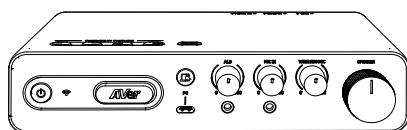


SAA5 Streaming Audio System



SAB5 Streaming Audio Box

User Manual



The power cord shall be connected to a socket-outlet with earthing connection.

This product is intended to be supplied by a UL Listed power adapter and power cord, output rated 19Vdc, 3.42A min., and Tma 35degree C min. Please contact manufacturer, UL File owner or AVer for further information and assistance.

Federal Communication Commission Interference Statement

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 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 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.

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 Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

For Wi-Fi Device:

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying the RF exposure compliance.

Radiation Exposure Statement

The product comply with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Industry Canada statement

This device complies with RSS-247 of the Industry Canada 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.

Ce dispositif est conforme à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

IC Notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The products are compliant with SAR for general population/uncontrolled exposure limits in IC RSS-102 and has been tested in accordance with the measurement methods and procedures specified in IEEE 1528.

Le produit est le respect de SAR pour la population générale / limites d'exposition incontrôlée de CNR-102 et a été testé en conformité avec les méthodes et procédures de mesure spécifiées dans la norme IEEE 1528.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the Radio Equipment Directive (2014/53/EU). The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the Radio Equipment Directive (2014/53/EU).

DISCLAIMER

No warranty or representation, either expressed or implied, is made with respect to the contents of this documentation, its quality, performance, merchantability, or fitness for a particular purpose. Information presented in this documentation has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.

In no event will AVer Information Inc. be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.

TRADEMARKS

“AVer” is a trademark owned by AVer Information Inc. Other trademarks used herein for description purpose only belong to each of their companies.

COPYRIGHT

©2023 AVer Information Inc. All rights reserved. | June 1, 2023

All rights of this object belong to AVer Information Inc. Reproduced or transmitted in any form or by any means without the prior written permission of AVer Information Inc. is prohibited. All information or specifications are subject to change without prior notice.

More Help

For FAQs, technical support, software and user manual download, please visit:

Headquarters

Download Center: <https://www.aver.com/download-center>

Technical Support: <https://www.aver.com/technical-support>

USA Branch Office

Download Center: <https://www.averusa.com/education/support>

Technical Support: <https://averusa.force.com/support/s/contactsupport>

Europe Branch Office

Download Center: <https://www.avereurope.com/download-center>

Technical Support: <https://www.avereurope.com/technical-support>

Contact Information

Headquarters

AVer Information Inc.

<https://www.aver.com>

8F, No.157, Da-An Rd., Tucheng Dist., New Taipei City 23673, Taiwan

Tel: +886 (2) 2269 8535

USA Branch Office

AVer Information Inc., Americas

<https://www.averusa.com>

668 Mission Ct., Fremont, CA 94539, USA

Tel: +1 (408) 263 3828

Toll-free: +1 (877) 528 7824

Technical support: support.usa@aver.com

Europe Branch Office

AVer Information Europe B.V.

<https://www.avereurope.com>

Westblaak 134, 3012 KM, Rotterdam, The Netherlands

Tel: +31 (0) 10 7600 550

Technical support: eu.rma@aver.com

Japan Branch Office

アバー・インフォメーション株式会社

<https://jp.aver.com>

〒160-0023 日本東京都新宿区西新宿 3-2-26 立花新宿ビル 7 階

Tel: +81 (0) 3 5989 0290

テクニカル・サポート: <https://jp.aver.com/technical-support>

Vietnam Branch Office

Công ty TNHH AVer Information (Việt Nam)

Tầng 5, 596 Nguyễn Đình Chiểu, P.3, Quận 3,

Thành phố Hồ Chí Minh 700000, Việt Nam

Tel: +84 (0)28 22 539 211

Contents

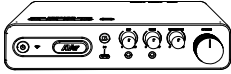
Overview	1
Package Contents	1
SAB5 Streaming Audio Box.....	1
Pendant Microphones and Charging Case*	1
Speakers*	2
Dimensions.....	3
Controls and Connections	4
SAB5 Streaming Audio Box.....	4
Pendant Microphones.....	6
Charging Case	7
Speakers	7
Power Connection	7
Wall Mount Installation	8
Getting Started	9
Set up Your SAB5 Streaming Audio Box	9
Insert the Wi-Fi Receiver (Dongle)	9
Set up Your Microphone	9
Pair Your Pendant Microphone.....	9
Use Your Microphone	10
For Emergencies	11
Charge Your Microphone.....	11
Replace Your Microphone Battery.....	12
Set up Your Speakers.....	12
Connect Your Speaker Cables	12
Audio and Video Integration	13
Audio Output to Assistive Listening Devices (ALD).....	13
In the Classroom	14
Hybrid Learning	15

Specification	18
SAB5 Streaming Audio Box.....	18
Pendant Microphones	20
Charging Case	21
Speakers	21
Environmental Specifications	22
Troubleshooting	23

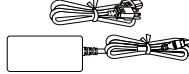
Overview

Package Contents

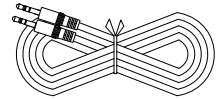
SAB5 Streaming Audio Box



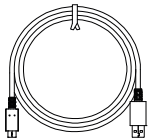
SAB5 Streaming Audio Box



Power Adapter & Power Cord(s)



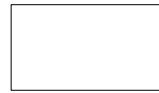
3.5 Stereo to 3.5 Stereo Cable (10m)



USB 3.0 Type-C to Type-A Cable (1.83m)



HDMI Cable (1.8m)

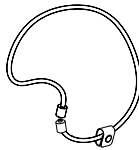


SAB5 QR Code Card

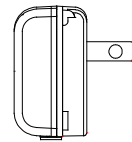
Pendant Microphones and Charging Case*



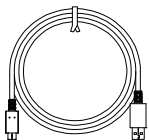
Pendant Microphones & Charging Case



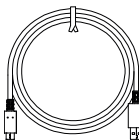
Lanyard (x2)



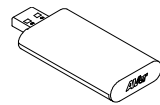
Wall Mount Type Adapter for Charging Case (3m)



USB 3.0 Type-C to Type-A Cable (1.5m)

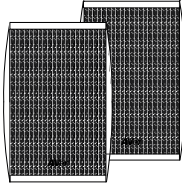


USB 3.0 Type-C to Type-A Cable (3m)

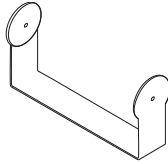


Microphone Receiver (Dongle)

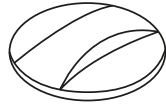
Speakers*



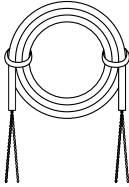
Speakers



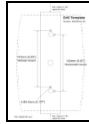
**Wall Mount
Bracket (x2)**



Bracket Knob (x4)



Speaker Cable (20m)



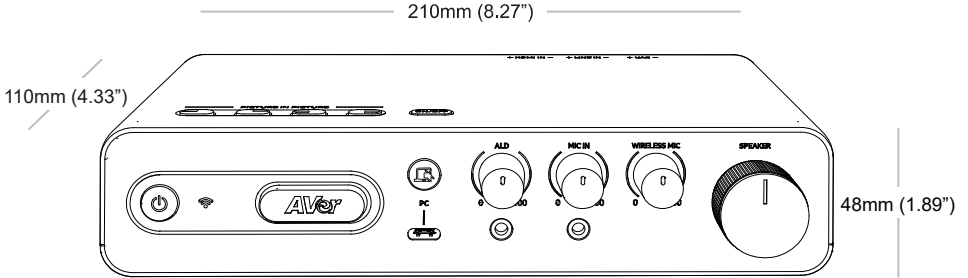
Drill Template (x2)



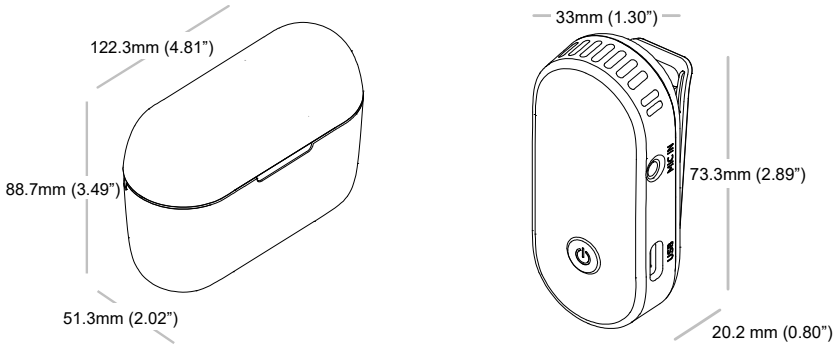
SAA5 QR Code Card

*SAA5 Streaming Audio System only.

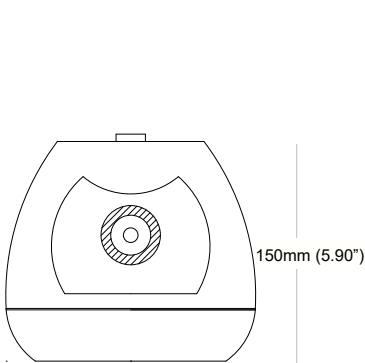
Dimensions



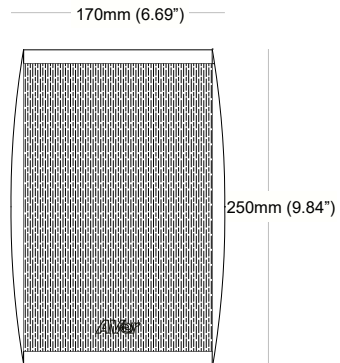
SAB5 Audio Streaming Box



Charging Case



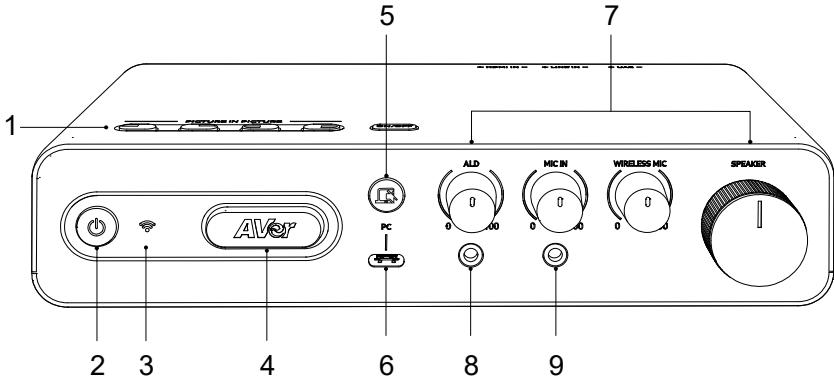
Pendant Microphones



Speakers

Controls and Connections

SAB5 Streaming Audio Box



Top Cover

1. Picture-in-Picture Buttons

Front Panel

2. Power Button

Short press to turn the SAB5 Streaming Audio Box on or off.
Press and hold for 3 seconds to enter Standby Mode.

- Solid green: Power on
- ★ Flashing green: Start-up
- Solid red: Standby Mode (when connected to power)
- ★ Flashing red: Updating firmware

3. Status LED

- Solid blue: Microphone(s) is paired
- Off: Microphone(s) isn't paired

4. Microphone Receiver (Dongle) Slot and Plug

5. PC Mute Button

- Solid red: PC is muted
- Off: PC isn't muted

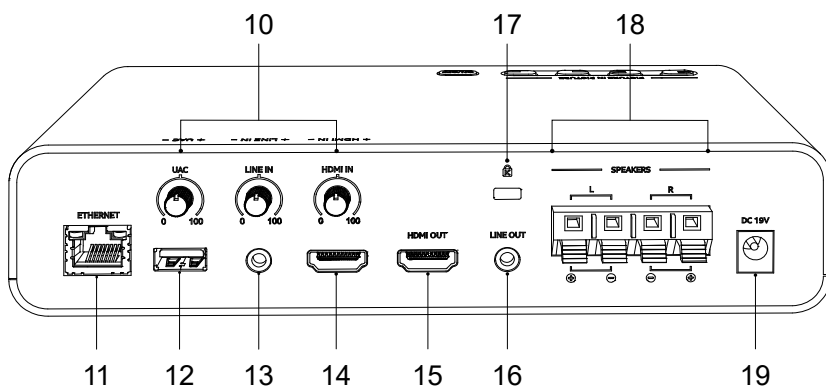
6. PC (USB Type-C) Port

7. Volume Controls:

Assistive Listening Device (ALD) / Mic In / Wireless Mic / Speakers

8. Assistive Listening Device (ALD) Port

9. Mic In Port



Back Panel

- 10. Volume Controls:
USB Audio Class (UAC) / Line In / HDMI In
- 11. Ethernet Port
- 12. USB Type-A Port
- 13. Line In Port
- 14. HDMI In Port
- 15. HDMI Out Port
- 16. Line Out Port
- 17. Kensington Lock
- 18. Speaker Push-in Terminal Connector Block
- 19. DC Power Jack

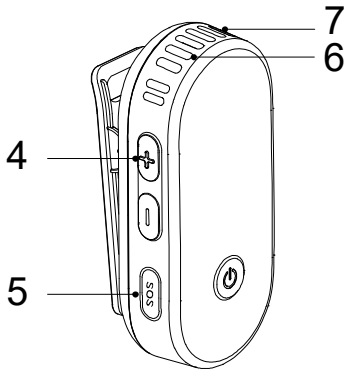
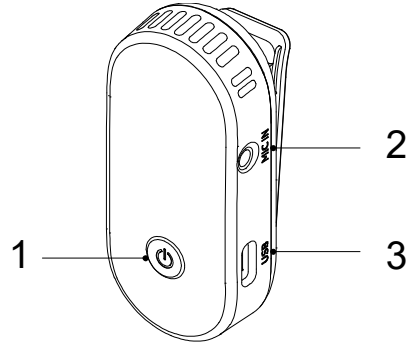
Pendant Microphones

1. Power/Mute Switch

Press and hold for 3 seconds to turn the microphone on or off.

2. Mic In Port

3. USB Type-C Port



4. Volume Up/Down

5. Emergency Button (on Teach Microphone)

6. Status LED

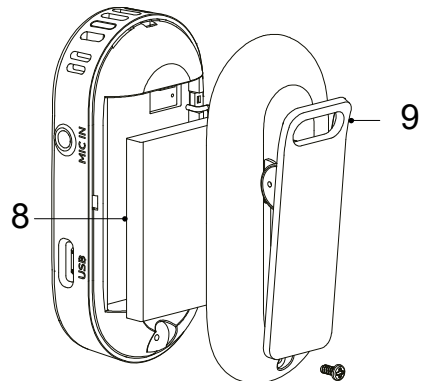
- Solid blue: Paired
- ★ Flashing blue: Not transmitting to a receiver or out of range
- Solid red: Mute
- ★ Flashing red: Low battery

7. Battery LED

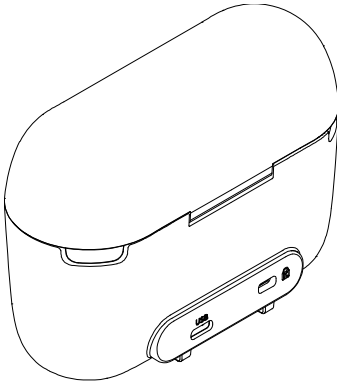
- Solid green: Normal
- ★ Flashing red: Low battery

8. Battery

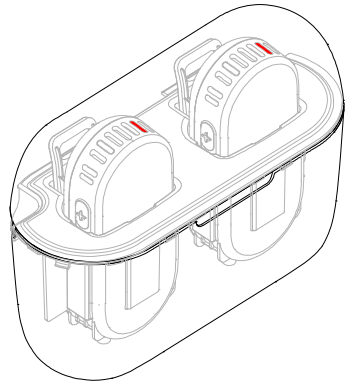
9. Microphone Clip



Charging Case

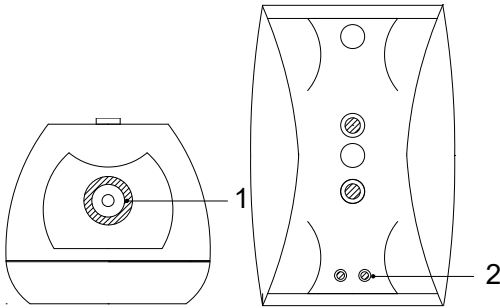


USB Type-C Port
Kensington Lock



● Solid green: Fully charged
● Solid red: Charging

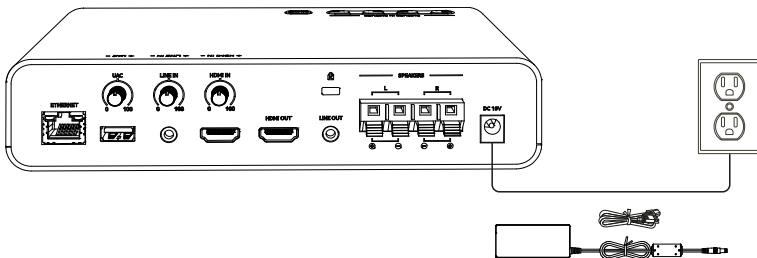
Speakers



1. Wall Mount Bracket Knob
2. Speaker Spring Binding Post Terminal Connector

Power Connection

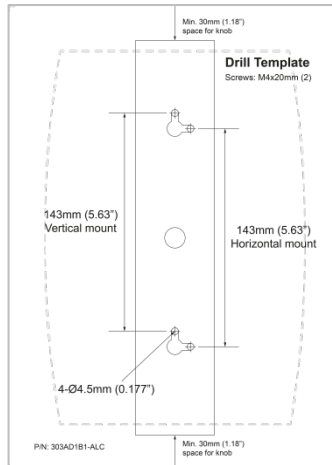
Connect the included power adapter and power cord to a power outlet with earthing connection.



Wall Mount Installation

The speakers should be mounted 2.13m (7 feet) from a wall outlet.

1. Level and tape the template to the wall. Drill pilot holes through the template and into the wall.

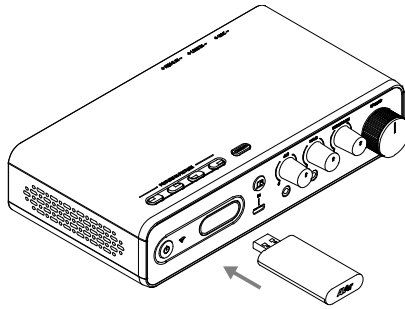


2. Remove the template and insert anchors.
 - Cement wall: M4x20mm self-tapping screws (2) + plastic conical anchor
 - Wooden wall: M4x20mm self-tapping screws (2)
3. Insert screws through the bracket and tighten to the wall.
4. [Connect your speaker cables](#) to the spring binding post terminal connectors.
5. Place the speaker inside the bracket and tighten the top and bottom bracket knobs to secure.
6. Loosen the bracket knobs to adjust the speaker angle as needed.

Getting Started

Set up Your SAB5 Streaming Audio Box

Insert the Wi-Fi Receiver (Dongle)



1. Remove the plug and insert the microphone receiver (dongle) included in the SAA5 Streaming Audio System. Or plug your Wi-Fi receiver into the Mic In or Line In port.
2. Short press the Power button to turn on the SAB5 Streaming Audio Box.

Note: The dongle should be replaced by its manufacturer, service technician or a similarly qualified person. To replace the dongle, gently pull it out from the notch on the bottom.

Set up Your Microphone

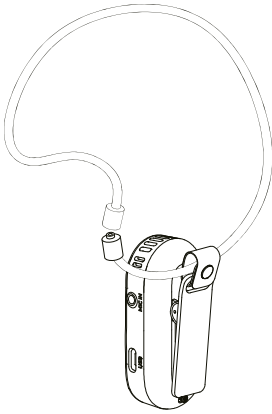
Pair Your Pendant Microphone



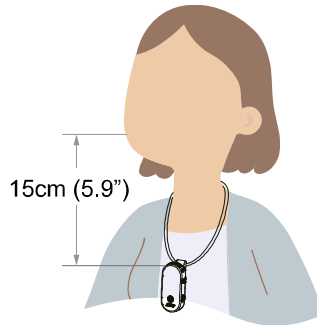
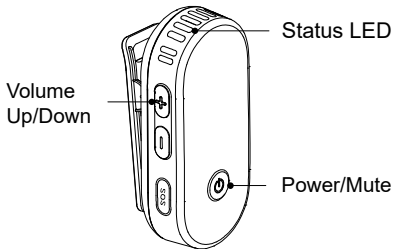
- Solid blue: Paired
- ★ Flashing blue: Not transmitting to a receiver or out of range

1. Make sure the microphone receiver (dongle) has been inserted and the SAB5 Streaming Audio Box is turned on.
2. Press and hold the Power/Mute button on the microphone for 3 seconds until the status LED starts flashing, then release the button and let the pairing process finish.
3. Pairing is successful when the status LEDs on both the microphone(s) and the SAB5 Streaming Audio Box turn solid blue.

Use Your Microphone



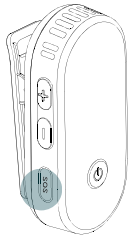
1. Pass the lanyard through the loop and pass the loop through the clip. Wear it around your neck by connecting the clasps.
2. Adjust the lanyard to position the microphone approximately 15cm (5.9") from mouth.
3. Press and hold the Power/Mute button for 3 seconds to power on > press again to mute > press and hold for 3 seconds to power off.
4. Adjust the Volume Up/Down buttons on the side of the microphone.
5. The microphone will automatically turn off:
 - When it is out of range and after 3 minutes of trying to connect.
 - After being muted for 30 minutes.



- Solid blue: Paired
- ★ Flashing blue: Not transmitting to a receiver or out of range
- Solid red: Mute
- ★ Flashing red: Low battery

For Emergencies

The emergency feature is only available in the US.

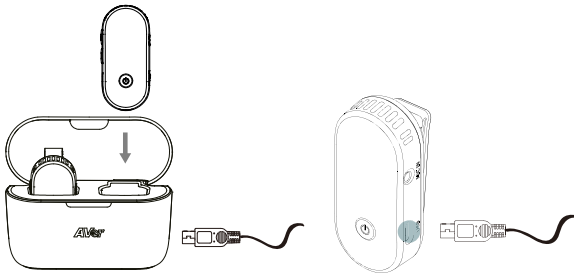


★ Status LED and battery LED flash red.

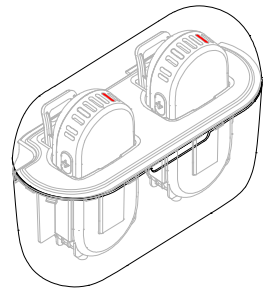
1. Connect the SAB5 Streaming Audio Box to your local network with an Ethernet cable and the Device Management software.
2. Press and hold the SOS button on the Teacher Microphone for 3 seconds to broadcast your location.
3. Both status LED and battery LED will flash red.
4. Your microphone will work normally after pressing the button.

Charge Your Microphone

- It will take less than 3 hours to fully charge your microphones.
- Your microphone can get up to 8-10 hours of talk time on a single charge.
- 10 minutes of charge will provide 1 hour of talk time.



To charge, plug your charging case or microphone into a power source using the included USB Type-C cable.

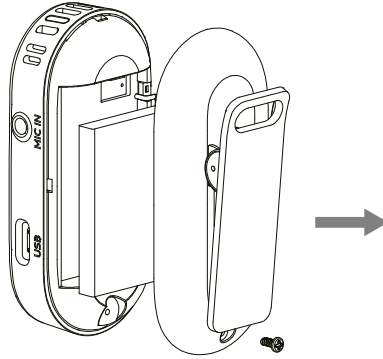


The status LED lights on the microphones can be seen through the lid.

- Solid green: Fully charged
- Solid red: Charging

Replace Your Microphone Battery

The battery should be replaced by its manufacturer, service technician or a similarly qualified person.



1. Turn off the microphone. Loosen the screw and open the battery door
2. Remove the battery by gently pulling up from the notch on the bottom.
3. Insert the replacement battery, close the battery door, and tighten the screw.

Set up Your Speakers

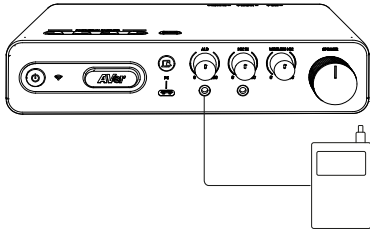
Connect Your Speaker Cables

1. Push down the spring binding post terminal connector on the back of your speakers to reveal the hole.
2. Insert the stripped end of the speaker wire into the hole in the center of the terminal connector. Make sure that the wire is connected to the correct terminal. The red wire should be connected to the red terminal, and the black wire should be connected to the black terminal.
3. Release the terminal connector. Make sure the wire is held securely and there are no loose strands.
4. Repeat the process for the other speaker wire.

Audio and Video Integration

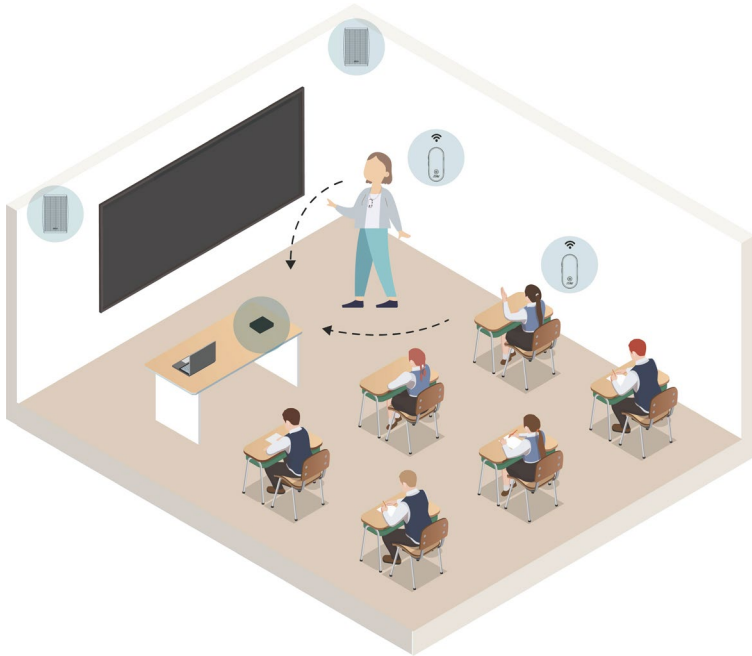
Audio Output to Assistive Listening Devices (ALD)

Assistive listening devices (ALD) can help students hear a teacher speaking across the room or hear a conversation in a noisy room.

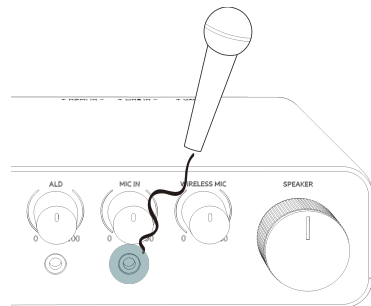
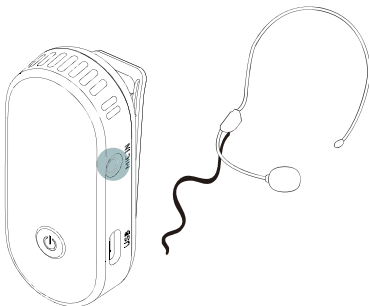


1. Turn the ALD volume control all the way down on the SAB5 Streaming Audio Box.
2. Plug your transmitter into the ALD port on the front panel of the SAB5 Streaming Audio Box using the included 3.5mm to 3.5mm stereo cable.
3. Speak into the microphone and slowly adjust the volume control for a suitable audio level.

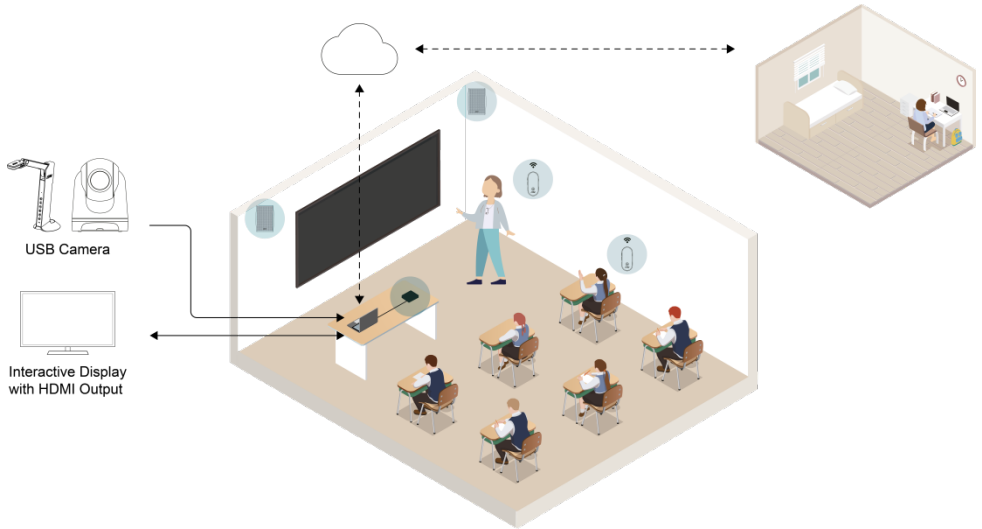
In the Classroom



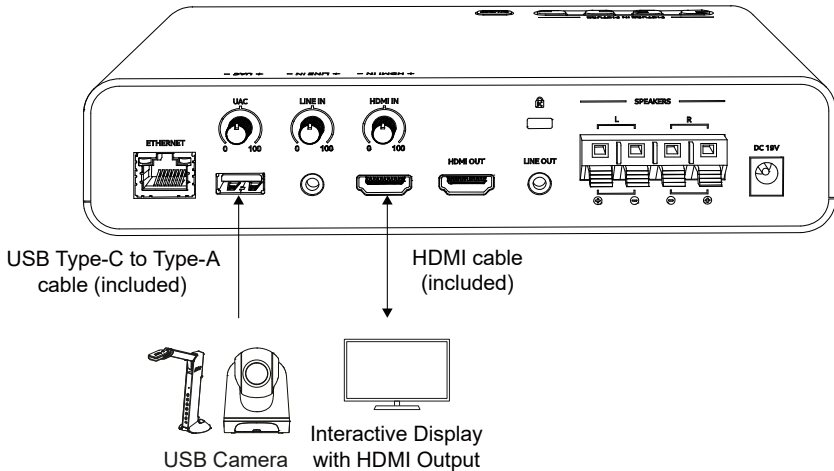
1. Short press to turn on the SAB5 Streaming Audio Box. Press and hold the Power/Switch button for 3 seconds to [pair your pendant microphone](#).
2. Or use a wired microphone by:
 - Plugging it into the Mic In port on the pendant microphone that has been paired with the SAB5 Streaming Audio Box.
 - Plugging it into the Mic In port on the front panel of the SAB5 Streaming Audio Box.

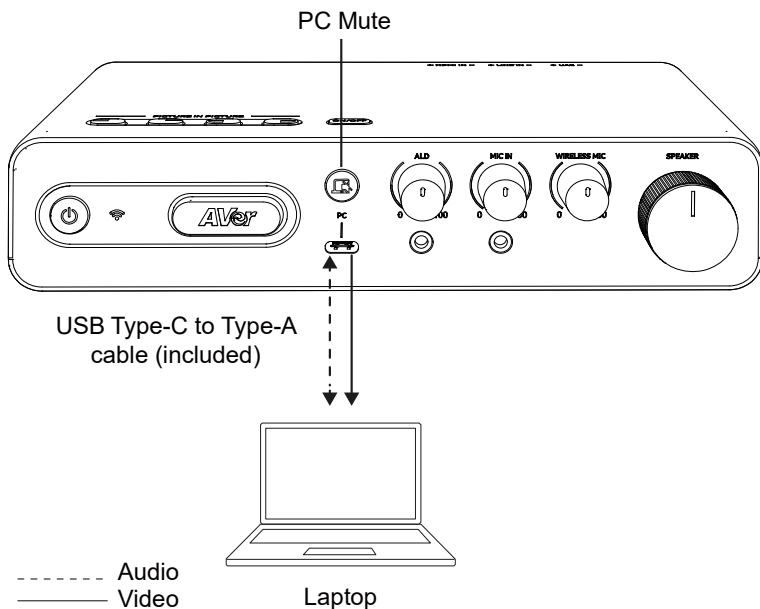


Hybrid Learning



1. Short press to turn on the SAB5 Streaming Audio Box. Press and hold the Power/Switch button for 3 seconds to [pair your pendant microphone](#).
2. Connect devices.





- **Interactive display**

- Interactive displays and Interactive flat panels (IFP) are often used interchangeably. While many interactive flat panels have HDMI output, some interactive displays may only have HDMI input or other types of video outputs such as VGA or DisplayPort.
- Check the specification of your model to confirm whether it has the necessary video outputs to connect to the SAB5 Streaming Audio Box

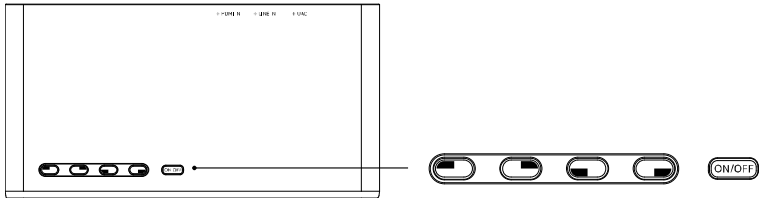
- **USB camera**

- When using your pendant or wired microphone, make sure your USB camera's built-in microphone (if any) is turned off to reduce feedback.

3. Open your video conferencing software, such as Google Meet, Skype, Microsoft Teams or Zoom, and select "SAA5 Series" as the microphone and speaker source.

4. How to use picture-in-picture (PiP):

- HDMI input is the main window.
- Let students see you or the classroom in a small, overlay window by plugging your USB camera into the USB Type-A port on the back panel of the SAB5 Streaming Audio Box.
- Press the buttons to turn picture-in-picture on or off and switch overlay positions.



5. How to use the PC Mute button:

- Press to mute PC speakers and sounds from online students to reduce distraction in class. They will still be able to hear you.

Specification

SAB5 Streaming Audio Box

DC Power	19V
Standby Mode	<1.5W (WoL)
Power Consumption	65W max.
Dimensions (W x H x D)	<210 x 110 x 48mm
Net Weight	850g ± 50g
Power Button	<ul style="list-style-type: none">● Solid green: Power on★ Flashing green: Start-up● Solid red: Standby Mode (when connected to power)★ Flashing red: Updating firmware
Status LED	<ul style="list-style-type: none">● Solid blue: Microphone(s) is paired○ Off: Microphone(s) isn't paired
PC Mute Button	<ul style="list-style-type: none">● Solid red: PC is muted○ Off: PC isn't muted
PC Port	USB Type-C
ALD Port	3.5mm stereo for assistive listening devices
Mic In Port	3.5mm mono
UAC Port	USB Type-A 2.0
Audio In Port	3.5mm stereo
HDMI In Port	HDMI 2.0
HDMI Out Port	HDMI 2.0
Line Out Port	3.5mm stereo
Speaker Out	Speaker push-in terminal connector block
Ethernet Port	1

DC Power Jack	19V
Kensington Lock	1

Pendant Microphones

	Teacher	Student
Style	Pendant with clip and lanyard	
Channels	1	
Transmission Type	Wireless	
Wireless Frequency	2.4 GHz	
Frequency Response	50 Hz - 20 kHz	
Coverage	15 - 20m (50 - 65 ft.)	
Microphone Capsule	Omni-directional electret condenser	
Battery	Rechargeable and removable Li-ion battery	
Battery Power	3.7V	
Talk Time	10 hours (fully charged)	
Charging Time	<3 hours	
Charging Method	USB Type-C	
Dimensions (W x H x D)	Microphone: <73.3 x 33 x 20.2mm (excluding clip) Receiver: 55 x 30 x 10mm	
Net Weight	35g	
Power/Mute Switch	Press and hold the Power/Mute button for 3 seconds to power on > press again to mute > press and hold for 3 seconds to power off.	
Volume	Up/down buttons	
Safety Alert	SOS button	N/A
Status LED	<ul style="list-style-type: none"> ● Solid blue: Paired ★ Flashing blue: Not transmitting to a receiver or out of range ● Solid red: Mute ★ Flashing red: Low battery 	

Battery LED	<p>When in use:</p> <ul style="list-style-type: none"> ● Solid green: Normal ★ Flashing red: Low battery <p>When charging:</p> <ul style="list-style-type: none"> ● Solid green: Fully charged ● Solid red: Charging
Mic In Port	3.5mm stereo
USB Type-C Port	1

Charging Case

Charging Time	<3 hours
Input Voltage	5V
Charging Voltage	5V
Dimensions (W x H x D)	<122.3 x 88.7 x 51.3mm
Net Weight	115g
USB Type-C Port	USB 2.0 Type-C
Kensington Lock	1

Speakers

Total Harmonic Distortion	<1% at 1kHz
Frequency Response	88Hz -25kHz ± 3dB
Sensitivity	88 dB 1 Watt (1M1W)
Impedance	6 Ohms nominal
Mounting	Wall mount
Dimensions (W x H x D)	<250 x 172 x 155mm
Net Weight	4.75kg
Power Output	15W RMS each

Environmental Specifications

Working temp.	0°C - 35°C
Working RH	10% - 90%
Storage temp.	-30°C - 60°C
Storage RH	10% - 90%

Specifications are subject to change without prior notice.

Troubleshooting

Microphone doesn't pair.

- Make sure the SAB5 Streaming Audio Box is turned on. A solid green light on the Power button will indicate that it is powered on.
- Make sure the SAB5 Streaming Audio Box is not placed in an enclosed space where the Wi-Fi signal may be obstructed.
- Press and hold the Power/Mute button on the microphone for 3 seconds to power off, and try pairing again.

No or low volume from the microphone.

- Make sure the microphone is not muted. A solid red light on top of the microphone will indicate that it's muted.
- Make sure the microphone is charged. A flashing red light on top of the microphone indicates low battery. 10 minutes of charge will provide 1 hour of talk time.
- Charge the microphones each night. It will take less than 3 hours to fully charge them. Solid green lights on top of the microphones will indicate that they are charged.

I hear feedback (squealing).

- Adjust the Volume Up/Down buttons on the side of the microphone.
- Position the microphone approximately 15cm (5.9") from mouth.

No video from the interactive display.

- Make sure that the interactive display has HDMI output. If you are unsure, check the specification of your model to confirm.
- Make sure the HDMI cable is plugged into the HDMI In port.

Picture-in-picture (PiP) window says no signal or not supported.

- Disconnect and reconnect your USB camera.
- Make sure your USB camera is using MJPEG format.