



McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903-2699 Phone: 607-723-3512 www.mcintoshlabs.com

CS7500

STREAMING PREAMPLIFIER

OWNER'S MANUAL



FCC Information (For US Customers)

1. IMPORTANT NOTICE:

DO NOT MODIFY THIS PRODUCT

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by McIntosh may void your authority granted by the FCC to use the product.

2. CAUTION:

- To comply with FCC RF exposure compliance requirement, separation distance of at least 20cm must be maintained between this product and all persons.
- This product and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

3. COMPLIANCE INFORMATION:

- Product Name: CS7500 Streaming Preamplifier
- Model Number: CS7500
- This product contains FCC ID: 2ADBM-LS11

FCC ID: XCO-HSBT5151

McIntosh Laboratory, Inc.
2 Chambers Street
Binghamton, NY 13903
Tel. (607) 723-3512

IC Information (Canadian Customers)

1. PRODUCT:

This product contains IC: 20276-LS11

IC: 7756A-HSBT5151

This product complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

(1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation. This Class B digital Apparatus complies with Canadian ICES-003.

2. CAUTION:

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

Informations sur IC (pour les clients Canadiens)

1. APPAREIL:

Cet Appareil contient IC: 20276-LS11

IC: 7756A-HSBT5151

Cet Appareil est conforme à la norme CNR-210 du Canada. L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes : (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif. Cet Appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

2. ATTENTION:

Afin de réduire le risque d'interférence aux autres utilisateurs, il faut choisir le type d'antenne et son gain de façon à ce que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne soit pas supérieure au niveau requis pour l'obtention d'une communication satisfaisante.

Canadian Customers: CAN ICES-003 (B)/NMB-003 (B)

RF Exposure Information

This equipment complies with FCC and ISCED RSS-102 radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. In order to avoid the possibility of exceeding the FCC and ISCED RSS-102 radio frequency exposure limits, this equipment should be installed and operated with minimum distance 20 cm (7.9 inches) between the antenna

and your body during normal operation. Users must follow the specific operating instructions for satisfying RF exposure compliance.

Cet équipement est conforme aux limites d'exposition aux rayonnements FCC et ISCED CNR-102 établies pour un environnement non contrôlé. Cet émetteur ne doit pas être installé ou utilisé en conjonction avec une autre antenne ou un autre émetteur. Afin d'éviter la possibilité de dépasser les limites d'exposition aux radiofréquences FCC et ISCED, cet équipement doit être installé et utilisé avec une distance minimale de 20 cm (7.9 pouces) entre l'antenne et votre corps pendant le fonctionnement normal. Les utilisateurs doivent suivre les instructions spécifiques d'utilisation pour respecter la conformité à l'exposition aux RF.

RED (EN) Information

1. DECLARATION OF CONFORMITY

Our products follow the provisions of EC/EU directives:

LVD: 2014/35/EU

EMC: 2014/30/EU

RED: RED (EU) 2022/30 of 20 Oct 2021

supplementing Directive 2014/53/EU

ERP: EC regulation 1275/2008 and
its frame work directive 2009/125/EU

RoHS: 2015/863/EU

2. IMPORTANT NOTICE:

DO NOT MODIFY THIS PRODUCT

This product, when installed as indicated in the instructions contained in this manual, meets RED directive requirements. Modification of the product could result in hazardous Radio and EMC radiation.

3. CAUTION:

Separation distance of at least 20 cm must be maintained between this product and all persons. This product and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

Thank You from All of Us at McIntosh

You have invested in a precision instrument that will provide you with many years of enjoyment. Please take a few moments to familiarize yourself with the features and instructions to get the maximum performance from your equipment. If you need further technical assistance, please contact your dealer who may be more familiar with your particular setup including other brands. You can also contact McIntosh with additional questions or in the unlikely event of needing service.

McIntosh Laboratory, Inc.

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Binghamton, New York 13903

Technical Assistance (607) 723-3512
Fax (607) 724-0549

Customer Service (607) 723-3515
Fax (607) 723-1917

Email support@mcintoshlabs.com

Website www.mcintoshlabs.com

Please Take A Moment

For future reference, you can write down your serial number and purchase information here. We can identify your purchase from this information if the occasion should arise:

Serial Number: _____

Purchase Date: _____

Dealer Name: _____

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Introduction

Now you can take advantage of traditional McIntosh standards of excellence in the CS7500 Streaming Preamplifier—which combines unparalleled quality with modern convenience. Connections for analog and digital inputs are provided, which can be routed to drive multiple Power Amplifiers. The streaming section includes Apple AirPlay, Google Cast, Spotify Connect, Qobuz Connect, Tidal Connect, Roon Ready ability via wired or wireless internet connection. Bluetooth is included for extra convenience.

Safety First

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

General Information

- Do not apply AC power to the CS7500, or other component(s), until they are connected to the CS7500.
- The CS7500 has been tested and certified for indoor use only.
- Do not use cleaners containing aggressive chemicals, as they will etch away the anodize finish.
- Balanced and unbalanced inputs and outputs can be mixed. For example, you can 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.
- The rear panel IR input is configured for non-McIntosh IR sensors such as a Xantech Model DL85K Kit. When in use, consider turning off the front panel sensor to avoid interference.
- For additional information on the CS7500 and other McIntosh products please visit the McIntosh website at www.mcintosh-labs.com.

Trademarks and Licenses

The McIntosh CS7500 incorporates copyright protected technology that is protected by U.S. patents and other intellectual property rights. The CS7500 uses the following technologies:

Trademark Logo	License Information
	ASIO is a trademark and software of Steinberg Media Technologies GmbH.
	For DTS patents, see http://patents.dts.com . Manufactured under license from DTS Inc. DTS, DTS:X, and the DTS:X logo are registered trademarks or trademarks of DTS, Inc. in the United States and other countries. © 2021 DTS, Inc. ALL RIGHTS RESERVED.
	Dolby, Dolby Audio, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation. Manufactured under License from Dolby Laboratories. Confidential unpublished works. Copyright © 2012-2024 Dolby Laboratories. All rights reserved.
	Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards. Apple, and AirPlay are trademarks of Apple Inc., registered in the U.S. and other countries and regions. To use AirPlay with the CS7500 Streaming Preamplifier , the latest version of iOS, iPadOS, or macOS is recommended.
	The Spotify Software is subject to third party licenses found here: https://developer.spotify.com/third-party-licenses
	Google Cast is a trademark of Google LLC.
	TIDAL is the first global music streaming service with high fidelity sound, hi-def video quality, along with expertly curated playlists and original content - making it a trusted source for music and culture.

Trademark Logo	License Information
	Qobuz Connect is a proprietary streaming technology developed by Qobuz. All related trademarks, logos, and software are the property of Xandrie SA. Unauthorized use, reproduction, or distribution of Qobuz Connect is strictly prohibited.
	The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.
	The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG Inc. and any use of such marks by McIntosh is under license. Other trademarks and trade names are those of their respective owners.
 	Qualcomm® aptX™ is a product of Qualcomm Technologies, Inc. and/or its subsidiaries. Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries. aptX is a trademark of Qualcomm Technologies International, Ltd., registered in the United States and other countries.
	The Wi-Fi CERTIFIED logo is a registered trademark of the Wi-Fi Alliance. Wi-Fi Certification provides assurance that the device has passed the interoperability test conducted by the Wi-Fi Alliance, a group that certifies interoperability among wireless LAN devices.
	Roon Ready network devices have Roon's streaming technology built in, and are certified by Roon Labs to provide the highest level of quality and performance in network streaming.
	This Roon Tested device works over USB and has been profiled by the Roon team to ensure simple setup and effortless daily use.

- **Built-in casting technologies**

Streaming services such as Spotify® Connect, TIDAL® Connect, Apple® AirPlay®, Bluetooth®, Google® Cast, Roon® Ready, and Qobuz® Connect allow for easy streaming to the CS7500 from smart devices.

- **USB Digital Input**

Access the entire audio library of a computer with pristine quality, high bandwidth, and low latency. The USB input processes PCM digital signals up to 192 kHz with 32-bit resolution, and decodes up to DSD512 digital signals and DXD 24-bit with a sampling rate of 352.8 kHz (or 384 kHz).

- **MCT Digital Input**

The proprietary digital MCT DIN connection allows playback of CD discs, and high-resolution Super Audio CD discs when connected to a compatible McIntosh transport/player.

- **Balanced Inputs**

The balanced inputs allow the connection of source components using long cable lengths without loss in sound quality.

- **Phono Inputs with Adjustable Gain**

The CS7500 has a precision phono preamplifier circuit with the ability to be configured for moving coil or moving magnet cartridges. The close tolerance resistors and capacitors used in the RIAA correction equalization circuitry provide an extremely flat frequency response.

- **Quad Balanced Digital-to-Analog Converter**

The 8 channel, 32-bit digital-to-analog converter is used in a stereo quad-balanced mode, assuring the music is reproduced with a wide dynamic range, and extremely low distortion.

- **HDMI TV Sound**

The HDMI ARC (Audio Return Channel) allows an entire audio system to play over-the-air broadcasts, HDMI inputs, and streaming services from a TV.

- **Front Panel**

The famous McIntosh illuminated glass front panel uses LEDs to ensure the pristine beauty of the CS7500 will be retained for many years. The front panel display indicates source selection, volume levels, and setup functions. The output meters are peak-responding, and indicate the output level of the preamplifier.

- **PassThru Mode**

The automatic PassThru mode allows audio to pass through the CS7500, going to the amplifier without altering the audio.

- **Power Control Output**

The POWER CONTROL connection offers convenient turn-on of McIntosh preamplifiers, source components, and accessories.

- **Remote Control**

The CS7500 provides control of connected McIntosh source components by passing data from the supplied remote control to the DATA OUT ports.

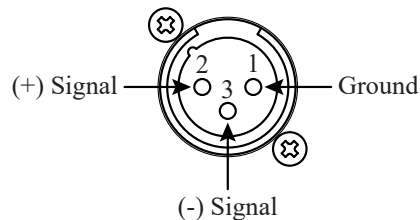
- **Qualcomm® aptX™ Audio**

aptX™ is a codec that can provide CD quality music over Bluetooth connections. The CS7500 will automatically utilize aptX when connected to a source that supports aptX.

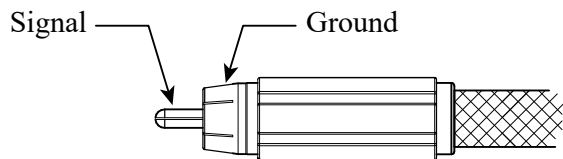
The CS7500 also supports the higher resolution aptX HD (24-bit / 48 kHz). If a device utilizes aptX HD, then that resolution will be utilized automatically.

The CS7500 also features aptX Adaptive. This technology works with supporting mobile devices to automatically select the best audio latency performance for maximum listening enjoyment.

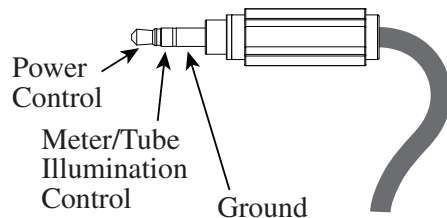
XLR Connectors



RCA Connectors

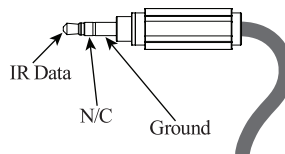


Power Control Connectors

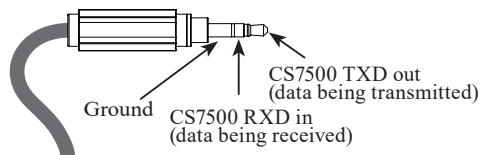


Data Ports and External Control Connectors

Data ports send converted IR commands to other McIntosh components. A 3.5 mm stereo mini phone plug is used for connections. The IR IN port also uses a 3.5 mm stereo mini phone plug, and allows the connection of other brand IR receivers to the CS7500. The IR receiver must provide its own power supply.



The RS232-C data cable is a 3.5 mm stereo mini phone plug used to connect to external third party controllers.



NET Port (Ethernet / 10baseT LAN)

Use an Ethernet cable to connect the CS7500 to a network router. The NET connector is located on the rear panel of the CS7500 under the DIGITAL AUDIO INPUTS section.

By default, the CS7500 uses DHCP to automatically receive an IP address from the router. This setting can be changed.

Alternatively, the CS7500 may be connected to a home network via wireless Wi-Fi. In this case, then the Ethernet connection would not apply.

USB Type-B Input

The USB audio input of the CS7500 provides the capability to receive music/sound in a digital format from a connected computer. Apple® computers with iOS-10.6.8 or later will communicate with the CS7500 automatically when connected.

For Windows-based computers (PC), Windows 7 (Service Pack 1), or later is required. The correct McIntosh USB audio driver must be installed. To install the McIntosh USB driver for Windows-based computers, download the latest driver from the McIntosh website: www.mcintoshlabs.com. The driver can be found in the Downloads section of the CS7500 webpage under Software Updates. Choose the McIntosh USB Audio Windows Driver. This driver may be selected in many third-party applications such as JRiver Media Center. The CS7500's display will show the sampling rate or bit rate for the USB input.

Optical

Two optical inputs allow digital sources to be connected to the CS7500 using TOSLINK cables, also known as "optical audio cables." The optical inputs can handle high-resolution digital audio up to 192 kHz / 24-bit. The CS7500 DAC will process standard format SPDIF PCM signals, Dolby Digital, and DTS bitstreams.

Coax

Two digital-coaxial inputs allow digital sources to be connected to the CS7500 using digital audio RCA coaxial cables. The coaxial inputs can handle high-resolution digital audio up to 192 kHz / 24-bit. The CS7500 DAC will process standard format SPDIF PCM signals, Dolby Digital, and DTS bitstreams.

The following dimensions can assist in determining the best location for the CS7500.

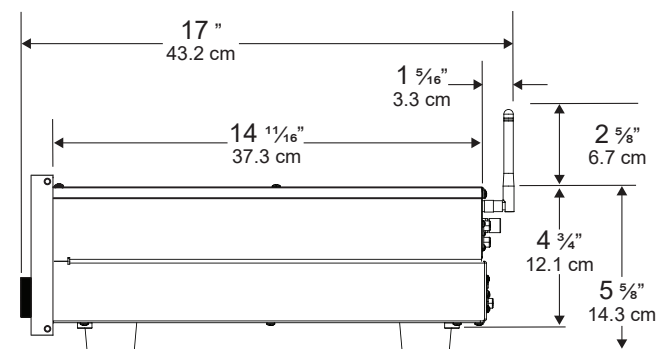
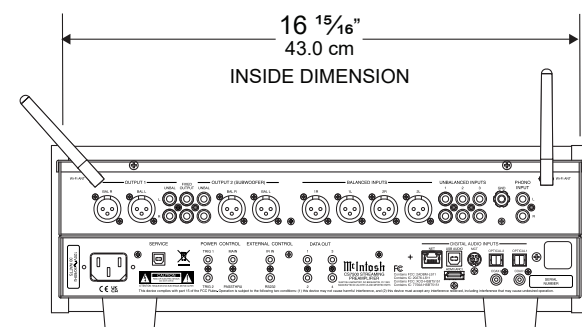
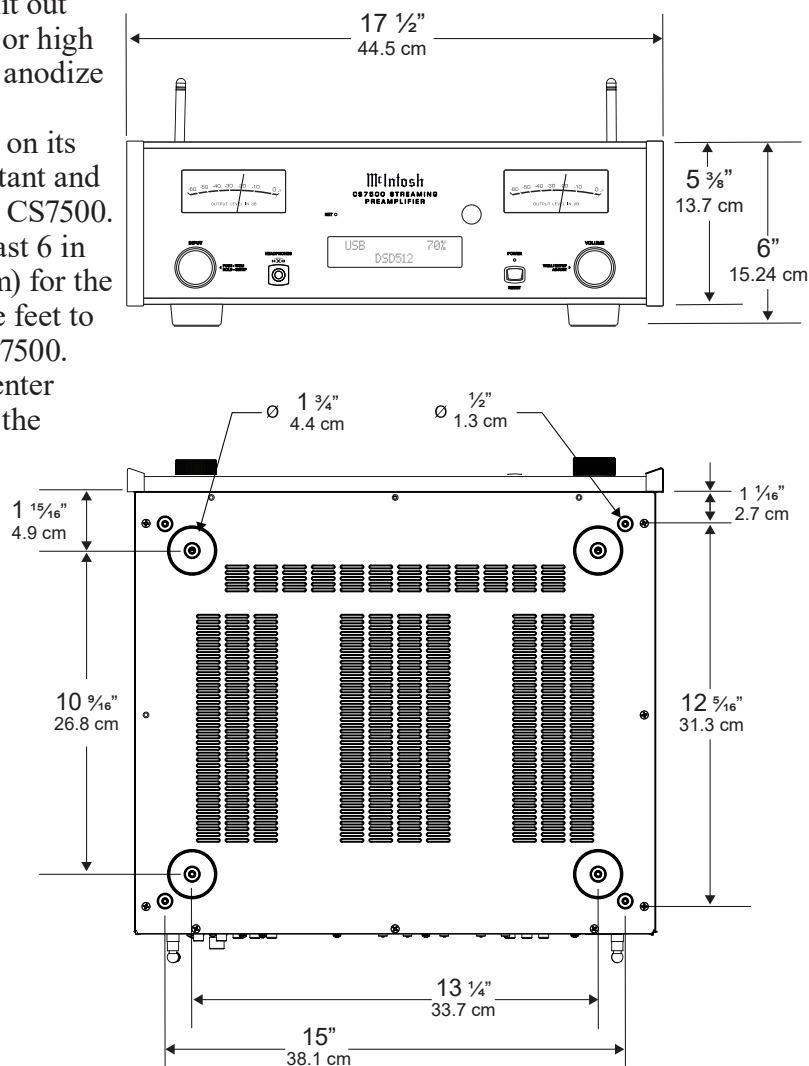
A Note on Placement:

It is important to keep this McIntosh unit out of UV light, such as light from the sun, or high intensity spotlights because the organic anodize can become discolored over time.

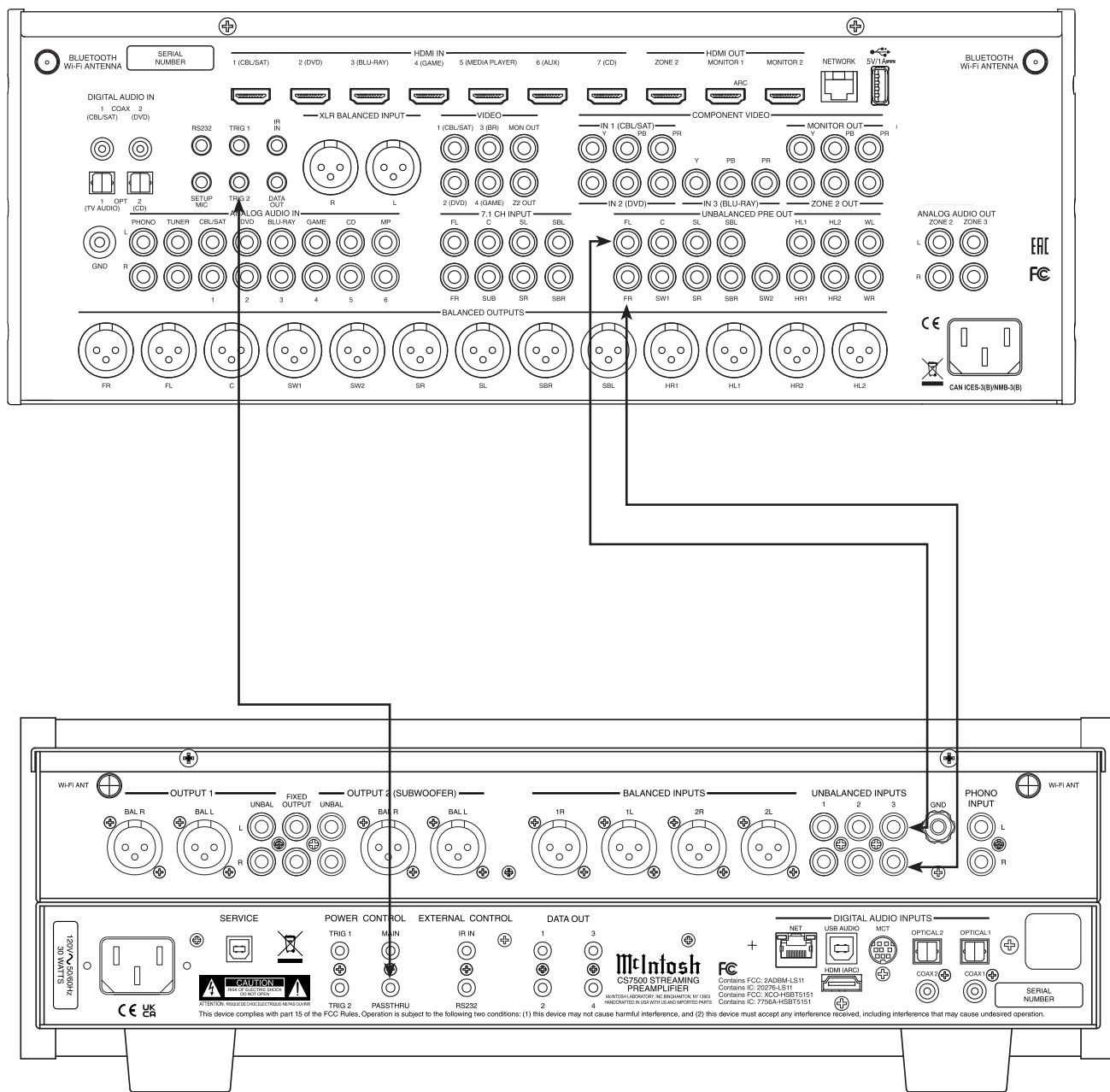
The CS7500 should be installed upright on its four feet. Adequate ventilation is important and will aid in a long trouble-free life of the CS7500.

Ensure proper airflow by allowing at least 6 in (15.2 cm) above the unit and 3 in (7.6 cm) for the front, rear, and sides. Do not remove the feet to ensure adequate airflow beneath the CS7500.

There must be openings for cool air to enter (below) and warm air to escape (above) the CS7500.



PassThru Connection Diagram



The CS7500 can be part of a multichannel sound system for Blu-ray audio, DVD audio, and home theater movies. The right and left front channels from an audio/video control center can “PassThru” the CS7500.

In the following example the UNBAL 3 Input will become the “PassThru” Input:

1. Connect audio cables from the A/V processor FL (front left) and FR (front right) channel outputs to the left and right jacks of the CS7500 UNBALANCED INPUT 3.
2. Connect a control cable from the A/V processor TRIGger 2 output to the CS7500 POWER CONTROL PASSTHRU jack.

Note: Refer to PassThru on page 16 to assign the UNBAL 3 INPUT as the “PassThru” Input.

Remote Control Operation

1. **Switch Device¹** jumps through different devices for remote operation. The selected device is indicated by the LED's to the right of the button.
2. **Numbers¹** select tuner presets, manually enters disc tracks and radio stations, and performs various other operations.
3. **SETUP** accesses additional functions of the AM and FM buttons, working as a "shift" key to access OUTPUT 1 and OUTPUT 2 functions.
(Note: Cannot be used to enter the CS7500's Setup menu.)
4. **AM Tuner¹/OUTPUT 1** accesses AM Tuner, or toggles Output 1 if pressed after the SETUP button.
5. **LEVEL UP/MENU** accesses Trim functions in the Settings menu of compatible devices.
6. **TRIM/GUIDE** enters Trim menu, and opens Guide on compatible devices.
7. **INFO/LEVEL DOWN** accesses Trim functions in the settings menu of compatible devices.
8. **Mute** silences all audio.
9. **INPUT** changes and selects different inputs.
10. **Play/Pause** halts playback of active media, and resumes upon pressing the button again.
11. **Stop** cancels playback, and resets progress in the active media.
12. **Previous/Previous PRESET** goes back to the previously selected media, and navigates to a previous tuner preset.
13. **Fast Reverse¹/SEEK Down¹** navigates backward through the active media, and adjusts the Tuner downward.

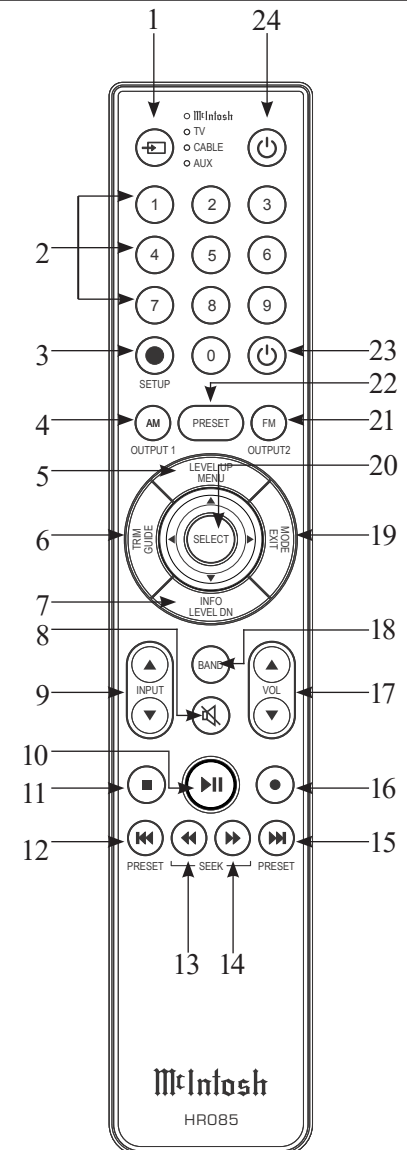
14. **Fast Forward¹/SEEK Up¹** navigates forward through the active media, and adjusts the tuner upwards.
15. **Next/Next PRESET** moves forward to the next media selection, and navigates to a later tuner preset.
16. **Record¹** records actively playing media.
17. **VOL** adjusts the volume.
18. **BAND¹** changes the band on the connected tuner, and selects certain options on various McIntosh models.
19. **MODE/EXIT** exits the Trim menu, and displays information and options.
20. **SELECT¹** picks the highlighted option where applicable.
21. **FM Tuner¹/OUTPUT 2** accesses FM Tuner, or toggles Output 2 if pressed after the SETUP button.
22. **PRESET¹** selects a stored preset when pressing PRESET followed by the number (0-9) associated with the desired preset.
23. **Power Off** turns off the selected device.
24. **Power On** turns on the selected device.

Additional Discrete Commands

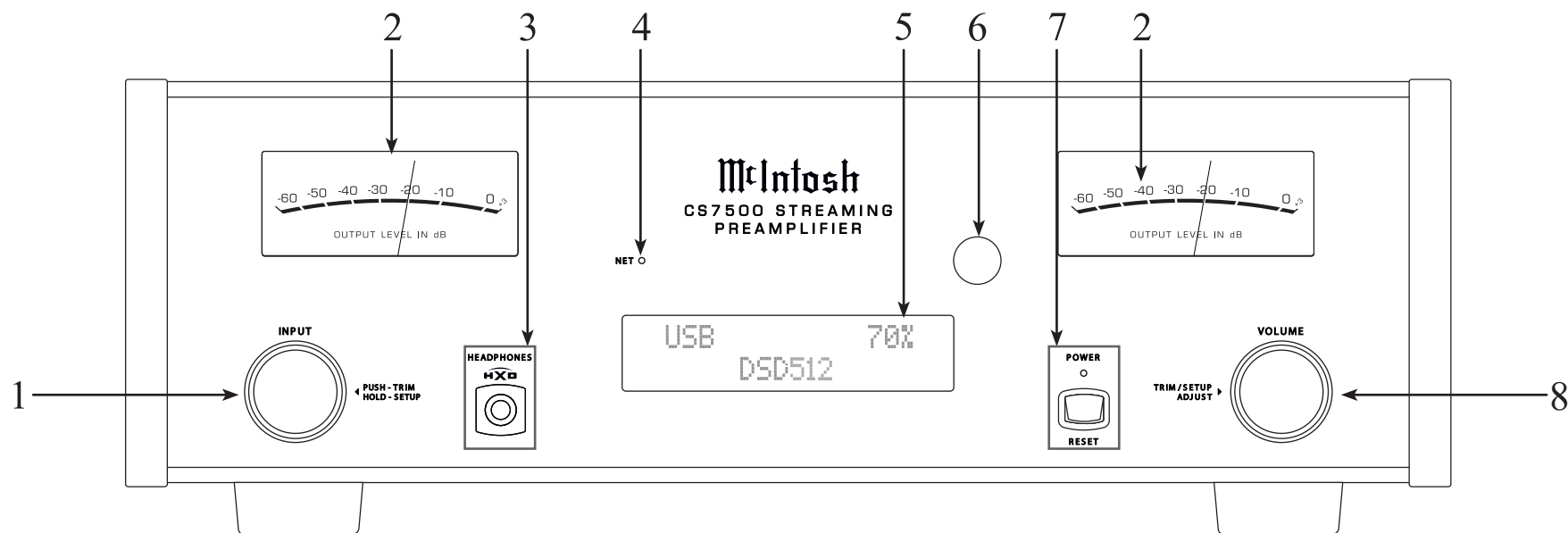
Additional discrete commands for external control systems are available for toggling power, and selecting audio inputs.

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

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



Note1: The included McIntosh HR085 remote control has buttons used to control multiple devices. While operating the CS7500 with the remote, nothing will happen when pressing buttons that activate features not present on the CS7500.



Front Panel

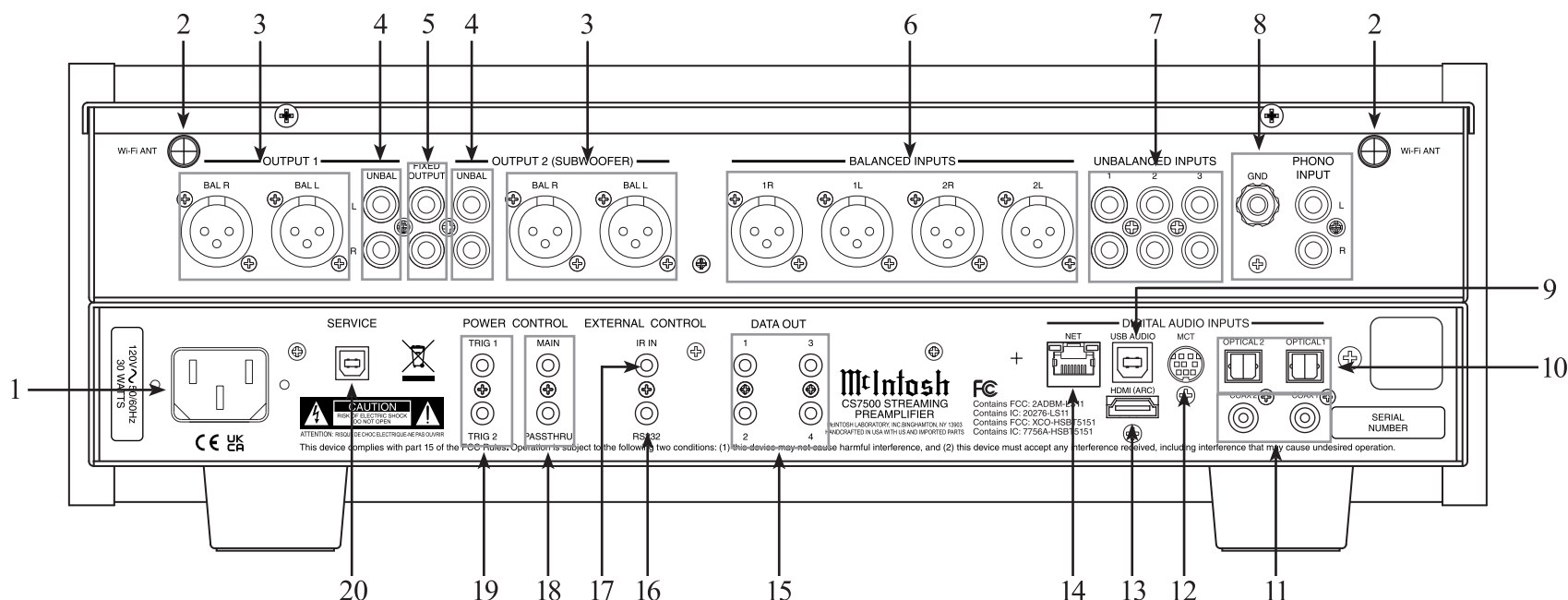
1. **INPUT knob** rotates to select different audio inputs for playback, and navigates through different menu options. Access the Trim menu by pressing the knob, or the Setup menus by holding the knob in.
2. **OUTPUT LEVEL meters** indicate the channel output level in decibels.
3. **HEADPHONES output** allows for private listening via low-impedance dynamic headphones.

4. **NETwork LED** informs of the network status:

LED	Status
None	No network connection
Green slow pulse	Connecting to a network
Green solid	Network connected
Red solid	A network error has occurred
Amber solid	Firmware requires an update

5. **VFD (Vacuum Florescent Display)** indicates the active audio input, source information, and volume level. It can also display menu options. The VFD's intensity is adjustable.

6. **IR sensor** receives commands from a remote control.
7. **POWER Indicator LED** illuminates when the CS7500 is connected to AC power. **POWER button** turns the CS7500 on and off, and resets the microprocessors.
8. **VOLUME knob** adjusts the output level and makes setting adjustments in the menus.



Rear Panel

1. **AC Input** connects to an AC outlet for power.
2. **Wi-Fi ANTenna** connection for wireless Wi-Fi.
3. **BALANCED OUTPUTS** use XLR connector cables for a balanced output signal.
4. **UNBALANCED OUTPUTS** use RCA connector cables for an unbalanced output signal.
5. **FIXED OUTPUT** sends signals to the input of a recording device.
6. **BALANCED INPUTS** accept high-level program source signals using XLR cables.
7. **UNBALANCED INPUTS** accept high-level program source signals using RCA cables.
8. **PHONO INPUT** accepts signals from a phono cartridge.
Ground connection (GND) prevents noise when used with a turntable.
9. **USB AUDIO Input** is a USB Type-B connector used to connect the CS7500 to a computer to play back digital audio.
10. **OPTICAL Inputs (1 and 2)** accept optical connections for digital signals.
11. **COAX Inputs (1 and 2)** accept coaxial connections for digital signals.
12. **MCT Input** transfers signals from McIntosh products with an MCT connector, and is required for SACD audio.
13. **HDMI (ARC) Input** connects with a compatible ARC TV using an HDMI cable.
Note: The HDMI ARC functionality of the CS7500 is only compatible with ARC TVs. Other devices like DVD and Blu-ray players will not work.
14. **EtherNET Input** allows a wired network connection.
15. **DATA OUT** retransmits remote control signals to source components.
16. **RS232 Control Port** communicates with external control devices using a 3.5 mm stereo mini phone plug cable.
17. **IR IN** accepts an external IR receiver using a 3.5 mm stereo mini phone plug cable.
18. **PASSTHRU In** receives turn on/off signals from another McIntosh component.
POWER CONTROL MAIN Out sends a turn on/off signals to another McIntosh component.
19. **POWER CONTROL TRIG (1 and 2)** send on/off signals to other McIntosh components.
20. **SERVICE Port** is used for service purposes only.

Basic Operation

Powering On / Turning Off:

Press the POWER button, or use the remote control to toggle the CS7500 on and off.

Source components, or Power Amplifiers may be connected to the POWER CONTROL outputs (i.e., MAIN, TRIG 1, TRIG 2) to automatically turn on and off with the CS7500.

Controlling Connected Source Components

The DATA OUT connections allow the operation of basic functions using the remote control. With an external sensor connected to the CS7500, remote control operation of the system is possible from another room, and/or when the CS7500 is located in a cabinet with the doors closed.

Troubleshooting

In the unlikely event that commands are not being registered by the CS7500, reset the microprocessors. To do so, hold the POWER (RESET) button down until the LED indicator switches off.

Release the button, and when the light illuminates again, press the power button again to turn on the unit.

Input Selection

Rotate the INPUT knob on the front panel, or use the INPUT   buttons on the remote control to select the desired input.

BAL 1 15%

MCT Input

When playing a multi-layer SACD, select the stereo (SACD), or CD player. The multi-channel layer will not reproduce sound.

Volume Control

Rotate the front panel VOLUME knob, or use the VOL   buttons on the remote control to set the desired listening level.

Trim Function Adjustment

The CS7500 has a variety of different trim settings that customize various audio, and lighting options.

Selection and adjustment of all trim functions may be performed by pressing the front panel INPUT knob, then rotating it to select the desired trim function for the active input. Use the VOLUME knob on the front panel to adjust the setting.

The TRIM button on the remote control may be used to move through each trim function, while the LEVEL UP / LEVEL DN buttons control the selected setting. With each Trim menu, the information display returns to indicate the input selection and volume level after approximately 10 seconds.

Balance

Listening balance varies with different program sources, room acoustics, and listening positions relative to the loudspeakers. Use the balance to achieve equal volume levels in each loudspeaker.

L BALANCE R
||

Input Trim Level

Source components can have slightly different volume levels, resulting in the need to readjust the CS7500 volume when switching between different sources. Trim level biases the input's signal level when that input is active. This allows each audio source to have the same relative volume when changing inputs.

< INPUT TRIM >
< 0.0 dB >

Tone Control

When tone controls are On, the treble and bass settings may be adjusted for the currently selected input. When the tone controls are Off, the previous settings for treble and bass are bypassed from the signal path.

< TONE CONTROLS >
Off >

Bass

Bass allows the intensity of low frequencies in audio to be increased or decreased.

< BASS >
< 0 dB >

Treble

Treble allows the intensity of high frequencies in audio to be increased or decreased.

< TREBLE >
< 0 dB >

Mono/Stereo Mode

Stereo allows separate left and right audio signals to be sent to their respective speaker. Mono sums the left and right audio signals before sending the same signal to each speaker. By default, Stereo mode is active for all inputs.



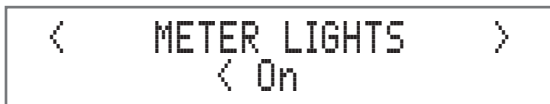
OUTPUT 1 & 2

The OUTPUT 1 and 2 settings control whether the speakers connected to each output jack are in use. By default, OUTPUT 1 and 2 are On.



Meter Illumination

The meter illumination of the CS7500 may be switched On and Off as desired.



Information Display Illumination

The brightness level of CS7500 information display can be adjusted from dim to bright.



Lip Sync Delay

When the HDMI, OPT1, or OPT2 inputs are selected, the Trim menu will set the audio lip sync delay between 0 to 150 ms in 10 ms intervals. When the HDMI input is selected, the option to set Lip-Sync to Auto becomes available.



Headphone HXD

The Headphone HXD feature appears when headphones are plugged into the front panel of the CS7500. The headphone cross feed director circuitry can be turned On to create a sound-stage effect, making audio sound like its coming from loudspeakers in front of the user. The HEADPHONES output is optimized for impedances ranging from 100 to 600 ohms.



Bluetooth

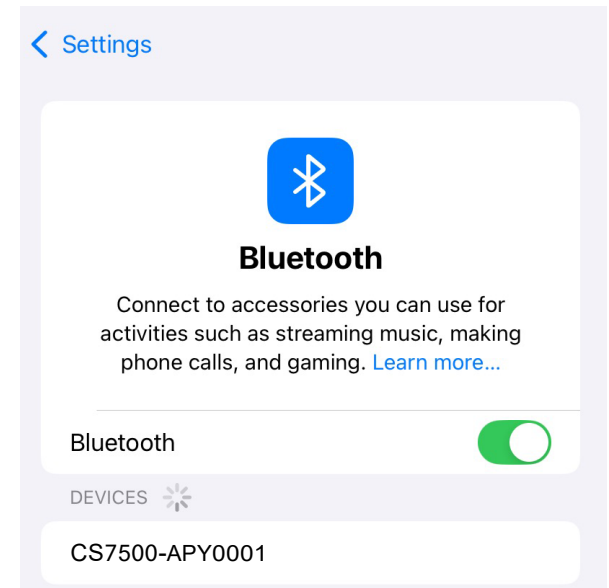
To connect the CS7500 to a Bluetooth device, rotate the INPUT knob to show Bluetooth on the information display.



Press the INPUT knob to enter the Trim menu, rotating the knob until Bluetooth Pairing is shown. This action is automatic the first time the CS7500 is turned on, or immediately following a factory reset.



In the settings of a mobile device, press SCAN in the Bluetooth sections. Select the CS7500, which will appear as “CS7500-APYxxxx” in the available devices. When asked to confirm the pairing of the CS7500 to the device, select OK. The CS7500 should now be “Connected for audio.”



Turntables With Built-In Preamps

Some turntables have built-in phono preamps, and are designed to be used with components without phono inputs. Many turntables with built-in preamps have a switch on the rear panel, or under the platter that allows the built-in preamp to be bypassed. If the built-in preamp cannot be bypassed, do not connect it to the phono inputs on the CS7500. Instead, connect the turntables left/right audio outputs to one of the unbalanced inputs.

One exception to this rule is if the turntable must be placed more than 10 ft (3 m) from the CS7500. Low level signals may pick up hum and noise if they travel down a longer audio cable. In such cases, use the preamp in the turntable and connect the turntable to an unbalanced input on the preamp, not the phono input.

Phono Input Connection and Setup

Connect the turntables left/right audio outputs and ground connection to the CS7500 phono input as shown in the Connection Diagram on page 8. Determine the type of phono cartridge the turntable uses, the majority of phono cartridges fall into one of three categories.

Moving Magnet: The most common phono cartridge. Requires less gain than a moving coil cartridge, and a specific capacitive load.

Low Output Moving Coil: Requires the most gain compared to other cartridges, and a specific resistive load.

High Output Moving Coil: Requires more gain than a moving magnet cartridge, but less gain than a low output moving coil cartridge. Requires a specific resistive load.

Phono Trim Functions

When the phono input is selected, three extra settings will be available in the Trim menu—capacitance, resistance, and gain. When changing these settings, keep the turntables cartridge type in mind. It is important for the phono cartridge to be connected to a phono preamp with an input impedance (resistance and capacitance) the same as the cartridge load specifications. In addition, the gain must be set according to the output capability of the cartridge.

Capacitance

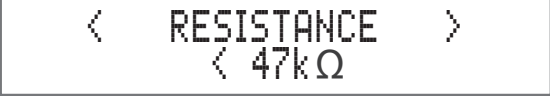
The capacitance setting adjusts the capacitive load the phono cartridge sees to optimize the phono preamp to the cartridge.



< CAPACITANCE >
50pF

Resistance

The resistance setting adjusts the resistive load the phono cartridge sees to optimize the phono preamp to the cartridge.



< RESISTANCE >
< 47kΩ

Gain

The gain setting controls how much the low level phono signal is amplified. The higher the dB, the more amplification.



< PHONO GAIN >
40dB

Moving Magnet

CAPACITANCE: Many modern phono cartridges are insensitive to changes in capacitance, and changing the setting may not alter the sound being output. Regardless, some moving magnet cartridges work best with a specific capacitive load. Check the specifications of the cartridge to determine its ideal capacitance. For example, if the cartridge specification says 300 pF is ideal, the capacitance should be set at 300 pF or lower. A lower setting will take the inherent capacitance in audio cables, which can add to the load, into account.

RESISTANCE: Almost all moving magnet phono cartridges are designed to work best into a resistance of 47k ohms. Unless a cartridge's specifications call for a different setting, set the preamp to provide 47k ohms of resistance.

GAIN: When using a moving magnet cartridge, start with the gain of the preamp at 40 dB. If the volume from the turntable is much lower than that of other sources in a system, the gain can be increased to 46 dB.

INPUT LEVEL TRIM: It's common for the volume level from a turntable to be lower than other sources, even after setting the phono preamp gain properly. The input trim adjustment in the CS7500 can be increased so that the phono input matches the level of other input sources.

See pages 12 & 13 for Trim menu instructions and options.

Low Output Moving Coil

CAPACITANCE: Low-output moving coil cartridges have a low output impedance, and are not sensitive to capacitance. Leave the capacitance at 50 pF.

RESISTANCE: Most low-output moving coil phono cartridges are designed to work best in a resistance between 100 and 400 ohms. Check the specifications of the phono cartridge being used to determine this. Some listeners may prefer to set the resistance "by ear" for their preferred sound. While playing a record with a wide range of instruments and voices, start with the resistance at 400 ohms, then decrease the resistance step-by-step until reaching the preferred sound. This is best done in the main listening position, using the remote control to access the Trim menu.

GAIN: When using a low-output moving coil cartridge, start with the gain of the phono preamp at 58 dB. If the volume from the turntable is much lower than other sources in the system, the gain can be increased to 64 dB.

INPUT LEVEL TRIM: It's common for the volume level from turntable to be lower than higher level sources even after setting the preamp gain properly. The input trim adjustment in the CS7500 can be increased so the phono input matches the levels of other input sources.

See pages 12 & 13 for Trim menu instructions and options.

High Output Moving Coil

CAPACITANCE: High-output moving coil cartridges usually have a low output impedance, and are not sensitive to capacitance. Leave the capacitance at 50 pF.

RESISTANCE: Most high-output moving coil phono cartridges are designed to work best with a resistive load between 750 and 1k ohms. Check the specifications of the cartridge being used for the ideal resistance setting. Some listeners may prefer to set the resistance "by ear" for their preferred sound. While playing a record with a wide range of instruments and voices, start with the resistance at 1k ohms, then decrease the resistance step-by-step until reaching the preferred sound. This is best done in the main listening position, using the remote control to access the Trim menu.

GAIN: When using a high-output moving coil cartridge, start with the gain of the phono preamp at 46 dB. If the volume the turntable is much lower than other sources in a system, the gain can be increased to 52 dB.

INPUT LEVEL TRIM: It's common for the volume level from turntable to be lower than higher level sources even after setting the preamp gain properly. The input trim adjustment in the CS7500 can be increased so the phono input matches the levels of other input sources.

See pages 12 & 13 for Trim menu instructions and options.

Setup Menus

Submenus	Settings
System	Product, Firmware, PassThru, Startup Vol, Auto Off, Power Save, Defaults, Factory Reset
Digital	DS Module, Update, OPT 1-2, HDMI, CEC Pwr, CEC Vol
Network	Type, IPv4 Address, MAC Address, Reset
Inputs	Bal 1-2, Unbal 1-3, Phono, Coax 1-2, Opt 1-2, USB, MCT, HDMI(ARC), Network, Bluetooth
Outputs	OUTPUT 1-2, Dual Mono (Output 2), Headphones
Triggers	Trig 1-2
Data Out	1-4
External Control	Front IR, IR Codes, RS232 Baud Rate, TCP/IP, SDDP

Setup Menu Navigation

The McIntosh CS7500 has been factory configured to allow immediate enjoyment of superb audio without the need for further adjustments. To make changes to the factory default settings, the Setup menu allows for the customizing of operating settings via the front panel. To access the Setup menu selection, press and hold the INPUT knob on the front panel until the information display indicates:

```
SETUP: Menu Select
SYSTEM >
```

Using the INPUT knob, navigate through the submenus by rotating, and select by pressing the knob in. Once the desired submenu has been selected, rotate the INPUT knob to navigate through the submenu setting. To change the selected setting, rotate the VOLUME knob. Exit the Setup Menu by rotating the INPUT knob to Exit selection.

System Setup Submenu

Settings	Options
Product	CS7500 - <serial number>
Firmware	----
PassThru	Disabled , BAL 1-2, UNBAL 1-3
StartupVol	Disabled, Enabled
Auto Off	Disabled, Enabled
Power Save	Disabled , Enabled
Restore Defaults	Hold INPUT to Reset
Factory Reset	Hold INPUT to Reset

Note: Bold Options indicate Default Settings

Product Information

Specific identifying information for the CS7500 can be found on the product information page of the System Setup submenu.

```
SYSTEM: Product >
CS7500-APY----
```

Firmware

The CS7500 will periodically check for updates. The current firmware version will be displayed here.

```
SYSTEM: < Firmware >
-----
```

PassThru

When the CS7500 is part of a home theater, or multichannel audio system, the right and left front channels from an A/V processor, or surround decoder can “PassThru” the CS7500 and into its associated power amplifier(s). The PassThru setting allows selection of the specified CS7500 input to be used for the right and left front channels. *Note that when an input is assigned as a "PassThru" input, it is no longer available as a regular input during non-passthru mode.*

```
SYSTEM: < PassThru >
Disabled >
```

Startup Volume

When Startup Volume is Enabled, upon power loss and returning to play from Standby, playback of the product will start at a low volume. When Disabled, the startup volume will resume playback at the last set volume.

```
SYSTEM: <StartupVol>
< Enabled
```

Auto Off

When Auto Off is Enabled, the CS7500 will automatically enter Sleep after approximately 30 minutes without user activity, and with the absence of an audio signal. When Disabled, the CS7500 must be turned off by pressing the POWER button.

```
SYSTEM: < Auto Off >
< Enabled
```

Power Save

By default, the CS7500 will maintain network connections, allowing the unit to be remotely activated and turned on by a mobile device, or network connected device. When Power Save is Enabled, the Network, Wi-Fi, and digital inputs will not be powered after the unit is in Standby for 15 minutes, preventing remote activation. The IR remote, RS232, and power control remain active.

```
SYSTEM: <Power Save>
Disabled >
```

Restore Defaults

To reset the Trim and Setup settings to the factory default values, select the Defaults option in the System Setup Menu.

```
SYSTEM: < Defaults >
Hold INPUT to Reset
```

Press and hold in the INPUT knob, then release. Once the default settings are restored, the CS7500 will turn itself back on.

```
SYSTEM RESETTING
■■■■■
```

```
SYSTEM RESETTING
Done
```

Factory Reset

To reset all adjustable settings and clear all network information, select Factory Reset and follow the same process as above.

```
SYSTEM: < Factory >
Hold INPUT to Reset
```

Digital Setup Submenu

Settings	Options
DS Module	v#.#
Update	Hold INPUT
OPT 1	0dB to +15dB in 1dB intervals
OPT 2	0dB to +15dB in 1dB intervals
HDMI	0dB to +15dB in 1dB intervals
CEC Pwr	Disabled, Enabled
CEC Vol	Disabled, Enabled

DS Module Firmware Version

The firmware version for the digital streaming circuitry of the CS7500 can be viewed in the Digital Setup submenu.

```
DIGITAL: DS Module >
DS1 v_._._
```

DS Update

This option is for service purposes only.

```
DIGITAL: < Update >
Hold INPUT
```

Digital Gain

The CS7500 offers digital gain adjustments for the OPTICAL 1 (OPT 1), OPTICAL 2 (OPT 2), and HDMI. The change in gain of a specific digital input will produce a change in playback volume of the music. The gain can be adjusted for each input in 1dB gain steps by rotating the VOLUME knob clockwise to increase the gain up to +15 dB.

```
DIGITAL: < OPT 1 >
0 dB >
```

HDMI (ARC) CEC Power

The CS7500 HDMI input connector has audio return channel circuitry (ARC), allowing the audio selection and control command of HDMI TV/monitor devices. By default, the HDMI Input is configured to accept power commands via CEC. To prevent the CEC power control of the CS7500, simply change HDMI CEC power from on to off.

```
DIGITAL: < CEC Pwr >
< Enabled
```

HDMI (ARC) CEC Volume

Enable CEC Volume to allow an external remote, such as a TV remote, to control the volume of the CS7500 via HDMI connection. CEC must be Enabled on both connected devices to function.

```
DIGITAL: < CEC Vol >
< Enabled
```

Network Setup Submenu

Settings	Options
Status	Displays Connection Status
Wi-Fi	Wi-Fi Setup and SSID
IPv4 Address	Displays IP Address
MAC Address	Displays MAC Address
Reset	Hold INPUT to Reset Network and Bluetooth Information

Enter to Network Setup submenu to display network information such as the connection type, IPv4 address, and MAC address. To reset the CS7500 network settings and Bluetooth connections, scroll to Reset and press and hold the INPUT knob.

Inputs Setup Submenu

Setting	Options
Enabled	Off, On
Name	

Enable

By default, all inputs are On. Unused inputs can be turned Off so that they do not appear on the display during input selection. Rotate the VOLUME knob to turn the selected input On or Off.

```
INPUT:      Enable >
      < On
```

Rename

Inputs can be renamed to more accurately reflect the source component that it is associated with.

```
INPUT:      < Name >
      Rename Input
```

A blinking cursor will appear over the selected character of the input's name. Rotate the INPUT knob to select which character needs to change, and use the VOLUME knob to change the character. Once the new name has been entered, hold the INPUT knob to confirm. Otherwise, press and release the INPUT knob to return to the previous menu without applying the changes.

Outputs Setup Submenu

Settings	Options
OUTPUT 1	Switched, Unswitched,
OUTPUT 2	Switched, Unswitched,
Dual Mono (Output 2)	Off, On
Headphones	Mute All Outputs, Mute No Outputs

Output Mode

The output setup menu provides the ability to change how OUTPUT 1, OUTPUT 2, Dual Mono, and Headphones function. Each output can be independently configured to operate in one of several modes. Each output is set to Switched by default, which allows toggling using the OUTPUT 1 and OUTPUT 2 buttons on the remote control. To disable toggling, choose the Unswitched option.

```
OUTPUT:  OUTPUT 1 >
      Switched >
```

Dual Mono

OUTPUT 2 can be configured as either a Stereo or Mono output. These connections can feed an additional full range amplifier and speaker system, a single mono subwoofer, or 2 separate left/right (stereo) subwoofers.

```
OUTPUT: <Dual Mono >
      Off >
```

Headphones

By default, the Mute All Outputs setting is turned on, muting all outputs upon plugging in headphones unless they are setup as Unswitched. Selecting the Mute No Outputs option won't turn off any outputs when headphones are plugged in.

```
OUTPUT: <Headphones>
      Mute All Outputs >
```

Trigger Setup Submenu

Settings	Options
Trig 1	Main, Output 1-2, INPUT (Push INPUT)
Trig 2	Main, Output 1-2, INPUT (Push INPUT)

The CS7500 has two power control triggers connections. When the CS7500 is on, the triggers are either activated or deactivated. The Trigger 1 and 2 settings can be configured to connect to the CS7500 itself, or any combination of inputs. These settings will control the operational power to the components connected to the various trigger output connectors.

```
TRIGGER:  TRIG 1 >
      Main >
```

Data Out Setup Submenu

Settings	Options
1-4	All Data, Bal 1-2, Unbal 1-3, Coax 1-2, Opt 1-2, MCT

Data connections between the CS7500 and another McIntosh source component allow for basic function control of the source component using the CS7500 supplied HR085 remote control. By default, all data connections are configured to always pass received IR data to the connected component. To dedicate a given data output for only one source component, select the desired input.

```
DATA OUT:      1 >
      All Data >
```


External Control Setup Submenu

Settings	Options
Front IR	Disabled, Enabled
IR Codes	Normal , Alternate
RS232 Baud Rate	9600 Baud, 19200 Baud, 38400 Baud, 57600 Baud, 115200 Baud
TCP/IP	Disabled , Enabled

Front IR

The CS7500 front panel sensor, receives the signals from the HR085 remote control, and can be Disabled to prevent interference when an external IR sensor is connected.

```
EXT CTRL: Front IR >
< Enabled
```

IR Codes

The HR085 remote control utilizes the normal McIntosh control codes. Alternate codes prevent the remote control of McIntosh equipment in close proximity to the CS7500

```
EXT CTRL: <IR Codes>
Normal >
```

RS232

The CS7500 may be controlled remotely from other equipment connected to the RS232 port. The speed at which the CS7500 communicates (8 bit, no parity, and 1 stop bit) with other equipment is adjustable from 9,600 Baud (bits per second) to 115,200 Baud.

```
EXT CTRL: < RS232 >
< 115200 Baud
```

TCP/IP

When Enabled, TCP/IP Control allows third-party control systems to communicate with the CS7500 via TCP/IP.

Network Connections

When the CS7500 connects to a network for the first time, it will automatically look for the latest software update. If available, the CS7500 will install the newest version. When updating, the VFD will show:

```
UPDATE DETECTED
Downloading
```

```
UPDATING: DS1
Installing...
```

```
UPDATING: CS7500
MESSAGES
```

The unit will reboot when the operation has completed. Do not remove power during this operation.

Ethernet

For a wired connection to a network, use an Ethernet cable to connect the CS7500 to the router.

Note: A solid red Network/Wi-Fi LED indicates that a network error has occurred. See page 10.

Note that plugging in an Ethernet cable will disable the Wi-Fi radio of the CS7500. The CS7500 will use the Ethernet connection for all network activity. To enable Wi-Fi, the Ethernet cable must be removed.

With an Ethernet connection, use the CS7500 browser interface to provide the CS7500 with the Wi-Fi settings.

Setting up Wi-Fi Using Ethernet

To connect the CS7500 to a Wi-Fi network using an existing Ethernet connection, begin by opening a web browser. Check the CS7500 for current connection IP address and type it into the browser. Select Settings from the CS7500 interface, then select Wireless in Network Type. Select Start Scan, then local network. Provide the password and press Connect.

Wi-Fi Connection using an iOS Device

To set up the CS7500 as an AirPlay device, a device with iOS 11.4 or later is required. Airplay will connect the CS7500 to a local Wi-Fi network automatically. Make sure the iOS device is on the Wi-Fi network the CS7500 is connected to, and the CS7500 is powered on. Open up Settings on the iOS device and open up the Wi-Fi submenu. Look at the Wi-Fi network list and find “Set Up New AirPlay Speaker.” Select the CS7500, and the CS7500 will be added to the network. Alternatively, use the iOS Home app to join the CS7500 to the network.

15 minutes after first being turned on, the CS7500 will disappear from the Wi-Fi network list of iOS devices. To make it reappear, go to the Network Setup submenu on the CS7500, and scroll to Type using the INPUT knob.

```
NETWORK: Type >
Hold INPUT to Setup
```

Hold down the INPUT knob until the information display changes.

```
NETWORK: Type >
Ready for Setup
```

The CS7500 will now be available in the Wi-Fi settings of an iOS device for the next 15 minutes.

Wi-Fi Connection using an Android Device

To connect using an android device, connect device to the same Wi-Fi network as the CS7500, and power on the CS7500. Download the McIntosh Cast Connect App from the app store, open the app, and follow the steps for the CS7500 as they automatically appear.

Google Cast

To Cast to the CS7500 connect a mobile device to the same Wi-Fi network as the CS7500, and power on the unit. Download the McIntosh Cast Connect App from the app store on the mobile device. Open the app and follow the steps for the CS7500 as they automatically appear.

Accept Google's terms of service to enable Google Cast streaming. Once the CS7500 is setup, choose to Cast to it by clicking the Cast button in the top right corner of any Google Cast-enabled app, and selecting the CS7500. When connected, the Cast button will change colors.

Airplay

Airplay is an Apple technology designed to control home audio systems and speakers in any room with a tap, or by asking Siri.

To control this Airplay enabled device, follow the "Wi-Fi Connection using an iOS Device" instructions on the previous page.

Roon

The CS7500 is Roon Ready so when connected to the main Wi-Fi network, the CS7500 will be available as a Zone for the Roon server (if a Roon server is available). The CS7500 can be connected to local Wi-Fi using any of the methods on the previous page. It can also be directly connected with an Ethernet cable.

Qobuz Connect

Qobuz is a high quality music platform. Pioneer of high quality sound since 2007, the French platform offers an intimate and enriching experience. Qobuz gives access to an unparalleled wealth of content: more than 100 million tracks available in the best sound quality (Hi-Res and lossless/CD) and exclusive editorial content written by a team of experts.

Use a phone, tablet, or computer as a remote control for Qobuz. Go to <https://www.qobuz.com/us-en/magazine/story/2025/05/14/qobuz-connect-how-it-works/> to learn how.

Spotify Connect

Use a phone, tablet, or computer as a remote control for Spotify. Go to Spotify - Connect to learn how.

The Spotify Software is subject to third party licenses found here:

<https://www.spotify.com/connect/third-party-licenses>

Tidal Connect

To listen to music on Tidal through the CS7500, using the Tidal app, select content to play and then select the connect icon  on the Now Playing screen. This will bring up a list of nearby devices to stream through. Locate the CS7500, and select to pair. If the desired device does not appear, make sure the device is connected to the same local network being streamed from.

Once paired, use the Tidal app as a remote. Tidal is compatible with select smart assistants that enable voice controls. Depending on the region, enable this feature by linking the Tidal account in use with the selected smart device. This option can normally be found in the Settings section of a Smart Devices app.

HDMI ARC

The HDMI ARC (Audio Return Channel) allows the entire audio system to play the sound from a TV. Ensure the CS7500 is connected to the TV's HDMI input port that is labeled "ARC." The TV's setup menu and settings may need to be adjusted before sound is heard. When the CS7500 is set to the HDMI input, the unit will automatically turn On and Off with the TV. Multi-channel formats will be down mixed to a 2-channel output.

Audio formats supported by HDMI ARC include, PCM (2 channel), Dolby Digital (up to 5.1 channel), DTS Digital Surround (up to 5.1 channel).

Settings may also be adjusted from a web browser. To open the browser interface, go on a computer and enter the IP address for the CS7500.

To view the IP address for the CS7500, see the *Network Setup Submenu* section on page 17.

Browser Interface Menus

The browser interface contains three menus to change various settings of the CS7500.

Overview Menu

The Overview Menu contains the following:

Settings	Options
Model Name	CS7500
Custom Name	
Serial Number	
MAC Address	
Network IP Address	
Network status	
Firmware Product	Firmware Version Information

A custom name may be provided for the CS7500. This is the name that will display for available AirPlay devices. To change the default name, type the new name in the box and press Enter. If the name was changed using the Apple Home app, the name will not be able to be changed on the web page.



Settings Menu

The Settings Menu contains the following:

Settings	Options
Startup Volume Limit	ON, OFF
Power Save	Disabled, Enabled
Network Type	Automatic, Wired, Wireless

When the **Startup Volume Limit** is ON, upon power loss and resuming playback from sleep or standby, the first playback of the product will start at a low volume level. When switched to OFF, the product will resume playback at the last volume level. The Settings Menu allows settings for Wired and Wireless network connections to be changed. By default, the CS7500 will indefinitely consume additional power to maintain a network connection while asleep. **Power Save** may be Enabled, which will allow the CS7500 to enter a low power state (Standby) after 15 minutes of continuous sleep. Once the CS7500 goes into Standby, it will lose its ability to be woken up via the network until powered back on by pressing the POWER key, IR remote, or RS232 command.

If **Network Type** is set to Automatic, the CS7500 will automatically connect to Wi-Fi when the ethernet cable is unplugged provided the Wireless connection has previously been setup. Selecting Wired for network type will limit the CS7500 network connection to the ethernet port connection. Select Wireless to setup a Wi-Fi network or to restrict the network connection to Wi-Fi.

If Wireless is selected, the following submenus appear:

- Scan Networks
- Display SSID
- Network Password

Update Menu

The Update Menu contains the following:

Settings	Options
Factory Reset	Start Factory Reset
Update Method	OTA Auto, OTA Manual, Service
Authorization Code	

To restore Factory settings, select the Start Factory Reset button. Note that Wi-Fi and Bluetooth connection settings will be lost.

An alternative method for Factory Reset is via the System Setup submenu, see page 16.

Update Method allows the user to change how the CS7500 updates its firmware. When set to the default of OTA Auto, the CS7500 will periodically check for updates and install them automatically. When set to OTA Manual, the CS7500 will check for available updates when the Start Search button is selected. If an update is available, install it by selecting Start Update. (OTA stands for “over-the-air.”) The Service option for updating is for service purposes by a McIntosh qualified technician only. While the CS7500 is in the process of updating the firmware, various messages will be displayed on the VFD to inform the update status.

Audio Specifications

Frequency Response

+0, -0.5 dB from 20 Hz to 20 kHz

+0, -3 dB from 15 Hz to 100 kHz

Total Harmonic Distortion

0.005% from 20 Hz to 20 kHz

Rated Output

Unbalanced: 2.5 V

Balanced: 5 V

Fixed Output: 450 mV

Maximum Voltage Output

Unbalanced: 8 V RMS

Balanced: 16 V RMS

Sensitivity (for rated output)

Unbalanced: 450 mV

Balanced: 900 mV

Phono MM: 4.5 mV

Phono MC: 0.45 mV

Signal To Noise Ratio (A-Weighted)

High Level: 100 dB (Below rated output)

MM Phono: 82 dB (Below 5 mV input)

MC Phono: 80 dB (Below 0.5 mV input)

Input Impedance

Unbalanced: 22k ohms

Balanced: 44k ohms

Phono: 100, 400, 750, 1k, or 47k ohms

50 to 400 pF in 50 pF steps

Maximum Input Signal

Unbalanced: 5 V

Balanced: 10 V

Phono MM: 80 mV

Phono MC: 8 mV

Voltage Gain

High Level to Fixed Output: 0 dB

High Level to Main Output: 15 dB

Phono: 40 dB, 46 dB, 52 dB, 58 dB,
or 64 dB

Output Impedance

Unbalanced: 100 ohms

Balanced: 200 ohms

Headphone Load Impedance

100 ohms to 600 ohms

Digital Input Signal Format

Coaxial: SPDIF (PCM), bitstream

Optical: SPDIF (PCM), bitstream

MCT: SACD, PCM

USB AUDIO: DSD, DXD, PCM

HDMI: PCM, Dolby Digital, DTS

Digital Input Sample Rates

Optical: PCM 16-bit, 24-bit 44.1-192 kHz

Coaxial: PCM 16-bit, 24-bit 44.1-192 kHz

MCT: PCM, 16-bit, 24-bit 44.1-192 kHz, SACD

USB: PCM 16-bit, 24-bit, 32-bit 44.1-192 kHz
DXD DXD352.8 kHz, DXD384 kHz

DSD DSD64, DSD128, DSD256, DSD512

HDMI: PCM 24-bit, 44.1-192 kHz, bitstream

Digital Inputs

Coaxial: 0.5 V p-p/75 ohms

Optical: -15 dBm to -21 dBm (TOS Link)

MCT: 0.5 V p-p/75 ohms

USB 2.0: USB Type-B Connector

HDMI: 2.0 ARC

Digital Network/Wi-Fi Input Sample Rate

24-bit/44.1k Hz to 192k Hz

Streaming Support

Apple AirPlay, Google Cast, Spotify Connect, Tidal
Connect, Roon, Qobuz Connect

Supported Audio Formats

(Must also be supported by chosen source app and
device)

MP3, AAC, FLAC, ALAC, WMA, Ogg Vorbis,
WAV, M4A, OGG, AIFF

Connectivity

Wi-Fi CERTIFIED™ a, b, g, n, ac

WPA™, WPA2™, WMM®

2.4/5 GHz, Ethernet

Bluetooth 5.0

AVRCP, A2DP, aptX, aptX HD, aptX Adaptive

General Specifications

Power Requirements

Field AC Voltage conversion of the CS7500 is not possible. The CS7500 is factory configured for one of the following AC Voltages:

100 Volts: 50/60 Hz at 30 Watts

110 Volts: 50/60 Hz at 30 Watts

120 Volts: 50/60 Hz at 30 Watts

220 Volts: 50/60 Hz at 30 Watts

230 Volts: 50/60 Hz at 30 Watts

240 Volts: 50/60 Hz at 30 Watts

Standby Power: less than 0.5 Watts

Note: Refer to the rear panel of the CS7500 for the correct voltage.

Power Control and Trigger Output

12VDC, 25mA

Overall Dimensions

Width: 17 ½ inches / 44.5 cm

Height: 6 inches / 15.2 cm (including feet)

Depth: 17 inches / 43.2 cm (including the front panel, knobs, and antennas)

Weight

Net: 25 pounds / 11.3 kg net

In shipping carton: 40.5 pounds / 18.4 kg

Shipping Carton Dimensions

Width: 27 inches / 68.6 cm

Height: 12 inches / 30.5 cm

Depth: 25 inches / 63.5 cm

Packing Instructions

In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below.

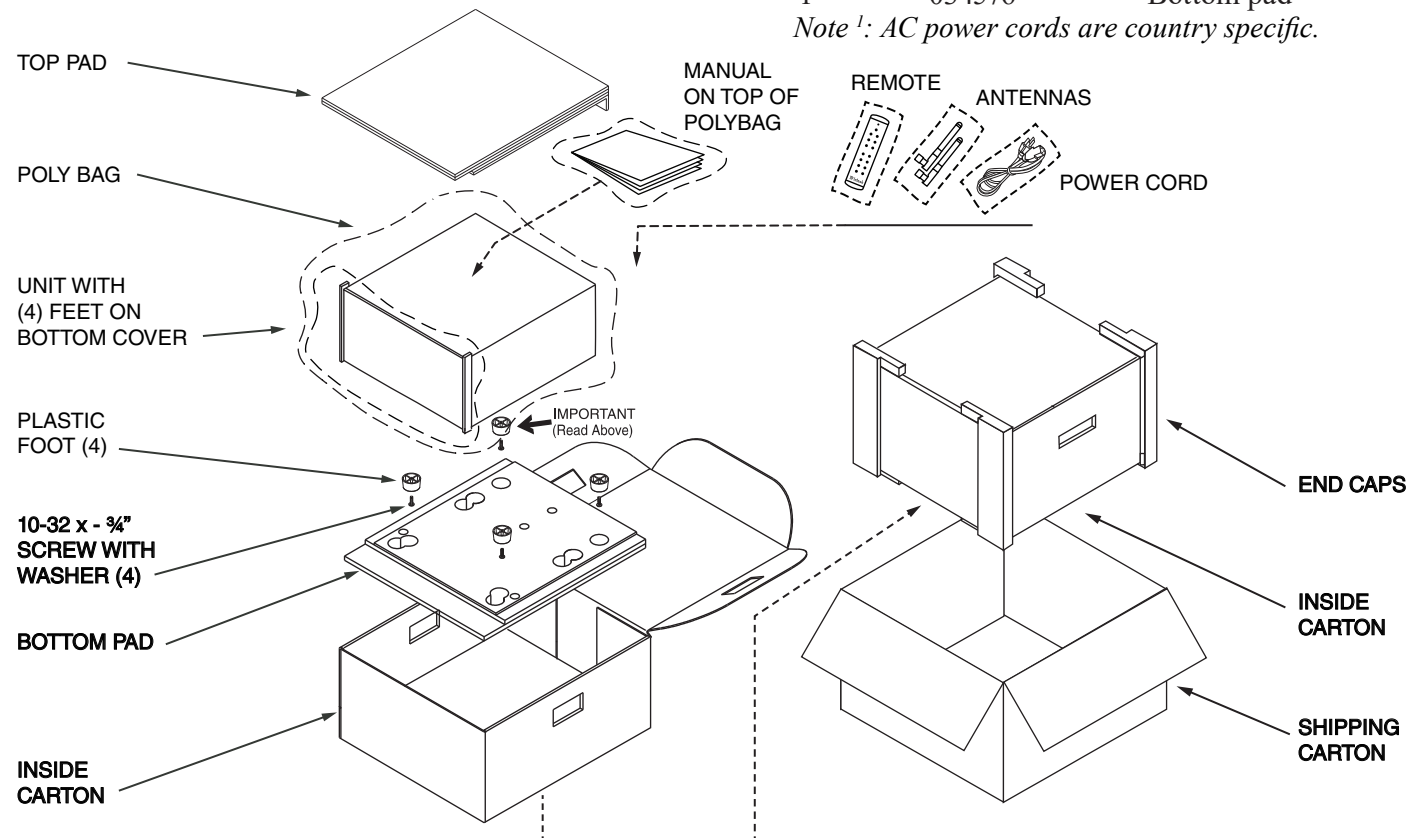
It is very important that the four plastic feet are attached to the bottom of the equipment. This will ensure the proper equipment location on the bottom pad. Failure to do this will result in shipping damage.

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 parts are needed, please contact our Customer Service Department. Refer to page 3.

Parts List

Quantity	Part Number	Description
1	033838	Shipping carton
1	033725	Top pad
1	753073	Manual pack
1	033626	Polybag
4	017937	Plastic foot
4	404080	#10-7/16 washer
4	400159	#10-32 x ¾ machine screw
1	033836	Inner carton
2	034669	End cap
1	HR085	Remote control
2	122476	Wi-Fi antenna
1	Note 1	AC power cord
1	034576	Bottom pad

Note 1: AC power cords are country specific.





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