

# EQ4M

# 6-Band Dual Channel Mastering EQ



# **User Guide**



Model: EQ4M

#### **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read these instructions
- 2. Keep these instructions
- 3. Heed all warnings
- 4. Follow all instructions
- 5. Clean only with dry cloth
- 6. Do not block any ventilation openings.
- 7. Install in accordance with the manufacturer's instructions
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
- 9. Protect the power cord from being walked on or pinched particularly at plugs and the point where they exit from the apparatus
- 10. Only use attachments/accessories specified by the manufacturer
- 11. Unplug this apparatus during lightning storms or when unused for long periods of time
- 12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped 13. CAUTION: To disconnect the unit completely
- 13. CAUTION: To disconnect the unit completely from the MAINS, unplug the unit. <u>Turning the power switch off does not disconnect the unit completely from the MAINS</u>
- 14. The unit shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the unit
- 15. WARNING: This is a Class I apparatus. It should be connected to a MAINS socket outlet with a protective earthing connection

# Warning:

To reduce the risk of fire or electrical shock, do not expose this unit to rain or moisture.

No user serviceable parts inside.

Refer service to qualified personnel.



#### **VOLTATE SELECTION AND FUSE**

This unit is capable of operating over a range of mains voltages as marked on the rear panel. Ensure correct mains voltage setting and correct fuse before connecting mains supply. Do not change mains voltage settings while mains supply is connected. To avoid the risk of fire, replace the mains fuse only with the correct value fuse, as marked on the rear panel. The internal power supply unit contains no user serviceable parts. Refer all servicing to a qualified service engineer, through the appropriate Maag Audio dealer.

For mains voltages from 100-120 volts, use a 0.5A 3AG fuse with Slo-Blo characteristics only and configure the mains selector to display 115V. For mains voltages from 200-240 volts, use a 0.25A 3AG fuse with Slo-Blo characteristics only and configure the mains selector to display 230V. The selectable fuse holder accepts 1/4" x 1-1/4" or 5mm x 20mm fuses.





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#### INTRODUCTION

The Maag Audio EQ4M<sup>™</sup> is a 6-Band Dual Channel Mastering EQ with AIR BAND® (shelf boost from 2.5 to 40kHz), a true in/out bypass, a transparent INPUT ATTN (attenuator), and stepped (detent) controls.

In 1993, Cliff Maag first introduced the AIR BAND® to the audio world in the NTI EQ3. The EQ3 was a dual channel 6-Band EQ powered in a 19 inch rack and to this day is hailed as one of the most musical equalizers ever made. Over two decades later, Maag Audio has captured the spirit of the EQ3 in the EQ4M by providing More Power, More Headroom, and More Control than ever before.

#### MORE POWER

The EQ4M rides on extremely clean +-18v rails without the need of any supporting chassis or power source. Just plug it in and make music.

#### MORE HEADROOM

More power, means more headroom. The EQ4M has an extra 2v compared to the EQ4 and boosts headroom to +29 dBu.

#### MORE CONTROL

The EQ4M offers more control with its true in/out bypass, a transparent INPUT ATTN (attenuator), and an extra 15 kHz selection on the AIR BAND. All controls are stepped (detented).

#### **OPERATION NOTES**

Because of the Maag Audio EQ4M's unique design, phase shift is very minimal. This helps the user maintain the integrity of the original sound and enhance the "Airy" frequencies, while tonally shaping the sound from the top to the bottom. The lack of phase shift and the AIR BAND® make the EQ4M great on anything that needs EQ shaping.

The EQ4M's band passes all interact with each other. Increasing the AIR BAND gain will also increase the overall gain to a small extent. This is normal and is a necessary byproduct of the design. This happens because of the interaction (summing) of the AIR BAND with all of the other band passes. This interaction is a necessary part of the design to ensure the integrity of the sound is maintained. To compensate for the added overall gain, simply adjust the level via the INPUT ATTN. The EQ will remain the same shape, but the overall gain will be lowered. This compensates for the extra gain added from the interaction of the boosted band passes. This is the correct way to get the desired results from the Maag Audio EQ4M. Here is another way to look at it: If lifting a desired frequency, you may want to consider bringing down the level of the other band passes above and or below; always remembering the band passes interact with each other. This is a different approach from other typical equalizers.

Understanding how the band passes and the AIR BAND interact in the Maag Audio EQ4M, will help you better shape your sound; providing unparalleled transparency and top end presence while maintaining the true natural sound behind the source.



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#### **CONTROLS**



#### **INPUT ATTN**

Input attenuator (0-12 dB)

#### **PEAK**

Red LED starts to illuminate when the output signal reaches 23 dBu

#### SIGNAL

Green LED indicates audio signal presence. Illumination starts @ -20 dBu

#### **SUB (10 Hz)**

Fixed boost and cut bell (+15 dB, -4.5 dB)

#### 40 Hz

Fixed boost and cut bell (+15 dB, -4.5 dB)

#### 160 Hz

Fixed boost and cut bell (+15 dB, -4.5 dB)

#### 650 Hz

Fixed boost and cut bell (+15 dB, -4.5 dB)

#### 2.5 kHz

Fixed boost and cut shelf (+15 dB, -4.5 dB)

#### **AIR BAND®**

Boost only shelf at 2.5 kHz, 5 kHz, 10 kHz, 15 kHz, 20 kHz, and 40 kHz. The frequencies below the shelf peaks are also affected due to the transitional slope.

#### **GAIN**

Gain control for the AIR BAND (+15 dB max gain)

#### IN

Engages and disengages the AIR BAND

#### CH1/CH2

Engages and disengages the channel as a true bypass.

#### IN

Green LED indicates when the channel is engaged or bypassed.

#### **Umlaut**

Orange LEDs indicate when the EQ4M is powered on. Controlled with the power switch on the back of the unit.

# **Input and Output Connections**

Input and Output connections are 3-pin XLR balanced connectors

#### **XLR Pinout**

1 = G, 2 = +, 3 = -





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### **Specifications**

| Specification                 | Value                     | Specification                  | Value                                       |
|-------------------------------|---------------------------|--------------------------------|---|
| Frequency Response            | -2dB points, 10Hz & 75kHz | Headroom                       | +29 dBu @ 10 K Ohms<br>+28.5 dBu @ 600 Ohms |
| Nominal Input Impedance (XLR) | 48 K Ohms, balanced       | Nominal Output Impedance (XLR) | 50 Ohms, balanced                           |

<sup>\*</sup>Specifications subject to change without notice.

## **Product Warranty**

Maag Audio expressly warrants its products for a period of one (1) year from the date of purchase. Products will be free of manufacturing defects. Within the warranty period, a product will be tested, repaired or replaced at the sole discretion of Maag Audio, free of charge. All warranty service will be conducted through authorized Maag Audio dealers only. The end user is required to provide proof of purchase (receipt or invoice) of the product. This warranty is offered solely to the original purchaser of the product from an authorized Maag Audio dealer and is not transferable. This warranty does not include the shipping charges to and from the authorized Maag Audio dealer from whom the product was purchased. Maag Audio will pay for shipping costs between the dealer and Maag Audio. All warranty service requires a Maag Audio issued RMA number. Please conduct warranty service communication with an authorized Maag Audio dealer.

### **Warranty Exclusions**

The foregoing express warranty is made in lieu of all other product warranties, expressed and implied, including merchantability and fitness for a particular purpose which are specifically disclaimed. The express warranty will not apply to defects or damage caused by post purchase shipping and transportation, storage, careless handling, nor damage caused by misuse, hot swapping, accidents, neglect, alterations, operator error, or failure to properly maintain products.