

# MQ112

ENVIRONMENTAL EQUALIZER

OWNER'S MANUAL



# MtIntosh

# Thank You from all of us at McIntosh

You have invested in a precision instrument that will provide you with many years of enjoyment. Please take a few moments to familiarize yourself with the features and instructions to get the maximum performance from your equipment. If you need further technical assistance, please contact your dealer who may be more familiar with your particular setup including other brands. You can also contact McIntosh with additional questions or in the unlikely event of needing service.

# McIntosh Laboratory, Inc.

2 Chambers Street Binghamton, New York 13903

**Technical Assistance** (607) 723-3512

Fax (607) 724-0549

**Customer Service** (607) 723-3515

Fax (607) 723-1917
mail support@mcintoshlabs.com

Email support@mcintoshlabs.com
Website www.mcintoshlabs.com

#### **Table of Contents**

Thank You from all of us at McIntosh	2
Please Take A Moment	2
Introduction	2
General Information	2
Safety First	2
Installation	3
Connector Information	3
Performance Features	3
Front Panel Displays and Switches	4
Equalizer Controls	5
Rear Panel Connections and Switches	6
Connection Diagram Option 1	7
Connection Diagram Option 2	
Dimensions	9
Audio Specifications	0
General Specifications	0
Packing Instructions	1
Part List	1

#### **General Information**

- 1. For additional connection information, refer to the owner's manual(s) for any component(s) connected to the MQ112.
- 2. The Main AC Power going to the MQ112 and any other McIntosh component(s) should not be applied until all the system components are connected together. Failure to do so could result in malfunctioning of some or all of the system's normal operations.
- 3. When the MQ112 is in its remote standby power off mode, a small section of the circuitry is actively waiting to receive a remote control command via the unit's power control in jack.
- 4. For additional information on the MQ112 and other McIntosh products please visit the McIntosh website at www.mcintoshlabs.com.

# Please Take A Moment

For future reference, you can write down your serial number and purchase information here. We can identify your purchase from this information if the occasion should arise:

Serial Number: \_\_\_\_\_\_
Purchase Date: \_\_\_\_\_

#### Introduction

The MQ112 Environmental Equalizer is an elegant instrument for adding customized sound reproduction to your audio system. The MQ112 uses the latest in technology to quickly restore proper musical balance in a minimum amount of time.

## **Safety First**

Please read the safety instructions included in a separate document called **Important Additional Operation Information Guide**.

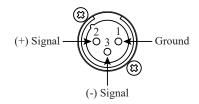
**Dealer Name:** 

#### Installation

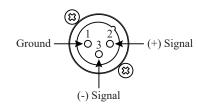
The MQ112 should be installed upright on its four feet. Adequate ventilation is important and will aid in a long trouble-free life of the MQ112. You must ensure proper airflow by allowing at least 3 inches (7.6cm) above the unit and 3 inches (7.6cm) for the front, rear and sides. **Do not remove the feet** to ensure adequate airflow beneath the MQ112. There must be openings for cool air to enter (below) and warm air to escape (above) the MQ112. To aid in choosing the best location to install the MQ112, refer to **Dimensions** on page 9.

#### **Connector Information**

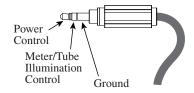
#### **XLR Input Connectors**



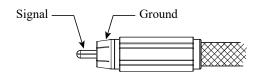
# **XLR Output Connectors**



#### **Power Control Connectors**



#### **RCA Connectors**



#### **Performance Features**

# • User Preferred Equalization

The MQ112 uses the latest in technology to restore musical balance to audio systems located in rooms with less than ideal acoustics.

# Multiple Outputs

The MQ112 has two sets of unbalanced and balanced outputs. One set can be configured for stereo or mono to provide convenient connection of a powered subwoofer.

#### • Power Control

The power control input connection provides convenient turn on or off signals to or from the MQ112 when connected to a McIntosh system.

#### • External EQ Control

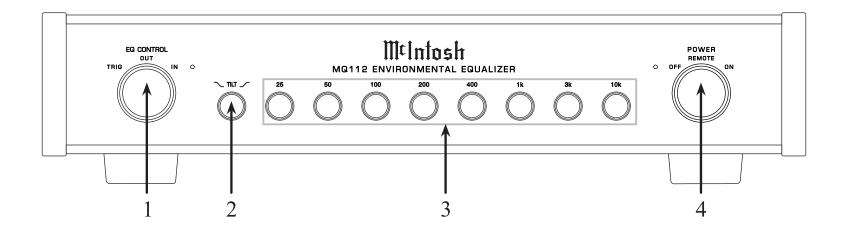
The EQ circuit in the MQ112 can be switched in or out using the front panel knob or by using the rear panel EQ control trigger. The EQ control trigger can be connected to a McIntosh preamplifier with programmable triggers so that the EQ circuit switches in or out depending on the input or amplifier used.

# • Solid State Front Panel Illumination

The even illumination of the glass front panel features long life Light Emitting Diodes (LEDs). This provides even front panel illumination and is designed to ensure the pristine beauty of the MQ112 will be retained for many years.



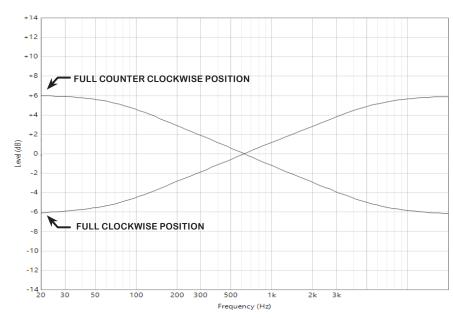
# Front Panel Displays and Switches



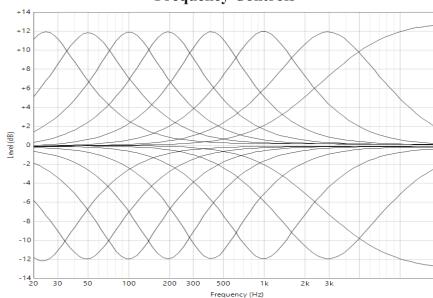
- 1. EQ CONTROL Knob allows the user to select whether or not the equalizer circuit is engaged. In the OUT mode the front panel adjustment knobs are bypassed and the audio signal is unaltered. In the IN mode the audio signal can be adjusted via the front panel TILT and frequency knobs. In the TRIG mode the EQ can be triggered IN or OUT using the rear panel EQ CONTROL trigger.
- 2. TILT Knob works around a centered frequency point or tilt frequency. When turned counterclockwise, the tilt control works by boosting all the signals below the tilt frequency (bass signals) while attenuating all signals above the tilt frequency (treble signals). When turned clockwise, the tilt control boosts all frequencies above the tilt frequency and attenuates all frequencies below the tilt frequency. Refer to Tilt Control on page 5.
- **3. Eight Band Equalizer Knobs** allow the user to boost or cut any individual frequency or any combination of frequencies. Refer to **Frequency Controls** on page 5.
- **4. POWER Knob** turns the unit ON / OFF or places the unit in REMOTE mode when set up in conjunction with the unit's power control IN port to receive ON or OFF commands from other audio units.

# **Equalizer Controls**

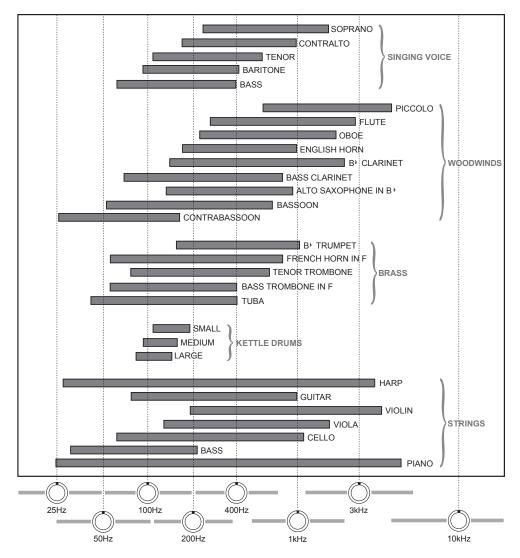




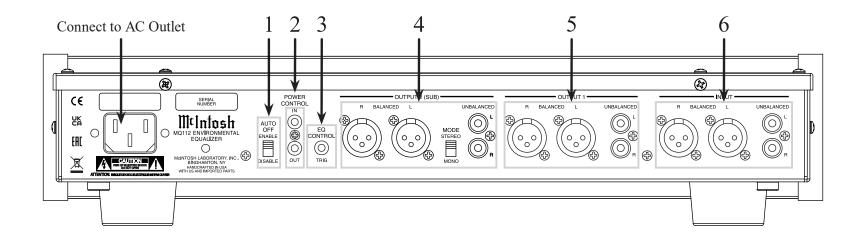
**Frequency Controls** 



The MQ112 has eight frequency controls which will raise or lower by 12 dB, the amplitude of the band of frequencies centered at the frequency marked above the controls. The center frequencies of these controls are at 25Hz, 50Hz, 100Hz, 200Hz, 400Hz, 1kHz, 3kHz and 10kHz. Both left and right channels are affected.



#### **Rear Panel Connections and Switches**



1. AUTO OFF when set to ENABLE, the unit will power itself down if no audio signal is present at the input for at least 30 minutes. When set to DISABLE, the unit will remain on until manually turned off by the user.

When the front panel POWER knob is set to REMOTE, the AUTO OFF function is automatically disabled.

#### 2. POWER CONTROL

IN receives a turn on/off command from another McIntosh component when the front panel POWER knob is set to REMOTE.
OUT sends a turn on/off command to another McIntosh component.

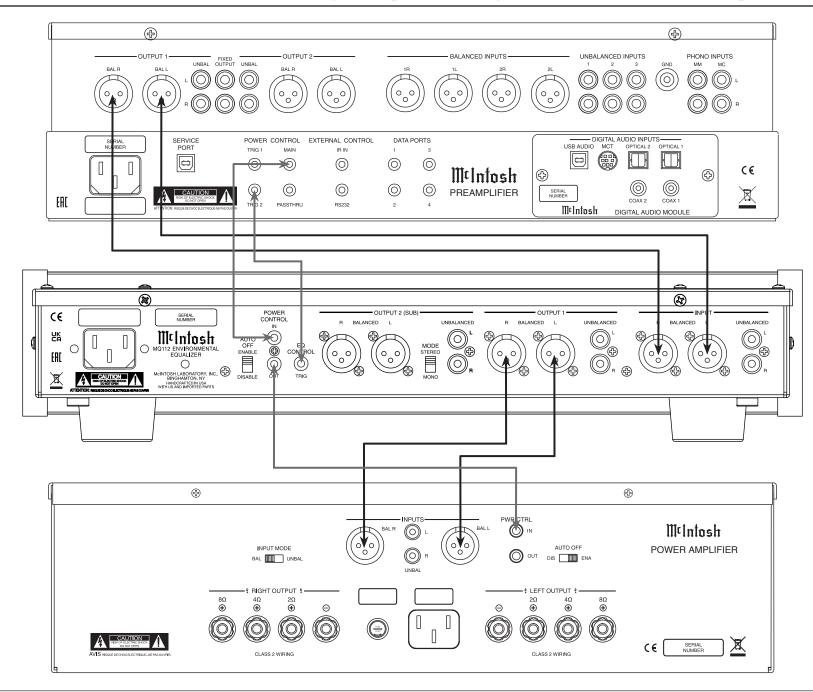
**3. EQ CONTROL** receives an IN / OUT command from another McIntosh component when the front panel EQ CONTROL knob is set to TRIG.

#### **4. OUTPUT 2**

BALANCED and UNBALANCED connections out to a power amplifier or processor loop input. MODE selects between left and right STEREO and MONO audio modes for OUTPUT 2.

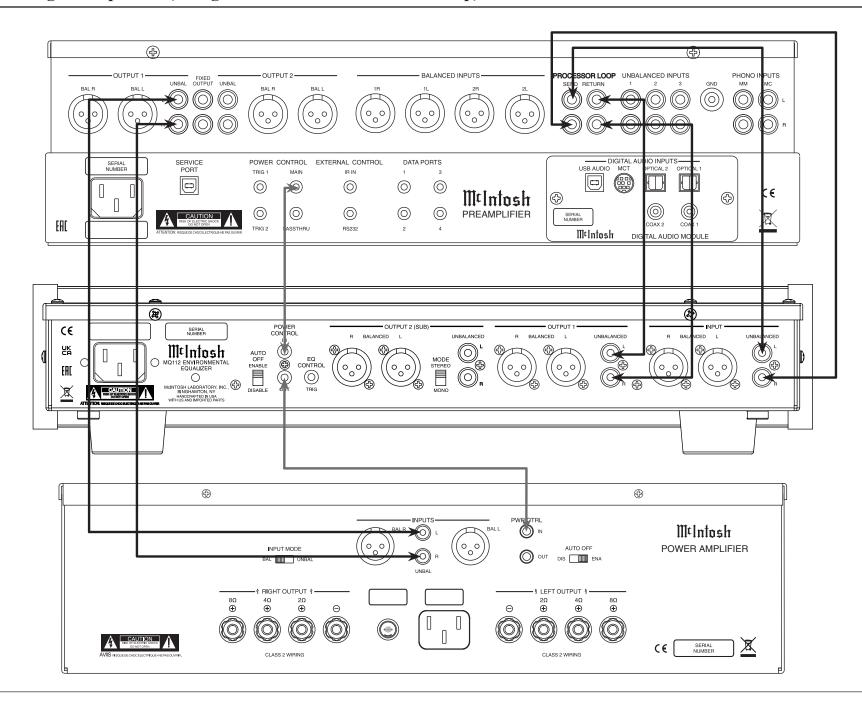
- **5. OUTPUT 1** BALANCED and UNBALANCED connections out to a power amplifier or processor loop input.
- **6. INPUT** for BALANCED and UNBALANCED connections from audio sources.

# Connection Diagram Option 1 (Using the MQ112 Between a Preamp and Power Amp)

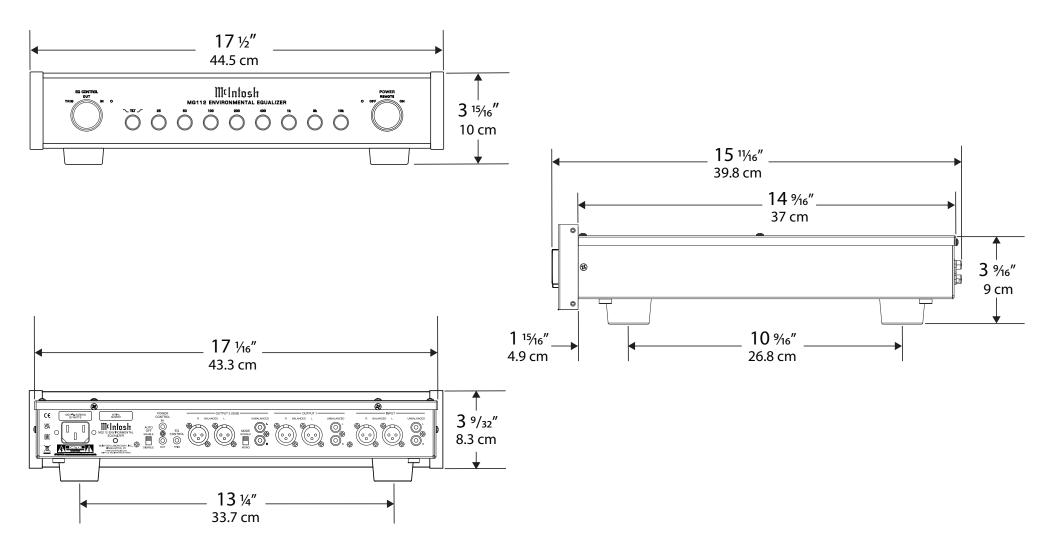




# Connection Diagram Option 2 (Using the MQ112 in a Processor Loop)



The following dimensions can assist in determining the best location for your MQ112.



# Milntosh

# **Audio Specifications**

# **Rated Output Voltage**

2.5V Unbalanced5V Balanced

# **Maximum Output Voltage**

10V Unbalanced 20V Balanced

# **Maximum Input Voltage**

10V Unbalanced 20V Balanced

# **Voltage Gain (all controls flat)**

Unbalanced IN to OUT 0dB Balanced IN to OUT 0dB

#### Frequency Response (all controls flat)

+0, -0.5dB from 20Hz to 20,000Hz +0, -1dB from 10Hz to 100,000Hz

# Signal to Noise Ratio (A-Weighted)

115dB (below rated output)

#### **Total Harmonic Distortion**

0.005% from 20Hz to 20,000Hz

# **Input Impedance**

10k ohms Unbalanced 20k ohms Balanced

# **Output Impedance**

500 ohms Unbalanced 1000 ohms Balanced

#### **Equalizer Controls**

 $\pm 12 dB$  at 25Hz, 50Hz, 100Hz, 200Hz, 400Hz, 1kHz, 3kHz, and 10kHz

# **Tilt Control**

±6dB at 20Hz and 20kHz 650Hz Tilt Axis

# **General Specifications**

#### **Power Control Input**

5-15VDC, less than 1mA

# **Power Control Output**

12VDC, 25mA

#### **Power Requirements**

Field AC Voltage conversion of the MQ112 is not possible. The MQ112 is factory configured for one of the following AC Voltages:

100 Volts, 50/60Hz at 30 watts 110 Volts, 50/60Hz at 30 watts 120 Volts, 50/60Hz at 30 watts 220 Volts, 50/60Hz at 30 watts

230 Volts, 50/60Hz at 30 watts 240 Volts, 50/60Hz at 30 watts

Standby Power, less than 0.5 watts

#### **Overall Dimensions**

Width is 17 ½ inches (44.5cm) Height is 3 ½ inches (10cm) Depth is 15 ¼ inches (39.8cm)

# Weight

15 pounds (6.8 kg) net 29.5 pounds (13.4 kg) in shipping carton

# **Shipping Carton Dimensions**

Width is 26 ½ inches (67.3cm) Height is 11 ¾ inches (29.8cm) Depth is 24 ¼ inches (61.6cm)

# **Packing Instructions**

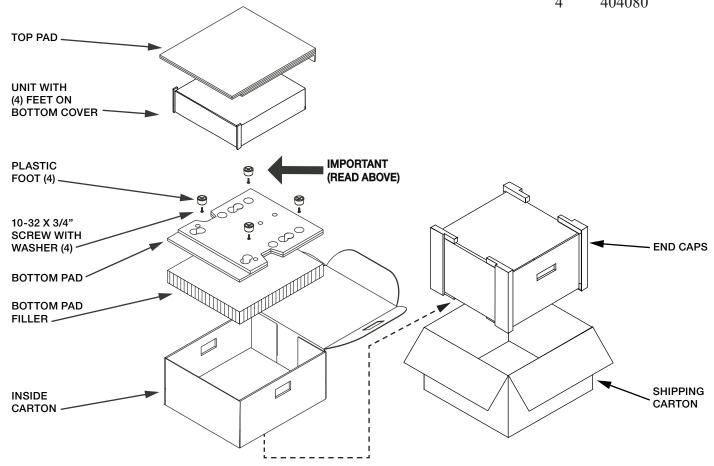
In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below.

It is very important that the four plastic feet are attached to the bottom of the equipment. This will ensure the proper equipment location on the bottom pad. Failure to do this will result in shipping damage.

Use the original shipping carton and interior parts only if they are all in good serviceable condition. If a shipping carton or any of the interior part(s) are needed, please call or write Customer Service Department of McIntosh Laboratory. Refer to page 2. Please see the Part List for the correct part numbers.

#### **Part List**

<b>Oty</b>	Part Number	<b>Description</b>
1	033838	Shipping Carton
2	034669	End Caps
1	033836	Inside Carton
1	033725	Top Pad
1	034576	Bottom Pad
1	034547	Bottom Pad Filler
4	017937	Plastic Feet
4	400159	#10-32 x 3/4" Screws
4	404080	#10 Flat Washers



# MtIntosh

McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, NY 13903 www.mcintoshlabs.com

The continuous improvement of its products is the policy of McIntosh Laboratory, Inc. who reserve the right to improve design without notice.

Printed in the U.S.A.

© 2023 McIntosh Laboratory, Inc.

McIntosh Part No. 24120000