

PlayPoint Mark II Network Audio Player

Owner's Manual

PLEASE READ BEFORE OPERATION



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Safety Information

Explanation of Graphical Symbols



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 $^{\sim}$ 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. 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 **FCC** one or more of the following measures: Statement 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. 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 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.
<u> </u>	We use our best efforts to ensure that information in this document is complete, accurate and current, but otherwise we make no representation concerning the same. We reserve the right 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.
Trade marks	 ZeroJitter™, GalvanicInfinity™, ENclusiv™, FemtoMaster™ and ZeroResolutionLoss™ are trademarks of exaSound Audio Design. Direct Stream Digital (DSD) is a trademark of Sony Corporation. Roon and Roon Ready and the Roon Labs logo are trademarks or registered trademarks of Roon Labs or Roon Labs's licensors. The MQA logo is a trade mark of MQA Limited. © MQA Limited 2018 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 other trademarks are the properties of their respective owners.

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 2.5 cm (1") 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.

Welcome

Thank you for purchasing the exaSound PlayPoint Mark II Network Audio Player!

The PlayPoint Mark II offers the highest digital audio resolution, comprehensive feature set and choice of easy to use and advanced configurations. Roon Core and Roon Ready bring the best playback and library management experience. Support for proprietary and open audio streaming technologies makes the PlayPoint the central digital hub in your audio system.

We hope that the exaSound PlayPoint 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.

Your satisfaction is our highest priority.

Happy listening,

exaSound Audio Design
www.exaSound.com
CustomerService@exaSound.com

Package Contents

The following items should be in the box:

- exaSound PlayPoint Mark II
- Power supply
- Ethernet Cable
- Quick Start Guide
- Two Wi-Fi Antennas (except for models without Wi-Fi support)

Overview

The exaSound PlayPoint Mark II is a reference-quality network audio player and server. It connects your DAC to your home network and delivers seamless, life-like music experience. It receives digital audio via Gigabit Ethernet, Wi-Fi 802.11AC or from attached USB storage devices. It outputs digital audio to attached USB Audio 2.0 DAC.

The PlayPoint Mark II has two build-in audio servers. A full-function Roon Core and a UPnP server can stream audio to other network players on you your home network.

When used with exaSound DACs, the PlayPoint Mark II utilizes the exaSound's proprietary ZeroJitter™ asynchronous USB streaming technology. exaSound DACs also feature GalvanicInfinity™ USB noise isolation and ZeroResolutionLoss™ hardware volume control. Combined, these three technologies deliver dynamic and natural sound with vanishingly-low jitter, distortion and noise levels. When used with exaSound DACs, the PlayPoint is certified as RoonReady device.

exaSound PlayPoint Mark II supports most high-resolution PCM music formats including FLAC, AIFF, WAV, as well as DSD formats including DSF and DFF. PlayPoint Mark II offers ENclusiv™ High Resolution Audio (HRA) support: PCM sampling rates up to 768kHz at 32bit resolution and DSD up to 24.576MHz (8X DSD or DSD512). The availability of sampling rates and other features depend on the capabilities of the attached USB DAC.

exaSound PlayPoint Mark II 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 Mark II 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, MPD 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 from iPads and iPhones.

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

PlayPoint Mark II - New Features

- Support for third-party USB Audio Class 2.0 DACs
- Doubled maximum sampling rates DSD512 at 22.5792/24.576 MHz and PCM 705.6/768kHz.
- Doubled CPU power improves the performance of Roon Core
- Doubling the size of RAM memory allows support for Roon libraries up to 128,000 tracks (approximately 8 TB of disk space)
- m.2 SSD disk storage with doubled access speed and capacity
- Two upgraded USB 3.0 ports
- All-new Web user interface

How Would I Use the PlayPoint Mark II?

Roon Server and Roon Ready Player

Roon offers engaging, enjoyable way to browse your music. exaSound PlayPoint Mark II 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 automatic cloud service library management, Roon delivers metadata for the user's library and frees the user from the complexities of library management.

When used with exaSound DACs, the PlayPoint is certified as a RoonReady player. Roon Ready is the highest level of Roon integration and means that Roon technology is customized and embedded both in the player and the DAC for achieving best user experience.

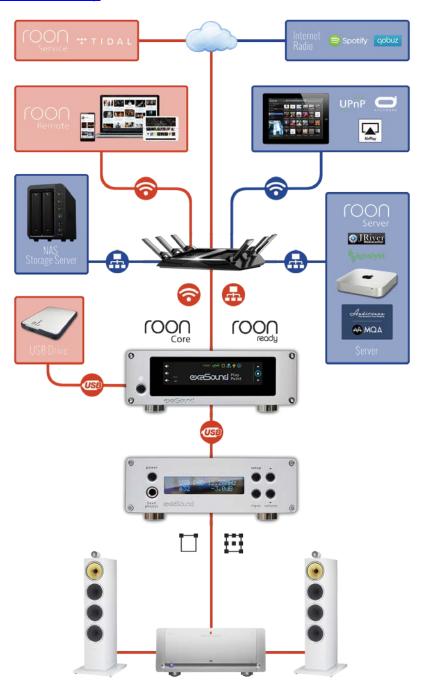
User–friendly remote operation of the exaSound PlayPoint Mark II from a favorite listening position is accessible via Roon Remote Apps on iOS or Android mobile devices. Together, Roon and exaSound deliver the power, flexibility, and performance benefits of networked audio, with the easiest setup and highest sonic fidelity.

The easiest configuration for using the exaSound PlayPoint Mark II 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:

- You need to connect the PlayPoint Mark II 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 Mark II.
- 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>.
- The Roon playback engine Roon Core is installed on the PlayPoint Mark II.
- 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.

- Music files can also be stored on Network Attached Storage (NAS) drive.
- The PlayPoint Mark II can transparently discover and connect to Roon servers running on computers or NAS drives.

Roon supports all formats - stereo and multichannel, PCM and native DSD at all sampling rates and resolutions. You can find more information about Roon here: How Roon works. Questions about Roon can be posted on the Roon Community forum. Step-by-step guide for configuring the exaSound PlayPoint Mark II for use with Roon is available on our blog: How to get started with Roon and the exaSound PlayPoint - Quick Setup.



UPnP /OpenHome Player and Audio Library Server

The PlayPoint Mark II 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 Mark II, it also 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 805.11AC wireless router.

There are many other third-party UPnP /OpenHome control apps and library servers. The ones listed here are tested with the PlayPoint Mark II and support all high-resolution formats, resolutions and sampling rates up to DSD512 for stereo and DSD256 for multichannel sources. <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 Mark II 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 with HQPlayer</u>.

AirPlay Player

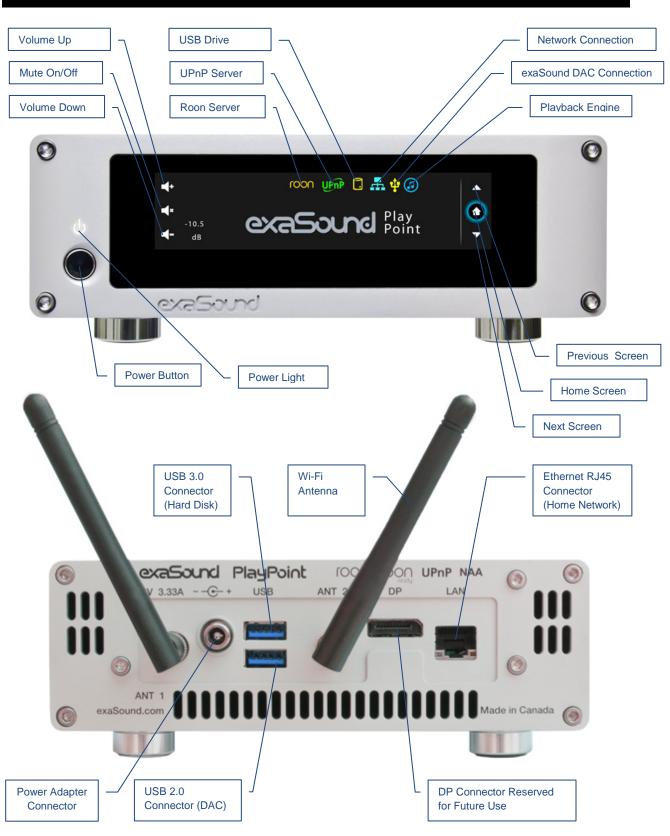
AirPlay is a popular and convenient network media streaming technology. AirPlay can be used to stream content from online services like Tidal to the PlayPoint Mark II.

AirPlay support is implemented with ShairPort, an open-source Linux 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 Mark II. It supports stereo CD-quality audio. DSD and high-sampling rate/high-resolution PCM are not supported.

MPD Player

PlayPoint Mark II has a built-in MPD player. Music files must be stored on attached USB drive. Playback can be controlled with any MPD client, like the MPaD / MPoD apps for iPad and iPhone available on the Apple iTunes store. This mode of operation supports all PCM formats and native DSD at all sampling rates, resolutions and number of channels. Step-by-step guide for configuring the exaSound PlayPoint for use with MPaD and MPoD is available on our blog.

Front and Rear Panels



Quick Start Guide

- 1. Connect the power adapter to the mains and to the PlayPoint Mark II device.
- 2. Attach the Wi-Fi Antennas (where applicable).
- 3. Connect the PlayPoint Mark II to your Gigabit home network with an Ethernet CAT 6 cable.
- 4. Connect the USB cable between the PlayPoint Mark II and your DAC.
- 5. Connect the line outputs to your power amplifier or preamplifier or plug-in your headphones.
- 6. Press the PlayPoint Mark II power button, the power indicator light will illuminate.



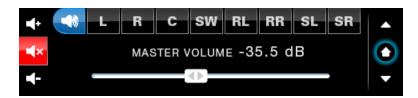
7. In a moment the exaSound logo will appear. After 30 seconds or so the screen will blink. Shortly after the home screen will appear. The three icons on the top indicate network connection, USB connection and working audio engine.



8. Navigate between screens with the buttons on the right. One screen up from the *Home* screen is the volume-control slider. You can control the master volume and trim the individual channels. Digital volume control may not be supported by your DAC.



Volume control screen for stereo DACs with digital volume control.



Volume control screen for multi-channel DACs. Mute is On.

9. One screen down you will find the DAC input selection screen. This feature is available with e32, e38 and newer exaSound DACs.



10. The next screen down displays the album, artist and title of the current track.



- 11. Turn on your audio components, first the DAC, then the preamp (if you use one) and finally the power amplifier.
- 12. Make sure the DAC volume level is safe.
- 13. The easiest way to use the exaSound PlayPoint Mark II is with Roon. The PlayPoint Mark II will appear as **exaSound-PP1** on the Audio tab of the Roon **Settings** screen. Step-by-step instructions are available on our blog: How to get started with Roon and the exaSound PlayPoint Quick Setup.
- 14. Another easy way to use the exaSound PlayPoint Mark II is with Kazoo installed on iPad, iPhone, PC or Mac. Connect a USB drive with music to the PlayPoint Mark II. The first time the disk will be scanned automatically for music files. When needed, you can manually update the music library.



Configure Kazoo to use exaSound-PP1 as playback device and exaSound-PP1 Library as music server. Step-by-step instructions for using Kazoo are available on our blog.



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

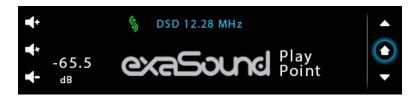
Playback Screens



UPnP / Open Home playback



Roon Ready playback using an external Roon Server or the built-in Roon Core. Available only with exaSound DACs.



Playback with the Signalyst Network Audio Adapter (NAA) using HQPlayer as a streaming source.



ShairPort playback using Apple AirPlay compatible devices as streaming sources.

PlayPoint Mark II Configuration

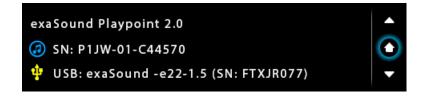
You can configure the PlayPoint Mark II using the touch-screen or with a Web browser from a mobile device, PC or Mac. Using the touch screen is simpler. Some advanced settings are available only with the Web user interface. We will introduce first the PlayPoint Mark II Touch-Screen Interface and then the Web User Interface.

Resetting the DAC Connection

Only one DAC can be attached to the PlayPoint at any time. Making a USB connection with more than one DAC can cause unexpected behavior. Always power down the PlayPoint before connecting or disconnecting DACs.

Device Information Screen

Navigating with the *Down* button on the touch screen you will see the model and serial numbers of the PlayPoint Mark II and the attached DAC.

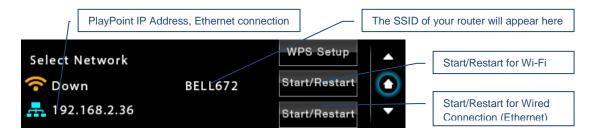


Zero-Configuration Networking

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 Mark II. Mac computers, mobile phones and tablets will discover automatically your exaSound PlayPoint Mark II. By default it will appear on your home network *as exaSound-PP1.local*. If your Windows computer is unable to see the PlayPoint Mark II, 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:

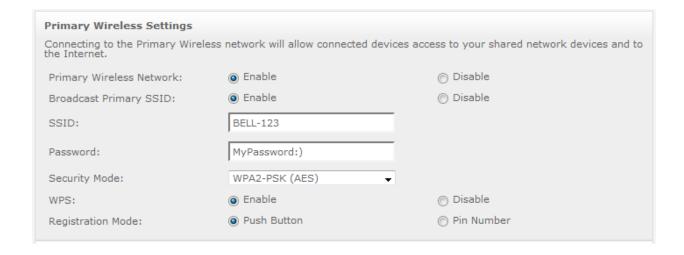


Before using the wireless connection you need to complete the WPS (Wireless Protected Setup) procedure. Alternatively you can configure manually the wireless network via the Web User Interface.

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.
- 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.

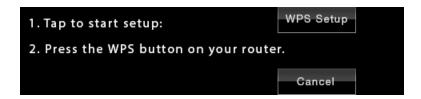


7. Use the Down navigation button on the right to navigate to the *Select Network* screen.



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 Mark II.

The SSID of your router will appear here



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 Mark II 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 Mark II model without Wi-Fi support, the simplified Network Screen will provide information about the network status and the IP address assigned to your PlayPoint Mark II.



Multi-room Configuration

Each PlayPoint Mark II device on your home network must have a unique name. Use the **Select PlayPoint Name** screen to assign different host names to your PlayPoint Mark II 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 Mark II will shut-down and restart.

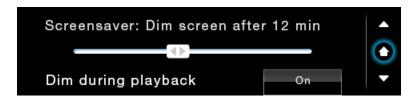


4. Remote control apps must be reconfigured to use the new PlayPoint Mark II host name.

Screen Saver

The PlayPoint Mark II 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 Mark II. The Setup files are automatically downloaded from roonlabs.com.



Running Roon Core on the PlayPoint Mark II is simple and convenient - there is no need to use external server hardware. In addition, using a USB drive attached to the PlayPoint Mark II to store your music library reduces the workload on your home network and simplifies the network configuration. PlayPoint Mark II supports Roon libraries up to 128,000 tracks (about 8TB storage space) on attached USB drives.

Alternatively, 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 can use an external Roon Server.

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



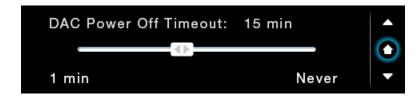




Note that uninstalling Roon Core will also erase all custom Roon settings and the local Roon music library from the PlayPoint Mark II internal SSD storage.

DAC Power Off Timeout

The latest generation exaSound DACs can enter power-saving mode after a period of inactivity. You can use the **DAC Power Off Timeout** Screen to set the time-out period.



Moving the slider to the rightmost position disables the DAC automatic power off feature.

Firmware Update

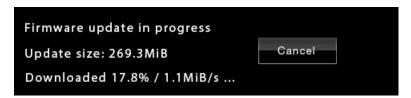
- 1. Disconnect any USB hard drives or USB sticks from the PlayPoint Mark II. External USB storage devices may interfere with the update.
- 2. Make sure that the PlayPoint Mark II power supply is reliably connected.
- 3. Make sure the PlayPoint Mark II is connected to your home network and your Internet connection is stable.
- 4. Use the *Up/Down* buttons on the right to navigate to the *PlayPoint Firmware Update* Screen. Tap on the *Check* button.



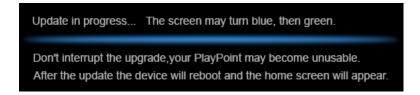
5. If a new firmware version is available, Tap *Update*.



6. You will see the *Firmware Update in Progress* screen. Don't interrupt the power to the PlayPoint Mark II during update or your device may become unusable.



7. The PlayPoint Mark II may reboot twice during the update.

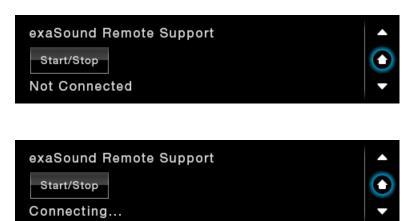


8. After the update you will see the *Home* screen.



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 Mark II 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 Mark II on the support network.

Volume Control

The availability of volume control capabilities depend on the features of the attached USB DAC. Some USB DACs don't offer digital volume control. Volume synchronization may be one way or multi-way. Volume may be measured in dBs or percentages. Some DACs may not have support for maximum volume limit, mute or volume bypass. The features that are not available with your DAC will not be shown on the device display and on the web user interface.

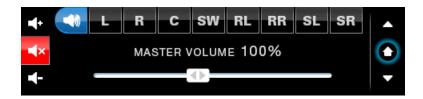
exaSound DACs feature ZeroResolutionLoss™ hardware volume control. Audio data is streamed at 0dB over the USB connection and volume control is implemented by the ES9018/ES9028PRO DAC chips. This approach preserves the maximum possible signal to noise ratio. The volume level changes in steps of 0.5 dB. exaSound DACs support all volume control feature listed in this guide.

Volume can be controlled in five ways:

- 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 Mark II touch-screen. You can control the master volume and trim the individual channels.



Volume control screen for stereo DACs



Volume control screen for multi-channel DACs. Mute is On.

- From the PlayPoint Mark II Web Interface.
- From the volume control buttons on the DAC front panel.
- With the IR remote control supplied with your DAC.

The PlayPoint Mark II implements a unique 5-way volume synchronization. No matter which method is used to change the volume, all volume sliders and the indicators on the DAC display and the PlayPoint Mark II display are kept in sync.

The sound can be muted by touching the *Mute* button on the *Home* screen or with the IR remote control supplied with your DAC. Pressing or clicking *Mute* again restores the previous volume level.

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

Volume Bypass

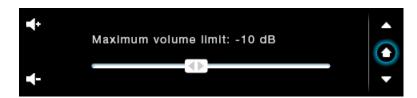
When the volume is set to 0dB, the hardware volume control is turned off and the PlayPoint Mark II sets the DAC in Volume Bypass Mode.

To activate Volume Bypass:

- Set the master volume to 0dB.
- On the touch screen set the left and right volume sliders to OdB.
- If you are using a multichannel DAC, set all channel sliders to OdB.

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 Mark II supports direct connection of one USB 3.0 hard-disk drive (HDD) or solid-state drive (SSD) with current consumption less than 900mA.

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

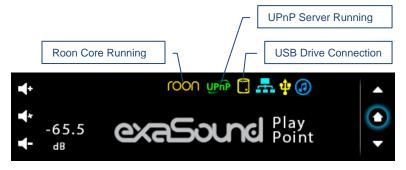
The PlayPoint Mark II scans attached USB drives for audio files. Metadata from the discovered files, like album, artist, and cover art are organized in media libraries for use with Roon, UPnP/Open Home, and MPD. These libraries are stored on the PlayPoint Mark II internal m.2 SSD drive.

Before connecting the USB drive to the PlayPoint Mark II, make sure to empty the Recycle Bin/Trash Can. The PlayPoint Mark II 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 Mark II.

PlayPoint Mark II Music Servers and Music Libraries

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

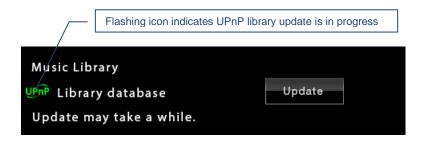
The PlayPoint Mark II can support Roon library with about 128,000 tracks. If your music collection is larger, use an external Roon server hosted on computer or NAS drive.

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

UPnP Music Library

When a USB drive is connected to a PlayPoint Mark II for the first time, it will be automatically scanned for music files. The PlayPoint Mark II 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 Mark II.

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.

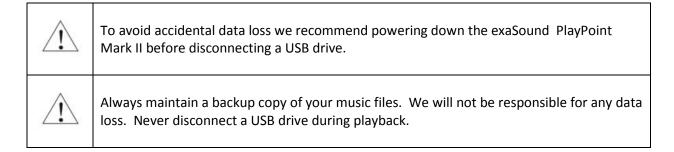


To delete the UPnP music library:

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

MPD Music Library

MPD library (database) is not created automatically. MPD clients can control the creation and the update of the MPD database. Step-by-step instructions are available on our blog: <u>Using MPaD/MPoD for audio playback with the exaSound PlayPoint Network Audio Player</u>. See point 14: Updating the database.

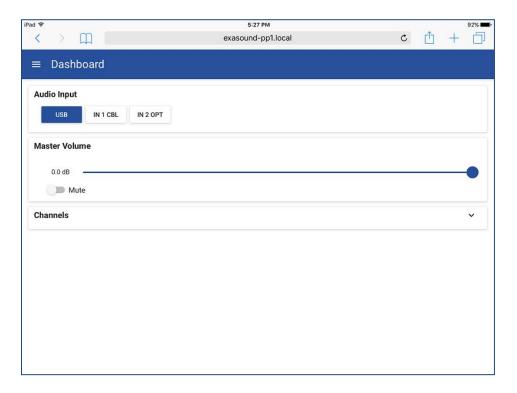


Web User Interface

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

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

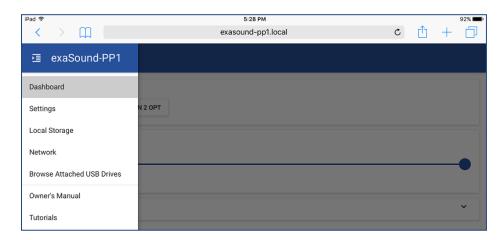
When you connect to the PlayPoint Mark II with a Web browser you will see the following page:



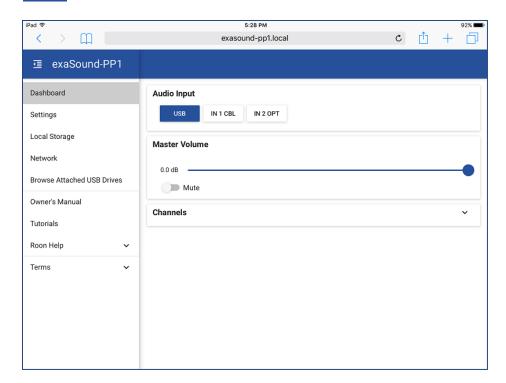
Working with the Menu



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.



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.

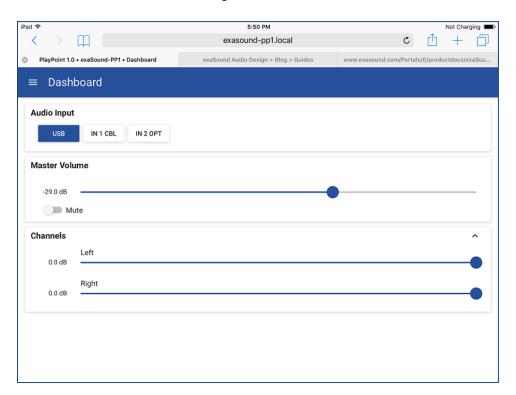


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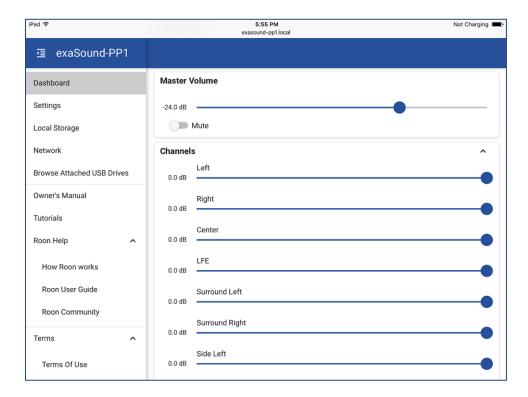
You can toggle between Auto-Hide and Always-On menu modes by tapping on the menu icon.

Dashboard for Volume Control and Input Selection

Web Dashboard, Channel Trimming View - Stereo



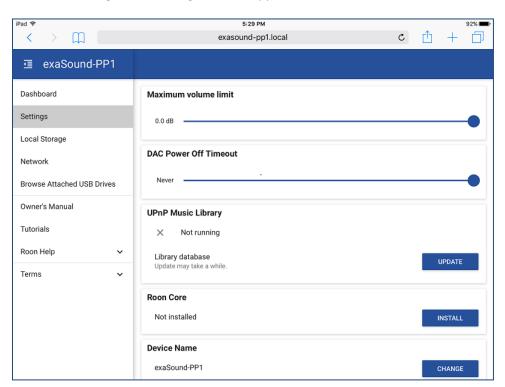
Web Dashboard, Channel Trimming View - Multichannel



Settings

Use the Settings page of the web user interface to configure the PlayPoint Mark II. Note that feature availability depends on the capabilities of the attached USB DAC.

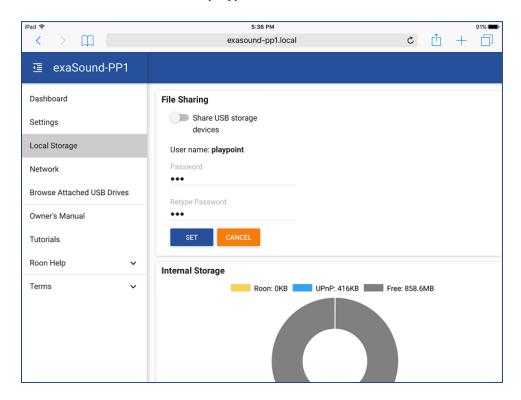
- Maximum Volume Limit
- DAC Power off Timeout
- Updating the UPnP Music Library
- Installing and erasing the Roon Core
- Changing the PlayPoint Mark II Device Name (Host Name)
- Displaying the model number, serial number and firmware version
- Checking for firmware updates and installing firmware updates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



Sharing Attached USB Drives on the Network

File Sharing allows you to have network access to the USB drives attached to the PlayPoint Mark II. 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 Mark II file shares.
- The username is fixed *playpoint*



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

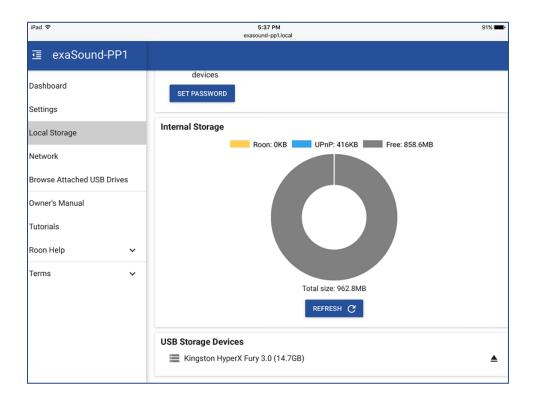


Make sure that there always is at least 10% free space on the PlayPoint Mark II internal SSD drive. See *PlayPoint Music Services and Music Libraries* for instructions how to free space by erasing unneeded music libraries.

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 Mark II:

- Close any applications on remote computers that may be using files on the PlayPoint Mark II 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 Mark II and then disconnect the USB drive.





Always maintain a backup copy of your music files. We will not be responsible for any loss of data on USB drive used with the exaSound PlayPoint Mark II.



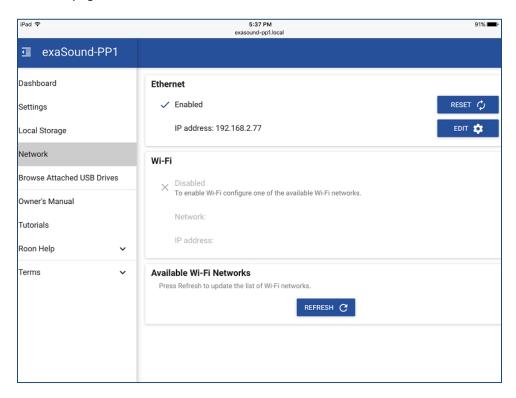
Never disconnect a USB drive during playback.



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

Ethernet Connection with Manual IP Address

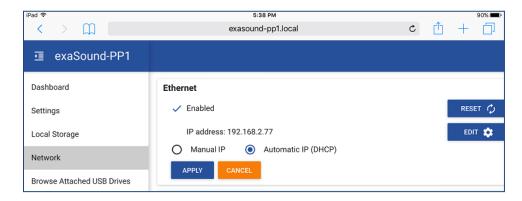
Navigate your web browser to the PlayPoint Mark II Web Interface. Open the menu and select the **Network** page.



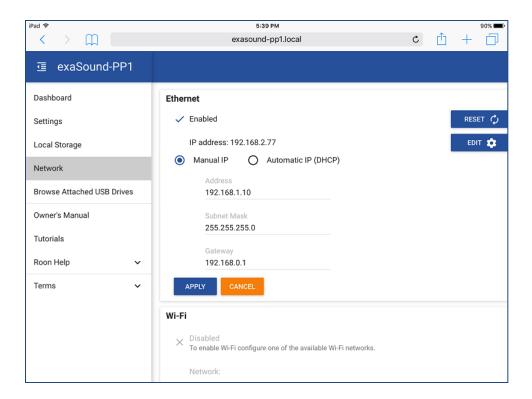
By default the PlayPoint Mark II will use the wired network connection - Ethernet.

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

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



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



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



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



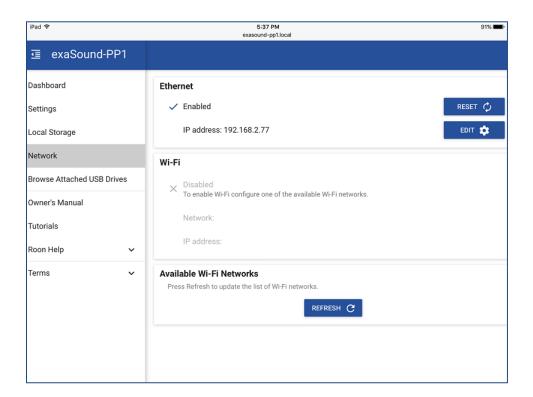
Note that if you use an IP address to connect your Web browser to the PlayPoint Mark II, the browser won't be able to reconnect automatically. In this case you will need to manually enter the new PlayPoint Mark II IP address in the navigation bar of the Web browser. See below how to restore automatic network connectivity.



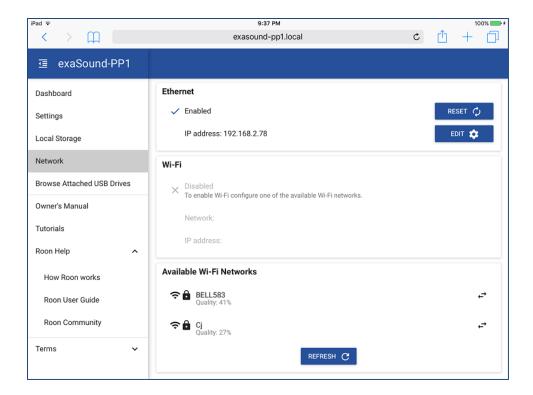
Warning: If you enter incorrect network settings you may lose connectivity to the PlayPoint Mark II. Use the touch screen to restore the automatic (DHCP) network configuration. With the **Down** button navigate to the **Network** screen and press **the Start/Restart** button for Ethernet (wired) connection. For more information see **Zero Configuration Networking**.

Manual Wi-Fi Configuration

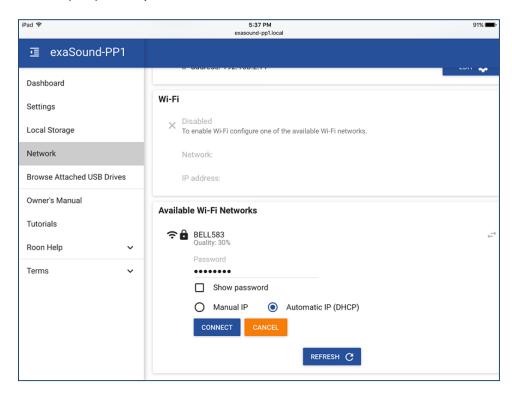
- 1. Navigate your web browser to the PlayPoint Mark II Web Interface. Open the menu and select the **Network** page.
- 2. Scroll down to the *Available Wi-Fi Networks* tab and tap the *Refresh* button.



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

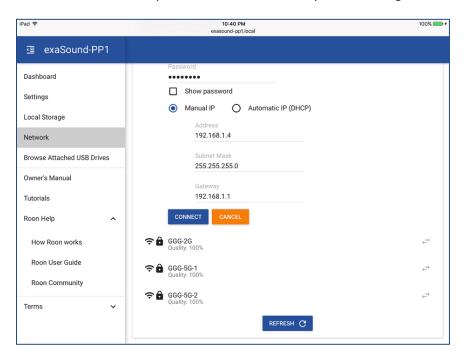


- 4. Locate the Wi-Fi network that you need to connect to and tap on the icon to the right.
- 5. Enter password if you are connecting to a secured network. The PlayPoint Mark II supports **WPA2- PSK (AES)** security mode.



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

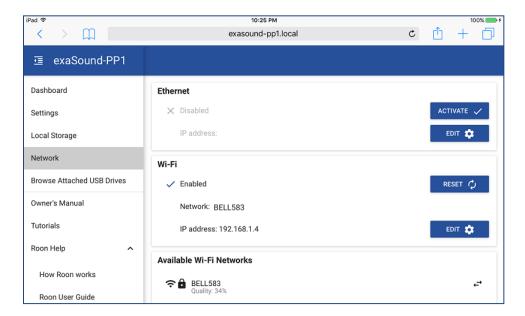
6. Select *Manual IP* if you need to enter manually the IP settings.



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



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





Note that if you use an IP address to connect your Web browser to the PlayPoint Mark II, the browser won't be able to reconnect automatically. In this case you will need to manually enter the new PlayPoint Mark II IP address in the navigation bar of the Web browser. See below how to restore automatic network connectivity.



Warning: If you enter incorrect network settings you may lose connectivity to the PlayPoint Mark II. Use the touch screen to restore the automatic (DHCP) network configuration. With the Down button navigate to the **Network** screen and press **the Start/Restart** button for the Wi-Fi connection. For more information see **Zero Configuration Networking**.

Specifications

	USB Audio Class 2.0
USB Audio Interface	exaSound proprietary ZeroJitter™ USB audio interface with error correction
HRA (High Resolution Audio) Sampling Rate Support	PCM 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 352.8kHz, 384kHz, 705.6kHx, 768 kHz 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
	DSD over PCM (DoP) DSD 64 Fs: 2.8224MHz; 3.072MHz DSD 128 Fs: 5.6448MHz; 6.144MHz DSD 256 Fs: 11.2896MHz; 12.288MHz
Volume Control (Feature availability depends on	Five-way volume synchronization Volume bypass Channel trimming Mute
the capabilities of the DAC in use)	ZeroResolutionLoss™ volume control for exaSound DACs provides all-time 0dB Full-Scale streaming
Digital Volume Control Steps	0.5 dB or 1dB, depend on the capabilities of the DAC in use
Number of channels	Stereo: 2 channels Multichannel: 8 channels Channel mode is automatically set to match the number of channels of the connected DAC
USB Ports	2x USB 3.0
USB Port Max Current	900mA

USB Storage Interface	USB 3.0 compatible with USB 2.0 and USB 3.0 HDD and SSD (USB 3.0 drives recommended)
Ethernet Interface	1 x Realtek 8111G PCI-E 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	90-264V~, 1.5A, 50-60Hz Compliance CE, FCC, RoHS, Safety CE,UL/cUL,FCC,TUV/GS Meet Energy Star EPS2.0/ErP lot 7 Meet DOE Level VI High Reliability EMC Standard: EN55022 CLASS B / EN55024 CLASS B Over Current Protection Over Temperature Protection Over Voltage Protection
DC Input	12V, 3.33A
Power Consumption	<36 W
Dimensions (W x H x D)	6.5 x 2.2 x 9.25 inches (165 x 55 x 235 mm)
Weight	2.4 lbs (1.26Kg)

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 Mark II. 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 Mark II Web Interface: http://exaSound-PP1.local.

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 http://www.exasound.com/Store/TermsofUse.aspx. In accordance with the GPL, if applicable: 1) the source code for the GPL Software may be downloaded at no charge from http://support.exaSound.com. Contact Customer Support 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 http://www.gnu.org/licenses/gpl-3.0.en.html, and may also be found at http://support.exaSound.com.

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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 http://www.exasound.com/Store/TermsofUse.aspx. 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 CustomerService@exaSound.com 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 http://www.exasound.com/Store/TermsofUse.aspx.

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