

MU-2 Tube Phono Preamplifier

User manual



Our mission is to make surrounding reality inspiring for eyes and for ears. We follow the idea of Open Eyes Economy where customer satisfied of high quality product and service is more important than pure financial profit for manufacturer. Our goal is to offer novel, luxury things – things with a bit of creator’s soul. Using those special things shall be a pleasure for its owner.

So, relax and spend a while with us...

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MU-2 Tube Phono Preamp

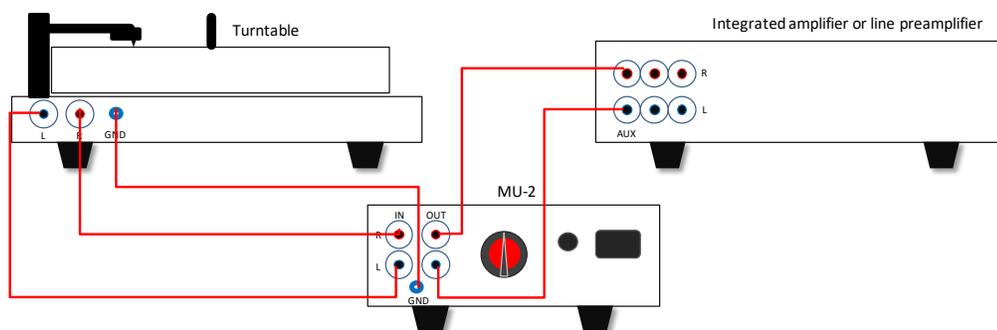
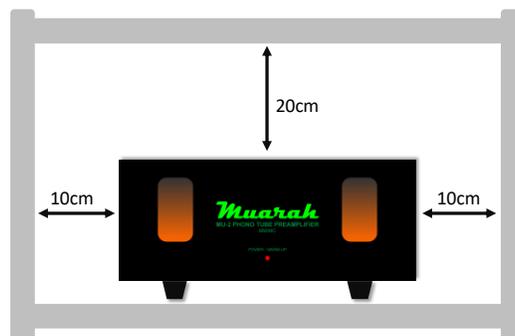
High end MU-2 tube phono is designed to preamplify subtle signal from turntable cartridge and make necessary frequency correction (low frequency signals are recorded on vinyl records with smaller amplitude than high frequencies). It's a must-have Hi-Fi component for every vinyl lover.

MU-2 features

- MM (Moving Magnet) and MC (Moving Coil) cartridges support
- Input impedance matching in range 50Ω-1kΩ for MC carts.
- „On the fly” input impedance change during music listening with automatic mute function
- Warm-up function: signal is attached to outputs with delay mandatory to stabilize tubes operating points.
- Immediate outputs detach when device is switched off or in case of AC mains is down.
- Physical separation of left and right channel path to decrease stereo channels cross talk
- High quality 1% tolerance resistors and capacitors in audio signal path for high stability and accuracy of RIAA frequency correction curve.
- Microprocessor controlled circuit
- Backlight regulation

Connection

- 1) Carefully take MU-2 out of the shipping carton and plastic bag. Use soft gloves if possible to avoid fingerprints on stainless steel cover. Do not hold glass front panel by hand.
- 2) Place preamplifier in proper distance (minimum 10cm) from other electrical equipment like amplifier to avoid electromagnetic interferences. Take care about proper ventilation because preamplifier generates heat.
- 3) Connect RCA cables from turntable to RCA inputs ① of MU-2. If turntable tonearm is equipped with grounding cord connect it to GND socket ⑥.
- 4) MU-2 outputs ⑦ connect to high level inputs of integrated amplifier or line preamplifier (inputs marked AUX, CD, DVD etc.). **WARNING!** Do not connect MU-2 to input marked PHONO unless it's Muarah MU-4 integrated amplifier.
- 5) Connect AC main power. **WARNING!** Main AC Power going to MU-2 should not be applied until all the system components are connected together. AC mains power cord has to be connected to MU-2 first and then to AC outlet.



Front and rear panel



① ② ③ ④



⑤ ⑥ ⑦ ⑧

- ① - POWER ON/ WARM-UP LED
- ② - MU-2 main power ON/OFF switch
- ③ - Backlight intensity change push button (located 3cm behind power switch)
- ④ - Tube windows
- ⑤ - Phono Input
- ⑥ - Ground connector
- ⑦ - Line output
- ⑧ - MM/MC cartridge switch, Input impedance switch for MC cartridge

MU-2 Operation

- 1) Before MU-2 power on set the rear rotary knob ⑧ in proper position adequate to used phono cartridge. If MC cart is used set the proper input impedance level according to phono cart supplier recommendation.
- 2) After power on by switch ② preamplifier starts warm up phase indicated by red POWER/WARM-UP diode ① blinking.
- 3) Warm up phase takes 40 seconds. After that tubes ④ operating points are stable and audio signal is attached to RCA outputs ⑦. Now listener can enjoy music recorded on vinyl records.
- 4) It's highly recommended to experiment with input impedance settings for MC carts during music listening. Impedance matching influences high frequency registers (>15kHz) reproduction. Each time you change the rear knob ⑧ position audio signal is detached from RCA outputs ⑦ for 2 seconds to avoid loud pops unpleasant for ears and dangerous for power amplifier and speakers.
- 5) Tube backlight intensity can be changed by using tiny push buton ③. There are 4 levels possible:
 - Off. Tube backlight and green Muarah logo backlight are switched off
 - Level 1 – Tube backlight is minimal, Muarah logo backlight is on
 - Level 2 – Tube backlight is medium, Muarah logo backlight is on
 - Level 3 – Tube backlight is maximum, Muarah logo backlight is on

Tubes replacement

- 1) MU-2 tubes have to be replaced every 2000 hours of operation. Assuming listening one vinyl record per day tubes have to be replaced after 6 years so it's quite long time. High frequencies degradation in sound is clear notification that tubes have to be replaced.
- 2) Tube replacement should be carried out by professional service. Please contact your distributor or manufacturer directly.

Maintenance

Stainless steel MU-2 cover should be regularly dusted off. Gently wipe fingerprints from the surface by soft cotton cloth soaked with spirit. Front glass panel can be wiped using soft cotton cloth and glass cleaner.

Specification

- Frequency response +0,15dB/-3dB 10Hz-70kHz
- RIAA curve accuracy in band 20Hz-20kHz +/-0,25dB
- MC gain 56dB
- MM gain 43dB
- THD @ 0dBV output <0.05%
- IMD @ 0dBV output <0.03%
- RMS noise A-weighted (inputs shorted) >86dB MM / >80dB MC
- Crosstalk <-73dB
- Inputs/Outputs RCA unbalanced
- MM input impedance 47k Ω
- MC input impedance Switched: 50 Ω , 100 Ω , 200 Ω , 500 Ω , 1k Ω
- Tubes 2x6DJ8 (or ECC88, E88CC)
- Dimensions (width/length/height) 21cm/35cm/11cm
- Weight 4kg
- Power consumption <30VA

MU-2 supports most of MM and MC carts available on the market but due to limited gain we recommend to use MC carts with output level 0,3mV or higher. In case of doubts please consult it with your dealer or Muarah company directly.