your purchase of the **MCAudioLab LUNA.5K**, a 500 Series compatible channel module. It has been specifically designed to operate in 500 Series enclosures (original API lunchbox® or its equivalent). The nominal output level is +4 dBu. The LUNA.5K is a stereo 500 Series **Analog Ambient Processor**.

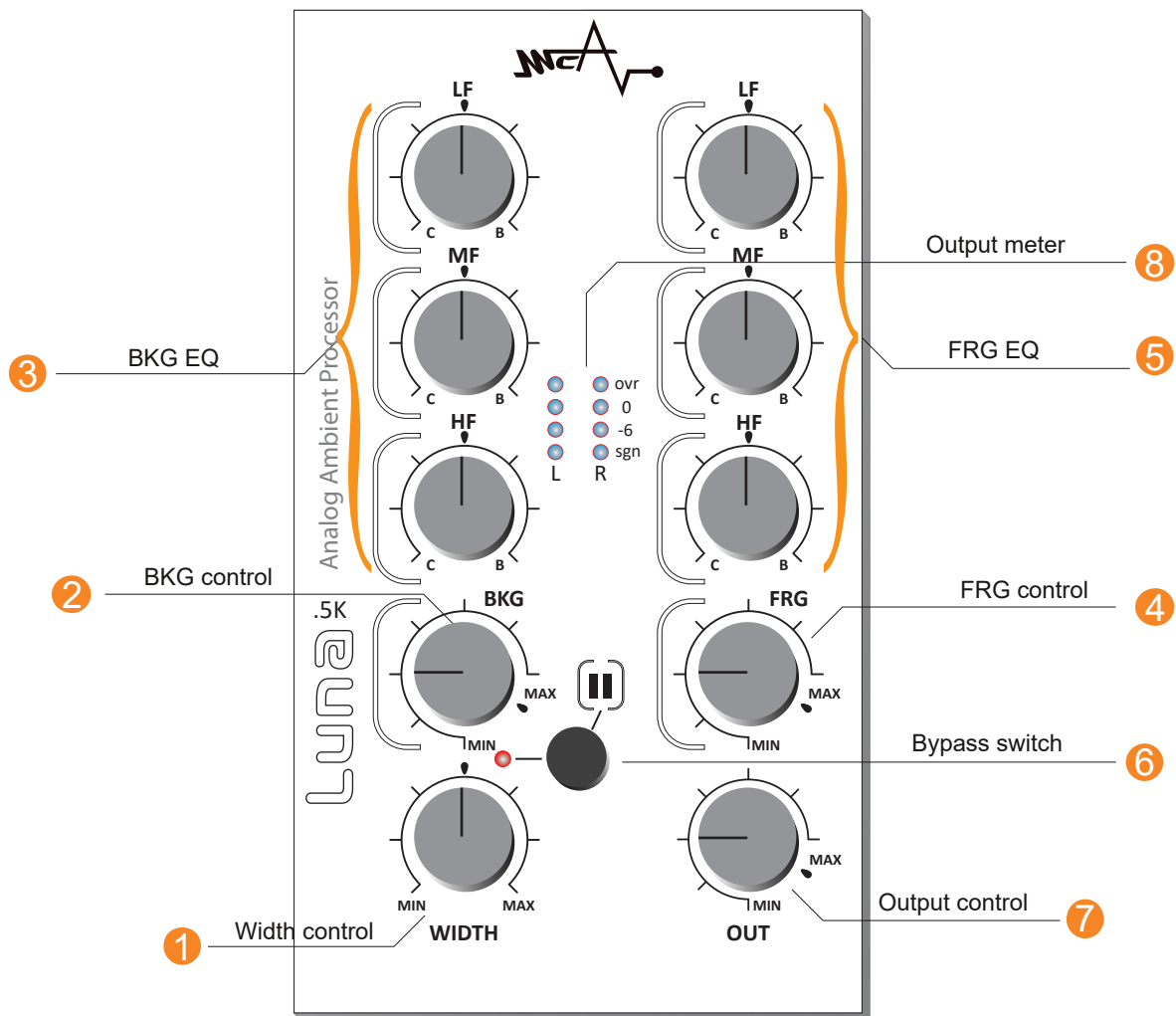
The LUNA.5K design

The LUNA.5K is a completely analog ambient processor. Sound manipulation is managed solely by discrete components, ensuring NO DIGITAL CONVERSION along the signal path. MCAudioLab's LUNA.5K has a unique and specific design that creates two levels from a stereo signal source: a Background level (BKG) and a Foreground level (FRG).

Imagine you are attending a concert. Looking at the stage, the frontman represents the FRG level while the band in the background represents the BKG level. Turning the corresponding knob affects the BKG and FRG levels independently. This feature is useful in mixing or mastering situations where you need to bring a voice "in your face," making it more present, while independently extending the band's sonic stage. Additionally, the device offers a dedicated EQ for each level. If you want to (brutally and simply) extend or shrink the stereo image, the width control will accomplish this. All three parameters (BKG, FRG, and width) can be used simultaneously to create a truly bespoke ambient sound.

Operation

Please refer to the illustration below



MCAudioLab LUNA.5K front panel

- 1 Width control**
This control should normally stay in the vertical position. Turning the knob clockwise extends the stereo image. To narrow the stereo image, turn the control counter-clockwise.
- 2 BKG control**
This control affects the background (BKG) level. The more you turn the knob to the right, the wider the stereo extension. Unlike the width control, this affects the analog processor.
- 3 BKG EQ**
The three-band EQ affects the BKG control only. The HF and LF bands are Baxandall, while the MF is bell-shaped.
- 4 FRG control**
This control affects the foreground (FRG) level. The more you turn the knob to the right, the more focused and closer the foreground sound becomes to the listener.
This control, along with the BKG control and its EQ, are parameters of the analog processor.
- 5 FRG EQ**
The three-band EQ affects the FRG control only. Like the BKG EQ, the HF and LF bands are Baxandall, while the MF is bell-shaped.
- 6 Bypass push button (true bypass)**
Pressing this push button redirects the input signal straight to the output, putting the unit in pause mode and lighting the red LED. Another press disengages the relay. In bypass mode, the unit continues to work but is removed from the audio chain.
- 7 Output control**
This is an active control with a range from $-\infty$ to +6 dB. Set the output level by turning this knob; clockwise rotation increases the output level.
- 8 Output meter**
This four-LED peak meter allows you to monitor the output level for both the Left and Right channels.

Audio Specifications (both channels)

Dynamic range, 20Hz – 22KHz:

Max input level: +20dBu

Max output level: +20dBu

input impedance: 10K Ohm

output impedance: <50 Ohm

Specifications are typical of a production unit and are subject to change without notice.

Installation Instructions

1. Switch off the 500-series enclosure and remove mains power.
2. Carefully insert the LUNA.5K module into an empty slot in the 500-series enclosure, ensuring the rear edge connector on the module and the edge connector of the 500-series enclosure mate correctly.
3. Secure the module into the enclosure with screws.
4. Apply mains power to the 500-series enclosure and switch it on. The module is not designed to be hot-plugged.

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.
- 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 enclosure.
- 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 sources 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, allow it to reach room temperature before switching it on again.

Troubleshooting

No Power:

- Ensure the 500-series enclosure is plugged in and turned on.
- Check the module is properly seated in the enclosure.

No Sound:

- Verify connections
- Check that the output control is set to an appropriate level.

Warranty Information

This product is covered by a warranty. For detailed warranty terms and conditions, please visit our website at MCAudioLab.com, Warranty Information.

Maintenance Instructions

- Regularly check and clean connectors to ensure optimal performance.
- If the device becomes dirty, clean it with a dry cloth. Do not use cleaning agents or solvents.

Disclaimer

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