



SMART SoundLift

wireless microphone-based voice amplification solution

User guide

Microphone: AEM-1 | Receiver: AER-1 | Charging case: AEC-1



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SMART[®]

Important information

Before installing or using the SMART SoundLift voice amplification solution, review the important information included with the SMART SoundLift. If you cannot find this information, it is available online.

See > docs.smarttech.com/kb/172099

Learn more

This guide and other resources for SMART SoundLift are available in the Support section of the SMART website (smarttech.com/support). Scan this QR code to view these resources on your mobile device.



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This product and/or use thereof is covered by one or more of the following U.S. patents:

www.smarttech.com/patents

June 29, 2026

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Chapter 1 **Welcome**

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The SMART SoundLift wireless microphone-based voice amplification solution can be installed on compatible SMART Board interactive displays to amplify a teacher's voice in learning environments, reducing vocal strain for teachers and assisting students absorb and process information faster and easier.

The SMART SoundLift system includes two wearable microphones and a receiver pre-paired out of the box. The receiver receives audio signals from the microphones and translates the signals into crystal-clear sound through the display's speakers.

For a list of compatible displays:

See > docs.smarttech.com/kb/172100

About this guide

This guide explains how to install and use SMART SoundLift with a compatible SMART Board® interactive display.

More information

In addition to this guide, SMART provides other resources in the Support section of the SMART website (smarttech.com/support). Scan the QR code on the cover of this guide to view links to other support resources for SMART SoundLift and related products.

Chapter 2 Installing the SMART SoundLift voice amplification solution

! Important

Use only the cables included with the SMART SoundLift voice amplification solution, or cables recommended by SMART, when installing and using SMART SoundLift. The use of non-recommended cables may result in reduced functionality or unexpected behavior.

The following cables are included with the SMART SoundLift system.

Part number	Description
1044756	Assembly, Cable, Audio, 3.5 mm TRS to 3.5 mm TRS, 0.5 m (1.64 ft)
1044758	Assembly, Cable, USB Type C to USB Type A, 0.5 m (1.64 ft)
1044933	Assembly, Cable, USB Type C to USB Type C, 0.5 m (1.64 ft)

Note

For a list of displays compatible with SMART SoundLift:

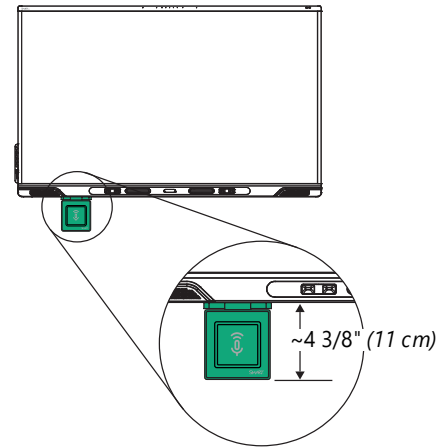
See > docs.smarttech.com/kb/172100

You or your organization's installers can install SMART SoundLift on a supported SMART Board interactive display by following the illustrated installation instructions included with the product. If you've misplaced these instructions, they're also available online.

See > docs.smarttech.com/kb/172101

Installation considerations

- The SMART SoundLift receiver's mounting bracket attaches magnetically to the display's frame. Position it so the included cables can reach from the receiver to the appropriate connectors on the rear connector panel (see the illustrated installation instructions included in the box).
- Make sure there's enough space around the display to accommodate the receiver.



System requirements

The SMART SoundLift system is compatible only with supported SMART Board interactive displays running iQ 4.7.2 or later.

! Important

For instructions on updating your display's iQ software, refer to the product card included with the SMART SoundLift system.

Chapter 3 Enabling SMART SoundLift on the display

The SMART SoundLift voice amplification solution must be enabled in the display's settings to allow input from a SMART SoundLift microphone to be available to the display's SMART and third-party applications. You can also enable input from a microphone to be heard through the display's integrated speakers or an external audio system.

Note

To learn how to connect and use the SMART SoundLift microphones, see *Chapter 5 Using the microphones* on page 11.

To enable SMART SoundLift on the display

1. On the display's Home screen, tap the **Settings** icon .
2. Tap **Sound & vibration**.
3. Set **Media volume** to 30% of its maximum.

! Important

Don't turn up the display's volume too high when you first connect a microphone to the receiver. Setting the display and microphone volume too high can result in acoustic feedback or "squealing". Start with a lower volume setting on the display and microphone and increase both gradually until the desired sound output level is achieved.

4. Tap **Sound input**.
5. Configure the following settings to enable the SMART SoundLift microphone's input to be available to the display's SMART and third-party applications.
 - Turn off **Mute all microphones**.
 - Turn on **Enable built-in microphone and Audio in**.

Turning on this option enables the ability to hear input from the SMART SoundLift microphone and the display's built-in microphone array (see below).
 - Turn off **Enable audio with VGA input**.

6. Tap **Select sound input options within applications** and turn on one of the following options:
 - **Microphone array only**: Hear audio input from the display's built-in microphone array.
 - **Line in only**: Hear input from the SMART SoundLift microphone.
 - **Both Microphone array and line in**: Hear input from the SMART SoundLift microphone **and** the display's built-in microphone array.

To enable a SMART SoundLift microphone's input to be heard through the display's speakers or an external audio system

1. Complete steps 1–6 above.
2. Turn on **Enable audio amplification**.

Chapter 4 Pairing the microphones

A SMART SoundLift microphone must be paired to a receiver before it can connect to the receiver and work.

Note

The SMART SoundLift system comes with the microphones and receiver already paired and ready to connect.

A microphone's LED flashes while it automatically connects to a receiver and then displays a solid color when connected. If a microphone's LED continues flashing until the microphone turns off without connecting to a receiver, use the following instructions to pair the microphone to a receiver.

To pair a microphone

1. If the microphone is turned off, turn it on by pressing and holding the **Power** button  for at least two seconds.

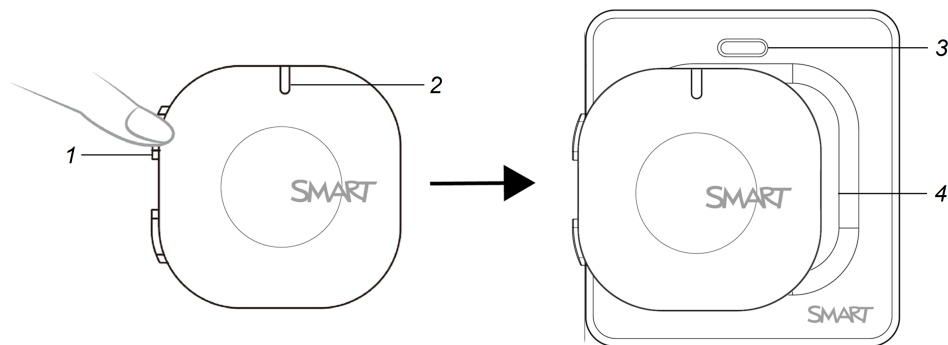
The microphone also turns on when its removed from the charging case.

2. Quickly press the microphone's **Power** button  twice.

The LED on the microphone flashes rapidly.

3. Hold the microphone against the pairing area on the receiver until a beep is heard from the receiver.

The LED on the microphone displays a solid color and the receiver's LED lights green to indicate successful pairing.



No.	Function
1	Power/Mute/Pairing button
2	Microphone status LED
3	Receiver status LED
4	Receiver touch pairing area

Chapter 5 Using the microphones

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The SMART SoundLift voice amplification solution supports the simultaneous pairing and connection of up to two microphones to the system's receiver.

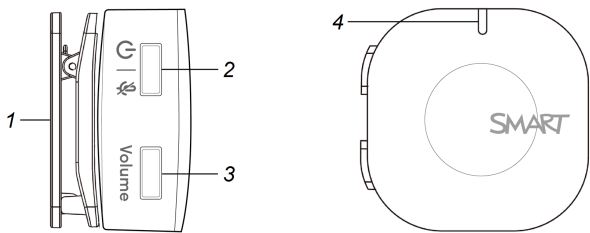
! Important

SMART SoundLift must be enabled in the display's settings for input from a microphone to be available to the display's applications, and heard through the display's integrated speakers or an external audio system.

See > *Chapter 3 Enabling SMART SoundLift on the display on page 7*

About the microphone

A SMART SoundLift microphone has the following controls and features.



No.	Function	Description
1	Lapel clip	The microphones come with a magnet lapel clip that allows you to mount the microphone onto a piece of clothing. See > <i>Attaching or mounting a microphone on page 14</i>

No.	Function	Description
2	Power/Mute/Pairing button	• Turns on microphone. • Mutes microphone. • Places the microphone in pairing mode. See > <i>Chapter 4 Pairing the microphones</i> on page 9
3	Volume/Noise cancellation button	• Controls the microphone's volume. • Turns on noise cancellation mode. The microphone's noise cancellation feature helps isolate your voice by reducing unwanted background noise so remote listeners hear you more clearly.
4	LED	The LED indicates the pairing and battery status of the microphone. The LED status also indicates when the microphone's volume control is being adjusted, the microphone is muted, and the noise cancellation feature has been enabled. See > <i>About a microphone's LED</i> below

About a microphone's LED

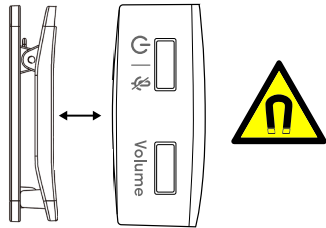
A microphone's LED provides status and troubleshooting information for the microphone.

LED status	Microphone status	Notes
No light	Microphone is off.	N/A
Flashing green	Waiting to connect with the receiver.	If a microphone does not connect with the receiver, it will automatically turn off after one minute.
Flashing green rapidly	Pairing with the receiver.	If a microphone doesn't pair with the receiver, it will automatically return to "waiting to connect" mode after one minute.
Solid green	Paired and connected with the receiver.	Audio output from the microphone is available at the receiver.
Flashing orange	Waiting to connect with the receiver while muted.	If a microphone is not connected with the receiver, it will automatically turn off after one minute.

LED status	Microphone status	Notes
Flashing orange rapidly	Pairing with the receiver while muted.	If a microphone doesn't pair with the receiver, it will automatically return to "waiting to connect" mode after one minute.
Solid orange	Paired and connected with the receiver and muted.	Audio output from the microphone is available at the receiver; however, the microphone is muted.
Flashing blue-green	Waiting to connect with the receiver with noise cancellation enabled.	If a microphone is not connected with the receiver, it will automatically turn off after one minute.
Flashing blue-green rapidly	Pairing with the receiver with noise cancellation enabled.	If a microphone doesn't pair with the receiver, it will automatically return to "waiting to connect" mode after one minute.
Solid blue-green	Paired and connected with the receiver with noise cancellation enabled.	Audio output from the microphone is available at the receiver with noise cancellation enabled.
Flashing red	Battery charge level is less than 3%.	Microphone will turn off after 5–8 minutes.
Solid red	Battery is charging while in the charging case.	The red LED will turn off when the battery is fully charged.
Flashing orange rapidly	The microphone's volume control is being adjusted.	A microphone's level of sound output (three levels) can be increased using the volume control feature.
Solid blue	The microphone's noise cancellation mode is enabled	Noise cancellation reduces background noise so remote listeners hear you clearly.

Attaching or mounting a microphone

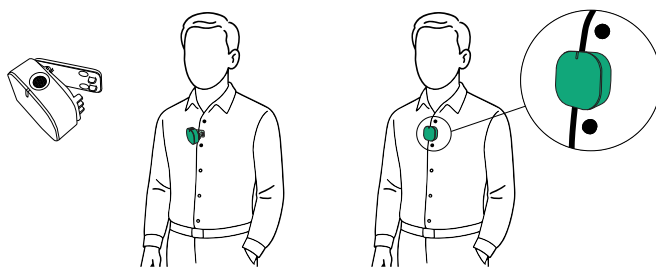
The microphones come with a magnet lapel clip that allows you to mount the microphone onto a piece of clothing.



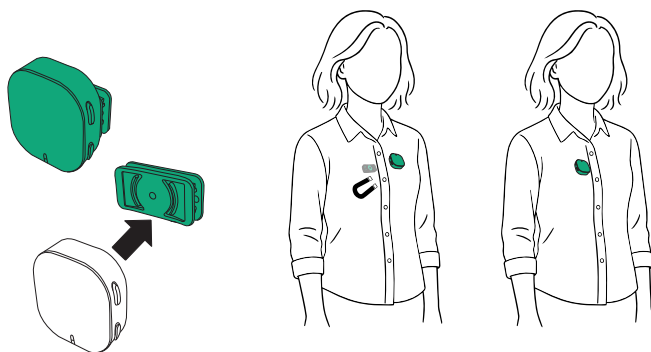
Microphone's can be secured to the edge of clothing using the magnetic lapel clip. Simply, pinch the clip and position the microphone 4–6" (10–15 cm) below your chin.

Tip

Orient a microphone so its LED is pointing up towards your mouth.



You can also place a microphone where you want on clothing, and use the magnet lapel clip on the other side of the clothing to secure it in place.



Using a microphone

❗ Important

A microphone won't connect to the receiver and work unless it's paired to a receiver. If a microphone's LED continues flashing until the microphone turns off without connecting to a receiver, see *Chapter 4 Pairing the microphones* on page 9.

Note

If a microphone loses its connection to the receiver, it turns off after one minute.

Tips

- Charge microphones every night.
- Speak at a normal conversational volume.

To turn a microphone on

❗ Important

Don't turn up the display's volume too high when you first connect a microphone to the receiver. Setting the display and microphone volume too high can result in acoustic feedback or "squealing". Start with a lower volume setting on the display and microphone and increase both gradually until the desired sound output level is achieved.

1. Press and hold the **Power** button  for at least two seconds.
The microphone also turns on when its removed from the charging case.
2. The microphone's LED flashes green while the microphone connects to the receiver.
3. The microphone's LED lights solid green when the microphone is connected with the receiver.

Note

The receiver will also beep when it connects with the microphone.

To turn a microphone off

1. Press and hold the **Power** button  for at least two seconds.
The microphone also turns off when its placed into the charging case.
2. The microphone's LED is off.

To mute a microphone

1. Press the **Mute**  button.
2. The microphone's LED is solid orange.

To change a microphone's volume

1. Press the **Volume** button to increase the microphone's level of sound output.
The microphone's level of sound output increases each time the Volume button is pressed (three levels).
2. The microphone's LED flashes orange indicating which volume level is selected (1–3 flashes).

To turn on a microphone's noise cancellation mode

1. Press and hold the **Volume** button until the LED lights blue.
The microphone's noise cancellation mode is now enabled.
2. To turn off the microphone's noise cancellation mode, press and hold the **Volume** button until the microphone's LED lights green.

Chapter 6 Using the receiver

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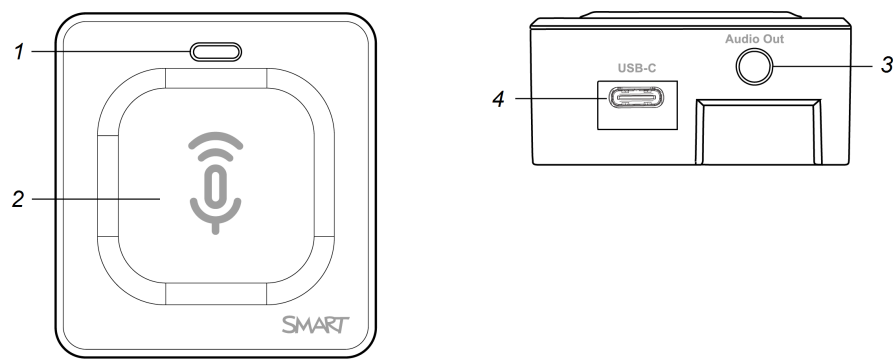
About the receiver's LED 18

The receiver for the SMART SoundLift voice amplification solution receives an audio signal and transmits it to the display's speakers. Pairing and connecting a microphone with the receiver is easy, and the receiver doesn't allow unpaired microphone audio to bleed into the speaker system. The status of the LED on a microphone makes it easy to tell at a glance if a microphone is properly connected.

SMART SoundLift supports the simultaneous pairing and connection of up to two microphones to the system's receiver.

About the receiver

The receiver has the following features.



No.	Function	Description
1	LED	The LED indicates the pairing and connection status of the receiver with a microphone.
2	Touch pairing area	Hold the microphone against the pairing area on the receiver until a beep is heard from the receiver. See > <i>About the receiver's LED</i> on the next page

No.	Function	Description
3	3.5 mm audio output connector	Connects to the display using a stereo 3.5 mm cable. See the <i>SMART SoundLift textless installation instructions</i> (docs.smarttech.com/kb/172101)
4	Power	5 V USB Type-C power supply (connects to the display using the included USB Type-A to USB Type-C receiver power cable). See the <i>SMART SoundLift textless installation instructions</i> (docs.smarttech.com/kb/172101)

About the receiver's LED

The receiver's LED provides status and troubleshooting information for the receiver.

LED status	Microphone status	Notes
No light	Receiver is not connected to power.	N/A
Flashing green	Not connected with a microphone.	The receiver will enter standby mode after 3 seconds of not being connected to a microphone.
Flashing green rapidly	Pairing with a microphone.	If pairing with a microphone fails, the receiver will enter standby mode 1 minute after failing to pair.
Solid green	Paired with a microphone.	N/A
Solid orange	Standby mode.	The receiver is waiting to connect with a microphone.

Chapter 7 Maintaining a microphone and its charging case

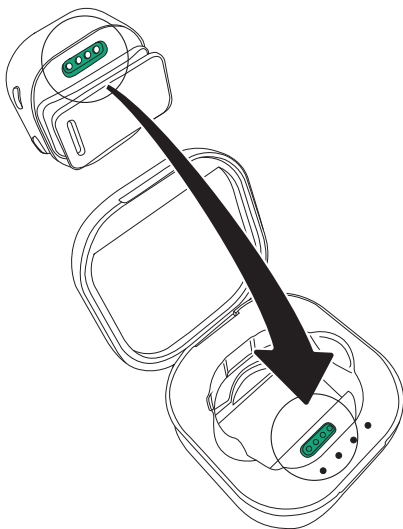
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A microphone and its charging case each contain a rechargeable lithium-ion battery. Charge a microphone and charging case every night and over the weekend.

Charging a microphone

To charge a microphone

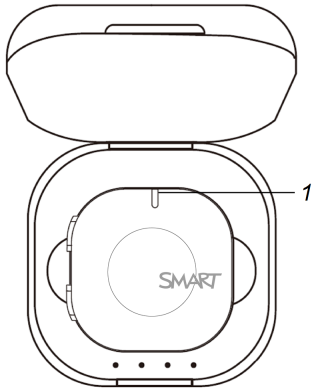
1. Align the charging contacts on the microphone with those in the charging case, and place the microphone into the charging case.



2. Place the microphone in the charging case until it magnetically snaps into place.

The microphone's LED lights according to the microphone's charging status.

See > *About a microphone's LED* on page 12



No.	Component
1	Microphone LED

3. Close the charging case.

Note

If the case is also charging, it can remain open.

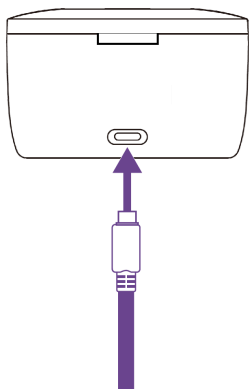
Charging a charging case

To charge a charging case

Connect the microphone charging case to a suitable power supply using the included USB Type-C to USB Type-C cable.

The LEDs on the charging case light according to the case's charging status.

See > *About the charging case's LEDs* below



About the charging case's LEDs

When the microphone is placed in or removed from the charging case, the case's LEDs light for 5 seconds indicating the charge state of the case.

LEDs status	Charging case's charge status	Notes
4 × solid green LEDs	Fully charged.	N/A
3 × solid green LEDs	75–99% charged.	N/A
2 × solid green LEDs	50–74% charged.	N/A
1 × solid green LED	25–49% charged.	N/A

While the charging case is charging, the case's LEDs light indicating the charge level being reached.

LEDs status	Charging case's charge status	Notes
4 × solid green LEDs	Fully charged.	N/A
3 × solid green LEDs and 1 × flashing green LED	Charging to 100%.	N/A

LEDs status	Charging case's charge status	Notes
2 × solid green LEDs and 1 × flashing green LED	Charging to 75%.	N/A
1 × solid green LED and 1 × flashing green LED	Charging to 50%.	N/A
1 × flashing green LED	Charging to 25%.	N/A

Replacing the microphone and receiver batteries

The SMART SoundLift microphone and receiver each use one battery. For instructions on replacing the batteries, visit the *Training and videos* page on the SMART SoundLift support site, located in the Support section of the SMART website (smarttech.com/support).

Chapter 8 **Troubleshooting the SMART SoundLift voice amplification solution**

Troubleshooting information for a variety of issues with the SMART SoundLift voice amplification solution is available on the product's support site.

See > [Troubleshooting the SMART SoundLift voice amplification solution](#)

Chapter 9 Getting support and finding serial numbers

If an issue you're experiencing with the SMART SoundLift voice amplification solution persists or isn't covered in the support section of the SMART website, or the [knowledge base](#), contact your authorized SMART reseller (smarttech.com/where) for support.

Your reseller might ask you for the serial number of a SMART SoundLift microphone, receiver or microphone charging case. A serial number ("S/N") located on the back of each component.

Example of charging case serial number.



S/N:XXXXXX P/N:1044752
Model: AEC-1

Certification and compliance

For regulatory purposes, the SMART SoundLift microphone, receiver, and charging case are identified as AEM-1, AER-1, and AEC-1 respectively.

Federal Communication Commission interference statement

FCC

Suppliers Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Unique Identifier: AEM-1, AER-1, AEC-1

Responsible Party – U.S. Contact Information

SMART Technologies Inc.

11100 NE 8th St., Suite 210

Bellevue, Washington 98004

compliance@smarttech.com

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.

Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

⚠ Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Innovation, Science and Economic Development Canada statement

This device complies with RSS-247 of the Innovation, Science and Economic Development 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.

Radiation exposure statement

Model AEM-1: This wireless equipment complies with government limits for exposure to radio frequency (RF) radiation. The values shown represent the worst-case results; in normal operation the exposure may be lower. As defined by the FCC OET Bulletin 65, IEEE C95.1, and Canada RSS-102, the maximum SAR limit is 1.6 W/kg over 1 g of tissue.

Model AER-1: This equipment complies with FCC and ICSED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the antenna of this device and all nearby persons. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Product	SAR averaged over 1 g of tissue (W/kg)
AEM-1	0.293

Innovation, Science et Développement économique Déclaration du Canada

Cet appareil est conforme à la norme ICSED CNR-247 pour les appareils radio agréés. Son fonctionnement est soumis 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.

Déclaration d'exposition aux radiations

Modèle AEM-1 : cet équipement sans fil respecte les limites gouvernementales en termes d'exposition aux rayonnements radio. Les valeurs qui s'affichent représentent les résultats les plus affichés ; en fonctionnement normal, l'exposition peut être inférieure. Comme définie par la norme IEEE C95.1 et le Canada RSS-102, la limite DER maximale est de 1,6 W/kg sur 1 g de chiffon.

Modèle AER-1 : Cet équipement est conforme aux limites d'exposition aux rayonnements ISSED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. Cet émetteur ne doit pas être co- implantés ou exploités conjointement avec une autre antenne ou émetteur.

Produit	DAS en moyenne plus de 1 g de chiffon (W/kg)
AEM-1	0.293

EU declaration of conformity

Hereby SMART Technologies ULC declares that the radio equipment models AEM-1 (microphone) and AER-1 (receiver), are in compliance with Directive 2014/53/EU.

Hereby SMART Technologies ULC declares that the AEC-1 (charging case) complies with Directive 2014/30/EU

⚠ Warning

Operation of this equipment in a residential environment may cause radio interference.

The full text of the EU declaration of conformity is available at the following internet address: smarttech.com/compliance

The frequency band and the maximum transmitted power in EU are listed below:

Model	Transmitting Band (MHz)	Maximum Transmit Power
AEM-1	2400 - 2478	Transmit Power: 9.30 dBm EIRP
AER-1	2400 - 2478	Transmit Power: 9.18 dBm EIRP

⚠ Caution: Exposure to Radio Frequency Radiation

Model AER-1 This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Model AEM-1: This equipment complies with EU radiation exposure limits for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 1.5 cm between the radiator and your body.

Note

The minimum distance of 1.5 cm between the radiator (model AEM-1) and your body is achieved when wearing the microphone on the outside of clothing using the included magnetic lapel clip.

Hardware environmental compliance

SMART Technologies supports global efforts to ensure that electronic equipment is manufactured, sold, and disposed of in a safe and environmentally friendly manner.

Waste Electrical and Electronic Equipment (WEEE Directive)

Electrical and electronic equipment and batteries contain substances that can be harmful to the environment and to human health. The crossed-out wheeled bin symbol indicates that products should be disposed of in the appropriate recycling stream and not as regular waste.



Batteries (Battery Regulation)

The microphone contains a 100 mAh rechargeable lithium-ion polymer battery (model 421624), and the charging case contains a 300 mAh rechargeable lithium-ion polymer battery (model 452332). The batteries are replaceable in the microphone and charging case. When replacing a battery recycle and dispose of old batteries in compliance with local rules.



For instructions on replacing the batteries, visit the *Training and videos* page on the SMART SoundLift support site, located in the Support section of the SMART website (smarttech.com/support).

Replacement batteries

⚠ Caution

- Replacing a battery with an incorrect type may result in a fire or explosion. Before replacing a battery, confirm the correct model (see above).
- Dispose of used batteries in accordance with local hazardous waste regulations.

Certification and compliance

- Do not place batteries in household waste, recycling bins, or landfills. Before taking batteries to a drop-off center, cover the terminals with non-conductive tape (such as electrical tape).
- Do not dispose of batteries in fire; they may rupture or explode.
- Keep used batteries intended for disposal out of the reach of children. Even used batteries can pose a health risk and may cause serious or fatal injury.

REACH regulation

This product may contain substances that are candidate SVHCs under the EU REACH Regulation (EC) 1907/2006.

See > echa.europa.eu/scip-database for the latest information.

SMART Technologies

smarttech.com/support

smarttech.com/contactsupport