# MtIntosh.

## C41 Audio Control Center



C41

 $McIntosh\ Laboratory, Inc.\quad 2\ Chambers\ Street\quad Binghamton, New\ York\ 13903-2699\quad Phone:\ 607-723-3512\quad FAX:\ 607-724-0549$ 

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



AVIS RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING - TO REDUCE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

## NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

To prevent the risk of electric shock, do not remove cover or back. No user serviceable parts inside.

# IMPORTANT SAFETY INSTRUCTIONS!

# PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT.

#### General:

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Warning: To reduce risk of fire or electrical shock, do not expose this equipment to rain or moisture. This unit is capable of producing high sound pressure levels. Continued exposure to high sound pressure levels can cause permanent hearing impairment or loss. User caution is advised and ear protection is recommended when playing at high volumes.
- 6. Caution: to prevent electrical shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.
  - Attention: pour pevenir les chocs elecriques pas utiliser cette fiche polarisee avec un prolongateur, une prise de courant ou un autre sortie de courant, sauf si les lames peuvent etre inserees afond ans en laisser aucune partie a decouvert.
- 7. Unplug this equipment during lightning storms or when unused for long periods of time.
- Only use attachments/accessories specified by the manufacturer.

#### **Installation:**

- 9. The equipment shall be installed near the AC Socket Outlet and the disconnect device shall be easily accessible.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 11. Do not install near any heat sources such as radiators, heat registers, stoves, or other equipment (including amplifiers) that produce heat.
- 12. Do not use this equipment near water.
- 13. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
- 14. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.



#### **Connection:**

- 15. Connect this equipment only to the type of AC power source as marked on the unit.
- 16. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the equipment.
- 17. Do not defeat the safety purpose of the polarized or grounding-type plug.

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A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

- 18. Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 19. To completely disconnect this equipment from the AC Mains, disconnect the power supply cord plug from the AC receptacle.

### Care of Equipment:

- 20. Clean only with a dry cloth.
- 21. Do not permit objects or liquids of any kind to be pushed, spilled and/or fall into the equipment through enclosure openings.
- 22. Unplug the power cord from the AC power outlet when left unused for a long period of time.

#### **Repair of Equipment:**

- 23. Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 24. Do not attempt to service beyond that described in the operating instructions. All other service should be referred to qualified service personnel.
- 25. When replacement parts are required, be sure the service technician has used replacement parts specified by McIntosh or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 26. Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

#### Thank You

Your decision to own this McIntosh C41 Audio Control Center ranks you at the very top among discriminating music listeners. You now have "The Best." The McIntosh dedication to "Quality," is assurance that you will receive many years of musical enjoyment from this unit.

Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new McIntosh.

#### Please Take A Moment

The serial number, purchase date and McIntosh dealer name are important to you for possible insurance claim or future service. The spaces below have been provided for you to record that information:

Serial Number:	
Purchase Date:	
Dealer Name:	

#### **Technical Assistance**

If at any time you have questions about your McIntosh product, contact your McIntosh dealer who is familiar with your McIntosh equipment and any other brands that may be part of your system. If you or your dealer wish additional help concerning a suspected problem, you can receive technical assistance for all McIntosh products at:

McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903 Phone: 607-723-3512

Phone: 607-723-3512 Fax: 607-723-3636

### **Customer Service**

If it is determined that your McIntosh product is in need of repair, you can return it to your dealer. You can also return it to the McIntosh Laboratory Service Repair department. For assistance on factory repair return procedure, contact the McIntosh Repair Department at:

McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903 Phone: 607-723-3515

Fax: 607-723-1917

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#### **General Notes**

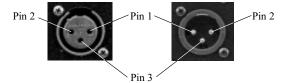
1. The following Connecting Cable is available from the McIntosh Parts Department:

Data and Power Control Cable Part No. 170-202 Six foot, 2 conductor shielded, with two 1/8 inch stereo mini phone plugs.

- 2. For additional connection information, refer to the owner's manual(s) for any component(s) connected to the C41.
- 3. A McIntosh Power Controller may be added to the C41 to provide AC Power Switching to components that do not have Power Control Connections. See your McIntosh Dealer for additional information.
- 4. Pin configuration for the XLR Balanced Connectors on the C41:

PIN 1: Shield or ground PIN 2: + input

PIN 3: - input



#### Introduction

The C41, Remote Controlled Audio Control Center is a elegant instrument that allows you to enjoy outstanding music reproduction. It includes a wide range of convenient operating functions to enhance your listening experience. The classic McIntosh C41 will perfectly complement a McIntosh stereo power amplifier for a stereo system of incomparable performance and style.

#### **Performance Features**

#### • Listen and Record Circuitry

Separate Record and Listen circuits allow you to record one program source while listening to another.

#### • Two Signal Processor Loops

Separate front panel switched Signal Processor Loops are provided for the listen and record circuits.

#### • Multiple Inputs

Eight high level inputs and one MM phono input provide for all popular program sources. The Aux input can be switched to accept a moving magnet phono cartridge.

### • Tone Control Bypass

At the flat settings the Bass and Treble control circuit elements are removed from the Listen signal path.

#### • Electronic Input Switching

Digital Logic integrated circuits drive Electromagnetic Switches on all inputs and operating functions for reliable, noiseless, distortion free switching.

#### • Remote Control

A Remote Control is included that will allow control of major front panel controls and switches.

### • Balanced and Unbalanced Inputs/Outputs

Seven unbalanced inputs, and three unbalanced outputs are provided. One balanced input, and one balanced output are also included.

## • Output Switching

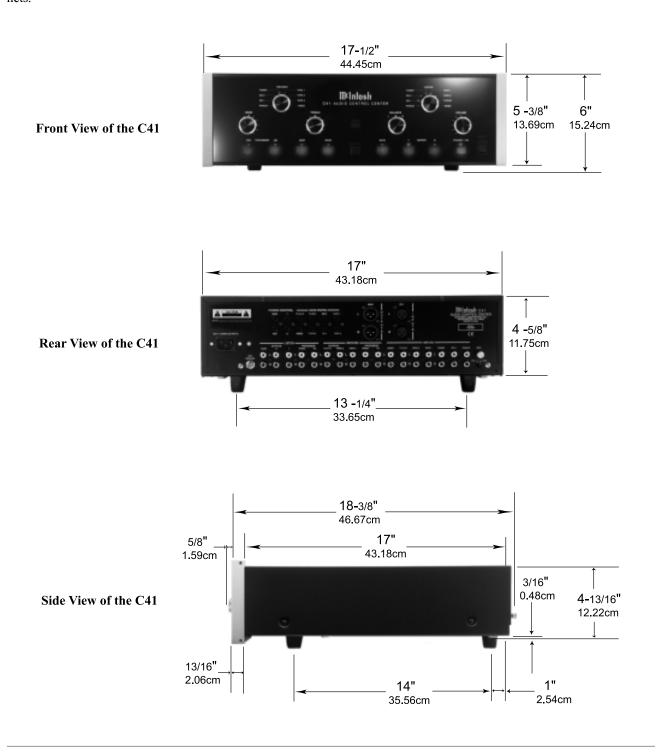
Front panel Output push-buttons control two switched outputs that allow you to send signals to two separate power amplifiers.

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## Introduction, Performance Features and Dimensions

## **C41 Dimensions**

The following dimensions can assist in determining the best location for your C41. There is additional information on the next page pertaining to installing the C41 into cabinets.



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#### Installation

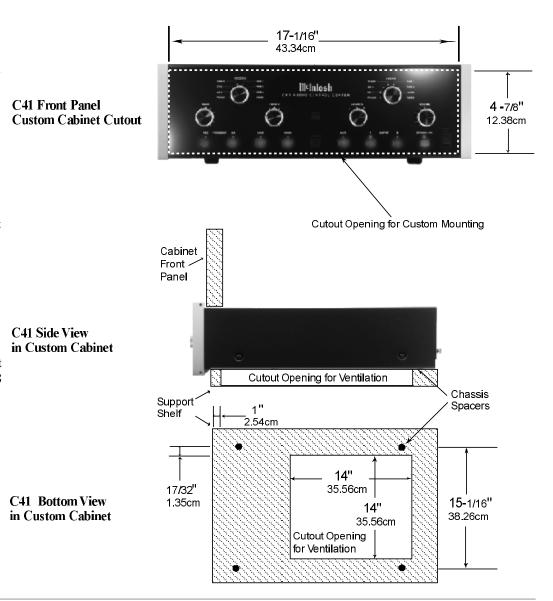
The C41 can be placed upright on a table or shelf, standing on its four 1 inch high feet. The four feet may be removed from the bottom of the C41 when it is custom installed as outlined below. The four feet together with the mounting screws should be retained for possible future use if the C41 is removed from the custom installation and used free standing. It also can be custom installed in a piece of furniture or cabinet of your choice. The required panel cutout, ventilation cutout and unit dimensions are shown.

Always provide adequate ventilation for your C41. Cool operation ensures the longest possible operating life for

any electronic instrument. Do not install the C41 directly above a heat generating component such as a high powered amplifier. If all the components are installed in a single cabinet, a quiet running ventilation fan can be a definite asset in maintaining all the system components at the coolest possible operating temperature.

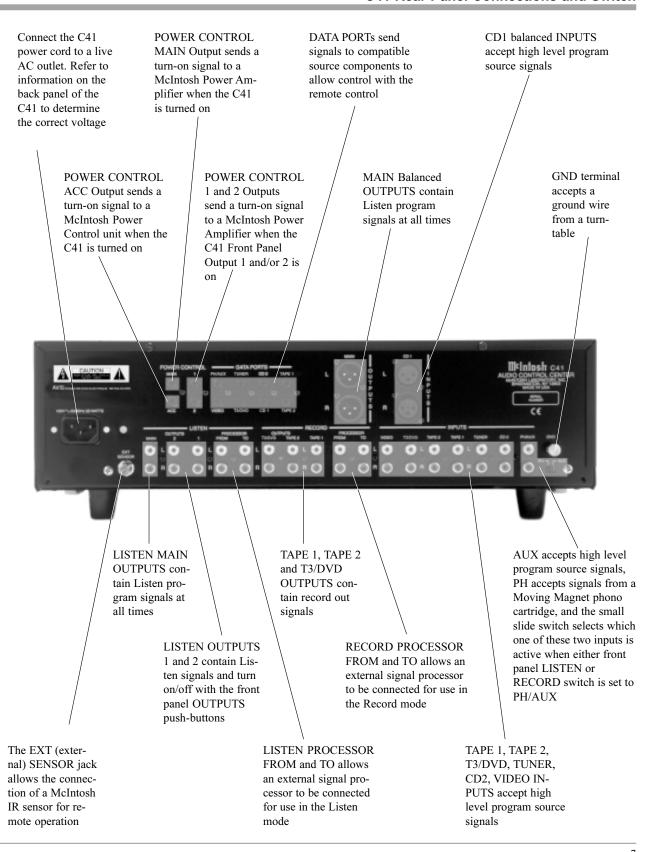
A custom cabinet installation should provide the following minimum spacing dimensions for cool operation. Allow at least 2 inches (5.08 cm) above the top, 2 inches (5.08cm) below the bottom and 1 inch (2.54 cm) on each side of the Control Center, so that airflow is not obstructed. Allow 20 inches (50.8 cm) depth behind the front panel. Allow

1 inch (2.54 cm) in front of the mounting panel for knob clearance. Be sure to cut out a ventilation hole in the mounting shelf according to the dimensions in the drawing.



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### **C41 Rear Panel Connections and Switch**



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#### **How to Connect the C41**

1. Connect cables from the Balanced MAIN OUTPUTS to the power amplifier inputs.

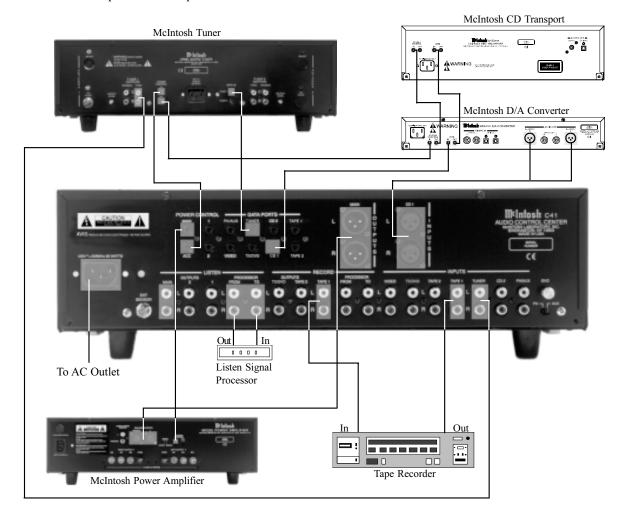
Note: If your power amplifier has only unbalanced inputs, the Main Unbalanced Outputs can be used.

 Connect cables from the C41 LISTEN PROCESSOR FROM jacks to the outputs of a signal processor. Connect cables from the C41 LISTEN PROCESSOR TO jacks to the signal processor inputs.

Note: Connect a signal processor to the RECORD PROCESSOR jacks in a similar manner.

- 3. Connect cables from the C41 CD INPUTS to the outputs of a McIntosh D/A Converter and CD Transport.
- 4. Connect cables from the C41 TUNER INPUTS to the outputs of a tuner.
- 5. Connect cables from the C41 TAPE 1 OUTPUTS to the record inputs of the tape recorder and the C41 TAPE 1 INPUTS to the tape recorder outputs.

- Note: Connect any additional recorders to the TAPE 2 or T3/ DVD jacks in a similar manner.
- Connect a Power Control cable from the C41 MAIN POWER CONTROL jack to the Power Control In of a McIntosh power amplifier.
- Connect a Power Control cable from the C41 POWER CONTROL ACC jack to the Power Control In of a McIntosh Tuner and then onto the next McIntosh Source Component.
- 8. Connect a Data cable from the C41 CD DATA PORT to the DATA IN of a McIntosh D/A Converter and CD Transport.
- 9. Connect a Data cable from the C41 TUNER DATA PORT to the DATA IN of a McIntosh tuner.
- 10. Plug the C41 AC power cord into a live AC outlet.



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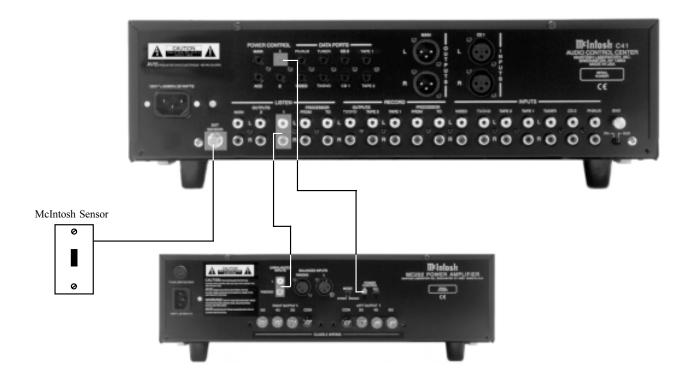
## **How to Connect for Additional Room(s)**

1. Connect cables from the LISTEN 1 OUTPUTS to the Second Power Amplifier inputs.

Note: A Third Power Amplifier may be connected to the Listen 2 OUTPUTS for an additional room.

- 2. Connect a Power Control cable from the C41 POWER CONTROL 1 jack to the POWER CONTROL IN of a McIntosh power amplifier.
- 3. Connect an RG6 or RG59U coaxial cable from the EXT (external) Sensor jack to an R649 wall mounted IR sensor(s).

Note: A second R649 wall mounted IR sensor may be connected for an additional room by using a suitable coaxial splitter that will pass DC (direct current).

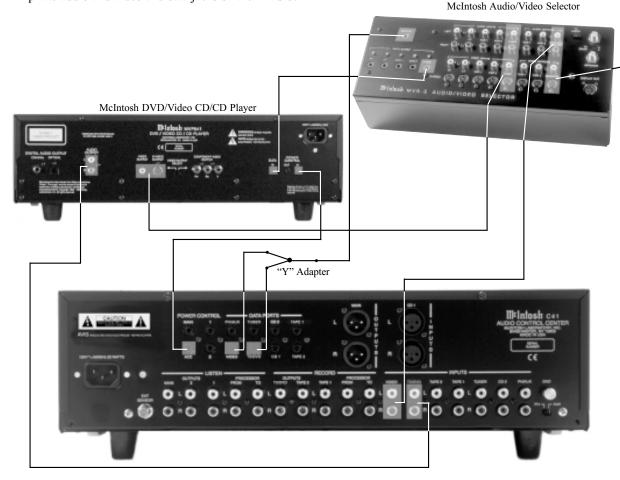


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## **How to Connect for Video Switching**

- Connect a Data cable from the C41 VIDEO and T3/ DVD DATA PORTS, using a "Y" Adapter, to the MVS-3 DATA IN jack.
- Connect a Power Control cable from the C41 ACC POWER CONTROL jack to the Power Control In of a McIntosh DVD/CD player.
- 3. Connect the MVS-3 CONTROL CENTER AUDIO OUTPUTS to the C41 VIDEO INPUTS.
- 4. Connect the MVS-3 VIDEO MONITOR OUTPUT to a TV or Monitor.
- 5. Connect cables from the McIntosh DVD Player, the Video Output(s) to the MVS-3 V-AUX VIDEO INPUT and the Data Control In to the MVS-3 DATA OUTPUT V-AUX jack.
- 6. Connect a cable from the McIntosh DVD Player; Audio Outputs to the C41 T3/DVD AUDIO INPUTS.
- 7. Connect other video source components to the appropriate audio and video and data jacks on the MVS-3.

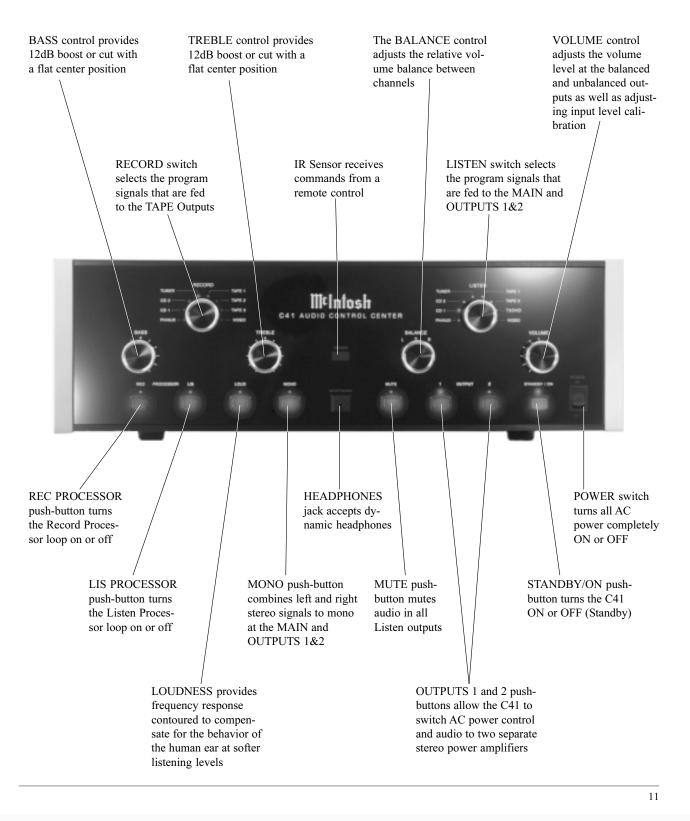




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## C41 Front Panel Controls, Push-Buttons and Switch



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### How to Operate the C41

#### Power On

Press the POWER switch to ON. The Red LED, above the STANDBY/ON Pushbutton, lights to indicate the C41 is in

Standby Mode. To turn on the C41 press the STANDBY/ON pushbutton. Refer to figure 1.

Note: You may also turn on the C41 using the remote control.

#### **Source Selection**

Select the desired listening source with the LIS-TEN Switch.



Figure 1

#### PH/AUX Inputs

When using a phono player with a moving magnet cartridge connected to the PH/AUX inputs, set the PH-AUX

switch to the PH position. When using an auxiliary program source component connected to the PH/AUX inputs, set the PH-AUX switch to the AUX position. Refer to figure 2.



Figure 2

#### **Volume Control**

Adjust the VOLUME control for the desired listening level.

#### **Loud Switch**

Press the LOUD push-button to add loudness bass compensation to the volume control for improved low level listening.

#### **Balance Control**

Adjust the BALANCE control as needed to achieve approximately equal listening volume levels in each loud-speaker. Turn the BALANCE to the Left to emphasize the left channel by reducing the level of the right channel. Turn the BALANCE to the right to emphasize the right channel by reducing the level of the left channel.

## **Bass and Treble Controls**

Adjust the BASS and TREBLE controls to suit your listening preferences. The bass or treble intensity can be increased with clockwise rotation and decreased with coun-

terclockwise rotation. All tone control circuit elements are removed from the signal path when the controls are in the center or flat position.

#### Mono

Press the MONO push-button to combine left and right stereo signals to mono at all MAIN, OUTPUT 1&2 and HEADPHONES Outputs.

#### Mute

Press the MUTE push-button to mute audio in all Listen outputs.

#### Output 1 and 2

Press OUTPUT 1 or 2 push-buttons to send audio to sepa-

rate power amplifiers connected to the rear panel OUT-PUTS 1 or 2. You can press either push-button individually or both together. Refer to figure 3.



Figure 3

#### **How To Make A Tape Recording**

The separate RECORD and LISTEN switches allow you to make a tape recording from one program source while listening to another. You can also listen (monitor) to the recorded signal off the tape, a fraction of a second later, during recording when a three head tape recorder is used.

- 1. Select the desired program source to record with the front panel RECORD Selector Switch.
- Adjust the record level using the tape recorder volume control.
- 3. To listen to the tape playback of the program source just recorded, turn the LISTEN switch to the desired input.

Note: The C41 RECORD OUTPUTS are not affected by the VOLUME or BALANCE controls. To listen to a different program source while recording, turn the LISTEN switch to the desired source. The recording process will not be affected and will continue.

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### How to use a Signal Processor

Access and operate a signal processor connected to the LISTEN PROCESSOR jacks by pressing the front panel LIS (Listen) PROCESSOR push-button. This processor

will affect only the LISTEN signals. Refer to figure 4. Access and operate a signal processor connected to the RECORD PRO-CESSOR jacks by



Figure 4

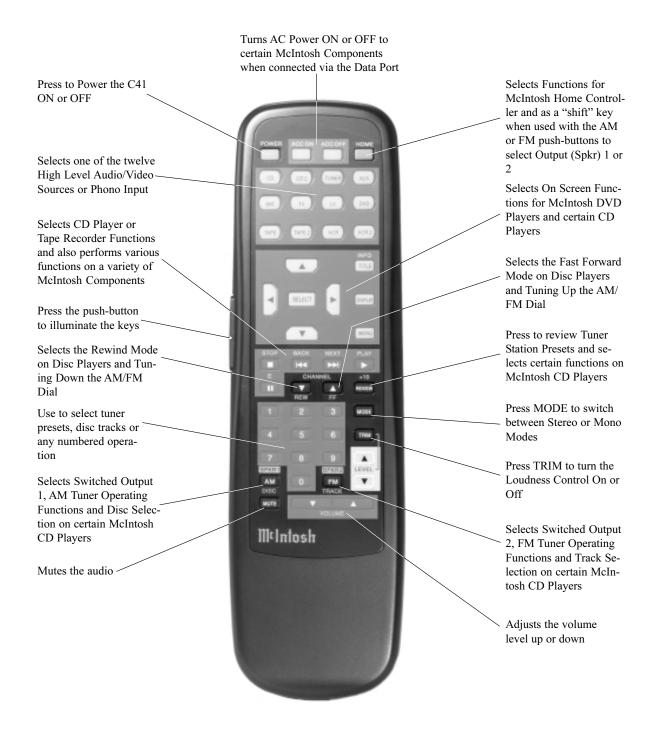
pressing the front panel REC (Record) processor push-button. This processor will affect only the RECORD signals sent to tape recorders.

#### Reset of Microprocessors

In the event that the controls of the C41 stop functioning, there is a built-in user reset function. Press the POWER switch to the OFF position, wait for two minutes. Then press the POWER switch to ON, the Red LED above the STANDBY/ON Pushbutton, lights to indicate the C41 is in Standby Mode. To turn on the C41 press the STANDBY/ON push-button.

Note: The above condition is usually caused by either interruptions in AC power and/or major changes in voltage.

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Note: The Remote Control push-buttons that are highlighted in white are for use with other McIntosh Control Centers.

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The supplied remote control is capable of directly controlling the functions of contemporary McIntosh Source Components connected to the C41. Earlier McIntosh source components and other brand source components can be controlled by the C41 with the addition of a McIntosh Remote Control Translator (RCT).

Note: Your McIntosh Dealer can assist you with the installation and operation of the Remote Control Translator (RCT).

#### Mute

Press the MUTE push-button to mute audio at the LISTEN OUTPUTS 1 and 2. The TAPE OUTPUTS and HEAD-PHONES output are not affected by the MUTE function. The MUTE LED above the push-button will flash on and off to indicate that Mute is active. Press MUTE a second time to unmute audio.

#### Mono

Press the MONO push-button to combine left and right stereo signals to mono at LISTEN OUTPUTS MAIN,1, 2 and HEADPHONE Output.

#### Trim

Press the TRIM push-button to active the Loudness Compensations circuit.

#### **Input Source Selection**

Press any of the twelve input push-buttons to select a program source. When one of the Audio/Video Inputs (SAT, LV, TV, VCR, and VCR2) are selected by remote control the C41 will automatically switch to the VIDEO Input. If the Front Panel VIDEO is selected, the source device connected to the VIDEO INPUT Jacks will be heard. When the optional McIntosh MVS Audio/Video Selector is added, multiple Audio/Video Inputs Sources, such as LV, TV, VCR, and VCR2 will become available by just pressing the desired program source push-button on the remote control.

### **CD/Tape Functions**

Use these push-buttons to operate a CD player, CD changer or tape recorder.

#### **Numbered Push-buttons**

Press push-buttons 0 through 9 to access tuner station presets or CD tracks/discs.

#### **Disc and Track**

Use the DISC and TRACK push-buttons when a CD player or changer is being used.

#### **Tuner Push-buttons**

Press the AM or FM push-button to select the desired broadcast band. Press and release the Channel Up▲ or Down▼push-button to move from station to station. Press and hold a Channel Up▲ or Down▼ push-button to move continuously from station to station. Press REVIEW to start the automatic brief audition of each of the presets stored in the tuner memory. Press REVIEW a second time to stop on a station preset and exit the Review process.

#### Volume

Press the Up or Down VOLUME push-button to raise or lower the listening volume level.

Note: The TAPE OUPUTS are not affected by volume changes.

#### **Amplifier Selection**

Press HOME push-button followed by the OUTPUT 1 or 2 push-buttons either separately or together, to control the rear panel OUTPUTS 1 and 2 which can feed signals to a power amplifier or other accessory component.

#### Acc On

Press ACC ON to turn the power ON to a McIntosh Disc Player.

#### Acc Off

Press ACC OFF to turn the power OFF to a McIntosh Disc Player.

#### E

Press E to perform various functions on a variety of McIntosh Components. It will also pause the playing of a disc or tape player.

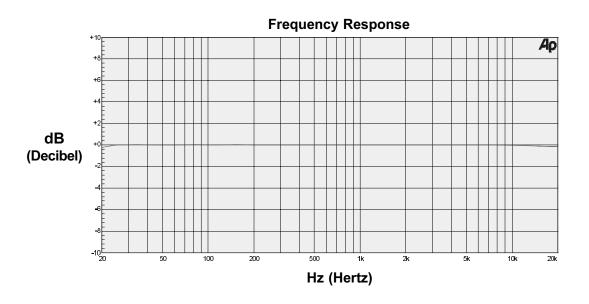
## Lighting

Press and release the LIGHTING push-button to momentarily illuminate the upper half of the remote control push-buttons.

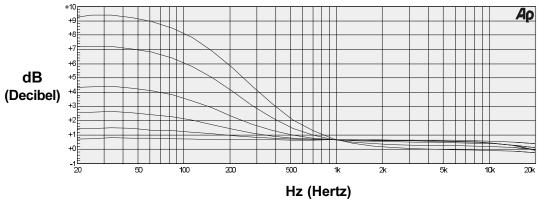
Note: While the LIGHTING push-button is being depressed, the remote control will be unable to send a remote command. When the LIGHTING push-button is released the push-buttons will continue to stay illuminated for approximately three seconds thus allowing you to send the desired command.

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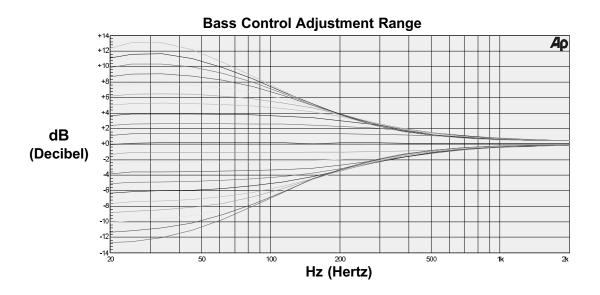
# Loudness Compensation Range

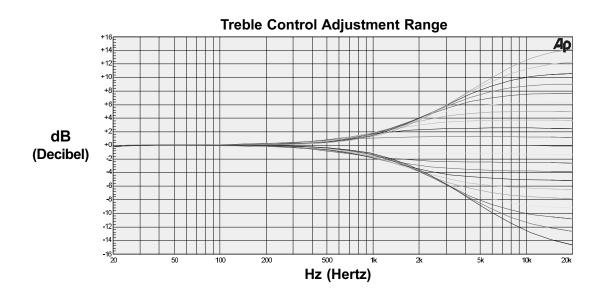


Note: The Loudness Compensation Range is a combination of the Loudness Circuitry and the Volume Control's rotational position. When the Loudness Circuit is active, the first 50% rotation of the Volume Control achieves maximum loudness compensation, as shown on the upper curve. When the Volume control is rotated beyond the 50% point, the loudness compensation is gradually reduced, as shown by the remaining curves.

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## **Specifications**



## **Specifications**

#### Frequency Response

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

#### **Total Harmonic Distortion**

0.002% From 20Hz to 20,000Hz

#### Signal To Noise Ratio

Phono, 90dB below a 10mV input, (84db IHF) High Level, 103dB below rated output, (93db IHF)

#### Maximum Voltage Output

Phono, 90mV High Level, 10V

#### **Output Impedance**

250 ohms (unbalanced) 500 ohms (balanced)

#### Sensitivity

Phono, 2.5mV for 2.5V rated output (0.5mV IHF) High Level, 250mV for 2.5V rated output (50mV IHF)

#### **Input Impedance**

Phono, 47K ohms, 65pF High Level, 22K ohms

#### **Maximum Input Signal**

Phono, 90mV High Level, 10V

#### **Voltage Gain**

Phono to Tape Out: 40dB High Level to Tape Out: 0dB High Level to Main Out: 20dB

#### **Rated Output Voltage**

Main and Outputs 1 and 2: 2.5Vrms

#### **Maximum Voltage Output**

Main and Outputs 1 and 2: 10Vrms

### **Tone Controls**

 $\begin{aligned} Bass & \ Control \pm 12 dB \ @20 Hz \\ Treble & \ Control \pm 12 dB \ @20 kHz \end{aligned}$ 

### **Power Requirements**

100 Volts, 50/60Hz at 20 watts. 110 Volts, 50/60Hz at 20 watts. 120 Volts, 50/60Hz at 20 watts. 220 Volts, 50/60Hz at 20 watts. 230 Volts, 50/60Hz at 20 watts. 240 Volts, 50/60Hz at 20 watts.

NOTE: Refer to the rear panel of the C41 for the correct voltage.

#### **Dimensions**

17-1/2" (44.5cm) W, 5-3/8" (13.7cm) H, 17-1/2" (44.5cm) D, (including clearance for connectors)

#### Weight

20.6 pounds (9.3 Kg) net, 35 pounds (15.9 Kg) in shipping carton

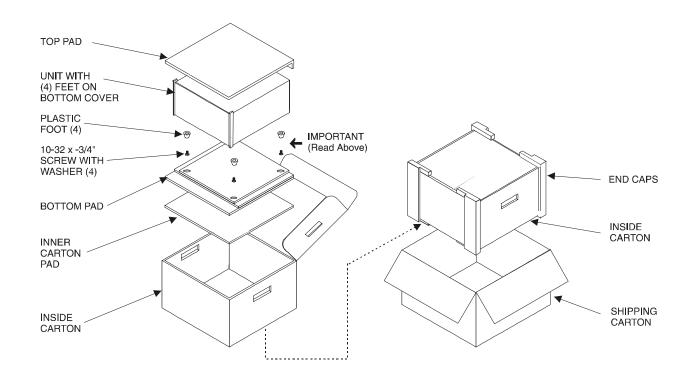
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## **Packing Instructions**

In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below. It is very important that the four plastic feet are attached to the bottom of the equipment. This will ensure the proper equipment location on the bottom pad. Failure to do this will result in shipping damage.

Use the original shipping carton and interior parts only if they are all in good serviceable condition. If a shipping carton or any of the interior part(s) are needed, please call or write Customer Service Department of McIntosh Laboratory. Please see the Parts List for the correct part numbers.

Quantity	Part Number	<u>Description</u>
1	033838	Shipping carton only
2	033837	End Cap
1	033836	Inside carton only
1	033725	Top Pad
1	034008	Bottom pad
1	034037	Inner carton pad
4	017218	Plastic foot
4	100159	#10-32 x 3/4" Machine screw
4	104083	#10 x 7/16" Flat washer
1	049259	Shipping carton complete with all the above parts



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