SAMSUNG

FULL MANUAL

HW-N450

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SAFETY INFORMATION

 The following also applies to the Wireless Subwoofer (PS-WN20).

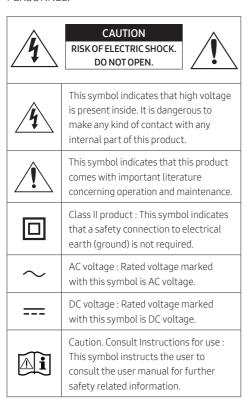
SAFFTY WARNINGS

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (OR BACK).

NO USER-SERVICEABLE PARTS ARE INSIDE.

REFER SERVICING TO QUALIFIED SERVICE

PERSONNEI



WARNING

- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
- To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

CAUTION

- Do not expose this apparatus to dripping or splashing. Do not put objects filled with liquids, such as vases, on the apparatus.
- To turn this apparatus off completely, you must pull the power plug out of the wall socket. Consequently, the power plug must be easily and readily accessible at all times.

FCC NOTE (for U.S.A):

Class B FCC Statement

The included module(s) 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 of the following measures:

- Reorienting or relocating the receiving antenna.
- Increasing the separation between the equipment and receiver.
- Connecting the equipment to an outlet that is on a different circuit than the radio or TV.
- Consulting the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated so there is at least 8 inches (20 cm) between the radiator and your body. This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

FCC Caution:

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances, such as radios and televisions, use shielded cables and connectors for connections.

Important Safety Instructions

Read these operating instructions carefully before using the unit. Follow all the safety instructions listed below. Keep these operating instructions handy for future reference.

- 1. Read these instructions.
- 2. Keep these Instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- **5.** Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 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.** Only use attachments/accessories specified by the manufacturer.

- tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.

 When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the 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.

PRECAUTIONS

- 1. Ensure that the AC power supply in your house complies with the power requirements listed on the identification sticker located on the bottom of your product. Install your product horizontally, on a suitable base (furniture), with enough space around it for ventilation (3~4 inches). Make sure the ventilation slots are not covered. Do not place the unit on amplifiers or other equipment which may become hot. This unit is designed for continuous use. To fully turn off the unit, disconnect the AC plug from the wall outlet. Unplug the unit if you intend to leave it unused for a long period of time
- **2.** During thunderstorms, disconnect the AC plug from the wall outlet. Voltage peaks due to lightning could damage the unit.

- Do not expose the unit to direct sunlight or other heat sources. This could lead to overheating and cause the unit to malfunction.
- 4. Protect the product from moisture (i.e. vases), and excess heat (e.g. a fireplace) or equipment creating strong magnetic or electric fields. Unplug the power cable from the AC wall socket if the unit malfunctions. Your product is not intended for industrial use. It is for personal use only. Condensation may occur if your product has been stored in cold temperatures. If transporting the unit during the winter, wait approximately 2 hours until the unit has reached room temperature before using.
- 5. The battery used with this product contains chemicals that are harmful to the environment. Do not dispose of the battery in the general household trash. Do not expose the battery to excess heat, direct sunlight, or fire. Do not short circuit, disassemble, or overheat the battery. Danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type.

ABOUT THIS MANUAL

The user manual has two parts: this simple paper USER MANUAL and a detailed FULL MANUAL you can download.



USER MANUAL

See this manual for safety instructions, product installation, components, connections, and product specifications.





FULL MANUAL

You can access the Full Manual on Samsung's on-line customer support center by scanning the QR code. To see the manual on your PC or mobile device, download the manual in document format from Samsung's website.

(http://www.samsung.com/support)

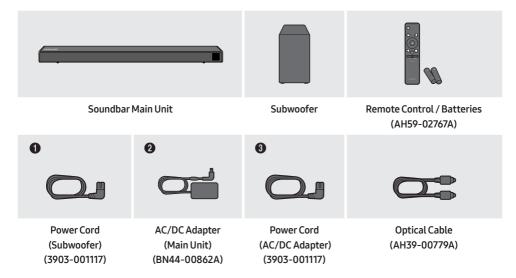
Design and specifications are subject to change without prior notice.

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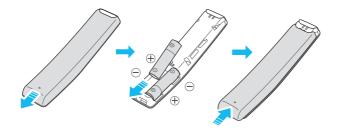
01 CHECKING THE COMPONENTS



- For more information about the power supply and power consumption, refer to the label attached to the product. (Label: Bottom of the Soundbar Main Unit)
- The power components are labelled (1, 2, 3). For more information about power connections, see page 5.
- For Soundbar wall mounting components, see page 27.
- To purchase additional components or optional cables, contact a Samsung Service Center or Samsung Customer Care.
- The appearance of the accessories may differ slightly from the illustrations above.

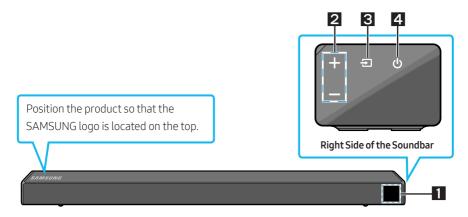
Inserting Batteries before using the Remote Control (AA batteries X 2)

Slide the battery cover in the direction of the arrow until it is completely removed. Insert 2 AA batteries (1.5V) oriented so that their polarity is correct. Slide the battery cover back into position.



02 PRODUCT OVERVIEW

Front Panel / Right Side Panel of the Soundbar



Display

3

Displays the product's status and current mode.

+/- (Volume) Button

2 Adjusts the volume.

• When adjusted, the volume level appears on the Soundbar's front display.

(Source) Button

Selects the source input mode.

Input mode	Display
Optical Digital input	D.IN
ARC (HDMI OUT) input	D.IN → TV ARC (Auto conversion)
AUX input	AUX
HDMI input	HDMI
BLUETOOTH mode	ВТ
USB mode	USB

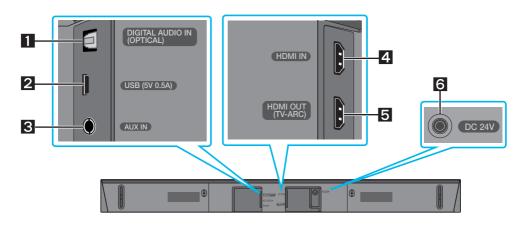
• To turn on "BT PAIRING" mode, change the source to "BT" mode, and then press and hold the Source) button for more than 5 seconds.

(Power) Button

Turns the power on and off.

- When you plug in the AC cord, the power button will begin working in 4 to 6 seconds.
- When you turn on this unit, there will be a 4 to 5 second delay before it produces sound.
- If you want to enjoy sound only from the Soundbar, you must turn off the TV's speakers in the Audio Setup menu of your TV. Refer to the owner's manual supplied with your TV.

Bottom Panel of the Soundbar



1	DIGITAL AUDIO IN (OPTICAL) Connect to the digital (optical) output of an external device.
2	USB (5V 0.5A) Connect a USB device here to play music files on the USB device through the Soundbar.
3	AUX IN Connect to the Analog output of an external device.
4	HDMI IN Inputs digital video and audio signals simultaneously using an HDMI cable. Connect to the HDMI output of an external device.
5	HDMI OUT (TV-ARC) Connect to the HDMI (ARC) jack on a TV.
6	DC 24V (Power Supply In) Connect the AC/DC power adapter.

- When disconnecting the power cable of the AC/DC power adaptor from a wall outlet, pull the plug. Do not pull the cable.
- Do not connect this unit or other components to an AC outlet until all connections between components are complete.

03 CONNECTING THE SOUNDBAR

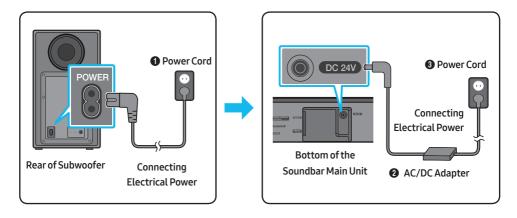
Connecting Electrical Power

Use the power components (1, 2, 3) to connect the Subwoofer and Soundbar to an electrical outlet in the following order:

- 1 Connect the power cord to the Subwoofer.
- 2 Connect the power output cable to the power adapter, and then to the Soundbar.
- **3** Connect the power cord to a wall socket.

See the illustrations below.

• For more information about the required electrical power and power consumption, refer to the label attached to the product. (Label: Bottom of the Soundbar Main Unit)



• Make sure to rest the AC/DC Adapter flat on a table or the floor. If you place the AC/DC Adapter so that it is hanging with the AC cord input facing upwards, water or other foreign substances could enter the Adapter and cause the Adapter to malfunction.

Connecting the Soundbar to the Subwoofer

When the subwoofer is connected, you can enjoy rich bass sound.

Automatic connection between the Subwoofer and the Soundbar

When you turn the power on after connecting the power cables to the Soundbar and subwoofer, the subwoofer is automatically connected to the Soundbar.

• When auto pairing is complete, the blue indicators at the rear of the subwoofer turn on.

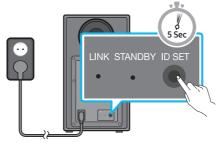
LED Indicator Lights on the Rear of Subwoofer

LED	Status	Description	Resolution
	On	Successfully connected	_
	011	(normal operation)	
			Check if the power cable attached to the
Blue			main Soundbar unit is connected properly
	Blinking	Recovering the connection	or wait about 5 minutes. If blinking persists,
			try manually connecting the subwoofer.
			See page 7.
		Standby (with the Soundbar	Check if the power cable attached to the
Red	On	main unit turned off)	main Soundbar unit is connected properly.
		Connection failed	Connect again. See the instructions for
			manual connection on page 7.
Red and	Blinking	Malfunction	See the contact information for the
blue		Matidifction	Samsung Service Center in this manual.

Manually connecting the Subwoofer if automatic connection fails

Before performing the manual connection procedure below:

- Check whether the power cables for the Soundbar and subwoofer are connected properly.
- Make sure that the Soundbar is turned on.
- 1. Press and hold **ID SET** on the rear of the subwoofer for at least 5 seconds.
 - The red indicator on the rear of the subwoofer turns off and the blue indicator blinks.

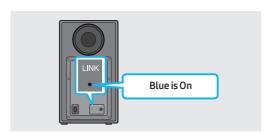


Rear of Subwoofer

- 2. Press and hold the **Up** button on the remote control for at least 5 seconds.
 - The ID SET message appears on the display of the Soundbar for a moment, and then it disappears.
 - The Soundbar will automatically power on when ID SET is complete.



3. Check if the LINK LED is solid blue (connection complete).



The LINK LED indicator stops blinking and glows a solid blue when a connection is established between the Soundbar and the Wireless Subwoofer.

NOTES

- Do not connect the power cord of this product or your TV to a wall outlet until all connections between components are complete.
- Before moving or installing this product, be sure to turn off the power and disconnect the power cord.
- If the main unit is powered off, the wireless subwoofer will go into stand-by mode and the STANDBY LED on the rear will be Red after blinking Blue several times.
- If you use a device that uses the same frequency (5.8GHz) as the Soundbar near the Soundbar, interference may cause some sound interruption.
- The maximum transmission distance of the wireless signal of the main unit is about 32.8 ft, but may vary depending on your operating environment. If a steel-concrete or metallic wall is between the main unit and the wireless subwoofer the system may not operate at all, because the wireless signal cannot penetrate metal.

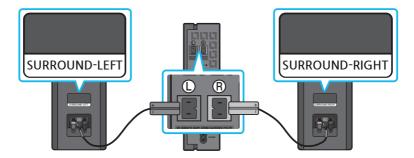
PRECAUTIONS

- Wireless receiving antennas are built into the wireless subwoofer. Keep the units away from water and moisture.
- For optimal listening performance, make sure that the area around the wireless subwoofer and Wireless Receiver Module (Sold separately) location is clear of any obstructions.

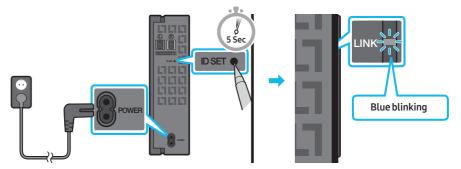
Connecting the SWA-8500S to a Soundbar (Sold Separately)

Expand to true wireless surround sound by connecting the Samsung Wireless Rear Speaker Kit (SWA-8500S) to your Soundbar (Sold separately).

- 1. Connect the Wireless Receiver Module to 2 Surround Speakers.
 - The speaker cables are color coded.



- 2. Check the standby status of the Wireless Receiver Module after plugging it into an electrical outlet.
 - The LINK LED indicator (blue LED) on the Wireless Receiver Module blinks. If the LED does not
 blink, press the ID SET button on the back of the Wireless Receiver Module with a pen tip for
 5~6 seconds until the LINK LED indicator blinks (in Blue). For more about the LED, please refer
 to the SWA-8500S user manual.

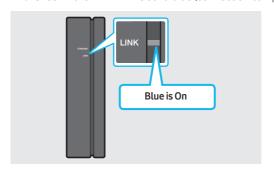


- **3.** Press and hold the **Up** button on the remote control for at least 5 seconds.
 - The ID SET message appears on the display of the Soundbar for a moment, and then it disappears.
 - The Soundbar will automatically power on when **ID SET** is complete.



A CAUTION

- If your Soundbar was playing music when it connects to the SWA-8500S, you may hear some stuttering from the woofer as the connection finalizes.
- **4.** Check if the LINK LED is solid blue (connection complete)



The LINK LED indicator stops blinking and glows a solid blue when a connection is established between the Soundbar and the Wireless Receiver Module.

5. If SWA-8500S is not connected, repeat the procedure from Step 2.

04 CONNECTING TO YOUR TV

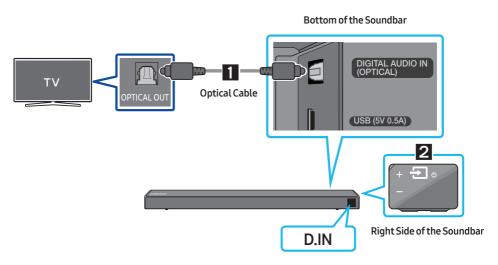
Hear TV sound from your Soundbar through wired or wireless connections.

- When the Soundbar is connected to selected Samsung TVs, the Soundbar can be controlled using the TV's remote control.
 - This feature is supported by 2017 and later Samsung Smart TVs that support Bluetooth when you connect the Soundbar to the TV using an optical cable.
 - This function also allows you to use the TV menu to adjust the sound field and various settings as well as the volume and mute.

Method 1. Connecting with a Cable

When the audio in a broadcast is encoded in Dolby Digital and the "Digital Output Audio Format" on your TV is set to PCM, we recommend that you change the setting to Dolby Digital. When the setting on the TV is changed, you will experience better sound quality. (The TV menu may differ depending on the TV manufacturer.)

Connecting using an Optical Cable



- Connect the DIGITAL AUDIO IN (OPTICAL) jack on the Soundbar to the OPTICAL OUT jack of the TV with a digital optical cable.
- 2. Press the (Source) button on the right side panel or remote control, and then select the "D.IN" mode.

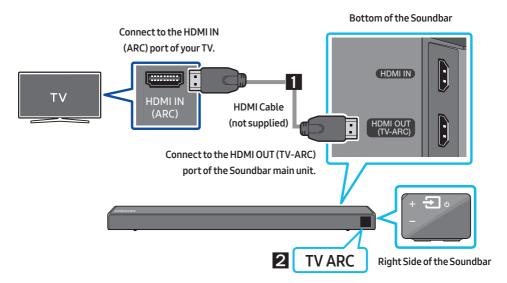
Auto Power Link

Auto Power Link automatically turns on the Soundbar when the TV is turned on.

- 1. Connect the Soundbar and a TV with a digital optical cable as described in Step 1 on the previous page.
- 2. Press the (Source) button on the right side panel or on the remote control, and then select "D.IN".
- **3.** Press the **Left** button on the remote control (the blue spot in the illustration to the right) for 5 seconds to turn Auto Power Link on or off.
 - Auto Power Link is set to ON by default.
 (To turn off this function, hold the Left button on the remote for 5 seconds.)
 - Depending on the connected device, Auto Power Link may not function.
 - This function is only available in the "**D.IN**" mode.



Connecting a TV using an HDMI Cable



- 1. With the Soundbar and TV turned on, connect the HDMI cable (not supplied) as shown in the figure.
- "TV ARC" appears in the display window of the Soundbar main unit and the Soundbar plays TV sound.
 - If TV sound is inaudible, press the (Source) button on the remote control or on the right side of the Soundbar to switch to "D.IN" mode. The screen displays "D.IN" and "TV ARC" in sequence, and TV sound is played.

- If "TV ARC" does not appear in the display window of the Soundbar main unit, confirm that the HDMI cable is connected to the correct port.
- Use the volume buttons on the TV's remote control to change the volume on the Soundbar.

NOTES

- HDMI is an interface that enables the digital transmission of video and audio data with just a single connector
- If the TV provides an ARC port, connect the HDMI cable to the HDMI IN (ARC) port.
- We recommend you use a coreless HDMI cable if possible. If you use a cored HDMI cable, use one
 whose diameter is less than 0.55 inches.
- Anynet+ must be turned on.
- This function is not available if the HDMI cable does not support ARC.

Method 2. Connecting Wirelessly

Connecting a TV via Bluetooth

When a TV is connected using Bluetooth, you can hear stereo sound without the hassle of cabling.

• Only one TV can be connected at a time.



The initial connection

- 1. Press the *PAIR button on the remote control to enter the "BT PAIRING" mode.
- (OR) a. Press the **⑤** (Source) button on the right side panel and then select "BT". Change "BT" to "BT READY".
 - **b.** When "BT READY" appears, press and hold the (Source) button on the right side panel of the Soundbar for more than 5 seconds to display "BT PAIRING".
- 2. Select Bluetooth mode on the TV. (For more information, see the TV's manual.)
- 3. Select "[AV] Samsung Soundbar Nxxx N-Series" from the list on TV's screen.

 An available Soundbar is indicated with "Need Pairing" or "Paired" on the TV's Bluetooth device list. To connect the TV to the Soundbar, select the message, and then establish a connection.
 - When the TV is connected, [TV Name] → "BT" appears on the Soundbar's front display.
- **4.** You can now hear TV sound from the Soundbar.

If the device fails to connect

- If a previously connected Soundbar listing (e.g. "[AV] Samsung Soundbar Nxxx N-Series") appears in the list, delete it.
- Then repeat steps 1 through 3.

NOTE

 After you have connected the Soundbar to your TV the first time, use the "BT READY" mode to reconnect

Disconnecting the Soundbar from the TV

Press the (Source) button on the right side panel or on the remote control and switch to any mode but "BT"

- Disconnecting takes time because the TV must receive a response from the Soundbar.
 (The time required may differ, depending on the TV model.)
- To cancel the automatic Bluetooth connection between the Soundbar and TV, press the
 ▶II (Play/Pause) button on the remote control for 5 seconds with the Soundbar in "BT READY" status.
 (Toggle On → Off)

What is the difference between BT READY and BT PAIRING?

- **BT READY**: In this mode, you can search for previously connected TVs or connect a previously connected mobile device to the Soundbar.
- **BT PAIRING**: In this mode, you can connect a new device to the Soundbar. (Press the **PAIR** button on the remote control or press and hold the (Source) button on the right side of the Soundbar for more than 5 seconds while the Soundbar is in "**BT**" mode.)

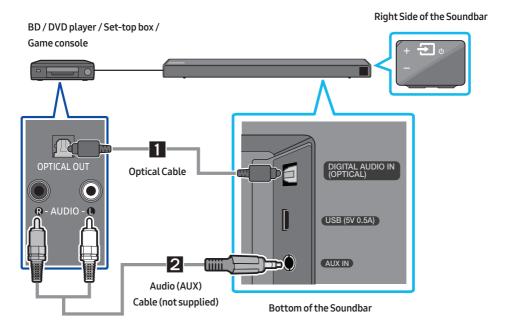
NOTES

- If asked for a PIN code when connecting a Bluetooth device, enter <0000>.
- In Bluetooth connection mode, the Bluetooth connection will be lost if the distance between the Soundbar and the Bluetooth device exceeds 32.8 ft.
- The Soundbar automatically turns off after 5 minutes in the Ready state.
- The Soundbar may not perform Bluetooth search or connection correctly under the following circumstances:
 - If there is a strong electrical field around the Soundbar.
 - If several Bluetooth devices are simultaneously paired with the Soundbar.
 - If the Bluetooth device is turned off, not in place, or malfunctions.
- Electronic devices may cause radio interference. Devices that generate electromagnetic waves must be kept away from the Soundbar main unit e.g., microwaves, wireless LAN devices, etc.

05 CONNECTING AN EXTERNAL DEVICE

Connect to an external device via a wired or wireless network to play the external device's sound through the Soundbar.

Connecting using an Optical or Analog Audio (AUX) Cable



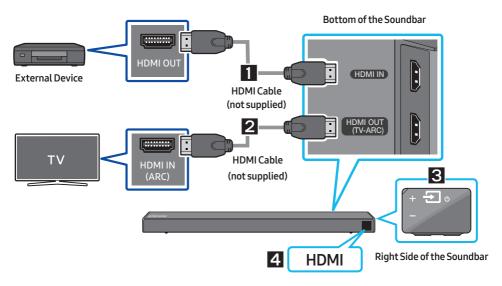
1 Optical Cable

- Connect DIGITAL AUDIO IN (OPTICAL) on the main unit to the OPTICAL OUT jack of the Source Device using a digital optical cable.
- 2 Select "D.IN" mode by pressing the (Source) button on the right side panel or on the remote control.

2 Audio (AUX) Cable

- Connect **AUX IN** (Audio) on the main unit to the AUDIO OUT jack of the Source Device using an audio cable.
- 2 Select "AUX" mode by pressing the (Source) button on the right side panel or on the remote control.

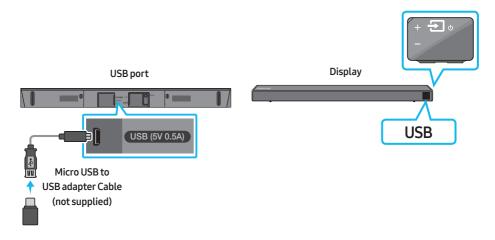
Connecting using an HDMI Cable



- **1.** Connect an HDMI cable (not supplied) from the **HDMI IN** jack on the back of the product to the HDMI OUT jack on your digital device.
- **2.** Connect an HDMI cable (not supplied) from the **HDMI OUT (TV-ARC)** jack on the back of the product to the HDMI IN jack on your TV.
- **3.** Press the **(Source)** button on the right side panel or on the remote control, and then select **"HDM!**".
- **4.** "HDMI" mode is displayed on the Soundbar display panel and sound plays.

06 CONNECTING A USB STORAGE DEVICE

You can play music files located on USB storage devices through the Soundbar.



- Connect a Micro USB to USB adapter cable with a male USB 2.0 Micro USB plug (Type B) on one end and a standard female 2.0 USB jack (Type A) on the other end to the micro USB jack on your Soundbar.
 - The Micro USB to USB adapter cable is sold separately. To purchase, contact a Samsung Service Center or Samsung Customer Care.
- 2. Connect your USB device to the female end of the adapter cable.
- 3. Press the (Source) button on the right side panel or on the remote control, and then select "USB".
- 4. "USB" appears in the display screen.
- 5. Play music files from the USB storage device through the Soundbar.
 - The Soundbar automatically turns off (Auto Power Off) if no USB device has been connected for more than 5 minutes.

File Format Type Compatibility list

Extension	Codec	Sampling Rate	Bitrate
*.mp3	MPEG 1 Layer2	16KHz ~ 48KHz	80kbps~320kbps
	MPEG 1 Layer3	16KHz ~ 48KHz	80kbps~320kbps
	MPEG 2 Layer3	16KHz ~ 48KHz	80kbps~320kbps
	MPEG 2.5 Layer3	16KHz ~ 48KHz	80kbps~320kbps
*.wma	Wave_Format_MSAudio1	16KHz ~ 48KHz	56kbps~128kbps
	Wave_Format_MSAudio2	16KHz ~ 48KHz	56kbps~128kbps
*.aac	AAC	16KHz ~ 96KHz	48kbps~320kbps
	AAC-LC	16KHz ~ 96KHz	128kbps~192kbps 5.1ch 320kbps
	HE-AAC	24KHz ~ 96KHz	48kbps~64kbps 5.1ch 160kbps
*.wav	-	16KHz ~ 48KHz	up to 3000kbps
*.ogg	OGG 1.1.0	16KHz ~ 48KHz	50kbps~500kbps
*.flac	FLAC 1.1.0, FLAC 1.2.1	16KHz ~ 96KHz	up to 3000kbps

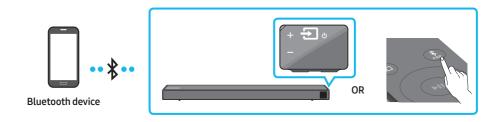
[•] If there are too many folders and files stored on the USB device, it may take the Soundbar some time to access and play files.

07 CONNECTING A MOBILE DEVICE

Connecting via Bluetooth

When a mobile device is connected using Bluetooth, you can hear stereo sound without the hassle of cabling.

• You cannot connect more than one Bluetooth device at a time



The initial connection

- 1. Press the *PAIR button on the remote control to enter the "BT PAIRING" mode.
- (OR) a. Press the (Source) button on the right side panel and then select "BT". Change "BT" to "BT READY".
 - **b.** When "**BT READY**" appears, press and hold the (Source) button on the right side panel of the Soundbar for more than 5 seconds to display "**BT PAIRING**".
- 2. On your device, select "[AV] Samsung Soundbar Nxxx N-Series" from the list that appears.
 - When the Soundbar is connected to the Bluetooth device, [Bluetooth Device Name] → "BT" appears in the front display.
- **3.** Play music files from the device connected via Bluetooth through the Soundbar.

If the device fails to connect

- If a previously connected Soundbar listing (e.g. "[AV] Samsung Soundbar Nxxx N-Series") appears in the list, delete it.
- Then repeat steps 1 through 2.

NOTE

 After you have connected the Soundbar to your mobile device the first time, use the "BT READY" mode to reconnect.

What is the difference between BT READY and BT PAIRING?

- **BT READY**: In this mode, you can search for previously connected TVs or connect a previously connected mobile device to the Soundbar.
- BT PAIRING: In this mode, you can connect a new device to the Soundbar. (Press the PAIR button on the remote control or press and hold the (Source) button on the right side of the Soundbar for more than 5 seconds while the Soundbar is in "BT" mode.)

NOTES

- If asked for a PIN code when connecting a Bluetooth device, enter <0000>.
- In Bluetooth connection mode, the Bluetooth connection will be lost if the distance between the Soundbar and the Bluetooth device exceeds 32.8 ft.
- The Soundbar automatically turns off after 5 minutes in the Ready state.
- The Soundbar may not perform Bluetooth search or connection correctly under the following circumstances:
 - If there is a strong electrical field around the Soundbar.
 - If several Bluetooth devices are simultaneously paired with the Soundbar.
 - If the Bluetooth device is turned off, not in place, or malfunctions.
- Electronic devices may cause radio interference. Devices that generate electromagnetic waves must be kept away from the Soundbar main unit e.g., microwaves, wireless LAN devices, etc.
- The Soundbar supports SBC data (44.1kHz, 48kHz).
- Connect only to a Bluetooth device that supports the A2DP (AV) function.
- You cannot connect the Soundbar to a Bluetooth device that supports only the HF (Hands Free) function.
- Once you have paired the Soundbar to a Bluetooth device, selecting "[AV] Samsung Soundbar Nxxx
 N-Series" from the device's scanned devices list will automatically change the Soundbar to "BT"
 mode.
 - Available only if the Soundbar is listed among the Bluetooth device's paired devices.
 (The Bluetooth device and the Soundbar must have been previously paired at least once.)
- The Soundbar will appear in the Bluetooth device's searched devices list only when the Soundbar is displaying "BT READY".
- The Soundbar cannot be paired to another Bluetooth device if already in Bluetooth mode and paired to a Bluetooth device.

Bluetooth Power On (SOUND MODE)

If a previously paired Bluetooth device tries to pair with the Soundbar when the Bluetooth Power On function is on and the Soundbar is turned off, the Soundbar turns on automatically.

- **1.** Press and hold the **SOUND MODE** button for more than 5 seconds on the remote while the Soundbar is turned on.
- 2. "ON-BLUETOOTH POWER" appears on the Soundbar's display.

Disconnecting the Bluetooth device from a Soundbar

You can disconnect a Bluetooth device from the Soundbar. For instructions, see the Bluetooth device's user manual

- The Soundbar will be disconnected.
- When the Soundbar is disconnected from the Bluetooth device, the Soundbar will display "BT DISCONNECTED" on the front display.

Disconnecting the Soundbar from the Bluetooth device

Press the (Source) button on the right side panel or on the remote control, and then change to any mode except "BT".

- Disconnecting takes time because the Bluetooth device must receive a response from the Soundbar. (Disconnection time may differ, depending on the Bluetooth device)
- When the Soundbar is disconnected from the Bluetooth device, the Soundbar will display "BT DISCONNECTED" on the front display.

NOTES

- In Bluetooth connection mode, the Bluetooth connection will be lost if the distance between the Soundbar and the Bluetooth device exceeds 32.8 ft.
- The Soundbar automatically turns off after 5 minutes in the Ready state.

More About Bluetooth

Bluetooth is a technology that enables Bluetooth-compliant devices to interconnect easily with each other using a short wireless connection.

- A Bluetooth device may cause noise or malfunction, depending on usage, if:
 - A part of your body is in contact with the receiving/transmitting system of the Bluetooth device or the Soundbar.
 - It is subject to electrical variation from obstructions caused by a wall, corner, or office partition.
 - It is exposed to electrical interference from same frequency-band devices including medical equipment, microwave ovens, and wireless LANs.
- Pair the Soundbar with the Bluetooth device while they are close together.
- The further the distance between the Soundbar and Bluetooth device, the worse the quality is. If the distance exceeds the Bluetooth operational range, the connection is lost.
- In poor reception areas, the Bluetooth connection may not work properly.
- The Bluetooth connection only works when it is close to the unit. The connection will be
 automatically cut off if the Bluetooth device is out of range. Even within range, the sound quality
 may be degraded by obstacles such as walls or doors.
- This wireless device may cause electric interference during its operation.

Using the Samsung Audio Remote App

Installing the Samsung Audio Remote App

To control the Soundbar with your smart device and the Samsung Audio Remote app, download the Samsung Audio Remote app from the Google Play store.

Market search: Samsung Audio Remote



Launching the Samsung Audio Remote App

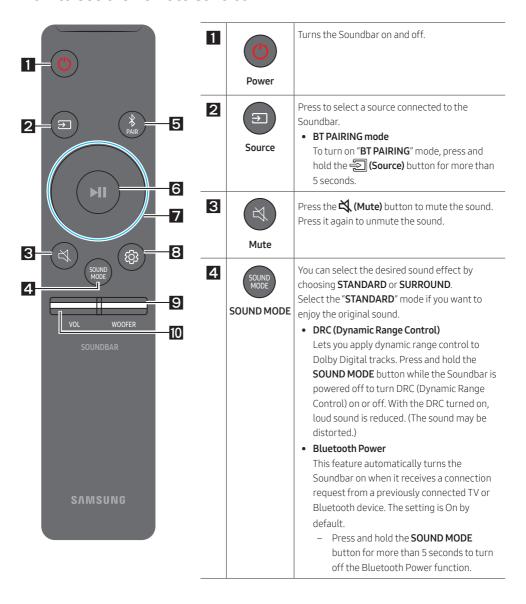
To launch and use the Samsung Audio Remote app, touch the Audio Remote icon on your smart device, and then follow the directions on the screen.



• The Samsung Audio Remote app is only compatible with Android mobile phones and mobile devices running Android OS 3.0 or later.

08 USING THE REMOTE CONTROL

How to Use the Remote Control



5	\$ PAID
	PAIR

Bluetooth PAIR

Press the PAIR button. "BT PAIRING" appears in the Soundbar's display.

You can connect the Soundbar to a new Bluetooth device in this mode by selecting the Soundbar from the Bluetooth device's search list





Play / Pause

Press the **II** button to pause a music file temporarily. When you press the button again, the music file plays.

Auto Power Down Function

The unit turns off automatically in the following situations.

- D.IN / HDMI / BT / USB Mode: If there is no audio signal for 5 minutes.
- AUX Mode :
 - If the Audio (AUX) Cable is disconnected for 5 minutes.
 - If there is no KEY input for 8 hours when the Audio (AUX) Cable is connected.
 (Auto Power Down function can be turned off only in that case.)
 - To turn off Auto Power Down function, while in "AUX" mode, press and hold the
 ▶II button for 5 seconds. "ON-AUTO POWER DOWN" / "OFF-AUTO POWER
 DOWN" appears on the display.









Press the indicated areas to select Up/Down/Left/Right.

Press Up/Down/Left/Right on the button to select or set functions.

Repeat

To use the Repeat function in "**USB**" mode, press the **Up** button.

Music Skip

Press the **Right** button to select the next music file. Press the **Left** button to select the previous music file.

Anvnet+ / Auto Power Link

You can turn Anynet+ and Auto Power Link on or off.

Anynet+ and Auto Power Link are turned on and turned off by the **Right** and **Left** buttons respectively.

- Anynet+: If the Soundbar is connected to a Samsung TV through an HDMI cable, you can control your Soundbar with a Samsung TV remote control.
 Press and hold the **Right** button for 5 seconds to toggle Anynet+ ON and OFF.
- Auto Power Link: If the Soundbar is connected to your TV through a digital optical cable, the Soundbar can automatically turn on when you turn on your TV. Press and hold the **Left** button for 5 seconds to toggle Auto Power Link ON and OFF.
- Anynet+ / Auto Power Link are set to ON by default.

ID SET

Press and hold the ${\bf Up}$ button for 5 seconds to complete ${\bf ID}$ SET (when connecting to an accessary item).

· Volume restriction function

Because it may damage hearing when the power is turned on at high volumes, it adjusts the volume to 20 when the set volume is higher than 20.

- The default value for Volume restriction is off. The set volume is maintained even when the power is turned off.
- To change the setting, press and hold the **Down** button on the remote control for 5 seconds. With the volume restriction off, "V FREE" appears on the front display and with the function on, "V LOCK" appears.





Sound Control

You can select from **TREBLE**, **BASS**, or **AUDIO SYNC**.

- To control the volume of the treble or bass sound, select TREBLE or BASS in Sound Settings, and then adjust the volume between -6~+6 by using the Up/Down buttons.
- Press and hold the (3) (Sound Control) button for about 5 seconds to adjust the sound for each frequency band. 150Hz, 300Hz, 600Hz, 1.2KHz, 2.5KHz, 5KHz, and 10KHz are selectable using the Left/Right buttons and each can be adjusted to a setting between -6 to +6 using the Up/Down buttons.
- If the video on the TV and audio from the Soundbar are not synchronized, select AUDIO SYNC in Sound Settings, and then set the audio delay between 0~300 milliseconds by using the Up/Down buttons. (Not available in "USB" mode.)
- AUDIO SYNC is only supported for some functions.





WOOFER





Push the button up or down to adjust the volume of the subwoofer to -12 or between -6 to +6. To set the subwoofer volume level to 0, press the button.





VOL





Push the button up or down to adjust the volume.

Mute

Press the **VOL** button to mute the sound. Press it again to unmute the sound.

Adjusting the Soundbar volume with a TV remote control

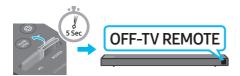
If you have a Samsung TV, you can adjust the Soundbar's volume using the IR remote control that came with your Samsung TV.

First use the TV menu to set the TV audio on your Samsung TV to external speakers, then use your Samsung remote to control the Soundbar's volume. For more information, see the TV's user manual. The default mode for this function is control by a Samsung TV remote. If your TV is not a Samsung TV, follow the directions below to change the settings of this function.

1. Turn Off the Soundbar.



If you do not want to use this function, push up and hold the WOOFER button repeatedly for 5 seconds until "OFF-TV REMOTE" appears in the display.



3. If you want to control the Soundbar with your TV's remote, push up and hold the WOOFER button for 5 seconds repeatedly until "ALL-TV REMOTE" appears in the display. Then, use your TV's menu to select external speakers.



4. If you want to return the Soundbar to the default mode (control by a Samsung TV remote), push up and hold the WOOFER button for 5 seconds repeatedly until "SAMSUNG-TV REMOTE" appears in the display.



- Each time you push the WOOFER button up and hold it for 5 seconds, the mode switches in the following order:
 "SAMSUNG-TV REMOTE" (Default mode)
 → "OFF-TV REMOTE" → "ALL-TV REMOTE".
- This function may not be available, depending on the remote control.
- Manufacturers supporting this function:
 VIZIO, LG, Sony, Sharp, PHILIPS,
 PANASONIC, TOSHIBA, GRUNDIG,
 Hisense, RCA

Using the Hidden Buttons (Buttons with more than one function)

Hide	D-f	
Remote Control Button	Function	Reference page
WOOFER	TV remote control On/Off (Standby)	page 25
② (Source)	BT Pairing	page 22
	Auto Power Down On/Off (AUX mode)	page 23
►II (Play / Pause)	Initialize (Standby)	page 30
	BT Ready	page 13
Left	Auto Power Link ON/OFF	page 23
Right	Anynet+ ON/OFF	page 23
Up	ID SET	page 23
Down	Volume restriction On/Off	page 24
(Sound Control)	7 Band EQ	page 24
SOUND MODE	DRC ON/OFF (Standby)	page 22
200IAN MONE	Bluetooth Power	page 22

Output specifications for the different sound effect modes

Effect			Output	
		Input	Without Wireless Rear Speaker Kit	With Wireless Rear Speaker Kit
SOUND MODE	STANDARD	2.0 ch	2.1 ch	4.1 ch
		5.1 ch	2.1 ch	4.1 ch
	SURROUND	2.0 ch	2.1 ch	4.1 ch
		5.1 ch	2.1 ch	4.1 ch

[•] Samsung Wireless Rear Speaker Kit can be purchased separately. To purchase a Kit, contact the vendor you purchased the Soundbar from.

09 INSTALLING THE WALL MOUNT

Installation Precautions

- Install on a vertical wall only.
- Do not install in a place with high temperature or humidity.
- Verify whether the wall is strong enough to support the product's weight. If not, reinforce the wall or choose another installation point.
- Purchase and use the fixing screws or anchors appropriate for the kind of wall you have (plaster board, iron board, wood, etc.). If possible, fix the support screws into wall studs.
- Purchase wall mounting screws according to the type and thickness of the wall you want to mount the Soundbar on.
 - Diameter: M5
 - Length: 13/8 inches or longer recommended.
- Connect cables from the unit to external devices before you install the Soundbar on the wall.
- Make sure the unit is turned off and unplugged before you install it. Otherwise, it may cause an electric shock.

Wallmount Components



Wall Mount Guide (AH63-04369C)





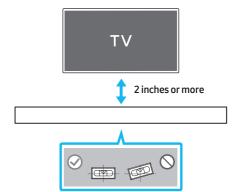
Holder-Screw (2 EA) (AH61-04110A)

Screw (2 EA) (6001-001202)

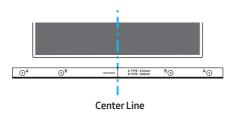


Bracket-Wall Mount (2 EA) (AH61-04235A)

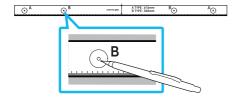
- Place the Wall Mount Guide against the wall surface
 - The Wall Mount Guide must be level.
 - If your TV is mounted on the wall, install the Soundbar at least 2 inches (5 cm) below the TV.



- Align the Wall Mount Guide's Center Line with the center of your TV (if you are mounting the Soundbar below your TV), and then fix the Wall Mount Guide to the wall using tape.
 - If you are not mounting below a TV, place the Center Line in the center of the installation area.

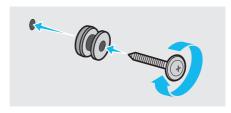


 Push a pen tip or sharpened pencil tip through the center of the B-TYPE images on each end of the Guide to mark the holes for the supporting screws, and then remove the Wall Mount Guide.



- **4.** Using an appropriately sized drill bit, drill a hole in the wall at each marking.
 - If the markings do not correspond to the
 positions of studs, make sure you insert
 appropriate anchors or mollies into the
 holes before you insert the support
 screws. If you use anchors or mollies,
 make sure the holes you drill are large
 enough for the anchors or mollies you
 use.

5. Push a screw (not supplied) through each **Holder-Screw**, and then screw each screw firmly into a support screw hole.

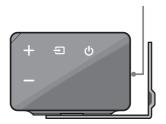


Install the 2 Bracket-Wall Mounts in the correct orientation on the bottom of the Soundbar using 2 Screws.



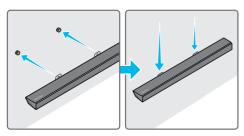
 When assembling, make sure the hanger part of the Bracket-Wall Mounts are located behind the rear of the Soundbar

Rear of Soundbar

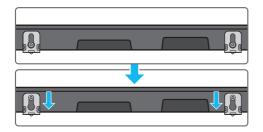


Right end of Soundbar

 Install the Soundbar with the attached Bracket-Wall Mounts by hanging the Bracket-Wall Mounts on the Holder-Screws on the wall.

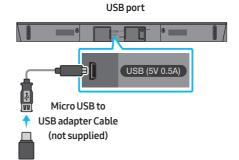


- **8.** Slide the Soundbar down as shown below so that the **Bracket-Wall Mounts** rest securely on the **Holder-Screws**.
 - Insert the Holder-Screws into the wide (bottom) part of the Bracket-Wall Mounts, and then slide the Bracket-Wall Mounts down so that Bracket-Wall Mounts rest securely on the Holder-Screws.



10 SOFTWARE UPDATE

Samsung may offer updates for the Soundbar's system firmware in the future.



If an update is offered, you can update the firmware by connecting a USB device with the firmware update stored on it to the USB port on your Soundbar. For more information about how to download update files, go to the Samsung Electronics website at

www.samsung.com→Support.

Then, enter or select the model number of your Soundbar, select the Software & Apps option, and then Downloads. Note that the option names can vary.

Updating Procedure

- 1. Connect a Micro USB to USB adapter cable with a male USB 2.0 Micro USB plug (Type B) on one end and a standard female 2.0 USB jack (Type A) on the other end to the micro USB jack on your Soundbar.
 - The Micro USB to USB adapter cable is sold separately. To purchase, contact a Samsung Service Center or Samsung Customer Care.
- Follow the steps below to download the product software:
 Go to the Samsung website at (samsung.com) → search for the model name select the customer support option (the option name is subject to change)
- Save the downloaded software to a USB stick and select "Extract Here" to unzip the folder.
- 4. Turn off the Soundbar and connect the USB stick containing the software update to the female port on a Micro USB adapter cable. Connect the cable to the USB port on the Soundbar.
- **5.** Turn on the Soundbar. Within 3 minutes, "**UPDATE**" is displayed and updating begins.
- 6. When the update finishes, the Soundbar turns off. Press the ►II button on the remote control for 5 seconds. "INIT" appears on the display and then the Soundbar turns off. The update is complete.
 - This product has a DUAL BOOT function.
 If the firmware fails to update, you can update the firmware again.

If UPDATE is not displayed

- Turn off the Soundbar, disconnect and then reconnect the USB storage device that contains the update files to the Soundbar's USB port.
- **2.** Disconnect the Soundbar's power cord, reconnect it, and then turn on the Soundbar.
 - Updating firmware may not work properly if audio files supported by the Soundbar are stored in the USB storage device.
 - Do not disconnect the power or remove the USB device while updates are being applied. The main unit will turn off automatically after completing the firmware update.
 - After update is completed, the user setup in Soundbar is initialized. We recommend you write down your settings so that you can easily reset them after the update. Note that updating firmware resets the subwoofer connection too.
 If the connection to the subwoofer is not re-established automatically after the update, refer to page 6.
 If the software update fails, check if the USB stick is defective.
 - Mac OS users should use MS-DOS (FAT) as the USB format.
 - Updating via USB may not be available, depending on the USB storage device manufacturer.

11 TROUBLESHOOTING

Refer to the table below if this product does not function properly. If the problem you are experiencing is not listed below or if the instructions below do not help, turn off the product, disconnect the power cord, and contact Samsung Electronics at 1-800-SAMSUNG (1-800-726-7864).

The unit will not turn on.

Is the power cord plugged into the outlet?

→ Connect the power plug to the outlet.

A function does not work when the button is pressed.

Is there static electricity in the air?

→ Disconnect the power plug and connect it again.

Sound dropouts occur in BT mode.

→ See the Bluetooth connection sections on pages 12 and 18.

Sound is not produced.

Is the Mute function on?

→ Press the **VOL** button to cancel the function.

Is the volume set to minimum?

→ Adjust the Volume.

The remote control does not work.

Are the batteries drained?

→ Replace with new batteries.

Is the distance between the remote control and Soundbar main unit too far?

→ Move the remote control closer to the Soundbar main unit.

The red LED on the subwoofer blinks and the subwoofer is not producing sound.

This issue can occur if the subwoofer is not connected to the Soundbar main unit.

→ Try to connect your subwoofer again. (See page 6.)

The subwoofer drones and vibrates noticeably.

Try to adjust the vibration of your subwoofer.

→ Push the **WOOFER** button on your remote control up or down to adjust the subwoofer volume. (to -12, or between -6 ~ +6).

12 LICENSE



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14 IMPORTANT NOTES ABOUT SERVICE

- Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance.
- An administration fee may be charged if either:
 a. An engineer is called out to your home at your request and there is no defect in the product.
 - b. You bring the unit to a repair center and there is no defect in the product.
- You will be advised of the amount of the administration fee before any work is done or a home visit is made.
- If you have a problem with this product, we strongly recommend you read the appropriate section of this manual, visit the Support page for your product at www.samsung.com, or call Samsung Product Support (1-800-726-7864) to find an answer before you contact a service center for a repair.

15 SPECIFICATIONS AND GUIDE

Specifications

Model Name	HW-N450	
USB	5V/0.5A	
Weight	4.9 lbs (2.2 kg)	
Dimensions(W x H x D)	35.6 x 2.2 x 3.2 inches (904.0 x 55.0 x 80.0 mm)	
Operating Temperature Range	+41°F to +95°F (+5°C to +35°C)	
Operating Humidity Range	10 % ~ 75 %	
AMPLIFIER Rated Output power	40W x 4	
Supported play formats (DTS 2.0 sound is played in DTS format.)	LPCM 2ch, Dolby Audio™ (supporting Dolby® Digital), DTS	

Subwoofer Name	PS-WN20	
Weight	12.6 lbs (5.7 kg)	
Dimensions(W x H x D)	8.7 x 14.5 x 11.0 inches (220.0 x 369.0 x 279.0 mm)	
AMPLIFIER Rated Output power	160W	

NOTES

- Samsung Electronics Co., Ltd reserves the right to change the specifications without notice.
- Weight and dimensions are approximate.
- Dispose unwanted electronics through an approved recycler.
 To find the nearest recycling location, go to our website: www.samsung.com/recyclingdirect or call (877) 278 0799

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This SAMSUNG brand product, as supplied and distributed by SAMSUNG and delivered new, in the original carton to the original consumer purchaser, is warranted by SAMSUNG against manufacturing defects in materials and workmanship for a limited warranty period of:

One (1) Year Parts and Labor* (*90 Days Parts and Labor for Commercial Use)

This limited warranty begins on the original date of purchase, and is valid only on products purchased and used in the United States. To receive warranty service, the purchaser must contact SAMSUNG for problem determination and service procedures. Warranty service can only be performed by a SAMSUNG authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to SAMSUNG or SAMSUNG's authorized service center. Transportation of the product to and from the service center is the responsibility of the purchaser. SAMSUNG will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of SAMSUNG and must be returned to SAMSUNG. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer. SAMSUNG's obligations with respect to software products distributed by SAMSUNG under the SAMSUNG brand name are set forth in the applicable end user license agreement. Non-SAMSUNG hardware and software products, if provided, are on an "AS IS" basis.

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SAMSUNG

The party responsible for product compliance: Samsung Electronics Co., LTD. America QA lab of Samsung 19 Chapin Rd. Building D, Pine Brook, New Jersey 07058

QUESTIONS OR COMMENTS?

COUNTRY	CALL	OR VISIT US ONLINE AT	WRITE
IN THE US	1-800-SAMSUNG (726-7864)	www.samsung.com/us/support	Samsung Electronics America, Inc. 85 Challenger Road Ridgefield Park, NJ 07660

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