



# Lounge Audio

[www.loungeaudio.com](http://www.loungeaudio.com)

Since 2011

## LCR **PREAMP** MARK III

A Moving Magnet Phonograph Preamp

### **INSTRUCTION MANUAL**

Thank you for purchasing the Lounge Audio LCR MKIII. This installation guide is designed to help the user connect and understand how to use Lounge Audio's pre amplifier. We reserve the right to make improvements or modifications as parts' manufacturers allow us or force us. For these reasons, the design and specifications are subject to change without prior notice while keeping very high quality standards for all products we manufacture.

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- Introduction
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# Introduction

The LCR MKIII is a high quality, dual-mono, pure analog phonograph preamp. This topology allows a unique application of smaller inductors that yields an ergonomic approach to LCR (L=Inductor, C=Capacitor, R=Resistor) phonograph reproduction. Vinyl minded audiophiles are growing in numbers with collectable, vintage releases often bettering the best digital formats and new vinyl issues being added to catalogs with increasing frequency. It is known by many in the audio community that LCR RIAA correction is a preferred way of capturing the experience and atmosphere of the original performance.

The passive LCR network is a topology that brings out the detail of small instrument inflections yet keeps a musical cohesiveness in context of the performance and room. Advanced hi-speed op-amps allow for transformerless direct drive of the LCR network. Current sources are employed to bias each amplifier stage into class A operation.

The LT1358 op-amp is still made in a through-hole package allowing this preamp to be made with only a few strategically placed surface mount parts. One set of dedicated inputs allows for the simplest path to the op-amp input. There are no switches between your cartridge and the amplifier. Discrete series/shunt power supply regulators are used with one dedicated to each amplifier IC power supply pin. Also for ease of current delivery the pass element of the series regulator is vastly over-rated in current capacity. No power supply ground shares audio grounds or left-right channels. Critical components in the audio section are hand matched.

All assembly is done in the USA.

## Box content and warranty

The box contains:

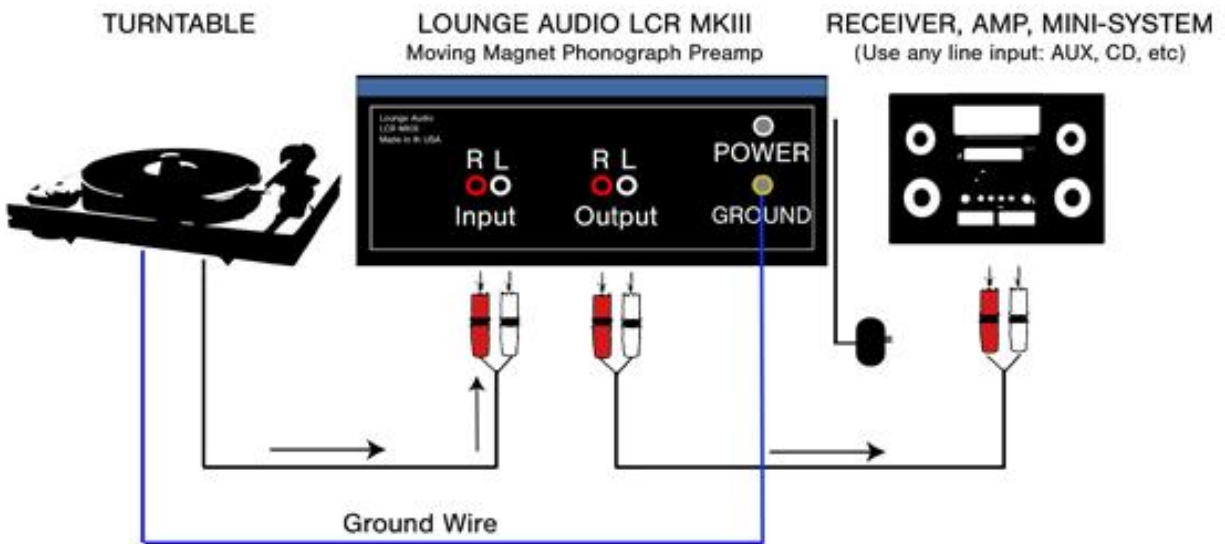
1. LCR MKIII
2. Wall wart (power adaptor)

We offer a 1 year warranty for the Lounge Audio LCR MKIII on parts and labor. We offer returns on non-defective units within 15 days of delivery. If in original condition, with all accessories intact and original receipt we will refund full purchase price minus 10% restocking fee. On non-defective returns, we do not refund shipping costs. Units damaged from use or mishandling will be pro-rated.

## Rear Panel Connections

Instructions below assume you have a turntable system set up already functioning and are adding the LCR MKIII to it.

The LCR MKIII will be inserted between your turntable and your receiver. Disconnect your turntable phono cables and ground wire from your receiver. Connect them to the LCR MKIII input jacks and ground terminal. Then connect the LCR MKIII outputs to the receiver inputs.



## Technical Specifications

**RIAA Equalization type:** Passive LCR Inductor based filter network

**Gain:** 42.5dB

**Input impedance:** 50k Ohm

**Output impedance:** 20 Ohm

**Input capacitance:** 120pf

**Full scale output level before visible clipping:**

@1KHz 9.6V rms with input of 69mV rms

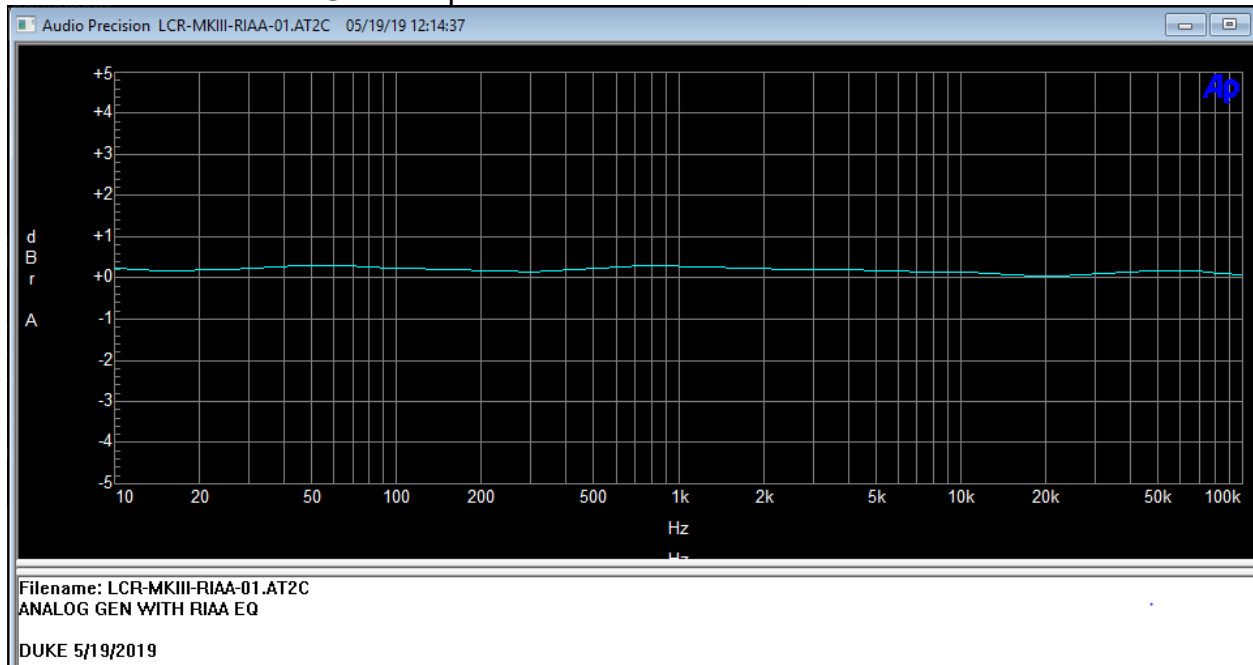
@100Hz 9V rms with input of 16mV rms

@10KHz 3.083V rms with input of 105mV rms

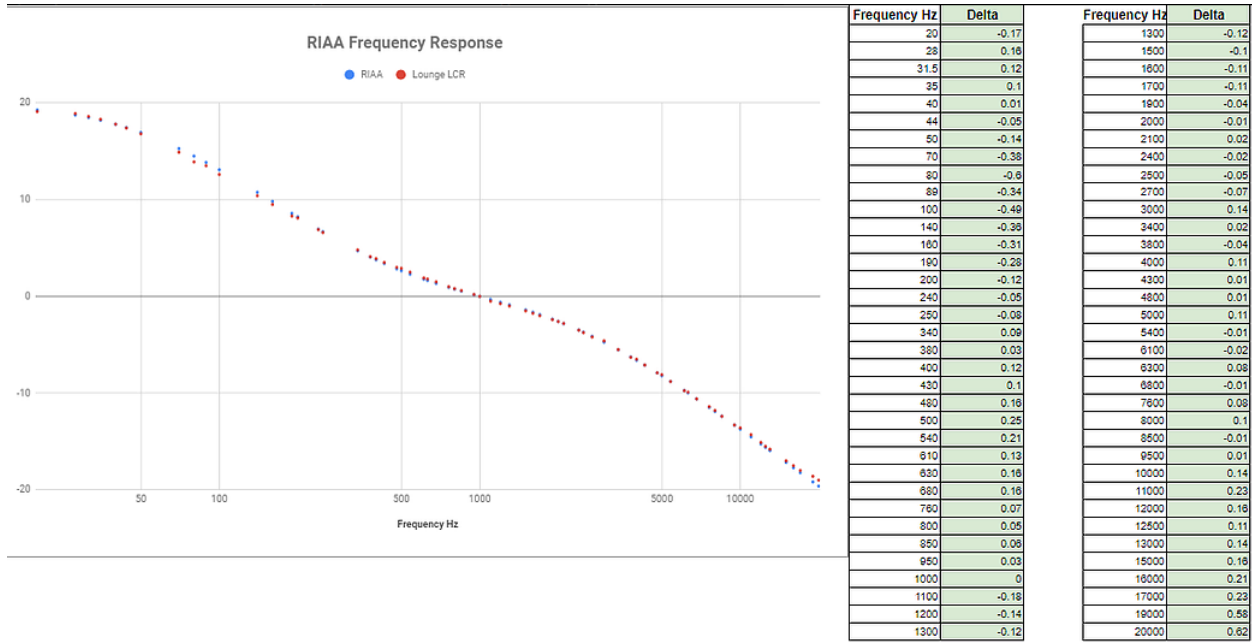
**RIAA response:**

Third party measurement from Sound Logic LA Service - Duke Aguiar using Audio Precision equipment

+/- 0.5 dB 10-100KHz @1mV input - inverse corrected



Lounge Audio analog raw measurement using:  
 LEADER LAG-120B Audio Generator  
 LEADER LMV-181A AC Millivoltmeter  
 BK Precision DYNASCAN 1801 Frequency Counter  
 @20 Hz, 0 to -1 db referenced to RIAA compliance  
 Trim @20KHz to +0.62 db over RIAA compliance



**Signal-to-noise ratio:** -74db with 1/f noise dominating (ref. to 1Vrms output)

**Distortion:** 0.15% THD @ 0.774Vrms 1kHz output. Composed mostly of 2nd and 4th harmonics.

**AC Adapter:** 120VAC 60Hz, 16VAC, 1000ma Wall Cube type.

**Amplification Type:** Class A biased Op-amp. Input to output non-inverting

**I/O's:** RCA jack

**Dimensions:** Height 3", Width 7 1/2", Length 5 9/16"

**Weight:** 3lbs 6 ounces net. 6lbs for shipping

**Features:**

- Hi-speed, video bandwidth op-amps for accurate transient response
- Separate discrete voltage regulators for each channel to reduce L-R channel interaction

- Shunt regulation on DC power lines
- Hand matched high/low frequency inductors and capacitors for left /right channel accuracy
- Film capacitors used in audio path
- Hand crafted in the USA

## **Troubleshooting**

There is no power switch. We suggest connecting it to a switchable power strip with all other devices, and switch the power strip on/off. You can leave the unit on 24/7 with no adverse effect.

Hum can occur due to a variety of reasons, most commonly:

- a) Quality of cables
- b) Grounding: check to see that the turntable is grounded to the LCRMKIII as shown on the Rear connections diagram.
- c) Positioning of the unit: power amps or integrated amps should be far enough away from the turntable tonearm or the LCRMKIII

We are committed to deliver excellent service. If you have any questions, please email us at [loungeaudio@ca.rr.com](mailto:loungeaudio@ca.rr.com)