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Important Safety Information is supplied in a separate document "Important Additional Operation Information Guide"

Thank You

Your decision to own this McIntosh MPC500 Power Controller ranks you at the very top among discriminating music listeners with the desire to protect your audio components. You now have "The Best." The McIntosh dedication to "Quality," is assurance that you will receive many years of enjoyment from this unit.

Please take 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 products, 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 need 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 Fax: 607-724-0549

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 Department. For assistance on factory repair return procedure, contact the McIntosh Service 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 Information

- 1. For additional connection information, refer to the Owner's Manual(s) for component(s) connected to the MPC500.
- 2. McIntosh MPC500 Products are marketed world wide. There are two different versions of the MPC500 Components. Each of the different versions of MPC500 have different AC Outlet Connectors and operate with either 100Volts to 120Volts or 220Volts to 240Volts. This MPC500 Owner's Manual contains information about both versions of the MPC500 to meet the different AC Power and Safety Requirements for use in your country.
- 3. The Main AC Power going to the MPC500 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 malfunctioning of some or all of the system's normal operations.
- The MPC500 is designed for connection with Audio/Video Components. This would include components such as Preamplifiers, A/V Control Centers, Source Components, Integrated Amplifiers and Power Amplifiers with low to modest power output.
- 5. The total amount of current drawn by all the components connected to the MPC500 should not exceed the Current Amperage Rating indicated on the rear panel of your MPC500. Typically, components consuming low amounts of energy are rated in wattage instead of current. Refer to the MPC500 Versions chart on the next page for converting a wattage rating into an approximate current rating.
- 6. **Caution:** Verify the protective earthing connection of socket-outlet for the plug of AC input power cord by a Skilled person.

Connector and Cable Information

MPC500 Versions									
	120VAC	230VAC							
Watts Rating on component	Approximate current	Approximate current							
0- 50 Watts	0.5A	0.25A							
51-100 Watts	1A	0.5A							
101-150 Watts	1.5A	0.75A							
151-200 Watts	2A	1A							
201-250 Watts	2.5A	1.25A							

7. For additional information on the MPC500 and other McIntosh Products please visit the McIntosh Website at www.mcintoshlabs.com.

Data In

PIN 6

(DB9-pin2)

Data Out (DB9-pin3)

> Ground (DB9-pin5)

> > a

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0 0

DB9

(male connector)

Connector and Cable Information

RS232 Data Port Cable

The RS232 Data Cable has 3.5mm stereo mini

phone plug at both ends of the cable. Some Source Component Products use a sub miniature DB9 Connector on their rear panels. Therefore, connecting from those Source Components requires an adaptor cable with a 3.5mm Stereo Mini Phone Plug on one end to a DB9 Connector on the other end of the cable.

Those type of cables are available from various retail stores that sell Computer Cables.

Ethernet Network Cable

The Ethernet Data Cable is for the connection of Data Signal from an Outside Data Network Source to various Audio/Video System Components. The Ethernet RJ45 Socket has eight electrical connections of which includes Receiving Data and Transmitting Data. The following information includes the eight pin connector Socket and the Ethernet Connection Cable.

Pin 1

Ethernet RJ45 Socket

 1. Transmit Data (+)
 5. N/C

 2. Transmit Data (-)
 6. Receive Data (-)

 3. Receive Data (+)
 7. N/C

 4. N/C
 8. N/C

Ethernet Cable - Straight Thru Connections



Pin Number - Wire C	Color <u>Pin Number - Wire Color</u>
1. Orange/White	\rightarrow 1. Orange/White
2. Orange	\rightarrow 2. Orange
3. Green/White	\rightarrow 3. Green/White
4. Blue	\rightarrow 4. Blue
5. Blue/White	\rightarrow 5. Blue/White
6. Green	\rightarrow 6. Green
7. Brown/White	\rightarrow 7. Brown/White
8. Brown	\rightarrow 8. Brown

Antenna "F" Connector

ANTenna IN, connects to the Cable Company Signal. The ANTenna OUT, connects to a FM Tuner Connector. "F" Connector







Introduction

The McIntosh MPC500 Power Controller provides a High Degree of Continuous Surge Protection to the Audio/Video Components that are connected to the MPC500 while performing their operational functions.

Performance Features

• Illuminated Multifunction Display

The comprehensive On-Screen Display makes it easy to perform setup. The Front Panel display indicates Voltage and Current at all times of connected McIntosh Components along with other operating functions.

• AC Line Surge Protection & EMI Filtering

The McIntosh MPC500 utilizes the finest, most sophisticated surge suppression technology available. It incorporates TPMOVs that are thermally protected from abnormal overvoltage occurrences and have four times the surge capability of the common MOVs (Metal Oxide Varistor) devices used by other companies. The MPC500 also offers EMI Filtering from the AC Line source for the components connected to it.

• Low Voltage DC Surge Protection

The McIntosh MPC500 utilizes GDT (Gas Discharge Tubes), PTC (Positive Temperature Coefficient thermistors) and TVS (Transient Voltage Suppression) components to protect your low voltage devices. This cascade approach provides a lower clamping voltage with increased surge capability.

Over/Under Voltage Protection

The McIntosh MPC500 Over/Under Voltage Protection circuitry prevents possible damage to your connected components by continuously monitoring the input voltage and then switching off the rear outlets during a fault.

Power Control Assignment

The Power Control input connection provides convenient switching ON/OFF of any connected components by removing/connecting the power from the desired outlet. All the Power Control ports are individually configured allowing for extreme customization.

Power Control

The Power Control Input connection provides convenient Turn-On/Off of the McIntosh MPC500 with your McIntosh System.

• Glass Front Panel and Super Mirror Chassis Finish

The famous McIntosh Illuminated Glass Front Panel uses long life Light Emitting Diodes (LEDs) and the Steel Chassis ensures the pristine beauty of the MPC500 will be retained for many years.



Dimensions

The following dimensions can assist in determining the best location for your MPC500.



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Installation

The MPC500 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 MPC500 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 MPC500 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 MPC500. Cool operation ensures the longest possible operating life for any electronic instrument. Do not install the MPC500 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 (5.08cm) above the top, 2 inches (5.08cm) below the bottom, 3 inches (7.62cm) behind the rear panel and 2 inches (5.08cm) on each side of the Power Controller, so that airflow is not obstructed. Allow 7/8 inch (2.22cm) in front of the mounting¹ panel for clearance. **Be sure to cut out a ventilation hole in the mounting shelf according to the dimensions in the drawing.**

¹ When the MPC500 is installed together with other Mc-Intosh Components, check clearances on all components before proceeding.



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ANTenna/IN provides protection for the FM RF Signal from Outside FM Network Source. ANTenna/OUT provides the protected FM RF Signal for connection to Audio/Video Tuner Components

How to Connect MPC500 for (100V-120V)

Caution: Do not connect the AC Power Cord to the MPC500 Rear Panel until after the Audio/ Video Components have been Connected to the MPC500.

The connection instructions below, together with the MPC500 Connection Diagram located on the separate folded sheet "**Mc1A**", are an example of a typical Audio/Video System. The MPC500 has the ability to automatically switch AC Power On/Off to Components connected to the MPC500 SWITCHED AC OUTLETS (2 thru 4) via the Power Control Connection (1 thru 4). Your system may vary from this, however the actual components would be connected in a similar manner. For additional information refer to "Connector and Cable Information" on page 3.

Power Control Connections:

- 1. Connect a Control Cable from the A/V Control Center TRIGger (Power Control) 1 Jack to the POWER CONTROL INput 2 Jack on the MPC500 for primary listening.
- 2. Connect a Control Cable from the MPC500 POWER CONTROL OUTput 2 Jack to the Media Bridge PWR CTRL (Power Control) IN Jack.
- 3. Connect a Control Cable from the Media Bridge PWR CTRL (Power Control) OUT Jack to the AM/FM Tuner Power Control IN Jack.

Network Connections:

Use CAT 5/6 Ethernet Type Cables to provide connections between the MPC500 and all the Network Connectors on the Audio/Video Components along with Network Router/Switch and Ethernet Crossover Adapter.

- 4. Connect a Ethernet Cable from the Cable Company Connection unit Net Output Connector, to the MPC500 NET/IN Connector.
- 5. Connect a Ethernet Cable from the MPC500 NET/

OUT Connector to the Network Router/Switch and Ethernet Crossover Adapter Input Connector.

6. Connect Network Cables from the Router/Switch or Ethernet Crossover Adapter NETWORK Output connectors to each of the Audio/Video Components (A/V Control Center, Media Bridge, and any addition components) with NETWORK Connectors.

RS232 Connections:

Use either type of RS232 Cables to make the necessary RS232 Connections. Either a 3.5mm stereo mini phone plug RS232 Cable on both cable ends or when necessary, a cable with Sub Miniature DB9 Connector on one end and a 3.5mm stereo mini phone plug on the other end.

- 7. Connect the appropriate RS232 Cable from the A/V Control Center RS232 Connector to MPC500 RS232/IN Connector.
- 8. Connect the appropriate RS232 Cable from the MPC500 RS232/OUT Connector to the AM/FM Tuner RS232 Connector.

Antenna Connections:

Use a RF Cable with "F" Connectors for providing FM Radio Frequency (or Video) Transmitted Signal between components.

- 9. Connect a RF Cable from the Cable Company Connection unit to the MPC500 ANT/IN Input Connector.
- 10. Connect the MPC500 ANT/OUT Connector via a RF Cable with "F" Connectors to the AM/FM Tuner FM ANT Connector.

Switched AC Power Outlets:

Use the AC Power Cords that were supplied with each of the Audio/Video Components in the following steps:

- 11. Connect an AC Power Cord from the A/V Control Center to the MPC500 UNSWITCHED Upper Outlet Number 1.
- 12. Connect an AC Power Cord from the Media Bridge External Power Supply to the MPC500 Switched Upper Outlet Number 2.
- 13. Connect an AC Power Cord from the AM/FM Tuner to the MPC500 Switched Lower Outlet Number 2.
- 14. Optionally, connect additional Audio/Video Components AC Power Cords to the MPC500 Switched AC Outlets. Add up the current Amperage ratings of the connected components, making sure that the Total Components do not exceed a total of 12 Amps.





ANTenna/IN provides protection for the FM RF Signal from a FM Antenna or Outside FM Network Source.

ANTenna/OUT provides the protected FM RF Signal for connection to Audio/Video Tuner Components

How to Connect MPC500 for (220V-240V)

Caution: Do not connect the AC Power Cord to the MPC500 Rear Panel until after the Audio/ Video Components have been Connected to the MPC500.

The connection instructions below, together with the MPC500 Connection Diagram located on the separate folded sheet "**Mc1B**", are an example of a typical Audio/Video System. The MPC500 has the ability to automatically switch AC Power On/Off to Components connected to the MPC500 SWITCHED AC OUTLETS (2 thru 4) via the Power Control Connection (1 thru 4). Your system may vary from this, however the actual components would be connected in a similar manner. For additional information refer to "Connector and Cable Information" on page 3.

Power Control Connections:

- 1. Connect a Control Cable from the A/V Control Center TRIGger (Power Control) 1 Jack to the POWER CONTROL INput 2 Jack on the MPC500 for primary listening.
- 2. Connect a Control Cable from the MPC500 POWER CONTROL OUTput 2 Jack to the Media Bridge PWR CTRL (Power Control) IN Jack.
- 3. Connect a Control Cable from the Media Bridge PWR CTRL (Power Control) OUT Jack to the AM/FM Tuner Power Control IN Jack.

Network Connections:

Use CAT 5/6 Ethernet Type Cables to provide connections between the MPC500 and all the Network Connectors on the Audio/Video Components along with Network Router/Switch and Ethernet Crossover Adapter.

4. Connect a Ethernet Cable from the Cable Company Connection unit Net Output Connector, to the MPC500 NET/IN Connector.

- 5. Connect a Ethernet Cable from the MPC500 NET/ OUT Connector to the Network Router/Switch and Ethernet Crossover Adapter Input Connector.
- 6. Connect Network Cables from the Router/Switch or Ethernet Crossover Adapter NETWORK Output connectors to each of the Audio/Video Components (A/V Control Center, Media Bridge, and any addition components) with NETWORK Connectors.

RS232 Connections:

Use either type of RS232 Cables to make the necessary RS232 Connections. Either a 3.5mm stereo mini phone plug RS232 Cable on both cable ends or when necessary, a cable with Sub Miniature DB9 Connector on one end and a 3.5mm stereo mini phone plug on the other end.

- 7. Connect the appropriate RS232 Cable from the A/V Control Center RS232 Connector to MPC500 RS232/IN Connector.
- 8. Connect the appropriate RS232 Cable from the MPC500 RS232/OUT Connector to the AM/FM Tuner RS232 Connector.

Antenna Connections:

Use a RF Cable with "F" Connectors for providing FM Radio Frequency (or Video) Transmitted Signal between components.

- 9. Connect a RF Cable from the Cable Company Connection unit to the MPC500 ANT/IN Input Connector.
- 10. Connect the MPC500 ANT/OUT Connector via a RF Cable with "F" Connectors to the AM/FM Tuner FM ANT Connector.

Switched AC Power Outlets:

Use the AC Power Cords that where supplied with

each of the Audio/Video Components in the following steps:

- 11. Connect an AC Power Cord from the A/V Control Center to the MPC500 UNSWITCHED Upper Outlet Number 1.
- 12. Connect an AC Power Cord from the Media Bridge External Power Supply to the MPC500 Switched Outlet Number 2.
- 13. Connect an AC Power Cord from the AM/FM Tuner to the MPC500 Switched Outlet Number 3.
- 14. Optionally, connect an additional Audio/Video Component AC Power Cords to the MPC500 Switched AC Outlet Number 4. Add up the current Amperage ratings of the connected components, making sure that the Total Components do not exceed a total of 6 Amps.





How to Operate

Power On and Off

After the MPC500 is connected for Audio/Video Components 100V-120V (refer to page 8) or 220V-240V (refer to page 10), press the OUTLET STATE Control to switch it On. The Front Panel Display will indicate the "MPC500" for several seconds and then followed by "MPC500 --Protected --". Refer to figures

1 and 2. The MPC500 will then measure the "The AC Line Voltage Level" that it is connected to. The Front Panel Display will then indicate



the measured Voltage, for the MPC500 (100V-120V) or (220V-240V) unit. Refer to figure 3A or figure 4A. The actual measurements will vary according to the incoming AC Line Voltage for the building where the MPC500 and the rest of the Audio/Video Equipment is physically located.



Note: If during the last time the MPC500 was On and the selection of the various Setup Operating Function was previously changed using the DISPLAY CONTROL, figures 3A or 4A will now indicate a different display status like figure 3B/4B.



Figure 3B/4B

Status of the Power AC Outlets

After the MPC500 has displayed the incoming line voltage, rotating the OUTLET STATE Control clockwise will allow for the indication of the MPC500 Operational Status. Rotating the Control will Display the following. Refer to figures 5 thru 8.



Each of the displays indicate the Status of the MPC500 AC Power Outlets and the Power Control Settings for the AC Power Outlets.

Display Control

After the MPC500 is switched On and the Front Panel Display has indicated the previous figures (3A, 4A or 3B/4B), rotate the DISPLAY Control Clockwise to display additional Function Displays. Refer to figures 9 thru 11.



Figure 11

By using the DISPLAY Control to select Figure 3A/4A, 3B/4B, 9, 10 or 11, it will now determine, when the MPC500 is switched on, which figure will be displayed after Figure 1 and Figure 2 is displayed.

How to Operate, con't

Setup Operating Mode

After the MPC500 is On and the Front Panel is Displaying Figures 3A/4A, 3B/4B, 9, 10 or 11, it is now time to operate the MPC500 SETUP Mode. Press DISPLAY CONTROL and the following is displayed. Referring to figure 12 of which is displaying the Version Number and Serial Number of this MPC500.



Figure 12

Figures 13 thru 15 are MPC500 Settings where adjustments can be made for each of the operating functions.



The Power Control Output Connections of 2, 3 & 4 on the MPC500 can be changed from the normal default settings of ON to a setting of ON, GLOBAL or LO-CAL. The GLOBAL Setting provides the same Power Control Output Setting as the Power Control 1 Output of which is On. The LOCAL Setting for the selected Power Control Output provides the same function as its Power Control Input Connection.

Follow the steps below to change the current setting for one or more of the MPC500 Power Control Output Connectors:

1. After the MPC500 has been switched on for several seconds, rotate the OUTLET STATE Control Clockwise to display the following for Power Control 2. Refer to figure 16.



Figure 16

2. Press DISPLAY CONTROL and then rotate the control until it displays "SETUP: Outlet Config (Hold SETUP)". Refer to figure 17.

Figure 17

3. Press DISPLAY CONTROL and the Front Panel Display will indicate the following setting for Power Control 2. Refer to figure 18.



Figure 18

4. Rotate the OUTLET STATE Control to select the setting of GLOBAL or LOCAL. Refer to figures 19 and 20.



Figure 19



Figure 20

5. Once the new Power Control Setting has been selected, press the DISPLAY CONTROL.

Setup Display Brightness Configuration

The Front Panel Display Brightness is adjustable via a Setup Mode of operation.

1. Press DISPLAY CONTROL and then rotate the control until it displays "DISPLAY Brightness". Refer to figure 21.



Figure 21

- 2. Then rotate the OUTPUT STATE Control clockwise to increase the current Brightness Level or rotate Control Counter Clockwise to reduce the current Brightness Level.
- 3. After the Brightness Level has been adjusted to the desired level, then press the DISPLAY CON-TROL to end the adjustment of the Brightness Level.

Setup Factory Reset Operation

If the MPC500 Operational Settings need to be restored to the default settings perform the following

1. Press DISPLAY CONTROL and then rotate the Control until the Front Panel displays "FACTORY RESET (Hold SETUP). Refer to figure 22.



Figure 22

2. Then press in and hold the DISPLAY CONTROL as the Front Display changes from figure 22 to figure 23 followed by figure 24. Then release the Display Control.

	FACTORY RESET In Progress
	Figure 23
	FACTORY RESET Completed!
	Figure 24
3. The swi	e AC Power to the MPC500 will now ttched Off.

4. Press the OUTPUT STATE Control to switch the MPC500 AC Power back On.

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MPC500 Protection and Technologies

AC Mains Protection Surge: 20kA (8x20kA) PER MODE Modes of Protection: L-N, L-G, N-G

RS232 Connections Thermally Protected and Low Voltage DC Protection: Surge: 5kA (8x20us)

Maximum Operating Voltage: 15VDC Maximum Operating Current: 350mA DC Clamping Voltage: 24Volts Technology: GDT, PTC and TVS

ETHERNET Connections Thermally Protected and Low Voltage DC Protection: Surge: 10kA (8x20us) Maximum Operating Voltage: 58VDC Technology: TVS

COAXIAL Connections Thermally Protected and Low Voltage DC Protection: Surge: 5kA(8x20us) DC Clamping Voltage: 75VDC Technology: GDT

Voltage and Power Specifications

MPC500 (100V-120V) Input Voltages 100 - 120 Volts AC Nominal

Output Voltages 100 - 120 Volts AC Nominal

Power Requirement 100V - 120V ~ 50/60Hz 12 Amps, maximum current 1440 Watts, maximum wattage

MPC500 (220V-240V) Input Voltages 220 - 240 Volts AC Nominal

Output Voltages 220 - 240 Volts AC Nominal

Power Requirement 220V - 240V ~ 50/60Hz 6 Amps, maximum current 1440 Watts, maximum wattage

General Specifications

Overall Dimensions

Width is 17-1/2 inches (44.5cm) Height is 6 inches (15.2cm) including feet Depth is 19 inches (48.26cm) including the Front Panel, Knobs and Cables

Weight

18.5 pounds (8.39 kg) net, 34 pounds (15.42 kg) in shipping carton

Shipping Carton Dimensions Width is 26-1/2 inches (67.3cm) Depth is 24-1/4 inches (61.6cm) Height is 11-3/4 inches (29.9cm)

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.

Quantity	<u>Part Number</u>	Description
1	033838	Shipping carton only
2	033837	End caps
1	033836	Inside carton only
1	033725	Top pad
1	034576	Bottom pad
4	017937	Plastic foot
4	400159	#10-32 x 3/4" screw
4	404080	#10 Flat washer





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