SONOS

CONNECT:AMP

Sonos CONNECT:AMP

The Sonos CONNECT:AMP™ includes a built-in state-of-the-art digital amplifier that can power large or small speakers, allowing you to enjoy superior audio quality in every room.

- Includes a multi-port Ethernet switch to enable direct connections to routers, computers, or other Sonos products.
- Includes analog audio inputs with digital encoding so that music from an external audio source (such as a CD player or portable MP3 player), can be connected to one CONNECT:AMP and played by all the other Sonos products in your system.
- Works seamlessly with the complete range of Sonos products.

New to Sonos?

It takes just a few steps to get your Sonos system up and running—simply follow the setup instructions packaged with your CONNECT:AMP. Once you've got it set up, you can add additional Sonos products any time.

Adding to an existing Sonos system?

Sonos can be easily expanded room by room. You can turn directly to **Adding to an Existing Sonos System** if you are adding this CONNECT:AMP to an existing Sonos system.

Your Home Network

To access music services, Internet radio, and any digital music stored on your computer or Network-Attached Storage (NAS) device, your home network must meet the following requirements:

Home network requirements

> **Note:** Your network must have a high-speed Internet connection, as the Sonos system is designed to provide you with free, online software updates. Your Sonos system must be registered to receive these updates so **be sure to register** during the setup process. We do not share your e-mail address with other companies.

- High-speed DSL/Cable modem, or fiber-to-the-home broadband connection for proper playback of Internet-based music services. (If your Internet service provider only offers Satellite Internet access, you may experience playback issues due to fluctuating download rates.)
- If your modem is not a modem/router combination and you want to take advantage of Sonos' automatic online updates, or stream music from an Internet-based music service, **you must install a router in your home network**. If you do not have a router, purchase and install one before proceeding. If you are going to use the Sonos Controller App on an Android™ or iOS device, or you are setting up Sonos wirelessly, you will need a *wireless* router.

> **Note:** Sonos communicates over a 2.4GHz home network supporting 802.11 b/g/n wireless technology. 5GHz networks are not supported in a completely wireless Sonos setup.

- Connect a Sonos BRIDGE, BOOST™ or player to your router if:
  - You have a larger home where the WiFi performance isn't reliable and you want to strengthen the wireless performance of your Sonos system.
  - Your WiFi network is already in high demand with streaming video and web surfing and you want to create a separate wireless network exclusively for your Sonos speakers.
  - Your home network is 5GHz only (not switchable to 2.4GHz).
- For best results, you should connect the computer or NAS drive that contains your personal music library collection to your home network router using an Ethernet cable.

The Sonos App

You can use the free Sonos app with any compatible device, including:

- **Sonos app (Android)**—Android 2.2 and higher; certain features require later versions. (Standard wireless setup is only supported on Android 2.3 or 4.0 and higher.)
  Touch the **Play Store** or **Market** button on your Android device to download the free Sonos app from Google Play.
- **Sonos app (iOS)**—iPhone, iPad and iPod touch running iOS 7.0 or later; certain features may require later versions.
  Touch the **App Store** button on your iPhone, iPod touch or iPad to download the free Sonos app, or download the application from iTunes®. (If you download from iTunes, you will need to sync before you see the Sonos logo display on your device.)

- **Sonos app (PC)**—Windows® XP SP3 and higher; certain features require later versions. (Standard wireless setup is only supported on Windows 7 and higher.)
  Download from our website at ***www.sonos.com/support/downloads***.
- **Sonos app (Mac)**—Macintosh® OS X 10.7 or later
  Download from our website at ***www.sonos.com/support/downloads***.

Note: Sonos CONTROL has been discontinued, but it's compatible with your new Sonos product.

CONNECT:AMP Front
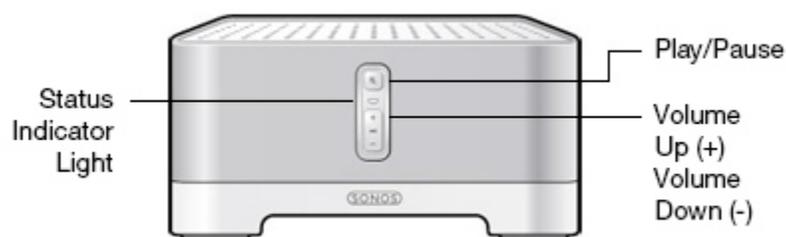
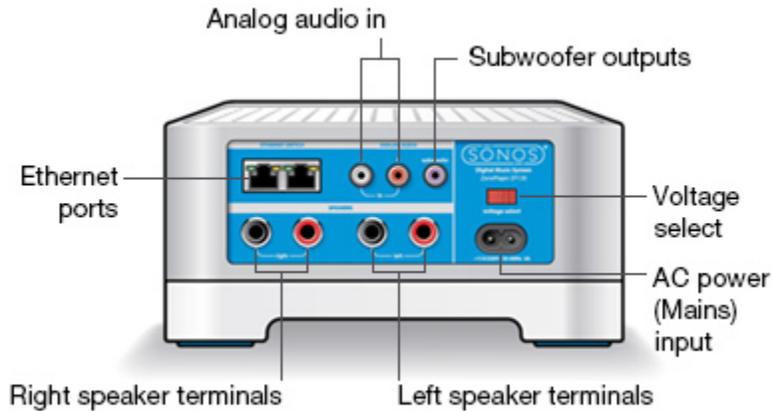|	
On / off	Your Sonos system is designed to be always on; the system uses minimal electricity whenever it is not playing music. To quickly stop streaming audio in all rooms, select **Pause All** from the **Rooms** menu. To stop streaming audio in one room, press the **Play/Pause** button on the CONNECT:AMP.
Status indicator	Indicates the current status. During normal operation the white light is dimly lit. If desired, you can turn off the white light from **Room Settings**.
	See **Player Status Indicators** for a complete list of status indications.
Play/Pause	Toggles between playing and pausing the audio in this room (defaults to restarting the same music source when pressed unless a different source is selected).
	• Press *once* to start or stop streaming audio
	• Press *twice* to skip to the next track (if applicable to the selected music source)
Volume up (+) **Volume down (-)**	Press these buttons to adjust the volume up and down.

CONNECT:AMP Back

Analog audio in

Subwoofer outputs

Ethernet ports

Voltage select

AC power (Mains) input

Right speaker terminals

Left speaker terminals

Ethernet ports (2)	You can use an Ethernet cable (supplied) to connect to a router, computer, or additional network device such as a network-attached storage (NAS) device.
	LED indicators:
	  • Green (link connection)
	  • Flashing Yellow (network activity)

Right speaker terminals	Use high-quality speaker wire to connect the right speaker to the CONNECT:AMP.
Left speaker terminals	Use high-quality speaker wire to connect the left speaker to the CONNECT:AMP.
Voltage select	100 – 120V~ / 220 – 240V~ 50 – 60 Hz Select the appropriate voltage setting for your country.
AC power (mains) input	Use only the supplied power cord to connect to a power outlet (using a third party power cord will void your warranty).
Analog audio in	You may use a standard RCA audio cable to connect the CONNECT:AMP's analog audio inputs to the audio outputs from a separate audio component, such as a CD player or a portable music player.
Subwoofer output Note: If you disconnect your subwoofer, make sure to also disconnect the subwoofer's cable from the CONNECT:AMP output.	You may connect a powered subwoofer to this output using a standard RCA cable. The system will detect when a cable is connected to the subwoofer output and adjust the crossover frequency automatically.

Adding to an Existing Sonos System

Once you've got your Sonos system set up, you can easily add more Sonos products any time (up to 32 rooms).

If your house has structured (built-in) wiring, you can make a wired connection to the additional Sonos products. If you don't, our built-in wireless technology is ideal for you.

1. Attach desired speakers.
    - Your speaker's power rating should be at least 75W for 8 Ohm speakers, and at least 150W for 4 Ohm speakers. Do not connect speakers rated at less than 4 Ohms.
    - Use your thumb or finger to firmly push the spring-loaded speaker connector post inward to reveal the connection hole.
    - Insert the stripped end of the speaker wire into the hole, and then release. The stripped portion should be caught firmly in the connector post.

    Note: Connect the **red** (+) and **black** (-) terminals from each speaker to the corresponding terminals on the Sonos CONNECT:AMP. Mismatching of polarities will result in weak central sound, and a distorted sense of sound direction.

    When making connections, ensure that none of the strands of your speaker wire come in contact with an adjoining terminal on the rear panel.

    - Repeat to install the other speaker wires.
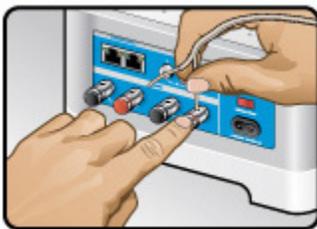
    - If your speakers have banana connectors, you can insert the plugs directly into the banana jacks on the back of the CONNECT:AMP instead.
2. Attach the power cord and plug into a wall outlet—make sure the *Voltage Switch* on the back of the CONNECT:AMP is set to the proper position for your country before applying power.

After a few moments, the **Status indicator** will begin to flash green (if this Sonos product was previously connected to another Sonos system, the Status indicator may be solid white instead.)

3. Choose one of the following options:
    - Using a handheld Sonos Controller: Select **Add a Player or SUB** from the **Settings** menu, and follow the on-screen prompts to add this product to your Sonos system.
    - Using the Sonos Controller for Mac or PC: Select **Add a Player or SUB** from the **Manage** menu and follow the prompts to add this product to your Sonos system.

Thick walls, 2.4 GHz cordless telephones, or the presence of other wireless devices can interfere with or block the wireless network signals from your Sonos system. If you experience difficulty after positioning a Sonos product, try one or more of the following resolutions—relocate the Sonos product; change the wireless channel your music system is operating on; connect a Sonos product to your router if your setup is currently wireless.

Playing Music

Make a selection from the Sonos music menu on your mobile device or from the **MUSIC** pane on a Mac or PC.

Radio

Sonos includes a radio guide that provides immediate access to thousands of free Internet radio stations and broadcast programs. You can easily find radio from all over the world—music, news, and variety programming, including archived shows and podcasts.

To select an Internet radio station, simply select **Radio** and choose a station.

Music services

A music service is an online music store or online service that sells audio on a per-song, per audiobook, or subscription basis. Sonos is compatible with several music services - you can visit our website at *www.sonos.com/music* for the latest list. (Some music services may not be available in your country. Please check the individual music service's website for more information.)

If you are currently subscribed to a music service that's compatible with Sonos, simply add your music service user name and password information to Sonos as needed and you'll have instant access to the music service from your Sonos system.

1. To add a music service, touch **Add Music Services** from the Sonos music menu.
2. Select the Sonos-compatible music service you would like to add.
3. Select **Add Account**, and then follow the on-screen prompts. Your login and password will be verified with the music service. As soon as your credentials have been verified, the music service displays on the Sonos music menu.

Free music service trials are available in some countries. (Please check the individual music service's website for more information.) If there is a music service trial visible on the **Music Services** menu, simply touch it to select. Touch **Add Account** -> **I'm new to [music service]**, and then follow the prompts to activate the music trial. After the trial period is up, you will need to subscribe to the music service to keep the music playing.

Local music library

The Sonos system can play music from any computer or network-attached storage (NAS) device on your home network where you have shared music folders. During the setup process, you are guided through the process of accessing your local music library (such as your iTunes library). Over time, you may wish to add or remove folders from this list.

Note: We recommend using the Sonos Controller for Mac or PC to add shared folders. For more information, please visit our website at *http://faq.sonos.com/manage*.

To make changes to your shared folders list, select the **Settings** menu from a handheld Sonos controller and then choose one of the following options:

- To add a new music folder to Sonos, select **Manage Music Library**-> **Music Library Setup** -> **Add New Share** on a handheld controller.
- To remove a music folder, select **Manage Music Library**-> **Music Library Setup**. Touch the share you wish to remove and then select **Remove**.

The Sonos system indexes your music folders so you can view your music collection by categories (such as artists, albums, composers, genres, or tracks.) If you add new music to a folder that is already indexed, simply update your music index to add this music to your Sonos music library.

- To update your music index, touch **Settings** -> **Manage Music Library** -> **Update Music Index Now**.
- If you'd like your music library to update automatically each day, open the Sonos Controller app on your Mac or PC.
  Select **Manage** -> **Music Library Settings** and click the **Advanced** tab. Check **Library Updates** and select an update time.

Wireless iTunes playback

You can select and play music and podcasts stored on any iOS device that's on the same wireless network as your Sonos products. Playback is perfectly synchronized, in any or every room of your home. Simply choose **On this iPad**, **On this iPhone**, or **On this iPod touch** from the Sonos app on your iOS device to make audio selections.

Wireless playback from Android devices

You can select and play music stored on any Android device that's on the same wireless network as your Sonos products. Playback is perfectly synchronized, in any or every room of your home. Simply choose **On this Mobile Device** from the Sonos app on your Android smartphone or tablet to make audio selections.

Google Play Music (Android devices)

You can play music to your Sonos system directly from the Google Play Music app on any Android device. This feature is available for both Standard and All Access Google Play Music customers.

To play music directly from the Google Play Music app to your Sonos system, you must have both the Google Play Music app and the Sonos Controller App installed on your mobile device.

Simply open the Google Play Music app and connect to a Sonos room or room group to start the music.

Using Line-In

You can easily stream an external source such as a CD player or portable music player through your Sonos system using the audio-in connections on your Sonos CONNECT:AMP. The device will be automatically detected as soon as you plug it in.

- Use a standard RCA cable to plug an external source like a CD player into the analog **Audio In** connections on the back of your CONNECT:AMP.
- **If you are connecting a portable music player** to the CONNECT:AMP, you will need a 1/8 inch mini-stereo to RCA audio cable instead. Plug the mini-stereo end into the portable device and the RCA end into the **Audio In** connection on the CONNECT:AMP.

Using the Sonos app on a mobile device

- To play music from this line-in source, select **Line-In** from the Sonos music menu, select the source, and select **Play Now**.
- To change the name of this device, select **Rooms** from the **Settings** menu. Select the Sonos product this source is connected to, and then touch **Line-In Source Name**. Select a new name from the list, or type a unique name.
- To change the line-in level, select **Rooms** from the **Settings** menu. Select the Sonos product this source is connected to, and then touch Line-In Source Level. Select a new level.

Using the Sonos app on a Mac or PC

- To play music from this source select **Line-In** from the **MUSIC** pane, click ▼ next to the music source, and select **Play Now**.
- To change the settings for this device:
  - Select **Manage** -> **Settings** (PC) or **Sonos** -> **Preferences** -> **Room Settings** (Mac).
  - Select the Sonos product your Airport Express is connected to from the **Room Settings for** drop-down list.
  - Click the **Line-In** tab and update the settings.

A default (typical) line-in level is automatically assigned when you select a source name, but if the volume sounds too low, you can select a higher line level for this device. (You may experience sound distortion at higher volume levels if you set the level too high.)

Line-in encoding settings

When you have line-in music sources attached to a Sonos product, line-in encoding determines how Sonos will encode the data coming in from these sources. Your Sonos system defaults to *automatic* in order to provide the optimal playback experience. Sonos recommends you do not change this default. However, if you decide to make a change, we recommend the following usage guidelines:

Use **Uncompressed** if:

- You want optimal performance with home theaters.
- You want to produce the highest quality sound for your Sonos system (this selection requires more network bandwidth than compressed audio.)

Use **Compressed** if:

- You are connecting more than 4 rooms wirelessly.
- You are in an environment with heavy wireless interference and are experiencing dropouts.

To change the line-in encoding setting, select one of the following options:

- Using a handheld Sonos controller: From the **Settings** menu, select **Advanced Settings** -> **Audio Compression**.
- Using the Sonos Controller for PC: Select **Manage** -> **Settings** -> **Advanced**.
- Using the Sonos Controller for Mac: Select **Sonos** -> **Preferences** -> **Advanced**.

Surround Speakers

You can easily pair two PLAY:1 or PLAY:3 speakers with a PLAYBAR to function as left and right surround channels in your Sonos surround sound experience.

If you have a CONNECT:AMP and speakers, the release of Sonos software update 4.2 makes it possible to configure the CONNECT:AMP for surround use. **Both the CONNECT:AMP and the PLAYBAR must be wired in this configuration**—this is a requirement only when configuring a CONNECT:AMP for surround. It is not a requirement for normal use of these products.

Set up CONNECT:AMP surround

Note: If this is a newly purchased CONNECT:AMP, be sure to add it to your Sonos system before attempting to set up surround speakers.

1. Connect the PLAYBAR to your router with an Ethernet cable.
2. Connect the CONNECT:AMP to your router, or to the PLAYBAR, with an Ethernet cable.
3. Attach desired speakers to the CONNECT:AMP (power rating should be at least 75W for 8 Ohm speakers and at least 150W for 4 Ohm speakers.)
4. Position the speaker connected to the **Left** terminal on the CONNECT:AMP as the left surround speaker in your surround sound setup.
5. Position the speaker connected to the **Right** terminal on the CONNECT:AMP as the right surround speaker in your surround sound setup.

Note: Make sure your PLAYBAR is not currently configured with any other surround speakers. It can be configured with a SUB.

6. Locate the IP address for your PLAYBAR.

- Using the Sonos Controller for PC, select **Help** -> **About My Sonos System**.
- Using the Sonos Controller for Mac, select **Sonos** -> **About My Sonos System**.
- Using a handheld Sonos controller, select **Settings** -> **About My Sonos System**.

7. Open a browser on your computer.

8. Type **http://*playbarIP*:1400/wiredsat.htm** (e.g. **http://10.20.11.49:1400/wiredsat.htm**) into the address
    bar and then follow the prompts to complete the CONNECT:AMP surround setup.

Remove CONNECT:AMP surround

1. Locate the IP address for your PLAYBAR.
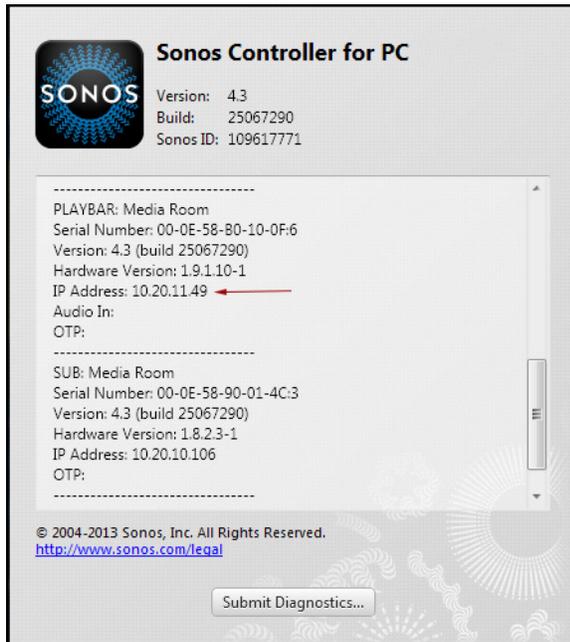
- Using the Sonos Controller for PC, select **Help** -> **About My Sonos System**.
- Using the Sonos Controller for Mac, select **Sonos** -> **About My Sonos System**.
- Using a handheld Sonos controller, select **Settings** -> **About My Sonos System**.

2. Open a browser on your computer.
3. Type **http://*playbarIP*:1400/wiredsat.htm** (e.g. **http://10.20.12.49:1400/wiredsat.htm**) into the address bar.
4. From the **CONNECT:AMP** drop-down, choose **None** and then click **Complete Setup**.
5. If desired, you can now disconnect the CONNECT:AMP from your router and move it to a new location.

Player Status Indicators

Indicator Lights	Player State	Sonos Product	Additional Information
Flashing white	Powering up	BRIDGE, BOOST, CONNECT, SUB, CONNECT:AMP, DOCK, PLAY:1, PLAY:3, PLAY:5, PLAYBAR	
Solid white (*dimly lit*)	Powered up and associated with a Sonos system (normal operation)	BRIDGE, BOOST, CONNECT, SUB, CONNECT:AMP, DOCK, PLAY:1, PLAY:3, PLAY:5, PLAYBAR	If desired, when the product is in normal operation, you can turn the white status indicator light on or off from **Room Settings**. (The SUB and any players set to surround reflect the same setting as the player they are paired with.)
Solid white (*brightly lit*)	Touch control(s) active	PLAY:5 (gen2)	Brightens when touch controls are activated and remains at full brightness for the duration of contact.
Flashing green	Powered up, not yet associated with a Sonos system *Or*, WAC (wireless access configuration) join ready	BRIDGE, BOOST, CONNECT, SUB, CONNECT:AMP, DOCK, PLAY:1, PLAY:3, PLAY:5, PLAYBAR	For a SUB, this may indicate the SUB is not yet paired with a player.
Slowly flashing green	Surround audio is off or SUB audio is off	PLAY:1, PLAY:3, PLAY:5 (gen2), SUB	Applicable for player configured as a PLAYBAR surround speaker, or for a SUB paired with a PLAYBAR
Solid green	Volume set to zero or muted	CONNECT, CONNECT:AMP, PLAY:1, PLAY:3, PLAY:5, PLAYBAR	
Flashing orange	During SonosNet setup, this occurs after a button press while the product is searching for a household to join.	BRIDGE, BOOST, CONNECT, SUB, CONNECT:AMP, DOCK, PLAY:1, PLAY:3, PLAY:5, PLAYBAR	

Indicator Lights	Player State	Sonos Product	Additional Information
Rapidly flashing orange	Playback / Next Track failed	CONNECT, CONNECT:AMP, PLAY:1, PLAY:3, PLAY:5, PLAYBAR	Indicates either playback or next track was not possible
Solid orange	During wireless setup, this occurs while the Sonos open access point is temporarily active. If you are not setting up your Sonos system, this may indicate warning mode.	CONNECT, SUB, CONNECT:AMP, PLAY:1, PLAY:3, PLAY:5, PLAYBAR	If the orange light is on AND the player's volume level automatically reduces, this indicates the player is in warning mode. • Press the **Pause** button to stop the audio • For Sonos products with a vent opening (SUB, CONNECT:AMP), check to make sure it's not blocked • Check the room temperature to make sure it's less than 104°F/ 40° C • If the player is in direct sunlight, provide shade • Allow the player to cool for several minutes and then press **Play** to restart the audio • If the problem does not resolve, please contact Customer Support

Important Safety Information

Please read these instructions and heed all warnings. Keep them in a convenient location and make sure everyone in the household is aware of them.

Warning: Do not open Sonos products as there is a risk of electric shock. Under no circumstances should Sonos products be repaired by anyone other than an authorized Sonos repair center, as this will invalidate the warranty. Please contact Sonos Customer Support for more information.

Location

- The product should not be used near water—avoid close proximity to a bathtub, kitchen sink, laundry tub, wet basement, swimming pool, etc.
- Do not place the unit where it will be exposed to excessive heat (e.g., radiators, heat registers, stoves), direct sunlight, or a dusty environment (e.g., woodworking shop.)
- Do not place the unit where it will be exposed to flammable liquids and/or fumes.
- Do not place the unit in a small confined space (e.g., closet or cabinet, under a bed or sofa) where ventilation is restricted.
- Protect the power cable from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it exits the product. The mains cord should be readily available to disconnect the power.

Proper Ventilation

- Leave 10" of open space around the sides and above the unit to ensure proper ventilation.
- Ventilation should not be impeded by covering the ventilation openings with items such as tablecloths, curtains, or papers.
- Do not let foreign objects into the unit. If a foreign object should get into the unit, unplug the unit and contact Sonos for servicing guidance.

Usage

- Do not operate or handle the product with wet hands.
- Do not place any object on top of the product (e.g. vase, coffee cup, potted plant, books, magazines, etc.)
- Only use attachment/accessories specified by Sonos.
- Unplug the power cord during lightning storms or when unused for long periods of time.
- Never disassemble or modify the product in any way.

Cleaning & Maintenance

- Keep the unit free from dust, pet hair and other fine particles.
- Wipe only with a soft, dry cloth.
- Do not use chemical solvents (e.g. alcohol, benzene, paint thinner) or other flammable cleaning liquids to clean the product.
- Refer all servicing to Sonos qualified service personnel. Servicing is required when the unit or the power cord has been damaged in any way, if liquid or other foreign matter has fallen into the ventilation openings, or the unit has been exposed to rain or moisture.

Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Specifications

Feature	Description
Audio	
Amplifier	Class-D
Rated Output	110W RMS (2x55W continuous average power into 8 ohms, THD+N<0.02%)*
Speaker Connections	Spring binding posts (in North America, the ZP120 has combined spring binding post/banana jack connectors)
Line-In Connections	Auto-detecting RCA type
Subwoofer Output	Auto-detecting RCA type, 80 Hz crossover
Music Access	
Audio Formats Supported	Support for compressed MP3, AAC (without DRM), WMA without DRM (including purchased Windows Media downloads), AAC (MPEG4), AAC+, Ogg Vorbis, Apple Lossless, Flac (lossless) music files, as well as uncompressed WAV and AIFF files. Native support for 44.1kHz sample rates. Additional support for 48kHz, 32kHz, 24kHz, 22kHz, 16kHz, 11kHz, and 8kHz sample rates. MP3 supports all rates except 11kHz and 8kHz. **Note**: Apple "Fairplay", WMA DRM and WMA Lossless formats not currently supported. Previously purchased Apple "Fairplay" DRM-protected songs may be upgraded.
Music Services Supported	Sonos works seamlessly with most music services, including Apple Music™, Deezer, Google Play Music, Pandora, Spotify and Radio by TuneIn, as well as downloads from any service offering DRM-free tracks. Service availability varies by region. For a complete list, see ***http://www.sonos.com/music***.
Operating Systems (for stored files)	Windows XP SP3 and higher; Macintosh OS X 10.6 or later; NAS (network-attached storage) devices supporting CIFS
Internet Radio Supported	Streaming MP3, HLS/AAC, WMA
Album Art Supported	JPEG, PNG, BMP, GIF
Playlists Supported	Rhapsody, iTunes, WinAmp, and Windows Media Player (.m3u, .pls, .wpl)
Networking	
Wireless Connectivity	Connects to your home WiFi network with any 802.11 b/g/n, 3x3 MIMO, dual-band (2.4GHz/5GHz) router.
SonosNet™ Extender	Functions to extend and enhance the power of SonosNet, a secure AES encrypted, peer-to-peer wireless mesh network dedicated exclusively for your Sonos system to reduce WiFi interference.

Feature	Description
Network Bridging	2-port switch (10/100Mbps, auto MDI/MDIX) allows Ethernet devices to connect through SonosNet.
Internet connectivity	Internet connection required for access to Internet radio stations, online music services and software updates. (DSL, cable modem or LAN-based high-speed Internet connection required.) Internet functionality may require payment of separate fee to a service provider; local and/or long distance telephone charges may apply.
General	
Power Supply	100 – 120V~ / 220 – 240V~ 50 – 60 Hz, user-switchable
Front Panel Buttons	Volume and Play/Pause
Front Panel LED Indicators	Audio and player status indicators
Dimensions (H x W x D)	3.50 x 7.28 x 8.15 in. (89 x 185 x 207 mm)
Weight	5.1 lbs. (2.3 kg)
Operating Temperature	32º to 104º F (0º to 40º C)
Storage Temperature	4º to 158º F (-20º to 70º C)
Product Finish	Anodized precision machined extrusion aluminum case. Aluminum casing also facilitates passive cooling.

* Both channels driven, 22Hz-20KHZ-AES17 measurement bandwidth.

* Specifications subject to change without notice.

Need More Help?

- Visit our Frequently Asked Questions (FAQ) pages at ***www.sonos.com/support***.
- Ask us a question at ***http://www.sonos.com/emailsupport***

Submit Feedback

We'd love to hear from you! Send us feedback on our guides at: **docfeedback@sonos.com**