BOSE®

♫⑂ SoundTouch™ SA-4
amplifier

Owner's Guide

Safety

Please take the time to follow the instructions in this owner's guide carefully. It will help you set up and operate your system properly and enjoy its advanced features. Please save this guide for future reference.

All Bose products must be used in accordance with local, state, federal, and industry regulations.

CAUTION

RISK OF ELECTRICAL SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED PERSONNEL.

The lightning flash with arrowhead symbol within an equilateral triangle alerts the user to the presence of uninsulated, dangerous voltage within the system enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

The exclamation point within an equilateral triangle, as marked on the system, is intended to alert the user to the presence of important operating and maintenance instructions in this owner's guide.

WARNINGS:
- To reduce the risk of fire or electrical shock, do not expose the product to rain or moisture.
- Do not expose this apparatus to dripping or splashing. Do not place objects filled with liquids, such as vases, on or near the apparatus. As with any electronic products, use care not to spill liquids into any part of the system. Liquids can cause a failure and/or a fire hazard.
- Keep battery (or batteries) away from children. May cause a fire or chemical burn if mishandled. Do not recharge, disassemble, heat above 212°F (100°C), or incinerate. Dispose of used batteries promptly. Replace only with a battery of the correct type and model number.
- Danger of explosion if battery (or batteries) is incorrectly replaced. Use only AA batteries (IEC LR06).
- Do not place any naked flame sources, such as lighted candles, on or near the apparatus.

WARNING: Contains small parts which may be a choking hazard. Not suitable for children under age 3.

WARNING: This product contains magnetic material. Please contact your physician if you have any questions on whether this might affect the operation of your implantable medical device.

Please dispose of used batteries properly, following any local regulations. Do not incinerate.

CAUTIONS:
- To prevent electric shock, match the wide blade of the line cord plug to the wide slot of the AC (mains) receptacle. Insert the plug fully into the receptacle.
- The product must be used indoors. It is neither designed nor tested for use outdoors, in recreation vehicles, or on boats.
- Make no modifications to the system or accessories. Unauthorized alterations may compromise safety, regulatory compliance, and system performance.

NOTES:
- A personal computer is required for system setup. A home Wi-Fi® network and Internet access are required.
- Where the mains plug or appliance coupler is used as the disconnect device, such disconnect device shall remain readily operable.
- The product label is located on the bottom of the product.
- The speaker wire and interconnect cables included with the system are not approved for in-wall installation. Please check your local building codes for the correct type of wire and cable required for in-wall installation.
- Changes or modifications not expressly approved by Bose Corporation could void the user's authority to operate this equipment.
- Operate this product within the temperature range of 32° F to 104° F (0° C to 40° C).

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 or moisture.
6. Clean only with a 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 are 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 plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Use only attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in a way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Important USA and Canada compliance Information

• This device complies with part 15 of the FCC rules and Industry Canada license-exempt RSS standard(s). 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 device complies with FCC and Industry Canada RF radiation exposure limits set forth for general population.

• This device must not be co-located or be operating in conjunction with any other antennas or transmitters.

• This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation.

• This equipment complies with FCC and Industry Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 8 inches (20 cm) between radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

CAN ICES-3 (B)/NMB-3(B)

This Class B digital apparatus complies with Canadian ICES-003.

Information about products that generate electrical noise

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

CE Bose Corporation hereby declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC and all other applicable EU directive requirements. The complete Declaration of Conformity can be found at www.Bose.com/compliance.

Safety

Please complete and retain for your records.

The serial and model numbers can be found on the bottom of the system.

SA-4 amplifier serial and model numbers: _____

Wireless adapter serial and model numbers: _____

SoundTouch™ controller serial and model numbers: _____

Purchase date: _____

We suggest you keep your receipt with this owner's guide.

Made for iPod iPhone iPad

AirPlay works with Apple iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion, and Mac and PC with iTunes 10.2.2 or later.

AirPlay, Apple iPad, iPhone, iPod touch, iTunes, Mac, and OS X are trademarks of Apple Inc., registered in the U.S. and other countries.

"Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

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Android and Google Play are trademarks of Google, Inc.

SoundTouch and the wireless note design are trademarks of Bose Corporation in the U.S. and other countries.

Wi-Fi is a registered mark of the Wi-Fi Alliance.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

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Introducing SoundTouch™ from Bose®

With SoundTouch™, you can stream Internet radio, music services, and your music library. If you have Wi-Fi® at home, you're ready to enjoy your favorite music in any room or outdoor space that you want.

Key Benefits

- Enjoy wireless access to Internet radio, music services, and your music library.

- Stream your favorite music easily with personalized presets.

- Works with your existing home Wi-Fi network.

- Free SoundTouch™ app for your computer, smartphone, or tablet provides more powerful control.

- Simply add additional systems at any time for a multi-room listening experience.

- Wide selection of Bose® audio systems lets you choose the right solution for any room or outdoor space.

Introduction

About your SoundTouch™ SA-4 amplifier

The SoundTouch™ SA-4 amplifier is an elegant way to deliver high-quality sound into any room or outdoor space streamed wirelessly over your home Wi-Fi® network. Use the free SoundTouch™ app to set up and control your system. See "Adding the system to your Wi-Fi® network" on page 10.

System features

- Easily connects to your choice of speakers for powerful sound anywhere around your home – even connects to outdoor speakers. (Although the amplifier itself must remain inside and dry.)

- Bose® patented signal processing automatically adjusts the tonal balance, enabling full, rich lows at nearly all listening levels.

- SoundTouch™ controller provides control from up to 70 feet (21 m) away.

- Six presets deliver your music with just one touch.

- An Ethernet connector enables wired access to your home network.

- Stream your music via AirPlay for your Apple® devices.

- USB connectors for network setup.*

The USB connectors on the back of the system (SETUP A and SETUP B) are for setup only. The connectors are not designed to charge smartphones, tablets, or similar devices.

Unpacking the system

Carefully unpack the carton and confirm that the following parts are included.

Note: Do not connect any cables to the system until after you have launched the SoundTouch™ app. See "Connecting the system to your home Wi-Fi® network" on page 11.
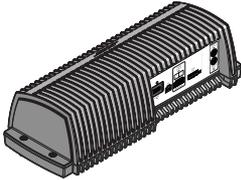
SoundTouch™
SA-4 amplifier

SoundTouch™
wireless adapter

USB cable

(i) AC (mains) power cord

SoundTouch™ controller

Save the carton and packing materials for transporting or storing the system.

CAUTION: To avoid danger of suffocation, keep the plastic bags out of the reach of children.

(i) The SoundTouch™ SA-4 amplifier includes the appropriate AC (mains) power cord for your region. Use only the supplied AC (mains) power cord. If it does not fit your AC power (mains) outlet, DO NOT alter the plug in any way. Contact Bose customer service for assistance.

Note: If part of the system is damaged, do not use it. Contact your authorized Bose® dealer or Bose customer service. Please refer to the contact list in the carton for contact information.

Adding the system to your Wi-Fi® network

Tip: A laptop is the preferred method for connecting to the network. If you must use a desktop computer, see "Appendix D: Using a desktop computer to connect to the network" on page 33.

Before you can use SoundTouch™ you must install the SoundTouch™ app onto a computer that is on your home network. Next, you will use the app to connect the system to the network. The app guides you through the setup process.

Make sure you follow the instructions on your computer.

Note: If you have already set up SoundTouch™ for another system, just launch the app and click **EXPLORE** > **SETTINGS** > **Systems** > **ADD SYSTEM** to add another system.

Installing the SoundTouch™ app

1. From a computer that is on your Wi-Fi® network, open a browser and go to:

http://www.Bose.com/soundtouch_app

> **Tip:** If you want SoundTouch™ to play your iTunes® or Windows Media® Player music library, use the computer where your music library is stored.

http://www.Bose.com/soundtouch_app
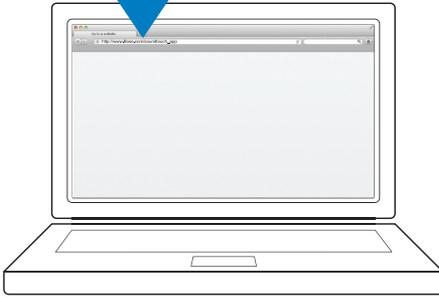
2. Download and install the SoundTouch™ app onto your computer.

You are now ready to connect the system to your network.

> **Note:** Do not connect any cables to the system until the app instructs you to connect the cables.

Connecting the system to your home Wi-Fi® network

1. Launch the app by double-clicking the SoundTouch™ app icon.

The first time the app launches, it guides you through setting up the system on your Wi-Fi network. The app instructs you to connect the system.

2. Place the SA-4 amplifier on a sturdy surface, close to an AC (mains) power source.

3. Connect the wireless adapter to the **BoseLink** INPUT connector on the back of the SA-4 amplifier.
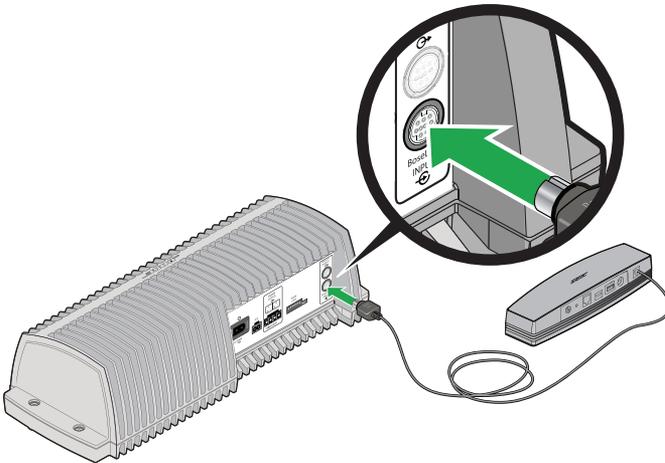
4. When prompted by the app, plug the power cord into the **AC POWER** connector on the back of the SoundTouch™ SA-4 amplifier.
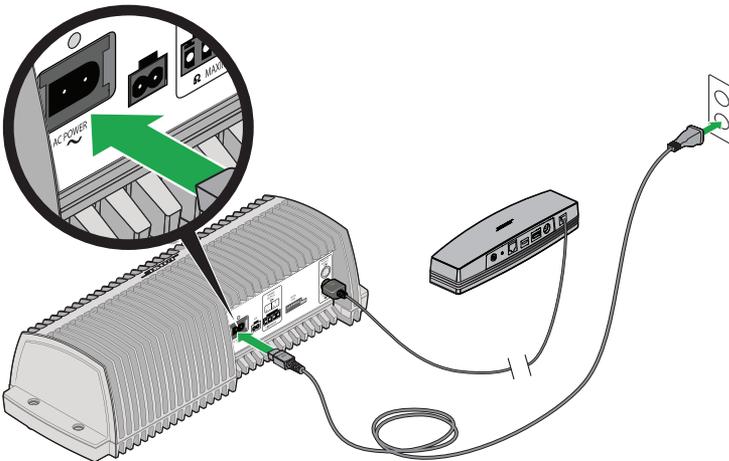
5. Plug the other end of the power cord into AC (mains) power.

Setting up the System

6. When prompted by the app, plug the small end of the USB cable into the **SETUP A** connector on the SoundTouch™ wireless adapter.

SoundTouch™ wireless adapter **SETUP A** connector
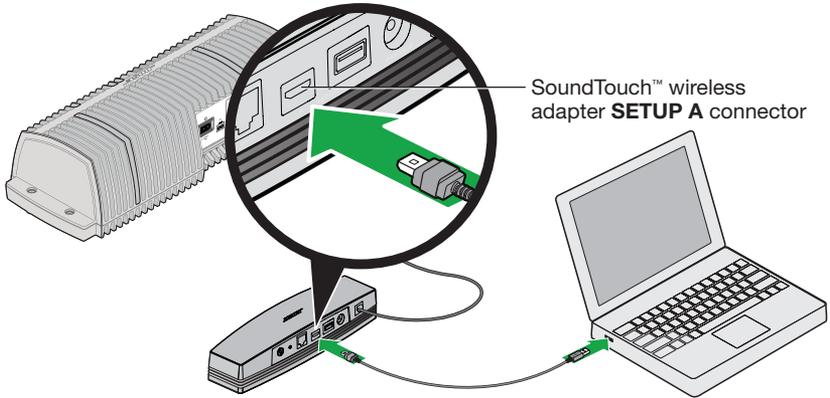
7. Plug the larger end of the USB cable into a USB port on your computer.

   When the SoundTouch™ app detects your system, the Wi-Fi® status indicator on the rear panel of the SoundTouch™ wireless adapter lights solid amber.

   The app instructs you to enter your network credentials.

8. When prompted to remove the USB cable, disconnect the USB cable from the SoundTouch™ wireless adapter and from the computer.

   Note: Leave the wireless adapter connected to the SA-4 amplifier, and the amplifier connected to AC (mains) power.

9. Follow the instructions on your computer to complete setup, including creating a SoundTouch™ account, locating your music library, signing in to music services, exploring music, and personalizing your presets.

   Note: During this process, you will be prompted to install the provided batteries into the SoundTouch™ controller.

10. When finished, disconnect the SA-4 amplifier from AC (mains) power and prepare to connect the speakers.

    If the amplifier is not in its permanent location, install the SA-4 amplifier and the SoundTouch™ wireless adapter. When you reconnect the system to AC (mains) power, it reconnects to your network.

Installing the SoundTouch™ SA-4 amplifier

Locate the SA-4 amplifier indoors, close to an AC (mains) power outlet. It does not need to be close to your speakers.

The SoundTouch™ SA-4 amplifier weighs 11 lbs (5 kg). It can be placed on a floor, on a shelf, or mounted on a wall. See page 30 for wall mounting instructions.

Consider the following caution statements when selecting a location for your SA-4 amplifier.

CAUTIONS:

• The SA-4 amplifier **must be used indoors**. It is neither designed nor tested for use outdoors, in recreational vehicles, or on boats.

• DO NOT mount the SA-4 amplifier on a surface that is not sturdy enough, or that has hazards concealed behind it, such as electrical wiring or plumbing.

• The wireless adapter connects to the SA-4 amplifier with a 6 foot (1.8 m) cable. Place the SA-4 amplifier so that the wireless adapter is within range of your Wi-Fi® router or network access point.

• Place the SA-4 amplifier and wireless adapter in an area where the maximum ambient temperature is less than 104°F (40°C).

• For optimum performance, place the SA-4 amplifier in a well-ventilated area.

• DO NOT place the SA-4 amplifier in a completely enclosed area. If adequate ventilation is not provided, the amplifier automatically protects itself by reducing its volume level in order to limit its temperature.

• DO NOT place the SA-4 amplifier on any heat-sensitive surface, such as the finished surface of fine furniture. Like all electrical equipment, it generates some heat.

• DO NOT use the SA-4 amplifier in a damp location. It is important to prevent moisture from getting into the system.

Installing the SoundTouch™ wireless adapter

The SoundTouch™ wireless adapter provides the network input for the SA-4 amplifier. It must remain in range of the Wi-Fi router, and within 70 feet (21 m) of the SoundTouch™ controller.

To keep interference to a minimum and to increase the strength of the Wi-Fi signal, install the wireless adapter outside of and away from metal cabinets, away from other audio/video components, and away from direct heat sources.

See page 32 for wall mounting instructions.

Note: If you experience interference with your network connection, place the SoundTouch™ wireless adapter outside of any cabinet or enclosure and away from metal objects. If problems persist, see "Troubleshooting" on page 24.

Setting up the System

Connecting speakers to the SA-4 amplifier

CAUTIONS:

- Use only **unpowered** speakers. DO NOT connect any make or model of powered speakers. Doing so may cause damage to the equipment.

- The SoundTouch™ SA-4 amplifier requires a 6-ohm minimum load.

Speaker cables consist of two insulated wires. Often, one wire is marked (striped, colored, or ribbed), indicating it should be connected to the positive (+) terminal. The plain wire should be connected to the negative (–) terminal. For recommended wire sizes and lengths, see "Speaker cable recommendations" on page 27.

1. Disconnect the SA-4 amplifier from AC (mains) power.

2. Remove the terminal block connector from the **SPEAKER OUTPUTS** connector on the rear panel of the SA-4 amplifier.

3. Use a small, flat-head screwdriver to connect the left speaker cable to the L positive (+) and minus (–) terminals of the 4-pin terminal block connector, and the right speaker cable to the R positive (+) and minus (–) terminals.
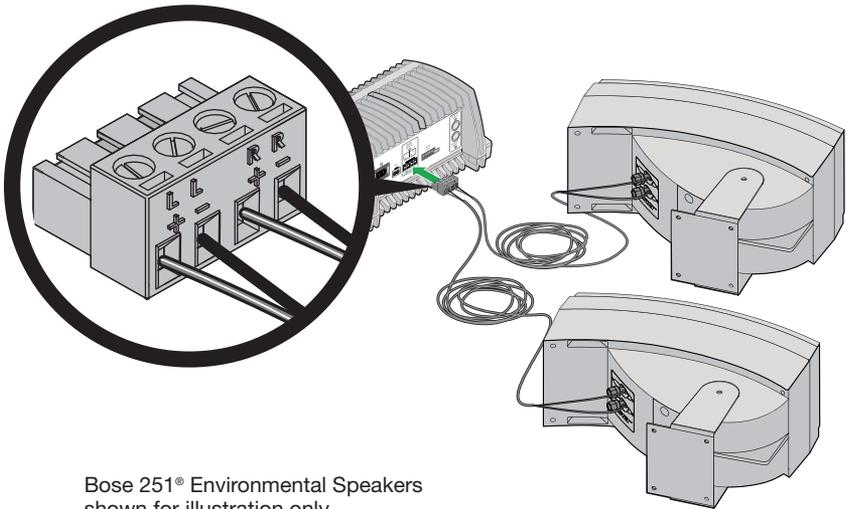
Bose 251® Environmental Speakers shown for illustration only.

4. Plug the terminal block connector into the **SPEAKER OUTPUTS** connector.

5. Follow the operating instructions for your unpowered speakers to connect the other end of the cables to the speakers. Make sure to connect the marked wires to the positive terminals.

6. Install the speakers in their permanent location.

7. Reconnect the SA-4 amplifier to AC (mains) power.

Tip: Use a silicone caulking material such as RTV adhesive to protect speaker wire connections. It is commonly available at hardware stores.

Using the SoundTouch™ app

The SoundTouch™ app is a software application that enables you to control the system from your computer, smartphone, or tablet. Using the app, your smart device acts as a rich remote for your SoundTouch™ system.

The app enables you to manage your system settings, explore local and global Internet radio stations, set and change presets, stream music to the system, view what is playing, plus much more.

After you set up the system on your network using the SoundTouch™ app, you are ready to explore streaming music and to personalize your presets.

Getting help

If you need more information on using the system, use Help Tips or Online help.

Help Tips

After setup is complete, helpful tips appear on the screen, based on the task you are trying to complete. These tips instruct you how to use the system, including how to personalize your presets.

To activate the tips

If you have deactivated tips, follow these instructions to re-activate tips.

1. Launch the SoundTouch™ app and click **EXPLORE** > **SETTINGS** > **Help Tips**.

2. Slide the SHOW TIPS slider to ON.

Online help

For information about using SoundTouch™:

1. Click **EXPLORE** > **HELP** in the app.

2. Browse through the help topics.

Controlling the System using the App

Downloading the app for your mobile device

Bose® offers a free mobile version of the SoundTouch™ app so you can control the system from your smartphone or tablet.

To install the app for your smartphone or tablet:

- For iOS users: download the SoundTouch™ controller app from the App Store.

- For Android™ users: download the SoundTouch™ controller app from the Google Play™ Store.

Controlling the system from another computer

Once you set up the SoundTouch™ system on your home Wi-Fi® network, you can control the system from any computer on the same network.

1. On the computer where you want to control the system, open a browser and go to:

   http://www.Bose.com/soundtouch_app

2. Download, install, and launch the SoundTouch™ app.

   The sign-in screen appears.

   You are ready to sign in to your SoundTouch™ account.

Playing music with the SoundTouch™ controller

During the app set up process, the SoundTouch™ controller was activated and a wireless connection was established. You can use the SoundTouch™ controller to play and manage your presets.

Note: The SoundTouch™ controller must be within 70 feet (21 m) of the SoundTouch™ wireless adapter in wood-construction homes. In concrete, stucco or brick homes, the range will likely be less and may vary. The number of other active wireless devices in the home may affect range. Ideally, there should be no more than one wall or ceiling between the controller and the wireless adapter.
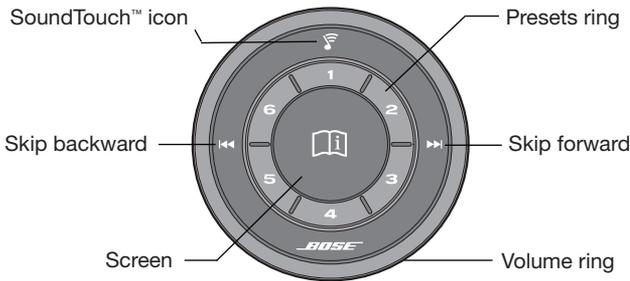

Using the SoundTouch™ controller

- Press a preset to play it. Press and hold a preset to personalize it.

- Move your finger around the Presets ring to view presets.

- Turn the Volume ring to adjust the volume.

- Touch ⏮ or ⏭ to skip through content.

- Press and hold the screen to turn the SoundTouch™ system on and off.

- Press the screen to play or pause music.

- Touch and hold the SoundTouch™ icon to disconnect the controller from a system. To connect to another system, refer to the help system in the app.

Note: If the controller is in power saving mode, wave your hand within 6 in. (15 cm) above the screen to turn it on.

Using the System

Wall mounting the SoundTouch™ controller

⚠ **WARNING:** The wall mount bracket contains magnetic material. Please contact your physician if you have any questions whether this might affect the operation of your implantable medical device.

Follow these instructions to wall mount your SoundTouch™ controller. Use the bracket as a template to mark the holes.
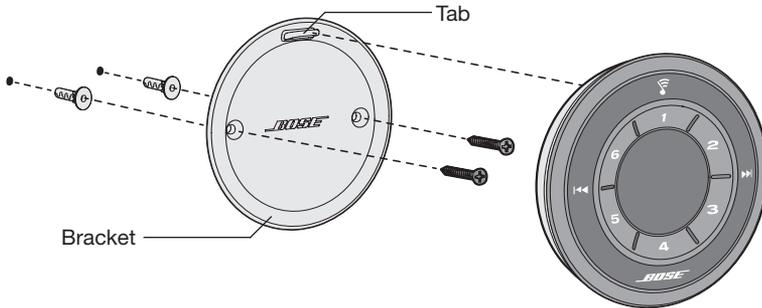
Wallboard (anchors and screws supplied):

1. Use a $^3/_{16}$ in. (5 mm) drill bit to drill two holes into $^3/_8$ in. (9.5 mm) or thicker wallboard.

2. Insert the provided anchors into the holes and tap lightly to secure.

3. Align the bracket (tab at top) to the anchors. Tighten the provided screws into the holes.

4. Align the latch to the bracket's tab. Attach the controller.

Wood:

1. Purchase two #6x1 in. (25.4 mm) flat-head wood screws.

2. Use a $^7/_{64}$ in. (2.78 mm) drill bit to drill 2 holes into $^3/_4$ in. (19 mm) or thicker wood.

3. Align the bracket (tab at top) to the holes. Tighten the screws into the holes.

4. Align the latch to the bracket's tab. Attach the controller.

Playing an AirPlay stream

In addition to playing content from Internet radio, music services, and your music library, you can also stream audio from an AirPlay device on the same Wi-Fi® network.

1. Start a music app on your AirPlay device.

    Tip: Adjust the volume on the AirPlay device to 75 percent of maximum to ensure optimal volume control from the SA-4 amplifier system.

2. On the device, tap or click ◣ and select the SoundTouch™ system name (assigned during setup).

3. Start playing music from a music app.

Note: To set up your system as an AirPlay device only, see "Alternate setup method" on page 24.

Status indicators

SoundTouch™ SA-4 amplifier status indicator

The SoundTouch™ SA-4 amplifier has a green status indicator on the connector panel.

SA-4 amplifier status indicator
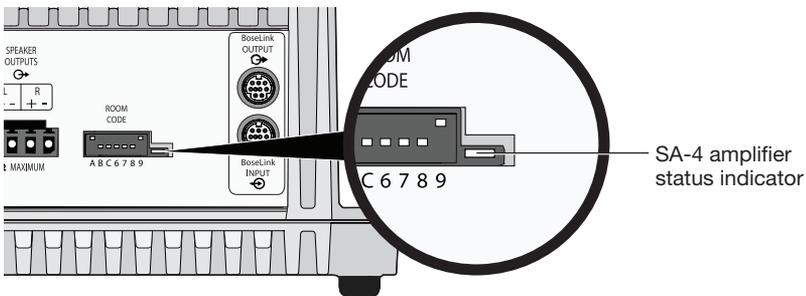
Indicator activity	System status
Solid	On and ready to receive data
Slow blinking: 1 sec on, 3 sec off	In standby
Fast blinking	On and receiving data

Using the System

SoundTouch™ wireless adapter Wi-Fi® status indicator

The SoundTouch™ wireless adapter is powered by the SA-4 amplifier. The Wi-Fi status indicator is located on the back panel.

SoundTouch™ wireless adapter Wi-Fi status indicator
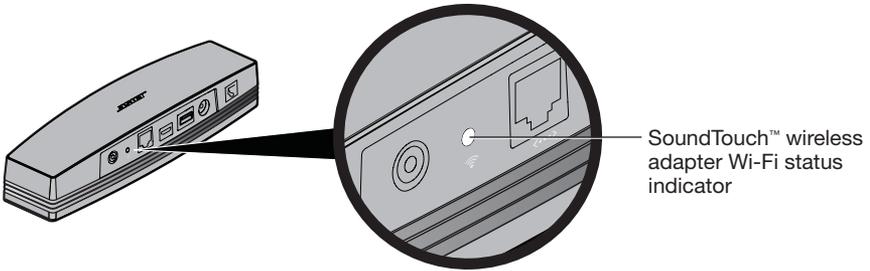
Indicator activity	System status
Blinking white	Connecting to Wi-Fi network
Solid white	System on and connected to Wi-Fi network
Solid amber	System in setup mode (page 12 and page 24)
Blinking slow amber	Disconnected from Wi-Fi network
Blinking fast amber	Firmware error - call Bose service
Off	Networking disabled or system connected to Ethernet

Alternate setup method

Using this method you can set up your SoundTouch™ system by first joining its own built-in Wi-Fi® network, and then connecting to your home Wi-Fi network.

1. On the back of the SoundTouch™ wireless adapter, press and hold the Control button for 2-6 seconds.

2. When the Wi-Fi status indicator blinks amber once and lights solid amber, release the Control button.

Wi-Fi status indicator
Control button
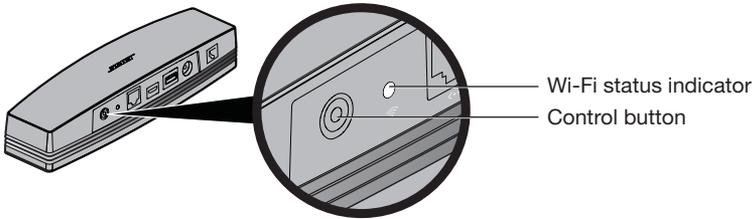
3. On your computer, tablet or smartphone, activate Wi-Fi and join the **Bose® SoundTouch™ Wi-Fi** network.

    Note: It may take several moments for the network to appear on your device.

4. Open a browser and type: **http://192.168.1.1** in the address field.

    The Wi-Fi setup window appears on the screen.

5. Select your home Wi-Fi network from the drop-down list.

6. Enter your password (if required) and tap or click **Connect**.

    The SoundTouch™ wireless adapter Wi-Fi status indicator blinks rapidly while the system connects to your home Wi-Fi network.

7. On your computer, tablet, or smartphone, return to the Wi-Fi control panel and rejoin your home Wi-Fi network.

8. Once the system is on the network, follow these steps to complete setup:

    A. Download and launch the SoundTouch™ app.

    B. On the SOUNDTOUCH™ SYSTEM SETUP screen, select this option:

        IT IS ALREADY CONNECTED.

Disable/enable Wi-Fi® capability

The SoundTouch™ wireless adapter has built-in Wi-Fi capability that enables it to wirelessly connect to your home Wi-Fi network. The Wi-Fi capability is disabled when the SoundTouch wireless adapter is placed in the Power Saving mode.

Power Saving mode

The SoundTouch™ wireless adapter has a low-power standby mode in which it consumes a minimum amount of power. This can be used to reduce the power consumed in your home while you are away.

To place the SoundTouch™ wireless adapter in the Power Saving mode and disable the Wi-Fi capability, press and hold the Control button on the back of the SoundTouch™ wireless adapter for 6-10 seconds. When the Wi-Fi status indicator turns off, release the Control button.

To wake up the SoundTouch™ wireless adapter and enable the Wi-Fi capability again, press and release the Control button. The Wi-Fi status indicator blinks white as it reconnects to the Wi-Fi network.

How presets work

You can personalize six presets to your favorite streaming music services, stations, playlists, artists, albums, or songs from your music library. You can access your music at any time with a simple touch of a button on the SoundTouch™ controller.

Tip: You can also access your presets using the SoundTouch™ app on your computer, smartphone, or tablet. See "Using the SoundTouch™ app" on page 15.

What you need to know

• You can set presets from the app, or from the SoundTouch™ controller.

• If the preset source is your iTunes® or Windows Media Player® music library, ensure the computer storing your music library is on and connected to the same network as the SoundTouch™ system.

Playing a preset

Once you personalize your presets using the app, press a preset on the SoundTouch™ controller to play it. If you have not set your presets, launch the app and set your presets. For help, refer to the Help system in the app.

Information appears on the screen, which may include an icon, song, or station depending on the source.

Presets with the SoundTouch™ controller

This section describes how to set and change a preset from the SoundTouch™ controller Presets ring.

Note: For information on using the SoundTouch™ app to set and change your presets, refer to the Help system in the app.

To set a preset

1. Stream music to the system using the app.

2. While the music is playing, press and hold a preset on the SoundTouch™ controller (about 2 seconds).

    A New Preset Assigned message appears on the screen.

To change a preset

Follow the instructions in "To set a preset."

Care and Maintenance

Adding a Wi-Fi® network

If your network information has changed, or to connect your system to another network, you must add the new network information in the app and then connect the system.

1. Launch the SoundTouch™ app.
2. Click **EXPLORE > SETTINGS > Systems**.
3. Select the system.
4. Click **CONNECT TO A WI-FI NETWORK**.
5. Follow the instructions on your computer.

Troubleshooting

For more troubleshooting information, refer to the Help system in the SoundTouch™ app.

Problem	What to do
Cannot complete network setup	• Make sure the SoundTouch™ wireless adapter is plugged into the **BoseLink INPUT** connector and the SA-4 amplifier is connected to AC (mains) power. • Ensure network name and password are correct. • Ensure network service is available and system and computer are on the same network. • Move system closer to wireless router or network access point. • Stop other audio or video streaming applications. • Close app, disconnect all cables, and restart setup process.
Cannot connect to network	• If your network has changed or to connect your system to another network, see "Adding a Wi-Fi® network" on page 24. • Try connecting to the network using an Ethernet cable.
Intermittent or no audio from SoundTouch™	• Make sure the SoundTouch™ wireless adapter is plugged into the **BoseLink INPUT** connector. • Move the SoundTouch™ wireless adapter away from possible interference such as microwaves, cordless phones, metal cabinets, or other metal objects, etc. • Stop other audio or video streaming applications. • Ensure system is powered and connected to the same network as the computer. • Move system or audio source closer to wireless router or network access point. • Ensure system volume is not muted or too low. • Unplug the power cord; reconnect after one minute.
Cannot hear an AirPlay device	• Ensure system and AirPlay device are connected to the same network. • Ensure AirPlay device is playing; increase its volume. • Ensure system is selected in the AirPlay menu of the device. • Move AirPlay device away from possible interference and closer to the wireless router or network access point. **Note:** Proximity of the AirPlay device to the system is not important, only to the wireless router or network access point.

Problem	What to do
Neither speaker plays	• Make sure the amplifier is connected to AC (mains) power. • Make sure the plug is inserted fully and the AC (mains) power outlet is powered. • Make sure content is selected via the SoundTouch™ app. • Disconnect the SoundTouch™ wireless adapter cable from the amplifier. Disconnect AC power from the SA-4 amplifier for three minutes. Reconnect the SoundTouch™ wireless adapter. Reconnect power to the SA-4 amplifier.
Only one speaker plays	Make sure the cables are in good condition and are firmly connected at both ends for the speaker that does not play.
One speaker still does not play	Try connecting the speaker that does not play to the other speaker cable. If the speaker still does not play, the problem may be with the speaker. If the speaker now plays, you know the speaker and the cable are both good. Disconnect the cable from the amplifier terminal, and connect it to the other terminal connector. If the speaker now plays, the problem is likely in the other speaker cable. Replace it. If the speaker does not play, the problem may be in that channel of the amplifier.
Right and left stereo channels are heard on the wrong speakers	• Make sure the cable connected to the SPEAKER OUTPUTS L at the amplifier are connected to the speaker on the left in your listening area, and the cable connected to the SPEAKER OUTPUTS R at the amplifier are connected to the speaker on the right in your listening area.
Bass or treble is weak	Check the speaker cable connections. Make sure the individual wires are connected + to + and – to –.
Interference	• Make sure the speaker cables are firmly inserted in the terminals on the back of the speakers and on the amplifier rear panel. Check to be sure no individual wires are touching across terminals. • Make sure the SoundTouch™ wireless adapter is away from metal objects, other audio/video components, and direct heat sources.
SoundTouch™ controller does not adjust the volume	• Replace the batteries in the SoundTouch™ controller. • If you are using a local volume control (VCA), turn it to the off position.
Volume suddenly decreases	• Lower the volume setting to see if the level returns to normal. If so, the sudden loss of volume was an intentional action of the amplifier's overload protection feature. This engages automatically if the volume is set too high and is overdriving the speakers. Choosing a lower setting should ensure continuous, even volume. • Disconnect the amplifier from AC (mains) power and allow it to cool. Increase ventilation. Reconnect to power. If the volume level returns to normal, the sudden loss of volume was an intentional action of the amplifier's thermal overload protective feature. This engages automaticaly if the amplifier overheats. Increasing ventilation should ensure continuous, even volume.
Wireless adapter does not awaken from power saving mode.	Disconnect the SoundTouch™ wireless adapter cable from the amplifier. Disconnect AC power from the SA-4 amplifier for three minutes. Reconnect the SoundTouch™ wireless adapter. Reconnect power to the SA-4 amplier.

Care and Maintenance

Cleaning

CAUTION: Disconnect the power cord from the AC (mains) power outlet before cleaning.

To clean the SA-4 amplifier, use only a soft, dry cloth to remove dust from the outside of the enclosure. You may use a brush attachment on a vacuum cleaner to clean the hard-to-reach areas. DO NOT use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives.

Customer service

For additional help using the system, contact Bose customer service. See the address and phone number list included with your SoundTouch™ system.

Limited warranty information

Your SoundTouch™ system is covered by a limited warranty. Details of the limited warranty are provided on the product registration card that is included in the carton. Please refer to the card for instructions on how to obtain warranty service and register your product. Failure to register will not affect your limited warranty rights.

SoundTouch™ SA-4 Amplifier

Features

- Bose® proprietary digital signal processing technology
- Built-in digital volume control
- Thermal overload protection

Dimensions and Weight

- 14¼ in. wide x 5½ in. deep x 4¼ in. high (36.2 cm x 14.0 cm x 10.8 cm)
- 11.0 lb (5 kg)

Power rating

- USA/Canada: 120V∿ 60 Hz, 400W
- International: 220-240V∿ 50/60 Hz, 400W

Input sensitivity

0.5 Vrms @ 1 kHz

Signal to Noise ratio (S/N)

90 dB

Output power (continuous average)

100W / channel minimum into 6 ohms, from 30 to 15 kHz, with no more than 0.5% THD.

Temperature range

32° F to 104° F (0° C to 40° C)

Speaker cable recommendations

Maximum Length	Gauge
30 ft (9 m)	18 (0.82 mm²)
45 ft (14 m)	16 (1.3 mm²)
70 ft (21 m)	14 (2.0 mm²)

Technical Information

SoundTouch™ wireless adapter

Dimensions and weight

- 2½ in. wide x 9⅜ in. long x 2 in. high (6.4 cm x 23.8 cm x 5.1 cm)
- 12.0 oz (.34 kg)

Temperature range

32° F to 104° F (0° C to 40° C)

SoundTouch™ controller

Dimensions and weight

- 4⅛ in. diameter x 1⅛ in. high (10.5 cm x 2.8 cm)
- 8.0 oz (.23 kg)

Temperature range

32° F to 104° F (0° C to 40° C)

Appendix A: SA-4 amplifier connector panel

Connector	Description
AC POWER	AC power cord connector. Power is applied when the power cord is inserted and plugged into an AC (mains) outlet. There is no on/off switch on the SoundTouch™ SA-4 amplifier.
VCA	Local volume control connector. Allows you to control the volume using a wall-mounted control. Contact your Bose dealer or call Bose customer service for information on installing this feature. See the contact list enclosed in the carton.
SPEAKER OUTPUTS	Left and right speaker outputs. Connect only unpowered speakers. A 6-ohm minimum load is required. To determine the correct speaker wire size, see "Speaker cable recommendations" on page 27.
ROOM CODE switches	**Only switch A is used for SoundTouch™ systems.** The output of the SoundTouch™ SA-4 amplifier can be set to stereo (Switch A up) or mono (Switch A down). The mono output mode feeds left and right channel audio to both the left and right outputs. This is useful in situations where a stereo output isn't feasible such as when outdoor speakers are used in a large area. The remaining six switches should remain in the default configuration: <table><tr><td>Switch B</td><td>Down</td></tr><tr><td>Switch C</td><td>Down</td></tr><tr><td>Switch 6</td><td>Down</td></tr><tr><td>Switch 7</td><td>Down</td></tr><tr><td>Switch 8</td><td>Down</td></tr><tr><td>Switch 9</td><td>Up</td></tr></table>
Status indicator	The green indicator shows the operational state of the SA-4 amplifier. See "SoundTouch™ SA-4 amplifier status indicator" on page 19.
BoseLink INPUT	Used for connecting the SoundTouch™ wireless adapter to the SA-4 amplifier.
BoseLink OUTPUT	Not used.

Appendices

Appendix B: Wall mounting the SoundTouch™ SA-4 amplifier

Vertical orientation
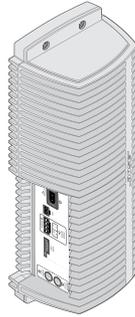
Connector panel is facing left.

Horizontal orientation

Connector panel is facing up.
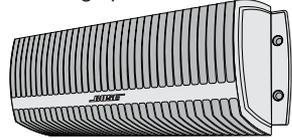
Follow these instructions to wall mount your SoundTouch™ SA-4 amplifier. Install either vertically with the connector panel facing left, or horizontally with the connector panel facing up.

1. Remove rubber feet from the SA-4 amplifier. Use these holes to mount the amplifier on the wall.

2. To mark mounting hole locations, hold the SA-4 amplifier in position and mark the wall through the holes in the housing.
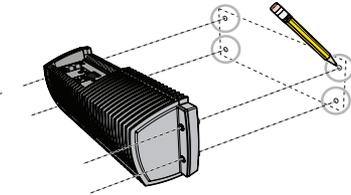

3. Drill holes.

4. Insert and tighten screws (and anchors, if used).

Note: Mounting hardware must be purchased separately. If the mounting hardware instructions differ from these instructions, follow the mounting hardware instructions.

- **Wood Mounting**: Mount to 1 in. (25.4 mm) or thicker wood. Drill pilot hole with a ³/₃₂ in. (2.38 mm) drill. Use (4) #10 x 1½ in. (M5 x 38 mm) pan-head wood screws.

- **Wallboard Mounting**: Mount to ⅜ in. (9.5 mm) or thicker wallboard. Drill pilot hole with a ½ in. (12.7 mm) drill. Use (4) #10 x 2½ in. (M5 x 63.5 mm) pan head machine screws and (4) #10 (M5) spring anchors.

Wood	Wallboard
1 in. (25.4 mm) minimum	³/₈ in. (9.5 mm) minimum
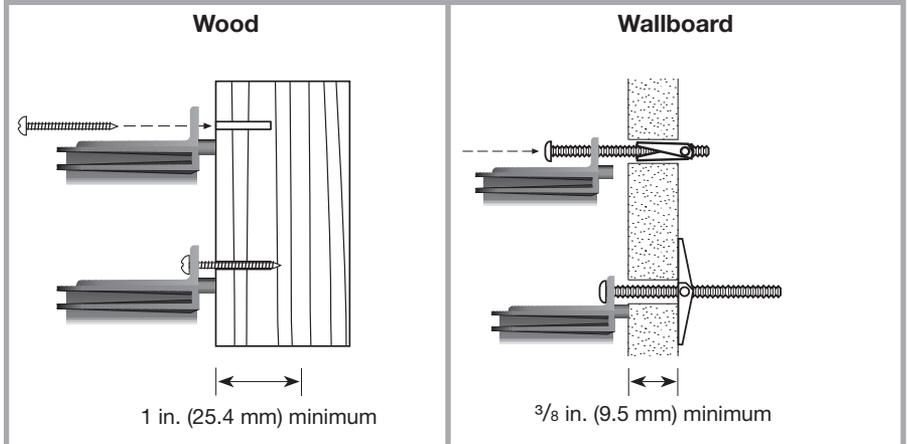
Appendices

Appendix C: Wall mounting the SoundTouch™ wireless adapter

Vertical orientation
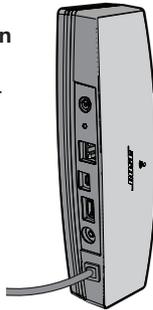
Connector panel is facing left.

Horizontal orientation

Connector panel is facing up.

Follow these instructions to wall mount your SoundTouch™ wireless adapter. Install either vertically with the connector panel facing left, or horizontally with the connector panel facing up.

Note: Mounting hardware must be purchased separately. If the mounting hardware instructions differ from these instructions, follow the mounting hardware instructions.

- **Wood Mounting**: Mount to 1 in. (25.4 mm) or thicker wood. Drill hole with a ⅛ in. (3.17 mm) drill. Use (2) #8x1¼ in. (32 mm) pan-head wood screws.

- **Wallboard Mounting**: Mount to ⅜ in. (9.5 mm) or thicker wallboard. Drill pilot hole with a ³⁄₁₆ in. (4.76 mm) drill. Use (2) #6-8x1 in. (25.4 mm) plastic wall anchors, and (2) #8x1¼ in. (32 mm) pan-head wood screws.

Wood	Wallboard
¼ in. (6.35 mm) above surface	¼ in. (6.35 mm) above surface
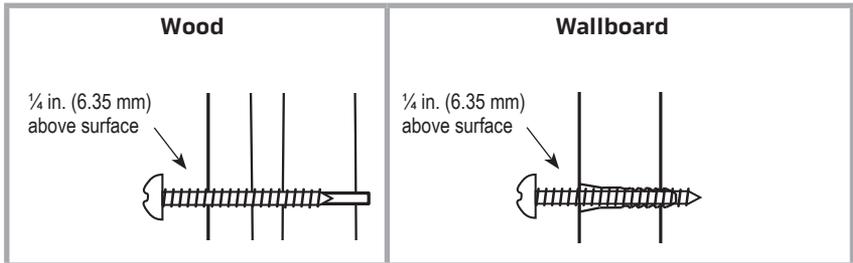
1. Mark holes on the wall 6¼ in. (158.7 mm) center-to-center.
2. Drill holes. Insert anchors (if used).
3. Install screws. Leave the screw heads ¼ in. (6.35 mm) above wall surface.
4. Position SoundTouch™ wireless adapter onto screws. Press firmly into place.

# Appendix D: Using a desktop computer to connect to the network

If you have a desktop computer, temporarily move the SA-4 amplifier near the computer to set up the network connection.

The diagram below shows how to temporarily set up your SA-4 amplifier and SoundTouch™ wireless adapter near your desktop computer.

Once you have the components in place, follow the procedures in this guide to connect to your network using the desktop computer. After making the network connection, you can test the system to make sure everything works.

When you are done, disconnect the amplifier from your computer and AC (mains) power and permanently install the SA-4 amplifier. When you reconnect the system to AC (mains) power, it reconnects to your network.

See "Installing the SoundTouch™ SA-4 amplifier" on page 13.

BoseLink cable

AC power cord
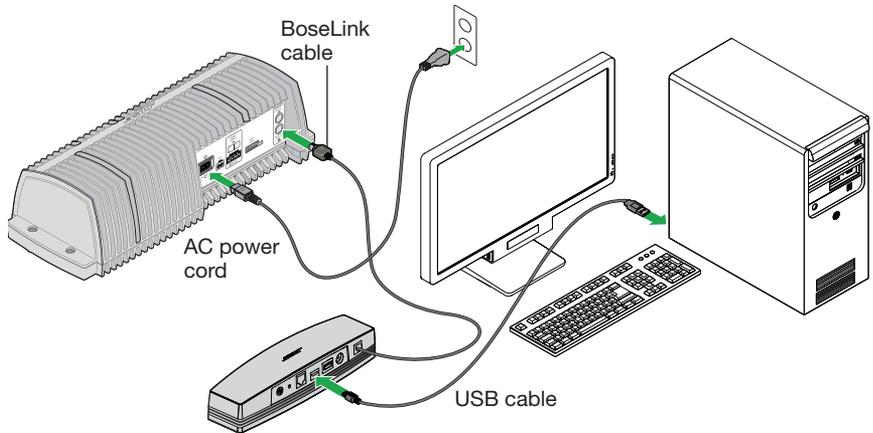
USB cable

Note: Connect the USB cable to the SoundTouch™ wireless adapter only when the app instructs you to do so.

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