

PlayPoint DM Mark II Dual-Mono D/A Converter and Network Audio Player

Owner's Manual

PLEASE READ BEFORE OPERATION



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Welcome

Thank you for purchasing the exaSound PlayPoint DM Mark II music streamer and DAC. Combining a reference-grade 32-bit digital-to-analog converter, balanced dual-mono headphone amplifier and Roon-Ready music player in one elegant component, the PlayPoint DM brings simplicity and sonic perfection to your music room.

With refinements like dual-mono fully balanced design, two 32-bit DXD/DSD512 DACs with four autonomous I/V stages, and exaSound's unique four-way galvanic isolation, PlayPoint DM Mark II will uncover every detail in your high-resolution music files, allowing you to hear the music just as it was recorded.

We hope that the exaSound PlayPoint DM Mark II will help you to enjoy world-class music experience for years to come. Please take a few minutes to read right through this manual. Investing a little time now is the best way to ensure that you will make the most of your investment.

Happy listening,

exaSound Audio Design <u>www.exaSound.com</u> <u>CustomerService@exaSound.com</u>

PlayPoint DM Mark II - What's New

The Mark II release of the exaSound PlayPoint DM increases the maximum supported DSD sampling rate from DSD256 / 12.288MHz to DSD 512 / 24.576MHz.

Package Contents

The following items should be in the box:

- exaSound PlayPoint DM
- Power supply (may be supplied separately)
- Ethernet Cable
- Quick Start Guide
- Two Wi-Fi Antennas (except for models without Wi-Fi support)

Overview

The exaSound PlayPoint DM is a reference-quality dual mono D/A converter, network audio player and server. It receives digital audio via Gigabit Ethernet, Wi-Fi 802.11ac, from attached USB storage devices, SPDIF and Optical inputs. It outputs analogue audio via balanced or unbalanced line outputs to your power amplifier or preamplifier. PlayPoint DM also features a balanced high-power headphone amplifier capable of driving the most demanding headphones.

PlayPoint DM has two build-in audio servers. A light-weight Roon Core for bit-perfect Roon configurations and a UPnP server can stream audio to other network players on you your home network.

PlayPoint DM utilizes the exaSound's proprietary ZeroJitter[™] asynchronous packet streaming technology, four-way GalvanicInfinity[™] noise isolation and ZeroResolutionLoss[™] hardware volume control. Combined, these three technologies deliver dynamic and natural sound with vanishingly-low jitter, distortion and noise levels.

exaSound PlayPoint DM supports most high-resolution PCM music formats including FLAC, AIFF, WAV, as well as DSD formats including DSF and DFF. PlayPoint DM offers ENclusiv[™] High Resolution Audio (HRA) support: PCM sampling rates up to 384kHz at 32bit resolution and DSD up to 24.576MHz (Octuple-rate / DSD512).

exaSound PlayPoint DM is managed locally via capacitive glass touch screen and remotely with a Web browser. Playback is controlled with Roon and various apps for iPad, iPhone, Android devices, Macs and PCs.

exaSound PlayPoint DM is a multi-level device. It can be used in simple and most-advanced network configurations. It supports several network audio standards including Roon RAAT, OpenHome, UPnP, HQPlayer NAA and AirPlay. Additional network audio protocols will be available with software updates.

Tidal and other streaming services are available with Roon, Bubble UPnP on Android devices, and with AirPlay.

With features like remote upgrades and remote support, the PlayPoint DM is future-proof and backed by the exceptional exaSound customer service.

Front and Rear Panels



Connecting the PlayPoint DM

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Before connecting, turn off the power to all the components in your system.

Connecting the Digital Inputs

All digital inputs are galvanically isolated to eliminate ground loop noise. The PlayPoint DM accepts four digital inputs:

- LAN Ethernet connection to home router for streaming digital audio. Supports 2 channels PCM up to 32 bit resolution at standard sampling frequencies from 44.1 kHz to 384 kHz and DSD up to 12.288 MHz/DSD512.
- **SPDIF IN1** SPDIF Input, 75-ohm RCA. Supports 2 channels PCM up to 24 bit resolution at standard sampling frequencies from 44.1 kHz to 192 kHz.
- SPDIF IN2 SPDIF Input, TOSLINK, Optical. Supports 2 channels PCM up to 24 bit resolution at standard sampling frequencies from 44.1 kHz to 96 kHz.
 USB supports one spinning disk or SSD drive and one flash drive. Standard A-B USB cables with length up to 16 ft (5m) can be used. Up to 8 USB drives can be attached with a powered USB hub.

Connecting the Line Outputs

PlayPoint DM offers two types of analogue line outputs - unbalanced (RCA) and balanced (XLR).

- Before making a connection make sure that your amplifier is powered down.
- RCA Line Outputs Left / Right Connect the Left and Right RCA line outputs of the PlayPoint DM to the amplifier line inputs. or
- **XLR Line Outputs Left / Right** Connect the Left and Right XLR line outputs of the PlayPoint DM to the amplifier line inputs.

Trigger Output

When the PlayPoint DM is on, a 12 VDC signal is sent from the left and right trigger outputs to control other devices. When the PlayPoint DM is placed in standby mode or power saving mode, the trigger signals are discontinued.

Direct Connection to Analogue Power Amplifier

If all your music sources are digital, you don't need a preamplifier. The built-in volume control allows analogue power amplifiers to be connected directly to the PlayPoint DM. Amplification always brings some level of noise and distortion. Eliminating unnecessary amplification helps to achieve higher level of transparency.

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Avoid connecting the PlayPoint DM to receivers or any other sound processing equipment that perform analogue to digital (ADC) conversion. Digitizing the analogue output signals back to the digital domain will undo some of the benefits that PlayPoint DM brings to you. Remember that your sound system is as good as the weakest link in the sound processing chain.

Connecting the Power Supply

To minimize ground noise and hum, it is recommended to connect the power cords of all components to a single point - usually a single surge protector with multiple outlets. Connecting all components to a single point, as close as it is practically possible minimizes the differences in ground potentials between the components.

Using a Third-Party Power Supply

PlayPoint DM comes with a power supply that has been tested to comply with the PlayPoint DM's quality requirements and allows for very high performance.

If you decide to use another power supply, the specifications marked on the back of the PlayPoint DM must be observed.

Surge Protectors

We strongly recommend the use of surge protectors for all of your audio and video components.

Isolating the Cable TV Ground

If you have a cable TV connected to your audio system, ensure that the TV cable ground is galvanically isolated from the audio system ground. The TV cable ground, usually connected to the earth outside your home, can have a significantly different potential than the audio ground. This condition can cause audible hum. If you suspect this is the case, use a cable TV ground isolator just before the cable set-top box or at the RF TV input.



When turning on and off your sound system, the power amplifier should be the last component to be turned on and the first component to be turned off. This prevents power on/off transients from being transmitted to the loudspeakers.

How Would I Use the PlayPoint DM?

Roon Server and Roon Ready Player

Roon offers engaging, enjoyable way to browse your music. exaSound PlayPoint DM hosts a Roon Core, the engine that manages your music collection. It builds and stores a digital library on the PlayPoint's internal SSD storage. Via intelligent cloud service, Roon delivers rich metadata and frees the user from the complexities of library management.



PlayPoint DM is certified as a Roon Ready player, Roon Tested DAC. Roon Ready is the highest level of Roon integration and means that Roon technology is customized and embedded for achieving best user experience.

User–friendly remote operation of the exaSound PlayPoint DM from a favorite listening position is accessible via Roon Remote App. Together, Roon and exaSound deliver the power, flexibility, and performance benefits of networked audio, with the easiest setup and highest sonic fidelity.

The easiest configuration for using the exaSound PlayPoint DM with Roon is to store your music on a USB drive. It is illustrated on the diagram below with red components and red connections. Here is how it works:

- Roon is a subscription service. You can find out more about the trial period and about subscription plans on the Roon website <u>RoonLabs.com</u>.
- You need to connect the PlayPoint DM to your home router with Ethernet cable or with Wi-Fi.
- Copy your music files to a USB drive and connect it to the PlayPoint DM. Alternatively you can store music files on Network Attached Storage (NAS) drives.
- The Roon playback engine Roon Core is installed on the PlayPoint DM.
- Playback is controlled by the Roon Remote App. Roon Remote is available for Apple iPhones, iPads and Android devices. You need to install it on your device from the App Store or Google Play. Playback can also be controlled from PC or Mac.
- Roon connects to the Roon Service to retrieve well organized information about your music files.
- Roon provides access to the Tidal online streaming service and Internet radio stations.
- The PlayPoint DM can transparently discover and connect to Roon servers running on computers or NAS drives.

The Ronn Core built into the PlayPoint DM supports bit-perfect operation for medium-sized music libraries. If you have a music library with more than 128,000 tracks, if you want to use simultaneously several audio zones or if you are interested to experiment with the digital signal processing capabilities of Roon, you will have to use an external Roon server like the <u>exaSound Gamma Server</u> or the Roon Nucleus.

MQA (Master Quality Authenticated)



MQA is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download.

PlayPoint DM includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording. Visit <u>mqa.co.uk</u> for more information. *The MQA logo is a trade mark of MQA Limited.* © MQA Limited 2018



UPnP /OpenHome Player and Audio Library Server

The PlayPoint DM supports the public UPnP/OpenHome audio streaming standards. It can be used as a player (also called renderer or audio endpoint). When a USB drive is attached to the PlayPoint DM, it becomes a UPnP audio library server. Playback can be controlled remotely with an app from an iPad, iPhone, Android device, PC or Mac. Popular control apps include Bubble UPnP on Android and Lumin, Kazoo, MconnectHD, PlugPlayer and others on iPad and iPhone.

Media files can also be stored on a Network Attached Storage (NAS), PC, Mac or Linux computer. All network file server options require the use of third-party audio library software like MinimServer, Asset UPnP or Twonky. You will need a fast and stable Gigabit Ethernet network or top-performance tri-band 802.11ac wireless router.

There are many other third-party UPnP /OpenHome control apps and library servers. The ones listed here are tested with the PlayPoint DM and support all high-resolution formats and sampling rates up to DSD512. <u>Step-by-step guide for configuring the exaSound PlayPoint for use with UPnP/OpenHome</u> is available on our blog.

Network Audio Adapter for HQPlayer

The exaSound PlayPoint DM supports Network Audio Adapter (NAA) protocol for network audio streaming with HQPlayer. The <u>Signalyst HQPlayer</u> offers advanced upsampling and PCM to DSD conversion algorithms. Follow the <u>Step-by-step guide for configuring the exaSound PlayPoint for use</u> with HQPlayer.

AirPlay Player

AirPlay is a popular and convenient network media streaming technology. AirPlay can be used to stream content from online services like Tidal to the PlayPoint DM.

AirPlay support is implemented with ShairPort, an open-source emulator for Airplay. Since this is not an official Airplay implementation, reliability may vary. Note that the AirPlay protocol has some limitations compared to the other network streaming standards used by the PlayPoint DM. It supports CD-quality audio. DSD and high-sampling rate/high-resolution PCM are not supported.

Playing Music from SPDIF Sources

The PlayPoint DM makes it possible to enjoy greatly improved level of sonic clarity and fidelity from SPDIF sources. The sonic improvement is the result of the outstanding jitter cancelling capability, superb signal to noise ratio, and low distortion levels of the PlayPoint DM. You can connect up to two SPDIF devices, such as disk players and wireless music servers. Use the *Input* buttons on the device front panel to switch between *LAN* digital streamer mode, Coaxial *SPDIF* and *Optical* Toslink inputs.

Quick Start Guide

Proper Device Placement

Place the device on a stable solid base, far from heat sources. Do not expose the device to direct sunlight. Allow at least 5 cm (2") around the device for ventilation. Do not place the device on fabrics, inside enclosed space, or in contact with curtains. Do not place the device on top of power amplifiers or any other equipment that emits heat. Do not expose the unit to smoke, humidity, moisture and water.

- 1. Attach the Wi-Fi Antennas (where applicable).
- 2. Connect the power supply to the mains and to the PlayPoint DM.
- 3. Connect the PlayPoint DM to your Gigabit home network with Ethernet CAT 6 cable.
- 4. Connect the outputs of the PlayPoint DM to your preamp or power amp. Don't turn them on yet.
- 5. Press the PlayPoint DM power button, the power light will illuminate.
- 6. In a moment the exaSound logo will appear.



7. After 30 seconds or so the screen will blink. Shortly after the home screen will appear.



8. Navigate between screens with the buttons on the right and the icons on the top. One screen up from the *Home* screen is the master volume and left / right channel trimming.



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9. One screen down you will find the album, artist and title of the current track.



- 10. To access the PlayPoint DM web user interface start a web browser. In the address bar enter *exaSound-PP1.local*. Alternatively you can enter the IP address from the *Select Network* screen.
- 11. On the web interface you will find all configuration settings, the Owner's Manual, tutorials and information about Roon.
- The best way to experience the PlayPoint DM is with Roon. PlayPoint DM will appear as *exaSound-PP1* on the *Audio* tab of the Roon *Settings* screen. Step-by-step instructions are available on our blog: <u>How to get started with Roon and the exaSound PlayPoint Quick Setup</u>.
- 13. Make sure the DAC volume level is safe.
- 14. Turn on your audio components, the preamp (if you use one) and finally the power amplifier.
- 15. Headphones with a single male plug should always be connected to the central headphone jack.
- 16. Use the headphones Left/Right XLR and1/4" combo jacks only with balanced headphones with two plugs. Always connect the right plug first. It is equipped with a switch to adjust the output level for balanced headphones.
- 17. Don't use balanced and unbalanced headphones at the same time.
- 18. The PlayPoint DM screen is preconfigured to fade out and become dark after 5 minutes of inactivity. When the screen is dark, touch within the display central area will wake it up.

As an alternative to Roon, you can control the exaSound PlayPoint DM with UPnP apps like Kazoo, Lumin and Bubble UPnP from iPad, iPhone and Android devices. Connect a USB drive with music to the PlayPoint DM. Press the Update button to create or to update the UPnP music library.



Configure your UPnP app to use *exaSound-PP1* as a playback device and *exaSound-PP1 Library* as a music server. <u>Step-by-step instructions for using Kazoo are available on our blog</u>.



The exaSound PlayPoint DM supports Network Audio Adapter (NAA) protocol for advanced upsampling and PCM to DSD conversion applications with the Signalyst HQPlayer. Follow the <u>Step-</u>by-step guide for configuring the exaSound PlayPoint for use with *HQPlayer* available on our blog.

Playback Screens



PlayPoint DM Configuration

You can configure the PlayPoint DM using the touch-screen or with a Web browser from a mobile device, PC or Mac. Using the touch screen is simpler. Some advanced settings are available only with the Web user interface. We will introduce first the PlayPoint DM Touch-Screen Interface and then the Web User Interface. The screens below are explained in the order they appear on the PlayPoint DM display.

Device Information Screen

Navigating with the *Down* button on the touch screen you will see the model and serial numbers of the PlayPoint DM.



Zero-Configuration Networking

If you use an Ethernet cable connection, no configuration is required. A Gigabit Ethernet network is required for seamless playback at high sampling rates. To obtain an IP address, DHCP must be enabled on your router. Manual network configuration is available via the Web User Interface.

Usually you don't need to use the IP address to access the PlayPoint DM. Mac computers, mobile phones and tablets will discover automatically your exaSound PlayPoint DM. By default it will appear on your home network *as exaSound-PP1.local*. If your Windows computer is unable to see the PlayPoint DM, you need to install <u>Apple Bonjour</u> or compatible zero-configuration networking (zeroconf) service. On Linux computers you need to install <u>Avahi</u>.

Use the *Down* navigation button on the right side of the touch screen to navigate to the *Select Network* screen. When the network cable is connected the screen should look like this:



Before using the wireless connection you need to complete the WPS (Wireless Protected Setup) procedure. Alternatively you can configure manually the wireless network via the Web User Interface.

Wireless Protected Setup (WPS) for Wi-Fi Network Access

Setup (WPS) for Wi-Fi Network Access

- 1. Use a Web browser to display the wireless configuration page of your home network router.
- 2. Make sure that **SSID** broadcast is enabled.
- 3. Mac filtering should be disabled.
- 4. Make sure that **WPS** is enabled.
- 5. Enable Push Button Registration Mode.
- 6. Set Security Mode to WPA2-PSK (AES).

Here is a sample router configuration screen. You need to use the home version of the **WPA2-PSK** security mode and the **Push Button** mode of **WPS**. You need to turn off the use of **Pin Number**.

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7. Use the Down navigation button on the right to navigate to the *Select Network* screen.



Tap WPS Setup

8. On the following screen tap again WPS Setup.



9. When you see the *WPS Setup in progress* message press the *WPS* button on your router. WPS setup will be active for two minutes.



10. The *Select Network* screen will reappear. DHCP may take another two minutes to assign an IP address to the PlayPoint DM.



Switching Between Wireless and Wired Network Connection

Only one network connection can be active at any time. Use the *Start/Restart* buttons to switch between wired and wireless network connection.

The PlayPoint DM may restart to activate the new network settings.

Remote control apps also may have to be restarted after changing the network connection.

Network Screen for Models without Wi-Fi

If you've purchased a PlayPoint DM model without Wi-Fi support, the simplified Network Screen will provide information about the network status and the IP address assigned to your PlayPoint DM.



Multi-room Configuration

Each PlayPoint DM device on your home network must have a unique name. Use the *Select PlayPoint Name* screen to assign different host names to your PlayPoint DM players.

- 1. Navigate to the *Select PlayPoint Name* screen. The current host name will be highlighted.
- 2. Tap on one of the six pre-configured host names.
- 3. The PlayPoint DM will shut-down and restart.



- 4. Remote control apps must be reconfigured to use the new PlayPoint DM host name.
- 5. The Web user interface allows assigning custom host names like "Living Room" or "Main System".

Screen Saver

The PlayPoint DM screen is preconfigured to fade out and become dark after 5 minutes of inactivity. The power LED will remain illuminated. When the screen is dark any touch within the display central area will wake it up.

Use the slider on the *Screensaver* screen to adjust the timeout interval.



When the *Dim during playback* option is set to *Off*, the display will wake up when playback starts. Set the setting to *On* if you prefer to keep the screen dark during playback.

Roon Core

Use the Roon Core screen to install or uninstall Roon Core on your PlayPoint DM. The latest Roon setup files are automatically downloaded from roonlabs.com.



Running Roon Core on the PlayPoint DM is simple and convenient - there is no need to use external server hardware. In addition, using a USB drive attached to the PlayPoint DM to store your music library reduces the workload on your home network and simplifies the network configuration.

PlayPoint DM supports Roon Core in the following basic configuration:

- Single zone playback
- Bitperfect playback (without DSP processing like upsampling and format conversion)
- Roon libraries up to 128,000 tracks (about 8TB storage space)

If you have a larger music library, if you want to stream hi-resolution audio simultaneously to multiple playback Roon zones, or you need to use the CPU-intensive Roon DSP engine, you need to use an external Roon Server.

Roon updates and Roon library backups can be initiated from the Roon Remote app.

Roon core can be removed if you prefer to use other streaming services.





Note that uninstalling Roon Core will also erase all custom Roon settings and the local Roon music library from the PlayPoint DM internal SSD storage.

Power Saving Mode Timeout

PlayPoint DM can enter power-saving mode after a period of inactivity.

- The high-current power supplies for the analogue circuits and the 12V Trigger Outputs are turned off.
- Power is resumed automatically when the volume or the input is changed or when playback is started.

You can use the **DAC Power Off Timeout** Screen to set the time-out period.



Firmware Up<u>date</u>

- 1. Make sure that the PlayPoint DM power supply is reliably connected.
- 2. Make sure the PlayPoint DM is connected to your home network and your Internet connection is stable.
- 3. Use the *Up/Down* buttons on the right to navigate to the *PlayPoint Firmware Update* Screen. Tap on the *Check* button.



4. If a new firmware version is available, Tap Update.



5. You will see the *Firmware Update in Progress* screen. Don't interrupt the power to the PlayPoint DM during update.



6. The PlayPoint DM may reboot twice during the update.



7. After the update you will see the *Home* screen.



Remote Support

Remote support connections are used by exaSound technical personnel for troubleshooting and collecting error logs and performance data. Remote connection is possible only when it is initiated by the PlayPoint DM owner by pressing the **Start/Stop** button.



Establishing the connection may take up to 10 seconds.



You need to provide the Support ID to the exaSound support representative. It is used to verify the identity of your PlayPoint DM on the support network.

Volume Control

PlayPoint DM features ZeroResolutionLoss[™] hardware volume control. Audio data is streamed at 0dB to the ES9028PRO DAC chips. This approach preserves the maximum possible signal to noise ratio. The volume level changes in steps of 0.5 dB.

Volume can be controlled in four ways:

- From the volume knob on the PlayPoint DM front panel. Slow turns change the volume at 0.5 dB increments. The sensitivity of the volume knob increases when you turn it fast.
- Remotely from iPad, iPhone or Android device. Compatible apps include Roon Remote, Kazoo, UPnP control points like Bubble UPnP and PlugPlayer, MPaD clients like MPaD and MPoD.
- From the PlayPoint DM touch-screen. You can control the master volume and trim the individual channels. You can tap on the volume bar or you can drag the slider.



• From the PlayPoint DM Web Interface.

The PlayPoint DM implements a unique 4-way volume synchronization. No matter which method is used to change the volume, all volume sliders and volume indicators in the apps, the Web interface and the PlayPoint DM display are kept in sync.

The sound can be muted by pressing gently in the middle of the volume button or by touching the *Mute* button on the *Home* screen. Turning or pressing the volume knob, or clicking *Mute* again restores the previous volume level.

Note: AirPlay devices can control the PlayPoint DM volume, however there is no volume synchronization when volume is changed from the PlayPoint DM or the DAC. AirPlay volume control steps are less precise compared to other audio streaming technologies.

Volume Bypass

When the volume is set to 0dB, the hardware volume control is turned off and the PlayPoint DM is set to Volume Bypass Mode. To activate Volume Bypass:

- Set the master volume to 0dB.
- On the touch screen set the left and right volume sliders to 0dB.

Maximum Volume Limit

Use the *Maximum Volume Limit* setting to prevent accidental playback at volume levels that are too loud.



Using External USB Drives for Storing Audio Files

PlayPoint DM supports direct connection of one USB 3.0 hard-disk drive (HDD) or solid-state drive (SSD) with current consumption less than 500mA.

Up to eight USB drives can be connected to the PlayPoint DM using an external powered USB 3.0 hub.

The PlayPoint DM scans attached USB drives for audio files. Metadata from the discovered files, like album, artist, and cover art are organized in media libraries for use with Roon, UPnP/Open Home, and MPD. These libraries are stored on the PlayPoint DM internal m.2 SSD drive.

Before connecting the USB drive to the PlayPoint DM, make sure to empty the Recycle Bin/Trash Can. The PlayPoint DM may find and include in the media libraries files that are not permanently deleted.

See *Web User Interface - Sharing Attached USB Drives on the Network* for instructions how to copy files over the home network to the PlayPoint DM.

PlayPoint DM Music Servers and Music Libraries

The PlayPoint DM Home Screen indicates the availability of attached USB drives and the enabled music servers.



Roon Music Library

The Roon music library is managed by the Roon Core installed on the PlayPoint DM. Use the Roon Remote app to configure the Roon music library. You can find more information about Roon here: <u>How</u> <u>Roon works</u>. Questions about Roon can be posted on the <u>Roon Community</u> forum. Step-by-step guide for configuring the exaSound PlayPoint DM for use with Roon is available on our blog: <u>How to get</u> <u>started with Roon and the exaSound PlayPoint - Quick Setup</u>. You can monitor the library update progress with the Roon Remote app from your tablet, mobile phone or computer.

The PlayPoint DM can support Roon library with about 128,000 tracks. If your music collection is larger, use an external Roon server hosted on computer or NAS drive.

The Roon Library can be completely removed by uninstalling the Roon Core.

UPnP Music Library

When a USB drive is connected to a PlayPoint DM for the first time, it will be automatically scanned for music files. The PlayPoint DM will build a UPnP library (database) with metadata and album art from your music files. Scanning large USB hard drive may take several hours. The UPnP music library is available only when there is a USB drive attached to the PlayPoint DM.

After adding or deleting files from the USB drive, the UPnP music library needs to be updated. Press the **Update** button on the Music Library screen. The UPnP icon will stop flashing when the update is completed.



To delete the UPnP music library:

- Power off the PlayPoint DM
- Detach all USB drives
- Power on the PlayPoint DM
- Navigate to the *Music Library* screen and tap the *Update* button



Web User Interface

To access the PlayPoint DM web user interface start a web browser like Safari, Firefox or Google Chrome. In the address bar enter the PlayPoint DM device name. The default device name is *exaSound-PP1.local*.

Alternatively you can enter the PlayPoint DM IP address which can be found on the *Select Network* screen on the devise display. For more information see *Zero Configuration Networking*.

When you connect to the PlayPoint DM with a Web browser you will see the following page:

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Working with the Menu



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Tap or click on the menu icon in the upper left corner of the screen. The menu will slide in. Selecting a menu item will hide the menu.

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If you prefer to have the menu visible at all times tap again on the menu icon. The menu icon will be overlaid with a right arrow.

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Roon Help 🗸 🗸					
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You can toggle between Auto-Hide and Always-On menu modes by tapping on the menu icon.

Dashboard for Volume Control and Input Selection

Web Dashboard, Channel Trimming View

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≡ Dashboard		
Audio Input		
USB IN 1 CBL IN 2 OPT		
Master Volume		
-29.0 dB		
Mute		
Channels		^
Left 0.0 dB		•
Right 0.0 dB		•
l		

Settings

Use the Settings page on the web user interface to configure the following features of the PlayPoint DM:

- Maximum Volume Limit
- DAC Power off Timeout
- Updating the UPnP Music Library
- Installing and erasing the Roon Core
- Changing the PlayPoint DM Device Name (Host Name)
- Displaying the model number, serial number and firmware version
- Checking for firmware updates and installing firmware updates
- Displaying the serial and model numbers
- Enabling and disabling remote support

iPad 🗢	5:29 PM			92%
$\langle \rangle$ \square	exasound-pp1.local	C	Û	+ 🗇
亘 exaSound-PP1				
Dashboard	Maximum volume limit			
Settings	0.0 dB			
Local Storage				
Network	DAC Power Off Timeout			
Browse Attached USB Drives	Never ·			-•
Owner's Manual	UPnP Music Library			
Tutorials	× Not running			
Roon Help 🗸 🗸	Library database			PDATE
Terms 🗸	Update may take a while.			
	Roon Core			
	Not installed		IN	ISTALL
	Device Name			
	exaSound-PP1		C	HANGE

Sharing Attached USB Drives on the Network

File Sharing allows you to have network access to the USB drives attached to the PlayPoint DM. You can use file management apps like Windows Explorer and the Mac OS Finder to copy, move and erase files remotely.

- Use the *File Sharing* tab on the *Local Storage* page to enable or disable file sharing and to set the password for accessing the PlayPoint DM file shares.
- The username is fixed *playpoint*

iPad 🗢	5:36 PM 91%
$\langle \rangle$ \square	exasound-pp1.local C 📋 🕂 🗍
亘 exaSound-PP1	
Dashboard	File Sharing
Settings	Share USB storage devices
Local Storage	User name: playpoint
Network	Password
Browse Attached USB Drives	Retype Password
Owner's Manual	•••
Tutorials	SET CANCEL
Roon Help 🗸 🗸	Internal Storage
Terms 🗸	Roon: 0KB UPnP: 416KB Free: 858.6MB

The Internal Storage tab displays information about the size of the music libraries stored on the PlayPoint DM internal SSD drive.



The **USB Stored Devices** tab on the **Local Storage** page displays list of attached USB drives. To safely disconnect an USB drive from the PlayPoint DM:

- Close any applications on remote computers that may be using files on the PlayPoint DM shared drives.
- Tap the Eject icon to the right of the USB drive that you want to disconnect.

- If the USB drive is in use an error message will be displayed at the bottom of the Local Storage page.
- If you are unable to eject the drive and continue to get error messages, there may be files on the USB drive used by the Roon Core or the UPnP server. In this case power off the PlayPoint DM and then disconnect the USB drive.

iPad 🗢	5:37 PM exasound-pp1.local	91% 페)
亘 exaSound-PP1		
Dashboard	devices SET PASSWORD	
Settings		
Local Storage	Internal Storage	
Network	Notic OKB OF IT - 410KB Hee. 000.0MB	
Browse Attached USB Drives		
Owner's Manual		
Tutorials		
Roon Help 🗸 🗸		
Terms 🗸		
	Total size: 962.8MB	
	REFRESH C	
	USB Storage Devices	
	Kingston HyperX Fury 3.0 (14.7GB)	



	1	
- 24	$/ \rangle$	
/	• \	

Never disconnect a USB drive during playback.



To avoid accidental data loss we recommend powering down the exaSound PlayPoint DM before disconnecting a USB drive.

Ethernet Connection with Manual IP Address

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亘 exaSound-PP1		
Dashboard	Ethernet	
Settings	✓ Enabled	eset 🤣
Local Storage	IP address: 192.168.2.77	edit 🏚
Network	Wi-Fi	
Browse Attached USB Drives	× Disabled	
Owner's Manual	To enable Wi-Fi configure one of the available Wi-Fi networks.	
Tutorials	Network:	
Roon Help 🗸 🗸	IP address:	
Terms 🗸	Available Wi-Fi Networks Press Refresh to update the list of Wi-Fi networks. REFRESH C	

Navigate your web browser to the PlayPoint DM Web Interface. Open the menu and select the *Network* page.

By default the PlayPoint DM will use the wired network connection - Ethernet.

You can use the Reset button to re-initialize the network connection in case the settings on your router are changed or the network connection is lost.

1. Locate the *Ethernet* tab and tap on the *Edit* button.

iPad ♥ < > ∏	5:38 PM exasound-pp1.local C [Û	90%
亘 exaSound-PP1				
Dashboard	Ethernet			
Settings	✓ Enabled			reset ϕ
Local Storage	IP address: 192.168.2.77			EDIT 🏚
Network	Manual IP Automatic IP (DHCP)			
Browse Attached USB Drives				

2. Select *Manual IP*. Enter proper IP address, subnet mask and gateway. Press apply when you are ready.

iPad 🗢	5:39 PM		90% 💷)
$\langle \rangle \square$	exasound-pp1.local	C	+ 🕛
e exaSound-PP1			
Dashboard	Ethernet		
Settings	✓ Enabled		RESET ϕ
Local Storage	IP address: 192.168.2.77		edit 🏚
Network	Manual IP Automatic IP (DHCP)		
Browse Attached USB Drives	Address 192.168.1.10		
Owner's Manual	Subnet Mask		
Tutorials	255.255.255.U		
Roon Help 🗸 🗸	192.168.0.1		
Terms 🗸	APPLY		
	Wi-Fi		
	X Disabled To enable Wi-Fi configure one of the available Wi-Fi networks.		
	Network:		

3. It will take a moment for the new settings to be activated. You will see a Waiting for Connection message.

$rac{1}{2} rac{1}{2} rac{1}{2}$ Waiting for connection	٦

4. When the Network page reappears you should see the new IP address.



Manual Wi-Fi Configuration

- 1. Navigate your web browser to the PlayPoint DM Web Interface. Open the menu and select the *Network* page.
- 2. Scroll down to the *Available Wi-Fi Networks* tab and tap the *Refresh* button.

iPad 🗢	5:37 PM exasound-pp1.local	91% 페
亘 exaSound-PP1		
Dashboard	Ethernet	
Settings	✓ Enabled	reset ϕ
Local Storage	IP address: 192.168.2.77	EDIT 🏟
Network	Wi-Fi	
Browse Attached USB Drives	× Disabled	
Owner's Manual	To enable WI-FI configure one of the available WI-FI networks.	
Tutorials	Network:	
Roon Help 🗸 🗸	IP address:	
Terms 🗸	Available Wi-Fi Networks	
	Press kerresh to update the list of WI-H networks.	

3. You will see a list of available Wi-Fi networks.

iPad 🗢	9:37 PM		100% 💼 🗲
< > 🕮	exasound-pp1.local	C	ů + Ö
這 exaSound-PP1			
Dashboard	Ethernet		
Settings	✓ Enabled		reset ϕ
Local Storage	IP address: 192.168.2.78		EDIT 🏚
Network	Wi-Fi		
Browse Attached USB Drives	 Disabled To enable Wi-Ei configure one of the available Wi-Ei networks 		
Owner's Manual	Network:		
Tutorials			
Roon Help ^	IP address.		
How Roon works	Available Wi-Fi Networks		
Roon User Guide			t, →
Roon Community	Ç 🔓 Cj Quality: 27%		t,⇒
Terms 🗸	REFRESH C		

- Locate the Wi-Fi network that you need to connect to and tap on the icon to the right.
- 5. Enter password if you are connecting to a secured network. The PlayPoint DM supports **WPA2-PSK** (AES) security mode.

iPad 🗢	5:37 PM exasound-pp1.local	91%
亘 exaSound-PP1		
Dashboard Settings	Wi-Fi	
Local Storage	 Disabled To enable Wi-Fi configure one of the available Wi-Fi networks. 	
Network	Network:	
Browse Attached USB Drives	IP address:	
Owner's Manual	Available Wi-Fi Networks	
Tutorials Roon Help 🔷	Quality: 30%	<i></i> ,
Terms 🗸	Password	
	Manual IP Automatic IP (DHCP) CONNECT CANCEL REFRESH C	

At this point, if you are using an *Automatic IP* (DHCP), continue with step 7.

6. Select *Manual IP* if you need to enter manually the IP settings.

iPad ≑	10:40 PM exascund-pp1.local	100% 💼 +
查 exaSound-PP1		
Dashboard	Password	
Settings	Show password	
Local Storage	Manual IP Automatic IP (DHCP)	
Network	Address 192.168.1.4	
Browse Attached USB Drives	Subnet Mask 255 255 25 0	
Owner's Manual	Gateway	
Tutorials	192.168.1.1	
Roon Help	CONNECT CANCEL	
How Roon works	중 ▲ GGG-2G Quality: 100%	$\stackrel{\rightarrow}{\leftarrow}$
Roon User Guide	중 ■ 666-56-1	<i>_</i> →
Roon Community		
Terms 🗸	Quality: 100%	<i>~</i> [*]
	REFRESH C	

7. Press *Connect*. It will take a moment for the new settings to be activated. You will see a *Waiting for Connection* message.

$\hat{z}_{\mathbf{p}}^{\text{states}}$ Waiting for connection

8. When the Network page reappears you should see the new IP address.

iPad 🗢	10:25 PM		100% 📥 +
< > 臼	exasound-pp1.local	Ċ	ů + Ö
亘 exaSound-PP1			
Dashboard	Ethernet		
Settings	× Disabled		ACTIVATE 🗸
Local Storage	IP address:		EDIT 🏟
Network	Wi-Fi		
Browse Attached USB Drives	✓ Enabled		reset ϕ
Owner's Manual	Network: BELL583		
Tutorials	IP address: 192.168.1.4		EDIT 🏟
Roon Help	Available Wi-Fi Networks		
How Roon works			.→
Roon User Guide	Quality: 34%		+ *

\triangle	Note that if you use an IP address to connect your Web browser to the PlayPoint DM, the browser won't be able to reconnect automatically. In this case you will need to manually enter the new PlayPoint DM IP address in the navigation bar of the Web browser. See below how to restore automatic network connectivity.
\triangle	Warning: If you enter incorrect network settings you may lose connectivity to the PlayPoint DM. Use the touch screen to restore the automatic (DHCP) network configuration. With the Down button navigate to the Network screen and press <i>the Start/Restart</i> button for the Wi-Fi connection. For more information see <i>Zero Configuration Networking</i> .

Specifications

D/A Converter IC	2xESS Technology ES9028PRO 32-bit, 8-channel PRO series DAC in octo-mono configuration
	PCM 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 352.8kHz, 384kHz
Sampling Rate Support-LAN	Native DSD DSD 64 Fs: 2.8224MHz; 3.072MHz DSD 128 Fs: 5.6448MHz; 6.144MHz DSD 256 Fs: 11.2896MHz; 12.288MHz DSD 512 Fs: 22.5792MHz; 24.576MHz
Sampling Rates-SPDIF Coaxial	PCM 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Sampling Rates-SDIF Optical	PCM 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz
Total Harmonic Distortion + Noise	Balanced: 0.00026% @ 1KHz, 0dBFS Unbalanced: 0.00021% @ 1KHz, 0dBFS
Total Harmonic Distortion	Balanced: 0.00012% @ 1KHz, OdBFS Unbalanced: 0.00014% @ 1KHz, 0dBFS
Intermodulation Distortion	-128db 0.00004% @ 19KHz + 20KHz 0 dBFS 2nd order IMD
Dynamic Range	Balanced: 123.8 dB, A-weighted, 5 Vrms Unbalanced: 123.5 dB, A-weighted, 2.5 Vrms
DAC Master Clock Jitter	0.082 psec (82fsec) rms
Frequency Response	0Hz - 20kHz (-0.15dB) @ 44.1kHz / 48kHz 0Hz - 30kHz (-0.15dB) @ 88.2kHz and higher rates
Phase	Non-inverting
Channel Separation	Balanced: 157 dB @ 1 KHz; 153 dB @ 20KHz Unbalanced: 164 dB @ 1KHz; 130dB @ 20KHz
Digital Inputs	LAN, SPDIF Coaxial, SPDIF TOSLINK (optical), USB storage
Line Outputs	Balanced (XLR), Unbalanced (RCA), gold-plated contacts

Line Output Level	Balanced: 5 Vrms Unbalanced: 2.5 Vrms
Line Output Impedance	Balanced: 400 ohms Unbalanced: 200 ohms
Line Output Offset	< 5 mV
Headphone Amp Current Output	500 mA peak
Headphone Amp Output Impedance	Balanced: 4 Ohm, 20Hz-20KHz Unbalanced: 2 Ohm, 20Hz-20KHz
Headphone Amp Output	Balanced: 0-5Vrms Unbalanced: 0-4Vrms
Headphone Amp THD+N	0.0012%, 1Vrms into 60ohms
Headphone Amp Intermodulation Distortion 1Vrms into 60ohms 19kHz + 20kHz 2nd order IMD	-120db 0.0001%
Headphone Channel Separation	Balanced: 156 dB @ 1KHz; 138 dB @ 20KHz; Unbalanced: 50 dB @ 1KHz; 50 dB @ 20KHz;
Headphone Jack	Balanced: 1/4" TRS; 3pin XLR Unbalanced: 1/4" TRS SE
Volume Control	Four-way volume synchronization, Volume bypass Channel trimming Mute ZeroResolutionLoss™ volume control provides all-time 0dB Full-Scale streaming
Volume Control Step	0.5 dB
Volume Matching Between Channels	Better than 0.1 dB
USB Ports	2x USB 3.0
USB Port Max Current	500mA
Ethernet Interface	Gigabit Ethernet

Wi-Fi Interface	Intel [®] Dual Band Wireless-AC 7260 802.11 ac/n 2.4 GHz, 5 GHz Compliance PCI, CISP, FIPS, FISMA
IP Setup	IP4, DHCP, WPA, manual configuration
Wi-Fi Setup	WPS Push Button, manual configuration
Wireless Security Mode	WPA-PSK2 AES (Home)
Display	Glass Capacitive Touch Color LCD
External Power Supply	Option 1: Switching Mode Power Supply Input: 10-240V AC, 1.4A, 50-60Hz Output: 12V DC, 5.4A Compliance CE, FCC, RoHS, Safety CE,UL/cUL,FCC,TUV/GS
DC Input	12V, 4A
Power Consumption	<48 W
Power Jack Diameter	Internal: 2.5mm External : 5.5mm
Enclosure	Premium machined and anodized aluminium Finish: Silver, Black, Zebra
Dimensions (W x H x D)	16.5 x 2.625 x 13.75 inches (420 x 70 x 352 mm)

Weight	2.4 lbs (4.26Kg)
Package dimensions (W x H x D)	20.75 x 8.25 x 16.5 inches (525 x 209 x 423 mm)
Package Weight	15.2 lbs (6.9Kg)
Teddy Pardo power supply dimensions (W x H x D)	6.5 x 2.2 x 9.25 inches (165 x 55 x 235 mm)
Teddy Pardo power supply weight	4.4 lbs (2.0Kg)
Teddy Pardo power supply package dimensions (W x H x D)	12.75 x 8.25 x 4.25 inches (320 x 107 x 235 mm)
Teddy Pardo PS package weight	5.5 lbs (2.5Kg)

Open-source Credits

We make extensive use of <u>open source software</u> for the various technologies, architectures, and interfaces that run on the exaSound PlayPoint DM. In fact, we would be unable to offer the device as we envision it, at the current price, without these publically developed projects. The credit roll is available on the PlayPoint DM Web Interface: <u>http://exaSound-PP1.local</u>.

GNU General Public License ("GPL")

Firmware incorporated into this product may include third party copyrighted software licensed under the GPL or Lesser General Public License ("LGPL") (collectively, "GPL Software") and not exaSound's Terms of Use available at <u>https://www.exasound.com/Store/TermsofUse.aspx</u>. In accordance with the GPL, if applicable: 1) the source code for the GPL Software may be downloaded at no charge from <u>https://support.exaSound.com</u>. Contact <u>Customer Support</u> for further information; 2) you may re-use, re-distribute, and modify the GPL Software; 3) with respect solely to the GPL Software, no warranty is provided, to the extent permitted by applicable law; and 4) a copy of the GPL is included herewith, may be obtained at <u>http://www.gnu.org/licenses/gpl-3.0.en.html</u>, and may also be found at <u>https://support.exaSound.com</u>. Modification of or tampering with the Software, including but not limited to any Open-source Software, is solely at your own risk. exaSound Audio Design is not responsible for any such modification or tampering. exaSound Audio Design will not support any product in which you have or have attempted to modify the Software supplied by exaSound Audio Design.

Safety Information

Explanation of Graphical Symbols

4	The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the Device.

Important Safety Instructions

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plug, receptacle, and the point where it exits from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.

Precautions

 Before connecting the AC power adapter cord to the device, make sure the voltage designation of the power adapter corresponds to the local electrical supply. If you are unsure of your power supply, contact your local power company. The acceptable power input range is AC ~ 100V-240V, 50/60Hz

- The device is still receiving power from the AC power source as long as it is connected to the wall outlet, even if the device itself has been turned off.
- Unplug the power adapter if you are not going to use the device for an extended period of time. Hold the power adapter when unplugging. Do not pull on the cord.
- The power adapter is used as the mechanism for cutting off power, therefore make sure it is easy to unplug.
- To ensure proper ventilation around this product, do not place this product on a sofa, bed or rug.
- High temperature will lead to abnormal operation of this device. Do not expose this device or batteries to direct sunlight or near heating objects.
- When moving the device from a cold location to a warm one, or vice versa, moisture may condense on components inside the device. Should this occur, the device may not operate properly. In such a case please turn the device off for 1-2 hours to facilitate moisture evaporation.

	WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS DEVICE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES MAY BE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY. THE DEVICE SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES SHALL BE PLACED ON THE APPARATUS.
	WARNING: CHANGES OR MODIFICATIONS NOT AUTHORIZED BY THE MANUFACTURER CAN INVALIDATE THE COMPLIANCE TO REGULATIONS AND CAUSE THE UNIT TO BE NO MORE SUITABLE TO USE. THE MANUFACTURER REFUSES EVERY RESPONSIBILITY REGARDING DAMAGES TO PEOPLE OR THINGS DUE TO THE USE OF A UNIT WHICH HAS BEEN SUBJECT TO UNAUTHORIZED MODIFICATIONS OR TO MISUSE OR TO MALFUNCTION OF A UNIT WHICH HAS BEEN SUBJECT TO UNAUTHORIZED MODIFICATIONS.
FCC Statement	This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Consult the dealer or an experienced radio/TV technician for help. Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
CE	This unit is compliant with Directive 2011/65/EC (RoHS) Restriction on Hazardous Substances,

	and is in conformity with the provisions of the EMC Directive 2004/108/EC. The following
	harmonized standards were applied:
	EN55022:2010/AC:2011 Class B
	EN61000-3-2:2006/A1:2009 and /A2:2009, EN61000-3-3:2008
	EN55024:2010 (IEC 61000-4-2:2008, IEC 61000-4-3-2006/A1:2007/A2:2010,
	IEC 61000-4-4:2004/A1:2010 , IEC 61000-4-5:2006, IEC 61000-4-6:2008,
	IEC 61000-4-8:2009, IEC 61000-4-11:2004)
	1999/5/ec - Radio and telecommunication Terminal Equipment Device (R&TTE)
	EN 60950-1, EN62311 - For Article 3.1(a): Health and safety of the user
	EN 301 489-1, EN 301 489-17 - For Article 3.1(b): Electromagnetic Compatibility
	EN 300 328, - EN 301 893 - For Article 3.2: Effective use of spectrum allocated
	This product, when no longer usable, when disposed off can't be treated as generic garbage,
	but must be disposed of at a collection point for recycling of electrical and electronic
	equipment, in compliance with the WEEE regulation (Waste of Electrical and Electronic
\mathbf{A}	Equipment).
	By making sure that this unit is correctly recycled, you will help preventing potential damages
	to environment and human health, which could be caused by the incorrect treatment of this
	product as generic garbage. Materials recycling helps conserve natural resources.
	We use our best efforts to ensure that information in this document is complete, accurate and
\wedge	current, but otherwise we make no representation concerning the same. We reserve the right
<u> </u>	to change or modify the information any time, without prior advice. It's up to the customer to
	ensure that the manual being consulted is the latest version.
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	 Direct Stream Digital (DSD) is a trademark of Sony Corporation. Boon and Boon Ready and the Boon Labs logo are trademarks or registered.
	trademarks of Roon Labs or Roon Labs's licensors
Trade	 The MOA logo is a trade mark of MOA Limited. © MOA Limited 2018
marks	 Designed for Windows Media, Microsoft, HDCD, and the HDCD logo are trademarks or
	registered trademarks of Microsoft Corporation in the United States and/or other
	countries.
	 Apple, Mac, AirPlay, iOS and OS X are trademarks of Apple, Inc. All attraction demarks are the annual statemarks of the second statemarks.
	 All other trademarks are the properties of their respective owners.

Limited One Year Warranty

exaSound's devices are warranted against defective workmanship or materials for one (1) calendar year from the original date of purchase. This warranty applies only to exaSound brand products manufactured by exaSound and sold to the original consumer by either exaSound or an exaSound authorized reseller. This warranty does not apply to exaSound brand products imported and sold by unauthorized dealers, distributors, or other sellers. exaSound may at its sole discretion, refuse to honour the warranty of any such unauthorized product that may be presented for service.

Warranty service can only be performed by exaSound. Devices which are defective must be shipped prepaid and insured to exaSound for warranty service in accordance with our Return Policy published at <u>https://www.exasound.com/Store/TermsofUse.aspx</u>. For products that we verify to be eligible for warranty service, we will pay the shipping cost to return the Device to you via ground shipment.

If in our assessment the defect is covered by our Warranty, the defective item will, at our sole option, be repaired, replaced with the same item or its functional equivalent, or the purchase price will be refunded. exaSound in its sole and absolute discretion shall be the sole determiner of whether a product is in fact defective.

Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer.

This limited warranty covers non-commercial use of this product, and shall not apply to the following, including, but not limited to: applications and uses for which this product was not intended; altered product or serial numbers; cosmetic damage or exterior finish; batteries and cable accessories; accidents, abuse, neglect, fire, water, lightning or other acts of nature; incorrect electrical line voltage, fluctuations and surges; failure to follow operating or maintenance instructions. exaSound does not warrant uninterrupted or error-free operation of the product. This limited warranty shall not extend to anyone other than the original purchaser of the product. It is non-transferable and states your exclusive remedy.

exaSound hereby expressly disclaims all liability for product defect or failure, that are due to normal wear, product misuse, physical tampering, abuse, product modification, improper product selection, non-compliance with any codes, misappropriation or the failure of the Device while being used for purposes for which it was not intended.

THE FOREGOING WARRANTY IS THE ONLY WARRANTY WITH RESPECT TO THE DEVICES AND WE MAKE NO OTHER WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, REGARDING THE DEVICES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL EXASOUND, OR ITS AUTHORIZED RESELLERS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF SUCH DAMAGES RESULT FROM NEGLIGENCE OR OTHER FAULT. TO OBTAIN WARRANTY SERVICE, please follow these instructions:

- Contact exaSound customer service via email at <u>CustomerService@exaSound.com</u> with details of the defect claimed, product model, serial number, date and place of the original purchase.
- If it is determined that your product needs service, a Return Merchandise Authorization (RMA) number will be issued to you along with return instructions and address of an exaSound service center.
- Pack the product securely in the original packaging, with your assigned RMA number marked clearly on the outside of the package. Send the package pre-paid and insured to the exaSound to obtain warranty service.
- All returns must comply with our Return Policy displayed at <u>https://www.exasound.com/Store/TermsofUse.aspx</u>.

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