

Bowers & Wilkins

Zeppelin Wireless

Welcome to Bowers & Wilkins and Zeppelin™ Wireless

Thank you for choosing Bowers & Wilkins. When John Bowers first established our company he did so in the belief that imaginative design, innovative engineering and advanced technology were keys that could unlock the enjoyment of audio in the home. His belief is one that we continue to share and it inspires every product we design.

Zeppelin Wireless can be used to:

- Play audio streams via a wireless or wired network connection, from AirPlay® or Spotify® Connect.

Note: A Spotify Premium account is required for Spotify Connect. Spotify functionality may be limited by region.

- Play music streamed from your mobile phone, tablet or computer using *Bluetooth*® wireless technology
- Play music using a wired connection from any device incorporating an analogue audio output.

1. Zeppelin Wireless Carton Contents

- i. Zeppelin Wireless
- ii. Power cable
- iii. Literature pack

Environmental Information

This product complies with international directives, including but not limited to the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment, the Registration, Evaluation, Authorisation and restriction of Chemicals (REACH) and the disposal of Waste Electrical and Electronic Equipment (WEEE). Consult your local waste disposal authority for guidance on how properly to recycle or dispose of this product.

2. Getting to know Zeppelin Wireless

Zeppelin Wireless is designed for very high performance and convenient music streaming.

On the top of Zeppelin Wireless are the volume and playback controls. These can be used to raise or lower the volume, to play or pause a music stream and to select the next or previous track. A status indicator is located within the Bowers & Wilkins logo on the front of the product. The status indicator changes colour and illumination pattern to indicate different operational states. Status indicator colours and illumination patterns are listed in Section 6 of this manual. Zeppelin Wireless also provides some audible feedback during *Bluetooth* pairing and connecting events.

On each side of the Bowers & Wilkins logo at the front of Zeppelin Wireless are a *Bluetooth* touch button and indicator and an AUX input touch button and indicator. The *Bluetooth* button is on the right and the AUX button is on the left. *Bluetooth* pairing and use of the AUX input are described in Sections 3.5 and 4.4 respectively.

Connection sockets on the rear of Zeppelin Wireless comprise a mains power input, a 3.5mm analogue AUX input, a network socket and a micro-USB interface used for service only. A power button and a pin-hole reset button are also located on the rear of Zeppelin Wireless.

Diagram 1 illustrates Zeppelin Wireless, its buttons, indicators and connection sockets.

Zeppelin Wireless is designed to be simple and convenient in operation and will automatically play the most recent audio stream or input signal it receives. There is no need to manually select sources or the AUX input.

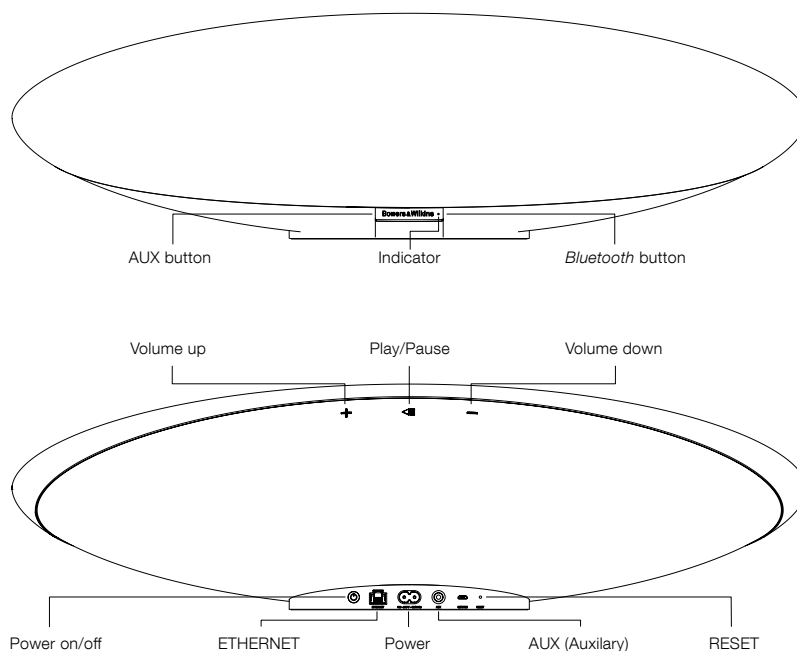


Diagram 1
Buttons and connection sockets

3. Switching on and setting up

Streaming audio via a wireless or wired network connection from AirPlay or Spotify Connect requires Zeppelin Wireless to be on the same network as the source device. Zeppelin Wireless needs to be connected to a router via a wireless or wired network connection. If network streaming is not possible or desired Zeppelin Wireless can also be set up in a non-networked mode allowing *Bluetooth* and *AUX* sources only. See section 3.1 for wireless network setup, wired network setup, and section 3.4 for non-network setup.

After removing Zeppelin Wireless from the box, connect to a mains power supply. The indicator will initially pulse red and then pulse green to indicate that Zeppelin Wireless is ready for any of the setup options below, see Diagram 2.

Note: When ready for setup, the indicator will be pulsing green, the Bluetooth and AUX icons will be off and inactive. Zeppelin Wireless must be connected to a network or put into non-network mode before the AUX and Bluetooth buttons are available for use.

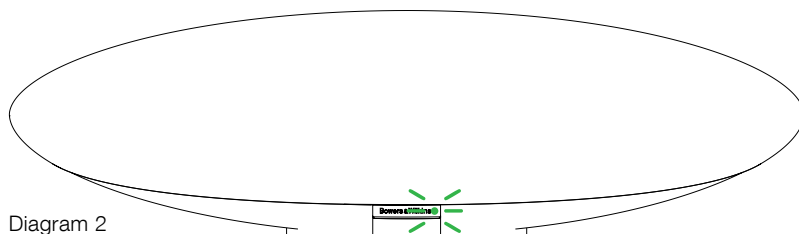


Diagram 2
Ready for set-up

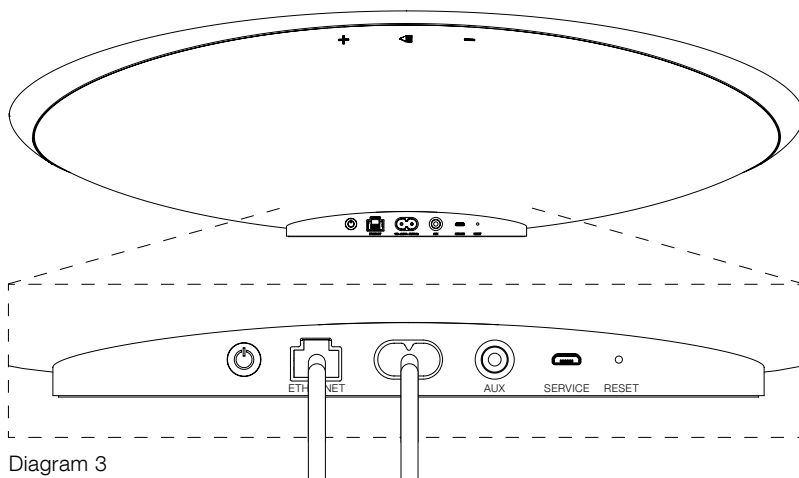


Diagram 3
Wired setup connection

3.1 Wireless Network Connection

Zeppelin Wireless is designed primarily for wireless network connections. We offer different tools for setup:

3.1.1 Bowers & Wilkins Control

Bowers & Wilkins Control is the primary tool for connecting to a wireless network, registering your product, and maintaining the firmware on Zeppelin Wireless.

- iOS device owners should download 'Bowers & Wilkins Control' by searching the App StoreSM for 'Bowers & Wilkins'.
- Mac[®] and PC owners should download the desktop version of 'Bowers & Wilkins Control' from www.bowers-wilkins.co.uk/control.
- Connect Zeppelin Wireless to your network by following the instructions within this app.

3.1.2 Zeppelin Wireless built in web page

Owners of other devices, including Android, can configure the wireless connection using a web browser.

- Connect your device to the temporary Wi-Fi network called "ZeppelinWireless_Setup".
- Open a web browser and type "192.168.10.1" in the address bar. Wait for the Zeppelin Wireless web page to load.
- Give the speaker a name and select which wireless network to connect the speaker to.
- Click the 'Apply now' button

Once Zeppelin Wireless is on the network it will be accessible by any Apple device for AirPlay streaming and the Spotify app in iOS, Android™, Mac, and Windows[®] via Spotify Connect.

3.1.3 Wireless Accessory Configuration

Zeppelin Wireless supports Apple Wireless Accessory Configuration (WAC) process. Consult your device user guide or supplier for full details

3.2 Wired Network Connection

Zeppelin Wireless can also be connected to the network via a cabled Ethernet connection. We recommend using a high quality, shielded network cable (eg Cat6). A computer with an Ethernet jack or Ethernet adapter is required for this set up process.

- Connect Zeppelin Wireless to your computer with an Ethernet cable, see Diagram 3.
- Open a web browser and type "192.168.11.1" in the address bar. Wait for the Zeppelin Wireless web page to load.
- Next to 'Device Name', enter a new name for your speaker.
- Next to 'Network Settings', select 'Wired Ethernet' as your network interface.
- Click the 'Apply now' button.
- Confirmation will appear under the 'Apply now' button.
- Unplug the Ethernet cable from your computer, and connect Zeppelin Wireless to your wireless router.

Note: If Zeppelin Wireless needs to be moved to another location away from the computer used in this set up, unplug mains power, move Zeppelin Wireless to the new location, plug in mains and plug in the Ethernet cable connected to the network router. Zeppelin Wireless will start up and establish a connection to the router via Ethernet.

- The Zeppelin Wireless indicator will turn solid green when it is successfully connected to the network.

3.3 Changing network connection

To change Zeppelin Wireless from a wireless connection to a wired Ethernet connection, access Zeppelin Wireless via a web browser.

- Using the iOS, MacOS[®], or Windows versions of Bowers & Wilkins Control, locate Zeppelin Wireless in the speaker list view and select it.
- Under Device Info, look up the IP address and note it.
- Open a web page and enter the speaker's IP address in the address bar. Wait for Zeppelin Wireless page to load.
- Next to 'Network Settings', select 'Wired Ethernet' as your network interface.
- Click the 'Apply now' button.
- Confirmation will appear under the 'Apply now' button.
- Plug in an Ethernet cable to the Zeppelin Wireless Ethernet input and connect the other end to the network router.
- The Zeppelin Wireless indicator will turn solid green when it is successfully connected to the network.

To change Zeppelin Wireless from a wired connection to a wireless connection, a reset is required to clear the network information and return the speaker into setup state.

- Unplug the Ethernet cable from Zeppelin Wireless.
- Perform a Reset as described in section 7.
- Configure the wireless connection as described in section 3.1.

3.4 Non-networked mode

If a network connection is not possible or desired for use, Zeppelin Wireless can be put in a non-networked mode, limiting the inputs to *Bluetooth* streaming and AUX input. To put Zeppelin Wireless in non-networked mode:

- While Zeppelin Wireless is still waiting for network set up (indicator pulsing green), press the Play/Pause button.
- The indicator will immediately turn orange, and the *Bluetooth* button will illuminate dim blue. If a cable is connected to the AUX input, the AUX button will also illuminate dim white.

Zeppelin Wireless is now in non-networked mode, and can be used for *Bluetooth* and AUX input only. To set up on a network via a wireless or wired connection, reset Zeppelin Wireless as described in section 7.

3.5 Bluetooth pairing and connecting

Note: Upon first use, Zeppelin Wireless will enter network connection mode, with the indicator pulsing green. It is recommended that Zeppelin Wireless is connected to a network before pairing Bluetooth devices. Refer to section 3.1 for network connection. To begin using Bluetooth or AUX inputs, refer to section 3.4.

Zeppelin Wireless can play *Bluetooth* audio streams from any *Bluetooth* enabled mobile device, laptop or desktop computer.

To connect Zeppelin Wireless to a *Bluetooth* enabled audio source device it must first be paired with the device as described below. Pairing is the *Bluetooth* form of an introduction and up to 8 pairings can be stored within Zeppelin Wireless for subsequent reconnection. If a ninth device is paired, it will automatically replace the oldest device previously paired.

Note: Bluetooth is designed to have a relatively limited connection range. A maximum of around 10 metres is typical in domestic environments.

Note: If your source device does not automatically reconnect with Zeppelin Wireless you should reselect your Zeppelin Wireless from the source device list of available speakers.

- With Zeppelin Wireless switched on, touch and hold its *Bluetooth* button for 2 seconds. The *Bluetooth* button illumination will flash and Zeppelin Wireless will enter pairing mode accompanied by audible feedback.

Note: Zeppelin Wireless will automatically exit from Bluetooth pairing mode if no device is paired within 5 minutes. To exit pairing mode manually touch the Zeppelin Wireless Bluetooth button twice in quick succession.

- Open the *Bluetooth* settings on the audio source device and switch *Bluetooth* on. After a short delay, Zeppelin Wireless will be listed as an available *Bluetooth* device. Select Zeppelin Wireless and wait for visual confirmation in the *Bluetooth* settings that pairing is complete and that Zeppelin Wireless is connected. Zeppelin Wireless will provide audible feedback when the *Bluetooth* connection is established and the *Bluetooth* indicator will turn blue.

Note: If your Bluetooth audio source device requests a four digit code, enter 1234.

- Once a connection has been established, ensure that Zeppelin Wireless is selected as the speaker output.

To disconnect a *Bluetooth* source device from Zeppelin Wireless touch the Zeppelin Wireless *Bluetooth* button twice in quick succession. This will disconnect all connected devices. Zeppelin Wireless will provide audible feedback when *Bluetooth* is disconnected and its *Bluetooth* indicator will dim.

Zeppelin Wireless will automatically connect to the last connected audio source device if the two are brought within range of one another, even if another paired device is also within range. If connection to another, previously paired audio source device is required, go to the *Bluetooth* settings page of the new device and select Zeppelin Wireless from the list.

To remove a *Bluetooth* device from Zeppelin Wireless "memory" perform a reset as described in section 7. All paired *Bluetooth* devices will be deleted following a reset.

4. Zeppelin Wireless sources

Zeppelin Wireless can receive audio from four sources, and will automatically switch between these sources on demand: AirPlay, Spotify Connect, *Bluetooth*, and AUX input. Each of these is described below.

4.1 AirPlay

Zeppelin Wireless can receive audio from Apple products and iTunes on Windows via AirPlay streaming. On iOS devices, a single AirPlay speaker may be chosen for output. In iTunes on Mac OS and Windows, multiple AirPlay speakers may be chosen for multi-room playback. Simply start playing audio from any AirPlay enabled device. Zeppelin Wireless will switch to the most recent audio streaming device that has initiated an audio stream.

Play/pause and volume change actions on Zeppelin Wireless will be reflected on the AirPlay audio source device user interface (UI).

4.2 Spotify Connect

Spotify Connect lets you play Spotify through your home speakers or TV, using the Spotify app as remote. You'll need a Spotify Premium account to use Spotify Connect.

Step 1. Connect your device to the same Wi-Fi network as your phone, tablet or PC running the Spotify app.

Step 2. Open the Spotify app, and play any song.

Step 3. Tap the song image in the bottom left of the screen.

Step 4. Tap the Connect icon

Step 5. Pick your Zeppelin Wireless from the list.

For more information on how to set up and use Spotify Connect please visit www.spotify.com/connect

4.3 Bluetooth

For any devices that have been paired with Zeppelin Wireless as described in section 3.5, the *Bluetooth* audio device must be reconnected to Zeppelin Wireless to be able to stream via the *Bluetooth* connection. Check the *Bluetooth* settings on the audio source device to see if Zeppelin Wireless is the active *Bluetooth* connection and, if not, make it active.

Zeppelin Wireless will wake from sleep when a connection is made, but will not switch from an active stream to the *Bluetooth* audio device until an audio stream is initiated on the *Bluetooth* audio device.

Play/pause and volume change actions on Zeppelin Wireless will be reflected on the *Bluetooth* audio source device user interface (UI).

4.4 AUX input

Zeppelin Wireless includes an analogue 3.5mm jack input socket for wired connection to audio source devices that incorporate an analogue output. Connect to the input socket using an appropriate cable. Zeppelin Wireless will select its analogue input automatically when a plug is inserted and deselect the input when the plug is removed. When Zeppelin Wireless is active on another source, it will detect audio activity on the AUX input and switch to this input automatically.

See Section 4.5 for more on Zeppelin Wireless input switching.

If the analogue audio source connected to Zeppelin Wireless has an output volume control, set it initially to around half volume. Use the Zeppelin Wireless buttons to control volume rather than the source device volume controls. Only increase the source volume if Zeppelin Wireless maximum volume is inadequate.

4.5 Selecting Zeppelin Wireless Streams and Inputs

Zeppelin Wireless will automatically play the most recent stream or input signal. For example:

- If an AirPlay stream is playing and a *Bluetooth* stream is received, Zeppelin Wireless will switch to its *Bluetooth* input.
- If a *Bluetooth* stream is playing and a Spotify Connect stream is received, Zeppelin Wireless will switch to its Spotify Connect input.
- If a Spotify Connect stream is playing and an AUX input plug is inserted or an audio signal is detected on a previously inserted plug, Zeppelin Wireless will switch to its AUX input.
- If an AUX input signal is playing and an AirPlay stream is received, Zeppelin Wireless will switch to its AirPlay input.

The only circumstances in which manual input selection may be required is when an AUX input signal is too quiet to be detected for automatic switching. In these circumstances the AUX input can be selected by touching the AUX input button. If Zeppelin Wireless is playing a stream and it is stopped or disconnected, Zeppelin Wireless will either switch back to the previous playing stream or input if it is still available, or remain silent until it receives a new stream or input signal.

5. Operating Zeppelin Wireless

To increase or decrease volume, use the Zeppelin Wireless volume + or – buttons respectively. A single press will step the volume change incrementally or press and hold to ramp the volume more quickly. If no audio is playing when the volume reaches either its maximum or minimum level Zeppelin Wireless will provide audible feedback.

To play or pause stream playback, press the play/pause button.

To select the next track, press the play/pause button twice in quick succession. To select the previous track, press the play/pause button three times in quick succession.

Note: Play, pause, next and previous functions do not operate on AUX input signals.

In normal use there is no need to manage the power of Zeppelin Wireless. The speaker will automatically enter sleep if left idle for 20 minutes. The indicator will illuminate dim red while in sleep. Zeppelin Wireless will remain connected to the network and to any paired *Bluetooth* devices within range. Zeppelin Wireless can be woken from sleep by connecting a cable to the AUX input, streaming via *Bluetooth*, *AirPlay* or *Spotify*, pressing the power, volume +/- or play/pause buttons or making a new *Bluetooth* connection.

Note: When in sleep Zeppelin Wireless will not wake if an AUX stream is initiated. In this instance the play/pause or volume buttons should be used to wake Zeppelin Wireless.

To put Zeppelin Wireless into standby, press and hold the Power button.

Note: In standby, Zeppelin Wireless will disconnect from the network and any paired Bluetooth devices. It can only be switched on by pressing the power button.

Note: Pressing the Bluetooth or AUX source buttons will have no effect as both are dim and inactive when in sleep.

6. Zeppelin Wireless Indicators

The Zeppelin Wireless indicator uses different colours and illumination patterns to indicate different operational states. These are listed in Diagram 4.

7. Zeppelin Wireless Reset Function

Note: Zeppelin Wireless will disconnect from the network and forget all paired Bluetooth devices when reset.

Zeppelin Wireless has a pinhole reset button located on its rear connection panel. The reset button is illustrated in Diagram 5. To return Zeppelin Wireless to its default settings, connect its power cable and switch it on by pressing the power button. Use a straightened paperclip or pen to press and hold the reset button for 6 seconds until the indicator flashes white, reset is then underway. When the reset is complete Zeppelin Wireless will power up in network connection mode.

8. Zeppelin Wireless Firmware Update

Updated firmware may from time to time be available for the Zeppelin Wireless. Firmware update notification, download and installation is managed using Bowers & Wilkins Control. Carefully follow the firmware update instructions provided by the app.

9. Cleaning Zeppelin Wireless

Use a clothes brush or damp a cloth with water to clean the grille cloth. Wipe other surfaces with a clean lint-free or microfibre cloth. Avoid cleaning products that can be abrasive, or contain acid, alkali or anti-bacterial agents.

10. Troubleshooting

If you need help troubleshooting a specific problem, or simply have a question you would like answered, please initially consult the Zeppelin Wireless support section of the Bowers & Wilkins website: www.bowers-wilkins.com

Indicator	Operational State
Off	Standby
Pulse red	Start-up from standby or sleep
Dim red	Sleep
Pulse green	Waiting for network setup
Green	Normal operation with <i>Bluetooth</i> , <i>AirPlay</i> or <i>Spotify Connect</i> streaming. (indicator will flash green when full volume is reached)
Orange	Operating (<i>AUX</i> or <i>Bluetooth</i> inputs) with no network settings. (indicator will flash orange when full volume is reached)
Pulse orange	Operating (<i>AUX</i> or <i>Bluetooth</i> inputs) with network settings but no network connection
Flash red	Error - visit the Zeppelin Wireless support pages of our website
Flash white	Reset underway
White	Firmware update underway

Bluetooth Indicator	Operational State
Dim blue	<i>Bluetooth</i> disconnected
Flash blue	Pairing mode
Blue	<i>Bluetooth</i> connected

AUX Indicator	Operational State
Off	AUX input disconnected
Dim white	AUX source connected
White	AUX source active

Diagram 4
Indicators

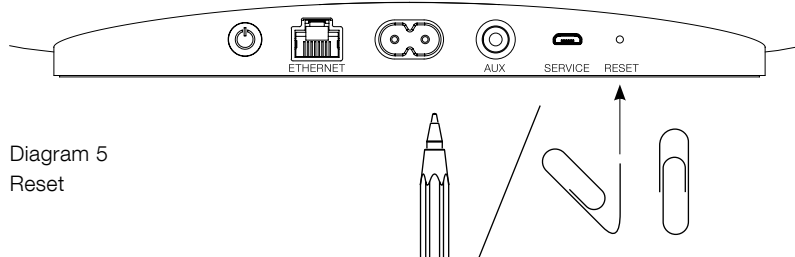


Diagram 5
Reset

Specifications

Model	Zeppelin Wireless
Description	Wireless Music System
Technical features	Apple® AirPlay® technology <i>Bluetooth</i> ® v4.1, Class 2 Spotify® Connect Digital Signal Processing (DSP) Digital amplifier
Drive units	2x 25mm (1.0 in) double dome tweeter 2x 90mm (3.5 in) FST™ midrange 1x 150mm (6.0 in) subwoofer
Frequency response	44Hz to 28kHz
Amplifier power output	2x 25W (tweeter) 2x 25W (midrange) 1x 50W (subwoofer)
Input voltage	100V – 240V – 50/60Hz
Power consumption:	
Sleep (network standby)	Below 1.50 Watts
Standby	Below 0.30 Watts
Inputs	Network (RJ45 Ethernet or Wi-Fi) Auxiliary – analogue (3.5mm mini jack) USB – service only
Height	188mm (7.4 in)
Width	660mm (26 in)
Depth	183mm (7.2 in)
Weight	6.5kg
AirPlay compatibility	iPhone®, iPad®, and iPod touch® with iOS 4.3.3 or later, Mac® with OS X Mountain Lion or later, and PC with iTunes® 10.2.2 or later.
<i>Bluetooth</i> Codecs	aptX Standard latency AAC SBC

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