



PS AUDIO®

Owner's Reference

Owner's Reference DirectStream Memory Player

Instructions for Use



DirectStream Memory Player™

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Rev A



PS AUDIO®

Introduction

Owner's Reference DirectStream Memory Player

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 unless absolutely necessary to reduce hum from ground loops of connected equipment. This may cause RFI (radio frequency interference) to be induced into your playback setup. 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 fuses inside this product.

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

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

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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.





PS AUDIO®

Introduction

Owner's Reference DirectStream Memory Player

Thank You

Thank you for your purchase of the PS Audio® DirectStream Memory Player.

Universal Disc Player

The DirectStream Memory Player (DMP) is a state-of-the-art universal disc transport capable of playing most forms of optical disc, including, AVCHD, HRx, SACD, CD, CD-R/RW, DVD±R/RW, DVD±R DL. In addition to DMP's ability to play these discs, it can also play multiple formats, like FLAC, APE, WMA, MP3, M4A, AAC, DTS, AC3, WAV, DSF, MKA, PCM, OGG, from discs or USB input.

Unique Architecture

At the heart of DMP is an advanced version of core PS Audio technology, the Digital Lens. Invented in 1993 by PS Audio founder Paul McGowan and chief engineer, Bob Stadtherr, the Digital Lens focuses digital data into a perfect stream, unaffected by the transport's mechanical and electrical properties.

Less Sensitive to Jitter

In digital audio, timing is everything. Jitter, noise, and a lack of isolation have major impacts on sound quality, especially affecting lower resolution media such as CD. DMP's advanced Digital Lens technology solves timing, noise and isolation problems through a unique combination of buffer memory and FPGA based digital processing.

Up until DMP's advanced Lens technology was introduced, the internal Digital Lens found in the older PerfectWave Transport relied on an intelligent RAM buffer to isolate digital data from the mechanical optical drive and laser mechanism. Separated from the CD reading device, data accumulated in the Lens' buffer until output through a fixed low jitter clock to the DAC.

New Lens Architecture

After eight years of research and two years of development, PS engineering has been able to shorten the memory requirements and improve the timing of digital audio data. The new Lens takes advantage of advances in semiconductor architecture found in FPGAs (Field Programmable Gate Array). Using a single large scale integrated FPGA, PS chief DMP architect, Bob Stadtherr, devised a segmented structure including intelligent RAM, two-way isolated communication with the drive, and near-field output latches controlled by an ultra-low jitter fixed clock.

Play the DSD Layer on SACD

DMP is unique in its ability to deliver DSD, long trapped in the protected layer of SACD discs, to PS Audio DirectStream series DACs. The protected DSD layer of SACD has long been available only through D/A converters built in to players and a few receivers and surround processors. These internal D/A processors, while adequate, were never capable of playing back stored music at the quality and performance levels enjoyed by mastering engineers.

With the introduction of DMP, owners of our DirectStream series of DACs can uncover all that they have been missing. Based on a proprietary handshake protocol between DMP and PS Audio DACs, through our advanced I²S interface, pure DSD is streamed to, and processed in, the same reference quality DAC used by mastering engineers like Gus Skinas, Cookie Marenco and Steve Hoffman, to name a few. DMP will playback pure DSD only through a PS protected DAC to prevent copyright and copying violations of the master DSD layer. Only PS Audio DACs have this ability. Other DACs employing PS Audio's I²S protocols will not deliver DSD.



PS AUDIO®

Introduction

Owner's Reference DirectStream Memory Player

Getting Data Out of DMP

There are three ways to get digital audio data out of the DMP: S/PDIF, AES/EBU or I²S HDMI. I²S is the preferred method if you have a PS Audio DAC or any manufacturer's DAC that can receive it. Three such I²S interface are provided, allowing for 6-channel high resolution audio to be streamed from DMP.

S/PDIF (and AES/EBU) are the standard delivery methods found on all transports and, while excellent, remain a slightly compromised format.

I²S Is the Preferred Delivery Method

Standard digital outputs take three separate internal clocks along with the raw music data and combine them into one stream to the DAC. This mashup of music and clocks causes the audio to sound flat and harsh compared to I²S.

A much better way of delivering the music is what I²S does. By transferring the clocks and data on separate wires within the HDMI cable, the audible results are impressive. Simply use any high quality HDMI cable between the DMP and appropriate DAC and you are transferring data perfectly, through I²S. The quality of this cable matters much to the sound quality. Experiment.

A growing number of DACS and devices are adopting the PS Audio HDMI standard for digital audio transmission because of its superior audio quality.

Playback of Stored Data

The front panel USB input on DMP is available for small music collections stored on USB drives. Plug in a USB thumb drive and its contents can be accessed and played back through DMP. While the instrument itself is capable of handling large numbers of tracks, selection can become cumbersome if there are too many.

Tracks from the data drive are displayed in small groups on DMP's touch screen, and navigating larger libraries can be time consuming. PS engineering added this input as a courtesy port offering quick access to a friend's favorite album or track. We imagine being at a consumer audio show and customers wishing to hear music stored on their thumb drives will find this input convenient and excellent sounding.

New User Interface

DMP enjoys a new user interface that includes song titles and tracks that can be read from a distance. Like its predecessor, the PWT, album art can be automatically downloaded for CD and SACD when DMP is connected to the internet.

Every time you play a CD (and are connected to the internet) a copy of the cover art and song titles are kept for you on your own private library page, accessed through our website. From your personal page it is a simple matter to correct any of the CD or SACD's information, change cover art and polish your CD collection.



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player

Location

LOCATION

A good location for DMP is in a cabinet or on a shelf at an easily accessible height.

The IR (infrared) receiver for the remote is located to the left of the touch screen. A direct line of sight will help with DMP's IR sensor.

PerfectWave products, such as DMP and DirectStream DAC (DSD), were designed to stack on top of each other if they are not placed on separate shelves. To do this, remove the feet from the unit you wish to place on top of the stack. Carefully place the top unit so it rests on the bottom unit. You will note that the bottom of the corners of each PerfectWave piece is specially designed to mate with the top corners of another PerfectWave.

Digital Outputs

DIGITAL OUTPUTS

DMP offers multiple digital output choices including: XLR (AES/EBU), RCA and I²S. All outputs are capable of delivering high-definition digital audio signals.

DMP provides three I²S connectors that transfer I²S digital audio through the use of an HDMI cable. This data can only be used with another compatible component, and will not work in other HDMI equipment as the I²S format incorporated does not comply with the HDMI standards. 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.

Unique to DMP is its ability to deliver the locked DSD layer of SACD to authorized PS Audio DACs, such as DirectStream and DirectStream Junior. Future PS Audio DACs may also be included. This feature is restricted to PS Audio DACs through a digital handshake between DMP and enabled PS Audio DACs. These restrictions are necessary to protect Sony and other label copyright agreements from illegal copying activities.

HDMI for I²S

Pure DSD from SACD is possible only through DMP's I²S outputs. Using a high quality HDMI cable, the stereo, or multi-channel DSD master layers will connect the authorized PS Audio DACs. DMP's same I²S outputs, connected to any other DAC using PS Audio's I²S protocols will not output the DSD layer. Instead, a downsampled high resolution PCM signal will be delivered.

DACs without I²S and without authorization from PS Audio can also enjoy higher resolution audio downsampled from the SACD layer through any of DMP's other outputs, such as XLR and RCA.

Unpacking

UNPACKING THE UNIT

- Carefully unpack the unit. Use the included cotton gloves to remove the unit and place it in the chosen location.
- The piano black top cover has a protective plastic film. Remove this film.
- Connect DMP to your digital sources using the appropriate connections.
- Connect the AC cable into the receptacle in back and plug the unit into your PS Audio Power Plant or into the wall.

PS Audio products come from the factory with a 3-year warranty. Please register your new DMP. Registration takes just a few minutes, helps us inform you about future upgrades, keeps track of your serial number and allows us to maintain the highest standards of product quality of any company.

Register the Unit

To register your new unit, look on the back panel of DMP and note the serial number. Using any web browser, go to www.psaudio.com and click on Register Products.

Once you have completed the registration process you can then go to the PS website and look at the My Registered Products page. The link to this page is located at the top right hand corner of the website once you are logged in. If you do not have web access you may register the unit via mail or phone. Notification of software upgrades to this product will be available only to registered owners via the web and email.



DMP Output Options

UNDERSTANDING DMP'S OUTPUT OPTIONS

DMP has multiple output possibilities, including I2S through HDMI connectors, AES/EBU through the XLR balanced connector, and S/PDIF through the RCA coax connectors.

Stereo Connections

THE BASIC STEREO CONNECTION

DMP is first and foremost a two channel universal transport, and the vast majority of its users will take advantage of DMP's stereo outputs to their two channel Digital To Analog Converters (DACs).

The stereo digital outputs of DMP can be transferred through three types of connections.

I²S Sources

I²S

PS Audio's recommended connection to DACs is through its I²S protocol. I²S delivers the best sonic



experience by separately transmitting data and clocks over an HDMI cable. A growing number of high-end audio DACs have adopted PS Audio's I²S standard, which we freely offer and support to the high end audio manufacturing community. DMP is compatible with all properly implemented DACs following our published protocols.

I²S data is not HDMI data, and should not be connected to HDMI compatible DACs and receivers. Only the HDMI connector and cabling is used to deliver audio via I²S.

Connect a high quality HDMI cable between DMP's I²S output labeled Front (Stereo) to a compatible DAC's HDMI based I²S input. Note: the quality of the HDMI cable as well as its length have significant impacts on audio performance. The shorter the cable, the better the sound. We recommend ½ meter if possible. Longer cables work as well, but make certain you install the highest quality HDMI cable you can afford.

Users can select what comes out of this Front (Stereo) output when an SACD is played. The choices are SACD (DSD), Stereo downsampled from the SACD layer (PCM), RedBook audio (PCM). Refer to this owner's manual setup instructions to select which mode you wish.

The pure DSD output on SACD's master layer is available through the I²S output only when connected



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player

to an authorized PS Audio DAC. Using the HDMI cable between DMP and a PS Audio authorized DAC, such as DirectStream and DirectStream Junior, a digital handshake occurs identifying the safe connection. Non authorized I²S compatible DACs will not reproduce the DSD layer of SACD to protect copyright restrictions and guarantee illegal copying of the master layer is not possible.

DMP outputs all outputs all the time. It is therefore unnecessary to tell DMP which outputs are connected at any one time. Multiple outputs can connect to multiple DACs if desired.

RCA and XLR

XLR

If I²S is not an available input on your connected DAC, PS Audio recommends AES/EBU (Audio Engineering Society/European Broadcasting Union) via XLR as the next best connection. AES/EBU is a balanced digital output stream containing a combined version of the musical data and multiple clocks.

Using a high quality XLR data cable, connect the DMP XLR output labeled Stereo XLR to your DAC's XLR input.

DMP outputs all outputs all the time. It is therefore unnecessary to tell DMP which outputs are connected at any one time. Multiple outputs can connect to multiple DACs if desired.

RCA (Coax)

Many DACs rely upon coax to receive data. Digital audio transferred over a single RCA coaxial cable is in the S/PDIF format (Sony, Philips, Digital Interface Format), combining digital audio with multiple clocks on a single wire cable.

Using a high quality RCA cable optimized for data transmission, connect the DMP RCA output labeled Coax Front (Stereo) to your DAC's RCA input.

Multi-Channel

MULTI CHANNEL OUTPUTS

Though DMP is primarily a two channel universal disc player, it is capable of playing multi channel discs and delivering the highest quality digital audio to multiple DACs.

Many SACD contain multi channel audio. DMP can deliver up to six channels of digital audio through its I²S and RCA/coax outputs.

Using DMP's I²S connections, DMP will deliver six channels of DSD or high resolution PCM to three compatible DACs. If you choose PS Audio DACs, DMP will recognize them and assign master control duties to the DAC connected to the Front/Stereo I²S connector. This permits the user to control all three DACs through one remote control for a true high end multi channel surround experience.

Connecting non-PS Audio DACs through compatible I²S (or coax) connections will deliver high resolution PCM but not the locked DSD layer. The master slave relationship will also be unavailable to non-PS Audio DACs.



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player



CONNECTING DMP

Connecting DMP

I²S

As previously covered there are three sets of HDMI I²S connectors on DMP's rear panel. They are labeled Front/Stereo, Rear, Center/Sub.

FRONT/STEREO

Connect your front channel DAC to this I²S output. Once connected (if it is a PS Audio DAC), this DAC becomes the master and it will control the volume level of DACs two and three.

REAR

Connect this stereo I²S output to the DAC delivering audio to your system's rear channel amplifier (or preamplifier).

CENTER/SUB/SIXTH CHANNEL

Connect this two channel output to the third DAC. Connect the Center channel output of this DAC to the power amplifier (or preamplifier) feeding the center channel. Connect the remaining subwoofer channel output to your system's subwoofer input. DMP outputs a full range audio signal, requiring the subwoofer crossover to produce the desired frequency response.

The subwoofer output is really the sixth channel. On 5.1 compatible discs, this channel serves as the subwoofer output. On six channel discs, such as Telarc's Heads Up series, this output serves as the sixth channel.

Network Connections

NETWORK CONNECTION

The DMP is a network capable transport that can download cover art and song titles to its front panel touch screen from PS Audio's GlobalNet™ server and will store this information on its included SD card memory as well as our servers. To take advantage of this feature, as well as access the full warranty period, it is necessary to register the unit with PS Audio. Registering the unit will setup the DMP's web access page that allows you to add, delete and edit any of the song titles and cover art library.



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player

Ethernet Connector

To the left of DMP's outputs is an Ethernet jack. To take advantage of DMP's cover art, metadata, and update functions, connect this jack to your home network. We recommend using a high quality shielded CAT5 or CAT6 cable. In addition, in order to make sure your DMP is fully compliant with international regulations, please install the included ferrite noise suppressor onto the Ethernet cable, close to the unit. It is not necessary to connect this jack to your home network for normal playback duties of DMP.



DMP will present metadata contained on the disc, as well as search PS Audio's music database for additional metadata.

Downloading Cover Art

DMP will automatically download the cover art and song titles of inserted discs if it is connected to the Internet. To connect to the Internet you must plug in a network enabled Ethernet cable in the back of the DMP. This connection should be to an Internet connected router or through a wireless Ethernet bridge connected to a router. DMP's connection to the Internet through this network cable is automatic through any DHCP enabled network. Most Internet setups in the home or office are DHCP enabled and connection should take place within a very short period of time.

You can look on the front touch screen for verification of connection. When you are connected to the internet the words "Internet OK" will be displayed.

Network Connection

If the network is not connected, the words "No Connection" will be displayed on DMP's front panel.

The supplied SD card must be inserted in DMP's rear panel SD card slot for this feature to work. Cards are inserted with the gold pins facing down. If the SD card is properly inserted and present, the touch screen will display SD Card: OK. If the card is not present, the display will read No SD card.

Turn On the Power

READY FOR POWER

Once everything has been connected, use a high quality AC cable to power DMP. Digital audio equipment is sensitive to AC power and produce line noise from their digital circuitry. Make sure you have a high quality power cable to operate DMP, and a Power Plant AC Regenerator if possible.

PS Audio produces an entire line of high quality quiet power cables that are generally accepted as being some of the best in the industry. Whatever you choose, make sure it honors the music.

Turn the AC power switch in the rear of DMP to the ON position. The power switch is located to the left of the AC inlet as you face the rear panel.

Initializing Screen

As soon as the switch is activated the front panel display will show the initializing information. This screen shows when DMP's internal "engine" is being loaded with the firmware that runs DMP.

Front Panel Standby Button

The front panel PS logo button, located on the upper left hand corner of the unit, is the Ready/Operation Mode control for DMP. This control has two modes: Ready Mode and Operational Mode. Ready Mode (Standby) is designed to keep power on to critical internal circuitry including power supply capacitors, thermally sensitive semiconductors and integrated circuits.

Press this front panel logo button to activate the Ready Mode or to place DMP in Operational Mode. When pressed to enter Ready Mode, the display, as well as the outputs are turned off, but all the unit's critical internal circuitry remains active.

If you wish to conserve energy consumed by DMP it will be necessary to use the rear panel power switch. Using this rear panel switch will remove power from critical components and in order to gain maximum performance levels you will need to turn DMP's power on at least 3 hours before use. DMP is designed to be left powered on at all times.

Operating DMP

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

OPERATING DMP

PLAYING DISCS

The first step is to open the drawer and insert a disc. Touch the drawer open icon on the touch screen or the same on DMP's remote.



The drawer opens. Insert a disc, label side up and facing you. A slight nudge to the drawer will close it, or repeat the touch to the drawer icon or remote control to close the drawer.

A "Reading" indicator is displayed on the screen as DMP accesses the disc's table of contents. Once the disc has been read, the first track number is displayed along with the type of digital audio

format, sample rate and bit depth. In the upper left of DMP's screen, the type of disc is displayed, CD, SACD, DSD, etc.

To play track 1, simply press the play icon on the touch screen or the remote. Touch the same once more to pause the disc. As the disc plays, elapsed and remaining times of the track are displayed in the lower scrubber bar, along with a vertical indicator showing the track's progress.



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player

Fast Forward and Reverse

To move to a different part of the track, either forward or backwards using the touch screen, touch the scrubber bar where you wish it to jump to and DMP instantly goes there.

You can also use the fast forward or reverse keys on the remote. Touch the top right arrow on the remote's round shuttle control to fast forward, the bottom left pointing arrow to reverse. The first press forwards the player's position in X1 steps and is indicated on the touch screen. Press the fast forward arrow key again and the player accelerates to X2, all the way to X6. Press the play button to resume normal play when you have reached to desired place in the track.

To move to the next track or the previous track using the touch screen, press either the right double arrows above the scrubber bar to go forward, or the left pointing double arrows to go back.

Playing from USB

The same controls and functions are available on the remote in the shuttle circle.

PLAYING FROM USB

The front panel of DMP features a USB input for thumb drive memory sticks. Inserting one into the USB input will cause DMP to switch from disc play to USB and users can play media stored on the drive. Supported formats are FLAC, APE, WMA, MP3, M4A, AAC, DTS, AC3, WAV, DSF, MKA, PCM, OGG. This is an easy and convenient way to transfer tracks of music from a computer and play on DMP.



We do not recommend large numbers of files or folders as scrolling through DMP's touch screen can be slow. If you have a large number of tracks, it is recommended to place related tracks in folders. This permits users to choose which folder to listen to, then open that folder and find a particular track or play the contents of the entire folder.

the attached media. After scanning the root folder of the device, the name of the first folder at root level (if one exists) will be displayed and 'DIR' will appear in the file format area of the screen. If no folders are present, the filename of the first audio track displays and 'DSD' or 'PCM' will appear in the file format area of the screen.

Once the USB memory stick has been inserted, DMP will automatically switch from disc operation to USB memory. The reading screen appears as DMP scans the content of

Folders

The top left corner of the screen will now read USB Data. Users can begin playing from the first track displayed, or use the shuttle controls to skip forward or backwards in the media.

To choose a particular track or folder, it will be necessary to touch the track list screen function, located just to the right of the USB Data indicator: three dots and three lines stacked vertically.



Select a folder by touching it in the playlist. There will be a short pause while that folder's contents are read. During this time, 'Changing directory' will appear at the bottom of the screen.

Once 'Changing directory' disappears, the first subfolder in the folder you chose will be displayed. If there are no subfolders, the first track will be displayed. Touch 'Play' to play that track or the playlist icon to select a specific folder or track. Be aware that only the first few characters of a file or folder name are displayed.

To move up in the directory structure, touch the playlist icon, select '0,' and wait for the 'changing directory' message to disappear.

To play a file, once a file name is displayed, simply press the 'PLAY' button. All files in the current folder will be played sequentially with a short gap between each file.

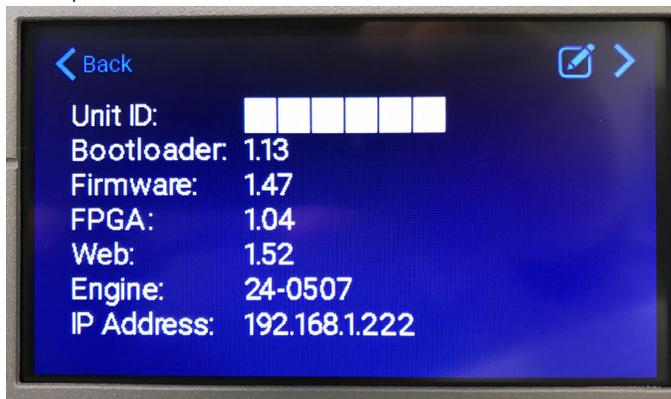
To play files within a specific folder, navigate to that folder by touching the playlist icon. '0' indicates the parent directory to the folder you're currently browsing. Each folder will be listed and numbered in alphabetical sequence.

Setup Menu

DMP SETUP MENU

To access DMP's setup menu touch the three horizontal dots on the touch screen's upper right hand corner when a disc is in the machine, or the pencil icon in the same area when there is no disc.

The first screen is DMP's information screen. Use this screen to determine the firmware version number and IP address if needed.



Output Modes

Touch the pencil edit icon in the upper right corner of the screen to access the setup menu.

SACD MODE

DMP features the user's ability to choose which layer of the SACD to listen to. Most SACD come with two layers, some with three: a DSD stereo layer, DSD multi-channel layer, and a standard RedBook CD layer.

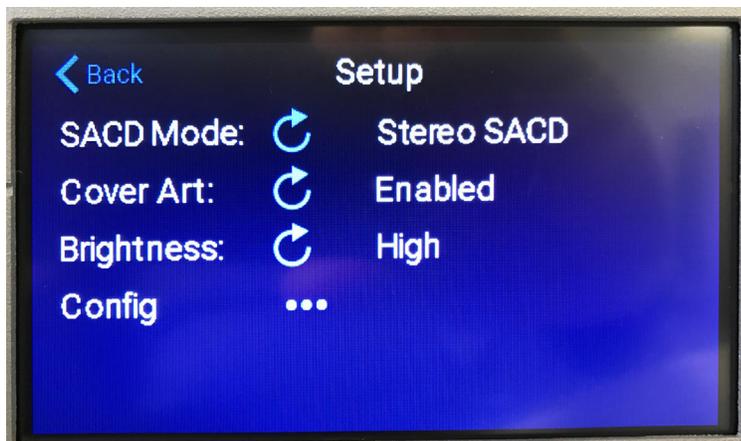
In DMP's setup menu users can select which layer they wish to play from. These settings will not take effect until a new disc is inserted. It is recommended to make your selection first, before inserting a disc. Once selection has been made, the newly inserted disc will now use the newest settings.

In non-PS Audio connected DACs, choosing an SACD stereo or multi-channel layer will provide a downsampled PCM version at DMP's outputs. This downsampled PCM version, output at 88.2kHz/24 bit, is generally superior to the RedBook CD layer.

When connected to a PS Audio authorized DAC, the choices will provide either RedBook CD at



Getting Started



44.1kHz/16 bit, or the actual stereo or multi-channel DSD layer according to the user's selection.

The three choices of reproduction to be found in the SACD setup menu are:

- RedBook CD
- Multi SACD
- Stereo SACD

REDBOOK CD

The idea of SACD was always backward compatibility. Placed in a standard CD or DVD player that cannot read SACD, the RedBook CD layer would be played instead. Placed into an SACD capable player, the SACD stereo layer is automatically chosen.

The DMP ships with this latter option as default. Without entering the setup menu, DMP will play the stereo SACD layer when connected to an authorized PS Audio DAC. If connected otherwise, DMP will output a downsampled PCM version of the stereo DSD layer, at twice that of RedBook CD: 88.2kHz/24 bit.

The DMP ships with this latter option as default. Without entering the setup menu, DMP will play the stereo SACD layer when connected to an authorized PS Audio DAC. If connected otherwise, DMP will output a downsampled PCM version of the stereo DSD layer, at twice that of RedBook CD: 88.2kHz/24 bit.

MULTI SACD

Some SACD have more than the two basic layers (RedBook and stereo DSD). This third layer contains multi-channel DSD data for up to 6 channels of audio. DMP is capable of playing all 6 channels of DSD when three stereo PS Audio authorized DACs are connected via its I²S outputs if this mode has been selected.

If only one authorized PS Audio DAC is connected via its I²S outputs, and Multi SACD mode is chosen, the first two channels of the multi-channel layer will be reproduced in pure DSD. These first two channels are typically the left and right front channels in a multi-channel recording. They are typically mastered differently than the stereo layer, and are specific to a multi-channel recording and should not be connected to unless you specifically want these two channels.

If DMP is connected via any of its outputs to a non-authorized DAC, choosing the multi SACD layer will provide the same left and right multi-channel information, downsampled from the SACD multi-channel layer in PCM at 88.2kHz/24 bits.

STEREO SACD

This is DMP's default setting and should be left in this setting for best results.

When selected, the stereo SACD layer will output stereo DSD to an authorized PS Audio I²S connected DAC, or a downsampled PCM version at 88.2kHz/24 bit to a non-PS Audio DAC.

COVER ART

The cover art option has two modes, enabled or disabled. If the default mode, enabled, has been selected and DMP is connected to an internet connected router through its rear panel Ethernet connection, and a SD memory card is inserted and acknowledged by DMP, recognized CDs will display cover art.

Cover Art

SACD rarely have cover art available through download. This is because few SACD players made were able to display cover art. Thus, the online library for SACD cover art is limited at best.

DMP users with SACD collections can help other DMP users build and enjoy a library of cover art. Once connected to the internet and with DMP registered with PS Audio through its website www.psaudio.com, users can access their My PS personalized library for cover art and metadata from played discs. A copy of every disc played will appear in this section and users can add their own cover art and metadata or edit existing metadata. Once you edit the information and add cover art, which can easily be found with a Google search, downloaded and added, the new cover art will be displayed on DMP's screen after it is downloaded when you next play that particular disc.

ADDING/EDITING COVER ART

If DMP is connected to the internet and registered on our website, users can add and edit all the tracks and albums of CD and SACD played via DMP. DVD, and other forms of media do not support cover art on DMP.

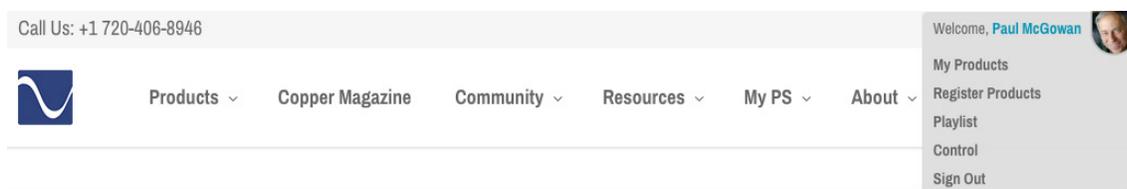
To add or edit your playlist, login to our website www.psaudio.com. Once logged in, click on your name in the upper right hand corner of the website to access the drop down menu. Select Playlist.

Editing Metadata

Once playlist opens users can view their online playlists, a record of everything DMP has played while connected to the internet through its rear Ethernet cable. Each entry will display the disc ID, the cover art (if found), and the track list of known albums.

To edit information or add missing information, click on the title or the cover art of the album desired.

Missing information is denoted by a series of question marks as shown. To edit, click on the questions mark string and a dialog box opens. Enter the new information and it is recorded. Move to another location on the page or simply press the keyboard's "Return" button.



Connections

The same procedure works with editing incorrect information as well. Simply click on the title or information you wish to edit and replace what text is there to what you wish instead.

CONNECTIONS

Touching the three horizontal dots next to Connections brings you to the connections screen. If DMP's



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player

Levels

Multi-channel

Tracker
Mark Knopfler

Play Count: 1
Last Played: Oct 8, 2016 @ 11:08am
Disc ID: x0f3AXkp9LhwSvzNr2Ob2mWoo-

[Track List](#) [Delete](#)



Untitled
Unknown

Play Count: 3
Last Played: Oct 8, 2016 @ 10:56am
Disc ID: TzO.dilpyaLCAyThknfuek8oU-

[Track List](#) [Delete](#)



COWBOY BEBOP
Various Artists

Play Count: 1
Last Played: Oct 8, 2016 @ 10:53am
Disc ID: Myd.P3kegPVxgl9vWCB94AVMJtg-

[Track List](#) [Delete](#)



Untitled
Unknown

Play Count: 2
Last Played: Oct 7, 2016 @ 7:40pm



COWBOY BEBOP
Various Artists

Play Count: 1
Last Played: Oct 8, 2016 @ 10:53am
Disc ID: Myd.P3kegPVxgl9vWCB94AVMJtg-

TRACK	TITLE	TIME	ARTIST	
1	Tank!	03:30	??????	✘
2	RUSH	03:34	??????	✘
3	SPOKEY DOKEY	04:05	??????	✘
4	BAD DOG NO BISCUITS	04:10	??????	✘
5	CAT BLUES	02:37	??????	✘
6	COSMOS	01:37	??????	✘
7	SPACE LION	07:11	??????	✘
8	WALTZ for ZIZI	03:29	??????	✘
9	PIANO BLACK	02:47	??????	✘
10	POT CITY	02:14	??????	✘
11	TOO GOOD TOO BAD	02:34	??????	✘
12	CAR 24	02:49	??????	✘
13	The EGG and I	02:42	??????	✘

outputs are connected to non-authorized PS Audio DACs through I²S, this screen will show “none” for connections.

If connected to an authorized PS Audio DAC or DACs, and those DAC's I²S inputs have been selected, DMP will display the type of DAC (DS or DSJ) and the DAC's unit ID number, indicating it has been recognized as an authorized PS Audio DAC capable of achieving the secure handshake and reproducing DSD from the stereo or multi-channel SACD layer when selected.

LEVELS

An upcoming firmware upgrade for DMP will add another menu option labeled Levels. This screen set will permit DMP users with multiple connected PS Audio authorized DACs to adjust individual volume levels for DACs One, Two or Three, where DAC One (Right, Left, Front) connected via I²S becomes the master volume control, and DACs Two, and Three (Left, Right Rear and Center, Sub) connected via I²S slave off of DAC one in a multi-channel setting.

MULTI-CHANNEL OUTPUT USE

DMP is capable of playing some multi-channel SACDs. Up to 6 channels of high resolution audio can be output to three stereo DACs for this purpose.

Available outputs include three stereo I²S outputs and three stereo coaxial outputs as shown in the photograph of the rear panel.

When three PS Audio authorized DACs are connected through the I²S outputs, volume control of all three DACs can now be handled through a single PS Audio DAC. DAC One, the DAC connected via I²S output 1 (left and right front channels) becomes the master control

DAC. DACs two and three (Left, Right Rear and Center, Sub) become slave DACs whose volume is controlled by DAC One. Individual level adjustments of DACs Two and Three can be taken care of in



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player

Firmware Upgrades

the Levels menu on DMP.

UPDATE DMP'S OPERATING SYSTEM

DMP operates from sophisticated software that is built in to the device, but upgradable by the user through the rear panel mounted SD card slot. To check for the current firmware version touch the front panel touch screen's top right hand corner pencil icon to enter the version screen.

Compare the version number to the latest firmware available on PS Audio's website www.psaudio.com/downloads/. If the version number of your DMP is lower than the latest version available on the PS Audio Downloads section of our website, it is possible to download the latest version and upgrade DMP to the latest.

When a new operating system becomes available, it may be obtained by ordering a pre-programmed SD card directly from PS Audio, or downloaded to your own SD card for free from the PS Audio website. To install, place the SD card in the rear of DMP, label side up, gold pins facing down. Then, turn off the rear panel power switch. Wait for 10 seconds, then turn the rear panel main power switch to the on position, rebooting the instrument. The front panel Ready Light will begin blinking, signifying the new firmware is being installed.



DO NOT REMOVE THE POWER OR DO ANYTHING WHILE THE UPDATE PROCESS IS TAKING PLACE. BE PATIENT AND WAIT UNTIL THE LOGO LIGHT BLINKING IS DONE.

Once the blinking has finished, keep the power to the unit on until it has fully initialized and is ready for operation again. Remove the SD card or leave it in for cover art.

Emergency Disc Retrieval

EMERGENCY EJECT OF A STUCK DISC

In the unlikely event a disc gets stuck in DMP, the first thing to try is a reboot of the instrument. Turn off the main rear panel power switch of DMP located near the AC inlet on the far left hand corner of the rear panel (as you face the rear). Wait 10 seconds, then restore AC power with the switch. Once DMP has initialized, use the remote control or the touch screen to open the drawer and remove the disc.

Failing a reboot, there is an emergency procedure. Gaining access to DMP's bottom, note the slot just behind the front panel drawer, but on the bottom. Using a sharp bladed object such as a pocketknife, or a small flathead screwdriver, engage the mechanical release mechanism and pull down to manually

slide DMP's door open as shown in the photo.



You can always contact PS Audio service via phone or through our popular forums for help www.psaudio.com/forums.

CARE OF DMP

DMP does need some care and is appreciative of being fed proper AC power. A Power Plant AC regenerator is recommended for this task.

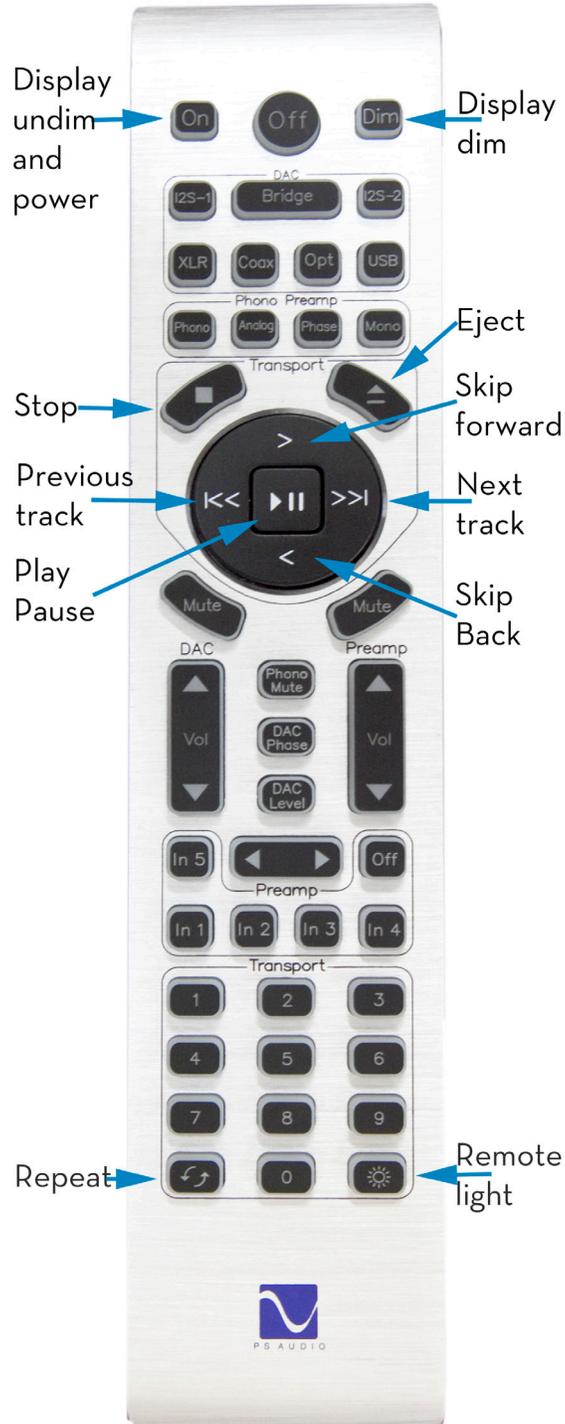
Should minor scratches occur in your top cover, simply purchase any type of high quality automotive scratch removal polish such as Kit's Scratch Out or Meguiar's products. Car finish polish and wax can both be used on this surface for a beautiful luster.



PS AUDIO®

Getting Started

Owner's Reference DirectStream Memory Player





LIMITED THREE YEAR WARRANTY

Should I Register My Product?

- Registering your product validates the warranty start date.
- 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 a 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.
- Registration can be completed online, by phone, by mail, or by email.
- You may wish to sign up for PS Audio's monthly newsletters, specials, product updates, and/or Paul's Daily Posts.

What Does this Warranty Cover?

This warranty covers defects in material and workmanship for products purchased from PS Audio or its authorized dealers and agents.

What Will PS Audio Do to Correct the Problem?

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. The product will be repaired without charge for parts or labor, replaced, or the purchase price refunded through the original point of purchase, at the option of PS Audio.

What is the Period of Coverage?

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.

Who Pays for Shipping?

You are responsible to pay for the safe and proper shipment of the warranted product to PS Audio or its authorized repair center.

PS Audio or its authorized repair center will pay the cost of returning the repaired or replacement product to you under this warranty.

What Does this Warranty 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 manuals (available for download at psaudio.com)
- Use in any manner inconsistent with PS Audio's operating instructions (available for download at 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
- 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 psaudio.com)
- Products with a factory-applied serial number that has in any way been altered, defaced, or removed

Limitations on PS Audio's Obligations Under this Warranty

- In no event will PS Audio's liability to you exceed the original purchase price of the unit.
- This warranty does not cover the cost of custom installation, customer instruction, setup adjustments, or signal reception problems.
- This warranty does not cover consequential and incidental damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- In the event your warranted product cannot be repaired, PS Audio will replace or refund 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 replacement.

How Can the Warranty be Transferred?

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 transfer of registration.

How Do I Get Warranty Service?

To locate an authorized PS Audio repair center, for service assistance, or for help with the operation of a product or just for information, please contact PS Audio customer support.

Warranty Service Within the US

- You must first obtain a Return Merchandise Authorization Number (RMA#) to receive warranty service and prior to returning any item. Contact PS Audio or an authorized PS Audio repair center to receive an RMA#.
- You must put the RMA# on all returns. If it is not clearly marked, PS Audio will return the package back to you, freight collect.
- You should include a description of the problem, along with the RMA# inside the packaging.
- 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 packing, PS Audio can sell and ship to you replacement packaging.
- 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 in 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.



PS AUDIO®

Warranty

Owner's Reference DirectStream Memory Player

How State Law Applies

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

Warranty Service Outside of the US

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 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.

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