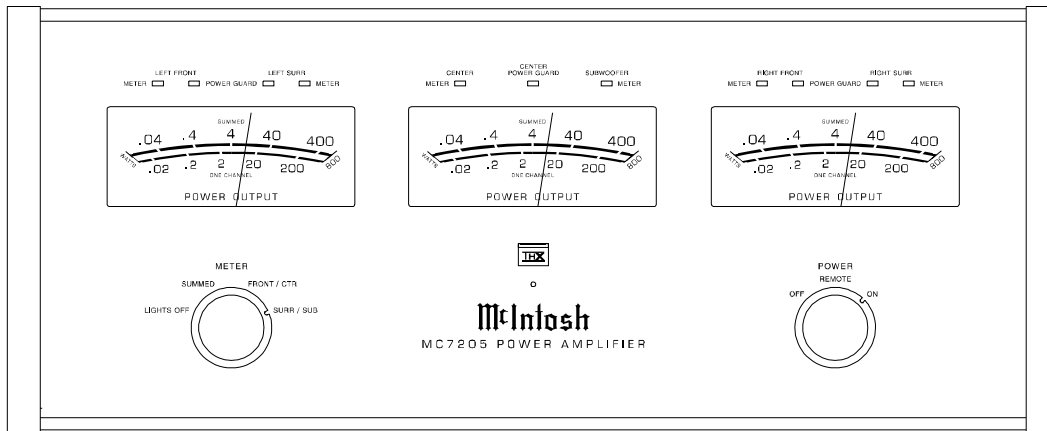




MC7205 THX® Five Channel Power Amplifier



MC7205

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Thank You, Please Take A Moment, Customer Service and Table of Contents

Thank You

For your decision to own this McIntosh MC7205 Five Channel Power Amplifier ranks you at the very top among discriminating music listeners. You now have “The Best.” The McIntosh dedication to “Quality,” is assurance that you will receive many years of musical enjoyment from this unit.

Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new McIntosh MC7205. This will ensure that you receive all the performance benefits this equipment can offer you, and that it will become a highly valued part of your home entertainment system.

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 serial number is located on the rear panel of the equipment. The spaces below have been provided for you to record that information:

Serial Number: _____

Purchase Date: _____

Dealer Name: _____

Customer Service

If at any time you have questions about your McIntosh MC7205 Five Channel Power Amplifier, contact your McIntosh dealer. Your dealer is familiar with your McIntosh equipment as well as other brands that may be included in your system and is best qualified to help you.

If it is determined that your MC7205 is in need of repair, you can return it to your dealer or you can return it to McIntosh Laboratory. Contact the McIntosh Repair Department for assistance at,

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

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NOTES:

1. *Connecting Cables and Connectors are available from the McIntosh Parts Department:*
Data and Power Control Cable Part No. 170-202
Six foot, shielded 2 conductor, with 1/8 inch stereo mini phone plugs on each end.
Control Center to Multi Channel Power Amplifier Cable Part No. 170-631
Six foot, DB25, shielded, straight through, 25 conductor male-to-female cable.
2. *For additional connection information, refer to the owner's manual(s) for any component(s) connected to the MC7205 Amplifier.*
3. *There is a built-in turn on delay which will mute the speaker outputs for approximately two seconds when the amplifier is turned on.*
4. *It is very important that loudspeaker cables of adequate size be used in your music system, to ensure that there will be no power loss or heating. Cable size is specified in Gauge numbers or AWG, (American Wire Gauge). The smaller the Gauge number, the larger the wire size:*
If your loudspeaker cables are 25 feet (7.62m) or less, use at least 18 Gauge (AWG) wire size or larger.
If your loudspeaker cables are 50 feet (38.1m) or less, use at least 16 Gauge (AWG) wire size or larger.
If your loudspeaker cables are 100 feet (76.2m) or less, use at least 14 Gauge (AWG) wire size or larger.

IMPORTANT SAFETY INSTRUCTIONS!

PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT.



WARNING SHOCK HAZARD - DO NOT OPEN.

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



AVIS RISQUE DE CHOC - NE PAS OUVRIR.

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



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



To prevent the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified personnel.

General:

1. Read all the safety and operating instructions, contained in this owner's manual, before operating this equipment.
2. Retain this owner's manual for future reference about safety and operating instructions.
3. Adhere to all warnings and operating instructions.
4. Follow all operating and use instructions.
5. **Warning: To reduce risk of fire or electrical shock, do not expose this equipment to rain or moisture. This unit is capable of producing high sound pressure levels. Continued exposure to high sound pressure levels can cause permanent hearing impairment or loss. User caution is advised and ear protection is recommended when playing at high volumes.**
6. **Caution: to prevent electrical shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.**

Attention: pour prevenir les chocs electriques pas utiliser cette fiche polarisee avec un prolongateur, une prise de courant ou un autre sortie de courant, sauf si les lames peuvent etre inserees afond ans en laisser aucune partie a decouvert.

7. For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning or power line surges.
8. Do not use attachments not recommended in this owner's manual as they may cause hazards.

Installation:

9. Locate the equipment for proper ventilation. For example, the equipment should not be placed on a bed, sofa, rug, or similar surface that may block ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet, that may impede the flow of air through the ventilation openings.
10. Locate the equipment away from heat sources such as radiators, heat registers, stoves, or other appliance (including amplifiers) that produce heat.
11. Mount the equipment in a wall or cabinet only as described in this owner's manual
12. Do not use this equipment near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.
13. Do not place this product on an unstable cart, stand, tripod, bracket, or table. The equipment may fall, causing serious injury to a person, and serious damage to the product.

Connection:

14. Connect this equipment only to the type of AC power source as marked on the unit.
15. Route AC power cords so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the instrument.
16. Do not defeat the inherent design features of the polarized plug. Non-polarized line cord adapters will defeat the safety provided by the polarized AC plug. If the plug should fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.



17. Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.

Care of Equipment:

18. Clean the instrument by dusting with a dry cloth. Unplug this equipment from the wall outlet and clean the panel with a cloth moistened with a window cleaner. Do not use liquid cleaners or aerosol cleaners.
19. Do not permit objects of any kind to be pushed and/or fall into the equipment through enclosure openings. Never spill liquids into the equipment through enclosure openings.
20. Unplug the power cord from the AC power outlet when left unused for a long period of time.

Repair of Equipment:

21. Unplug this equipment from the wall outlet and refer servicing to a qualified service personnel under the following conditions:
 - A. The AC power cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the equipment.
 - C. The equipment has been exposed to rain or water.
 - D. The equipment does not operate normally by following the operating instructions contained within this owner's manual. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - E. The equipment has been dropped or damaged in any way.
 - F. The equipment exhibits a distinct change in performance - this indicates a need for service.
22. Do not attempt to service beyond that described in the operating instructions. All other service should be referred to qualified service personnel.
23. When replacement parts are required, be sure the service technician has used replacement parts specified by McIntosh or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
24. Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

Introduction

Now you can take advantage of traditional McIntosh standards of excellence in the MC7205, power amplifier. Five 200 watt, high current output channels will deliver outstanding audio performance for your McIntosh Home Theater System. The MC7205 is THX certified and easily meets the demanding Lucasfilm, Ltd., standards for accuracy in home theater electronics.

Performance Features

● **Power Output**

The MC7205 consists of five separate power amplifier channels, each capable of 200 watts into 4 ohm speakers with less than 0.005% distortion. This is 1000 watts of McIntosh power in a single package.

● **Power Guard**

All five channels include the patented McIntosh Power Guard circuit that prevents the amplifier from being overdriven into clipping with its harsh distorted sound that can also damage your valuable loudspeakers.

● **Sentry Monitor and Thermal Protection**

McIntosh Sentry Monitor power output stage protection circuits are present on all five channels to ensure the MC7205 will have a long and trouble free operating life. Built-in thermal protection circuits guard against overheating which could shorten the normal long life expectancy of your McIntosh power amplifier.

● **Direct Current Protection**

Direct Current sensing circuits on each channel provide extra protection for your valuable loudspeakers.

● **Illuminated Power Meters**

Three front panel, illuminated output wattmeters can be selected to precisely indicate the power output of each of the five channels as well as the relative power output produced by a THX certified powered subwoofer amplifier.

● **Convenient Single Cable Hookup**

A rear panel connector provides for the convenience of using a single cable, (DB25 computer style) to receive all audio and power control signals from a McIntosh THX Control Center.

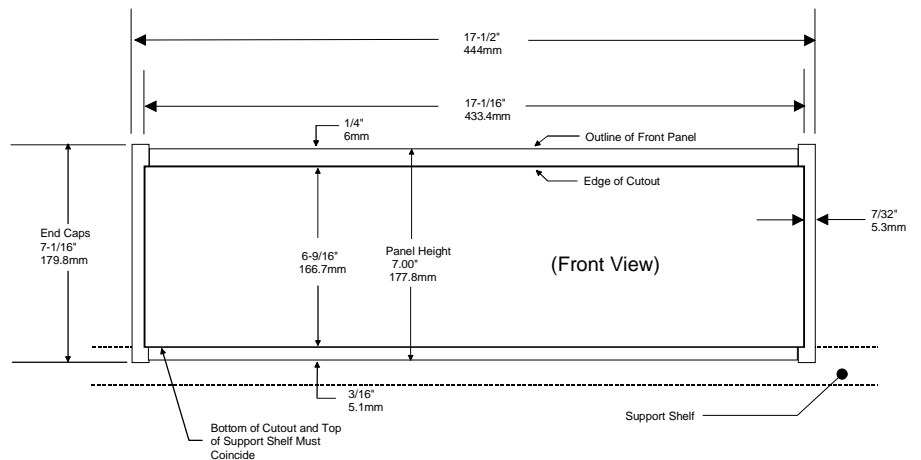
Installation

The MC7205 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 required panel cutout, ventilation cutout and unit dimensions are shown.

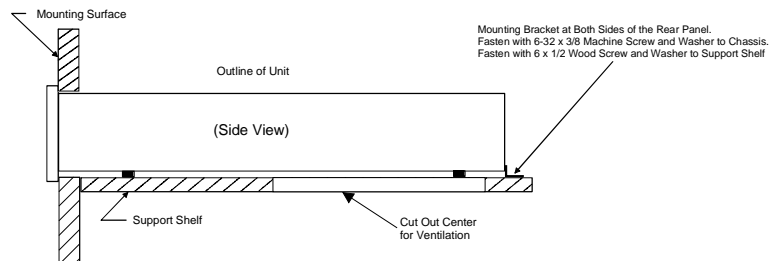
Always provide adequate ventilation for your MC7205. Cool operation ensures the longest possible operating life for any electronic instrument. Do not install the MC7205 directly above a heat generating component such as a high powered amplifier. If all the components are installed in a single cabinet, 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 (5.1 cm) above the top and 1 inch (2.54 cm) on each side of the amplifier, so that airflow is not obstructed. Allow 21 inches (53.3 cm) depth behind the mounting panel, which includes clearance for connectors. Allow 1-1/8 inches (2.9 cm) in front of the mounting panel for knob clearance. Be sure to cut out a ventilation hole in the mounting shelf according to the dimensions in the drawing.

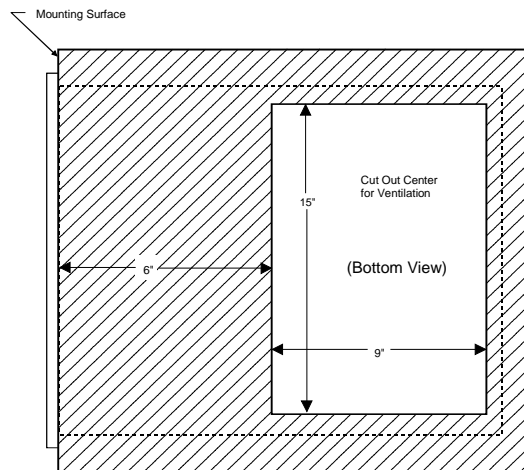
Front View of a MC7205 custom installed



Side View of a MC7205 custom installed



Bottom View of a MC7205 custom installed





MC7205 Rear Panel Controls and Connections

MC7205 Rear Panel Controls and Connections

INPUTS for discrete audio cables from a preamplifier or control center audio outputs

INPUT for discrete audio cable from a preamplifier or control center audio output

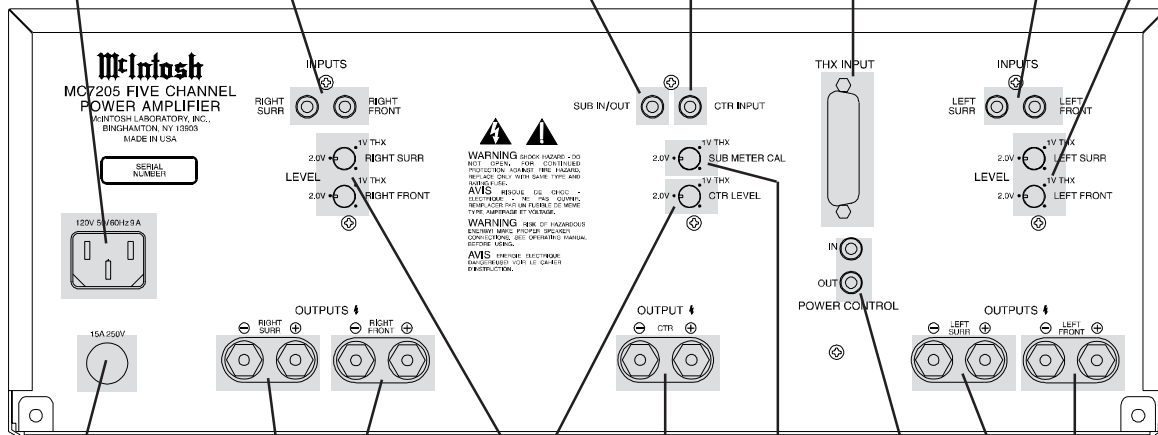
INPUTS for discrete audio cables from a preamplifier or control center audio outputs

Connect the MC7205 power cord to a live AC outlet. Refer to information on the back panel to determine the correct voltage.

SUB IN/OUT accepts a subwoofer input signal to activate the subwoofer power meter circuit. If a 25 conductor cable is being used with a McIntosh Control Center this jack will provide a signal out to a subwoofer amplifier.

THX INPUT Connector accepts a 25 conductor cable that connects all audio and power control signals from a McIntosh Control Center

Individual Input LEVEL controls for the Left channels



Individual Input LEVEL controls for Right channels and Center channel

SUB METER CAL control for meter calibration of the Subwoofer Channel

Main Fuse holder, refer to information on the back panel of your MC7205 to determine the correct fuse size and rating.

OUTPUT Connections for 8 or 4 ohm loudspeakers

OUTPUT Connections for 8 or 4 ohm loudspeakers

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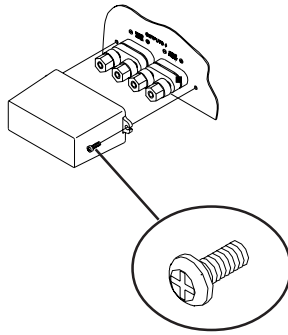
POWER CONTROL In receives turn on/off signals from a McIntosh component and the POWER CONTROL Out sends that turn on/off signal to the next McIntosh component.

How to Connect the MC7205 with a C39/MX130

How to Connect the MC7205 with a C39/MX130

1. Connect the MC7205 power cord to a live AC outlet.
2. Connect the loudspeaker cables to the appropriate channel output connectors, being careful to observe the correct polarities.

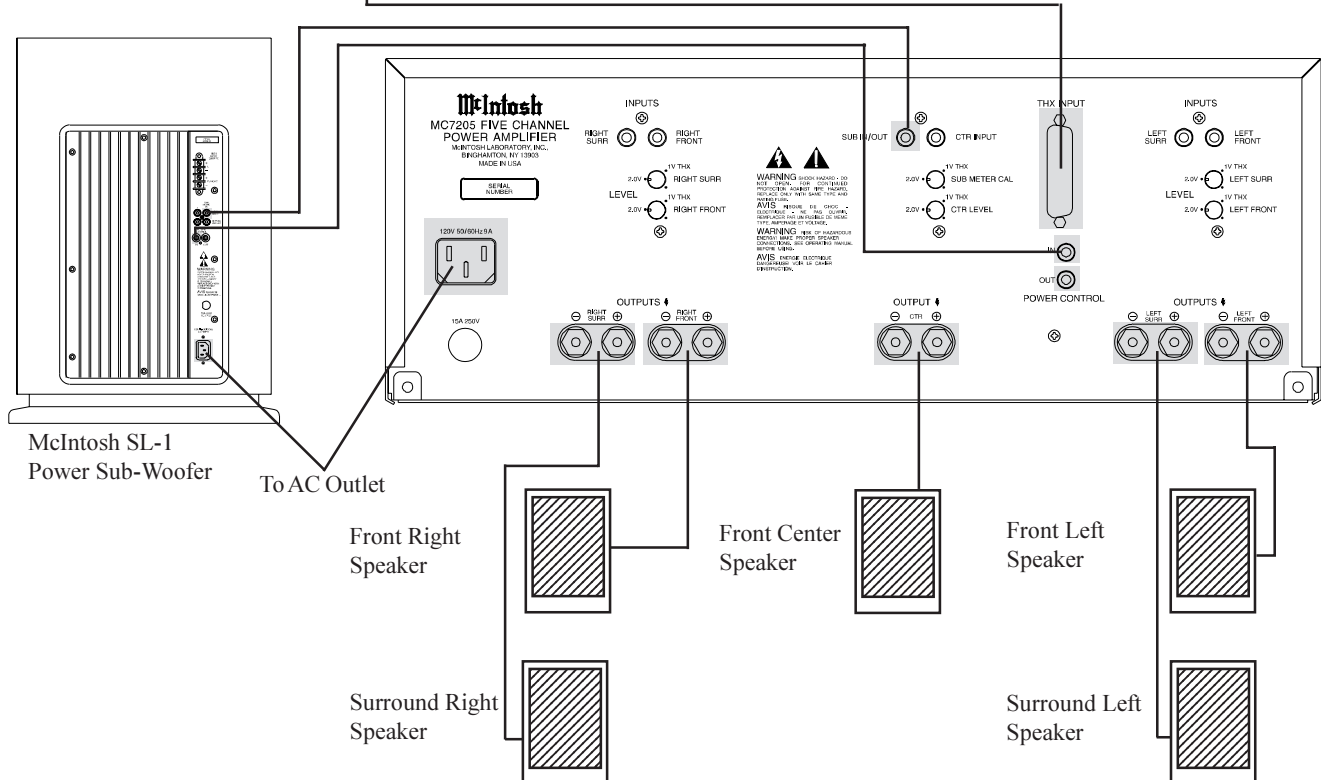
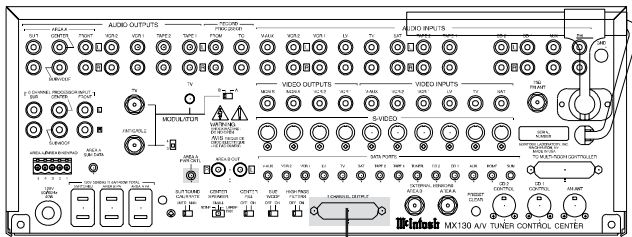
Note: To prevent the possibility of user contact with potentially dangerous voltages, install the protective cover(s) over the loudspeaker output terminals after the loudspeaker cables have been connected. The covers and cover mounting screws are located in an accessory package that is enclosed in the amplifier shipping carton. There are two types of screws in the package. Install the protective covers with the Phillips, 6-32 by 5/16 inch self tapping screws. The other screws are No. 6 by 1/2 inch wood screws used to secure the amplifier custom mounting brackets to a shelf.



3. Connect a single DB25 computer type cable from the THX output of a control center to the MC7205 THX Input connector for all six audio channels and power control.
4. Connect the MC7205 Sub In/Out to the McIntosh SL-1 subwoofer amplifier THX input and a power control cable from the MC7205 Power Control Out to the SL-1 Power Control In.

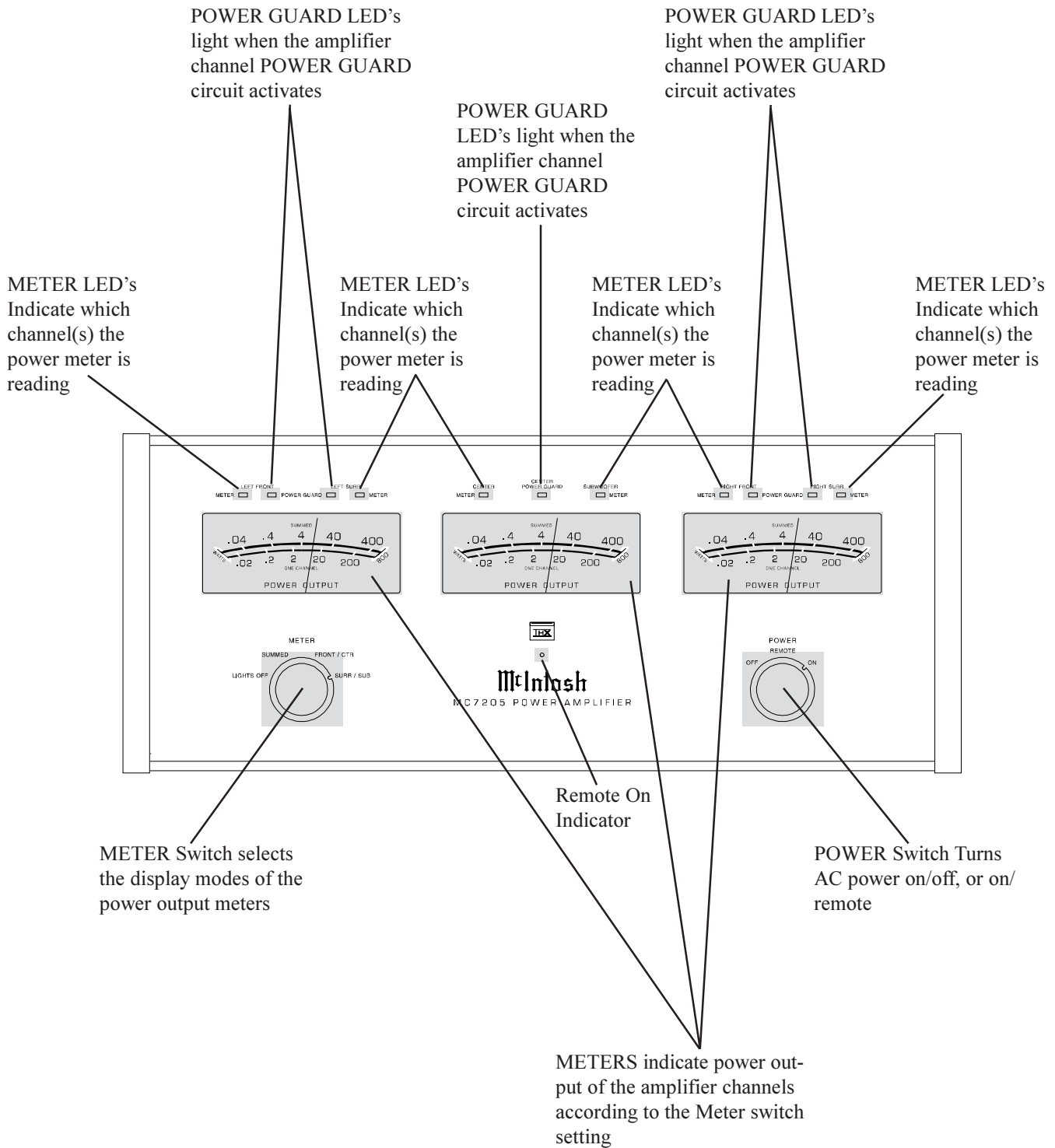
Note: An optional hookup is to use discrete cables from a McIntosh Control Center to inputs of the MC7205. Connect a "Y" adapter to the Control Center Subwoofer Output, with one cable to the SL-1 subwoofer THX input and a second cable to the MC7205 Sub In/Out jack. Connect a power control cable from the Control Center Power Control Out to the MC7205 power control in jack and connect a power control cable from the MC7205 Power Control Out to the SL-1 Power Control In.

McIntosh MX130 Control Center





MC7205 Front Panel Displays and Controls



How to Operate the MC7205

Input Level Controls

When using a McIntosh Control Center set all five level controls to the 2V position. If a preamplifier or control center has a 1V output rating and/or a built-in THX module, set the controls to the 1V position. If an increase or decrease in amplifier sensitivity is required for other applications, set the controls as desired. Refer to Figure 2.

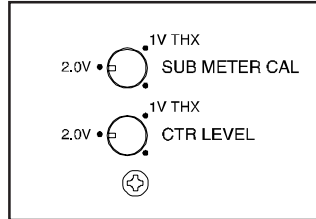


Figure 2

Subwoofer Meter Calibration

When using a McIntosh SL-1 powered subwoofer, set the Sub Meter Cal control to the 1V THX position for the correct subwoofer amplifier power output indication. Refer to Figure 1.

Power On

To have the MC7205 turn on or off when a control center turns on or off, rotate the power switch to the remote position. For manual operation, rotate the power switch to the on or off position as desired.

Note: There must be a power control connection between the MC7205 and the McIntosh Control Center in order for the remote power turn on to function.

Meter Selection

Rotate the meter mode switch to select the meter operation mode you desire:

Lights Off - Meter lights are turned off and the meters are in the summed mode.

Summed - Each meter displays the combined outputs of two channels. The left meter indicates the left

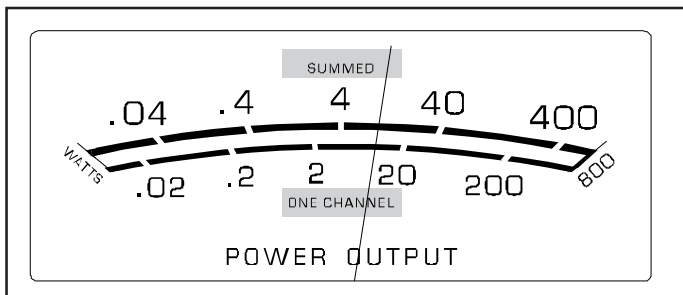


Figure 3

front combined with the left surround, the center meter indicates the center combined with the subwoofer and the right meter indicates the right front combined with the right surround. In this meter mode refer to the upper meter scale(s).

Front/Ctr - The left meter indicates the left front channel, the center meter indicates the center channel and the right meter indicates the right front channel. In this meter mode refer to the lower meter scale(s).

Surr/Sub - The left meter indicates the left surround channel, the center meter indicates the relative power of the subwoofer amplifier and the right meter indicates the right surround channel. In this meter mode refer to the lower meter scale(s).

How to Read the Power Output Meters

The MC7205 Power Output Meter scales are based on using 4 ohm loudspeakers. If 8 ohm speakers are used, the actual power output is one half the power available to drive 4 ohm loudspeakers. Use the chart(s) below to determine the actual power output sent to your loudspeakers. Refer to figure 3.

Summed Channels Meter Readings		
Meter Reading	With 4Ω Loudspeaker(s)	With 8Ω Loudspeaker(s)
.04	.04 Watts	.02 Watts
.4	.4 Watts	.2 Watts
4	4 Watts	2 Watts
40	40 Watts	20 Watts
400	400 Watts	200 Watts

Single Channel Meter Readings		
Meter Reading	With 4Ω Loudspeaker(s)	With 8Ω Loudspeaker(s)
.02	.02 Watts	.01 Watts
.2	.2 Watts	.1 Watts
2	2 Watts	1 Watts
20	20 Watts	10 Watts
200	200 Watts	100 Watts



Specifications

Power Output Per Channel

200 watts into 4 ohm loads or 120 watts into 8 ohm loads minimum sine wave continuous average power output per channel, all channels operating.

Output Load Impedance

8 or 4 ohms

Rated Power Band

20Hz to 20,000Hz

Dynamic Headroom

1.6dB

Frequency Response

+0, -0.25dB from 20Hz to 20,000Hz

+0, -3dB from 10Hz to 100,000Hz

Total Harmonic Distortion

0.005% maximum at any power level from 250 milliwatts to rated power per channel from 20Hz to 20,000Hz, all channels operating.

Intermodulation Distortion

0.005% maximum if instantaneous peak output per channel does not exceed twice the rated output with all channels operating for any combination of frequencies from 20Hz to 20,000Hz.

Signal To Noise Ratio

113dB below rated output, (A Weighted)

Sensitivity

1 volt (2.0V at level control center detent position)

Input Impedance

10,000 ohms

Damping Factor (Wide Band)

200 @ 8 ohms

100 @ 4 ohms

Power Supply Energy Storage

215 Joules

Power Requirements

100 Volts, 50/60Hz at 1080 watts

110 Volts, 50/60Hz at 1080 watts

120 Volts, 50/60Hz at 1080 watts

220 Volts, 50/60Hz at 1080 watts

230 Volts, 50/60Hz at 1080 watts

240 Volts, 50/60Hz at 1080 watts

NOTE: Refer to the rear panel of the MC7205 for the correct voltage

Dimensions

Front Panel: 17 1/2 inches (44.5cm) wide, 7-1/16 inches (17.9cm) high. Depth behind front mounting panel is 21 inches (53.3cm) including clearance for connectors. Panel clearance required in front of mounting panel is 1-1/8 inches (2.9cm).

Weight

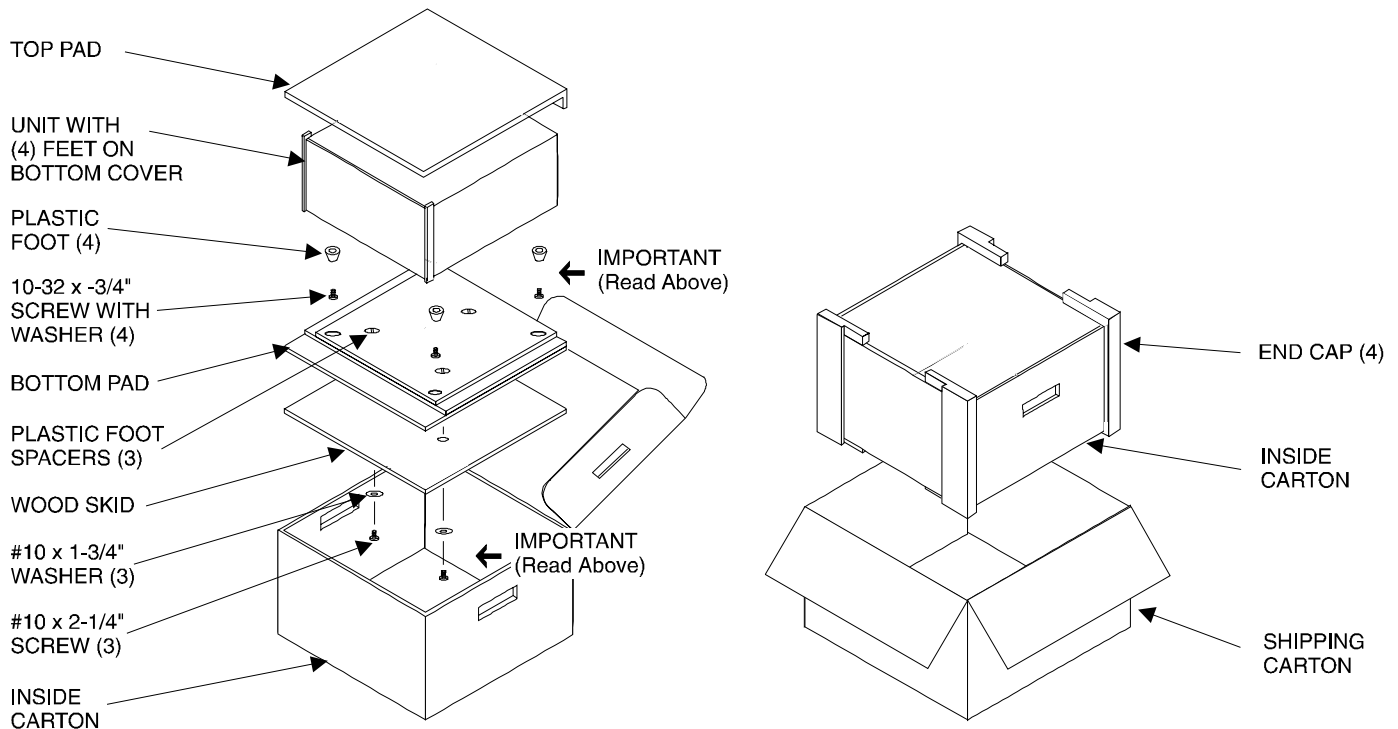
53 pounds (24Kg) net, 72 pounds (32.7Kg) in shipping carton

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. Three #10 x 2-1/4" 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. Please see the Part List for the correct part numbers.

Quantity	Part Number	Description
1	033888	Shipping carton only
4	033887	End cap (Foam pad)
1	033697	Inside carton only
1	033725	Top Pad
1	034008	Bottom pad
3	017218	Plastic foot (spacer)
1	033699	Wood skid
3	101169	#10 x 2-1/4" Wood screw
3	104033	#10 x 1-3/4" Wood screw
4	017218	Plastic foot
4	100159	#10-32 x 3/4" Machine screw
4	104083	#10 x 7/16" Flat washer
1	040542	Shipping carton complete with all the above parts



McIntosh[®]

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Binghamton, NY 13903

McIntosh Part No. 040539