

Congratulations on your purchase of the Motif MC10 line-stage preamplifier. You have acquired one of the finest pieces of music reproduction equipment available today. The result of more than fifteen years of research by conrad-johnson design into the application of solid-state devices to the reproduction of recorded music, the MC10 was designed to establish the reference standard among preamplifiers for reproducing the dynamics, tonalities, textures and ambience of a live musical performance. The design and materials have been carefully selected to yield years of unvarying excellence.

Please take a few minutes to read this manual so that you will better understand the features and capabilities of your MC10. **NOTE THAT THE MC10 LINE STAGE IS PHASE INVERTING.** See the section entitled "Getting the most from your MC10" for details on correct hookup in your system.

LIMITED WARRANTY FOR THE MOTIF MC10

1. conrad-johnson design, inc. warrants to the original purchaser that the MC10 will be free of defects in materials and workmanship for a period of three years from the date of original purchase.

2. conrad-johnson will repair defective units without charge for labor or parts (with the exception of the vacuum tubes) subject to the following conditions:

a) The unit must not have been altered or damaged through misuse, abuse, negligence, accident, or improper operation.

b) The purchaser must provide evidence of purchase at the time service is requested.

c) All repairs must be undertaken at the factory or other service center designated by conrad-johnson design, inc. Units submitted for warranty repairs must be shipped in the factory packing carton to conrad-johnson design or its designated service center, freight and insurance prepaid by the owner, and will be returned to the owner, freight and insurance prepaid by conrad-johnson design. Replacement cartons are available from the factory for a nominal charge.

d) Normal wear and maintenance are not covered by this warranty.

3. Where permitted by law, conrad-johnson design's liability shall be limited to that set forth in this warranty. No other warranty of any kind, expressed or implied, is made by conrad-johnson design, inc., and all implied warranties, including merchantability and fitness for a particular "purpose", which exceed the obligations and time limits set forth herein are hereby disclaimed. conrad-johnson design, inc. shall not be liable for incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.

4. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Questions about warranty service should be addressed to:

Service Department
conrad-johnson design, inc.
2733 Merrilee Drive
Fairfax, VA 22031

REGISTERING THE WARRANTY

Please return the enclosed card to the factory within 30 days of purchase to register the warranty. Proper registration of the warranty is important! It will enable us to inform you of any alterations in the design of a given model and of any new products we offer which are likely to be of interest to you.

I **INSTALLATION**

Because the MC10 dissipates very little heat (less than 15 watts) ventilation is not an important consideration, allowing greater flexibility for custom or built-in installations. Of course, reasonable judgement must be exercised to see that the MC10 does not obstruct ventilation required by amplifiers or other equipment in the system. In custom installations, the unit may be mounted either horizontally or vertically.

To minimize hum pickup, keep the unit well away from the power amplifier, and route power cords away from input cables.

The MC10 requires an ac power line providing between 90 and 130 volts at 50 to 60 Hz. Alternatively, the MC10 is optionally available for operation on 220 and 240 volt power lines.

CONNECTION

Aux/Phono, Tuner, Cd, Tape 1, Tape 2: These are high level inputs and are electrically equivalent. They present a 50k ohm load to the source. The outputs of your tape recorders should be connected to tape 1 and tape 2.

Record Output: The record outputs connect the selected signal to your recorders or external processing loop (eg. equalizer). The output signal is not affected by the level control. Connect "record out" to the inputs of your tape recorders or external processors.

Output 1, Output 2: Connect these outputs to the input of your amplifier(or crossover in a bi-amped system). We recommend the use of an amplifier with an input impedance of 10k ohms or higher. Since the MC10 inverts phase, it may be necessary to invert the speaker leads to maintain correct absolute phase. See the section on "Getting the most out of your MC10" for an explanation of this.

***USE OF EXTERNAL TONE CONTROLS OR OTHER
EXTERNAL SIGNAL PROCESSING DEVICES:***

Use Tape 1 and Record 1 for your tape recorder. Connect the output of the tone controls to Tape 2 and the input of the tone controls to Record 2. To use the tone controls, select Tape 2 on the Source Selector and use the Record Selector to select phono, tuner, cd or tape 1. By selecting the input directly on the source selector, the tone control processor will be bypassed.

CONTROLS

SOURCE SELECTOR: AUX/PHONO, TUNER, CD, TAPE 1, TAPE 2:

This selector switch is used to choose an input for listening.

RECORD SELECTOR: PHONO, TUNER, CD, TAPE 1, TAPE 2.:

This control selects the signal to the record outputs, allowing the user to record one source while listening to another.

BALANCE: This control is an eleven position stepped attenuator, adjusting the channel balance in approximately .75 dB steps. The maximum attenuation is under 4 dB, so both channels will be present even in the extreme positions. In normal use the control will be centered.

LEVEL: The MC10 volume control is an extremely precise control, maintaining channel to channel accuracy to within 1/2 dB throughout its rotation.

***G*ETTING THE MOST FROM YOUR MC10**

The motif MC10 offers an unparalleled level of sophistication and refinement in music reproduction, but it cannot transform an inferior stereo system. Only high quality amplifiers and loudspeaker systems will be capable of fully revealing the capabilities of this precision instrument.

Given a system of high quality components, there remain a number of important details which must be attended to.

ABSOLUTE PHASE

Musical notes are heard through the ear's response to waves of alternating rise and fall of air pressure. Musical transients are exclusively positive: that is, the initial effect is a rise in pressure. The ear is capable of distinguishing these positive transients from the musically unnatural alternative of a negative transient (an initial fall in air pressure). In terms of your stereo system, these transients are created by your loudspeakers. If the speakers respond to musical transients by first moving out, they are creating a rise in pressure, and the system is said to be "phase correct". If they respond by moving in, they create a fall in pressure and the system is said to be phase inverting. Each component in the stereo system is either phase correct or phase inverting (including the source and speakers-these are normally phase correct). It is of no consequence if an individual component is phase inverting, as long as the system as a whole is phase correct. This will be the case as long as the number of phase inversions is even (or zero).

THE MC10 IS PHASE INVERTING. If your system has an odd number of inversions, then you must add one phase inversion. This will be the case if the MC10 is the only unit in the chain that inverts phase. **THIS IS CONVENIENTLY DONE BY REVERSING THE POSITIVE AND NEGATIVE CONNECTIONS TO YOUR SPEAKERS** (be sure to reverse both channels).

If you are not sure about the phase of every piece in your system, you can establish correct absolute phase by careful listening. When the system is in correct phase, transients will be noticeably cleaner and more sharply defined. The effect is especially apparent on plucked string sounds. A final warning-not all recordings are phase correct (including

some "audiophile" recordings), so listen to several before concluding your investigation of absolute phase.

THE IMPORTANCE OF WIRES

Interconnect and speaker wires are an important element in your stereo system. Interconnects are available which will permit a reference quality system to blossom and fulfill its promise of musical reality. Others will strangle the system to the point where it becomes no better than average. To complicate matters, our experience suggests that the choice of interconnects will be system dependent- those that are ranked first on a given system may be a poor choice for a different system. Consult your conrad-johnson dealer for recommendations for your specific system.

TIP

Warm up the MC10 before listening: The sonic performance of the MC10 improves noticeably as the unit warms up. The midrange becomes more lucid, the highs smoother, and the soundstage expands. The warm up period can be expected to last several hours. Consequently, we recommend that the MC10 be left on at all times. The low power consumption of the unit makes this practical.

Questions: If you have questions about the installation or function of your MC10 do not hesitate to call Customer Service at (703) 698-8581.

MC10 SPECIFICATIONS

Gain: 21dB

Maximum Output: 10V

Bandpass: 2Hz to more than 75kHz

Hum and noise: 94dB below 2.5V output

Distortion at 1.0 v output: less than .1% THD or IMD

Phase: phase inverting

Ouput impedance: less than 200 ohms

Mechanical:

Dimensions: Audio chassis: 19"W x 3.5"H x 12.25"D

Net Weight: 11 lbs.

SERVICE

In the event your motif MC10 stereo preamplifier requires service, repack it in the original packing material and ship via United Parcel Service (UPS) to:

Service Department
conrad-johnson design, inc.
2733 Merrilee Drive
Fairfax, VA 22031

Be sure to include a copy of your sales receipt from the original purchase, along with a note explaining the problem you are having in as much detail as possible. If the problem is intermittent, please indicate. If you do not have the original packing material, replacements are available from conrad-johnson design for a nominal charge.