



McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903-2699 Phone: 607-723-3512 www.mcintoshlabs.com

MDA200

D/A CONVERTER

OWNER'S MANUAL



Thank You from All of Us at McIntosh

You have invested in a precision instrument that will provide you with many years of enjoyment. Please take a few moments to familiarize yourself with the features and instructions to get the maximum performance from your equipment. If you need further technical assistance, please contact your dealer who may be more familiar with your particular setup including other brands. You can also contact McIntosh with additional questions or in the unlikely event of needing service.

McIntosh Laboratory, Inc.

2 Chambers Street
Binghamton, New York 13903

Technical Assistance (607) 723-3512
Fax (607) 724-0549

Customer Service (607) 723-3515
Fax (607) 723-1917

Email support@mcintoshlabs.com
Website www.mcintoshlabs.com

Please Take A Moment

For future reference, you can write down your serial number and purchase information here. We can identify your purchase from this information if the occasion should arise:

Serial Number: _____

Purchase Date: _____

Dealer Name: _____

Table of Contents including Figures

General Information	2
Performance Features	3
Trademark and License Information	3
Front Panel Displays and Switches.	4
Rear Panel Connections and Switches	5
Connectors and Cable Information	6
System Configurations	7
DAC Mode	7
Preamp / DAC Mode	7
Setup Menu	8-10
Trim Functions Menu	10
Dimensions	11
Using Your MDA200	12
Remote Control	13
Changing the Remote's Battery	13
Specifications	14
Audio Specifications	14
Digital Audio Specifications	14
General Specifications	14
Packing Instructions	15
Part List	15

Safety First

Please read the safety instructions included in a separate document called "Important Additional Operation Information Guide."

General Information

The main AC power going to the MDA200 and any other McIntosh component(s) should not be applied until all the system components are connected together. Failure to do so could result in the malfunctioning of some or all of the system's normal operations. When the MDA200 and other McIntosh components are in their Standby / Power Off Mode, the microprocessor's circuitry inside each component is active and communication is occurring between them.

The unbalanced outputs and the balanced outputs can be used simultaneously.

The MDA200 internal digital-to-analog converter circuitry is designed to decode 2 channel PCM (Pulse Code Modulation), Dolby Digital and DTS bitstreams, and DSD (Direct Stream Digital) digital signals present at the coaxial, optical, and USB digital inputs. Other digital audio signal format types will cause the audio outputs of the MDA200 to be muted.

The IR input, with a 3.5mm mini phone jack, is configured for non-McIntosh IR sensors such as a Xantech Model HL85BK Kit.

When discarding the unit, comply with local rules or regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal.

The MDA200 has been tested and certified for indoor use only.

For additional information on the MDA200 and other McIntosh products please visit the McIntosh website at www.mcintoshlabs.com.

Performance Features

• Alphanumeric Fluorescent Display

The front panel information display indicates the source selection, sampling frequency, volume level, and setup mode selections. The display intensity is adjustable.

• Dual Function

Connect the MDA200 to an existing McIntosh analog audio system to provide the latest in digital-to-analog conversion from digital audio sources or use the MDA200 as the preamplifier together with McIntosh source components and power amplifier to form a complete audio system.

• Electronic Input Switching

Electronic input switching on all inputs provides reliable, noiseless, distortion free switching.

• Quad Balanced Digital-to-Analog Converter

The 8 channel 32-bit digital-to-analog converter is used in a stereo quad balanced mode, assuring the music is reproduced with a wide dynamic range and extremely low distortion.

• Balanced Outputs

The balanced outputs allow the connection of long cable lengths without a loss in sound quality.

• Precision Tracking Volume Control

Volume levels are controlled by a new precision digitally controlled attenuator system with a tracking accuracy of 0.5dB.

• Remote Control with External Sensor Input

The remote control provides control of the MDA200 operating functions and allows enjoyment of your McIntosh system from another room in your home by connecting an external sensor.

• Power Control Input and Output

A power control connection for powering on multiple McIntosh power amplifiers, source components, and accessories is included for your convenience.

• Special Power Supply

Fully regulated power supplies ensure stable noise free operation even though the power line varies.

• Gold Plated Connectors

The input and output connector contacts are gold plated for superior corrosion resistance and high electrical conductivity.

• Fiber Optic Front Panel Illumination

The even illumination of the front panel is accomplished by a combination of custom-designed fiber optic light diffusers and extra long life Light Emitting Diodes (LEDs).

• HDMI TV Sound




The HDMI ARC (Audio Return Channel) allows you to use your entire audio system to play the sound from your TV, including the over-the-air broadcasts, HDMI inputs, and streaming services.

• Digital Audio Inputs

The MDA200 has coaxial, optical, MCT DIN, HDMI (ARC), and USB inputs to decode PCM and DSD signals from an external source. The coaxial and optical inputs process digital signals up to 192kHz with 24-bit resolution and decode Dolby Digital and DTS bitstreams. The digital MCT DIN connection allows for streaming of high bandwidth digital signals (DSD, PCM) from external sources. The USB input processes PCM digital signals up to 192kHz with 32-bit resolution, decodes up to DSD512 digital signals and DXD 24-bit with a sampling rate of 352.8kHz (or 384kHz).

Trademark and License Information

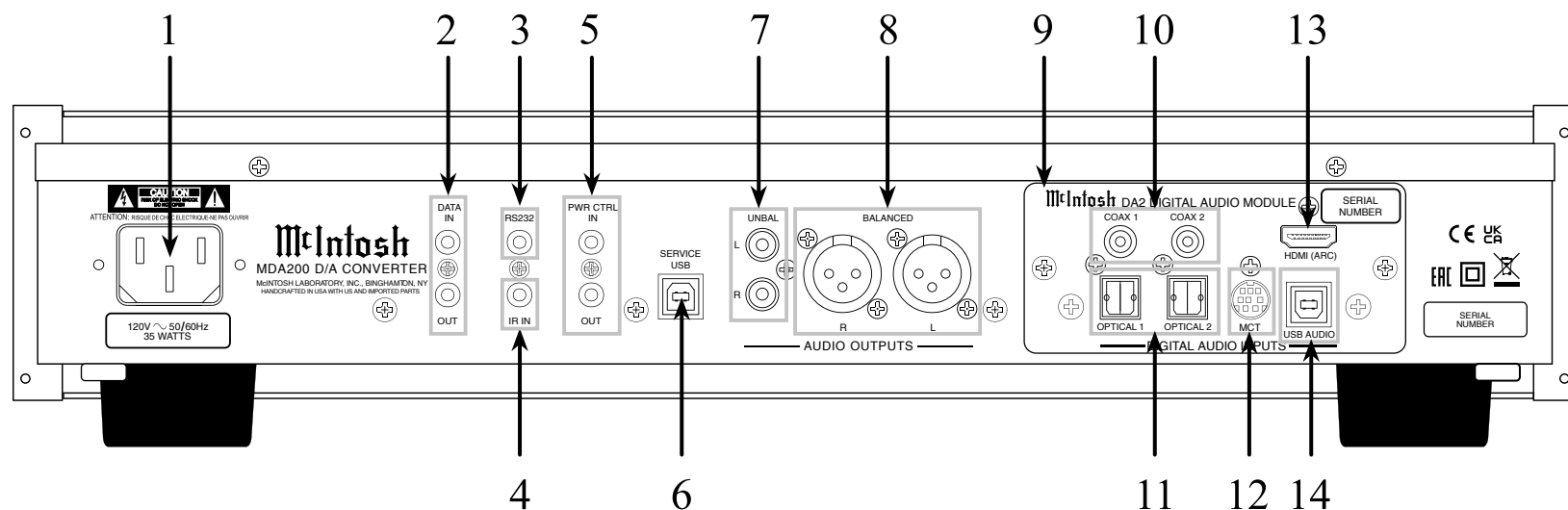
The McIntosh MDA200 incorporates copyright protected technology that is protected by U.S. patents and other intellectual property rights. The MDA200 uses the following technologies:

Trademark Logo	License Information
	ASIO is a trademark and software of Steinberg Media Technologies GmbH
	The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.
	For DTS patents, see http://patents.dts.com . Manufactured under license from DTS, Inc. DTS, the Symbol, DTS and the Symbol together, and Digital Surround are registered trademarks and/or trademarks of DTS, Inc. in the United States and/or other countries. DTS, Inc. All Rights Reserved.
	License Notice and Trademark Acknowledgment: Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories.



Front Panel Displays and Switches

1. **INPUT Knob** rotates to select different input sources for playback and navigate through different options in the menus. Access menus by holding or pressing the knob in.
2. **IR Sensor** receives commands from your remote control.
3. **Standby Indicator LED** illuminates when the MDA200 is connected to AC power.
4. **ADJUST Knob** adjusts the output level when “Adjustable” is selected in the setup menu. Also used to navigate in the menus and trims.



Rear Panel Connections and Switches

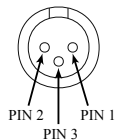
1. **AC Input** uses a Power Cord to connect to an AC Outlet.
2. **DATA IN** receives operating data from a McIntosh preamplifier or Control Center. **DATA OUT** sends remote control signals to source components.
3. **RS232 Connector** communicates with external control devices using a 3.5mm stereo mini phone plug cable.
4. **IR Input** connects to an IR receiver using a 3.5mm stereo mini phone plug cable.
5. **Power Control IN** receives turn On/Off signals from another McIntosh component. **Power Control OUT** sends a turn On/Off signals to another McIntosh component.
6. **SERVICE USB** is a USB Type-B port used for service purposes only.
7. **UNBALANCED Outputs** use an RCA connector cable for a fixed or adjustable volume level signal.
8. **BALANCED Outputs** each use an XLR connector cable for a balanced output signal.
9. **DA2 DIGITAL AUDIO MODULE**
10. **COAX Inputs (1 and 2)** accept coaxial cables for digital signals.
11. **OPTICAL Inputs (1 and 2)** accept optical connections for digital signals.
12. **MCT Input** transfers signals from McIntosh products with an MCT connector and is required for SACD audio.
13. **HDMI (ARC) Input** connects with a compatible ARC TV using an HDMI cord to share control and digital audio connectivity.
Note: The HDMI ARC functionality of the MDA200 is only compatible with ARC TVs. Other devices like DVD and Blu-ray players will not work.
14. **USB AUDIO Input** is a USB Type-B connector used to connect the MDA200 to a computer to stream digital audio.

Connectors and Cable Information

XLR Connectors

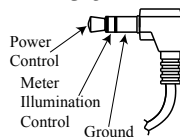
Below is the pin configuration for the XLR balanced output connectors on the MDA200. Refer to the diagram for connection:

- PIN 1: Shield/Ground
- PIN 2: + Input/Output
- PIN 3: – Input/Output



Power Control Connector

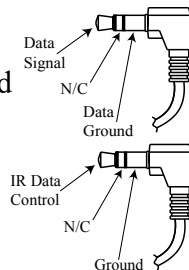
The MDA200 power control input receives an On/Off signal from +5 to +12 volts. The power control output will in turn provide a +12 volt output signal with a total current up to 25mA. An additional connection is for controlling the illumination of other McIntosh products' meter power output indicators. The 3.5mm stereo mini phone plug connects to a McIntosh preamplifier or A/V control center power control output.



Data Input and IR IN Port Connectors

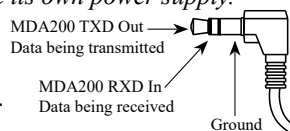
The MDA200 data in port receives remote control signals from McIntosh preamplifiers and A/V control centers. The data out port will send the converted IR commands to another attached McIntosh component. A 3.5mm stereo mini phone plug is used for connection.

The IR in port also uses a 3.5mm stereo mini phone plug and allows the connection of other brand IR receivers to the MDA200.



Note: The IR receiver must provide its own power supply.

The RS232-C Data Cable is a 3.5mm stereo mini phone plug used to connect to external third party controllers.



USB Audio

The USB audio input of the MDA200 provides the capability to receive music/sound in a digital format from a connected computer.

Software Requirements

Apple® computers with OS-10.6.8 or later require no additional driver install to communicate with the MDA200.

For Windows-based computers (PC), Windows 7 (Service Pack 1) or later is required. The correct McIntosh USB audio driver must be installed for the PC to communicate with the MDA200.

To install the McIntosh USB driver for Windows-based computers download the latest driver from the McIntosh website: <https://www.mcintoshlabs.com/products/specialty-products/MDA200>

The driver can be found in the Downloads section of the webpage under Software Updates. Choose the DA2 Digital Audio Module: McIntosh USB Audio Windows Driver. You may select this driver in many third-party applications such as JRiver Media Center.

The MDA200's display will show the sampling rate or bit rate for the USB input.

Service USB Port

The service USB port on the rear of the MDA200 is for McIntosh service use only. Use the USB audio port for audio input.



Optical

The two optical inputs allow digital sources to be connected to the MDA200 using TOSLINK cables also known as "optical audio cables." The optical inputs can handle high resolution digital audio up to 192kHz/24-bit. The MDA200 DAC will process standard format SPDIF PCM signals and Dolby Digital and DTS bitstreams. Unsupported formats can result in strange and/or unpleasant sounds.

Coax

The two digital coaxial inputs allow digital sources to be connected to the MDA200 using Digital Audio RCA coaxial Cables. The coax inputs can handle high-resolution digital audio up to 192kHz/24-bit. The MDA200 DAC will process standard format SPDIF PCM signals and Dolby Digital and DTS bitstreams. Remember, unsupported formats can result in strange and/or unpleasant sounds.

System Configurations

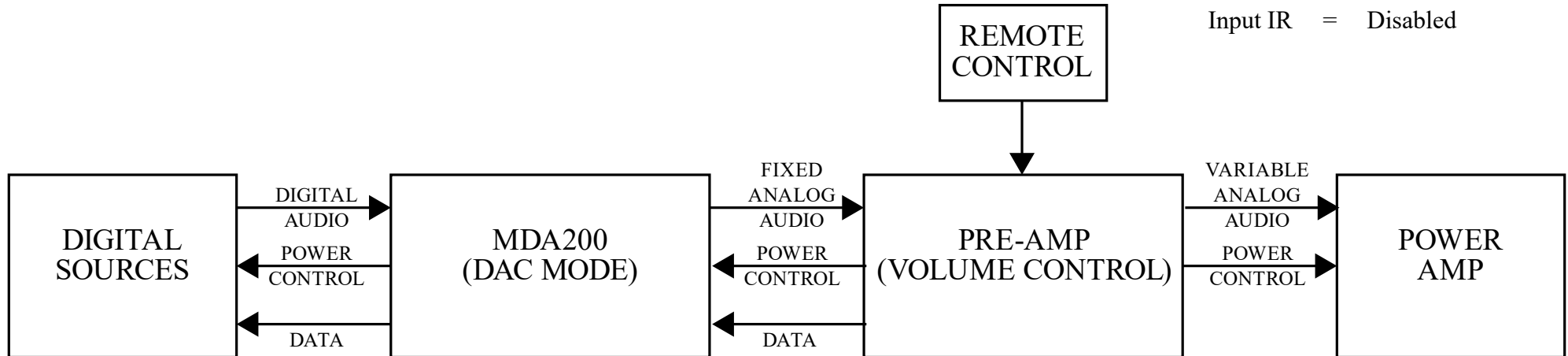
Shown below are two different system configurations. Your system may vary from this, however the actual components would be connected in a similar manner.

Note: The preamplifier or power amplifier may be connected to the MDA200 balanced or unbalanced outputs.

System Configuration for DAC Mode

Setup Menu Notes:

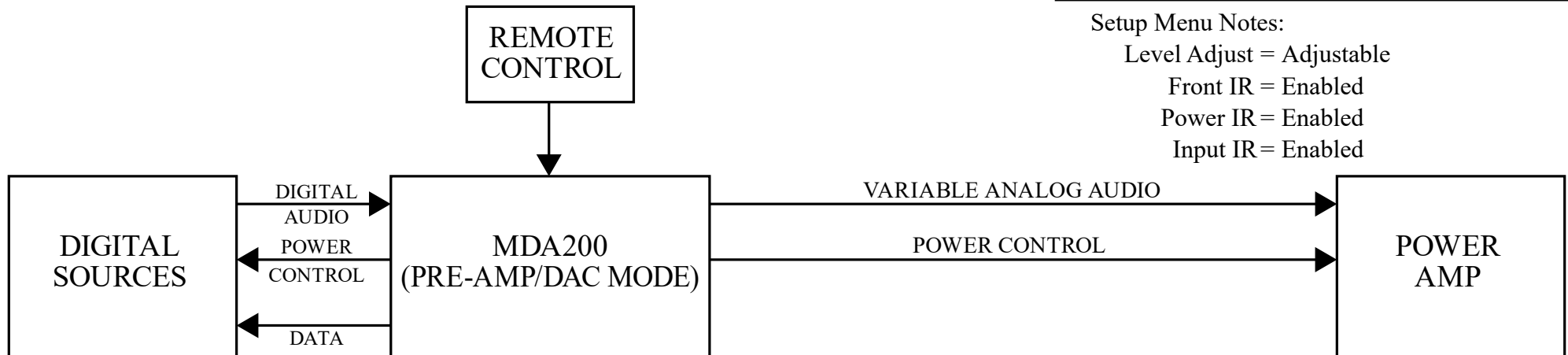
Level Adjust	=	Fixed (default)
Front IR	=	Disabled
Power IR	=	Disabled
Input IR	=	Disabled



System Configuration for Preamp / DAC Mode

Setup Menu Notes:

Level Adjust	=	Adjustable
Front IR	=	Enabled
Power IR	=	Enabled
Input IR	=	Enabled



Navigating the Setup Menu

Entering Setup Menu:

To enter the Setup Menu, push and hold the INPUT knob. Once the display shows the unit model, the firmware version, and the serial number, release the knob and you are in the setup menu. See next section for the setup menu overview.

Note: “Enter Code” will appear if the INPUT knob is held too long. This is for support purposes only. Press the knob again to exit.

Selecting/Adjusting Menu Settings:

You can navigate through and select the different options in the menus by rotating the INPUT knob. To adjust a selected setting, use the ADJUST knob. If a category in a menu has a submenu available, the display will show “Hold Input”, allowing you to hold down the INPUT knob to see additional options.

Exiting/Navigating Back:

A brief deliberate press (not hold) and release of the INPUT knob will exit the current menu. Make additional presses until the display shows the main operating screen to continue normal use of the unit.

Setup Menu Settings and Options

Setting	Options
S/N AKTxxxx	Displays the serial number of the MDA200
MDA200	V_ . _ _
DA2	V_ . _ _
Setup: Level Adjust	Fixed / Adjustable
INPUTS	On / Rename
HDMI CEC VOL (Consumer Electronic Control)	Control Command On / Off
HDMI CEC PWR	Power On or Off
Lip Synchronize Mode (Audio Only)	Auto / Manual
Digital Gain (for HDMI, Optical 1&2)	0-15dB
DATA PORT	All Data / Individual Input
RS232	115200 Baud Default
IR Codes	Normal / Alternate
Front IR	Enabled / Disabled
Power IR	Enabled / Disabled
Input IR	Enabled / Disabled
Trim IR	Enabled / Disabled
Auto-Off	Enabled / Disabled
Factory Reset	Default Settings

Setup Menu Settings

The following is a list of the available settings options. A down arrow ↓ represents being taken to a submenu after holding the INPUT knob while the display says “Hold Input”. The selectable options will be listed in brackets [] and separated by commas, with a brief description underneath of what each option does when selected.

Serial Number:

The MDA200’s unique serial number can be viewed by entering the setup menu and rotating the INPUT knob until you see “S/N:”. The numbers and letters to the right are the unit’s serial number. This number can also be found on the rear of the unit.

Firmware Version:

Firmware is internal software that controls the MDA200’s functionality. Firmware upgrades when available can be installed by qualified technicians.

The version of the main firmware of the MDA200 can be viewed by entering the setup menu. The first setting is called MDA200. The number to the right is the version number. For example, if the VFD displays “MDA200 V1.01”, then the main firmware is version 1.01.

There is also firmware for controlling the digital audio hardware. To see the digital audio firmware version, enter the setup menu and rotate the INPUT knob until you see “DA2 FIRMWARE”. The number following the V to the right is the digital audio firmware version.

Setup Menu Settings (continued)

Output Level Adjust:

SETUP: LEVEL ADJUST

[FIXED 70%, ADJUSTABLE]

Select the fixed setting for a system where the MDA200 DAC will feed a fixed line-level signal into a preamplifier or integrated amp that has its own master volume control.

Select the adjustable setting when using the MDA200 as both a DAC and a preamplifier, to directly feed a power amplifier. In this case the MDA200 ADJUST knob will work as the system volume control.

Input Settings:

SETUP: Inputs
(Hold INPUT knob)

↓
SETUP: [input name]
[On / Rename, Off]

On / Rename: The selected input will be functioning as normal. Hold in the INPUT knob to enter the menu to rename the input*.

Off: The selected input will be deactivated and will no longer be selectable from the main display during normal use. Change this setting back to “On / Rename” to make it selectable again.

***Renaming inputs:** While in the selected input’s submenu, use the INPUT knob to navigate to the input with the name you’d like to change (and turn it On using the ADJUST knob if it isn’t already) so that the display says “SETUP: [input name] On / Rename” and hold the INPUT knob to begin renaming. The character you are currently adjusting will be blinking. Rotate the INPUT knob to select which character you want to change and use the ADJUST knob to change the character.

HDMI CEC Settings:

SETUP: HDMI CEC VOL

[ON, OFF]

ON: Allows compatible devices to use CEC (Consumer Electronics Control) to control certain functions of the MDA200.

OFF: Prevents MDA200 from being controlled w/ CEC.

SETUP: HDMI CEC PWR

[ON, OFF]

ON: Allows compatible devices to use CEC (Consumer Electronics Control) to power On/Off the MDA200 or be powered On/Off by the MDA200.

OFF: Prevents devices from using CEC to power On/Off the MDA200 or be powered On/Off by the MDA200.

HDMI Lip Sync Mode Settings:

SETUP: Lip Sync Mode

[Auto, Manual]

Auto: The MDA200 will automatically synchronize audio signals received through HDMI.

Manual: Disables auto video/audio synchronization through HDMI, allowing you to manually calibrate audio/video sync from connected devices.

Digital Gain Settings:

SETUP: Digital Gain

(Hold INPUT knob)

↓
SETUP: [HDMI, OPTI 1, OPTI 2] Gain
[Volume in dB]

To get more even playback Volume from your connected digital devices, adjust their individual volumes with this setting. The defaults are +14dB for HDMI and +0dB for optical.

Data Port Settings:

SETUP: Data Port

(Hold INPUT knob)

↓
SETUP: [DATA PORT]
[All Data, input name]

All Data: Devices connected to the data port will receive the same data from the remote control.

[input name]: Dedicate the data port to a specific input, forcing that data port to only send data received from that input when it receives commands from the remote control.

RS232 Baud Rate Setup:

The settings for serial communications are:

8 bit, no parity and 1 stop bit

The speed at which the MDA200 communicates with devices plugged into the RS232 Port (the Baud Rate) can be adjusted with this Setting.

SETUP: RS232

[rate in bits] Baud

It is recommended to leave this at the highest setting of 115200.

Setup Menu Settings (continued)

IR Codes Settings:

SETUP: IR Codes

[Normal, Alternate]

By default, the included HR091 remote control sends “Normal” IR codes when buttons are pressed. Any McIntosh device set to receive “Normal” IR codes will receive the signal. To prevent controlling multiple devices with the remote control at once, change this setting to “Alternate” to prevent signals from the remote control being read. Then an optional remote control like the McIntosh HR085 or HR093 set to alternate codes would control the MDA200.

Front IR Sensor Settings:

SETUP: Front IR

[Enabled, Disabled]

You can enable or disable the functionality of the IR sensor to change whether or not the MDA200 will accept commands from the remote control. You may want to do this if you have an external IR sensor that operates the MDA200 with other devices.

Power IR, Input IR, and Trim IR Settings:

The MDA200 can be controlled by another McIntosh unit’s remote control using the data in port. If you want to limit what commands sent by the connected unit affect the MDA200 you can use the Power IR and Input IR settings.

To disable power commands coming from the data port or from a connected external IR sensor connected the IR in port, enter the setup menu and select Power IR On or Off by rotating the ADJUST knob.

If you wish to disable input commands coming from the data port or from a connected external IR sensor connected the IR in, enter the setup menu. Select Input IR On or Off by rotating the ADJUST knob.

If you wish to disable trim commands coming from the data port or from a connected external IR sensor connected the IR in, enter the setup menu. Select Trim IR On or Off by rotating the ADJUST knob.

Power Saving Settings:

SETUP: Auto-Off

[Enabled, Disabled]

Enabled: The MDA200 automatically enters Standby Mode after approximately 30 minutes of not playing sound or changing settings.

Disabled: The MDA200 will not power off automatically and will remain On until you turn it off.

Factory Reset:

Use the factory reset option if you wish to return all settings to factory defaults. All previous setup changes will be lost.

FACTORY RESET

(Hold INPUT knob)


While on this option, hold the INPUT knob until the display says “In Progress!” and immediately release. Once the display says “Completed!”, your unit’s settings will be set back to their factory defaults.

Trim Functions Menu

Entering Trim Functions Menu

A brief deliberate press (not hold) and release of the INPUT knob will take you to the trim functions menu.

Trim Functions Menu Options

Settings	Options
Balance	L, Center, R
Input Trim	-6dB to +6dB
Brightness	4 Levels Dim  Bright

Adjusting Trim Functions:

The following is a list of descriptions of the various options in the trim functions menu. The remote control will also adjust these settings.

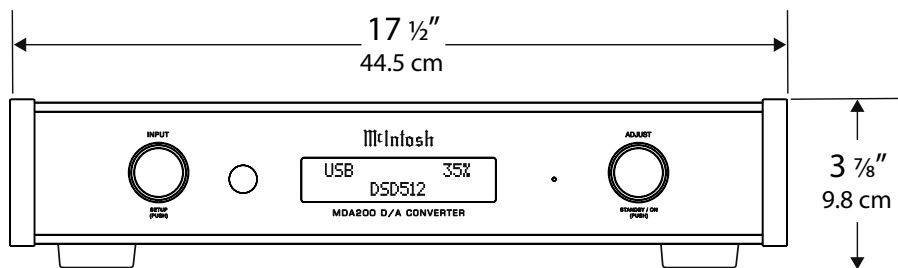
Note: The balance and input trim settings in this menu will only be adjusted and affect the currently selected input and their configurations will be independently saved.

- **Adjusting Audio Balance:** If you want one loudspeaker to be louder than the other, while on the balance setting, use the ADJUST knob to adjust the meter to whichever channel you wish to be louder. The more filled the meter is under a channel, the louder that channel will get, while the opposite channel will get quieter.
- **Adjusting Input Trim Levels:** Devices connected to the various inputs may be sending audio at varying volumes to the MDA200. This could result in uneven playback volume when changing sources. To correct this, you can raise or lower the volume of an input as it enters the MDA200 by adjusting its trim level with this setting.
- **Adjusting Brightness:** The front information display can be adjusted for brightness in four levels from dim to bright.

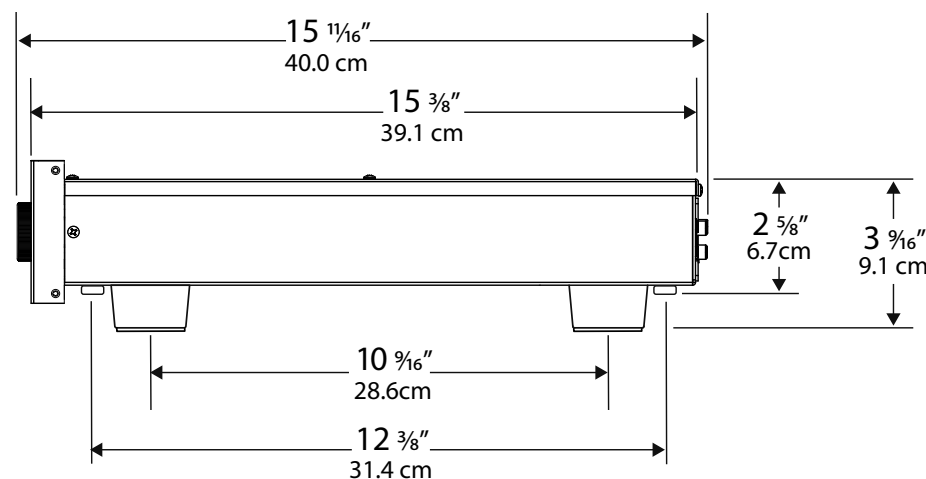
The following dimensions can assist in determining the best location for your MDA200.

A Note on Placement:

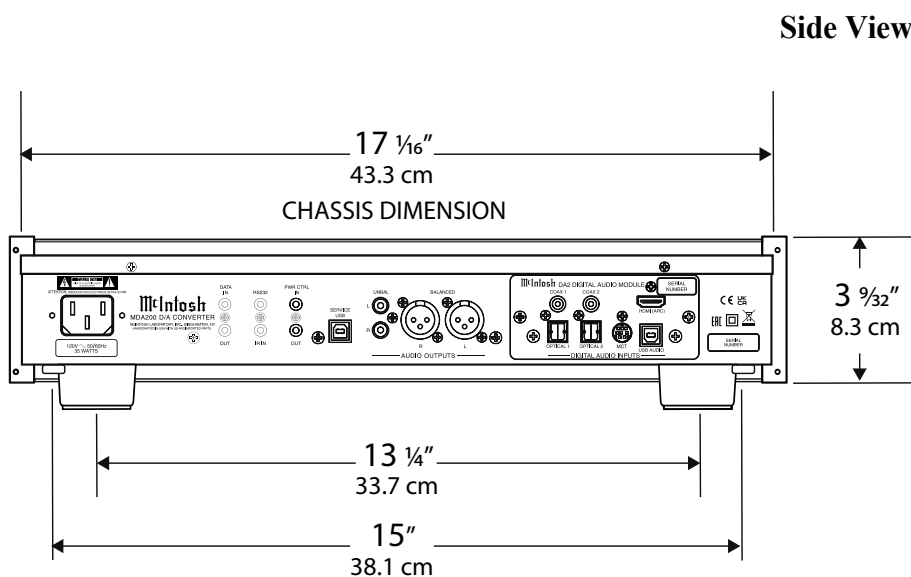
It is important to keep your McIntosh unit out of direct sunlight and only use appropriate gentle cleaners because the Organic Anodize can become discolored over time. While most products will maintain their classic dark features for their lifetime, some situations can accelerate discoloration. The most pervasive culprit is UV light, especially light directly from the sun, or high intensity spotlights. Even high intensity short-term exposure can result in discoloration. Chemicals can also alter the finish of the Anodize. Aggressive cleaners will take their toll over time and actually etch away the Anodize finish.



Front View



Rear View



Side View

Using Your MDA200

The MDA200 has the ability to automatically switch power On or Off to source components via the power control connections. The data port connections allow for the remote operation of basic functions using the remote control. With an external sensor connected to the MDA200, remote control operation of the system is possible from another room and/or when the MDA200 is located in a cabinet with the doors closed.

Powering On / Turning Off:

While the unit is in Standby Mode (no lights except the LED indicator light are on), press the ADJUST knob to power on the unit. While the unit is on, press the ADJUST knob again to enter Standby Mode (turn it off). Using the remote control, press the power button to turn the MDA200 On or Off where appropriate. If power control is connected from a preamplifier, the MDA200 will automatically turn on and off with the preamplifier.

Selecting an Input for Playback:

You can change the current playback source by rotating the INPUT knob or by using the input button on the remote control.

Adjusting the Level:

If the level setting in the setup menu is set for “Adjustable,” rotate the ADJUST knob or use the volume buttons on the remote control to adjust the volume. The current volume level is represented by a percentage on the display.

Note: The volume control will not affect audio if the level setting in the setup menu is set for “Fixed” level.

HDMI ARC

The HDMI ARC (Audio Return Channel) allows you to use your entire audio system to play the sound from your TV.

Notes: • Ensure you are connected to the TV’s HDMI input port that is labeled “ARC”.

- Your TV’s setup menu and settings may need to be adjusted before sound is heard.
- When the MDA200 is set to the HDMI input, the unit will automatically turn On and Off with the TV. The front display will show “Entering HDMI Standby Mode” when turning Off.
- Multi-channel formats will be down mixed to a 2-channel output.

Audio formats supported by HDMI ARC:

- PCM (2 channel)
- Dolby Digital (up to 5.1 channel)
- DTS Digital Surround (up to 5.1 channel)

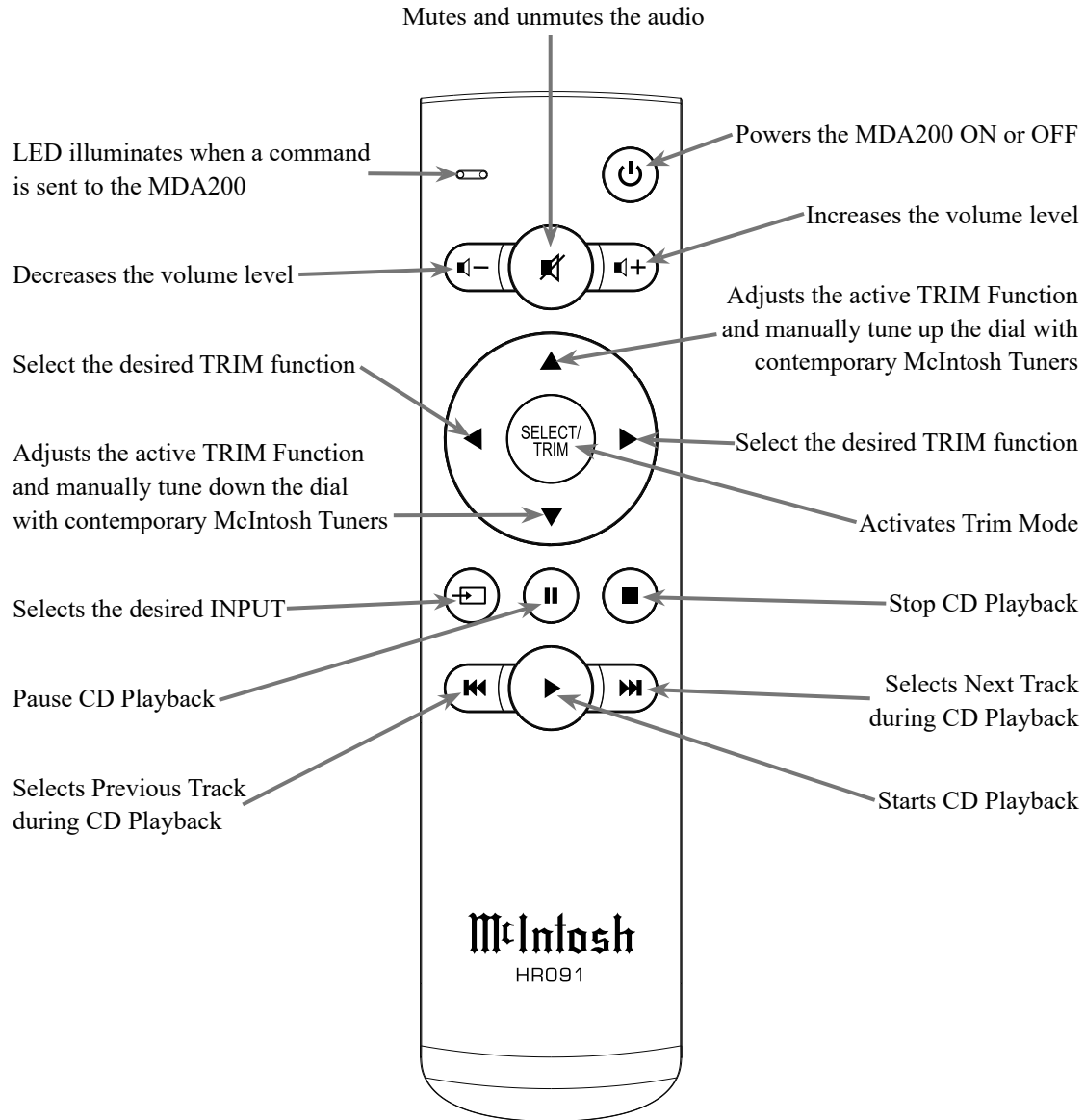
MCT Input

When playing a multi-layer SACD, select the stereo (SACD) or CD layer. The multi-channel layer will not reproduce sound.

Troubleshooting

In the unlikely event that your commands are not being registered by the unit, you can reset the micro-processors. To do so, hold the ADJUST knob down until the LED power indicator light switches off. Release the button, and when the light illuminates again, you can press the button again to power the unit On and resume normal operation. Be sure to let off the button as soon as the LED lights back up.

Remote Control Buttons



Note: The following additional discrete IR commands for external control systems are available: POWER ON, POWER OFF, INPUT (Down), COAX 1, COAX 2, OPT 1, OPT 2, USB, MCT, and HDMI ARC. Contact McIntosh Technical Assistance or your dealer for more information.

Changing the Remote's Battery

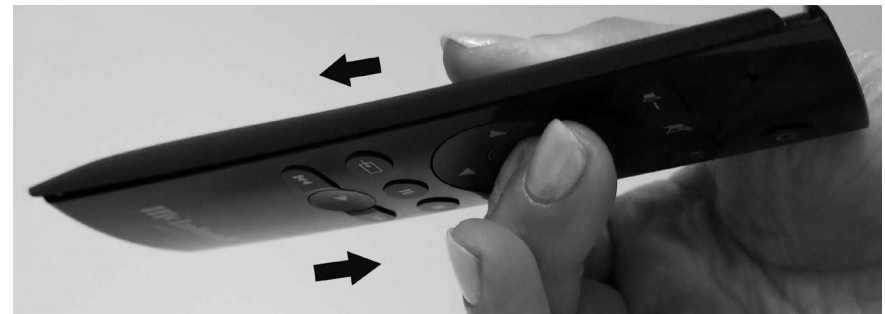
The back of the remote control is held in place by magnets. To remove the back of the remote to reveal the battery, slide the front of the remote up while sliding the back of the remote down. The goal is to move the back $\frac{3}{16}$ of an inch from the top of the remote and then lift it off.

Open the remote:

1. Hold the remote upside down and backwards with the McIntosh name facing down and away from you. You should be looking at the back of the remote.
2. Pinch the remote with your index finger resting on the SELECT/TRIM button and your thumb on the backside (facing you) opposite your index finger's position. Your thumb and remote should both be pointing away from you.
3. Use your thumb to slide the back open $\frac{3}{16}$ of an inch by sliding your thumb away from you towards the thicker end of the remote, while your index finger goes in the opposite direction (towards you). Make sure you do not hold the side edge with either hand.
4. Lift the back off with your other hand before it snaps closed again.
5. Remove and replace the battery noting the polarity.

Replace the back:

Place the back in position $\frac{3}{16}$ of an inch from the edge. Slide the back towards the top of the remote and the magnets will help you snap it into place.



Audio Specifications

Frequency Response

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

+0.5/-3dB from 5Hz to 60,000Hz (Source dependent)

Total Harmonic Distortion

0.005%

Fixed Output level

2.0Vrms Unbalanced

4.0Vrms Balanced

Adjustable Output level

0 - 8.0Vrms Unbalanced

0- 16.0Vrms Balanced

Signal To Noise Ratio (A-Weighted)

100dB

Dynamic Range

100dB

Output Impedance

100 ohms Unbalanced and Balanced

Digital Audio Specifications

Digital Input Signal Format

Coaxial and Optical Inputs - SPDIF (PCM), and bitstream

MCT - SACD, PCM

USB Audio - DSD, DXD, PCM

HDMI - PCM, Dolby Digital, DTS

Digital Input Sample Rates

Optical: PCM 16-bit, 24-bit 44.1-192kHz

Coaxial: PCM 16-bit, 24-bit 44.1-192kHz

MCT: PCM, SACD, 16-bit, 24-bit 44.1-192kHz

USB: PCM 16-bit, 24-bit, 32-bit 44.1-192kHz

DXD DXD352.8kHz, DXD384kHz

DSD DSD64, DSD128, DSD256, DSD512

HDMI: PCM 24-bit, 44.1-192kHz, bitstream

Digital Inputs

Coaxial: 0.5V p-p/75 ohms

Optical: -15dbm to -21dbm (TOS Link)

MCT: 0.5V p-p/75 ohms

USB Audio: USB Type B Connector

HDMI: 2.0 ARC

General Specifications

Power Control Out

12VDC, 25mA

Power Requirements

Field AC Voltage conversion of the MDA200 is not possible. The MDA200 is factory configured for one of the following AC Voltages:

100 Volts, 50/60Hz at 35 watts

110 Volts, 50/60Hz at 35 watts

120 Volts, 50/60Hz at 35 watts

220 Volts, 50/60Hz at 35 watts

230 Volts, 50/60Hz at 35 watts

240 Volts, 50/60Hz at 35 watts

Standby Power, less than 0.5 watts

Note: Refer to the rear panel of the MDA200 for the correct voltage.

Overall Dimensions

Width is 17 ½ inches (44.45cm)

Height is 3 ⅞ inches (9.8cm) including plastic feet

Depth is 15 ⅞ inches (39.95cm) including the front panel, knobs, and connectors

Weight

13.5 pounds (6.1 kg) net, 28 pounds (12.7 kg) in shipping carton

Shipping Carton Dimensions

Width is 26 ½ inches (67.3cm)

Height is 11 ¾ inches (29.9cm)

Depth is 24 ¼ inches (62.2cm)

Trademarks of McIntosh Laboratory, Inc.:

The following are Registered Trademarks of McIntosh Laboratory, Inc. in multiple jurisdictions around the world: the written McIntosh logo; the McIntosh Globe logo; the Mc logo; Power Guard; Power Guard Screen Grid Sensor; Power Guard SGS; LD/HP; Dynamic Power Manager; the 4DPM8 logo; HXD; the HXD logo; Behind The Sound; Legendary Performance.

The following are Trademarks of McIntosh Laboratory, Inc. in multiple jurisdictions around the world: Autoformer; Sentry Monitor; Solid Cinch; McIntosh Monogrammed Heatsinks; Hybrid Drive; DualView; TripleView; Made of Sound.

The foregoing trademarks, registered and otherwise, are not to be used, reproduced, or registered in any way without the express written permission of McIntosh Laboratory, Inc.

Packing Instructions

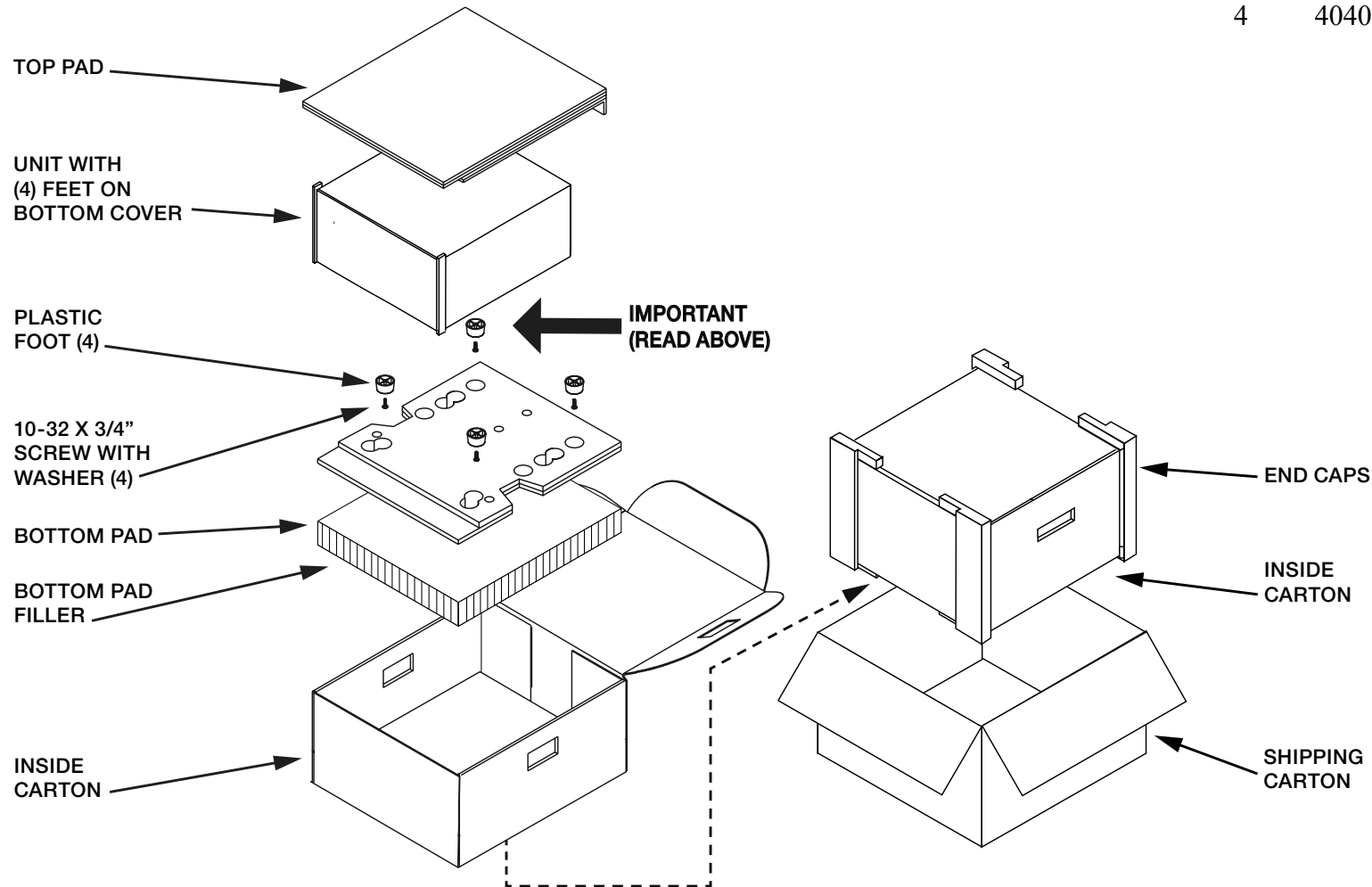
In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below.

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. Refer to page 2. Please see the Part List for the correct part numbers.

Part List

Qty	Part Number	Description
1	033838	Shipping carton only
4	033837	Foam end caps
1	033836	Inside carton only
1	033725	Top pad
1	034576	Bottom pad
1	034547	Bottom filler pad
4	017937	Plastic feet
4	400159	#10-32 x 3/4" screws
4	404080	#10 Flat washers



McIntosh®

MADE OF SOUND™

McIntosh Laboratory, Inc.
2 Chambers Street
Binghamton, NY 13903
www.mcintoshlabs.com

The continuous improvement of its products is the policy of McIntosh Laboratory Incorporated who reserve the right to improve design without notice.

Printed in the U.S.A.

McIntosh Part No. 24120101