

**OWNER'S MANUAL
MOTIF MC9
STEREO F.E.T. PREAMPLIFIER**

**conrad-johnson design, inc.
(703) 698-8581**

Congratulations. In the Motif MC9 you have a precision audio preamplifier of highest quality. It is the result of nearly a decade of research by William Conrad and Lewis Johnson into the application of solid state devices to the reproduction of recorded music. The circuit design has been executed with the highest quality component parts and each unit has been painstakingly hand assembled by skilled assembly technicians. The completed instrument has been subjected to a rigorous quality inspection program entailing exacting performance measurements followed by a 100 hour "burn-in" period and re-inspection.

Every effort has been made to provide you with an audio instrument capable of achieving a believable illusion of live music when listening to high quality recordings. This manual contains many important suggestions on how to realize the full potential of your MC9. Please take a few minutes to read it.

LIMITED WARRANTY FOR THE MOTIF MC9

1. conrad-johnson design, inc. warrants to the original purchaser that the Motif MC9 will perform to specifications as published in the owner's manual and that it 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 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. The above warranty may be transferred to subsequent owners provided that the warranty registration card has been returned to conrad-johnson design, inc. within 30 days of the original purchase and that the registered owner provides the factory with a signed notice giving the new owner's name and address and the model and serial number of the unit.
4. 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 limitation or exclusion may not apply to you.
5. 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, Virginia 22031
(703) 698-8581

INSTALLATION

Because the MC9 dissipates very little heat (less than 10 watts) ventilation is not an important consideration, allowing great flexibility for custom or built-in installations. Of course, reasonable judgment must be exercised to see that the MC9 does not obstruct ventilation required by amplifiers or other equipment in the system. The MC9 front panel is designed to support the weight of the unit, allowing installation in standard 19" equipment racks. In custom installations, the unit may be mounted either horizontally or vertically.

To minimize hum pickup, the MC9 should be mounted well away from amplifier power transformers. All ac power cords should be dressed away from input cables - especially phono cables.

The MC9 requires an ac power line providing between 90 and 130 volts at 50 to 60 Hz. Alternatively, the MC9 can be reconnected internally for operation on 220v power lines. Consult your dealer for details about the conversion.

CONNECTION

Optional phono stage: Instructions for proper use are included with the phono stage.

Auxiliary, 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 two pairs of 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 input of your tape recorders or external processors.

Main output: Connect this output to the input of your amplifier (or crossover in a bi-amplified system). We recommend the use of an amplifier with an input impedance of 20k ohms or higher.

GETTING THE MOST FROM YOUR MC9

The Motif MC9 offers an unparalleled level of sophistication and refinement in music reproduction, but it cannot transform an inferior stereo system. Only the very best 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 cartridge 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 MC9 is phase inverting. If your system has an odd number of inversions, for example if the MC9 is the only inverting piece in your system, then you must add one phase inversion. This is conveniently done by reversing the positive and negative connections on 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 records are phase correct (including some "audiophile" recordings), so listen to several before concluding your investigation of absolute phase.

AC LINE POLARITY

Each piece of electronic equipment in your system is subject to minute ac leakage currents to the chassis. Since the chassis of components in a system are usually connected via the ground side of the interconnect wires, these leakage currents are superimposed on the musical signals. It is possible to minimize these current flows by carefully selecting the way in which each component is plugged into the wall outlet. Because the power cord on the MC9 is not polarized, it can be plugged in two ways. It will normally sound better in one orientation than in the other. The same will be true of each electronic device in your system.

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 that 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 Motif dealer for recommendations for your specific system.

A FEW TIPS

Warm up the MC9 before listening: The sonic performance of the MC9 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 MC9 be left on at all times. The low power consumption of the unit makes this practical.

Magnetic fields should be controlled: We recommend the use of one VPI "brick" placed on the top of the MC9 in the right rear corner.

Questions: If you have questions about the installation or function of your MC9 do not hesitate to call Customer Service at (703) 698-8581.

SPECIFICATIONS:

Gain: 10 dB

Output: maximum 10v .
rated at .5v

Phase: Inverts phase.

Response: Bandpass 5Hz to more than 100kHz.

Total hum and noise (20-20kHz): 90 dB

Distortion: THD less than .1%
IM less than .1%

Output impedance: Less than 200 ohms

Dimensions: 19" x 3.5" x 12.3"

SERVICE

In the event your Motif MC9 stereo preamplifier requires service, repack it with 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.