McIntosh

MA9500

Integrated Amplifier

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.
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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

Safety First

Please read the additional document **INSTRUCTIONS: Safety - Lithium Batteries -Disposal**

General Information

- The main AC power going to the MA9500, and any other component(s), should only be applied when all the system components are connected together to prevent the malfunction of the system's normal operations.
- The MA9500 has been tested and certified for indoor use only.
- To protect the anodized finish of the MA9500, limit exposure to UV light, high intensity lighting, and cleaners with harsh chemicals.
- For additional information on the MA9500 and other McIntosh products, please visit the McIntosh website at www.mcintoshlabs.com.
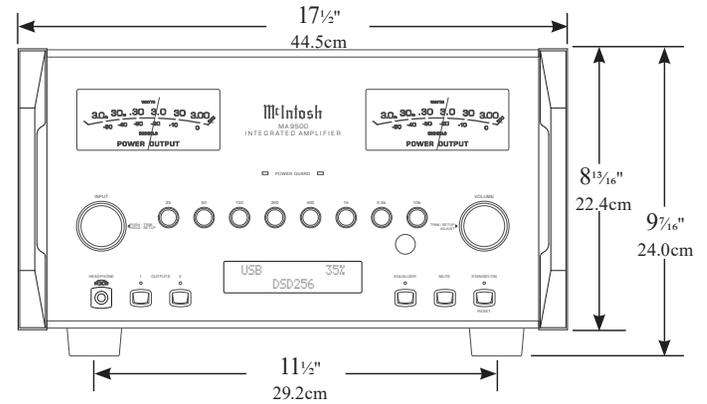
McIntosh

Trademark and License Information

The McIntosh MA9500 incorporates copyright protected technology that is protected by U.S. patents and other intellectual property rights. The MA9500 uses the following Technologies:
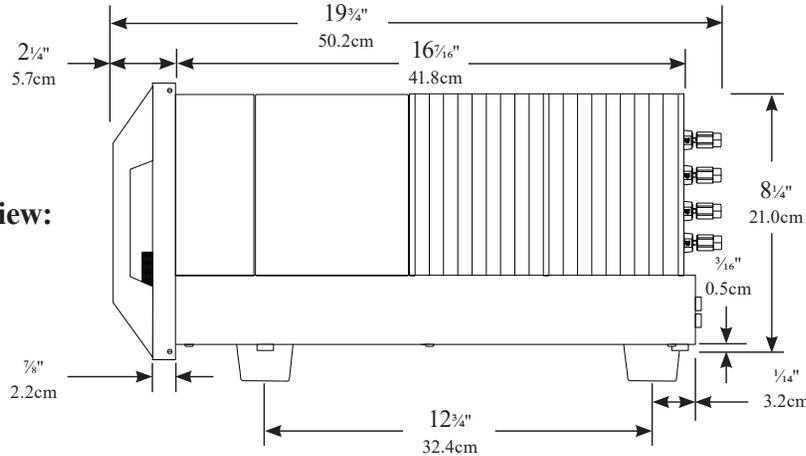
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▶◀Dolby **AUDIO**	Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories.
dts™	For DTS patents, see http://patents.dts.com. Manufactured under license from DTS, Inc. DTS, 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.
HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE	The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

Dimensions
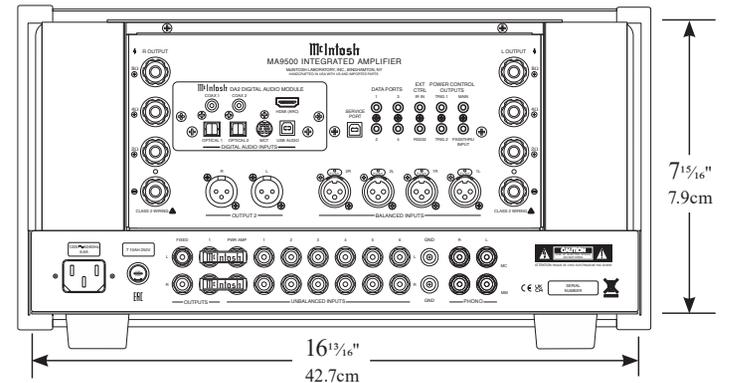
Front View:

17½"
44.5cm

8¹³⁄₁₆"
22.4cm

9⁷⁄₁₆"
24.0cm

11½"
29.2cm

Side View:

2¼"
5.7cm

19¾"
50.2cm

16⁷⁄₁₆"
41.8cm

8¼"
21.0cm

³⁄₁₆"
0.5cm

⁷⁄₈"
2.2cm

¹⁄₁₄"
3.2cm

12¾"
32.4cm

Rear View:
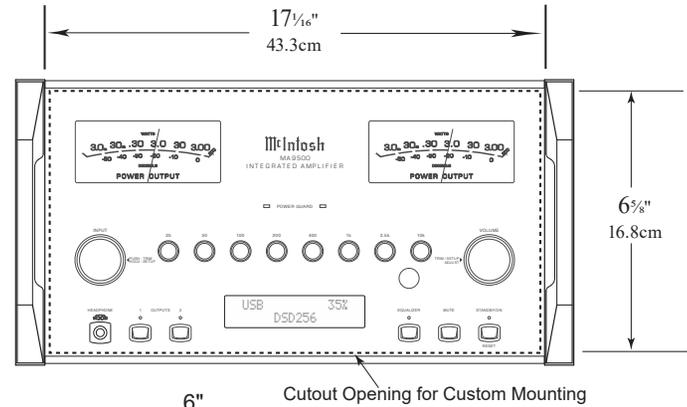

7¹⁵⁄₁₆"
7.9cm

16¹³⁄₁₆"
42.7cm

Installation

WARNING: *The MA9500 is heavy (approx. 101 lbs). Please get help when moving the unit, and make sure your furniture or cabinetry is sturdy enough to hold it.*

The MA9500 can be placed upright on a table or shelf, standing on its four feet. It also can be custom installed in a piece of furniture or cabinet of your choice. The four feet may be removed from the bottom of the MA9500 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 MA9500 is removed from the custom installation and used free standing. The required panel cutout, ventilation cutout and unit dimensions are shown. Always provide adequate ventilation for your MA9500. Cool operation ensures the longest possible operating life for any electronic instrument. Do not install the MA9500 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 6 inches (15.2cm) above the top, 2 inches (5.1cm) below the bottom and 2 inches (5.1cm) on each side of the Integrated Amplifier, so that airflow is not obstructed. Allow 2 inches (5.1cm) depth behind the front panel. Allow 1⅛ inch (3.7cm) 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.
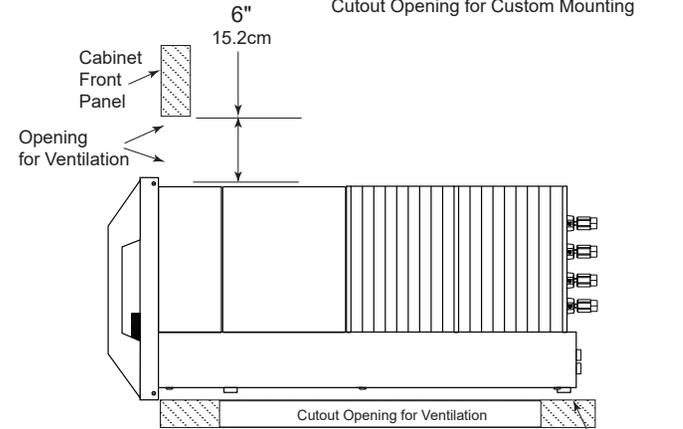
Notes:

1. *If you remove the feet from your unit, be sure not to lose them, as they will need to be reattached if you need to send the unit back for service.*

2. *Use an appropriately-sized Phillips drill bit, or you may cause damage to the screw heads, making the feet impossible to remove.*

MA9500 Front Panel Custom Cabinet Cutout

17¹⁄₁₆"
43.3cm

6⅝"
16.8cm

Cutout Opening for Custom Mounting

6"
15.2cm

Cabinet Front Panel

Opening for Ventilation

MA9500 Side View in Cabinet Cabinet

Cutout Opening for Ventilation

Support Shelf

Chassis Spacers

1"
2.5cm

2"
5.1cm

13"
33cm

15¹⁄₁₆"
38.3cm

MA9500 Bottom View in Custom Cabinet

Cutout Opening for Ventilation

13⁵⁄₁₆ "
33.8cm
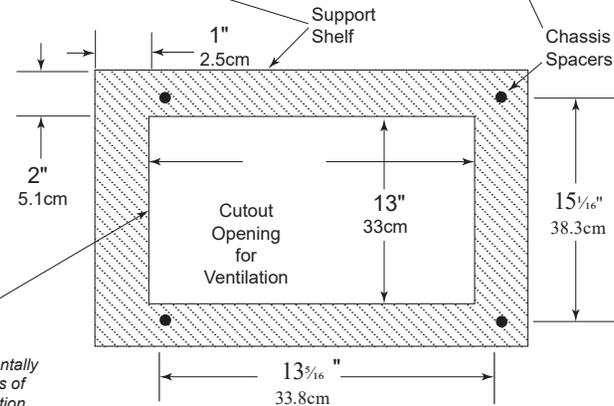
Note: Center the cutout Horizontally on the unit. For purposes of clarity, the above illustration is not drawn to scale.

Connecting Devices

Input and Control:

IR Sensor

Connection Legend:
Data Cable*
Sensor/Keypad Cable
Power Control Cable*
Loudspeaker Cable

Digital Signal Cable
Ground Wire
Audio Signal Cable

* 2 conductor shielded with 1/8 inch stereo mini phone plug on each end.

Computer

Media Server

AM/FM Tuner

SACD/CD Transport

Digital Audio Player

Turntable
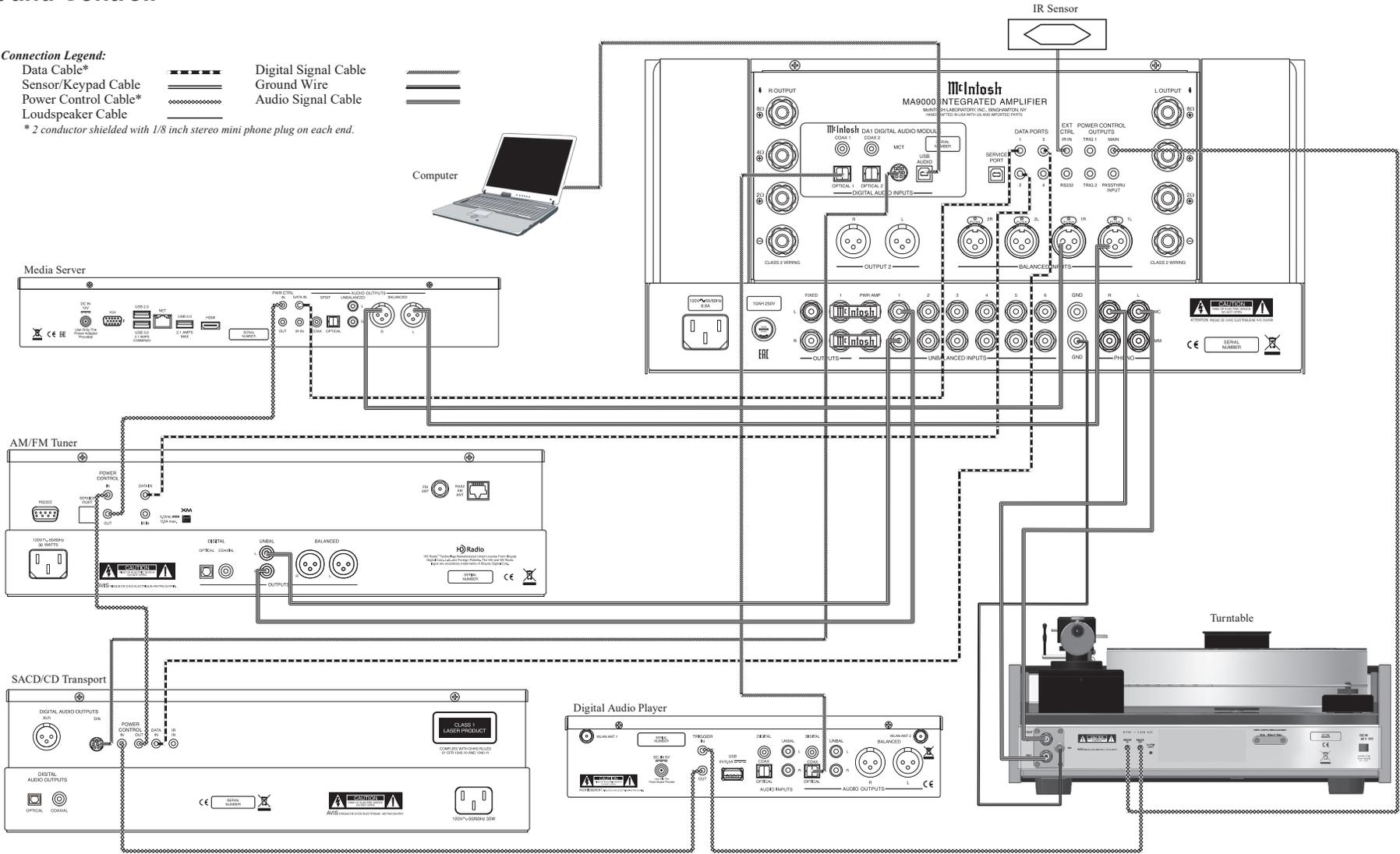
Output and Loudspeakers:

Connection Legend:

Data Cable*
Sensor/Keypad Cable
Power Control Cable*
Loudspeaker Cable

Digital Signal Cable
Ground Wire
Audio Signal Cable

* 2 conductor shielded with 1/8 inch stereo mini phone plug on each end.

Power Amplifier - Secondary Room

Right Loudspeaker - Secondary Room

Left Loudspeaker - Secondary Room

Right Loudspeaker

Left Loudspeaker

McIntosh
MA9500 INTEGRATED AMPLIFIER
McINTOSH LABORATORY, INC., BINGHAMTON, NY
HANDCRAFTED IN USA WITH US AND IMPORTED PARTS

McIntosh
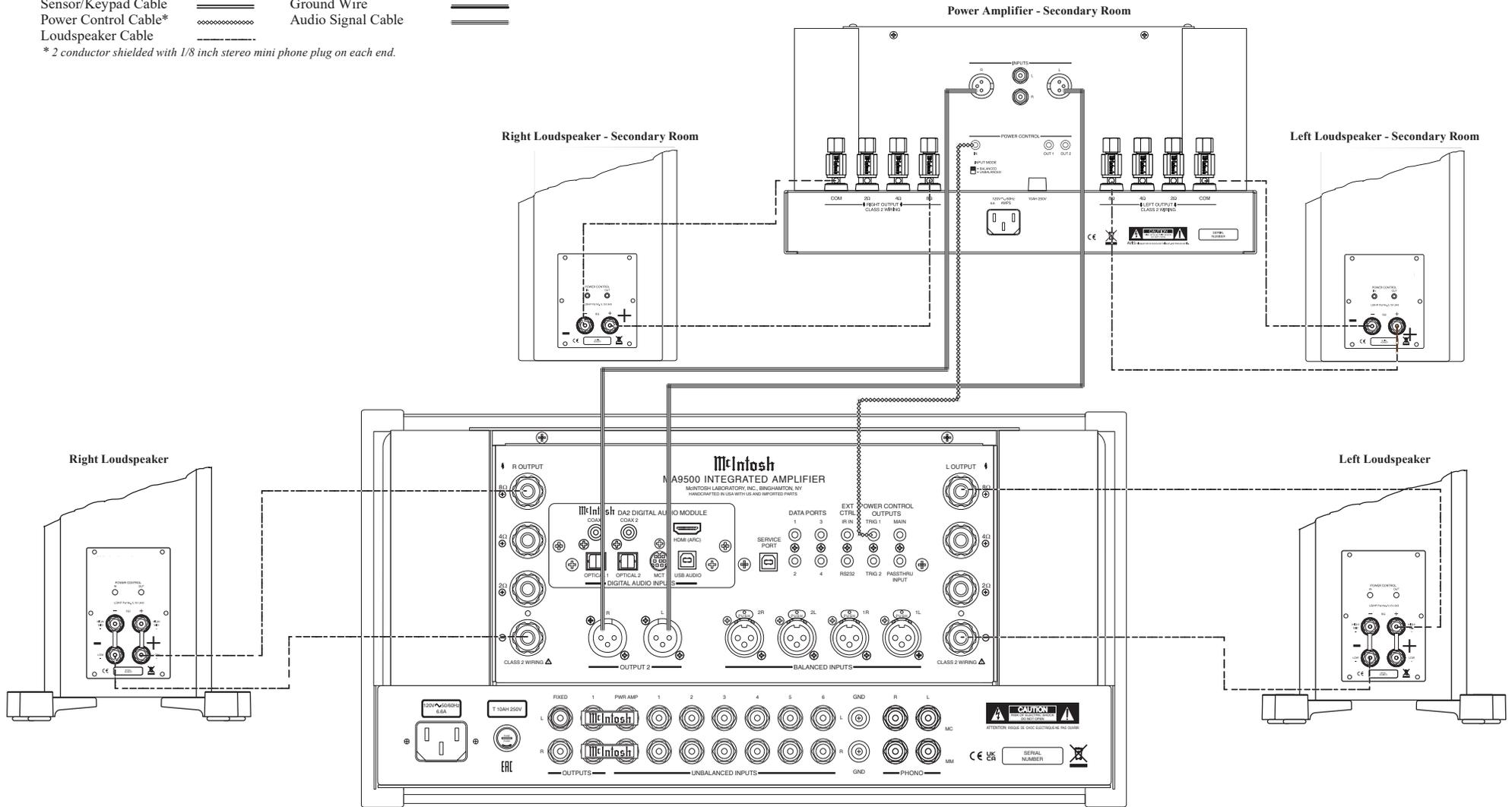
Connector and Cable Information

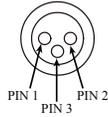### XLR Connectors
Below is the Pin configuration for the XLR Balanced Input Connectors on the MA9500. Refer to the diagram for connection:

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

PIN 1   PIN 2
PIN 3

Power Control and Trigger Connectors
The Power Control Trigger Output Jacks send and Passthru Input Jack receives Power On/Off Signals (+12 volt/0 volt) when connected to other McIntosh Components. An additional connection is for controlling the illumination of the Power Output Meters on McIntosh Power Amplifiers. A 3.5mm stereo mini phone plug is used for connection to the Power Control, Trigger and Passthru Outputs.

Data Port Connectors
The Data Out Ports send Remote Control Signals to Source Components. A 3.5mm stereo mini phone plug is used for connection.

Main, Trig 1&2 and Pass-Thru

Power Control
Meter Illumination Control
Ground

IR IN Port Connectors
The IR IN Port also uses a 3.5mm stereo mini phone plug and allows the connection of other brand IR Receivers to the MA9500.
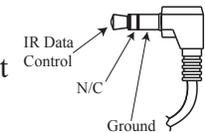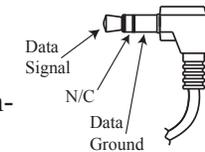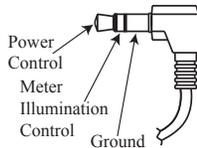
RS232-C Data Port Cable
The RS232 Data Cable is a 3.5mm stereo mini phone plug to a sub miniature DB 9 connector:

Data Signal
N/C
Data Ground

Output Terminal Connector
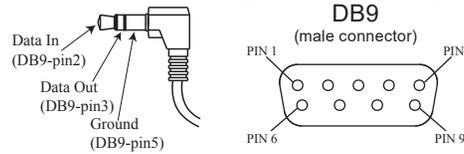When cables with spade lugs are used for Loudspeaker Connection, the spade lugs need an opening of at least 3/10 inch (7.6mm)

IR Data Control
N/C
Ground

## McIntosh Plug-In Jumper Connector (x2 Included)
The MA9500 utilizes two phono style Plug-In

Data In (DB9-pin2)
Data Out (DB9-pin3)
Ground (DB9-pin5)

DB9 (male connector)

PIN 1   PIN 5
PIN 6   PIN 9

Jumpers to connect the Preamplifier Output to the Power Amplifier Input.

Note: Additional or replacement Jumper Connectors can be obtained from the McInotsh Parts Department under Part No. 117781.

3/10 of an inch (7.6millimeters)
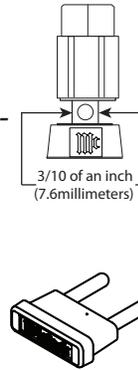
Connecting Loudspeakers

WARNING: *To avoid injury due to electrical shock or damage to your unit, do not attempt to attach loudspeakers while the MA9500 is plugged into a power outlet.*

Preparing the Output Terminal Posts:
Notes:

1. *When attaching loudspeakers, make sure the wires you used for positive (+) polarity is connected between the matching positive connectors on both the speakers and the unit. Do the same for the wires you used for negative (-) polarity. Do not make a connection between the separate channels (left and right).*

2. *Refer to your speakers' documentation to determine the correct Output Terminal Post to connect them to based on their ohm impedance. If your speaker ohm impedance falls between the MA9500s labeled Output Terminal Posts, used the nearest lower connection. Example: If your speakers have a 6-ohm impedance, connect them to the 4-ohm Output Terminal Post.*

3. *If you're using banana plugs, loosening the Output Terminal Posts is not necessary. Make sure the posts are tight before you attach the banana plugs.*

To prepare the Output Terminal Posts for wires, unscrew them with your fingers counterclockwise until the opening on the post is exposed. When wires are set inside, tighten by turning the posts clockwise until they stop, **making sure not to overtighten*.** Finally, to secure the wires in place, use the included McIntosh Wrench and turn the posts one quarter turn (90°) clockwise.

*WARNING: *Overtightening can cause damage.*

Opening
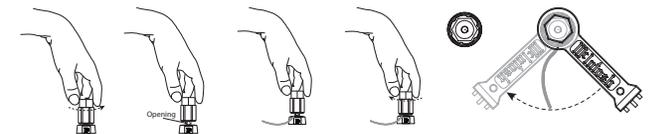
Preparing Your Speaker Wire:

Your speaker cord will have two sections, each with a set of wires in casing – one for each polarity (positive and negative). Using your choice of tool (such as pliers or clippers), take one cord section from one end and gently cut away and remove about ½ inch of the outer casing, making sure not to cut the internal wires. Once the casing is removed and the wires are exposed, use your fingers to twist the wires together until they are as narrow as possible, resembling a screw. Repeat this process for the remaining sections on both ends of the speaker cord.

0.5 inches
12.7mm

Connecting Speakers (Bare Wire):

After loosening the Output Terminal Posts, you will see an opening. Place your narrowed wires you previously exposed through the opening and tighten the posts using the method described in "Preparing the Output Terminal Posts".

Connecting Speakers (Banana Plug):

Make sure the Output Terminal Posts are tightened via the method described in "Preparing the Output Terminal Posts" (if necessary) and connect the banana plugs into the holes of the appropriate posts.

Connecting Speakers (Spade Lug):

While the Output Terminal Posts are unscrewed, slip the openings of the forks of the spade lugs around the inner part of the posts. and tighten the posts using the method described in "Preparing and Tightening the Output Terminal Posts."
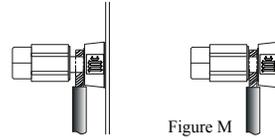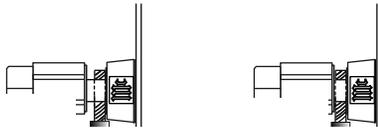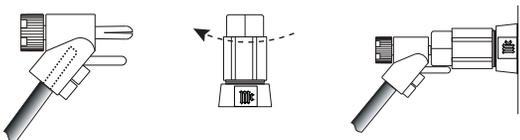
Figure M

McIntosh
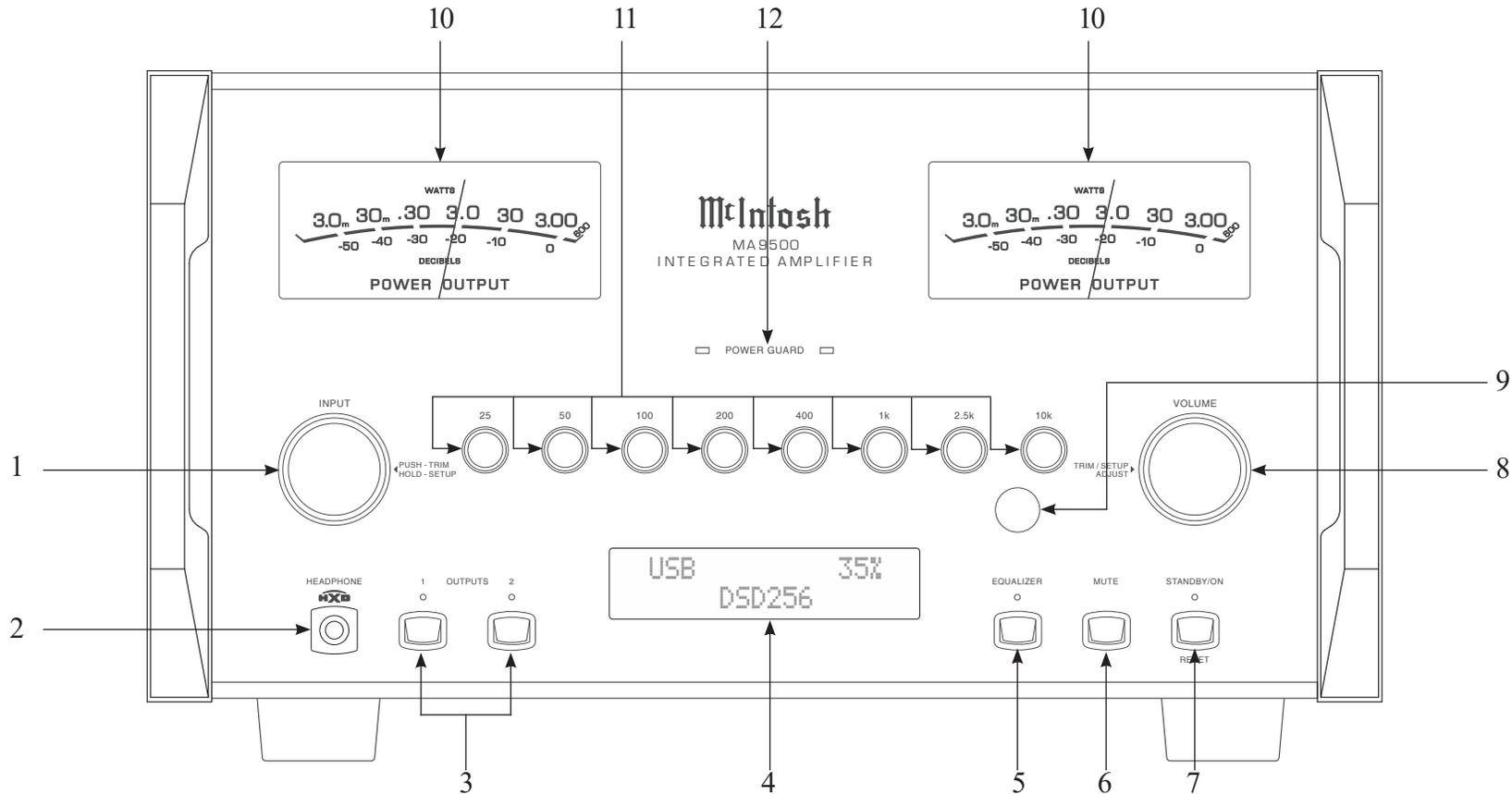
Front Panel

1. Input Control Knob: Rotate this to select different Input sources for playback, as well as navigate through different options in the menus. Access menus by holding or pressing the Knob in.

2. Headphone Jack: Plug in your .25" headphones here to gain access to the headphone amplifier.

3. Outputs Toggle Buttons (1 and 2): You can toggle playback through the outputs using these buttons.

4. Information Display: This will show information based on your current selection. Shows inputs and Menu options for navigation.

5. Equalizer Toggle Button: Toggle the Equalizer On or Off for the currently selected Input with this button.

6. Mute Button: This will mute all audio playback from the MA9500.

7. Standby/On Button: You can turn the device On or Off - put it in Standby Mode - using this button.

8. Volume Knob: Adjust the Volume with this Knob. You will also use this to adjust Settings in the menus (see Page 13).

9. IR Sensor: This is how the MA9500 receives commands from your Remote Control.

10. Power Output Meters: These gauge the power Output from the amplifier channels.

11. Frequency Adjustment Knobs: These will adjust the frequencies marked above each Knob for the sound coming through the any Input that has the Equalizer (see Page 16) is activated.

12. Power Guard Lights: These LED lights will illuminate when McIntosh's patented Power Guard (see Page 16) automatically kicks on to prevent playback distortion and protect your system from damage.

12. Coax Inputs (1 and 2): You will connect coaxial cables for digital signals into these ports.

13. Optical Inputs (1 and 2): These ports accept optical connections for digital signals.

14. MCT Input: Used to transfer signals from McIntosh products with an MCT connector. Required for SACD audio.

15. HDMI (ARC) Input: Connect an HDMI cord here to share control and connectivity with a compatible ARC TV.

16. USB Audio Input: A USB Type-B connector will go here to receive a digital signal from a computer.

17. Balanced Inputs: Plug in an XLR connector cable to these ports for balanced signals.

18. Service Port: This USB Type-B port will be used for service purposes only.

19. Data Ports (1-4): Using 3.5mm data cables, plug other McIntosh devices into these ports and control them with the remote ontrol

20. RS232 Port: Using a 3.5mm-to-DB9 cable (see next section), you can connect the device to a computer or another controller device through here.

Rear Panel

1. Main Power: Attach the included power cable here.

2. Main Fuse Holder: This is where the main fuse to power the unit is located.

3. Fixed Outputs: An RCA connector cable will produce a fixed, non-adjustable Volume level signal from here.

4. Output 1: Use this port with an RCA cable to send the signal to a subwoofer or power amplifier. Connect included Jumper Plugs to this port and PWR AMP to use onboard amp.

5. PWR AMP Input: Jumper plugs connect Output 1 to the onboard power amplifier. Also used as a loop for room correction with Output 1.

6. Unbalanced Inputs (1-6): You can connect up to six high-level unbalanced signals using an RCA connection with these ports.

7. GND Input: This is where you would put a ground wire from a turntable to prevent noise.

8. MM Phono Input: A turntable with a moving magnet cartridge can be plugged in with an RCA cable.

9. MC Phono Input: A turntable with a moving coil cartridge will plug in here with an RCA cable.

10. Loudspeaker Output Terminal Posts: Connect loudspeakers to these posts.

11. Output 2: Use an XLR connector cable for a balanced output signal from these ports.

21. IR In Port: Connect an external IR sensor here with a 3.5mm connector (see next section).

22. Trigger Ports (1 and 2): Connecting external components to these ports via a 3.5mm connection will allow you to send a signal to turn those devices On or Off from a signal sent by the MA9500.

23. Main Output Control Port: McIntosh devices can turn each other On and Off when connected via a 3.5mm connector to these ports.

24. Passthru Input: Connecting other devices with a 3.5mm connector, in addition to their main connection, will enable Passthru Mode when enabled in the Setup menu, producing unaltered audio.

McIntosh

Remote Control Operation
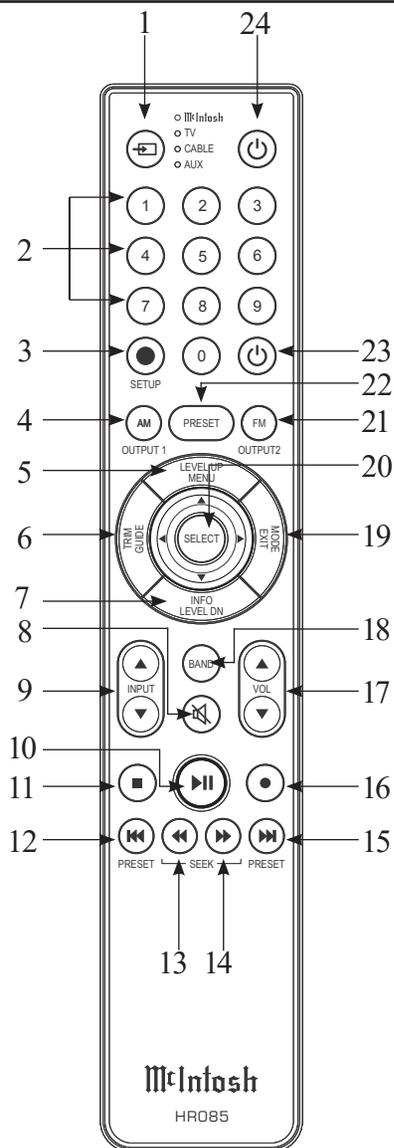
Note1: The included McIntosh HR085 remote control has buttons used to control multiple devices. While operating the MA9500 with the remote, nothing will happen when pressing buttons that activate features not present on the MA9500.

1. **Switch Device** jumps through different devices for remote operation. The selected device is indicated by the LED's to the right of the button.
2. **Numbers** select tuner presets, manually enters disc tracks and radio stations, and performs various other operations.
3. **SETUP** accesses additional functions of the AM and FM buttons, working as a "shift" key to access OUTPUT 1 and OUTPUT 2 functions.
   (*Note: Cannot be used to enter the MA9500's Setup menu.*)
4. **AM Tuner/OUTPUT 1** accesses AM Tuner, or toggles Output 1 if pressed after the SETUP button.
5. **LEVEL UP/MENU** accesses Trim functions in the Settings menu of compatible devices.
6. **TRIM/GUIDE** enters Trim menu, and opens Guide on compatible devices.
7. **INFO/LEVEL DOWN** accesses Trim functions in the Iettings menu of compatible devices.
8. **Mute:** stops all audio playback.
9. **INPUT** changes and selects different inputs.
10. **Play/Pause** halts playback of active media, and resumes upon pressing the button again[1].
11. **Stop** cancels playback, and resets progress in the active media[1].
12. **Previous/Previous PRESET** goes back to the previously selected media, and navigates to a previous tuner preset[1].
13. **Fast Reverse/SEEK Down** navigates backward through the active media, and adjusts the Tuner downward[1].
14. **Fast Forward/SEEK Up** navigates forward through the active media, and adjusts the tuner upwards[1].
15. **Next/Next PRESET** moves forward to the next media selection, and navigates to a later tuner preset[1].
16. **Record** records actively playing media[1].
17. **VOL** adjusts the volume[1].
18. **BAND** changes the band on the connected tuner, and selects certain options on various McIntosh models[1].
19. **MODE/EXIT** exits the Trim menu, and displays information and options.
20. **SELECT** picks the highlighted option where applicable
21. **FM Tuner/OUTPUT 2** accesses FM Tuner, or toggles Output 2 if pressed after the SETUP button.
22. **PRESET** selects a stored preset when pressing PRESET followed by the number (0-9) associated with the desired preset.
23. **Power Off:** Turns off the selected device.
24. **Power On:** Turns on the selected device.

Additional Discrete Commands
Additional discrete commands for external control systems are available for toggling power, and selecting audio inputs.

These additional commands can be accessed using an optional McIntosh HR093 service remote control.

Contact McIntosh Technical Assistance, or your dealer for more information.

Using Knobs for Menu Navigation:

In addition to their normal use, you will use the Input Control Knob and the Volume Knob to enter the Menu, navigate through the selections, and adjust the different Settings options.

<u>Entering Setup Menu:</u>

To enter the Setup Menu, hold the Input Control 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 Control Knob is held too long. This is for support purposes only. Press the Knob again to exit.*

<u>Entering Trim Functions Menu:</u>

A brief deliberate press (not hold) and release of the Input Control Knob will take you to the Trim Functions Menu.

<u>Selecting/Adjusting Menu Settings:</u>

You can navigate through and select the different options in the menus by rotating the Input Control Knob. To adjust a selected Setting, use the Volume Knob. If a category in a Menu has a Submenu available, the Display will show "Hold Input", allowing you to hold down the Input Control Knob to see additional options.

<u>Exiting/Navigating Back:</u>

A brief deliberate press (not hold) and release of the Input Control Knob will exit the current Menu. Make additional presses until the Display shows the main operating screen to continue normal use of the unit.

The Setup Menu:

See the previous section for instructions on entering, navigating, and adjusting Settings in the Setup Menu.

The following is a list of the available Settings options in the Setup Menu as they will appear on your Display. A down arrow ↓ represents being taken to a Submenu after holding the Input Control 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.

<u>Input Settings:</u>

```
SETUP: Inputs
(Hold Input)
↓
SETUP: [ input name ]
[ On / Rename, Off ]
```
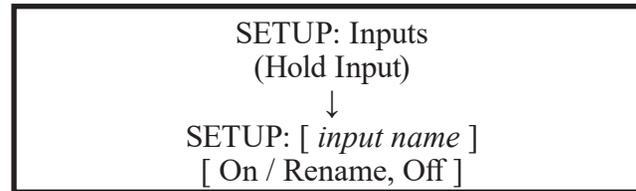
On / Rename: The selected Input will be functioning as normal. Hold in the Input Control Knob to enter the Menu to rename the Input*.

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 this inputs Submenu, use the Input Control Knob to navigate to the Input with the name you'd like to change (and turn it On using the Volume Knob if it isn't already) so that the Display says "SETUP: [input name] On / Rename" and hold the Input Control Knob to begin renaming. The character you are currently adjusting will be blinking. Rotate the Input Control Knob to select which character you want to change and use the Volume Knob to change the character.

<u>Output Settings:</u>

```
SETUP: Outputs
(Hold Input)
↓
SETUP: [ Output 1, Output 2 ]
[ Switched, Unswitched ]
```
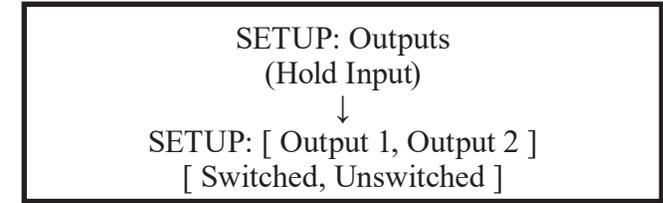
Switched: The front panel/Remote Control Output buttons will function as normal, allowing you to toggle On and Off the outputs.
Unswitched: The front panel/Remote Control Output buttons will be deactivated and the outputs will be always On.

```
SETUP: HEADPHONES
[ Mute All Outputs, Mute No Outputs ]
```

Mute All Outputs: When headphones are plugged in, mute audio from all other outputs and play audio from the headphones exclusively.
Mute No Outputs: When headphones are plugged in, continue to play audio through other outputs as normal in addition to the audio from the headphones.

Power Control Triggers Settings:

```
SETUP: Triggers
(Hold Input)
↓
SETUP: [ TRIGGER 1, TRIGGER 2 ]
[ Main, Output 1, Output 2, Input (Hold Input) ]
```
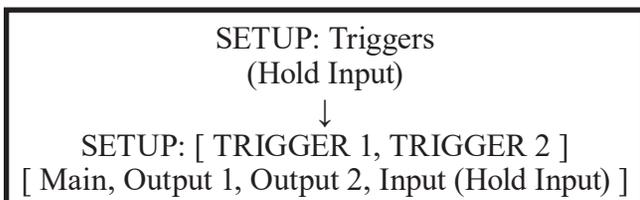
Main: An On/Off signal is sent to devices attached to the TRIG 1 and TRIG 2 ports when the MA9500 is turned On or Off.
Output 1: Turns On/Off any devices attached to either TRIG 1 or TRIG 2 when Output 1 is activated, either via the front panel buttons or the Remote Control.
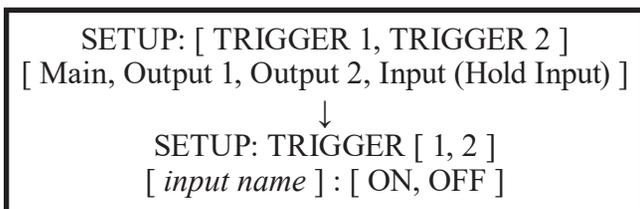**Output 2:** Turns On/Off any devices attached to either TRIG 1 or TRIG 2 when Output 2 is activated, either via the front panel buttons or the Remote Control.

```
SETUP: [ TRIGGER 1, TRIGGER 2 ]
[ Main, Output 1, Output 2, Input (Hold Input) ]
↓
SETUP: TRIGGER [ 1, 2 ]
[ input name ] : [ ON, OFF ]
```

[input name] : ON: Turns On/Off any devices attached to TRIG 1 or TRIG 2 when the Input is selected on the Main Display during normal use.
[input name] : OFF: Prevents any devices attached to TRIG 1 or TRIG 2 from turning On/Off when the Input is selected on the Main Display during normal use.

Data Ports Settings:

```
SETUP: Data Ports
(Hold Input)
↓
SETUP: [ DATA PORT (1-4) ]
[ All Data, input name ]
```
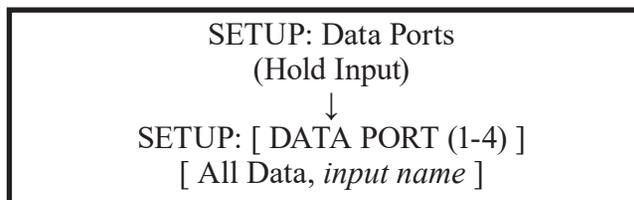
All Data: Devices connected to all four data ports will receive the same data from the Remote Control.
[input name]: Dedicate one of the data dorts to a specific Input, forcing that data port to only send data received from that Input when it receives commands from the Remote Control.

Passthru Settings:

```
SETUP: PASSTHRU
[ input name, Off ]
```
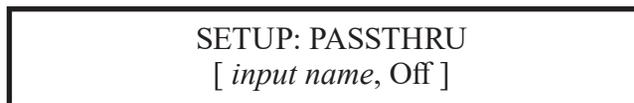
[input name]: Enables Passthru for the signal received by the MA9500 from the selected Input, which will bypass the onboard preamplifier and send it straight to the onboard power amplifier without altering it in any way.
Off: Disables Passthru, and the MA9500 will process each Input signal as normal.

HDMI CEC Settings:

```
SETUP: HDMI CEC
[ ON, OFF ]
```

ON: Allows compatible devices to use CEC (Consumer Electronics Control) to control certain functions of the MA9500.
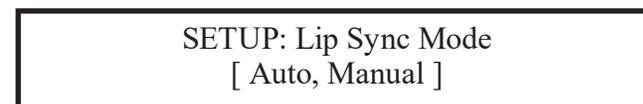**OFF:** Prevents MA9500 from being controlled w/ CEC.

```
SETUP: HDMI CEC PWR
[ ON, OFF ]
```

ON: Allows compatible devices to use CEC (Consumer Electronics Control) to power On/Off the MA9500 or be powered On/Off by the MA9500.
OFF: Prevents devices from using CEC to power On/Off the MA9500 or be powered On/Off by the MA9500.

HDMI Lip Sync Mode Settings:

```
SETUP: Lip Sync Mode
[ Auto, Manual ]
```

Auto: The MA9500 will automatically synchronize video and audio signals received through HDMI.
Manual: Disabled 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)
↓
SETUP: [HDMI, OPTI 1, OPTI 2] Gain
[ Volume in dB ]
```
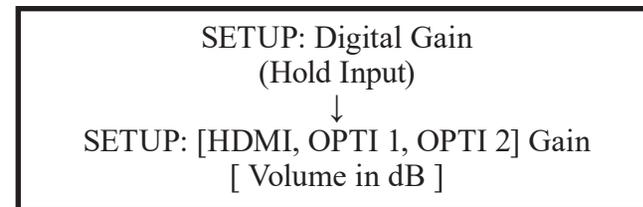
To get more even playback Volume from your connected digital devices, adjust their individual volumes with this Setting. The defaults are +15dB for HDMI and +0dB for Optical.

USB Automute Settings:

> SETUP: USB Automute
> [On/Off]

On: Mutes USB playback for the first half of a second to prevent the audible "noise burst" that sometimes occurs when switching digital files or signals.
Off: USB playback will not be muted when switching digital files or signals.

Comm Port Baud Rate Settings:

> SETUP: RS232
> [*rate in bits*] Baud

The speed at which the MA9500 communicates with devices plugged into the Comm Port (the Baud Rate) can be adjusted with this Setting. It is recommended to leave this at the highest Setting of 115200.

IR Codes Settings:

> SETUP: IR Codes
> [Normal, Alternate]

By default, the included HR085 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 at once, change this Setting to "Alternate" to prevent signals from the Remote being read. You can also set the Remote itself to send "Alternate" codes.

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 MA9500 will accept commands from the Remote Control. You may want to do this if you have an external IR sensor that operates the MA9500 with other devices.

Power Saving Settings:

> SETUP: Auto-Off
> [Enabled, Disabled]

Enabled: The MA9500 automatically enters Standby Mode after approximately 30 minutes of inactivity.
Disabled: The MA9500 will not power Off automatically and will remain On until you turn it Off.

Factory Reset:

> FACTORY RESET
> (Hold Input)

While on this option, hold the Input Control 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.

Using Your MA9500

Note: In the unlikely event that your commands are no longer being registered by the unit, you can try resetting the microprocessors. To do so, hold the Standby/On button 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. This will also revert the Settings to factory defaults. Be sure to let off the button as soon as the LED lights back up.

Powering On/Turning Off:
While the unit is in Standby Mode (no lights except the LED indicator light are On), press the Standby/On front panel button to power On the unit. While the unit is On, press the button to enter Standby Mode (turn it Off). Using the Remote Control, press the Power On and Power Off buttons where appropriate.

Selecting an Input for Playback:
You can change the current playback source by rotating the Input Control Knob or by using the Input Buttons on the Remote Control.

Adjusting the Volume:
Rotate the Volume 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 does not affect audio through the Fixed Outputs.*

Adjusting Trim Functions:
See Page 13 for instructions on entering, navigating, and adjusting Settings in the Trim Function Menu. The Remote Control will also adjust these Settings.

Note: The Balance, Input Trim, and Equalizer Settings in this Menu will only be adjusted and affect the currently selected Input and their configurations will be independently saved.

Adjusting Audio Balance:
You may want one loudspeaker to be louder than the other. While on the Balance Setting, use the Volume 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.

Enabling/Disabling the Equalizer:
Turning On the Equalizer will allow you to adjust the sound frequency for the selected Input using the Frequency Adjustment Knobs. Sound will adjust for each Input that has it activated.

Adjusting Input Trim Levels:
Devices connected to the various inputs may be sending audio at varying volumes to the MA9500. 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 MA9500 by adjusting its Trim level with this Setting.

Adjusting Phono Resistance (Turntables):
With the MC Phono source Input selected, the option to change the phono resistance becomes available in the Trim Functions Menu. Make sure to match this number to your turntable's recommended phono resistance level.

Toggling Stereo/Mono:
Stereo allows the left and right channels to have separate independent audio signals. Mono sends the same signal through both channels. You can toggle between the two with this Setting.

Toggling the Meter Backlights:
You can turn On/Off the illumination of the power meters here.

Adjusting Display Brightness:
Use the Volume Knob to adjust the Brightness level of the Display.

Enabling/Disabling HXD:
This option will become available if headphones are plugged in. Enable this option to experience McIntosh's patented Headphone Crossfeed Director (HXD) or disable it to have unaltered audio playback through the headphones.

Muting the Audio:
Use the mute button on the front panel or the Remote Control to mute the audio coming from the MA9500.

Getting the Most Out of Your MA9500

Using the Autoformer:
Your MA9500 comes equipped with independent connectors specifically allocated for loudspeakers of 2-, 4-, and 8-ohm impedance. Separating these connections allows McIntosh to use its patented Autoformer to provide the full 200 watts of power regardless of your speakers' specifications.

Using the Eight-Band Equalizer:
As with all McIntosh products, your MA9500 produces the clearest, most accurate form possible of any audio that pumps through it. If the audio sent from the source is suboptimal, however, then the "clearest, most accurate form" might not be ideal for every situation. If you find yourself wanting to adjust the audio frequencies, enable the Equalizer (with the button on the front panel or in the Trim Functions Menu) to activate the functionality of the eight Frequency Adjustment Knobs. Turning the Knobs will adjust from the low frequencies (25Hz) up to the high frequencies (10,000Hz). Experiment with different rotations of the knobs to produce your desired sound. The Equalizer will affect the sound for any Input that has it on, and its On/Off status will be saved per Input.

Using Bi-Amplification on Loudspeakers:
> WARNING: *If the loudspeakers you are attempting to connect for bi-amplification have Jumper Plugs connecting the mid/high and low frequencies, they must be removed before making the connections to the amplifier(s). Failure to do so may result in damage to your equipment.*

The MA9500's onboard power amplifier may be used in conjunction with a separate external power amplifier to connect a loudspeaker for bi-amplification, allowing more flexible power control to the separate mid/high and low frequencies of the loudspeaker. You will do this by first removing the McIntosh Jumper Plugs from the Output 1 ports and the PWR AMP ports on the MA9500. In their place, bridge each of the left and right channels of the Output 1 and PWR AMP ports with a shielded RCA Y splitter. Connect the open ends of each of the Y splitters to your separate external power amplifier.

Using the HXD with Headphones:
Enable Headphone Crossfeed Director (HXD) to improve the sound localization for your headphones. HXD restores the directionality component of the spatial sound stage, giving you the quality and immersion of a loudspeaker paired with the privacy of headphones.

Listening Worry-Free (Auto Protection):
The internal McIntosh Power Guard monitors and adjusts sound waves at the speed of light, preventing harsh sounding distortion and clipping that could damage your speakers. The Power Guard LED lights on the front panel will be lit when it automatically activates. The MA9500 also includes an internal Sentry Monitor, which guages the amount of incoming electricity and will automatically protect your unit in the event of improper current flow, allowing you to listen while knowing your unit is safe.

Software Requirements

Using the Onboard Power Amplifier:
To use the internal preamplifier and power amplifier simultaneously, connect the Output 1 ports and the PWR AMP ports using the included Jumper Plugs. This audio will be produced through Output 1.

Using External Power Amplifiers:
While your MA9500 comes fully equipped with a preamplifier and a power amplifier with the capability of playing the crystal-clear audio you'd expect from McIntosh amps through your loudspeakers, you have the option to attach separate power amplifiers if you so choose. You can do this while using the onboard power amplifier, or you can disable the onboard power amplifier and only use separate ones.

Using MA9500 with External Amp:
Connect your loudspeakers to the MA9500 and use the Output 2 ports to send a signal to an external amplifier, leaving the McIntosh Jumper Plugs that are bridging the Output 1 ports and the PWR AMP ports right where they are.

Using Only External Amps:
To disable the functionality of the onboard power amplifier, disconnect any loudspeakers from the MA9500 and remove the McIntosh Jumper Plugs bridging the Output 1 ports and the PWR AMP ports. This will turn your MA9500 into a dedicated preamplifier, allowing you to send signals from Output 1 and Output 2 to external power amplifiers.

Using Audio Passthru:
When using the MA9500 as part of a home theater system, you will likely want to enable audio Passthru to ensure proper flexibility with your audio signals. To do this, connect a cable from one of your A/V processor's trigger ports to the MA9500's Passthru Input port. Then, connect left and right audio signals from the A/V processor to a left and right Input port, respectively, on the MA9500. Finally, enable that Input for Passthru in the Setup Menu.

Viewing Coax/Optical Inputs Sample Rate:
When coaxial or optical inputs are selected and producing a signal, the Display will show the sample rate of the signal under the input name. If no signal is being received through the inputs, the Display will show a dotted line under the input name.

Using USB Playback:
You can play audio from your computer through the MA9500 while it's connected via USB. You can see the sample rate of the playback on the second line of the Display while the USB Input is selected. The sample rate is affected by the audio source, the software used for playback.

Apple® computers with OS-10.6.8 or later require no additional driver install to communicate with the MA9500.

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 MA9500.

To install the McIntosh USB driver for Windows-based computers, download the latest driver from the McIntosh website:
https://www.mcintoshlabs.com/products/integrated-amplifiers/MA9500
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 MA9500 display will show the sampling rate or bit rate for the USB input.

McIntosh

Preamplifier Specifications

Frequency Response
+0, -0.5dB from 20Hz to 20,000Hz
+0, -3dB from 10Hz to 100,000Hz

Preamplifier Output 1 and 2 (for rated input)
1.7V unbalanced (8V Maximum)
3.4V balanced (8V Maximum)

Preamplifier Output Impedance
220 ohms

Sensitivity (for rated output)
High Level - 300mV unbalanced
                    600mV balanced
Phono MM, 3.0mV
Phono MC, 0.3mV

Signal To Noise Ratio (A-Weighted)
High Level, 98dB below rated output
Phono MM, 84dB below 5mV input
Phono MC, 82dB below 0.5mV input

Input Impedance
High Level - 22K ohms Unbalanced
                    44k ohms Balanced
Phono MM - 50 to 400pF, in 50pF steps;
                    47K ohms
Phono MC - 50, 100, 200, 400 or 1,000 ohms;
                    100pF

Maximum Input Signal
High Level, 8V unbalanced, 16V balanced
Phono MM, 80mV
Phono MC, 8mV

Headphone Impedance
100 to 600 ohms

Equalizer Controls
25Hz, 50Hz, 100Hz, 200Hz, 400Hz, 1,000Hz, 2,500Hz and
10,000Hz

Power Amplifier Specifications

FTC Power Output Rating
300 watts

Power Output
Minimum Output Power Per Channel:
            300W into 2, 4, or 8-Ohm speaker load

Output Load Impedance
2, 4 or 8 ohms

Rated Power Band
20Hz to 20,000Hz

Total Harmonic Distortion
0.005% maximum with both channels operating from 250 mil-
liwatts to rated power, 20Hz to 20,000Hz

Intermodulation Distortion
0.005% maximum, if the instantaneous peak power output does
not exceed twice the rated power output for any combination of
frequencies from 20Hz to 20,000Hz.

Dynamic Headroom
2.8dB

Wide Band Damping Factor
Greater than 40

Power Guard
Less than 2% THD with up to 16dB overdrive at 1,000Hz

Frequency Response
+0, -0.25dB from 20Hz to 20,000Hz
+0, -3.0dB from 10Hz to 100,000Hz

Input Sensitivity (for rated output)
1.7 Volts

Signal To Noise Ratio (A-Weighted)
114dB below rated outpu)

Input Impedance
22,000 ohms

Maximum Input Signal
Power Amplifier In, 16V

Voltage Gain
29dB, 8 Ohms
26dB, 4 Ohms
23dB, 2 Ohms

Power Control and Trigger Output
12VDC, 25mA

Digital Audio Specifications

Digital Input Signal Format
Coaxial and Optical Inputs - SPDIF (PCM)
MCT and USB Inputs - PCM, DSD

Digital Input Sample Rates
Optical: PCM - 16Bit, 24Bit - 44.1kHz to 192kHz
Coaxial: PCM -16Bit, 24Bit - 44.1kHz to 192kHz
MCT: PCM - 16Bit, 24Bit - 44.1kHz to 192kHz, SACD
USB: PCM - 16Bit, 24Bit, 32Bit - 44.1kHz to 384kHz
            DXD - DXD352.8kHz, DXD384kHz
            DSD - DSD64, DSD128, DSD256, DSD512
HDMI: PCM 24bit, 44.1kHz - 192kHz
        DTS
        Dolby Digital

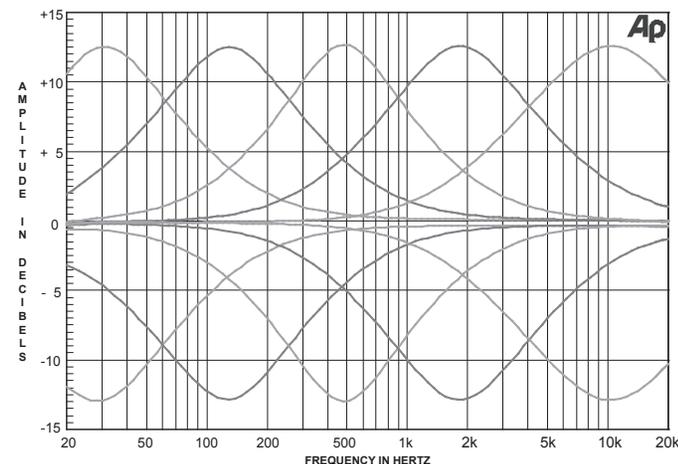**Digital Inputs**
Coaxial: 0.5V p-p/75 ohms
Optical: -15dbm to -21dbm (TOS Link)
MCT: 0.5V p-p/75 ohms
USB: USB Type B Connector HDMI

Representative Equalizer
Boost/Cut Frequency Response

General Specifications

Power Control and Trigger Output
12VDC, 25mA

Power Requirements
Field AC Voltage conversion of the MA9500 is not possible. The MA9500 is factory configured for one of the following AC Voltages:
100 Volts, 50/60Hz at 8.0 amps
110 Volts, 50/60Hz at 6.6 amps
120 Volts, 50/60Hz at 6.6 amps
127 Volts, 50/60Hz at 6.6 Amps
220 Volts, 50/60Hz at 3.6 amps
230 Volts, 50/60Hz at 3.3 amps
240 Volts, 50/60Hz at 3.3 amps
Standby: Less than 0.25 watt

> *Note: Refer to the rear panel of the MA9500 for the correct voltage.*

Overall Dimensions
Width is 17½ inches (44.5cm)
Height is 9⁷⁄₁₆ inches (24.0cm) including feet
Depth is 19¾ inches (50.2cm) including the Front Panel and Knobs

Weight
101 pounds (45.8 kg) net, 134 pounds (60.8 kg) in shipping carton

Shipping Carton Dimensions
Width is 29½ inches (74.9cm)
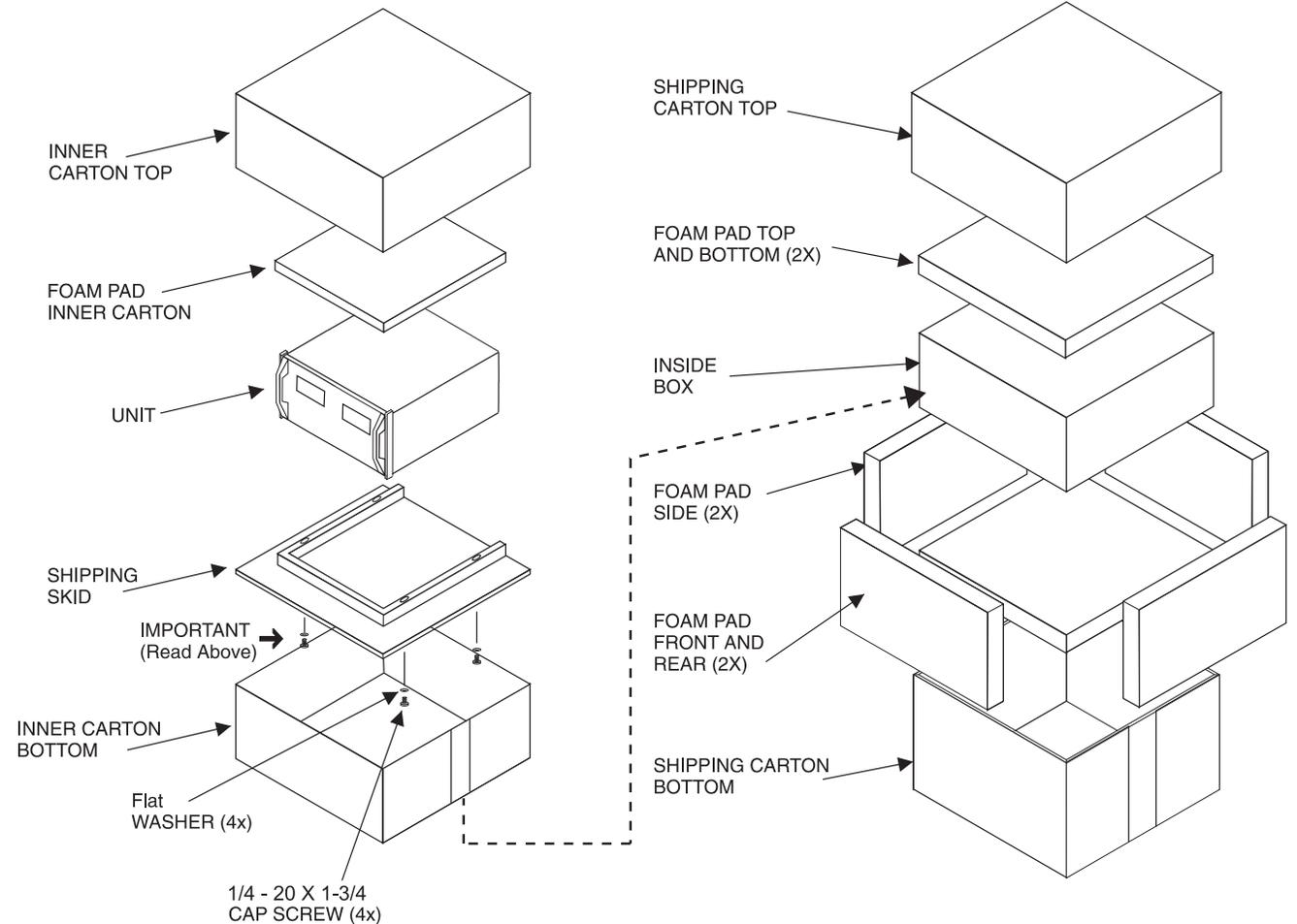Depth is 29 inches (73.7cm)
Height is 17 inches (43.2cm)

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. Two 1/4-20 x 2-1/4 inch screws and washers must be used to fasten the unit securely to the bottom pad and wood skid. 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 3. Please see the Part List for the correct part numbers.

MA9500 Packing Material List

Quantity	Part Number	Description
1	034052	Shipping carton top
1	034051	Shipping carton bottom
2	034186	Front and rear foam pad
2	034187	Side foam pad
2	034054	Top and bottom foam pad
1	034136	Inner carton top
1	034137	Inner carton bottom
1	034188	Inner foam pad
1	034479	Shipping skid
4	400411	1/4-20 hex cap x 2-1/4 inch screw
4	104058	1/4 inch flat washer 1-1/2 inch
4	017937	Plastic foot
4	400159	#10 flat washer
4	404080	#10 flat washer

McIntosh®

MADE OF SOUND™

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The MA9500 is designed to employ non-McIntosh provided services some of which require separate customer subscriptions and some of which do not, as part of the Product's functionality. Because McIntosh cannot control the providers of such services or the services themselves, the owner of the Product therefore assumes all risks related to the use of services provided by anyone other than McIntosh itself. McIntosh cannot and does not warrant against, and shall have no liability of any kind for any of the following that are attributable to non- McIntosh providers or services: (i) interruption, discontinuance, or other unsatisfactory performance of service; (ii) reduced Product functionality that is so attributable; or (iii) any other loss or damage of any kind that is so attributable.

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