McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903-2699 Phone: 607-723-3512 www.mcintoshlabs.com

MQ112

ENVIRONMENTAL EQUALIZER

OWNER'S MANUAL

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

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

Table of Contents

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: _____

Dealer Name: _____

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

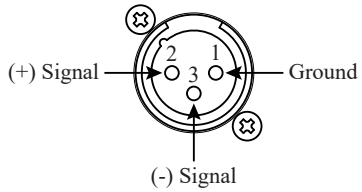
Please read the safety instructions included in a separate document called **Important Additional Operation Information Guide**.

Installation

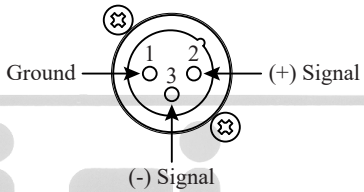
The MQ112 should be installed upright on its four feet. Adequate ventilation is important and will aid in a long trouble-free life of the MQ112. You must ensure proper airflow by allowing at least 3 inches (7.6cm) above the unit and 3 inches (7.6cm) for the front, rear and sides. **Do not remove the 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

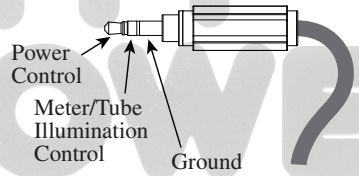
XLR Input Connectors



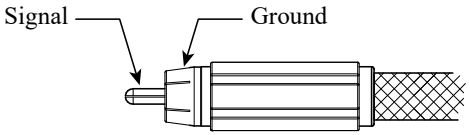
XLR Output Connectors



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.

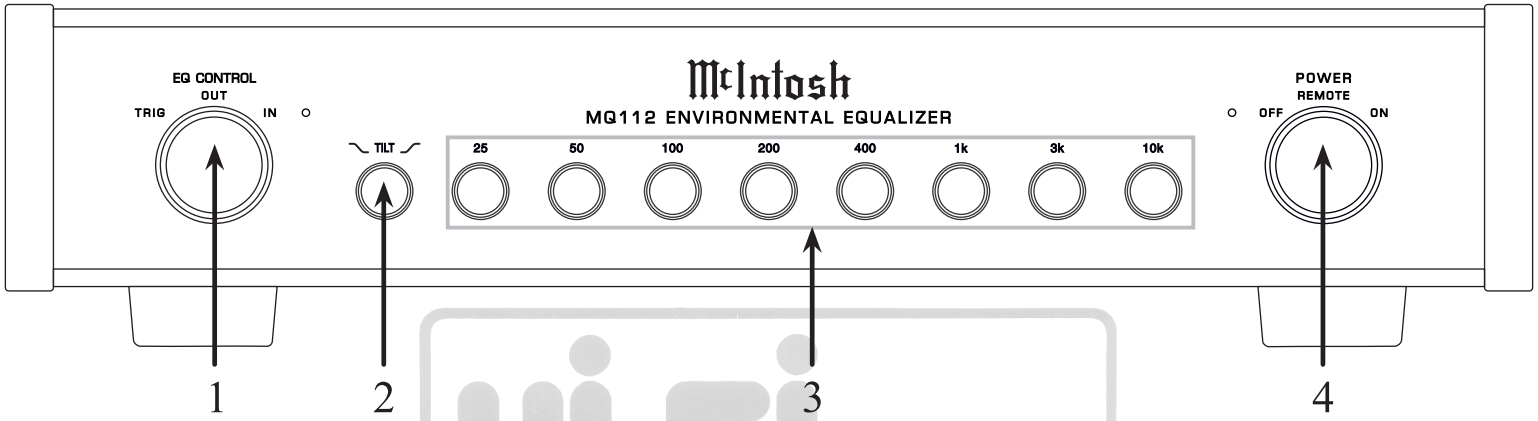
- **External EQ Control**

  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**

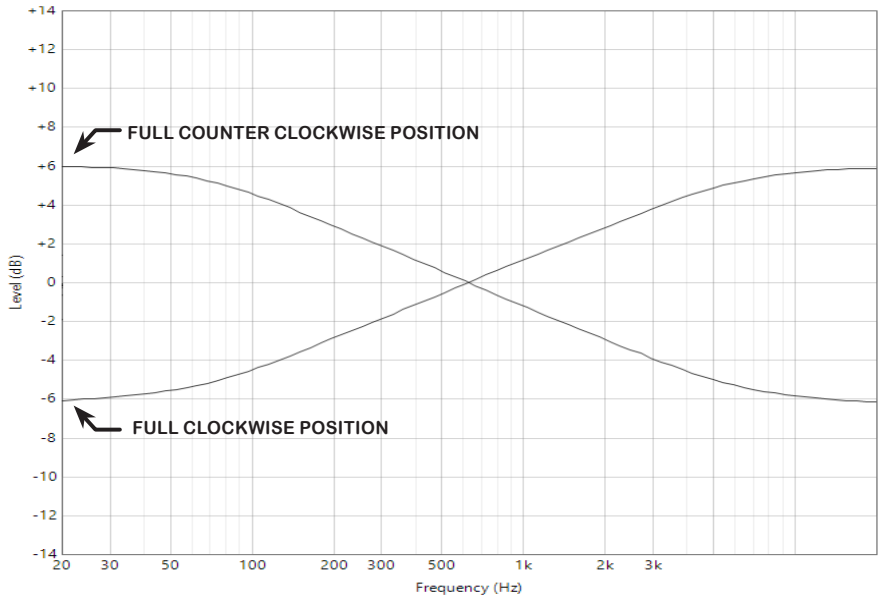
  The even illumination of the glass front panel features long life Light Emitting Diodes (LEDs). This provides even front panel illumination and is designed to ensure the pristine beauty of the MQ112 will be retained for many years.

Front Panel Displays and Switches

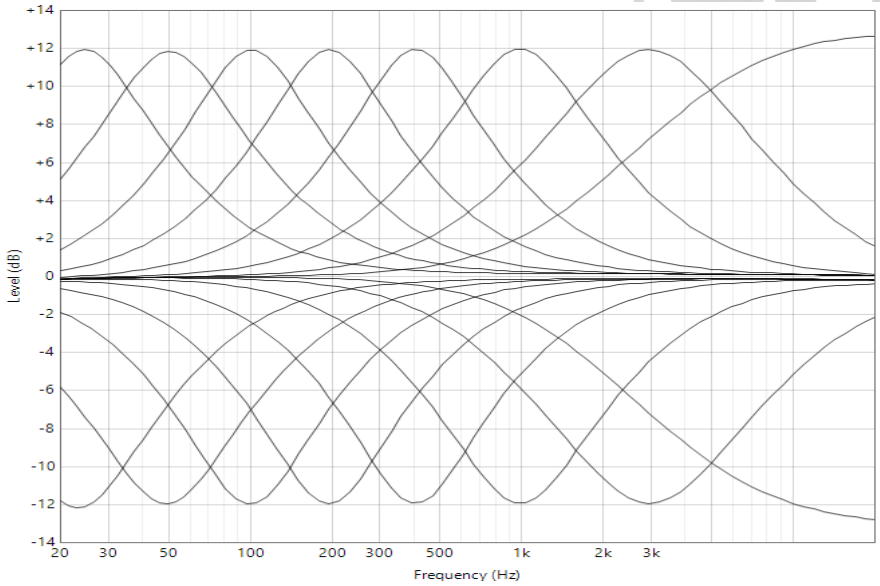


1. **EQ CONTROL Knob** allows the user to select whether or not the equalizer circuit is engaged. In the OUT mode the front panel adjustment knobs are bypassed and the audio signal is unaltered. In the IN mode the audio signal can be adjusted via the front panel TILT and frequency knobs. In the TRIG 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 counter-clockwise, 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.

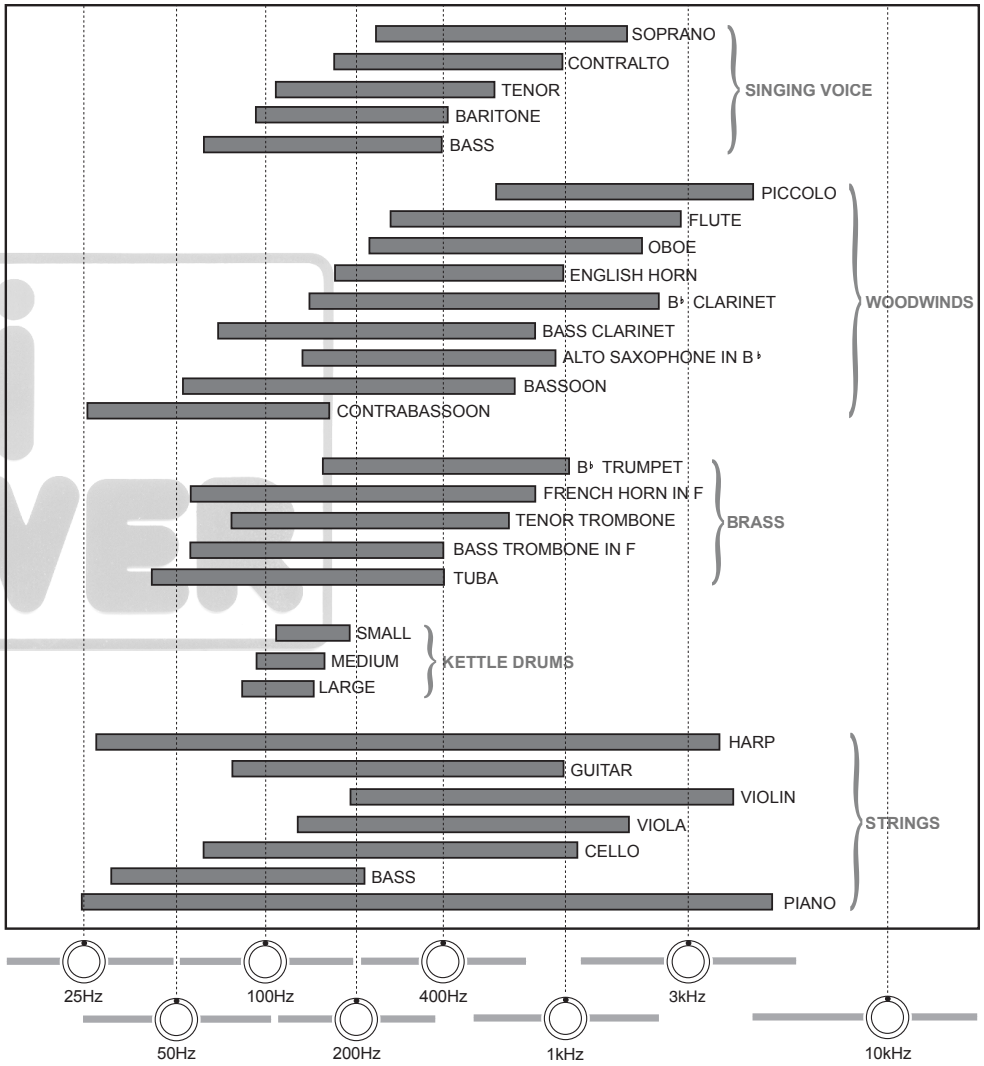
Tilt Control



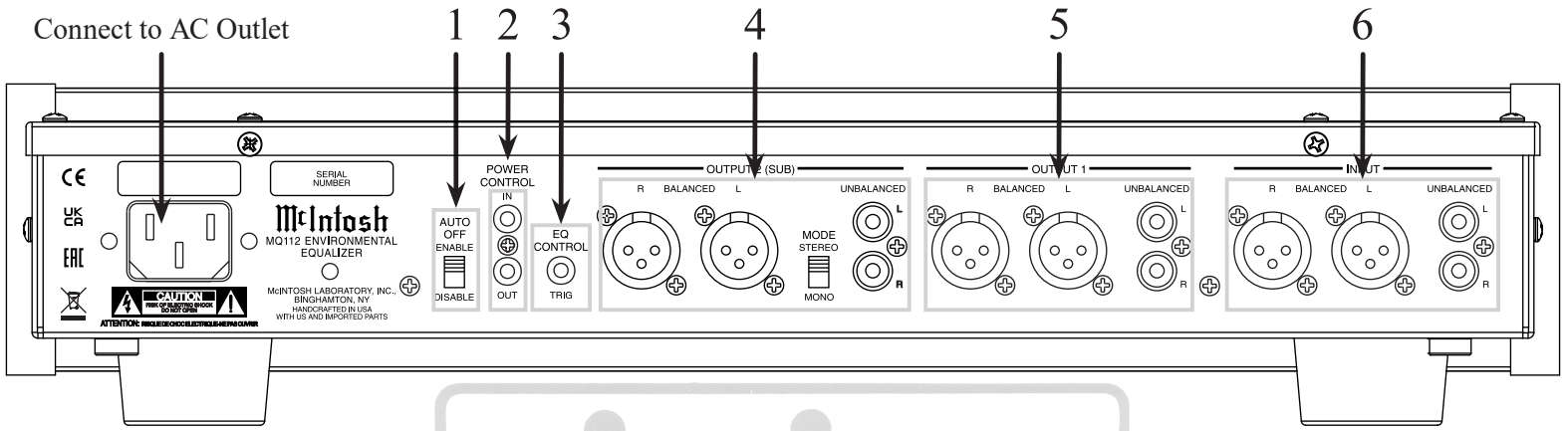
Frequency Controls



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.

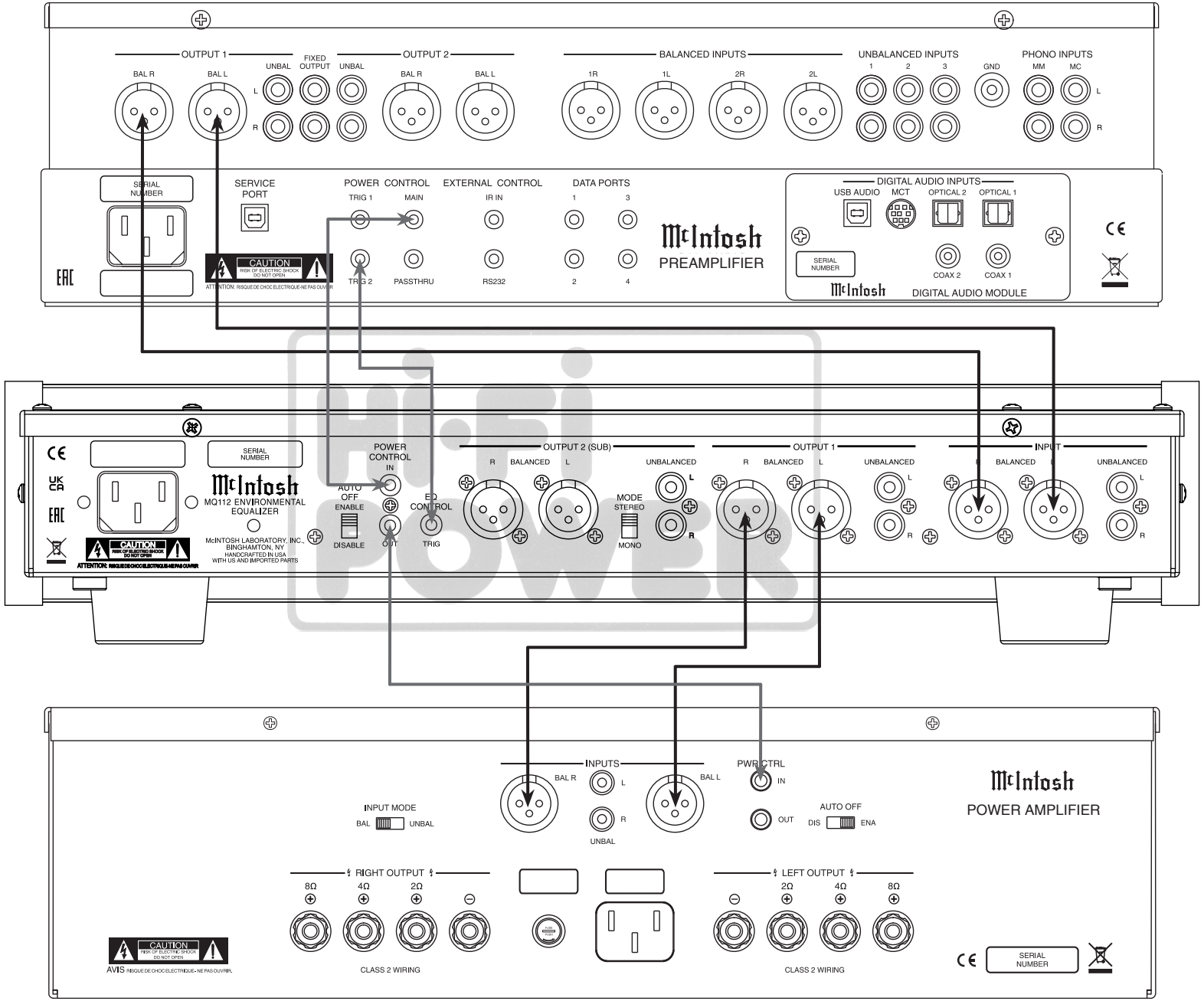


Rear Panel Connections and Switches

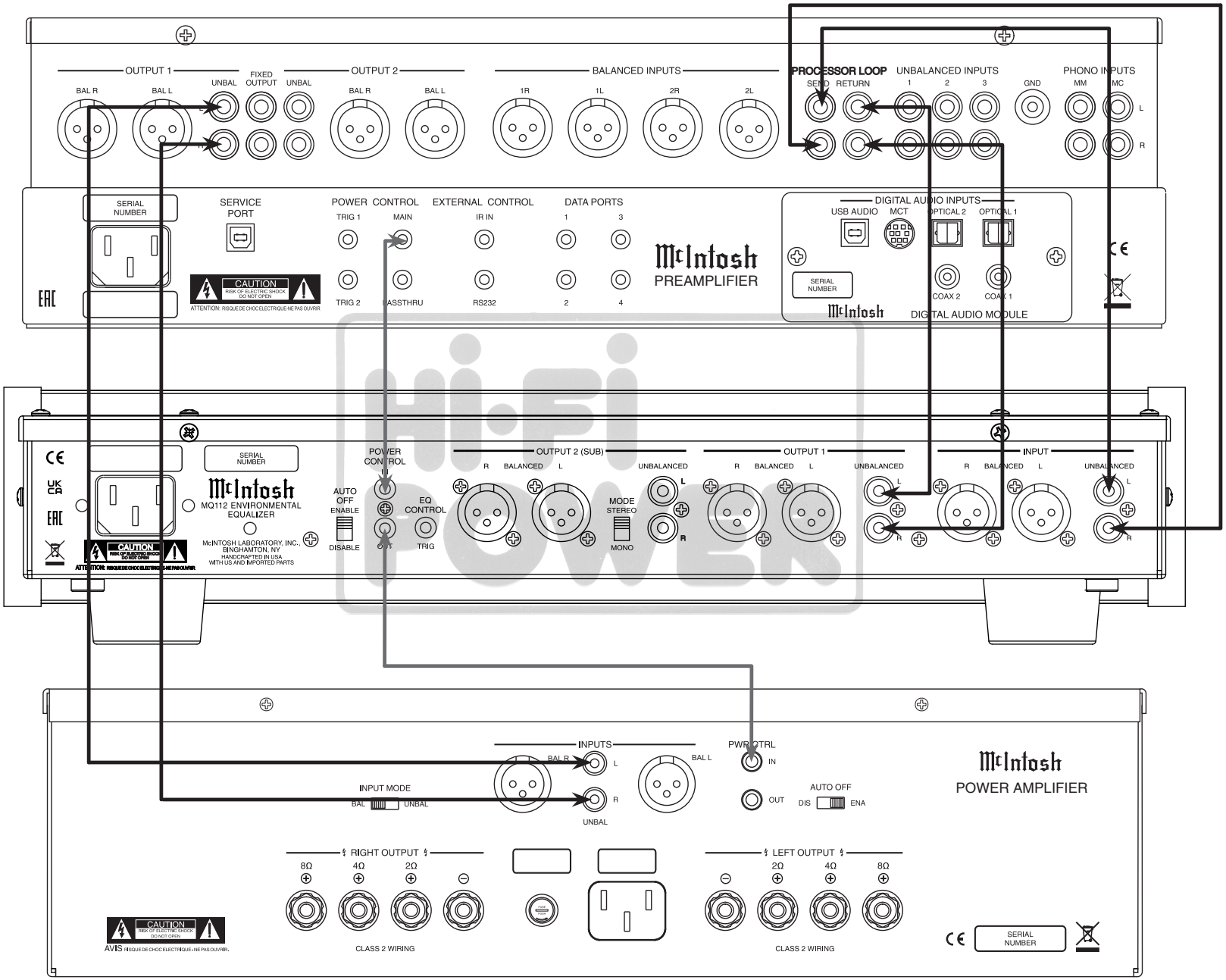


1. **AUTO OFF** when set to ENABLE, the unit will power itself down if no audio signal is present at the input for at least 30 minutes. When set to DISABLE, the unit will remain on until manually turned off by the user.
   When the front panel POWER knob is set to REMOTE, the AUTO OFF function is automatically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

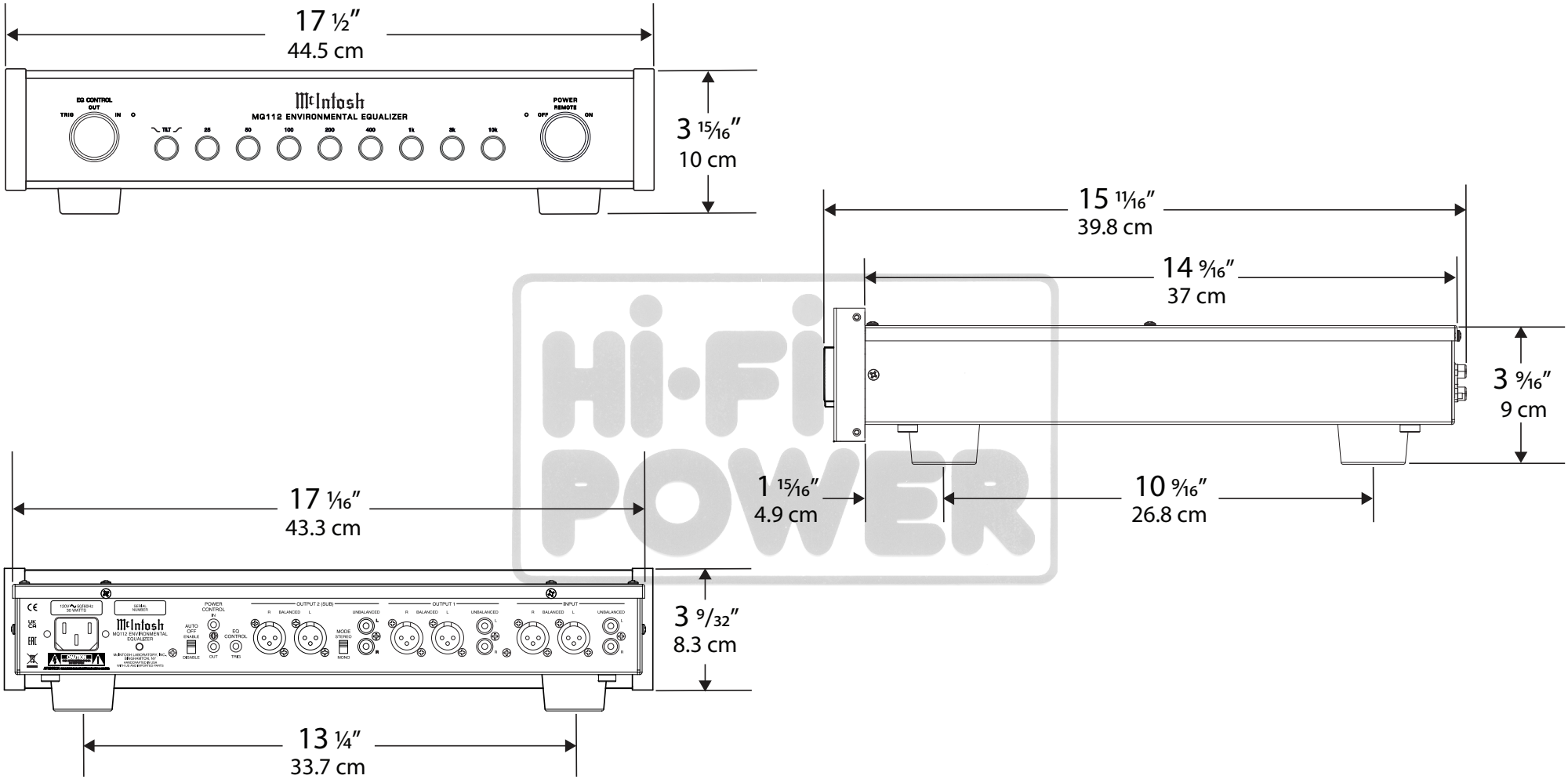
Connection Diagram Option 1 (Using the MQ112 Between a Preamp and Power Amp)



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



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



Audio Specifications

Rated Output Voltage
2.5V Unbalanced
5V 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
±12dB 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 15⁄16 inches (10cm)
Depth is 15 11⁄16 inches (39.8cm)

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

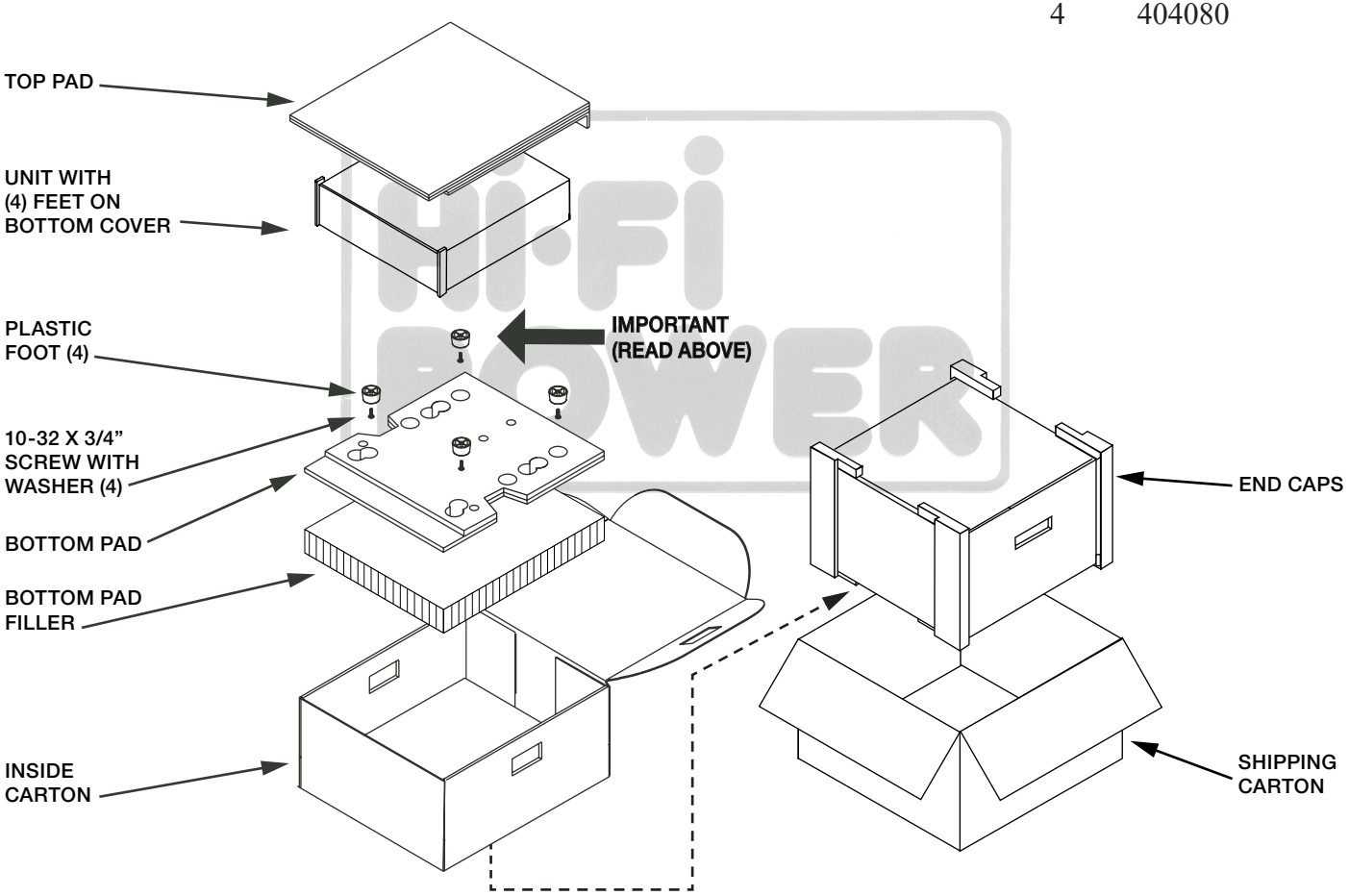
Shipping Carton Dimensions
Width is 26 ½ inches (67.3cm)
Height is 11 ¾ inches (29.8cm)
Depth is 24 ¼ inches (61.6cm)

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

Qty	Part Number	Description
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 ¾" Screws
4	404080	#10 Flat Washers

McIntosh

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.

McIntosh Part No. 24120000