C1100

Controller and

Tube Preamplifier

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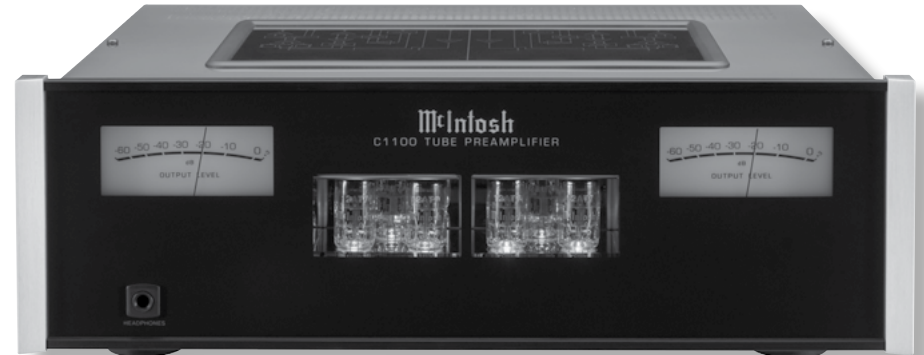
The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

WARNING - TO REDUCE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

ATTENTION:
RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR

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

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.

To prevent the risk of electric shock, do not remove cover or back. No user-serviceable parts inside.

IMPORTANT SAFETY INSTRUCTIONS!

PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use

caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
    Ne pas exposer cet appareil à des éclaboussures ou gouttelettes d'un liquide. Aucun objet remplie de liquide comme par exemple un vase ne doit être placé sur l'appareil.
16. If this equipment is supplied with a power supply cord only, the mains plug of the power supply cord shall remain readily operable. To completely disconnect this equipment from the a.c. mains remove the plug from the a.c. receptacle.
    Si l'équipement est uniquement alimenté par un cordon d'alimentation, la fiche du cordon d'alimentation doit demeurer aisément accessible. Pour déconnecter complètement l'équipement du réseau d'alimentation, déconnecter la fiche du cordon d'alimentation de la prise murale.

17. If this equipment is supplied with AC /DC Adapter with separate power supply cord or the AC/DC Adapter plugging directly into an a.c. receptacle, they shall remain readily operable. To completely disconnect this equipment from the a.c. mains remove the AC /DC Adapter mains power supply cord from the a.c. receptacle or remove the AC /DC Adapter when it is directly plugged into the a.c. receptacle.
    Si l'équipement est alimenté par un adaptateur AC/DC munis d'un cordon d'alimentation ou un adaptateur AC/DC qui est alimenté directement à la prise murale, ils doivent demeurer aisément accessibles. Pour déconnecter complètement l'équipement du réseau d'alimentation, déconnecter l'adaptateur AC/DC de la prise murale ou déconnecter le cordon d'alimentation de l'adaptateur AC/DC de la prise murale.
18. WARNING: Do not expose batteries or battery pack to excessive heat such as sunshine, fire or the like.
    AVERTISSEMENT: Les batteries ou bloc de batteries ne doivent pas etre exposees a une chaleur excessive telle que celle du soleil, feu ou autre source de chaleur similaire.
19. CAUTION: danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
    ATTENTION: danger d'explosion si la pile n'est pas remplacée correctement. Ne remplacer que par le même type ou un type équivalent.
20. Connect mains power supply cord only to a mains socket outlet with a protective earthing connection.

Thank You

Your decision to own this McIntosh C1100 Tube Pre-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.

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 product, 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 wish 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

Table of Contents

General Information

1. The C1100 System consists of two separate chassis. The C1100 Controller Chassis will be referred to as the C1100C throughout this Owner's Manual. In a similar manner, the C1100 Tube Preamplifier Chassis will be referred to as the C1000T throughout this Owner's Manual.

2. For additional connection information, refer to the owner's manual(s) for any component(s) connected to the C1100 Audio Preamplifier.

3. The Main AC Power going to the C1100 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. When the C1100 and other McIntosh Components are in their Standby Power Off Mode, the Microprocessor's Circuitry inside each component is active and communication is occurring between them.

4. Balanced and Unbalanced Inputs and Outputs can be mixed. For example, you may connect signal sources to Unbalanced Inputs and send signals from the Balanced Outputs. You can also use Balanced and Unbalanced Outputs simultaneously, connected to different Power Amplifiers.

5. Sound Intensity is measured in units called Decibels and "dB" is the abbreviation.

6. The McIntosh C1100 is factory configured for immediate use. It can also be customized to complement the components making up your system. Refer to the C1100 "Setup Mode" starting on page 18 for additional information.

7. The Remote Control Supplied with the C1100 Preamplifier is capable of operating other components. For additional information go to www.mcintoshlabs.com.

8. The IR Input, with a 3.5mm mini phone jack, is configured for non-McIntosh IR sensors such as a Xantech Model HL85BK Kit. Use a Connection Block such as a Xantech Model ZC21 when two or more IR sensors need to be connected to the C1100. The signal from a connected External IR Sensor will have priority over the signal from the Front Panel IR Sensor.

9. Controller to Preamplifier Cable Part No. 171-872 is three foot, shielded 23 conductor, male-to-female custom cable. Two cables are required between Controller and Preamplifier. Do not use any other cable when connecting the C1100C Controller to the C1100T Tube Preamplifier.

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

11. For additional information on the C1100 and other McIntosh Products please visit the McIntosh Web Site at www.mcintoshlabs.com.

Connector and Cable Information

XLR Connectors

Below is the Pin configuration for the XLR Balanced Input and Output Connectors on the C1100. Refer to the diagrams for connections:

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

PIN 2 | PIN 1
PIN 3

PIN 1 | PIN 2
PIN 3
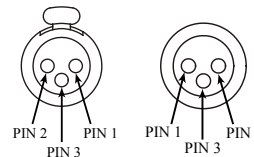
Power Control and Trigger Connectors

The C1100 Power Control Out, Trigger and PASSTHRU Output Jacks send 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 on the C1100.

Main, Triggers 1-4 and PASSTHRU

Power Control
Meter Illumination Control
Ground
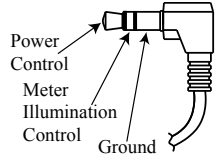
Note: The Power Control, Trigger, PASSTHRU and Data Connecting Cable is available from the McIntosh Parts Department:
Power Control, Trigger, PASSTHRU and Data Cable Part No. 170-202
Six foot, shielded 2 conductor, with 3.5mm stereo mini phone plugs on each end.

Data Port Connectors

The C1100 Data Out Ports send Remote Control Signals to Source Components. A 3.5mm stereo mini phone plug is used for connection.

Data Signal
N/C
Data Ground
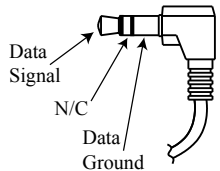
IR IN Port Connectors

The IR IN Port also uses a 3.5mm stereo mini phone plug and allows the connection of other brand IR Receivers to the C1100.

IR Data Control
N/C
Ground
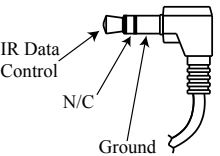
RS232 Data Port Cable

The RS232 Data Cable is a 3.5mm stereo mini phone plug to a sub miniature DB 9 connector:

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

DB9
(male connector)
PIN 1   PIN 5
PIN 6   PIN 9

Introduction

The McIntosh C1100 Tube Preamplifier is one of the finest Preamplifiers ever created with connections for both analog and digital sources. The C1100T Outputs have the ability to drive multiple Power Amplifiers. The C1100 Audio Reproduction is sonically transparent and absolutely accurate. The McIntosh Sound is "The Sound of the Music Itself."

Performance Features

• Dual Chassis with Dual Mono Design
The Dual Chassis design completely separates all power supply, microprocessor and control circuits from the pure audio circuits for total noise isolation. To further aid in channel isolation, the circuitry for both channels is totally separate, physically isolated and shielded. The C1100C incorporates two identical power supplies one for each channel, to help assure total channel isolation.

• Fully Balanced Circuitry
The C1100T utilizes the very latest in Fully Balanced Circuitry from the Input Connectors all the way to the Output Connectors for the lowest possible noise and distortion.

• Electromagnetic Input Switching with Level Trim Adjustment
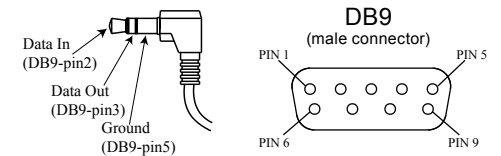Digital Logic integrated circuits drive Electromagnetic Switches on all Inputs and operating functions for reliable, noiseless, distortion free switching. All the Inputs on the C1100T can be matched in level, so there are no abrupt changes in volume levels between the different Inputs.

• Moving Coil and Moving Magnet Phono Inputs
The C1100T has two precision Phono Preamplifier Circuits, one for Moving Coil Phono Cartridges and the other for Moving Magnet Cartridges. Both phono inputs have selectable loading. The circuits use the latest designs providing the lowest possible noise and distortion. The close tolerance resistors and capacitors used in the RIAA Correction Equalization Circuitry provide an extremely flat frequency response.

• Balanced Inputs
The Balanced Inputs allow the connection of a source component using long cable lengths without a loss in sound quality.

• Precision Tracking Volume Control
Volume levels are controlled by a Precision Balanced Digitally Controlled Attenuator System with an Optical Encoder Rotary Control. This assures a 0.1dB tracking accuracy between channels. There are 214 individual 0.5dB volume level steps with no noise as the volume level is changed.

• Variable Rate Volume and Balance Controls
The C1100T Preamplifier's Volume and Balance Control Circuitry provides an ideal rate of change with control rotation.

• HXD® for Headphones
The C1100T Headphone Crossfeed Director Circuitry (HXD®) improves the sound localization for Headphone Listening. HXD™ restores the directionality component of the spatial sound stage normally heard with Loudspeaker listening.

• Alphanumeric Fluorescent Display
The Front Panel Information Display indicates the Source Selection, Volume/Balance Levels and Setup Mode Selections. The display intensity is adjustable.

HXD® is a registered trademark of McIntosh Laboratory, Inc.

• PASSTHRU Mode
The Automatic PASSTHRU Mode allows the C1100T to become part of a Home Theater Multichannel Sound System.

• Remote Control with External Sensor Input
The Remote Control provides control of the C1100C operating functions and McIntosh Source Components connected to it. Enjoy your McIntosh System from another room in your home by connecting an external sensor.

• Power Control Output and Trigger Assignment
A Power Control connection for convenient Turn-On of McIntosh Power Amplifiers, Source Components and Accessories is included. The Power Control Trigger Ouputs may be assigned to activate when a given Input/Output is selected.

• Dual Special Power Supply
Two fully separate and regulated Power Supplies with special R-Core Power Transformers ensure stable noise free operation even though the power line varies.

• LED Front Panel Illumination
The even Illumination of the Front Panel is accomplished by multiple extra long life Light Emitting Diodes (LEDs) arranged with a special orientation.

• Glass Front Panel and Super Mirror Chassis Finish
The famous McIntosh Illuminated Glass Front Panel and the Lower Chassis are Stainless Steel with a Mirror Finish. The Upper Chassis and Top Cover is hairline brushed black Titanium Stainless Steel Finish. This will ensure the pristine beauty of the C1100 will be retained for many years to come.

Dimensions

The following dimensions can assist in determining the best location for your C1100C. There is additional information on the next page pertaining to installing the C1100C into cabinets.

Front View of the C1100C

17-1/2"
44.5cm

INPUT: MC PHONO
VOLUME: 70%

5-3/8"
13.7cm

6"
15.2cm

Side View of the C1100C

15-7/8"
40.3cm

14-1/2"
36.8cm

5/8"
1.6cm

3/16"
0.5cm

4-13/16"
12.2cm

13/16"
2.0cm

2"
5.1cm

10-9/16"
26.8cm

1-15/16"
4.9cm
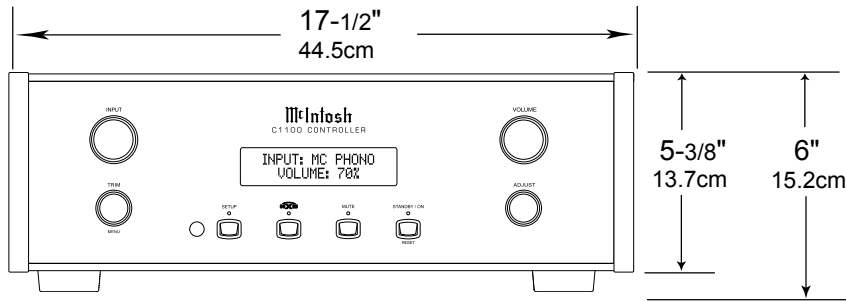
Rear View of the C1100C

17"
43.2cm

4-5/8"
11.8cm

13-1/4"
33.7cm
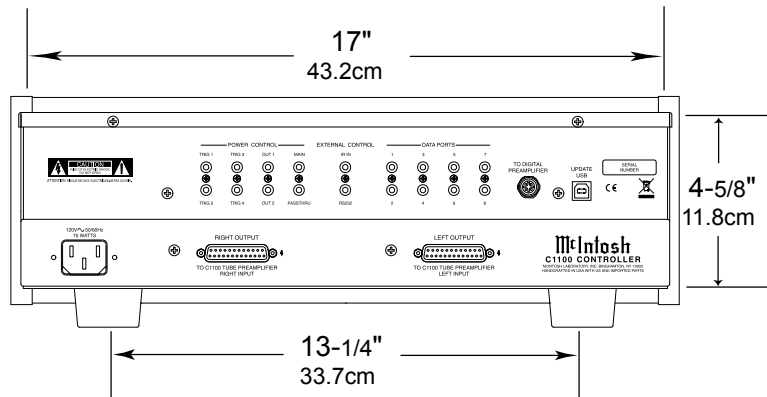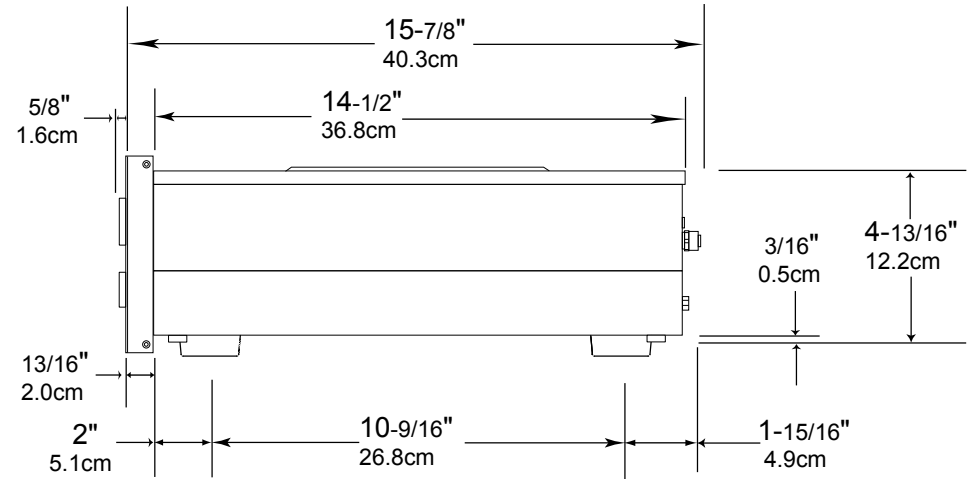
Installation

The C1100C 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 C1100C 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 C1100C 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 C1100C. Cool operation ensures the longest possible operating life for any electronic instrument. Do not install the C1100C directly above a heat generating component such as a high powered amplifier. Also do not stack the C1100T on top of the C1100C. If all the components are installed in a single cabinet, a quiet run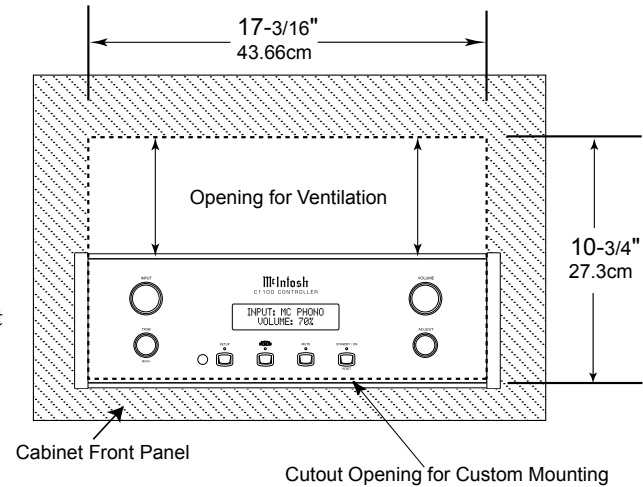ning ventilation fan can be a definite asset in maintaining all the system components at the coolest possible operating temperature.

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 1 inch (2.5cm) on each side of the Preamplifier, so that airflow is not obstructed. Allow 20 inches (50.8cm) depth behind the front panel. Allow 1-7/16 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.

C1100C Front Panel Custom Cabinet Cutout

17-3/16"
43.66cm

Opening for Ventilation

10-3/4"
27.3cm

Cabinet Front Panel

Cutout Opening for Custom Mounting

C1100C Side View in Custom Cabinet

6"
15.2cm

Cabinet Front Panel

Opening for Ventilation

Cutout Opening for Ventilation

Support Shelf

Chassis Spacers

C1100C Bottom View in Custom Cabinet

2-7/8"
7.3cm

8-1/8"
23.2cm

13-1/8"
33.3cm

Cutout Opening for Ventilation

15-1/16"
38.3cm

15-1/16"
39.6cm

1-1/8"
2.9cm

12-5/16"
31.3cm

Note: Center the cutout Horizontally on the unit. For purposes of clarity, the above illustration is not drawn to scale.

Dimensions

The following dimensions can assist in determining the best location for your C1100T. There is additional information on the next page pertaining to installing the C1100T into cabinets.

Front View of the C1100T

17-1/2"
44.5cm

5-3/8"
13.7cm

6"
15.2cm

Side View of the C1100T

15-7/8"
40.3cm

14-1/2"
36.8cm

3/16"
0.5cm

4-13/16"
12.2cm

Rear View of the C1100T

17"
43.2cm

4-5/8"
11.8cm

13/16"
2.0cm

2"
5.1cm

10-9/16"
26.8cm

1-15/16"
4.9cm

13-1/4"
33.7cm
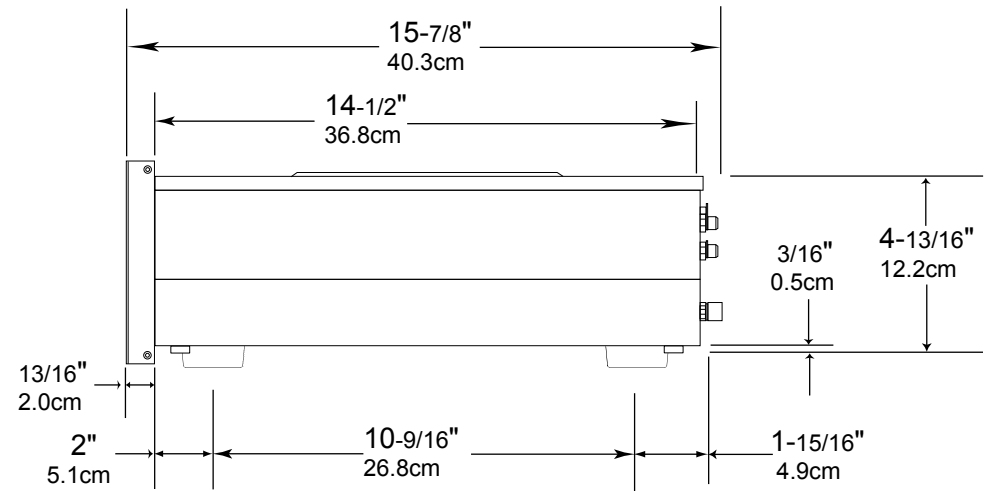
Installation

The C1100T 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 C1100T 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 C1100T 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 C1100T. Cool operation ensures the longest possible operating life for any electronic instrument. Do not install the C1100T directly above a heat generating component such as a high powered amplifier. Also do not stack the C1100C on top of the C1100T. 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.
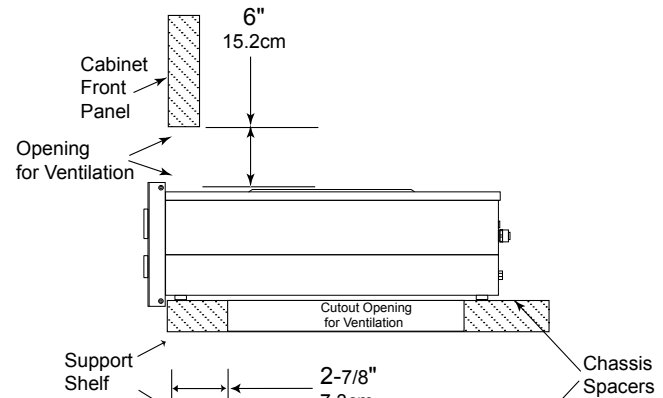
A custom cabinet installation should provide the following minimum spacing dimensions for cool operation.

Allow at least 6 inches (15.2 cm) above the top, 2 inches (5.1cm) below the bottom and 1 inch (2.5cm) on each side of the Preamplifier, so that airflow is not obstructed. Allow 20 inches (50.8cm) depth behind the front panel. Allow 1-7/16 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.
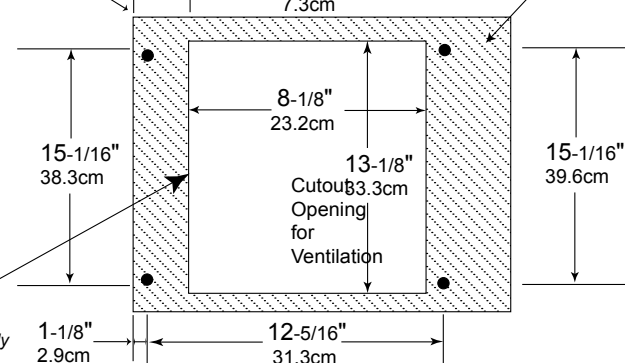
C1100T Front Panel Custom Cabinet Cutout

17-3/16" 43.66cm

Opening for Ventilation

10-3/4" 27.3cm

Cabinet Front Panel

Cutout Opening for Custom Mounting

C1100T Side View in Custom Cabinet

6" 15.2cm

Cabinet Front Panel

Opening for Ventilation

Cutout Opening for Ventilation

Support Shelf

Chassis Spacers
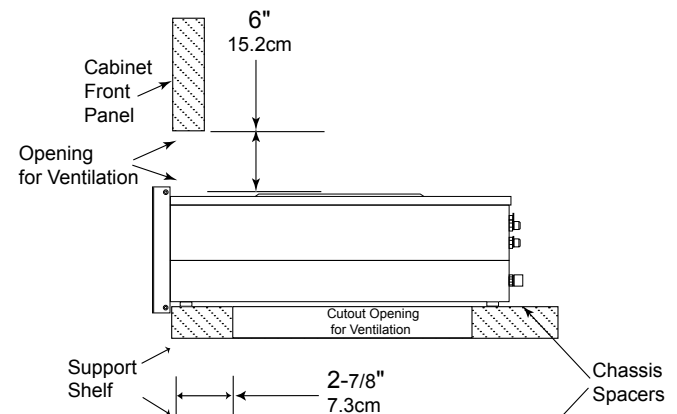
C1100T Bottom View in Custom Cabinet
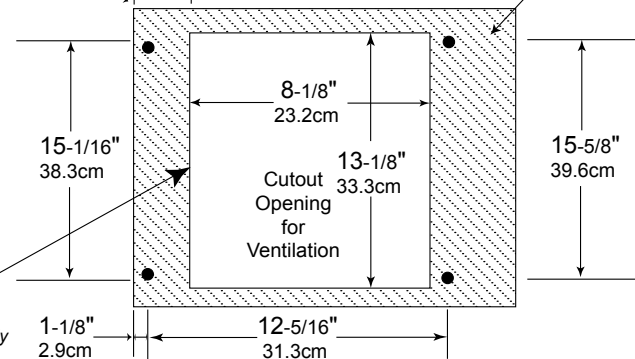
2-7/8" 7.3cm

8-1/8" 23.2cm
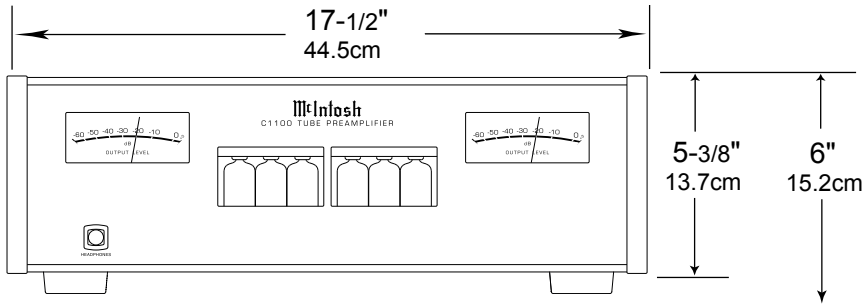
15-1/16" 38.3cm

13-1/8" 33.3cm

Cutout Opening for Ventilation

15-5/8" 39.6cm

Note: Center the cutout Horizontally on the unit. For purposes of clarity, the above illustration is not drawn to scale.
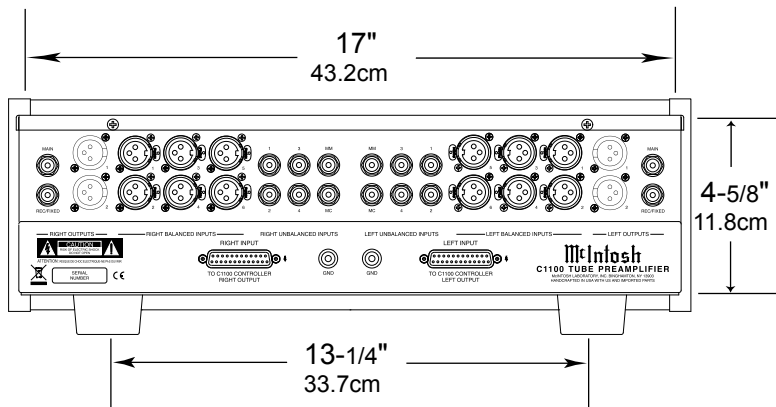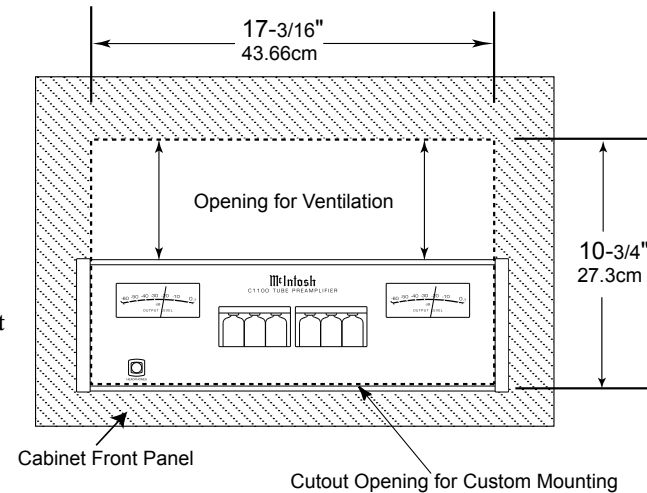
1-1/8" 2.9cm

12-5/16" 31.3cm

Rear Panel Connections

The identification of Rear Panel Connections for the C1100C Controller and C1100T Tube Preamplifier is located on a separate folded sheet contained in the Owner's Manual Packet.

Refer to separate sheet **"Mc3A"** and **"Mc3B"** for the Rear Panel Connections.

C1100C Controller Rear Panel
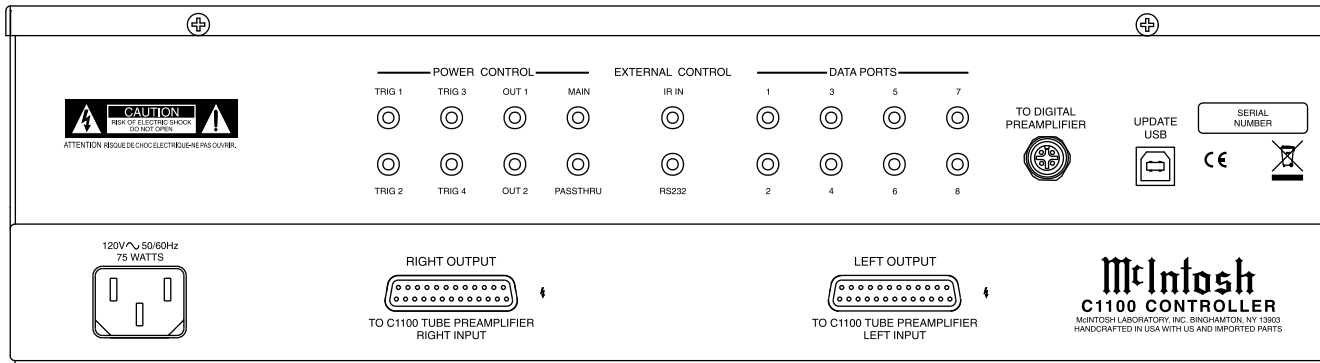
C1100T Tube Preamplifier Rear Panel
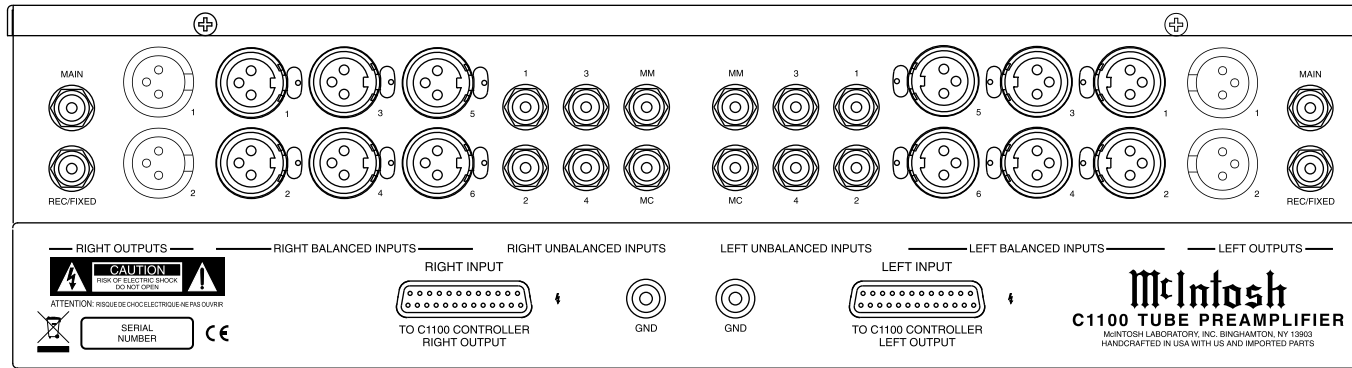
Connecting Components

The C1100C has the ability to automatically switch power On/Off to Source Components via the Power Control connections. The Data Port Connections allow for the remote operation of basic functions using the C1100C HR085 Remote Control. With an external sensor connected to the C1100C, remote control operation of the system is possible from another room and/or when the C1100 is located in a cabinet with the doors closed.

The connection instructions below, together with the C1100 Input/Output/Control/PASSTHRU Connection Diagrams are located on the separate folded sheets "**Mc1A/1B** and **Mc2A/2B**". The Connection Diagrams are examples of a typical audio system. 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 4.

Notes: 1. The C1100C allows re-naming of the Audio Input Names as indicated on the Front Panel Information Display. Example, "UNBAL 1" may be changed to "TUNER" or your own personal preference. Refer to Setup "Inputs" on page 18.
2. For convenience, an "Input Assignment Chart" on a separate sheet "Mc5A/5B" has been provide to keep track of changes.

Power Control Connections:

1. Connect a Control Cable from the C1100C POWER CONTROL MAIN Jack to the Power Control In on the Turntable.
2. Connect a Control Cable from the Turntable Power Control Out Jack to the Digital Audio Player Trigger In Jack.
3. Connect a Control Cable from the Digital Audio Player Trigger Out Jack to the SACD/CD Player Power Control In Jack.

4. Connect a Control Cable from the SACD/CD Player Power Control Out Jack to the AM/FM Tuner In Jack.
5. Connect a Control Cable from the AM/FM Tuner Power Control Out Jack to the Media Bridge Pwr Ctrl (Power Control) In Jack.
6. Connect a Control Cable from the C1100C POWER CONTROL OUT 1 Jack to the Power Amplifier Power Control In Jack.

Notes: 1. If two separate Power Amplifiers are used (Left and Right Channels), connect the Power Control Output of the first Amplifier to the Power Control Input on the second Amplifier.
2. By the defaut settings, POWER CONTROL OUT 1 and 2 are active by default. They can be switched On/Off by using the C1100C TRIM Function.

7. Optionally, connect a Control Cable from the C1100CS POWER CONTROL OUT 2 Jack to the Power Amplifier (Secondary Room) Power Control In Jack.
8. Connect any additional Components in a similar manner, as outlined in steps 1 thru 5.

Data Control Connections:

9. Connect a Control Cable from the C1100C DATA PORTS 2 Jack to the TUNER Data In Jack.

Note: To have source components (e.g. Tuner) respond only to their specific "Function Commands" issued by the Remote Control, it is first necessary change the Data Ports Default settings for the "Tuner" Input. Refer to Setup "Data Port Assignment" on page 22.

10. Connect a Control Cable from the C1100C CD DATA PORT 3 Jack to the SACD/CD Player Data In Jack.
11. Connect a Control Cable from the C1100C DATA PORT 1 Jack to the Media Bridge Data In Jack.

12. Connect any additional McIntosh Components in a similar manner, as outlined in steps 9 thru 11.

Sensor Connection:

13. Connect a Control Cable from the C1100C IR INput Connector to the external Sensor. For additional information, refer to "General Information" note 8 on page 4.

Audio Connections:

14. Connect an Audio Cable from the C1100T UNBALANCED INPUT 1 (Left and Right Channels) Jacks to the Tuner Unbalanced Output Jacks.
15. Connect XLR Audio Cables from the C1100T BALANCED INPUT 1 (Left and Right Channels) connectors to the SACD/CD Player Balanced output connectors.
16. Connect XLR Audio Cables from the C1100T BALANCED INPUT 3 (Left and Right Channels) connectors to the Media Bridge Balanced output connectors.
17. Connect XLR Audio Cables from the C1100T BALANCED INPUT 2 (Left and Right Channels) connectors to the Digital Audio Player Balanced output connectors.
18. Connect the Audio Cables coming from the Turntable to the C1100T MC PHONO INPUT (Left and Right Channels) Jacks.

Note: If the Turntable has a Moving Magnet Cartridge, connect the audio cables to the C1100T MM PHONO INPUT instead of the MC Input.

19. Connect XLR Audio Cables from the C1100T OUTPUT 1 connectors (Left and Right Channels) to the Power Amplifiers (Primary Room) Balanced (Left and Right) Inputs.

Connecting Components, con't

20. Optionally, connect XLR Audio Cables from the C1100T OUTPUT 2 connectors (Left and Right Channels) to the Power Amplifier (Secondary Room) Balanced (Left and Right) Inputs.
21. Connect any additional McIntosh Components in a similar manner, as outlined in steps 14 thru 19.

Optional PASSTHRU Connections:
22. Connect XLR Audio Cables from the A/V Processor, Front Channels (Left and Right) Balanced Output connectors to the C1100T BALANCED INPUT 6 connectors (Left and Right Channels).
    Note: Refer to Setup "PASSTHRU" on page 22 to activate the BALANCED 6 Input.
23. Connect a Control Cable from the C1100C PASSTHRU Jack to A/V Processor Power Control Zone ZA Jack.

Ground Connections:
24. Connect the Ground Cable coming from the Turntable to the C1100T PHONO INPUT GND Binding Post.

C1100C and C1100T Inner Connections:
25. Connect one of the supplied custom cables from the C1100C RIGHT OUTPUT Socket to the C1100T RIGHT INPUT Socket. In a similar manner, connect the second cable from the C1100C LEFT OUTPUT Socket to the C1100T LEFT INPUT Socket.

AC Power Cord Connections:
26. Connect the C1100C to a live AC Outlet using the supplied Power Supply Cord.

LEDs illuminate during the time a remote command is sent and when programming the remote control

Select the DEVICE to issue a remote control command to

SETUP Push-button is used as a "Shift Key" to select a function with blue color nomenclature

Selects AM Tuner Operating Functions, select Output 1 when used with the SETUP/shift Push-button and Track Selection on certain McIntosh CD Players

Press the Trim Push-button and then the LEVEL UP Push-button to select and adjust various functions. MENU is used with McIntosh Models displaying choices on a video screen

Activates the TRIM Mode. GUIDE is used with McIntosh Models displaying instructions on a video screen

Press the Trim Push-button and then the LEVEL DOWN Push-button to select and adjust various functions. INFO is used with McIntosh Models displaying information on a video screen

Scrolls through the available INPUTS

Mutes the audio

Selects transport functions of STOP, PLAY/PAUSE, RECORD, BACK for the previous-selection, FAST-RE-VERSE, FAST-FORWARD and NEXT for the next selection

Selects Previous Tuner Station PRESET

Tuner scans Down the dial to SEEK the next Station
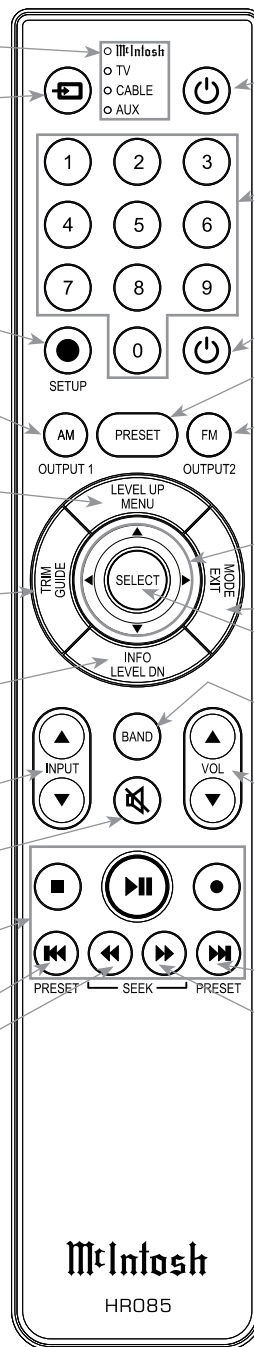
Press to Power the Preamplifier ON

Use to select tuner presets, direct access an AM/FM Station Frequency, disc tracks or any numbered operation

Press to Power the Preamplifier OFF

Direct access to stored Tuner PRESETS when used with the numeric Push-buttons (0 thru 9)

Selects FM Tuner Operating Functions, select Output 2 when used with the SETUP/shift Push-button and Track Selection on certain McIntosh CD Players

Use ▲ and ▼ to tune Up or Down the AM/FM Dial, use ▶ and ◀ for the next or previous HD Radio Program (were applicable)

EXIT the TRIM Menu and is used with McIntosh Models displaying information or choices on a video screen

Used to SELECT/Enter the indicated choice

Press to change broadcast bands on a connected Tuner. Select certain functions on a variety of McIntosh Models

Adjusts the VOLume level up or down

Selects Next Tuner Station PRESET

Tuner scans Up the dial to SEEK the next Station

Note: Push-buttons whose function is not identified above are for use with other McIntosh Products.

How to use the Remote Control

The supplied C1100 Remote Control (HR085) is capable of directly controlling the functions of contemporary McIntosh Source Components connected to the C1100 via the Data Ports.

> *Notes: 1. If at any time the C1100 seems unresponsive to HR085 Remote Control Commands, press the ⊡ DEVICE Push-button to select 𝕸𝖈𝕴𝖓𝖙𝖔𝖘𝖍 first.*
> *2. For additional information on using the HR085 Remote Control with the McIntosh Model, please refer to "How to Operate" starting on page 26.*
> *3. For additional information on assigning the Data Ports, refer to "How to Setup" on page 18.*

Trim

Press the TRIM Push-button until the desired Trim function (Balance, Trim Level, etc.) appears on the C1100 Front Panel Display, then press the LEVEL Up or Down Push-button to adjust the Trim setting.

> *Note: Press the TRIM Push-button to recall the last Trim function selected. For additional information on using the Trim Functions refer to "How to Operate" page 26.*

Output Selection

Press the BLUE (Setup) Push-button followed by the AM (Output 1) or FM (Output 2) Push-button, to control the Rear Panel Audio OUTPUTS 1, 2 (ON or OFF) and Power Control TRIG 1 / TRIG 2.

> *Note: For additional information on assigning the Outputs (1 and 2) and Power Control Triggers (1 and 2) refer to page 21.*

INPUT Control used to select a source for listening and recording. The control is also used in the SETUP Modes

INFORMATION DISPLAY indicates the Sources, Volume, other Audio Settings, Operational Functions and Setup Mode Settings

IR Sensor receives commands from a Remote Control

VOLUME Control allows adjustment of the listening level for both channels

INPUT

VOLUME

McIntosh
C1100 CONTROLLER

INPUT: MC PHONO
VOLUME: 70%

TRIM

ADJUST

MENU

SETUP

HXD

MUTE

STANDBY / ON

RESET
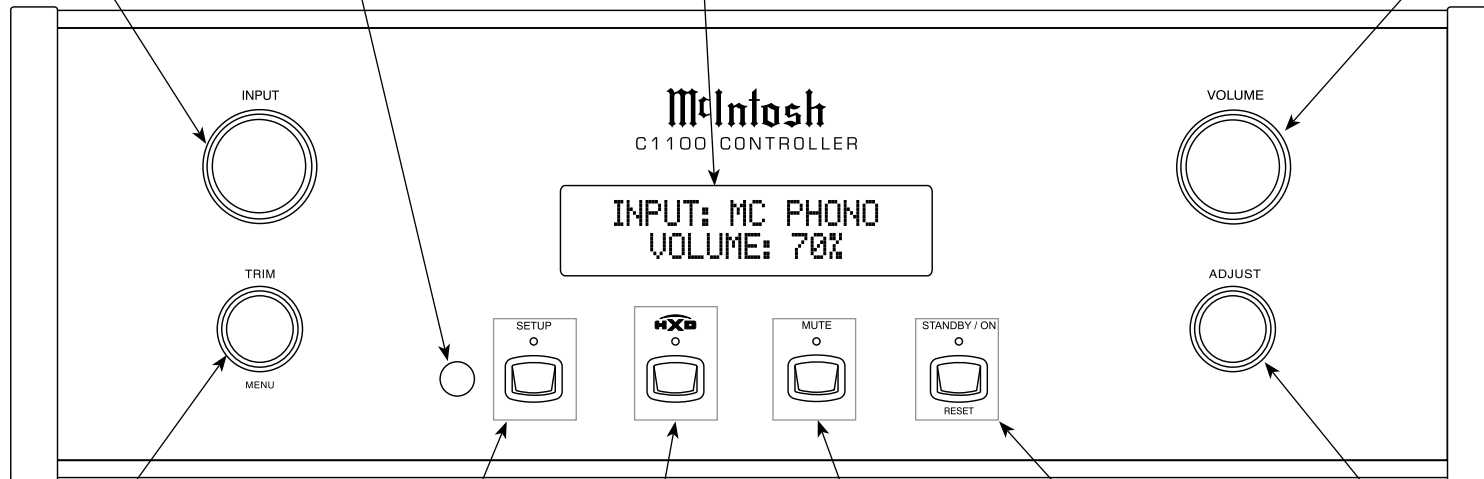
TRIM Control allows selection of Trim settings and is also used in the SETUP Mode

HXD Push-button with indicator, activates the Crossfeed Director Circuitry for Headphones

STANDBY/ON Push-button with indicator, switches the C1100 ON or OFF (Standby) and resets the microprocessors

SETUP Push-button with indicator, activates the Setup Mode allowing changes to the default settings

MUTE Push-button mutes the audio from the Loudspeakers and Headphones

ADJUST Control used for Trim Mode Adjustments and also various SETUP Functions

Meter indicates the
Left Channel Output
of the Preamplifier

Meter indicates the
Right Channel Output
of the Preamplifier

McIntosh
C1100 TUBE PREAMPLIFIER

-60 -50 -40 -30 -20 -10   0
dB
OUTPUT LEVEL

-60 -50 -40 -30 -20 -10   0
dB
OUTPUT LEVEL

HEADPHONES

Connection for low impedance
dynamic headphones, for private
listening
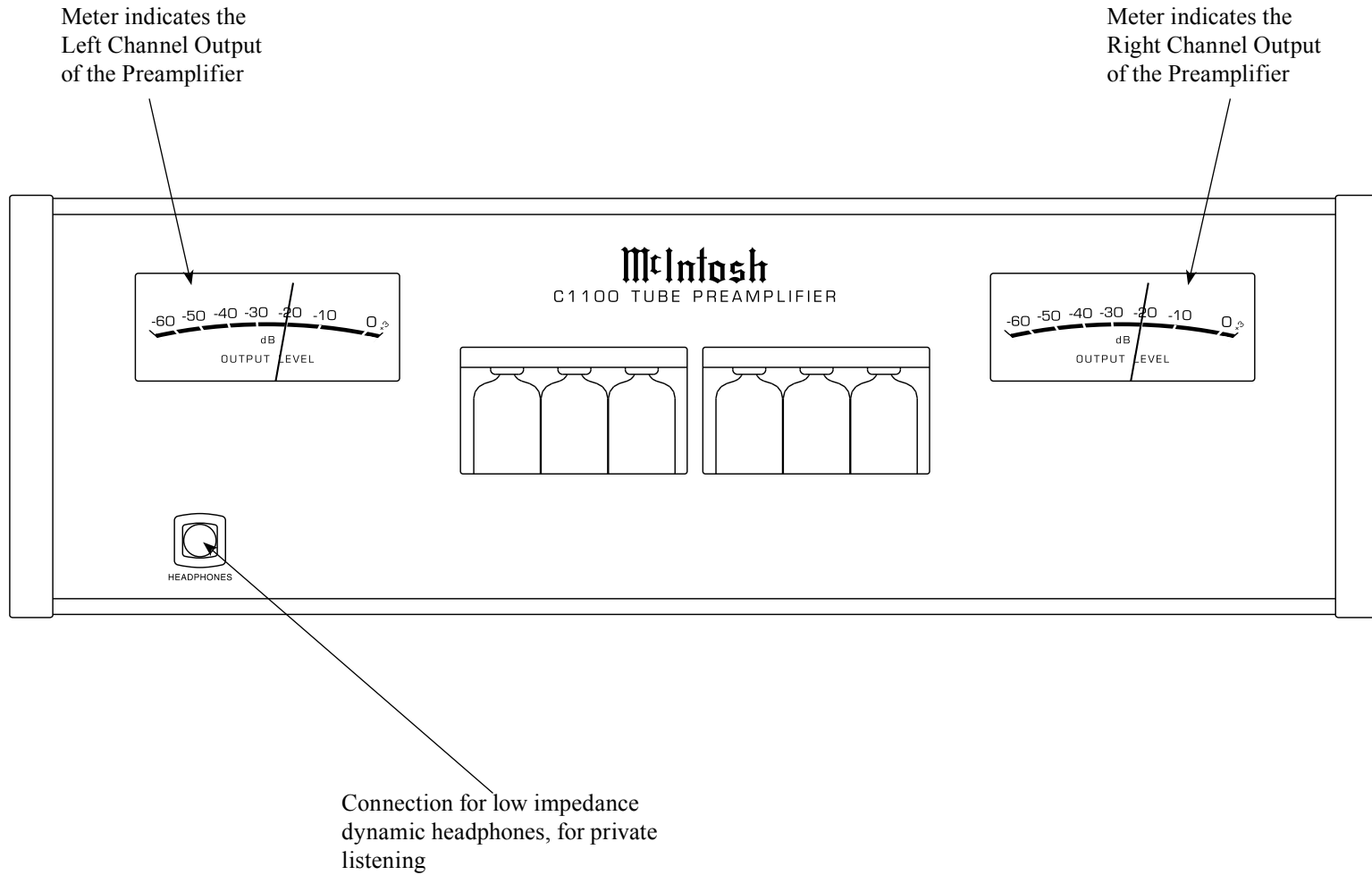
How to Operate the Setup Mode

Your McIntosh C1100 has been factory configured for default operating settings that will allow immediate enjoyment of superb audio without the need for further adjustments. If you wish to make changes to the factory default settings, a Setup Feature is provided to customize the operating settings using the Front Panel Information Display. Refer to the C1100C Front Panel Illustration on page 16 while performing the following steps.

Note: If the C1100 is currently On, proceed to step 2.

1. Press the STANDBY/ON Push-button on the Front Panel or press the ⏻ (Power ON) Push-button on the Remote Control to switch On the C1100. The C1100 will go through a TUBE WARMUP (15 seconds) with the Tubes in the C1100T glowing an amber color and a brief startup initialization with the Front Panel Information Display indicating the last used source and volume setting. The illumination of the Tubes will now glow a green color; this is followed by the volume setting indication starting at zero, then increasing to the last used volume setting. Refer to figure 1.

```
INPUT: BAL 1
       15%
```
Figure 1

2. Press the SETUP Push-button, rotate TRIM (MENU) Control until the Front Panel Information Display indicates "C1100, V_.__ - S/N: AEE____" (or higher Firmware version). Refer to figure 2.

```
C1100   V1.00
S/N:  AEE____
```
Figure 2

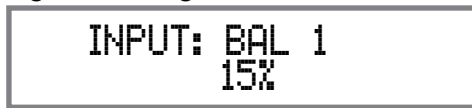3. Rotate the TRIM Control to select the next Setup Mode Menu item, "SETUP: BAL 1, On / Rename." Refer to figure 3. Continue to rotate the INPUT CONTROL to view the other SETUP Mode Options.

```
SETUP:  BAL 1
  On / Rename
```
Figure 3

4. To exit from the SETUP Mode, press the SETUP Push-button and the Front Panel Display will revert back to its normal display. Refer to figure 1.

Default Settings

The Default Settings Chart below indicates the Function Name, Default Setting and the Page Number for additional information.

Default Settings		
Function Name	**Setting**	**Page No.**
C1100	V_.__ - _._	18
INPUTS	On / Rename	18
OUTPUTS (1 & 2)	Switched	20
HEADPHONES	Main = Unmuted	20
TRIGGER 1	Output 1	21
TRIGGER 2	Output 2	21
TRIGGERS (3 thru 4)	Main	21
DATA PORTS (1 thru 8)	All Data	22
PASSTHRU	OFF	22
RS232 (Rate)	115200 Baud	22
Remote Control (IR Codes)	Normal	23
IR Sensor	Enabled	23
Power Mode	Enabled	24

Firmware Version

The C1100 functionality is controlled by internal software that is know as Firmware. The Version of the Firmware in the C1100 can be identified at any time by utilizing the Setup Mode.

1. Press the SETUP Push-button to enter Setup Mode.
2. Referring to the Front Panel Information Display-the number after the character "V" is the Firmware number. Refer to figure 2.
3. To exit the Setup Mode, press the SETUP Push-button.

Input Settings

The C1100 provides the ability to switch unused INPUTS Off (or back On if they have been previously switched Off). The default INPUT Names can be changed to match the name of the component connected to it or any other custom name desired (within 10 Characters).

INPUT SWITCHED ON/OFF:

In the following example, the UNBAL 4 Input will be switched Off.

Notes: 1. When an INPUT is swiched Off, its name will no longer appear on the Front Panel Information Display when using the INPUT Control (Front Panel or Remote Control).

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2.
2. Rotate the TRIM Control until "SETUP: _____, On / Rename" appears on the Information Display. Refer to figure 3.
3. Then rotate the INPUT Control to select the UNBAL 4 Input. Refer to figure 4.

```
SETUP:  UNBAL 4
  On / Rename
```
Figure 4

Input Settings, con't

4. To switch the UNBAL 4 Input Off, rotate the AD-JUST Control until the display indicates SETUP: UNBAL 4, Off". Refer to figure 5.

```
SETUP:  UNBAL 4
        Off
```
Figure 5

5. Exit the SETUP Mode by pressing the SETUP Push-button.

In the following example, the UNBAL 4 Input will be switched On.

Notes: 1. When an INPUT is swiched ON, its name will appear on the Front Panel Information Display when using the INPUT Control (Front Panel or Remote Control).

6. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.

7. Rotate the TRIM Control until "SETUP: _____, On / Rename" appears on the Information Display. Refer to figure 3.

8. Rotate the INPUT Control to select the UNBAL 4 Input. Refer to figure 5.

9. To switch the UNBAL 4 Input On, rotate the AD-JUST Control until the display indicates SETUP: UNBAL 4, On / Rename". Refer to figure 4 on page 18.

10. Exit the SETUP Mode by pressing the SETUP Push-button.

RENAME INPUT:

In the following example, the BALANCED 1 (BAL 1) Input will be renamed to match up with the component connected (refer to page 11, step 16).

The C1100 Default Input Names (UNBAL 1, BAL 1, etc.) as indicated on the Front Panel Display can be customized to a different name up to ten characters long (TUNER, CD PLAYER, etc.). The available

characters for renaming the input include the following: ! < > * , / - _ 0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z .
In the following example, the BAL 1 Input will be renamed to "MEDIA BRDG".

11. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.

12. Rotate the TRIM Control until "SETUP: _____, On / Rename" appears on the Information Display. Then rotate the INPUT Control to select the "BAL 1" Input. Refer to figure 6.

```
SETUP: BAL 1
    On / Rename
```
Figure 6

13. Press and hold in the SETUP Push-button until "RENAME: BAL 1, >BAL 1 < " appears on the Display. The character "B" is flashing to indicate it is ready to be changed. Refer to figure 7.

```
RENAME: BAL 1
   >BAL 1    <
```
Figure 7

14. Rotate the ADJUST Control to change the character "B" to "M". Refer to figure 8.

```
RENAME: BAL 1
   >MAL 1    <
```
Figure 8

15. Rotate the TRIM Control until the character "A" is flashing, then rotate the ADJUST Control to change the character "A" to "E". Refer to figure 9.

```
RENAME: BAL 1
   >MEL 1    <
```
Figure 9

16. Rotate the TRIM Control until the character "L" is flashing, then rotate the ADJUST Control to change the character "L" to "D". Refer to figure 10.

```
RENAME: BAL 1
   >MED 1    <
```
Figure 10

17. Rotate the TRIM Control until the "_" empty space to the right of character D is flashing, then rotate the ADJUST Control to change the "_" empty space to character to "I". Refer to figure 11.

```
RENAME: BAL 1
   >MED      <
```
Figure 11

18. Repeat steps 14 thru 17 until the new name of " RENAME: BAL 1, MEDIA BRDG" is indicated on the Front Panel Display. Refer to figures 12 thru 15 and figures 16 thru 18.

```
RENAME: BAL 1
   >MEDI     <
```
Figure 12

```
RENAME: BAL 1
   >MEDIA    <
```
Figure 13

```
RENAME: BAL 1
   >MEDIA    <
```
Figure 14

```
RENAME: BAL 1
   >MEDIA B    <
```
Figure 15

```
 RENAME: BAL 1
     >MEDIA BR      <
```
Figure 16

```
 RENAME: BAL 1
     >MEDIA BRD     <
```
Figure 17

```
 RENAME: BAL 1
     >MEDIA BRDG    <
```
Figure 18

19. To save the new name, press and hold in the SET-UP Push-Button until "SETUP: MEDIA BRDG , ON / Rename" appears on the Front Panel Information Display. Refer to figure 19.

```
 SETUP: MEDIA BRDG
     On / Rename
```
Figure 19

21. Exit the SETUP Mode by pressing the SETUP Push-button.

> *Note: For convenience, an "Input Assignment Chart" on a separate sheet "Mc5A/5B" has been provided to keep track of changes.*

Output Settings

The Output Settings provide the ability to change how the C1100 Output 1 and Output 2 function.

OUTPUT 1 and 2:

By defaut OUTPUT 1 and 2 are set to go On/Off by using the Front Panel TRIM and ADJUST Controls or the OUTPUT 1 and 2 Push-buttons on the Remote Control. If it is desirable to have OUTPUT 1 and/or 2 always On regardless of the TRIM setting, perform the following:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: OUTPUT 1, Switched" appears on the Information Display. Refer to figure 20.

```
 SETUP: OUTPUT 1
     Switched
```
Figure 20

3. Rotate the ADJUST Control until "SETUP: OUTPUT 1, Unswitched" appears on the Information Display. Refer to figure 21.

```
 SETUP: OUTPUT 1
     Unswitched
```
Figure 21

4. In a similar manner, perform steps 2 and 3 to change the OUTPUT 2 setting. Refer to figures 22 and 23.

```
 SETUP: OUTPUT 2
     Switched
```
Figure 22

```
 SETUP: OUTPUT 2
     Unswitched
```
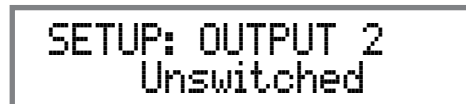Figure 23

5. Exit the SETUP Mode by pressing the SETUP Push-button.

Headphone Settings

The C1100 has the ability to automatically mute the Output Jacks and/or Connectors when a Headphone Cable Plug is inserted into the C1100T Front Panel HEADPHONES Jack. The Output Default Settings are: MAIN - Unmuted
OUTPUT 1 - Muted
OUTPUT 2 - Muted

In the following examples the MAIN Output Jacks will Mute and the OUTPUT 1 Connectors will not Mute when Headphones are connected:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: MUTE WITH HDPH, Main = Unmuted " appears on the Information Display. Refer to figure 24.

```
 SETUP:MUTE WITH HDPH
     Main = Unmuted
```
Figure 24

3. Rotate the ADJUST Control to change the current setting to "SETUP: MUTE WITH HDPH, Main = Muted". Refer to figure 25.

```
 SETUP:MUTE WITH HDPH
     Main = Muted
```
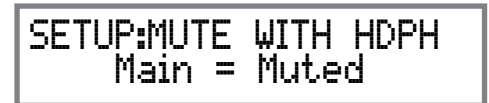Figure 25

4. Rotate the INPUT Control to change the current setting to "SETUP: MUTE WITH HDPH, Output 1 = Muted". Refer to figure 26.

```
 SETUP:MUTE WITH HDPH
     Output 1 = Muted
```
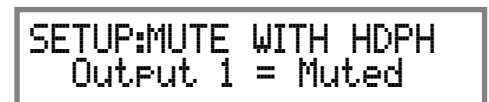Figure 26

5. Rotate the ADJUST Control to change the current setting to "SETUP: MUTE WITH HDPH, Output 1 = Unmuted". Refer to figure 27.

```
SETUP:MUTE WITH HDPH
 Output 1 = Unmuted
```
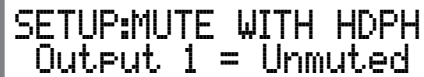Figure 27

6. In a similar manner, perform steps 4 and 5 to change the OUTPUT 2 setting. Refer to figures 28 and 29.

```
SETUP:MUTE WITH HDPH
 Output 2 = Muted
```
Figure 28
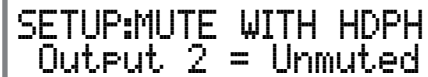
```
SETUP:MUTE WITH HDPH
 Output 2 = Unmuted
```
Figure 29

7. Exit the SETUP Mode by pressing the SETUP Push-button.

Power Control Triggers 1 and 2

By default the Power Control TRIGger 1 thru TRIGger 4 Outputs function the same as the MAIN Power Control Jack, switching On/Off with the C1100. Triggers 1 thru 4 are also reassignable to activate when Output 1 or 2 is selected. All four Triggers can also be assigned to a given Input or Inputs.

In the first example, the Power Control Triggers 1 and 2 will be assigned to Output 1 and 2 respectively:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until SETUP: TRIGGER 1, MAIN" appears on the Display. Refer to figure 30.

```
SETUP:   TRIGGER 1
     Main
```
Figure 30

3. Rotate the ADJUST Control to select either Output 1, from the available additional selections including Output 2 or Input. Refer to figure 31.

```
SETUP:   TRIGGER 1
    Output 1
```
Figure 31

4. To change the Trigger 2 setting from Main to OUTPUT 2, first rotate the INPUT Control to select TRIGGER 2. Then Rotate the ADJUST Control to select Output 2. Refer to figure 32.

```
SETUP:   TRIGGER 2
    Output 2
```
Figure 32

The second example will use selection of the Trigger 3 to activate when the BAL 1 Input is selected:

5. Rotate the INPUT Control to select "SETUP: TRIGGER 3, Main" appears on the Display. Refer to figure 33.

```
SETUP: Trigger 3
     Main
```
Figure 33

6. Rotate the ADJUST Control until "SETUP: TRIGGER 3, Bal 1: OFF" appears on the Display. Refer to figure 34.

```
SETUP:   TRIGGER 3
    Bal 1: OFF
```
Figure 34

7. Rotate the VOLUME Control to select "Bal 1: ON". Refer to figure 35.

```
SETUP:   TRIGGER 3
    Bal 1:   ON
```
Figure 35

8. Exit the SETUP Mode by pressing the SETUP Push-button.

Data Ports

Data Ports Connections between the C1100 and a McIntosh Source Component allow for basic function control of the source component using the C1100 supplied Remote Control. By default, all eight Data Ports are sent the same Data for the selected source. To dedicate a Data Port for only one source component (BAL 1 Input will be assigned to Data Port 1) perform the following Steps:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: Data Port 1, All Data" appears on the Information Display. Refer to figure 36.

```
SETUP: DATA PORT 1
        All Data
```
Figure 36

3. Rotate the ADJUST Control until "SETUP: DATA PORT 1, BAL 1 Data" appears on the Display. Refer to figure 37.

```
SETUP: DATA PORT 1
        BAL 1 Data
```
Figure 37

4. To assign additional Data Ports, first rotate the INPUT Control to select the Data Port and then rotate the ADJUST Control to select the desired Input. Refer to figure 38.

```
SETUP: DATA PORT 2
        UNBAL 1 Data
```
Figure 38

5. In a similar manner, assign any additional Data Ports.
6. Exit the SETUP Mode by pressing the SETUP Push-button.

Passthru

When the C1100 is part of a Home Theater or Multichannel Audio System the Right and Left Front Channels from an Audio/Video Processor or Surround Decoder can "Passthru" the C1100 and onto its associated Power Amplifier(s). The Setup Mode allows selection of the specified C1100 Input to be used for the Right and Left Front Channels. In the example below, the Right and Left Front Channels from the Audio/Video Processsor will be connected to the BALanced 6 Input Connectors on the C1100. Refer to pages 8 and 9 for additional connection information.

Notes: 1. The Phono Inputs are not assignable as a Passthru Input.
2. If Balanced Input 6 is already assigned to a given Input, it will not appear in the list of available Inputs.
3. When one of the Unbalanced Inputs is selected as a Passthru Input, it is advisable to remove it from the Input List by switching it Off. Refer to "Input Settings" on page 18.

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: Passthru, Off" appears on the Information Display. Refer to figure 39.

```
SETUP:  Passthru
          Off
```
Figure 39

3. Rotate the ADJUST Control to select "BAL 6" Input. Refer to figure 40.

```
SETUP:  Passthru
          BAL 6
```
Figure 40

4. Exit the SETUP Mode by pressing the SETUP Push-button.

Comm Port Baud Rate

The C1100 may be remotely controlled from other equipment connected to the Rear Panel RS232 Jack. The speed at which the C1100 communicates (8 bit, 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, perform the following steps:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: RS232, 115200 Baud" appears on the Information Display. Refer to figure 41.

```
SETUP: RS232
        115200 Baud
```
Figure 41

3. Rotate the ADJUST Control to select the desired Baud Rate Speed (115200 thru 9600).
4. Exit the SETUP Mode by pressing the SETUP Push-button.

Remote Control Codes

The Remote Control included with the C1100 utilizes the NORMAL McIntosh Control Codes. The Second Set of Control Codes the C1100 will respond to is referred to as the ALTERNATE Codes. The Alternate Codes are used when the C1100 is used in the same location as another McIntosh Preamplifier and/or A/V Processor. This will prevent the Remote Control from affecting the operation of both units at the same time. To activate the Remote Control ALTERNATE Codes perform the following steps:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: IR Codes, Normal" appears on the Information Display. Refer to figure 42.

```
SETUP: IR Codes
     Normal
```
Figure 42

3. Rotate the ADJUST Control to select the Alternate Codes. Refer to figure 43.

```
SETUP: IR Codes
    Alternate
```
Figure 43

4. It is now necessary to change the HR085 Remote Control over to the Alternate Codes. Information on the HR085 Remote Control is available for download from the McIntosh Web Site:
   http://www.mcintoshlabs.com/us/Products/pages/ProductDetails.aspx?CatId=preamplifiers&ProductId=C1100
5. Exit the SETUP Mode by pressing the SETUP Push-button.

IR Sensor

The C1100 Front Panel Sensor, which receives the signals from the HR085 Remote Control, can be switched off to prevent interference when an external IR Sensor is connected. To de-activate the Front Panel IR Sensor perform the following steps:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: Front IR, Enabled" appears on the Information Display. Refer to figure 44.

```
SETUP: Front IR
    Enabled
```
Figure 44

3. Rotate the VOLUME (ADJUST) Control to select Disabled. Refer to figure 45.

```
SETUP: Front IR
    Disabled
```
Figure 45

4. Exit the SETUP Mode by pressing the SETUP Push-button.

Power Mode

The C1100 incorporates an Auto Off Feature, which automatically places the preamplifier into the Power Saving Standby/Off Mode. This occurs approximately 30 minutes after there has been an absence of audio input or user activity (includes changes to any of the Operation Functions such as source selection, volume adjustment, etc). If it is desirable to disable the Auto Off Feature perform the following steps:

1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "SETUP: Auto Off, Enabled" appears on the Information Display. Refer to figure 46.

```
SETUP: Auto-Off
    Enabled
```
Figure 46

3. Rotate the ADJUST Control to select Disabled. Refer to figure 47.

```
SETUP: Auto Off
    Disabled
```
Figure 47

4. Exit the SETUP Mode by pressing the SETUP Push-button.

Factory Reset

If it becomes desirable to reset all the adjustable settings (Setup and Trim Settings) to the factory default values, perform the following steps:
1. Press the SETUP Push-button to enter the SETUP MODE. Refer to figure 2, on page 18.
2. Rotate the TRIM Control until "FACTORY RESET,   (Hold SETUP)" appears on the Information Display. Refer to figure 48.

```
FACTORY RESET
(Hold SETUP)
```
Figure 48

3. Press and hold in the SETUP Push-button until "FACTORY RESET, In Progress" appears on the Information Display, then release the SETUP Push-button. Refer to figures 49 and 50.
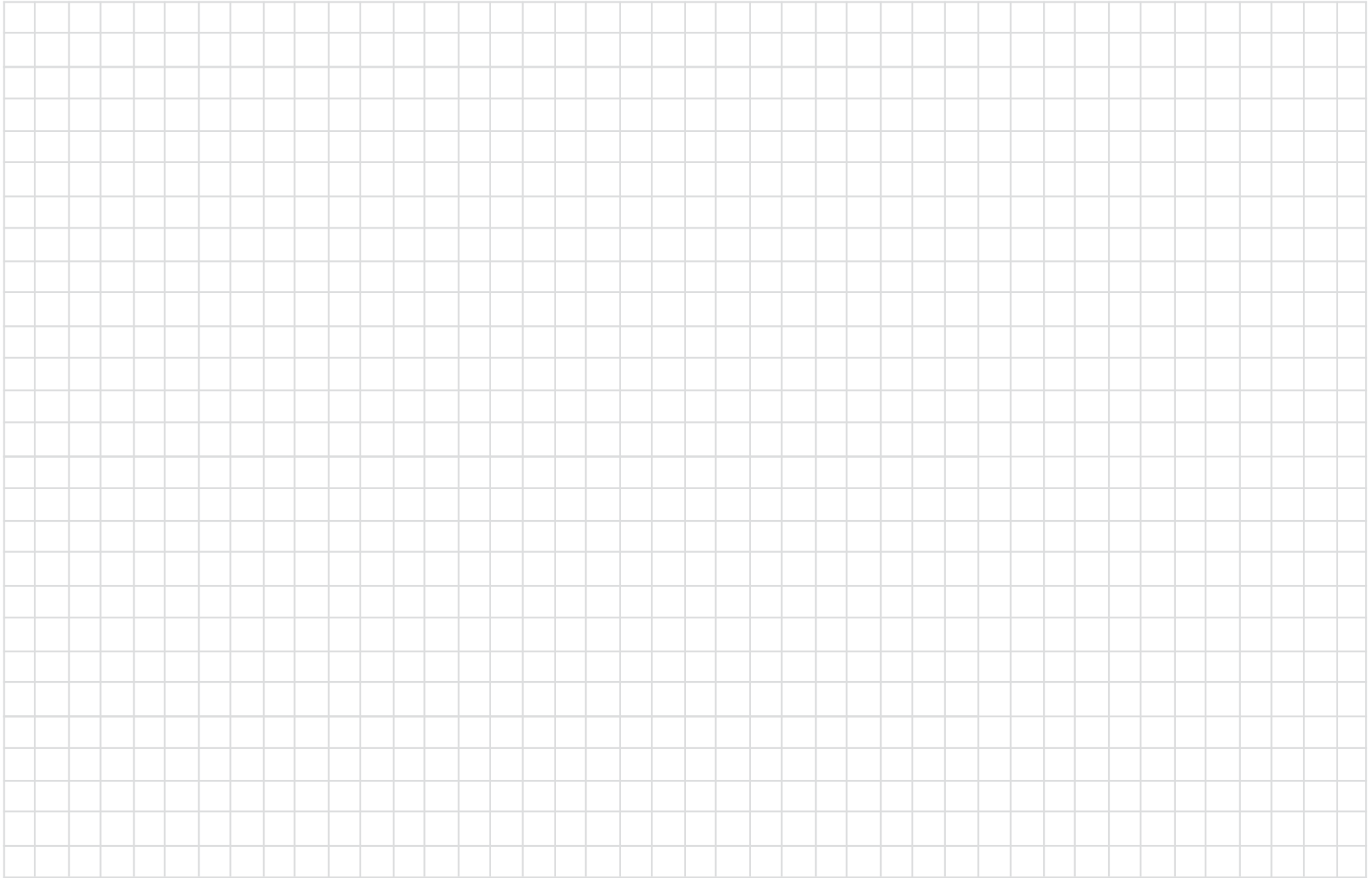
```
FACTORY RESET
In Progress
```
Figure 49

```
FACTORY RESET
Completed!
```
Figure 50

4. Press the Front Panel STANDBY/ON Push-button to switch the C1100 on.

How to Operate the C1100

Power On and Off

The Red LED above the STANDBY/ON Push-button lights to indicate the C1100 is in Standby mode. To switch ON the C1100, press the STANDBY/ON Push-button on the Front Panel or the ⏻ (Power On) Push-button on the Remote Control. The C1100 will go through a TUBE WARMUP (15 seconds) with the Tubes in the C1100T glowing an amber color, a brief startup initialization with the Front Panel Information Display indicating the last used source and volume setting. The illumination of the Tubes will now glow a green color; this is followed by the volume setting indication starting at zero, then increasing to the last used volume setting. Refer to figures 60, 61, 62 and 63. To switch OFF the C1100, press the STANDBY/ON Push-button on the Front Panel or the OFF Push-button on the Remote Control.

Note: For an explanation of the Remote Control Push-button functions, refer to pages 14 and 15.

```
INPUT: BAL 1
15%
```
Figure 61

Figure 60

Source Selection

Rotate the Front Panel INPUT Control to select the desired source or press the INPUT Up▲ or Down▼ Push-button on the Remote Control. Refer to figures 60, 62 and 63.

```
INPUT: MC PHONO
30%
```
Figure 62

Volume Control

Rotate the Front Panel VOLUME Control or use the VOLUME Up▲ or Down▼ Push-buttons on the Remote Control for the desired listening level. Refer to figures 60 and 63.

Trim Functions

The C1100 has nine different Trim Selections with Adjustments. The Trim Selections include Balance, Input Trim Level, Output 1, Output 2, Meter Lights, Display Brightness, Phono Cartridge (MC & MM) Loading (when the Input is Selected) , and Headph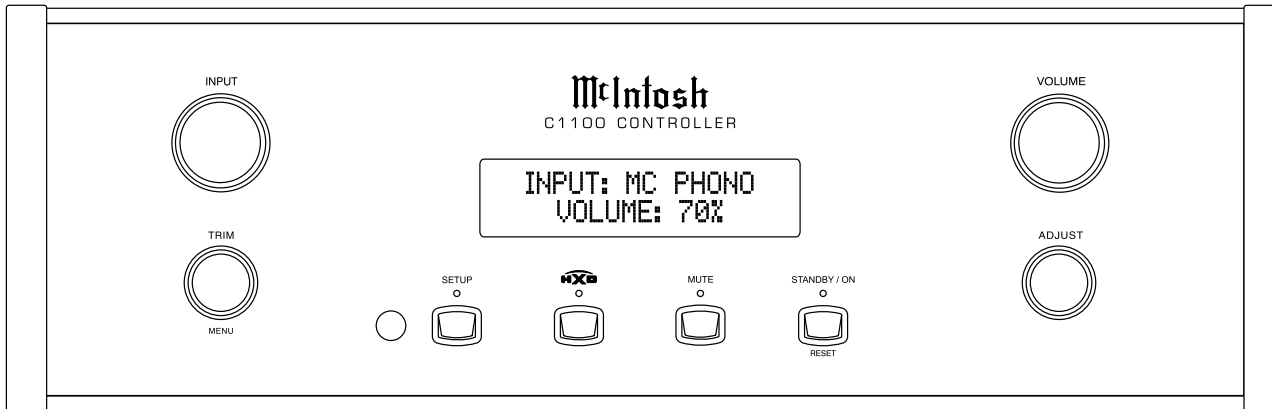one HXD Mode and Headphone Gain. The Trim Settings are stored in memory independently for each Input Source Selected, except the Meter Illumination, Display Brightness and Headphone Settings of which are the same for all inputs.

Note: Selection and Adjustment of all Trim Functions may be performed by rotating the Front Panel TRIM Control and then use the ADJUST Control to change the setting. Remote Control TRIM Push-Button together with the LEVEL UP / Down Push-button may also be used. Refer to figures 60 and 63.

BALANCE

Listening balance varies with different program sources, room acoustics and listening positions relative to the Loudspeakers. Use the Balance (Trim Function) as needed to achieve approximately equal listening volume levels in each Loudspeaker. To adjust the Balance perform the following:

1. Press the TRIM Push-button repeatedly on the Remote Control until "L BALANCE R" appears on the Front Panel Information Display. Refer to figure 64.

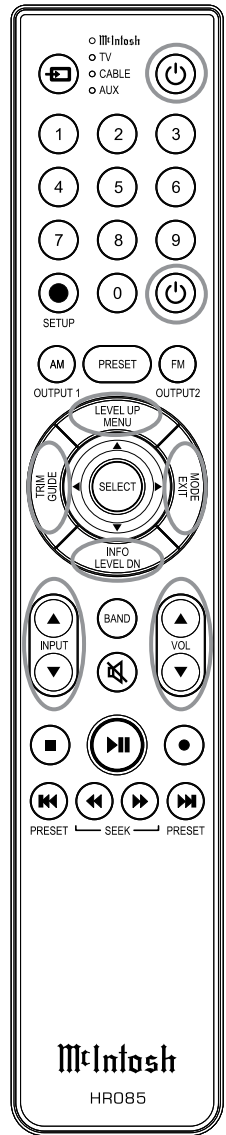*Note: The Front Panel TRIM and ADJUST Controls may also be used.*

Figure 63

```
L    BALANCE    R
         ||
```
Figure 64

2. Press the LEVEL UP / DOWN Push-buttons on the Remote Control to emphasize the Right Channel (refer to figure 65) or the Left Channel (refer to figure 66).

```
L    BALANCE    R
        ▮▮▮▮▮▮▮▮
```
Figure 65

```
L    BALANCE    R
    ▮▮▮▮▮▮▮▮
```
Figure 66

The Front Panel Display indicates the Balance changes are from 0 to 50dB. After approximately 10 seconds the Information Display returns to indicate the Source Selection and Volume Level. To verify the Balance setting without changing it, use the TRIM Push-button and select Balance.

TRIM LEVEL
Source Components can have slightly different volume levels resulting in the need to readjust the C1100 Volume Control when switching between different sources. The C1100 allows the adjustment of levels for each of the Source Inputs for the same relative volume. To adjust the Trim Level for the currently selected Input Source perform the following steps:
  1. Select "INPUT TRIM" as indicated on the Front Panel Information Display. Refer to figures 60, 63 and 67.
  2. Adjust the Trim Level of each Input to match the average volume level of the Input most frequently

```
INPUT TRIM
  0.0 dB
```
Figure 67

listened to. The range of adjustment is ± 6.0dB in half dB steps. Refer to figures 68 and 69.

```
INPUT TRIM
 -2.5 dB
```
Figure 68

```
INPUT TRIM
 +4.0 dB
```
Figure 69

After approximately 10 seconds the Information Display returns to indicate the Source Selection and Volume Level.

OUTPUT 1 and OUTPUT 2
The Rear Panel Output 1 and Output 2 Connectors (along with the Power Control Output 1 and 2) can be switched On or Off by using the TRIM FUNCTIONS OUTPUT 1 and OUTPUT 2. The default settings for TRIM OUTPUT 1 and OUTPUT 2 is ON. To change the setting perform the following:
  1. Select "OUTPUT 1" as indicated on the Front Panel Information Display. Refer to figures 60, 63 and 70.

```
OUTPUT 1
  ON
```
Figure 70

  2. Either rotate the Front Panel ADJUST Control or LEVEL UP / Down Push-button on the Remote Control to change the setting for OUTPUT 1 or OUTPUT 2. Refer to figures 71 thru 73.

```
OUTPUT 1
  OFF
```
Figure 71

```
OUTPUT 2
  ON
```
Figure 72

```
OUTPUT 2
  OFF
```
Figure 73

Note: The OUTPUT 1 and OUTPUT 2 Remote Control Push- buttons may also be used. Refer to "Output Selection" on page 15 for additional information.

After approximately 10 seconds the Information Display returns to indicate the Source Selection and Volume Level.

METER ILLUMINATION
The C1100 Front Panel Meter Illumination may be switched On or Off by performing the following:
  1. Select "METER LIGHTS, On" as indicated on the Front Panel Information Display. Refer to figures 60, 63 and 74.

```
METER LIGHTS
    On
```
Figure 74

  2. Switch Off the Meter Illumination. Refer to figure 75.

```
METER LIGHTS
    Off
```
Figure 75

How to Operate the C1100, con't

After approximately 10 seconds the Information Display returns to indicate the Source Selection and Volume Level.

> Notes: 1. Meter Illumination of recent McIntosh Power Amplifiers will also switch On/Off when connected to the C1100 via a power control cable.
>
> 2. Some A/V Processors will provide an On/Off Control Signal when the C1100 Passthru Input Jack is connected to the A/V Processor via the power control cable.

INFORMATION DISPLAY ILLUMINATION
The Brightness Level of C1100 Front Panel Information Display can be adjusted from bright to dim by performing the following:

1. Select "DISPLAY BRIGHTNESS" as indicated on the Front Panel Information Display. Refer to figures 60, 63 (on page 26) and 77.
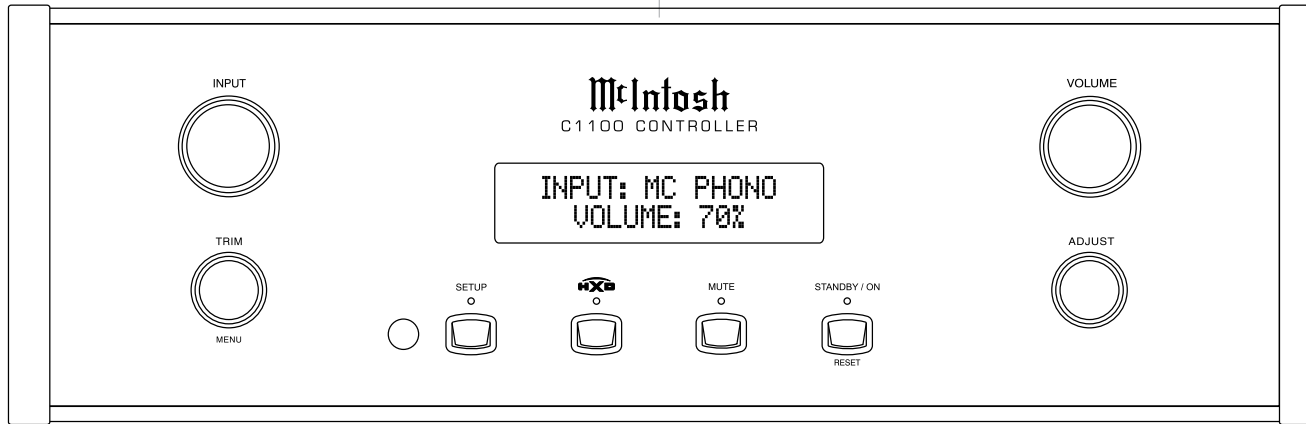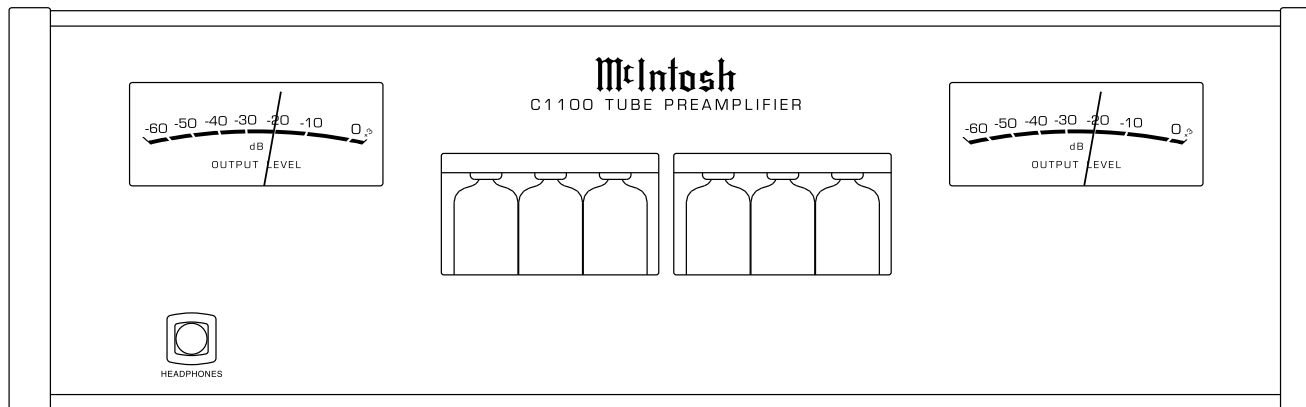

Figure 77

Figure 60

Figure 76

2. Reduce the Brightness level by adjusting the TRIM LEVEL. Refer to figure 78.

Figure 78

After approximately 10 seconds the Information Display returns to indicate the Source Selection and Volume Level.

PHONO ADJUSTMENTS
When the Phono MC or Phono MM Input is selected an additional TRIM SELECT FUNCTION becomes available for adjustment. Perform the following steps to make the Phono Trim Adjustments:

1. Select either the Phono MM or Phono MC Source Input.
2. Select "MC PHONO LOAD, 400Ω (ohms)" or "MM PHONO LOAD, 50pF" as indicated on the Front Panel Information Display. Refer to figures 79 and 80.

Figure 79

Figure 80

3. Set the desired phono cartridge loading value (Ohms for a Moving Coil Cartridge or Capacitance for a Moving Magnet Cartridge) that comes closest to the Phono Cartridge Makers recommended value.

After approximately 10 seconds the Alphanumeric

Display returns to indicate the Source Selection and Volume Level.

HEADPHONE HXD SELECTION
The C1100 Internal Headphone Amplifier incorporates McIntosh HXD Circuitry bringing acoustical depth and spatiality of music normally heard with loudspeakers, to your headphones. It can be switched On or Off as follows:
 1. Select the "HEADPHONE HXD, ___" TRIM FUNCTION. Refer to figures 81 and 82.

```
HEADPHONE HXD
     Off
```
Figure 81

```
HEADPHONE HXD
     On
```
Figure 82

 2. Select either ON or OFF.

HEADPHONE GAIN SELECTION
The C1100 Internal Headphone Amplifier Circuitry also incorporates three available Ranges of Amplifier Gain, to more closely match the impedance Ω (ohms) of the connected Headphones (16Ω - 40Ω, 40Ω - 150Ω, 150Ω - 600Ω), for the best performace. To select one of the three available ranges perform the following:
 1. Select the "HEADPHONE GAIN, 40Ω - 150Ω", default setting. Refer to figure 83.

```
HEADPHONE GAIN
  40Ω - 150Ω
```
Figure 83

2. If the impedance of the connected Headphones doesn't match within the current setting, select one of the other choices. Refer to figures 84 and 85.

```
HEADPHONE GAIN
  16Ω - 40Ω
```
Figure 84

```
HEADPHONE GAIN
  150Ω - 600Ω
```
Figure 85

Mute
Press the MUTE Push-button, on the C1100 Front Panel or on the Remote Control, to Mute the Audio in all outputs (Main, Output 1, Output 2 and Headphones) except the FIXED OUTPUT. The Front Panel Information Display will indicate the Source Name and the word MUTE in place of the actual volume setting. Refer to figure 86.

```
INPUT: BAL 1
    MUTE
```
Figure 86

Pressing the Mute Push-button a second time or adjusting the volume control (either the Front Panel or Remote Control) will unmute the C1100.

Trim
Momentarily press the Front Panel INPUT Control to activate the C1100 Trim Functions. Rotate the INPUT Control to select the desired Trim Function and then use the VOLUME (adjust) Control to change the Trim setting. Refer to figures 60 and 63 on page 26. The Remote Control TRIM and LEVEL UP / DOWN-Push-buttons may also be used. Approximately 10

seconds after Trim Function Selection and/or adjustments have stopped, the C1100 will switch the Trim Mode Off.

Adjust
The Front Panel ADJUST Control is used to make changes to the currently selected TRIM FUNCTION.

HXD
Press the the Front Panel HXD Push-button to activate or de-activate the HXD Circuitry. Refer to "HEADPHONE HXD SELECTION" elsewhere on this page-for additional information.

Output Meters
The C1100 Output Meters indicate the Output Level in Decibels (dB) available at the MAIN, OUTPUT 1 and OUTPUT 2 Connectors/Jacks to drive Power Amplifiers. Refer to figure 87. The Meters are calibrated in dB (decibels) and respond to all the peaks contained in the musical information. A meter reading of 0dB indicates the C1100 is delivering its rated output.
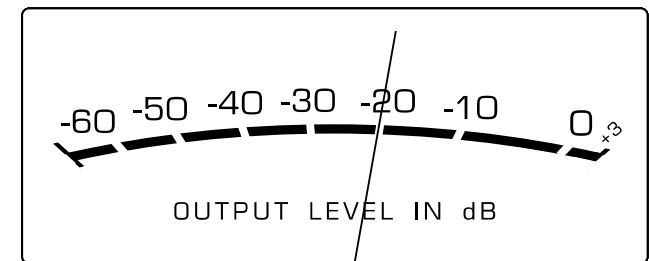

Figure 87

Passthru
The C1100 will automatically turn On and switch to the previously setup Passthru Input when the McIntosh A/V Processor or Multichannel Surround Decoder is turned-on. The Audio Preamplifier Front Panel

How to Operate the C1100, con't

Alphanumeric Display will indicate "PASSTHRU". Refer to figure 88.

PASSTHRU

Figure 88

The Front Panel Controls and Push-buttons are deactived when in the Passthru Mode.

Headphones Jack

Connect a pair of dynamic headphones to the Headphones Jack with a 1/4" (0.635cm) stereo phone type plug for private listening. The default setting is for the OUTPUT 1 and OUTPUT 2 Power Amplifier Output Connections to automatically mute, when headphones are connected to the C1100 Front Panel Jack.

How To Make a Recording

1. Select the desired signal source you wish to record by using the Front Panel INPUT Control or using the INPUT UP / DOWN Push-button on the Remote Control.
2. Adjust the record level using the recorder level control and proceed with the recording process.
3. Listen to the playback of the program source just recorded by selecting the Input Source connected to the recorder component output.

Reset of Microprocessors

In the unlikely event the controls of the C1100 stop functioning, the microprocessors can be reset by performing the following:

1. Press and hold in the STANDBY/ON Push-button until the LED above the STANDBY/ON Push-button illumination is extinguished. Then release the STANDBY/ON Push-button.

2. To switch the C1100 back On press the STAND-BY/ON Push-button.
   Note: This can be performed with the C1100 On or in the Standby Mode.

Specifications

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

Total Harmonic Distortion
0.005% maximun from 20Hz to 20,000Hz
    (High Level Inputs)
0.05% maximun from 20Hz to 20,000Hz
    (Phono Inputs)

Rated Output
5V Balanced, 2.5V Unbalanced (Main Outputs)

Maximum Voltage Output
20V RMS Balanced, 10V RMS Unbalanced

Sensitivity (for rated output)
High Level, 450mV Unbalanced, 900mV Balanced
Phono MM, 4.5mV
Phono MC, 0.45mV

Signal To Noise Ratio (A-Weighted)
High Level - 107dB (Below rated output)
MM Phono - 77dB (Below 5mV input)
MC Phono - 79dB (Below 0.5mV input)

Input Impedance
High Level - 44K ohms Balanced
    22K ohms Unbalanced
Phono MC - 25, 50, 100, 200, 400 or 1,000 ohms;
    220pF
Phono MM - 50 to 800pF, in 50pF steps;
    47K ohms

Maximum Input Signal
High Level, 20V Balanced, 10V Unbalanced
Phono MC, 10mV
Phono MM, 100mV

Voltage Gain
High Level to Main, Output1 and 2: 15dB
High Level to Rec/Fixed Output: 0dB
Phono MC to Rec/Fixed Output: 60dB
Phono MM to Rec/Fixed Output: 40dB

Output Impedance
200 ohms Balanced
100 ohms Unbalanced

Headphone Load Impedance (Selectable)
16 - 40 ohms, 40 - 150 ohms, 150 - 600 ohms

Headphone Voltage Gain (From Main Output)
16 - 40 ohms, 0dB
40 - 150 ohms, 6dB
150 - 600 ohms, 12dB

Headphone Output
150mW minimum from 16 ohms to 600 ohms load

Power Control and Trigger Output
12VDC, 25mA

Tube Complement
12 Tubes, Six - 12AX7A and Six - 12AT7
High level - one 12AX7A and two 12AT7 (per channel
    viewed from Front Panel Window)
Phono MC - one 12AX7A and one-half 12AT7
    (per channel viewed from the Top
    Cover Window)

Tube Complement, con't
Phono MM - one 12AX7A and one-half 12AT7
    (per channel viewed from the Top
    Cover Window)

Power Requirements
Field AC Voltage conversion of the C1100 is not possible. The C1100 is factory configured for one of the following AC Voltages:
100 Volts, 50/60Hz at 75 watts
110 Volts, 50/60Hz at 75 watts
120 Volts, 50/60Hz at 75 watts
220 Volts, 50/60Hz at 75 watts
230 Volts, 50/60Hz at 75 watts
240 Volts, 50/60Hz at 75 watts
Standby Power, less than 0.5 watts
    *Note: Refer to the rear panel of the C1100C Controller
    for the correct voltage.*

Overall Dimensions
Width is 17-1/2 inches (44.45cm)
Height is 6 inches (15.2cm) including feet
Depth is 19 inches (48.3cm) including the Front Panel,
Knobs and Cables

Weight
C1100C Controller - 27 pounds (12.3 kg) net,
    42 pounds (19.5 kg) in shipping
    carton
C1100T Preamplifier - 25 pounds (11.3 kg) net,
    39 pounds (17.7 kg) in shipping
    carton

Shipping Carton Dimensions
Width is 27 inches (68.6cm)
Height is 12 inches (30.5cm)
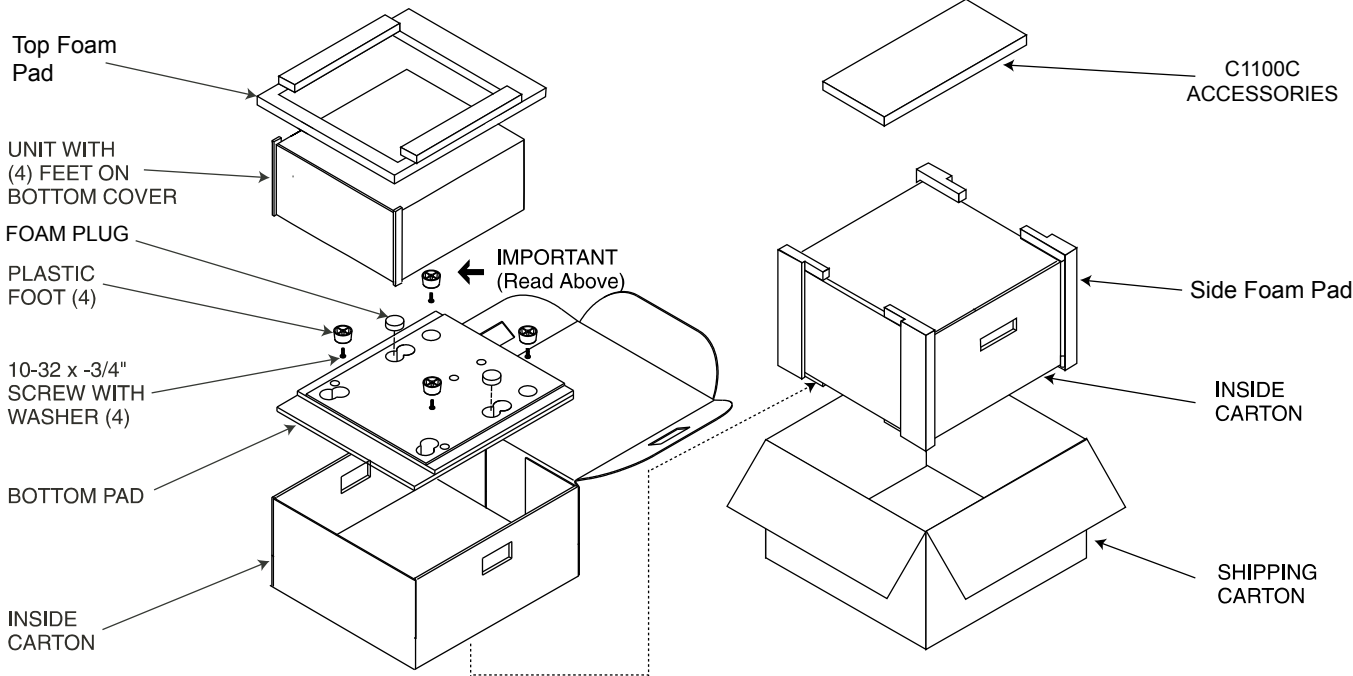Depth is 25 inches (63.5cm)

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 3. Please see the Part List for the correct part numbers.

Note: The McIntosh C1100C Controller and C1000T Tube Preamplifier use the same shipping carton. The C1100C Controller Shipping Carton also includes the "C1100C Accessories" separate package.

Quantity	Part Number	Description
1	033838	Shipping carton only
2	033837	Side foam pad
1	033836	Inside carton only
1	034414	Top foam pad
1	034301	Bottom pad
4	017937	Plastic foot
4	400159	#10-32 x 3/4" screw
4	404080	#10-7/16" Flat washer

Top Foam Pad

UNIT WITH (4) FEET ON BOTTOM COVER

FOAM PLUG

PLASTIC FOOT (4)

10-32 x -3/4" SCREW WITH WASHER (4)

BOTTOM PAD

INSIDE CARTON

IMPORTANT (Read Above)

C1100C ACCESSORIES

Side Foam Pad

INSIDE CARTON

SHIPPING CARTON

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