

# McINTOSH C 34V HOME ENTERTAINMENT CONTROL CENTER

TECHNI-DATA QUICKSHEET

The McIntosh C 34V Home Entertainment Control Center is the latest in advanced performance, innovative flexibility, user usefulness and engineered for human beings by human beings. Here is the preamplifier that merges video control flexibility with audio control flexibility!

- The most flexible, complete, stereo and video control center.
- The most flexible, complete, separate stereo and video recording control center.
- Seven position electronic input selectors control both audio and video source selection.
- High quality, high performance distortion-free five band tone shaping controls that can be used in either audio listen or record preamplifier.
- The most flexible, complete program compressor and expander that can operate in either audio listen or record preamplifier.
- High quality, high performance monitor power amplifier that protects your speakers and your music with the exclusive McIntosh Power Guard and Sentry Monitor Circuits.
- Two independent, seven source input selector switches allow audio and video source selection (with the accessory McIntosh MVS-1 video control) for either listening, viewing or recording. The MVS-1 receives its control voltages by an interconnect with the C 34V.

The flexibility in audio control you have come to expect from McIntosh has been extended to the control of video. Now, there is a true Home Entertainment Control Center.

Unique separate audio and video, listen and record facilities, introduced and perfected by McIntosh, permit complete and independent operation. Separate input selectors, electrically isolated from each other, provide non-interference operation in both listen and record on both audio and video. Both listen and record input selectors control low DC voltages which in turn control, electronically, Field Effect Transistor Analog switches. Because the FET analog switches are located at the input, noise, switch clicks and pops are eliminated and the potential for induced hum pickup is close to zero.

You can record on 3 audio tape recorders from any source and you can copy from one tape recorder to another while listening to a completely different program. The program being recorded can be monitored

easily with the monitor pushbutton. A fourth audio tape deck may be plugged into the front panel without disturbing your permanently wired system.

McIntosh has pushed the barriers of low noise performance with a totally shielded, direct input connected phono preamplifier section. Superior performance, even in the presence of strong interference fields, is assured by the use of the steel exterior chassis plus an inner shield enclosure of plated steel.

Loudness controls in ordinary equipment are usually simple, passive circuits connected to a portion of the rotation range of the volume control. As a consequence, loudness compensation accuracy is dependent on many variables such as speaker efficiency, amplifier gain and differences in input level.

The McIntosh compandor permits expansion or compression of the dynamic range of program material. Compressed recordings and broadcasts can be expanded on playback to restore dynamic range. Tapes can be recorded using compression and replayed using expansion to increase signal-to-noise ratio. The operating ranges of the compandor are so versatile that commercially encoded program material can be reproduced without the added investment in other outboard equipment.

Five separate tone shaping controls provide musical spectra tone shaping. Each control adjusts band segments to satisfy your personal preference or the demands of the program material. At the detent in the center of the rotation of each control the equalizer circuits are disconnected, completely removed from the operating circuits.

A wide band, very low distortion 20 watts per channel power amplifier feeds power to headphones. The power amplifier is a complete, fully designed amplifier. Music listening is protected by the patented POWER GUARD circuit and circuit components are protected by the patented Sentry Monitor circuit.

The Power Guard waveform comparison circuit detects waveform differences between the input and

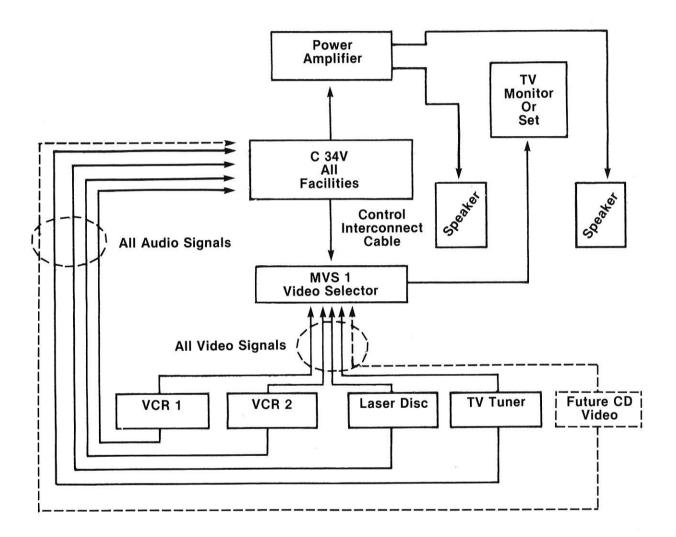


the output signal. A sampling of the program material at the output of the amplifier is constantly compared with the program material at the amplifier input. Should the differences reach 1%, Power Guard goes to work. In only a fraction of a millisecond Power Guard dynamically reduces input level to prevent amplifier overload yet permits the amplifier to deliver its absolute maximum power output without extra distortion. The operation of the

Power Guard circuit is absolutely silent. There is not even "soft" clipping. There is simply no clipping!

The Sentry Monitoring circuit constantly monitors the output signal. At signal levels up to rated output this circuit has no effect. If the power output exceeds design maximum, or in the event of a short circuit or severe mismatch, the Sentry Monitoring circuit will protect the output transistors from failure.

The C 34V has complete Audio and Video Control



MVS 1 Video Selector is an accessory added to the C 34V for video control



# PERFORMANCE LIMITS AND RATINGS

Performance limits are the maximum deviation from perfection permitted for a McIntosh instrument. We promise you that when you purchase a new C 34V from a McIntosh franchised dealer, it will be capable of or can be made capable of performance at or exceeding these limits or you can return the unit and get your money back. McIntosh is the only manufacturer that makes this statement.

#### **PREAMPLIFIER**

### FREQUENCY RESPONSE

+0, -0.5dB from 20Hz to 20,000Hz

#### **MAXIMUM VOLTAGE OUTPUT**

10 volts from 20Hz to 20,000Hz

# TOTAL HARMONIC DISTORTION

0.01% maximum from 20Hz to 20,000Hz at rated output

#### **SENSITIVITY**

Phono- 2mV for 2.5V rated output (0.4mV IHF) High Level- 250mV for 2.5V rated output (50mV IHF)

# SIGNAL TO NOISE RATIO, A-WEIGHTED

Phono- 90dB below 10mV input (84dB IHF) High Level- 100dB below rated output (86dB IHF)

# MAXIMUM INPUT SIGNAL

Phono- 100mV High Level- 10 volts

# INPUT IMPEDANCE

Phono- 47k ohms and 65pf capacitance High Level- 50k ohms

# **EQUALIZATION CONTROLS**

Variable 12dB boost to 12dB cut at center frequencies of 30, 150, 500, 1500, 10k Hz

# **COMPANDOR RATIOS**

From 1:2 compression to 2:1 expansion

#### LF FILTER

Flat or roll-off at 12dB per octave below 50 Hz.

#### HF FILTER

Flat or roll-off at 12dB per octave above 7,000 Hz.

# **MONITOR AMPLIFIER**

# **CONTINUOUS AVERAGE POWER OUTPUT**

20 watts per channel into 8 ohms, from 20Hz to 20kHz, at 0.01% maximum harmonic distortion

#### FREQUENCY RESPONSE

+0 - 0.2dB from 20Hz to 20,000Hz

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# **SENSITIVITY**

750mV for rated output (170mV IHF), input impedance is 27K ohms

# SIGNAL TO NOISE RATIO, A-WEIGHTED

100dB below rated output (87dB IHF)

#### **GENERAL INFORMATION**

#### SEMICONDUCTOR COMPLEMENT

31 Bipolar Transistors

76 Field Effect Transistors

35 Integrated Circuits

107 Diodes

1 Silicon Controlled Rectifier (SCR)

#### **AC POWER OUTLETS**

2 turntable current-sensing, 100 watts, green

4 switched, 1200 watts total, black

# **POWER REQUIREMENTS**

120 volts, 50/60 Hz, 25 to 85 watts

# **MECHANICAL INFORMATION**

#### SIZE:

16-1/8 inches wide (40.6 cm) by 5-7/16 inches high (13.8 cm) by 13 inches deep (33 cm), from the mounting surface, including PANLOC shelf and back panel connectors. Knob clearance required is 1-1/4 inches (3.2 cm) in front of the mounting panel.

#### FINISH:

Front panel is anodized gold and black with special gold/teal nomenclature illumination. Chassis is black.

#### MOUNTING:

Exclusive McIntosh developed professional PANLOC.

#### WEIGHT:

26 pounds (11.8 kg) net, 38 pounds (17.2 kg) in shipping carton.



MVS 1 VIDEO SELECTOR

