C46
Audio Control Center

“Trust McIntosh to create an elegant combination of audio purity and flexible control”

With eight source input selections, one of them a balanced input, all fully assignable and programmable, plus separate processor loops for both listen and record sections and enough outputs, both balanced and unbalanced, to drive multiple amplifiers, the C46 Preamplifier is a control center that can easily coordinate even the most complex audio system.

Sonic integrity is enhanced through use of digital logic controlled electromagnetic switches which provide the most reliable, lowest distortion signal switching in existence. Master volume control is accomplished through an ultra-precision digitally controlled attenuator, enhanced with Variable Rate Volume circuitry and adjusted through an optical rotary encoder that results in resolution and tracking accuracy within 0.5 dB. The exclusive McIntosh equalization circuitry allows “tailoring” the sonic performance over 8 frequency bands and a separate programmable bypass control totally eliminates the equalizer from the signal path when not in use.

Behind McIntosh’s signature black glass front panel, LED-driven Fiber Optic Light Diffuser Panels provide all illumination - reducing heat and power consumption and increasing the lighting’s life span many times over that of ordinary light bulbs.
Silent Electromagnetic Switching
McIntosh Silent Electromagnetic Switches, located literally at the input panel, eliminate the need for audio signals to travel through any internal wiring where it would be subject to noise pickup. The state-of-the-art switches consist of ruthenium contacts—the finest conducting material known—which are sealed within a glass tube containing an inert oxygen-free gas that eliminates all possibility of contamination and results in a distortion-free switch that never needs cleaning. The glass tube is enclosed within a multi-layer copper coil, which provides the means to actuate the switch and also provides additional shielding.

The entire assembly is finally encased in a shock-absorbent plastic housing for protection.

VRV (Variable Rate Volume) Digitally Controlled Attenuator
The output attenuator controls volume over 214 steps of .5dB each with accuracy within .1dB. The volume vs. rotation rate varies as preamplifier gain varies and attenuation changes occur at the zero crossings of the audio signal to prevent audible artifacts during adjustment.

FREQUENCY RESPONSE
20Hz to 20kHz, +0 / -0.25dB

TOTAL HARMONIC DISTORTION
0.002% max. from 20Hz to 20kHz

A-WEIGHTED SIGNAL-TO-NOISE RATIO
Phono: 86dB
High Level: 97dB

RATED OUTPUT VOLTAGE
5 Vrms at balanced outputs
2.5 Vrms at unbalanced outputs

INPUT IMPEDANCE
Phono, MM: 47K ohms, 65pf
High Level: 47K ohms (balanced) 22K ohms (unbalanced)

OUTPUT IMPEDANCE
240 ohms (unbalanced)
480 ohms (balanced)

VOLTAGE GAIN
Phono to Tape Out: 40dB
High Level to Tape Out: 0dB
High Level to Main Output: 15dB

MAXIMUM VOLTAGE OUTPUT
10.0 Vrms unbalanced, 20 Vrms balanced

SENSITIVITY
Phono: 4.5mV for rated output
High Level: 450mV, 900 balanced for rated output
Balanced: 900mV for rated output

POWER REQUIREMENTS
120V 50/60Hz, 50 watts

DIMENSIONS (H X W X D)
5 3/8" (13.65 cm) x 17 1/2" (44.45 cm) x 19" (48.26 cm)
Panel clearance required in front of mounting panel is 1 3/4 inches (4.5 cm) for connections

WEIGHT
28 lbs. (11.79kg) net
40.41 lbs. (18.33kg) boxed