**Manuals+** — User Manuals Simplified.

**McIntosh®**
**MIP200**
**Power**
**Controller**

# mcintosh MIP200 Power Controller Owner's Manual

## Contents

**McIntosh®**

**mcintosh MIP200 Power Controller**

**Specifications**

- **Model:** MIP200
- **Manufacturer:** McIntosh Laboratory, Inc.
- **Address:** 2 Chambers Street Binghamton, New York 13903-2699
- **Phone:** 607-723-3512
- **Website:** www.mcintoshlabs.com

## Product Information

The MIP200 Power Controller is designed to protect your home audio investment by providing AC power line surge protection, overvoltage protection, and undervoltage protection. It also offers programmable control options for added convenience.

### Safety First

Please read the safety instructions in the Important Additional Operation Information Guide provided separately.

### General Information

1. Refer to the owner's manual(s) of connected components for additional connection information.
2. The MIP200 comes in two versions with different AC outlet connectors and supports either 100-120Volts or 220-240Volts.
3. Do not apply Main AC Power until all system components are connected to avoid malfunctioning.
4. Designed for connection with audio/video components like preamplifiers, A/V control centers, source components, integrated amplifiers, and power amplifiers.
5. The total current drawn by connected components should not exceed the amperage rating on the rear panel of the MIP200.
6. Tested and certified for indoor use only.
7. Protect the anodized finish by limiting exposure to certain lighting types and using appropriate gentle cleaners.

## Product Usage Instructions

1. **Connection:** Connect audio/video components to the MIP200 following the owner's manuals of each component.
2. **Power On:** Only apply Main AC Power after all components are connected to prevent system malfunction.
3. **Usage:** Use the MIP200 with audio/video components like preamplifiers, A/V control centers, source components, and amplifiers with low to modest power output.
4. **Current Limit:** Ensure the total current drawn does not exceed the amperage rating on the MIP200's rear panel.

**FAQ**

**Q: Can the MIP200 be used outdoors?**

**A:** No, the MIP200 is tested and certified for indoor use only.

**Q: What should I do if I exceed the current limit on the MIP200?**

**A:** If you exceed the current limit, disconnect some components to reduce the total current drawn or consider using a separate power controller for additional components.

**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.

**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: _____

## Introduction

- Protect your home audio investment with the MIP200 Power Controller.
- The MIP200 delivers AC power line surge protection, such as from a lightning strike, overvoltage protection (when there is too much power), and under voltage protection (commonly referred to as a brownout).
- All of this protection comes with a host of programmable control options.

**Safety First**

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

## General Information

1. For additional connection information, refer to the owner's manual(s) for component(s) connected to the MIP200.
2. There are two different versions of the MIP200. Each version has different AC outlet connectors and operate on

either 100-120Volts or 220-240Volts. This MIP200 owner's manual contains information about both versions of the MIP200 to meet the different AC power and safety requirements for use in your country.

3. The Main AC Power going to the MIP200 and any other 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.

4. The MIP200 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 MIP200 should not exceed the current amperage rating indicated on the rear panel of your MIP200. Typically, components consuming low amounts of energy are rated in wattage instead of current.

6. The MIP200 has been tested and certified for indoor use only.

7. To protect the anodized finish on your MIP200, it is important to limit exposure to certain types of lighting and only use appropriate gentle cleaners. Direct sunlight, other forms of UV light, high-intensity lighting, and aggressive cleaners with harsh chemicals can result in discoloration of the anodized finish.

8. For additional information on the MIP200 and other McIntosh products please visit the McIntosh website at **www.mcintoshlabs.com**.

## Performance Features

- **Illuminated Glass Front Panel**
  - The famous McIntosh illuminated front panel is made from 1/8 inch thick glass and uses Light Emitting Diodes (LEDs) for even illumination and long life.
- **AC Line Surge Protection**
  - The MIP200 uses a TPMOV (Thermally Protected Metal Oxide Varistor) that eliminates common failure modes associated with standard MOVs.
- **AC Line Filtering**
  - The MIP200 offers EMI filtering that provides electromagnetic noise suppression to all compo-nents connected to the outlets.
- **AC Line Meter / Monitor**
  - The MIP200 uses a power line monitoring IC (Integrated Circuit) to constantly monitor and display AC line voltage, current, and power. Over and under voltage limits can be set to automatically turn the outlets off should those conditions occur.
- **Power Control**
  - The MIP200 power control inputs provide remote control of the switched outlets and can be configured individually. Power control outputs pass control signals on to other components.
- **RS232 Control**
  - The MIP200 RS232 port allows for connection of third party control systems. Control of the switched outlets and various operating functions can be made remotely using RS232 protocol.
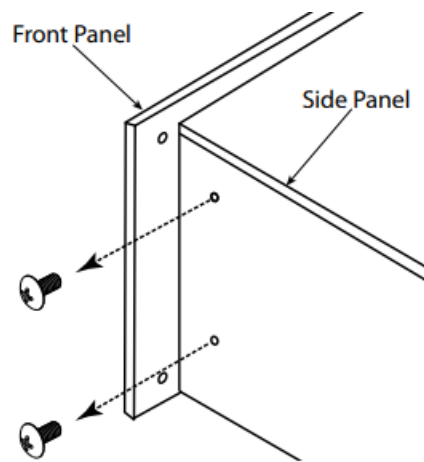
## Dimensions

**100V – 120V**

**220V – 240V**
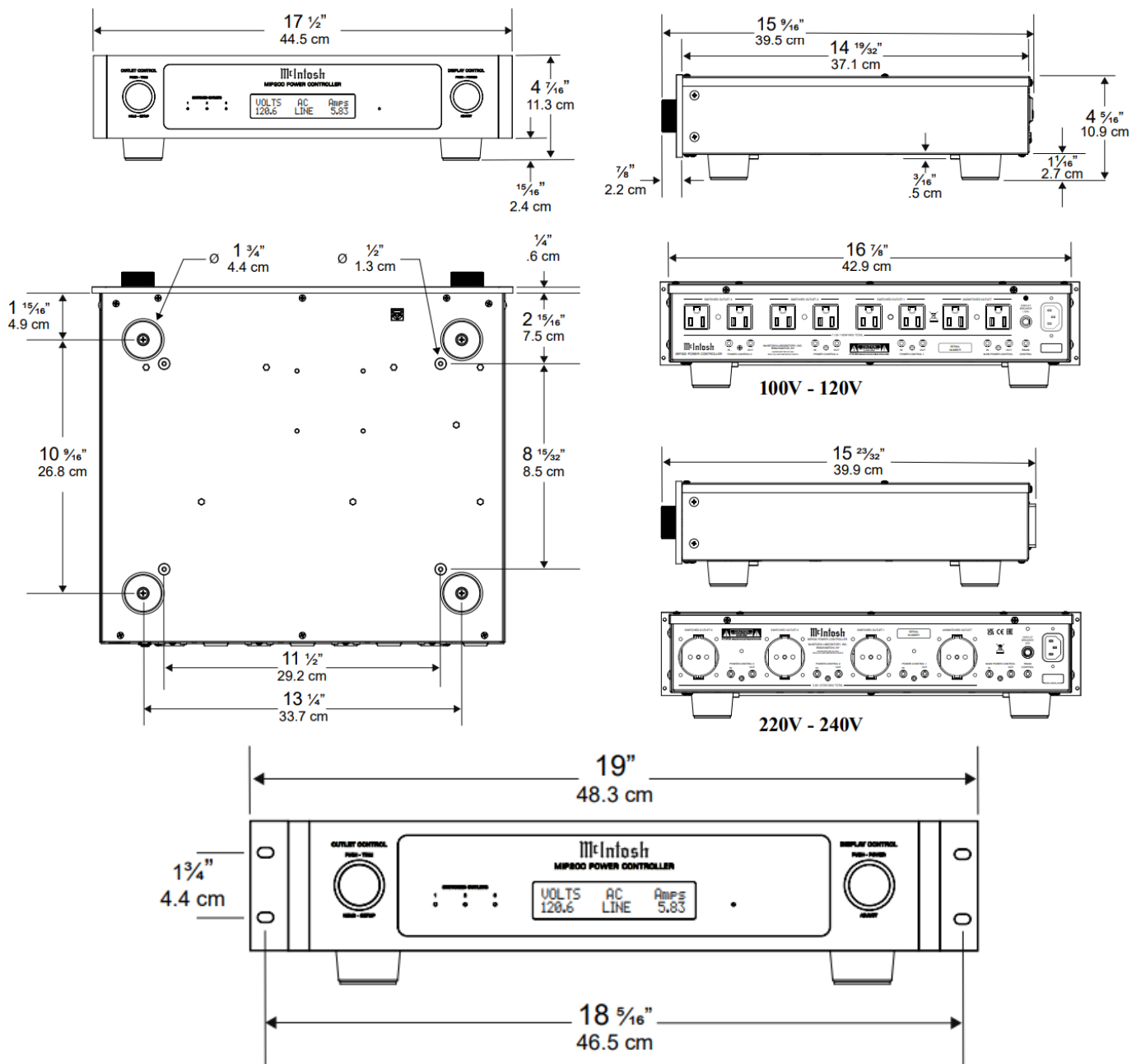
## Rack Mounting

To rack mount the MIP200, the two included rack mounting brackets should be installed.

**Follow these instructions for each side:**

1. Remove the two screws from the MIP200's side panel. Save these for future use if the mounting brackets are removed.

Front Panel

Side Panel

2. Secure the rack mounting bracket to the MIP200 side panel using 2 of the 8-32 thread (larger) flathead screws. Do not re-use the previously removed screws. Use 2 of the supplied 6-32 thread (smaller) flathead screws to secure the bracket to the front panel.



Front Panel

Rack Mounting Bracket

Side Panel

Larger Supplied Screws

Smaller Supplied Screws
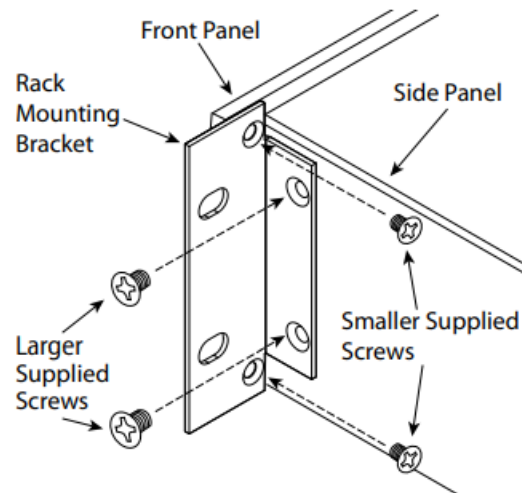
**MIP200 Front Panel**
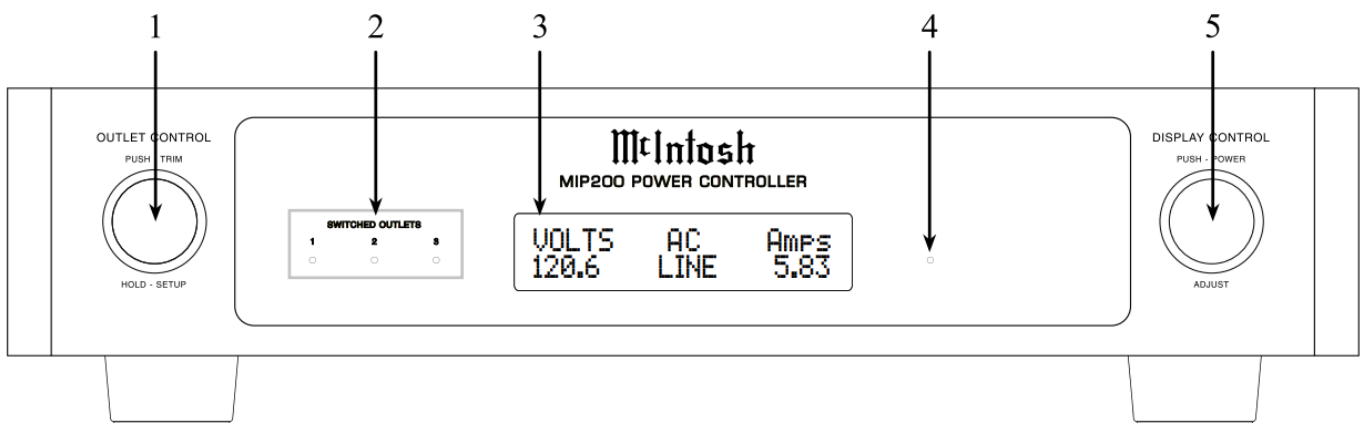


**Front Panel Displays and Switches**

1. **OUTLET CONTROL knob**
   - Rotate to select which of the three SWITCHED OUTLETS are to be controlled. PUSH to access the trim menu. HOLD to access the setup menu.
2. **SWITCHED OUTLET Indicators**
   - Indicate the state of each of the three SWITCHED OUTLETS. When illuminated, the outlet is on.
3. **Information Display**

- Indicates AC line monitor readings as well as options for the SWITCHED OUTLETS, trim menu and setup menu.

4. **AC Power Indicator**
   - Illuminates whenever the MIP200 is connected to a live AC circuit. Flashes when AC surge protection has triggered, or an over/under voltage condition has occurred. Also used to indicate a reset of the internal microprocessor.
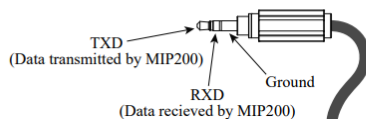
5. **DISPLAY CONTROL knob**
   - PUSH to turn the MIP200 on or off. Rotate to select various display options for the AC line monitor. ADJUST (rotate) to change states when controlling the SWITCHED OUTLETS and to select trim and setup menu options.
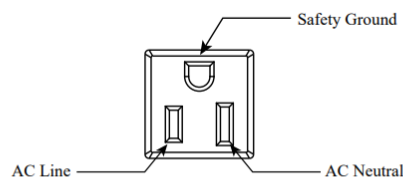
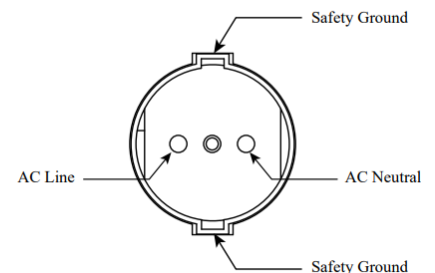## Connector Information



**Power Control Connectors**
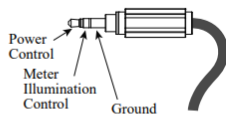
**RS232 Connectors**

**100V - 120V Outlets**

**220V - 240V Outlets**

## MIP200 Rear Panel



100V - 120V
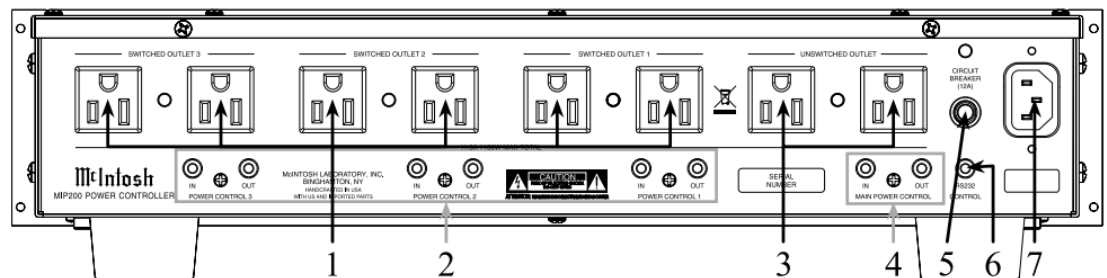
220V - 240V
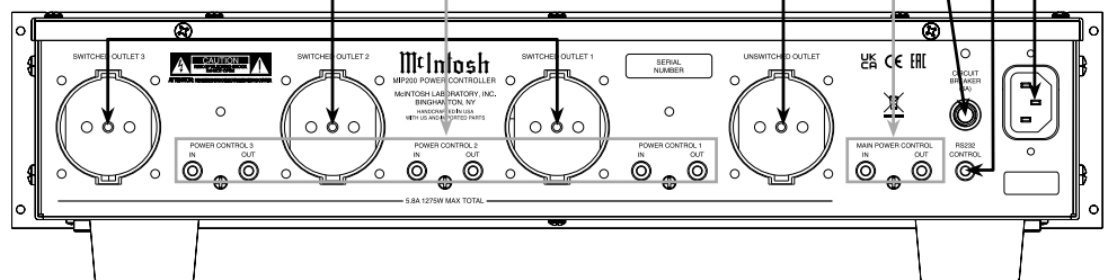
## Rear Panel Connections and Switches

1. **SWITCHED OUTLETS**
   - These outlets can be turned on and off using the front panel OUTLET CONTROL knob or rear panel POWER CONTROL IN connectors. If over/under voltage protection has been enabled, these outlets will switch off should that condition occur.

2. **POWER CONTROL 1, 2, 3**
   - IN connectors are used to turn on the front panel lighting and display and then turn on the SWITCHED

OUTLET that has been configured to respond to its associated POWER CONTROL IN. The OUT connectors pass the POWER CONTROL IN signal onto other system components.

3. **UNSWITCHED OUTLET**
   - This outlet is always on whenever the MIP200 is connected to a live AC circuit. If over/under voltage protection has been enabled, the outlet will switch off should that condition occur.

4. **MAIN POWER CONTROL**
   - The IN connector is used to turn on the front panel lighting and display and then turn on any SWITCHED OUTLET that has been configured to respond to the MAIN POWER CONTROL IN. The OUT connector generates a 12V DC signal whenever the MIP200 is powered on.

5. **CIRCUIT BREAKER**
   - Should the MIP200 input current exceed its rating, the CIRCUIT BREAKER will activate and disconnect AC power to the MIP200. Should this happen the tip of the breaker will pop out. Reset the breaker by pushing in on the tip.

6. **RS232 CONTROL**
   1. This connector is used for external control devices that use RS232 protocol. Control of the SWITCHED OUTLETS as well as trim menu functions can be controlled using pre-defined RS232 commands.

7. **AC Input**
   1. Connect to a live AC outlet according to the AC input rating label.

## MIP200 Connection Diagram
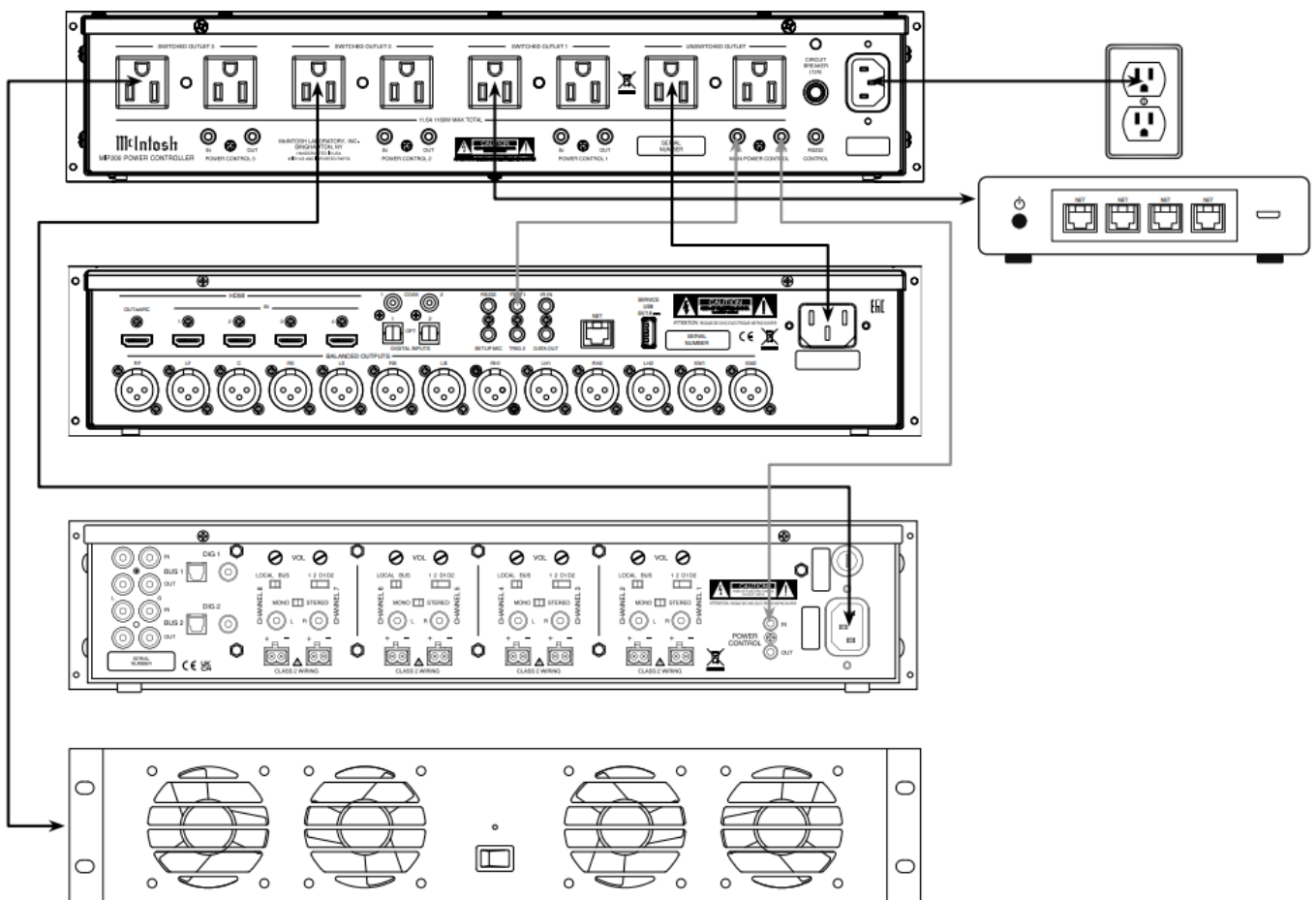


- In this connection example, a home theater processor, power amplifier, network router, and equipment rack fan are shown connected to the MIP200.

- The processor is connected to the UNSWITCHED OUTLET so it always has power and would be in standby mode.
- The router and amplifier are connected to SWITCHED OUTLETS that have been configured to be ON. By being configured to ON they act as additional unswitched outlets so they always have power as well.
- A power control signal from TRIG 1 of the processor will then turn on the MIP200 front panel and then turn on the amplifier.
- The equipment rack fan is connected to SWITCHED OUTLET 3 which is configured to only come on with MAIN POWER CONTROL.
- By being configured for MAIN POWER CONTROL the fan will only come on when the system is turned on by the processor.

## Setup Menu

- Your McIntosh MIP200 has been factory-configured for default operating settings that allow immediate operation.
- If you wish to make changes to the default configurations, a Setup Menu is provided to customize the operating settings using the Information Display.

### Navigating the Setup Menu

1. To open the Setup Menu, press and hold the OUTLET CONTROL knob until the Information Display indicates.

```
SETUP:    Product  >
      MIP200-AMR####
```
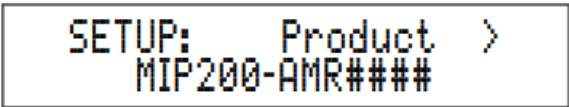
2. Rotate the OUTLET CONTROL knob to select the desired setting.
3. Rotate the DISPLAY CONTROL knob to change the selected setting's options.
4. To exit from the Setup Menu or a submenu, press the OUTLET CONTROL knob.

| Settings | Options |
|---|---|
| Product Information | MIP200-AMRXXXX |
| Version | __.__.__ |
| Outlet 1 | Remote, Delay, Name |
| Outlet 2 | Remote, Delay, Name |
| Outlet 3 | Remote, Delay, Name |
| Nominal Voltage | 100, 110, 120 (220, 230, 240) |
| RS232 Baud Rate | 9600, 19200, 38400, 57600, **115200** Baud |
| Factory Reset | Reset to defaults |

### Product Information

- The product information contains the product name and serial number.
- **Version**

- The version number indicates the version of the MIP200 firmware. The firmware controls the internal circuitry of the MIP200.
- **Outlet 1**
  - Refer to the Outlet Submenu section on the following page for a description of how to configure Outlet 1.
- **Outlet 2**
  - Refer to the Outlet Submenu section on the following page for a description of how to configure Outlet 2.
- **Outlet 3**
  - Refer to the Outlet Submenu section on the following page for a description of how to configure Outlet 3.
- **Nominal Voltage**
  - The nominal voltage sets the expected AC Line voltage that the MIP200 will be plugged into. Based on your version of the MIP200, this will be either 100, 110, 120 Volts, 220, 230, or 240 Volts.
  - Your MIP200 should already be configured to the correct Nominal Voltage based on your country. To change the nominal voltage, rotate the DISPLAY CONTROL knob until the correct voltage is selected.
- **RS232**
  - The MIP200 may be remotely controlled from other equipment connected to the Rear Panel RS232 Jack. The speed at which the MIP200 communicates (8 bits, no parity, and 1 stop bit) with other equipment is adjustable from 9,600 bits per second to 115,200 bits per second. To change from the default speed of 115,200 bits per second, rotate the DISPLAY CONTROL knob until the desired bit rate is selected.
- **Factory Reset**
  - To reset all adjustable settings to the factory default values, perform the following steps.

1. Hold the OUTLET CONTROL knob until the following appears on the Information Display, then release the INPUT knob.

```
SETUP: <  Factory
      In Progress...
```
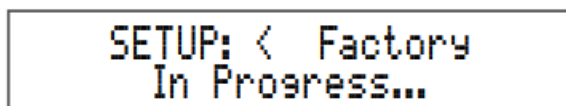
2. Once the factory reset is completed, the MIP200 will turn off. Push the DISPLAY CONTROL knob to turn the MIP200 on.

## Outlet Submenu

- Outlets 1, 2, and 3 each have their submenu to configure them individually. To enter an outlet's submenu, rotate the OUTLET CONTROL knob in the Setup Menu until the desired outlet is selected, then hold the OUTLET CONTROL knob.
- **Each submenu has three configuration options:** Remote Power Control, Delay, and Name.

| Settings | Options |
|---|---|
| Remote Power Control | **Main Power Control**, Power Control # |
| Delay | **Off**, 1 second, 2 seconds, 3 seconds |
| Name | |

**Remote Power Control**

- The Remote Power Control setting determines which type of POWER CONTROL IN connectors control the switched outlet. By default, it is set to the Main Power Control connector.
- To change the Remote Power Control to Power Control 1, 2, or 3 (outlet specific), perform the following steps.

1. Rotate the DISPLAY CONTROL knob until the following appears on the Information Display.

```
OUTLET #:  Remote >
<  Power Control 1
```

2. To exit the Outlet Submenu and return to the Setup Menu, press the OUTLET CONTROL knob again or use the OUTLET CONTROL knob to navigate to the next setting.

**Delay**

The Delay setting controls how long the outlet takes to turn on after a Remote Power Control signal. By default, the Delay is set to Off, but can be configured to 1, 2, or 3 seconds.

**To change the Delay, perform the following steps:**

1. Rotate the OUTLET CONTROL knob until the following appears on the Information Display.

```
OUTLET #: < Delay >
        Off      >
```

2. Rotate the DISPLAY CONTROL knob until the desired setting is selected.

```
OUTLET #: < Delay >
<   2 seconds >
```

3. To exit the Outlet Submenu and return to the Setup Menu, press the OUTLET CONTROL knob again or use the OUTLET CONTROL knob to navigate to the next setting.

**Name**

1. To change the name of Outlet 1, rotate the OUTLET CONTROL knob until the Information Display indicates.

```
OUTLET #: < Name
    (Hold OUTLET)
```

2. Press and Hold the OUTLET CONTROL knob to enter the Outlet 1 naming menu.

```
RENAME: OUTLET 1
    >OUTLET 1  <
```

3. The character you are currently changing will be blinking. Rotate the OUTLET CONTROL knob to select which character to change, then rotate the DISPLAY CONTROL knob to change the selected character.
4. To save the new name, press and hold the OUTLET CONTROL knob. The new name will replace the old name.
5. To exit the naming menu, press the OUTLET CONTROL knob.
6. To exit the Outlet Submenu and return to the Setup Menu, press the OUTLET CONTROL knob again.

**Trim Menu**

**How to Select and Adjust Trim Functions**

1. Press the Front Panel OUTLET CONTROL knob to open the Trim Menu.
2. Rotate it to select the desired Trim Function.
3. Rotate the DISPLAY CONTROL knob to change the setting.
    - Approximately 5 seconds after making any changes, the Information Display will return to indicate the AC line monitor/meter.

**Trim Functions Menu Options**

| Settings | Options |
|---|---|
| Brightness | 4 Levels from Dim          Bright |
| Display | **Always On**, Auto Sleep |
| Over Voltage | **Off**, 5%, 10% |
| Under Voltage | **Off**, 5%, 10% |

**Brightness**

- The brightness level of the Information Display can be adjusted. It has 4 levels that vary from dim to bright.

**Display**

- When the Display control is set to Auto Sleep, the Information Display will automatically turn off.
- This occurs approximately 30 minutes after there has been an absence of user activity (includes power controls).
- By default, it is set to Always On.

**Over Voltage**

- The Over Voltage protection feature will turn off all outlets if the AC line exceeds the set limit.
- This threshold can be configured to protect against voltages either 5% or 10% above the Nominal Voltage value (see Setup Menu). By default, the Over Voltage is set to Off, which disables the protection.

**Under Voltage**

- The Under Voltage protection feature will turn off all outlets if the AC line falls below the set limit.
- This threshold can be configured to protect against voltages either 5% or 10% below the Nominal Voltage value (see Setup Menu). By default, the Under Voltage is set to Off, which disables the protection.

**How to Operate**

**Display On and Off**

To turn on the Information Display, push the DISPLAY CONTROL knob. The MIP200 will go through a brief initialization and then indicate the last used AC line display.

```
Volts    AC     Amps
118.0   LINE    0.00
```

- To turn off the Information Display, push the DISPLAY CONTROL knob. Turning the Information Display does not control any Switched or Unswitched Outlets

## AC Line Monitor Readings

- The MIP200 provides four different AC line readings: Composite, Power, Voltage, and Current.
- To select the desired reading, rotate the DISPLAY CONTROL knob.

```
AC LINE POWER
     0.0 Watts
```

## Switched Outlet Control

- The MIP200 has three Switched Outlets that are independently configurable. Rotate the OUTLET CONTROL knob to select the desired Outlet.
- If an outlet has been renamed in the Setup Menu, its custom name is displayed here. Each Outlet has two control modes, which can be selected by rotating the.

## DISPLAY CONTROL knob:

- Off/Remote (Default) – Outlet is Off unless controlled by a POWER CONTROL IN connection.
- When configured for Off/Remote, the type of Remote Power Control is indicated in parentheses.

```
       OUTLET 1   >
  Off/Remote (Main) >
```

- **On** The outlet behaves as an Unswitched
- To return to the AC Line Readings, push the OUTLET CONTROL knob.

```
       OUTLET 1   >
  <   On
```

## Remote Power Control Connections

- Each Outlet can use one of two control signals.
- **MAIN POWER CONTROL** (Default) – a universal signal that can control multiple Outlets simultaneously
- **POWER CONTROL X** – each Outlet has its own corresponding power control, where X is the Outlet number
- The control type for each Outlet can be configured in the Setup Menu.

## Specifications

## MIP200 (100V-120V ) Specifications

- **Input Rating**
  - **100V 50/60Hz** 12A (Max)
  - **110V 50/60Hz** 12A (Max)
  - **120V 50/60Hz** 12A (Max)
- **Output Rating**
  - **11.6A** (1160W) Total
- **AC Surge Protection**
  - **Thermally** Protected Metal Oxide Varistor (TPMOV)
  - **50** kA – 8/20us Line to Neutral
- **AC Voltage Protection**
  - **±5% or** ±10% from Nominal
- **Power Control Input**
  - **5-12VDC** (All inputs)
- **Power Control Output**
  - **12VDC,** 25mA (Main)
  - **Vout** = Vin (PC1, PC2, PC3)
- **Overall Dimensions**
  - **Width** is 17 1/2 inches (44.5cm)
  - **Height** is 4 3/8 inches (11.1cm)
  - **Depth** is 15 9/16 inches (39.5cm)
- **Weight**
  - **17 pounds** (7.7 kg) net
  - **33 pounds** (15 kg) in shipping carton
- **Shipping Carton Dimensions**
  - **Width** is 27 inches (68.6cm)
  - **Depth** is 25 inches (63.5cm)
  - **Height** is 12 inches (30.5cm)

**MIP200 (220V-240V ) Specifications**

- **Input Rating**
  - **220V** 50/60Hz 6A (Max)
  - **230V** 50/60Hz 6A (Max)
  - **240V** 50/60Hz 6A (Max)
- **Output Rating**
  - 5.8A (1275W) Total
- **AC Surge Protection**
  - **Thermally Protected** Metal Oxide Varistor (TPMOV)
  - **50** kA – 8/20us Line to Neutral
- **AC Voltage Protection**
  - **±5%** or ±10% from Nominal
- **Power Control Input**
  - 5-12VDC (All inputs)
- **Power Control Output**

- - **12VDC,** 25mA (Main)
  - **Vout** = Vin (PC1, PC2, PC3)
- **Overall Dimensions**
  - **Width** is 17 1/2 inches (44.5cm)
  - **Height** is 4 3/8 inches (11.1cm)
  - **Depth** is 15 23/32 inches (39.9cm)
- **Weight**
  - **17 pounds** (7.7 kg) net
  - **33 pounds** (15 kg) in shipping carton
- **Shipping Carton Dimensions**
  - **Width** is 27 inches (68.6cm)
  - **Depth** is 25 inches (63.5cm)
  - **Height** is 12 inches (30.5cm)

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## Packing Instructions

- In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below.
- It is very important that the four plastic feet are attached to the bottom of the equipment. This will ensure the proper equipment location on the bottom pad. Failure to do this will result in shipping damage.
- Use the original shipping carton and interior parts only if they are all in good serviceable condition.
- If a shipping carton or any of the interior part(s) are needed, please call or write the Customer Service Department of McIntosh Laboratory. Refer to Please see the Part List on the right for the correct part numbers.
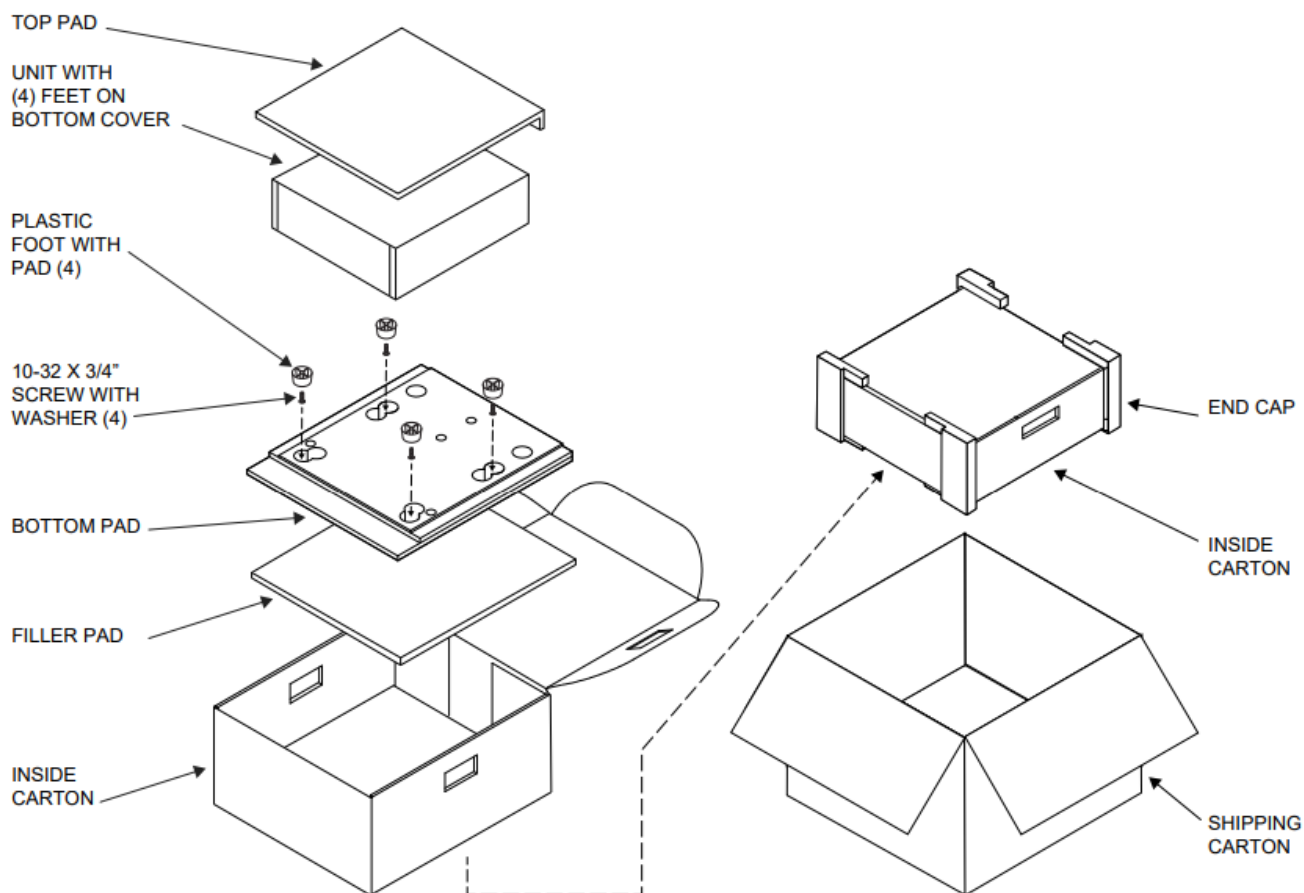
**Part List**

| Qty | Part Number | Description |
|---|---|---|
| 1 | 033838 | Shipping carton |
| 2 | 034669 | End caps |
| | | |
| 1 | 033836 | Inside carton |
| 2 | 033725 | Top / Filler pad |
| 1 | 034576 | Bottom pad |
| | | |
| 4 | 017937 | Plastic feet |
| 4 | 024036 | Foot pads |
| 4 | 400159 | #10-32 x ¾" screws |
| 4 | 404080 | #10 Flat washers |

- **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. The MIP200 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

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- **Website [www.mcintoshlabs.com](http://www.mcintoshlabs.com)**

## Documents / Resources

| | |
|---|---|
|  | [mcintosh MIP200 Power Controller](#) [pdf] Owner's Manual<br>MIP200 100V-120V, MIP200 220V-240V, MIP200 Power Controller, MIP200, Power Controller, Controller |

## References

- 🏛 **[McIntosh: Home Audio Systems for Music & Home Theater](#)**
- **[User Manual](#)**