



Owner's Reference

Owner's Reference PMG Signature 512 DAC

Instructions for Use



Paul McGowan Signature 512 DAC

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Introduction

Owner's Reference PMG Signature 512 DAC

Important Safety Instructions



Read these instructions
Heed all warnings
Follow all instructions



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

Clean only with a dry cloth.

Do not place flammable material on top of or beneath the component.

All PS Audio components require adequate ventilation at all times during operation. Rack mounting is acceptable where appropriate.

Do not remove or bypass the ground pin on the end of the AC cord. Removing or bypassing the ground pin on any electrical component is potentially dangerous and should be avoided for safety reasons. A polarized plug has two blades, one wider than the other. A grounding type plug has two blades and a third grounding prong. All PS products ship with a grounding type plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Unplug this apparatus during lightning storms or when unused for long periods of time.

When making connections to this or any other component, make sure all components are off. Turn off all systems' power before connecting the PS Audio component to any other component. Make sure all cable terminations are of the highest quality.

THERE ARE NO USER-SERVICEABLE PARTS INSIDE ANY PS AUDIO PRODUCT. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL

This device contains FCC ID: 2AQ9Y-OPIZERO3.

Please contact your authorized dealer, distributor, or PS Audio if you have any questions not addressed in this reference manual.

This product is manufactured in the United States of America. PS Audio® is a registered trademark of PS Audio International Inc., and is restricted for use by PS Audio International, Inc., its subsidiaries, and authorized agents.

Rev. A3



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.



The lightning flash with arrowhead within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.





Introduction

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Welcome

Let me begin by offering a warm and heartfelt welcome to the HiFi Family. You've joined a passionate community that believes music isn't just something you listen to—it's something you feel. And with the PMG Signature 512 DAC now part of your system, you're about to feel it in a way you may never have before.

Nearly 14 years ago, we challenged conventional thinking in high-end audio with the launch of the original DirectStream DAC. Back then, nearly every DAC on the market focused on decoding PCM and reconstructing analog from stepped voltage levels—DirectStream did something different—radical, even. It upsampled and converted all incoming data to DSD (also known as PDM), filtered that high-frequency stream with a simple analog low-pass filter, and fed your preamp a signal that was as close to pure analog as digital technology could achieve. It defied expectations—not with flashy specs, but with sound quality that moved people.

And now, here we are.

The PMG Signature 512 DAC is the culmination of everything we've learned over the past decade—and everything we dreamed a reference DAC could be. Designed from the ground up, it retains the elegant simplicity of our original PDM-based architecture but takes it to astonishing new heights. With a completely new digital engine—PureStream 512—developed by our chief engineer Bob Stadtherr alongside aerospace veteran Doug Goldberg, we've reimagined what's possible in digital-to-analog conversion.

Inside your DAC are not just circuits, but innovations: custom low-noise silicon pushing out a high-level DSD stream at 22mHz (DSD512), a ground-breaking FIR filter module called the SpectraWave 64 Sequencer, and an analog output stage derived from our flagship preamplifier. Gone are the video op amps and output transformers of the past—replaced by zero-feedback, high-bandwidth analog stages that preserve every nuance. Every signal path is shielded. Every clock cycle is refined. Every decision made was in service of one goal: musical truth.

The result? A breathtaking leap in clarity, warmth, bass extension, and tonal realism. Measurements have improved dramatically (a full 20dB better SINAD than DirectStream), but more importantly, the sound has reached new emotional depths.

So welcome. Welcome to the pinnacle of digital audio. Welcome to the next chapter in your musical journey. Welcome to the PMG Signature 512 DAC—and to the HiFi Family.

Enjoy the music.

Paul McGowan
Founder, PS Audio



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Unpacking



Figure 1: Front Panel

Item	Description
1	Logo Button (Ready/Operational mode switch)
2	Display and Touch Screen

The following items are included with the PMG Signature 512 DAC:

- Power Cord
- PS Audio Remote
- Quick Start Guide

Carefully unpack the unit and place it in the chosen location. Care should be taken to keep it away from power amplifiers or large, potentially hum-inducing products.



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Connections



Figure 2: Back Panel

Item	Description
1	Fuse holder 230V (refer to panel legend for fuse type)
2	Fuse holder 120V (refer to panel legend for fuse type)
3	Main power switch
4	Power cord receptacle
5	USB type A (thumb drive) port - for firmware updates only
6	Trigger outputs (connect to power amplifier trigger input to control amplifier power with front panel logo button)
Digital Inputs:	
7	XLR (S/PDIF)
8	Coax-2 BNC (S/PDIF)
9	Coax-1 RCA (S/PDIF)
10	Optical (S/PDIF)
11	USB type B
12	I2S-2
13	I2S-1
14	Ethernet (for internal streamer)
Analog Outputs:	
15	Right channel balanced XLR
16	Right channel single-ended RCA
17	Left channel single-ended RCA
18	Left channel balanced XLR



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Connect Inputs

There are multiple methods of connecting digital inputs to the PMG 512 DAC: through the S/PDIF based XLR input (Item 7), Coax (Items 8 & 9), Optical (Item 10), and through USB-B (Item 11) and I²S (Items 12 & 13). S/PDIF is a serial digital interface available as an optical source (Optical) or coaxial source (RCA). Connect your digital sources with any of these cable types. You can connect one or all seven inputs at the same time.

USB-B

USB-B (Item 11) is the preferred method of connection for a direct-to-computer connection and the PMG 512 DAC is capable of processing up to 705.6kHz 24 bit PCM data as well as DSD 64 through DSD256. Connect the PMG DAC to your computer using a well regarded USB-B cable and make sure to set the output of your computer to the highest 24 bit standard. Once connected, your computer should automatically install PMG Signature 512 DAC as a new device if you have a Mac. If you have a Windows operating system and want to use Native DSD, you will need to download the USB driver bundle from our website and install the WHQL driver on your Windows computer.

If you don't use Native DSD, DoP (DSD over PCM) is a standard allowing single rate DSD to travel through the PCM data path. Most programs, such as Roon, Audirvana, JRiver Media Center and Foobar 2000, will automatically convert DSD files to the DoP standards on the fly if the appropriate check box has been enabled. There are no sonic penalties for conversion to DoP as the raw DSD data is unaffected by the process. Windows supports the PCM sample rates required for full DoP without additional drivers.

I²S Input

If not connecting to a computer, PS Audio recommends connecting digital inputs through its I²S (Items 12 & 13) protocol for the best sonic experience. This data link can only be used with another compatible component, such as the PS Audio SACD Transports. Although I²S protocol uses the same connector and cable as HDMI, this is not an HDMI signal. The HDMI connector and cable were chosen to carry the I²S signal because of their superior high-speed data transmission capabilities for multiple clocks and data lines. PS Audio publishes its I²S standard and it has been adopted by multiple other manufacturers as well. Ask your equipment manufacturer if it is compatible with PS Audio's I²S protocol.

I²S is also the only input that can deliver the locked DSD layer of an SACD disc.

Ethernet

The PMG 512 DAC has an internal streamer. It can be connected via an Ethernet cable (Item 14) or using Wi-Fi. For setting up Wi-Fi, see the Streamer section of this manual.

Connect Outputs

The PMG 512 DAC is designed to drive a power amplifier directly or as another input on a preamplifier. The outputs of the DAC are high-performance, high current outputs that can drive long lengths of interconnect cable without degradation.

The PMG 512 DAC has two types of analog outputs: balanced XLR (Items 15 & 18) or single ended RCA (Items 16 & 17). We do not recommend using both outputs at the same time. Most



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amplifiers and preamplifiers will produce 6dB higher level with the balanced outputs relative to the single ended outputs. If you are using both outputs, they will be at different levels. Our preference for connection to a power amplifier or preamplifier is through the balanced XLR outputs of the DAC.

That being said, RCA or single ended outputs will be the typical outputs as many preamplifiers, surround processor receivers, integrated amplifiers, and power amplifiers have only this standard type of input.

Plug either the RCA or the XLR outputs of the PMG DAC into a line level input on the preamp, integrated, amplifier, or subwoofer. Do NOT plug the output of the PMG DAC into a phono or equalized input of any type.

Trigger Ports

Optionally, connect power amps to the trigger ports (Item 6) on the rear panel. Each of the two trigger jacks outputs a +12V signal to connected equipment when the DAC is in operational mode. The +12V signal will stop when the Preamplifier is in ready mode. Ready mode turns off the display and power outputs but keeps power on to critical internal circuitry. For more on this, see Mode Button on page 7. These trigger outputs are typically used to switch on/off compatible power amplifiers when the PMG 512 DAC is active.

Connect Power

Your new PS Audio DAC is supplied with a removable AC Power cord. While the supplied cord is of good quality, it is recommended that you replace it with a high quality AC power cord for optimum performance. It is also recommended that you connect your new PMG 512 DAC to one of PS Audio's award-winning Power Plants.

Power On


Once everything is connected, it is time to power up the PMG 512 DAC. Put the main power switch (Figure 2, Item 3) in the ON position (horizontal line is pressed down). We recommend the master power switch be left in the On position and AC power continue to be supplied even when the DAC is not in use. Instead, use the front logo button (Figure 1, Item 1) to put the DAC in ready mode. This keeps power on to critical circuitry thereby avoiding the stabilizing warm-up period and additional wear on components due to power cycling.



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Product Registration

To register your new PMG Signature 512 DAC, look on the back panel and note the serial number. Using any web browser, go to www.psaudio.com, click Support and select Product Registration from the menu. When you have completed the registration process, go to the Registrations page. The link to this page () is located at the top right hand corner of the website after you are logged in. Click the link then select Product Registrations in the left hand column.

If you do not have web access, you may register via phone. Notification of software upgrades to this product are available only to registered owners via the website and email.



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Main Display

When powered on, "PMG Signature Series" appears followed by the main display as shown in Figure 3.



Figure 3: Main Display

Item #	Description
1	Current Input Connection Status: Green = Connected Red = Disconnected Gray (Streamer Only) = Powered Off
2	Selected Input
3	Volume
4	Track Sample Rate
5	Menu Icon
6	Volume Ring

Inputs

As shown in Figure 3, the main display shows the currently selected input (2). This can be changed three ways: swipe left or right on the input, touch the input and select the input from the pop-up menu, or select the input on the remote. Including the internal streamer, there are 8 input options:

1. I2S 1
2. I2S 2
3. Coax 1
4. Coax 2
5. Optical
6. USB
7. XLR
8. Streamer

Note: To select the streamer from the remote, press the optical button twice.

Volume

The volume level (3) is also on the main display.

- Touching the volume (3) mutes and unmutes the DAC.
- Swiping up or down on the volume (3), changes it by one.
- To make bigger changes to the volume, drag your finger along the volume ring (6).
- Alternatively, you can use the DAC volume and mute button on the remote.

Note: If plugging the PMG DAC into a preamplifier, we recommend setting volume at 100 (the max).

Menu System

Touching the menu icon (5) opens the main menu.

Swipe up and down to navigate the list of menu items. Touch the menu item's current value to make changes. Touch the three dots to enter sub-menus.



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To exit a pop-up menu, touch any area outside the box. To exit a sub-menu, press the return arrow at the bottom of the display. To return to the main display, press the home icon at the bottom of the main menu.

Note: The menu system will time out after 15 seconds.

Streamer

Your PMG 512 DAC comes with a built in Streamer. Stream audio via services like Roon, Tidal via Roon, Qobuz Connect, Spotify Premium, DLNA/UPnP, and ShairPort. (ShairPort is an AirPlay emulator that allows users to stream audio from Apple devices and other AirPlay sources.)

The Streamer can be turned on or off. The PMG DAC leaves the factory with the Streamer off.

To use the streamer:

- Touch the menu icon (Figure 3, Item 5) on the main display to enter the menu system.
- Touch the icon next to Streamer to enter the Streamer pop-up menu.
- It will say "Streamer Off". Touch the green power icon to turn it on.
- If the Ethernet is not plugged in, the pop-up will now say "Wi-Fi disconnected". Touch the Wi-Fi icon and follow the steps to set it up. (See the Streamer: Wi-Fi section of this guide for more detailed instructions.)
- Once your streamer is on and connected to the network via Wi-Fi or Ethernet, [wait 2 minutes for the system to sync up before connecting to it in your streaming app.](#)
- After waiting 2 minutes, open your streaming app. In the app, you will see PMG DAC as a connection option. Select it and start streaming!

For detailed operating instructions, see the Operating Guide starting on the next page.



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Front Panel Controls



Figure 4: Front Panel

The logo button (Figure 4, Item 1) controls whether the PMG 512 DAC is in Operational mode (illuminated) or Ready (dark) mode. Use Operational mode when the unit is in use. The screen and logo button will both be illuminated. When not in use, we recommend using Ready mode. Ready mode turns off the display and outputs but keeps power on to critical internal circuitry, including power supply capacitors, thermally sensitive semiconductors, and integrated circuits. Press the logo button to switch between these two modes.

If you wish to conserve energy consumed by PMG 512 DAC, it will be necessary to use the rear panel power switch. Using this rear panel switch will remove power from critical components. In order to gain maximum performance levels, you will need to turn the power back on at least 1 hour before use.

Should the DAC need to be rebooted, use the rear panel power switch to power cycle the unit. It's best to wait 30 seconds before powering back on.

Volume

The volume level is shown on the main display (Figure 4, Item 2). The volume ranges from 0 to 100. There are three ways to change the volume:

- Use the volume ring along the edge of the screen. Drag your finger along the ring to change the volume.
- Swipe up or down on the volume number to change the volume by 1.
- Use the DAC volume buttons on the remote.

To mute and unmute, touch the volume number or use the DAC Mute button on the remote.

Input

The current input is displayed at the top of the screen. There are three ways to change the input:

1. Swipe right or left on the current input. Continue swiping until you land on the input you want.
2. Touch the current input and a pop-up menu will appear (Figure 5). Touch the radio button of the desired input. After selecting the input, the screen will automatically return to the main display.

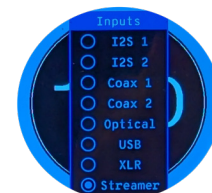


Figure 5: Input Pop-Up



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- Alternatively, select the input from the remote. To select the streamer, press the Optical button twice.

Input Connection Status

The red or green dot (Figure 6, Item 1) above the current input communicates the connection's status. A green dot indicates the connection is good.

- For USB, a green dot indicates that a USB cable is connected to a USB host. A red light indicates that there's no connection to a USB host.
- For S/PDIF, a green dot means there's an active signal on that input with a valid sampling rate.
- For I²S, a green dot means there's a PS Audio I²S source connected with a valid signal.
- For the streamer, a green dot indicates the streamer is on and connected to the network. The streamer also has a gray dot. A gray dot means the streamer has been powered off. See more on this under Menu/Streamer.



Figure 6: Main Display

Menu System

To access the menu system, touch the menu icon at the bottom of the display (Figure 6, Item 2).

Note: Adjusting certain items, such as offsetting the balance or selecting Phase, will replace the menu icon with icons indicating these settings. Touching the icon cluster will still enter the menu system.

To exit the main menu, press the home icon at the bottom of the screen (Figure 7, Item 4). Changes to settings are saved in real time as the changes are made.

Note: The menu system will time out after 15 seconds of inactivity.

To scroll through menu items, swipe up and down. To change an item's setting, touch the value of the item you wish to change. For example, to change the balance, touch 0 (Figure 7, Item 1). To exit an item's pop-up menu, touch any area outside the pop-up.

Sub-menus are indicated by three dots (Figure 7, Item 2). Press the dots to enter the sub-menu.

To enter the Streamer and Versions menu, touch the icon (Figure 7, Item 3).

Main Menu

The main menu has the below items:

- Balance
- Audio (sub-menu)
- System (sub-menu)



Figure 7: Main Menu



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- Streamer
- Versions (informational only)

Balance

The Balance feature allows you to adjust the center location of the stereo image. The balance steps are each 1/4dB and the range is 48 steps each way for a maximum shift of 12dB. In addition, you can set to Max Left or Max Right to apply maximum attenuation to the other channel. In addition to the below, the balance button on the remote can be used.

The default is 0. To use this feature:

- Touch 0 or the current balance to open the Balance pop-up (Figure 8).
- Touch or drag the slider right of center to reduce the gain of the left channel, causing the image to come more from the right channel.
- Touch or drag the slider left of center to reduce the gain of the right channel, causing the image to come more from the left channel.
- To easily return the balance to 0, touch the word "Balance."
- Touch anywhere outside the pop-up to exit.



Figure 8: Balance

When the balance is set to anything other than the center position, there will be an icon on the Home screen to indicate this state.

Sub-Menus

There are two sub-menus in the Main Menu: Audio and System. They are indicated by three dots (Figure 7, Item 2). To enter a sub-menu, touch the three dots. To exit a sub-menu, touch the return arrow at the bottom of the sub-menu (Figure 9, Item 1). To return to the main display, press and hold the return arrow for three seconds. A down arrow (Figure 9, Item 2) indicates there are more items at the bottom of the list. To view them, swipe up on the list. An up arrow indicates there are more items at the top of the list. Swipe down to view them.

Sub-Menu: Audio

The Audio Sub-Menu (Figure 9) has the below features:

- Fixed Volume
- Max Volume
- DSD Rate
- Phase Out
- Preemphasis
- Ground Lift (sub-menu)
- Input Power (sub-menu)



Figure 9: Audio Sub-Menu



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Audio Sub-Menu: Fixed Volume

The Fixed Volume feature allows you to set the volume at a fixed value so that it cannot be changed. This is useful when feeding the PMG DAC into a preamplifier. When Fixed Volume is enabled, the volume up / down keys will no longer function. All inputs are affected by the Fixed Volume setting. The fixed volume setting is saved and restored on power downs.

The default is Off. To use this feature:

- Touch the current value or Off to open the Fixed Volume pop-up (Figure 10).
- Touch the bar or drag your finger across the slider to set the fixed volume.
- To easily turn this off, touch "Fixed Vol."
- Touch anywhere outside the pop-up to exit.



Figure 10: Fixed Volume

Audio Sub-Menu: Max Volume

Max Volume sets the upper limit of the main volume control.

The default is 100. To use this feature:

- Touch the current value to open the Max Volume pop-up (Figure 11).
- Touch or drag the slider to set it from 1-99.
- Set to 100 to disable this feature.
- To easily return to 100, touch "Max Vol."
- Touch anywhere outside the pop-up to exit.



Figure 11: Max Volume

Note: This value is ignored if the Fixed Volume setting is enabled.

Audio Sub-Menu: DSD Rate

DSD Rate lets you select the sample rate for your tracks.



Figure 12: DSD Rate

The default is 512. To use this feature:

- Touch the current value to open the DSD Rate pop-up (Figure 12).
- Touch the radio value of the sample rate you prefer.
- Touch anywhere outside the pop-up to exit.



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Audio Sub-Menu: Phase Out

Phase Out inverts the phase 180 degrees so that positive wave forms become negative and vice versa. This can be useful when listening to certain source material that may have inverted absolute polarity.

Note: Some listeners are more sensitive to absolute polarity than others.

The default is off. To use this feature:

- Touch the toggle to turn phase on or off.
- When on, the toggle turns green (Figure 12).

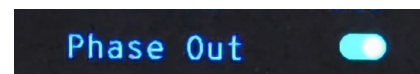


Figure 12: Phase Out On

Audio Sub-Menu: Pre-emphasis

Some Compact Discs were recorded with pre-emphasis in order to improve the performance at high frequencies. If you are playing a track that was recorded with pre-emphasis, you can engage the de-emphasis filter using the pre-emphasis option. The options are Off, On, or Auto. When on auto, this allows you to see if pre-emphasis has been detected and de-emphasis is active.

The default is Off. To use this feature:

- Touch the current mode to open the Pre-emphasis pop-up (Figure 13).
- Touch the radio value to choose Off, On, or Auto.
- Touch anywhere outside the pop-up to exit.



Figure 13: Pre-emphasis

Audio Sub-Menu: Ground Lift

Ground lifts reduce or eliminate ground-related noise arising from ground loops in audio cables. This opens the connection between the PMG 512 DAC ground and the shielding conductor of the audio cables, leaving those cables grounded only at their opposite end.



Figure 14: Ground Lift enabled on I2S 1, Coax 1 and Coax 2

The default is Grounded. To use this feature:

- Touch the three dots to enter the Ground Lift sub-menu (Figure 14).
- Touch the toggle on any inputs you want to enable ground lift on. When ground lift is enabled, the toggle will turn green.
- Touch the return arrow at the bottom to return to the Audio sub-menu.

Audio Sub-Menu: Input Power

Input power allows you turn power off and on all inputs.



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The default is On. To use this feature:

- Touch the three dots to enter the Input Power sub-menu (Figure 15).
- Touch the toggle of the input you want to turn off or on.
- Touch the return arrow at the bottom of the display to return to the Audio sub-menu.



Figure 15: Input Power with all inputs on

System Sub-Menu

Use the System sub-menu to access the below features:

- Backlight
- Remote Code
- Transport In
- Trigger
- Input Name (sub-menu)
- Streamer Firmware
- Factory Reset

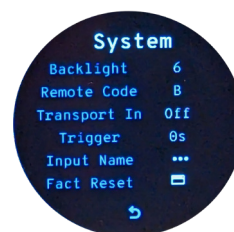


Figure 16: System Sub-Menu

System Sub-Menu: Backlight



Figure 17: Backlight

The Backlight setting allows users to adjust the brightness of both the Logo Button and the Display to complement the room lighting. Options range from 1–10 with 10 being the brightest.

To set the brightness:

- Touch the current value to open the Backlight pop-up (Figure 17).
- Touch the bar or drag your finger to increase or decrease the brightness. Touch "backlight" to return to 6, the default.
- Touch any area outside the pop-up to exit.

System Sub-Menu: Remote Code

The PMG remote sends RF code to your PMG 512 DAC. In addition, it sends IR codes so that it can work with your PS Audio legacy devices, such as the PerfectWave or Stellar series. The remote code menu allows you to change the IR code. This is helpful if you have a PS Audio legacy unit and are experiencing interference with other devices, such as your television.

Both the unit and the remote will need to be updated when changing this setting.

Note: Except for the DSD MK2, PerfectWave units only work with code A, the default.

There are four options: Off, A, B, C

- Off: Your PMG remote will no longer work with the PMG DAC. However, it will still work with other devices..
- A: This is the default. It works with the default code on Stellar and PerfectWave



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devices. This is IR code 1 on Stellar Products. *It is the only option that will work with all PerfectWave devices.*

- B: Select Code B if you are experiencing interference with your other devices (such as an LG television). In order for this to work with your Stellar products or the PerfectWave DSD MK2, make sure the IR 2 code is selected on those devices as well. *Other than the DSD MK2, this will not work with PerfectWave devices.*
- C: If you don't want to use this remote for your Stellar or PerfectWave products, select C.

To change remote codes on the unit:

- Touch the current remote code to open the Remote Code pop-up.
- Touch the radio button that corresponds to the code you want to use (Figure 15).
- If applicable, ensure that the corresponding remote code is also selected on your Stellar units.
- Touch anywhere outside the pop-up to exit.

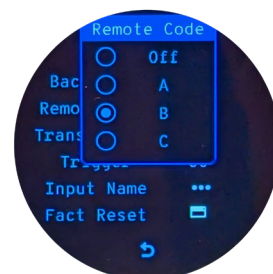


Figure 18: Remote Code

To update the remote:

- Press and hold both the center button of the navigation ring and the light bulb for three seconds. The green light around the Off key blinks once for A, twice for B, and three times for C.

System Sub-Menu: Transport In

When selected, the Transport In setting causes the unit to automatically switch to that input when you press a Transport button on the PMG remote.

Note: This will only work when using the PMG remote with PS Audio SACD Transports.

The default is Off. To use this feature:

- Touch Off (or the current input selected) to open the Transport In pop-up.
- Touch the radio button of the input connected to your Transport (Figure 19).
- Touch any area outside the pop-up to exit.



Figure 19: Transport In

System Sub-Menu: Trigger Timeout

The Trigger Timeout setting allows the trigger output to be delayed a period of time after the PMG DAC is activated. This adjusts the time between placing the PMG 512 DAC in Operational mode and powering up any other units plugged into the trigger output of the DAC. The delay can be set at intervals between 0 to 1 minute. The default is Off,



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which means the signal is sent immediately.

To set the delay:

1. Touch off or the current delay to open the Trigger Timeout pop-up (Figure 20).
2. Touch the radio button for the time delay you want.
3. Press any area outside the pop-up to exit.

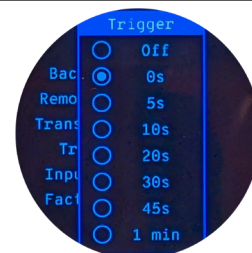


Figure 20: Trigger

System Sub-Menu: Input Name

The Input Name sub-menu allows users to rename input connections from a preset list of common names to aid in identifying the connected source.

To assign the names AirLens, Blu-ray CD, DWP, DVD, Game, or PC:

- Touch the three dots to enter the Input Name sub-menu.
- Touch "Default"(or the current name) on the connection you want to rename (Figure 21-1).
- Touch the radio button to select the name you want (Figure 21-2).
- Press any area outside the pop-up to exit and return to the Input Name sub-menu.
- The input is now renamed (Figure 21-3).
- Touch the return arrow at the bottom of the screen to return to the System Sub-Menu.

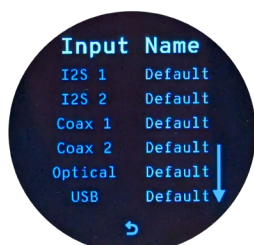


Figure 21-1: Input Name Sub-Menu

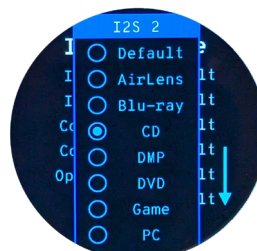


Figure 21-2: I2S 2 Pop-Up Menu

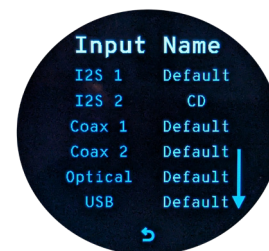


Figure 21-3: I2S 2 Renamed

System Sub-Menu: Streamer Firmware

The Streamer Firmware menu searches for updated streamer code and then gives you the option to update your unit.

To update the Streamer's firmware:

- Touch the white icon next to Streamer Firmware.
- A dialog box will appear and say "Searching for new firmware."
- If a new firmware is available, the screen will show the current firmware and the latest firmware. It will ask "Update Now?"
- To update, touch the green check mark. To cancel, press the red x.



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System Sub-Menu: Factory Reset

The Factory Reset setting returns all menu items to their original factory settings.

Note: All custom settings will be lost.

To factory reset the unit:

- Touch the white icon next to Factory Reset.
- A dialog box will appear and ask "Restore settings to defaults?" (Figure 22-1)
- Press the green check mark to restore settings.
- The dialog box will say "Resetting" (Figure 22-2). After a few seconds, the DAC will automatically restart at the main menu with factory settings restored.

Note: If you pressed Factory Reset by mistake, press the red X to cancel and return to the system sub-menu. Alternatively, you can touch anywhere outside of the pop-up.



Figure 22-1: Factory Reset



Figure 22-2: Resetting

Main Menu: Streamer

The Streamer pop-up menu has four different displays, depending on whether the Ethernet is plugged in, Wi-Fi is set up, and if the power to the streamer is off or on. Please note that PMG DACs are shipped from the factory with the Streamer powered off, so on first start up, you will see figure 23-4.

Display 1: Ethernet is not plugged in, Wi-Fi is disconnected and streamer is on.



Figure 23-1

Display 2: Ethernet is plugged in and streamer is on.



Figure 23-2

Display 3: Wi-Fi is setup and streamer is on.



Figure 23-3

Display 4: Streamer is off.



Figure 23-4



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The streamer menu allows you to do two things:

- Turn power to the streamer off and on
- Set up Wi-Fi

Streamer: Power On

The PMG DAC arrives with the Streamer powered off. To power on the Streamer:

- Touch the white icon next to Streamer. The Streamer pop-up menu will appear (Figure 23-4).
- Touch the green power button.
- The Streamer Initializing screen will appear (Figure 24). Wait while the Streamer initializes.
- Once it is done initializing and has been powered on, the Streamer pop-up menu will reappear. It will display one of the below:
 - If Ethernet isn't connected, the pop-up will have the option to connect Wi-Fi (Figure 23-1).
 - If Ethernet is connected, the pop-up will show the IP Address (Figure 23-2). Wait a couple minutes for the system to sync up before connecting to the PMG DAC in your streaming app.



Figure 24: Streamer Initializing

Streamer: Power Off

If you aren't using the Streamer and want to power it off:

- Touch the white icon next to Streamer. The Streamer pop-up menu will appear. If Ethernet is not plugged in, it will look like Figure 23-1. If Ethernet is plugged in, it will look like Figure 23-2. Either way, touch the green power button.
- It will ask "Power off Streamer?" (Figure 25). Touch the green check mark.

Note: If this was a mistake, press the red X or touch anywhere outside the pop-up.

- The Streamer pop-up will reappear and show "Streamer Off" (Figure 23-4).



Figure 25: Power Off?

Streamer: Setup Wi-Fi

If you want to use Wi-Fi to connect the streamer, follow the below steps:

- If an Ethernet cord is plugged in, unplug it. Wi-Fi cannot be set up while Ethernet is plugged in. If the Ethernet is plugged in, the Streamer pop-up will only have the option to power on or off. (Figure 23-2)
- Touch the Wi-Fi icon (Figure 23-1).
- The screen will say "Starting AP Mode Setup services" (Figure 26). Wait while it loads the instructions for connecting to Wi-Fi.
- Once the instructions are loaded, Step 1 is displayed on the screen



Figure 26: Starting AP Mode



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(Figure 27-1). Touch the QR code to enlarge it.

- Scan the QR Code (Figure 27-2) with your device. (Put your phone/tablet in camera mode and hold it up to QR code as seen in Figure 27-3.) Touch the QR code again to minimize it.
- Some devices automatically pull up the PMG Wi-Fi Setup web page (Figure 27-4). If yours does not:
 - Click the next arrow at the bottom of the screen (Figure 27-1).
 - A "Step 2" screen appears. Touch the QR code to enlarge it. Scan it to bring up the PMG Wi-Fi Setup web page (Figure 27-4).
 - Touch the QR code again to minimize it.



Figure 27-1: Wi-Fi Step 1



Figure 27-2: QR Code

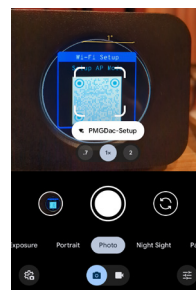


Figure 27-3: Scan with your camera



Figure 27-4: Wi-Fi Setup

- Once on the "PMG Wi-Fi Setup" page (Figure 27-4), fill in your Wi-Fi Network Name or SSID (a list of available networks may appear under the form) and Wi-Fi Password. Then press the blue "Connect Wi-Fi" button. Provided you entered the information correctly, you will see a green screen with "Setup Complete!" on your phone or tablet (Figure 28-1).

Note: If the network and password were not entered correctly, the DAC's display will read "ERROR Invalid password" and you will need to reenter the information.

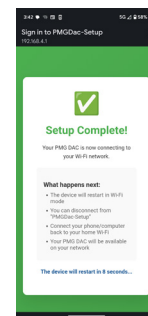


Figure 28-1: Setup Complete



Figure 28-2: Configuring Wi-Fi

• Meanwhile, the DAC's display will say "Configuring Wi-Fi" (Figure 28-2). Once the process is complete, it will say "Success!" and then shows the Streamer pop-up menu with the network information (Figure 28-3). Once successfully connected to Wi-Fi, wait a couple minutes for the system to sync up before connecting to the PMG DAC in your streaming app.



Figure 28-3: Pop-Up with Wi-Fi Connected



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Note: If at any time during the Wi-Fi process it gets stuck or you want to restart, press the arrow on the setup instructions until you are at the final screen. Touch the red X to cancel. When it asks, "Cancel Wi-Fi Setup?" touch the green check mark to confirm. For more troubleshooting tips, see the troubleshooting section of this manual.

Streamer: Disconnect Wi-Fi

To disconnect from Wi-Fi:

- Touch the white icon next to Streamer to enter the Streamer pop-up menu.
- Click on the red trash can (28-3).
- It will ask "Forget AP?" (Figure 29-1). Touch the green check mark to continue.

Note: If this was a mistake, press the red X or touch anywhere outside the pop-up.

- The display will say "Forgetting AP..." (Figure 29-2). This could take 30 seconds.
- Once complete, the streamer pop-up menu will return. Please note it may take 10 seconds before it shows that Wi-Fi is disconnected (Figure 29-3).



Figure 29-1: Forget AP?



Figure 29-2: Forgetting AP



Figure 29-3: Wi-Fi Disconnected

Main Menu: Versions

The Versions menu is informational only. It has the unit id, firmware version, and NMS (streamer version). When calling for technical support, please have this information available.

To access the Version Screen:

- Touch the white icon next to Versions to open the pop-up menu.
- Press anywhere outside the Version pop-up to exit.



Troubleshooting

Owner's Reference PMG Signature 512 DAC

Unable to connect to PMG DAC in my streaming apps

If you connect to Wi-Fi and wait 2 minutes but don't see the PMG DAC as an option in your streaming apps (or it appears but you cannot select it), exit out of the streaming app, wait a minute, and then go back in.

PMG DAC not appearing when switching streaming apps

If you switch streaming apps, for example go from Roon to Qobuz, and are unable to connect the PMG DAC to the current streamer, follow the below steps:

- Go back to the streaming app you were previously using. Change the streamer's output device back to your phone or another default device.
- Return to the new streaming app and you will now be able to connect to the PMG DAC.

Note: Just closing the previous app will not disconnect it from the PMG DAC. You need to actually disconnect the PMG DAC from the streamer.

Stuck waiting for Wi-Fi to set up

If you are attempting to set up Wi-Fi and it gets stuck searching for a network, power cycle the unit or follow the below steps:

- Go to the Main Menu and touch the three dots to enter the Audio Sub-Menu
- Find Input Power and touch the three dots to enter the Input Power Menu.
- Find the Streamer and touch the toggle to turn off power to the streamer.
- Wait 30 seconds and then turn it on again. The Streamer Pop-Up menu will once again appear when you click on the Streamer icon.



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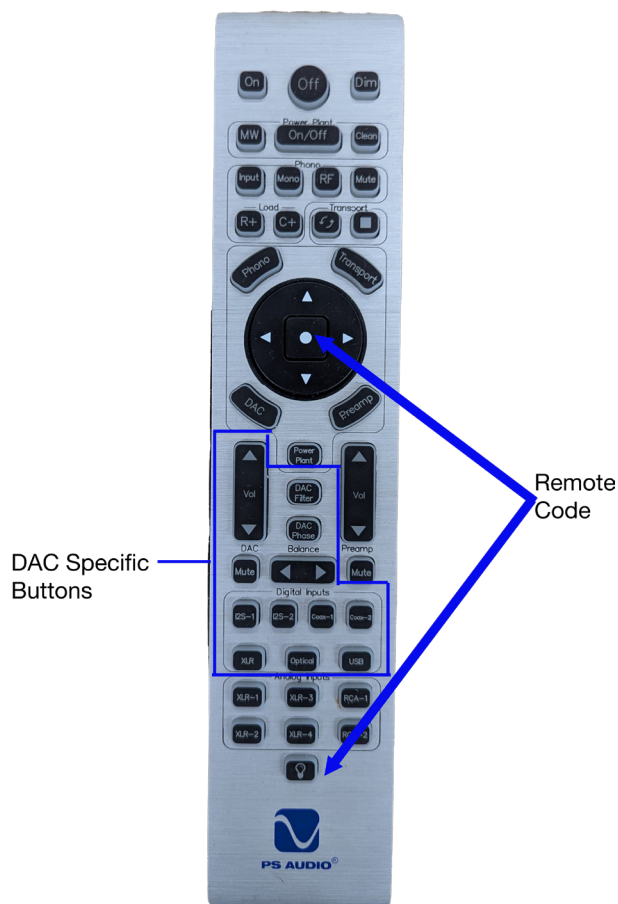
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Remote Control

The remote included with the PMG DAC works with all PMG products and most legacy products.

- **On/Off:** Use the Off button to put the unit in Ready Mode. Use the On button to return it to Operational Mode.
- **Dim:** Press the Dim button to turn off the display and all the indicators on your PMG unit. Pressing any button on your remote control will wake up and reactivate the display and indicators for 7 seconds. After 7 seconds with no button activity, the display will go dark again. Press the On button to restore the DAC display to normal operation.
- **DAC Specific Buttons:**
 - Volume and Mute
 - DAC Filter: Press this to change filters
 - DAC Phase: Press to turn phase on/off.
 - Balance: Press arrows to adjust balance. This works for both Preamp and DAC. To ensure you are changing the DAC balance, press DAC volume first.
 - Streamer Input: To select the streamer input, press the Optical button twice.
- **Light Bulb:** Lights up or dims the remote buttons.
- **Remote Code:** Hold the center button in the navigation ring and the light bulb for three seconds to change remote codes. The off button will flash green once for Code A, twice for Code B, and three times for Code C.

Note: When the remote code is changed on the remote, it also needs to be changed on the unit. Go to System/Remote Code in the PMG DAC menu to update it.



Note: Press Optical button twice to select streamer.



Reference

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PMG Signature 512 DAC Specifications

Physical:	
Unit Weight	30.3 lbs [13.61 kg]
Unit Dimensions	14 3/4" x 17 1/2" x 4 3/8" (with feet) 375 mm x 445 mm x 112 mm (with feet)
Shipping Weight	40.3 lbs [18.3 kg]
Shipping Dimensions	20.5" x 24" x 10" 521 mm x 610 mm x 254 mm
Color Options	Black Silver
Power Requirements:	
Input Power	Auto Voltage: 120VAC or 230VAC 50 or 60 Hz
Power Consumption	30W
Digital Audio Inputs	
Inputs	I ² S (2), Coax (2), XLR Balanced (2), Optical, USB
Sample Rates	<u>S/PDIF Optical</u> : PCM 44.1KHz, 48.0KHz, 88.2KHz, 96.0KHz, Up to 24 bits <u>S/PDIF Coax and XLR</u> : PCM 44.1KHz, 48.0KHz, 88.2KHz, 96.0KHz, 176.4KHz, 192.0KHz, Up to 24 bits. DoP64 <u>I²S</u> : PCM 44.1KHz, 48.0KHz, 88.2KHz, 96.0KHz, 176.4KHz, 192.0KHz, 352.8KHz, 384.0KHz, 705.6KHz, 768.0KHz, up to 32 bits. DSD64, DSD128, DSD256, DSD512, DoP64, DoP128, DoP256 <u>USB</u> : PCM 44.1KHz, 48.0KHz, 88.2KHz, 96.0KHz, 176.4KHz, 192.0KHz, 352.8KHz, 384.0KHz, Up to 32 bits. DSD64, DSD128, DSD256, DoP64, DoP128, DoP256
Analog Audio Output:	
Connector	RCA single ended or balanced, XLR balanced
Output level high, maximum	4 VRMS Balanced 2 VRMS Single Ended
Output Impedance	<100Ω/<200Ω



Reference

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Frequency Response	20-20KHz +/- 0.25dB
THD+N @ 1KHz (full scale)	<0.001%
Output Stage	High-speed op-amp with discrete buffers
Data Handling:	
Format	PCM or DSD
PCM Input	Up to 768KHz 32 bits
DSD Input	Up to DSD512
DSD Output	DSD128, DSD256, DSD512 (user selectable)
Analog Conversion method	Single bit ladder DAC
I2S Digital Input:	
Connector	HDMI
Format	PCM or DSD. DoP on all inputs as well as raw DSD on I ² S inputs
USB Digital Input:	
Connector	USB "B" Type
Format	PCM, DoP v1.1 (DSD over PCM), or Native DSD
Transfer mode	Asynchronous
Streamer:	
Connectivity	Roon Ready Tidal via Roon Qobuz Connect Spotify Premium DLNA/UPnP ShairPort
Network Support	Wi-Fi: IEEE 802.11 b/g/n/ac (2.4 & 5GHz dual band) 10/100/1000 Ethernet



Warranty

Owner's Reference PMG Signature 512 DAC

Registering

Product registration

By registering your product, you are validating the start date of your limited warranty. This limited warranty is in effect for 3 years from the date the unit was first purchased from PS Audio or its dealers and agents. If you do not register your product within 30 days of service, a copy of your purchase receipt from an authorized PS Audio dealer may be used as proof of purchase to establish the warranty start date. If no proof of purchase from an authorized PS Audio dealer or registration is provided, the production date of the product will be used to determine the warranty start date. You can register your product online, by phone, by mail, or by email.

Coverage

What this warranty covers

This warranty covers defects in material and workmanship for products purchased from PS Audio or its authorized dealers and agents. In the event your product fails, your sole remedy under this limited warranty shall be to return the product to PS Audio or an authorized PS Audio repair center. At the option of PS Audio, the product will be repaired without charge for parts or labor, replaced, or the purchase price refunded through the original point of purchase.

Shipping

Shipping

You are responsible to pay for the safe and proper shipment of the warranted product to PS Audio or its authorized repair center. Under this limited warranty, PS Audio or its authorized repair center will pay the cost of returning the repaired or replacement product to you.

Not Covered

What this warranty does not cover

This warranty does not cover damage due to:

- Accidents, carelessness, improper transportation, misuse, neglect, or abuse
- Failure to follow the operating instructions that are provided by PS Audio in the Owner's Reference Manual (available for download at www.psaudio.com)
- Use in any manner inconsistent with PS Audio's operating instructions (available for download at www.psaudio.com)
- Lack of routine maintenance
- Connection to an improper voltage supply
- Alterations or modifications to the unit
- Improper or unauthorized repair, including repairs not authorized by PS Audio or a PS Audio authorized repair center



Warranty

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- Fire, lightning, flood, "Acts of God," or other contingencies beyond the control of PS Audio
- Products purchased through an unauthorized source (if you have questions as to whether or not a dealer is authorized, please contact customer support at www.psaudio.com)
- Products with a factory-applied serial number that has in any way been altered, defaced, or removed

Limitations

Limitations under this warranty

In no event will PS Audio's liability to you exceed the original purchase price of your unit. This warranty does not cover the cost of custom installation, customer instruction, setup adjustments, or signal reception problems. Consequential and incidental damages are not covered under this warranty. However, some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you. In the event that your warranted product cannot be repaired, PS Audio will either replace or refund the cost of the unit. We reserve the right to replace any out-of-stock, discontinued, or limited edition products with a comparable product. Discontinued products may not be available for warranty.

Warranty Transfer

Warranty transfer

This warranty is for the benefit of the original purchaser of the product. The warranty may be transferred to a subsequent purchaser during the 3 year warranty period. To do this, you must contact PS Audio directly to set up a transfer of warranty registration.



If you require service in North America

Warranty Service within North America

Please contact PS Audio customer support for service assistance, help with locating an authorized PS Audio repair center, help with the operation of a product, or for more information.

Obtain an RMA number

Obtaining an RMA#

In order to receive warranty service, you must first obtain a Return Merchandise Authorization Number (RMA#) prior to returning any item. Please contact PS Audio or an authorized PS Audio repair center to receive an RMA#. The RMA# must be on all returned items. If it is not clearly marked, PS Audio will return the package back to you, freight collect.

Use original packing

Packaging and Shipping

Original packaging should be used for the safe transit of your PS Audio unit to the repair center. If you do not have the original packaging, PS Audio can sell and ship replacement packaging to you. You are responsible for the cost of shipping the product to a PS Audio authorized repair center. You should insure the product for its full retail cost, in the event it gets lost or damaged in transit. PS Audio is not responsible for damage incurred during the transit of products sent to us. Shipping your product in non-PS Audio packaging may void this warranty. PS Audio reserves the right to charge you for new factory packaging to return your product after a repair.

State law

State Law

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

If you are outside the US

International Warranty Service

PS Audio has authorized distribution in many countries of the world. In each country, the authorized importing distributor has accepted the responsibility for warranty of the products sold by that distributor. Warranty service should be obtained where the product was purchased.

Changes to Our Products

PS Audio reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products, and to change the prices or specifications of any products without notice or obligation to any person.



Notes

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At PS Audio, we're family.

Not just a family that runs in bloodlines, but in frequencies.

Because while we may not all share the same genes here, we are all related by a passion, nay, obsession with listening to the music we love at the highest, most breathtaking quality possible.

And in our minds, that makes us kin.

In fact, we believe that every nutty, hertz counting audiophile out there is part of our tribe.

That's how we've built our company over the last 50 years - with the kind of care and respect that you give to your family.