

# Instructions for use



EduMic

## Introduction to this booklet

This booklet guides you on how to use and maintain your new EduMic. Please read the booklet carefully, including the Warning section. This will help you achieve the full benefit of your new EduMic. If you have additional questions about the use of your EduMic, please contact your hearing care professional.

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For your convenience, this booklet contains a navigation bar (see above) to help you easily navigate through the different sections.

## Intended use

<b>Intended use</b>	EduMic is intended as a wireless microphone and transmitter of speech and other audio signals to the hearing aids.
<b>Indications for use</b>	No indications for use.
<b>Intended user</b>	Adults and children older than 36 months.
<b>Use environment</b>	Classroom setting / Personal use.
<b>Contraindications</b>	Users of active implants must pay special attention when using the device. For more information, read the Warning section.
<b>Clinical benefits</b>	See clinical benefits of the hearing aid.

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## Package content

The package consists of the following elements:



EduMic



Adjustable lanyard



3.5 mm jack cable



FM protective skin



This booklet  
(Instructions for use)



Wall charger  
(will vary from country to country)

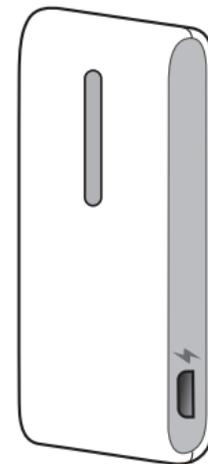


USB charger cable

## Getting started

Before you can use EduMic, EduMic and the hearing aids need to be paired. The pairing will be stored, so you only need to pair once. Please visit [www.oticon.ca/compatibility](http://www.oticon.ca/compatibility) for more information.

### Pair EduMic with hearing aids



Your EduMic



Students'  
hearing aids

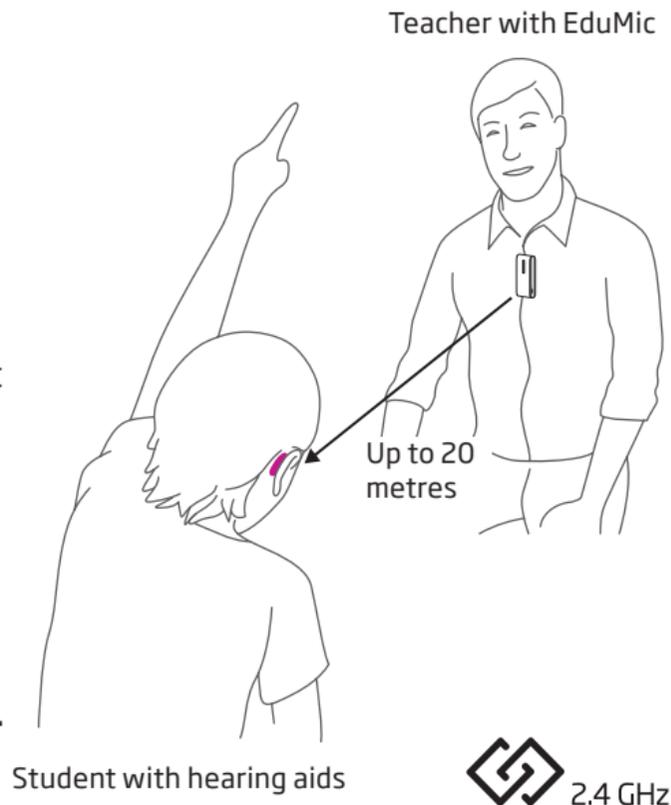
See page  
**16**  
or  
**18**

## Introduction

EduMic can stream to Oticon hearing aids with 2.4 GHz technology. The hearing aids receive the streamed sound in a dedicated EduMic program.

### Microphone mode

When you turn EduMic on, a green LED will appear. This indicates the microphone mode is enabled. The EduMic microphone picks up your voice and streams the signal, using wireless 2.4 GHz technology, to any number of paired hearing aids. This way, each student will always have clear and consistent access to your voice - overcoming the negative effects of noise and reverberation in the classroom and the distance between you.



A wireless microphone can benefit children of all ages by providing direct access to a primary talker.

### Modes in EduMic

EduMic offers four different modes of operation:

- Microphone mode (20 m range)
- Jack mode (20 m range)
- FM mode (3 m range)
- Telecoil mode (3 m range)

When a jack cable is connected, EduMic is in **jack mode** and streams audio input from external sound sources directly to the hearing aids.

Streaming in microphone and jack mode is designed for one-to-many communication.

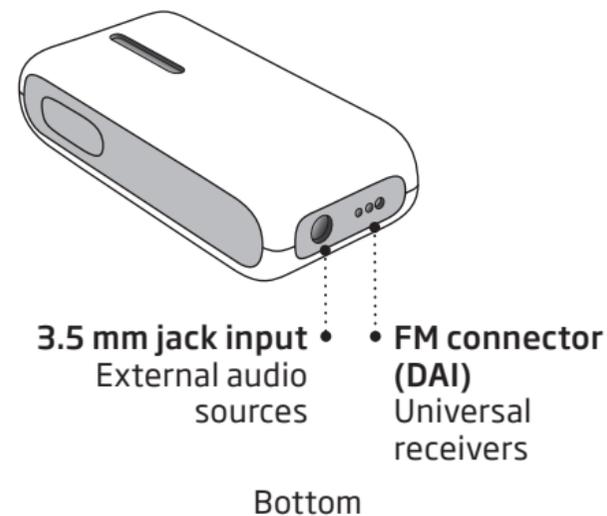
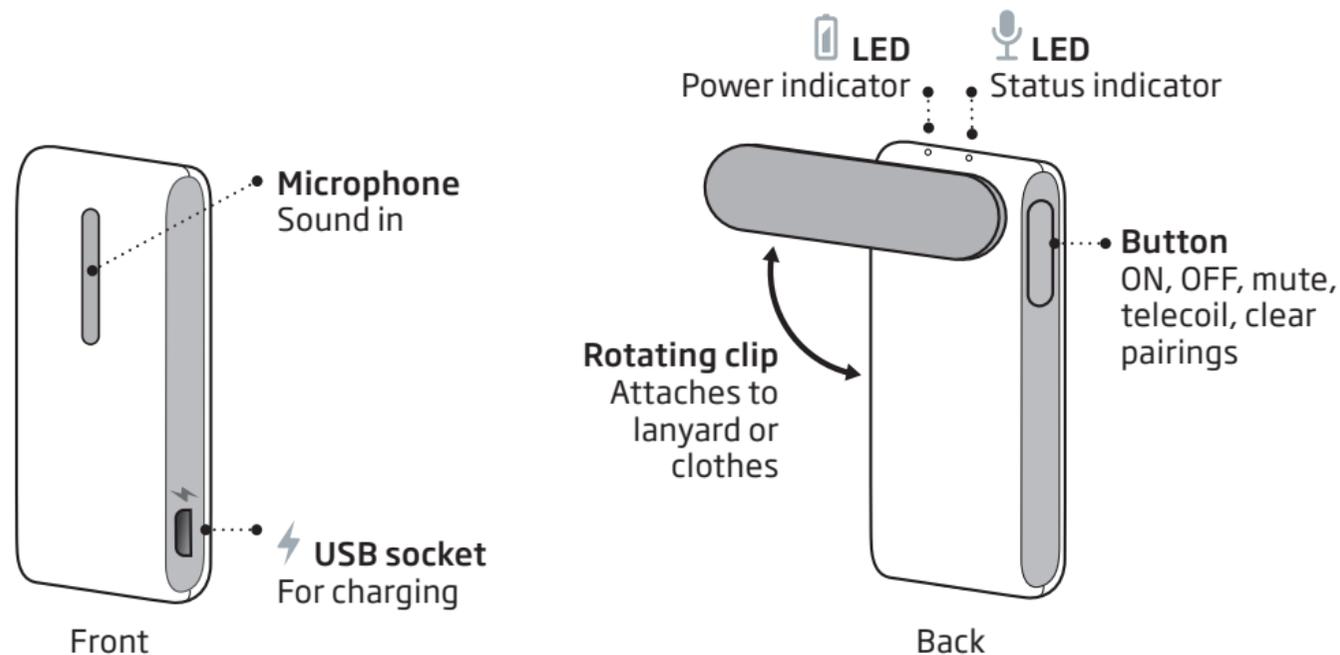
When a universal (FM) receiver is plugged in, EduMic is in **FM mode** and streams the audio from another wireless classroom system.

When **telecoil mode** is enabled, EduMic streams audio from a teleloop system.

Streaming in FM and telecoil mode is designed for personal use either in the classroom (FM mode), or in the public arena (telecoil mode).

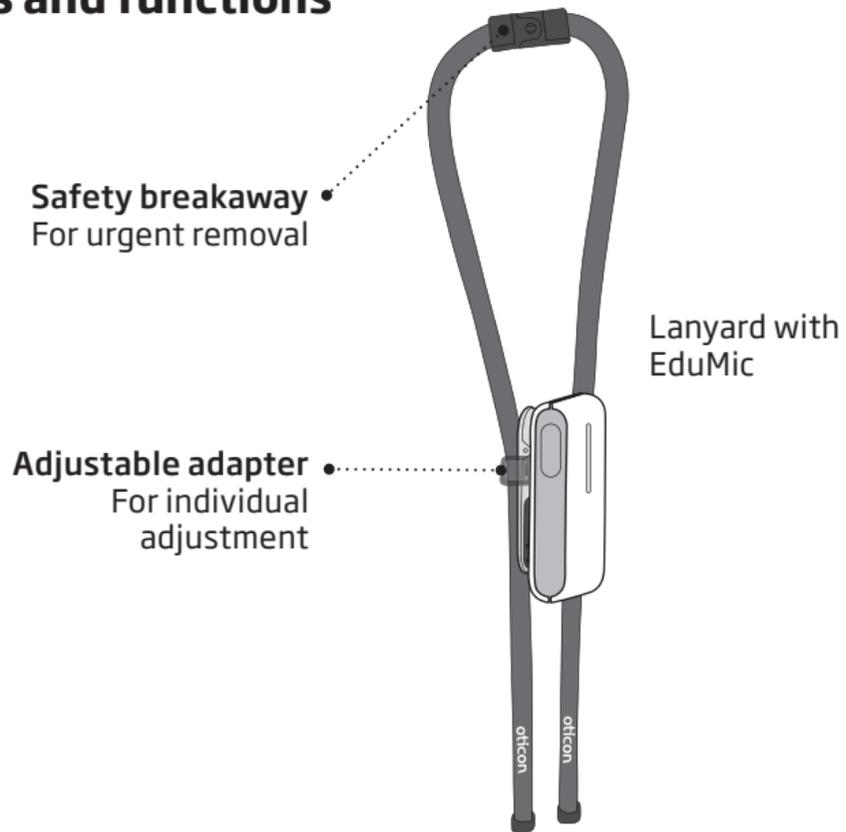
When operated in Telecoil and DAI-mode, drop-outs may occur. EduMic will reset and the chosen listening program will be resumed shortly.

## EduMic parts and functions



	Status indicator	
	Flashing blue	Pairing in progress
	White	Start-up
	Green	ON/microphone mode
	Flashing green	Mute in microphone mode
	Yellow	Jack/FM mode
	Flashing yellow	Mute in jack/FM mode
	Red	Pairings cleared
	Magenta	Telecoil mode
	Flashing magenta	Mute in telecoil mode
	Power indicator	
	White	Start-up
	Green	Fully charged
	Flashing yellow	Charging
	Flashing red	Battery low

## Lanyard parts and functions



## Use of lanyard

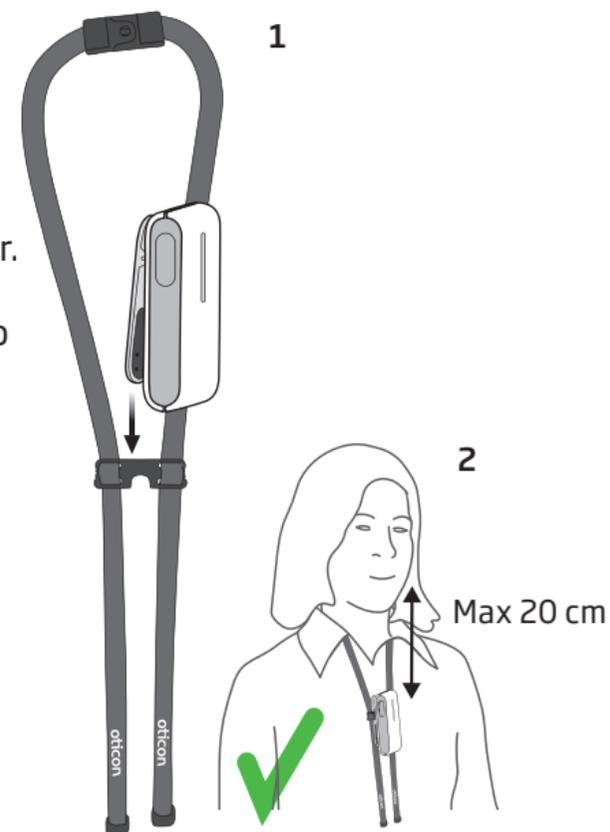
When using EduMic with the lanyard, the distance from the mouth to the top of EduMic should be a maximum of 20 cm.

1. Attach the clip onto the adjustable adapter.
2. Hang the lanyard around your neck and adjust the adapter for the right distance to your mouth.

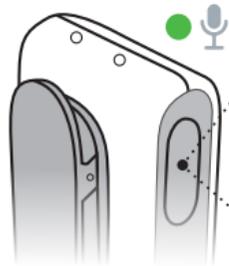
### Tips:

To reduce noise in the students' hearing aids, it is recommended to mute the microphone while you are handling it prior to use.

EduMic should not be worn close to pieces of jewellery or other hard objects.



## Turn EduMic ON and OFF



### ON/microphone mode:

- Press the button for 2 seconds until both indicators turn WHITE and release the button. Wait for 10 seconds until the status indicator turns GREEN. EduMic is now turned ON and the microphone is ready for use.

### OFF:

- Press the button for 2 seconds until the status indicator turns OFF.

## Mute microphone mode

Use the mute function if you need to mute the audio stream from EduMic. Press the button briefly to mute the audio stream from EduMic.



### Mute:

- Press the button briefly. The status indicator flashes GREEN. The audio stream from EduMic is now muted.

### Unmute:

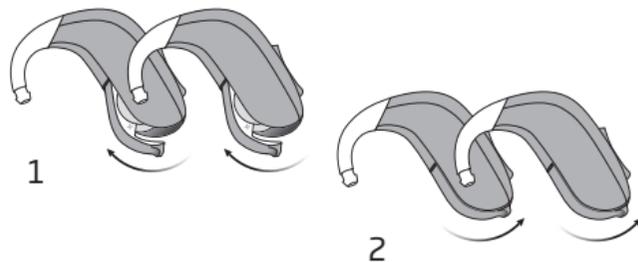
- To unmute EduMic, press the button again briefly.

## Pair EduMic with hearing aids

Ensure EduMic is turned ON



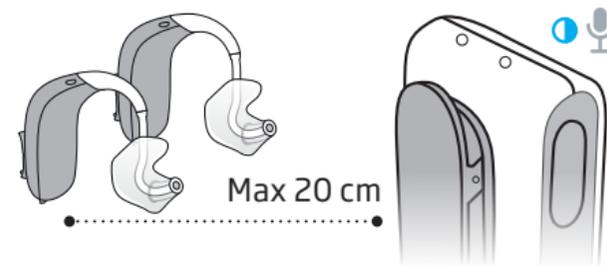
Enable pairing mode in hearing aids



1. Turn the hearing aids OFF by opening the battery drawer.
2. Turn the hearing aids ON by closing the battery drawer.

The hearing aids can now be paired with EduMic within the next 3 minutes.

Pair the hearing aids



Place the hearing aids close to EduMic.

It is recommended to pair one set of hearing aids at a time.

The status indicator will flash BLUE while pairing is in progress.

Ready for use



The status indicator will stop flashing BLUE when pairing is complete and turn GREEN.

EduMic is now ready for use with the hearing aids.

If more sets of hearing aids need to be paired, repeat these steps.

## Pair EduMic with rechargeable hearing aids

Ensure EduMic is turned ON



Enable pairing mode in hearing aids

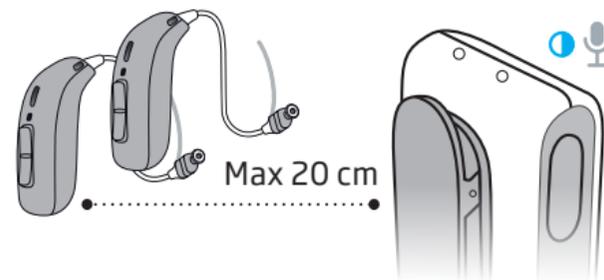
1. OFF
2. ON



1. Turn the hearing aids OFF by pressing the lower part of the hearing aid push button for 3 seconds.
2. Turn the hearing aids ON by pressing the lower part of the hearing aid push button for 2 seconds.

The hearing aids can now be paired with EduMic within the next 3 minutes.

Pair the hearing aids



Place the hearing aids close to EduMic.

It is recommended to pair one set of hearing aids at a time.

The status indicator will flash BLUE while pairing is in progress.

Ready for use



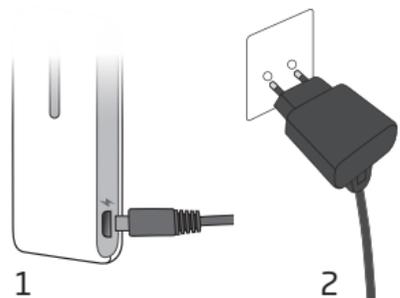
The status indicator will stop flashing BLUE when pairing is complete and turn GREEN.

EduMic is now ready for use with the hearing aids.

If more sets of hearing aids need to be paired, repeat these steps.

## Charge EduMic

### Connect to power source

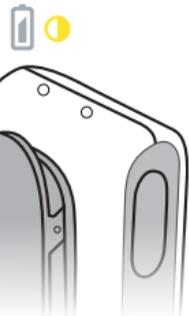


1. Insert the micro USB into the charging socket on EduMic.

2. Insert the wall charger into a power outlet.

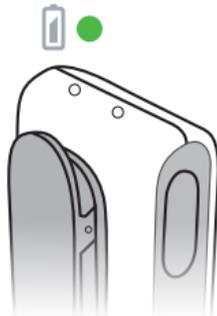
Or insert the USB charger cable into a USB power source.

### Charging



The power indicator will flash YELLOW during charging.

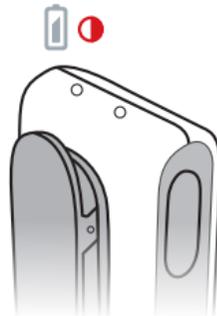
### Charging complete



The power indicator will turn GREEN when the battery is fully charged.

## Low battery indication

The power indicator starts flashing RED, when the battery is running low. This will leave you two hours before the battery runs out.



### IMPORTANT NOTICE

When recharging, the charging indicator should be lit as described in this booklet. If the charging indicator is not lit as described, disconnect the device from the charger and consult your hearing care professional.

When charging EduMic, use the supplied original USB cable or power supply 5.0V/1A, CE and safety marked.



## Battery performance

A fully charged EduMic will give you 10 hours of use. The daily battery performance varies depending on your specific use of EduMic. E.g. streaming stereo sound in jack mode will consume more battery power than streaming your voice in microphone mode.

If EduMic runs out of battery, connect it to a power source for recharging. You can normally continue using EduMic while charging. It is however, not recommended to charge EduMic in FM mode as signal quality may be affected by other wireless transmitters.

For optimal charging conditions, the room temperature should be +68 °F to +86 °F.

If you find that the battery does not perform as expected, please contact your hearing care professional.

## Charging time

Make sure to charge EduMic fully before you use it for the first time.

We recommend to recharge EduMic overnight after use. In this way you will start the day with a fully charged EduMic.

Charging time may vary depending on the remaining power of the battery. If EduMic is completely drained, the normal charging time is:

2.5 hours	1 hour	0.5 hour
Fully charged	50% charged	25% charged

The charging process will automatically stop when the battery is fully charged. Leave EduMic connected to a power supply when you are not using it.

## Pairing management

To listen to the streamed signal from EduMic, the hearing aids should be in the EduMic program. This can happen automatically or manually.

### Automatic hearing aid program change

EduMic can store up to 10 sets of hearing aid pairings. When any of these sets of hearing aids are within a 20 m range of EduMic, they will automatically change to the EduMic program. By muting and unmuting EduMic, you also initiate a program change in the hearing aids.

### Manual hearing aid program change

When EduMic is paired with more than 10 sets of hearing aids, not all of the pairings are stored in EduMic. In this case, the student can manually change to the EduMic program on their hearing aids or alternatively, on a personal remote control.

#### IMPORTANT NOTICE

Please refer to the hearing aid's instructions for use for details on the functionality of the specific hearing aid solution.

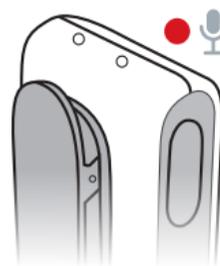
## Clear pairings

It is possible to clear all pairings from EduMic when these are no longer needed. Pairing the hearing aids again will ensure access to automatic program change for these hearing aids.

### Ensure EduMic is turned ON



### Clear pairings



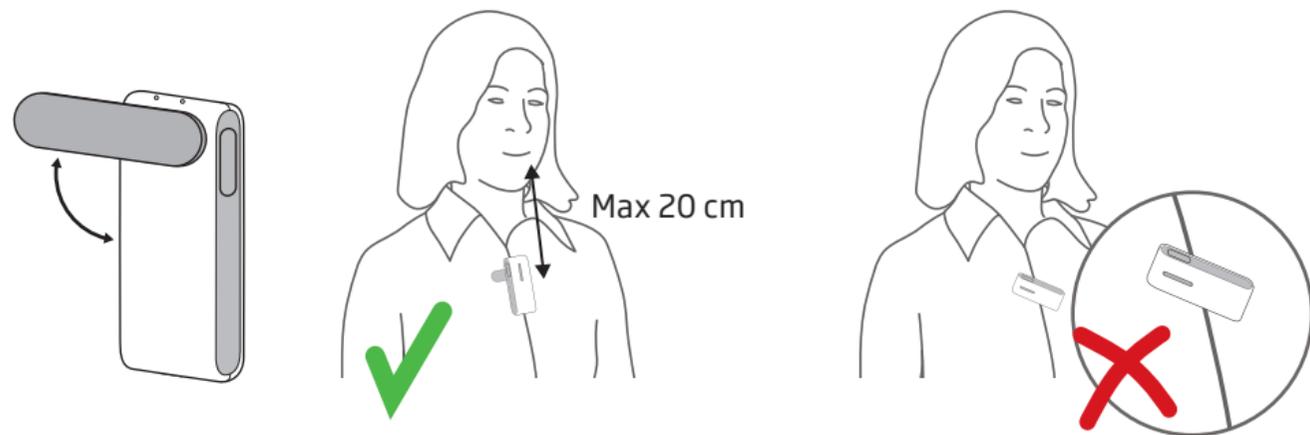
Press and hold down the button for 12 seconds until the status indicator turns RED.

All pairings with hearing aids are now cleared from EduMic.

## Use of rotating clip

When using EduMic in microphone mode, wear it as indicated, in an upright position. The distance from the mouth to the top of EduMic should be a maximum of 20 cm. EduMic should not be worn close to pieces of jewellery or other hard objects.

### Attach EduMic to your clothes using the rotating clip



## Cleaning

EduMic is moisture repellent, which makes it very easy to clean with a damp cloth. It is recommended that you clean it on a regular basis.

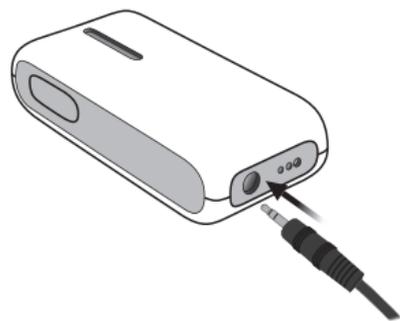
### IMPORTANT NOTICE

EduMic must never be washed or immersed in water, alcohol or other strong detergents.

## Connecting to external sound sources

The 3.5 mm jack input allows you to connect EduMic to external sound sources like a sound field system, smartboards or PC/tablets, etc.

### Connect the jack cable



Insert the jack.

Connect the jack cable to the external audio source.

Ensure EduMic is turned ON.

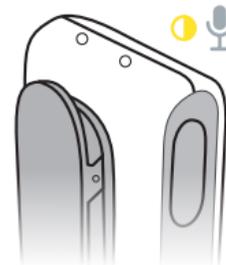
### Jack mode



When EduMic is streaming audio, the status indicator is **YELLOW**.

The EduMic microphone is disabled in jack mode.

### Mute/unmute

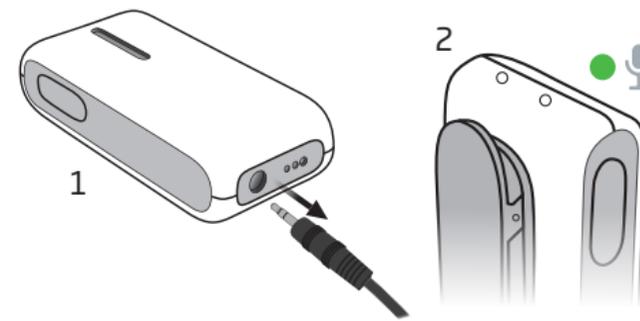


Press the button briefly to mute the audio stream from EduMic.

The status indicator flashes **YELLOW**.

To unmute, press the button again briefly.

### Return to microphone mode



1. Unplug the jack from EduMic.

2. The status indicator will turn **GREEN** and EduMic will return to microphone mode.

## Connecting to classroom systems

Setting up the system requires an FM transmitter and a universal FM receiver with a Europin connector.

### Plug in the receiver



Plug in the receiver and ensure EduMic is turned ON.

Place EduMic close to the student (max 3 m).

Switch on the FM transmitter to activate the classroom system.

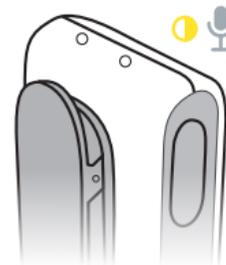
### FM mode



When the FM receiver is connected, the status indicator is YELLOW.

The EduMic microphone is disabled in FM mode.

### Mute/unmute

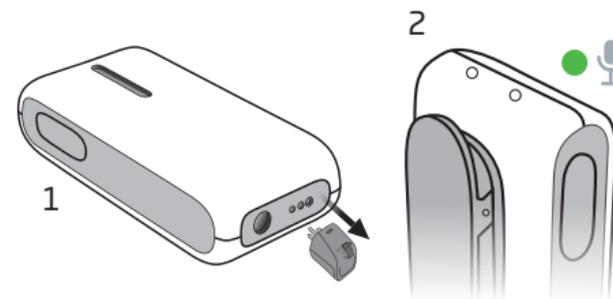


Press the button briefly to mute the audio stream from EduMic.

The status indicator flashes YELLOW.

To unmute, press the button again briefly.

### Return to microphone mode



1. Unplug the receiver from EduMic.

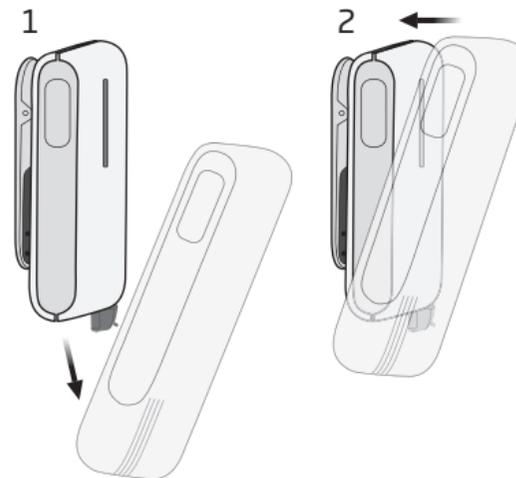
2. The status indicator will turn GREEN and EduMic will return to microphone mode.

#### **IMPORTANT NOTICE**

For details on the functionality of your specific classroom system, please refer to the associated Instructions for use.

## **FM protective skin**

When a universal receiver is plugged into EduMic, it is recommended to use the enclosed white rubber skin to protect the receiver from breakage.



#### **IMPORTANT NOTICE**

The FM protective skin must not be used in Microphone mode. The skin will distort the input to the microphone.

## Enter telecoil mode



Telecoil gives direct access to teleloop systems typically found in theatres, places of worship, or lecture rooms. This symbol or a similar sign is shown wherever a teleloop has been installed.

### Ensure EduMic is turned OFF



### Telecoil mode



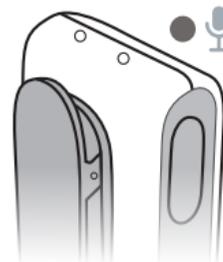
Press and hold down the button for 10 seconds until the status indicator turns MAGENTA.  
EduMic is now in telecoil mode and the EduMic microphone is disabled.  
The range of operation is 3 m.

### Mute/unmute



Press the button briefly to mute the audio stream from EduMic.  
The status indicator flashes MAGENTA.  
To unmute, press the button briefly again.

### Exit telecoil mode



Press the button for 2 seconds until the status indicator is off.

## Warnings

For your personal safety and to ensure correct usage, you should familiarise yourself fully with the following general warnings before using your EduMic. Consult your hearing care professional if you experience unexpected operations or serious incidents with your EduMic during use or because of its use. Your hearing care professional will support you with issue handling and, if relevant, reporting to the manufacturer and/or the additional authorities.

### **Choking hazards and risk of swallowing small parts**

EduMic with a receiver attached should be kept out of reach of children and anyone who might swallow the receiver or otherwise cause injury to themselves. If a receiver is swallowed, see a doctor immediately.

*If a battery or hearing aid is swallowed, see a doctor immediately and contact the National Poison Center at 1-800-222-1222 or National Battery Ingestion Hotline at 1-800-498-8666*

### **Explosives**

Use in explosive environments EduMic is safe to use under normal usage conditions. EduMic has not been tested for compliance with international standards concerning explosive environments.

Therefore, do not use EduMic in environments with danger of explosions e.g. mines, oxygen rich environments or areas where flammable anaesthetics are handled.

### **X-ray/CT/MR/PET scanning, electrotherapy and surgery**

Remove EduMic before X-ray/CT/MR/PET scannings, electrotherapy, surgery, etc. as EduMic may be damaged when exposed to strong electromagnetic fields.

### **Heat and chemicals**

EduMic must never be exposed to extreme heat e.g. left inside a parked car in the sun. EduMic must not be dried in microwave ovens or other ovens.

The chemicals in cosmetics, hairspray, perfume, aftershave lotion, suntan lotion and insect repellent can damage EduMic. Always remove EduMic before applying such products and allow time to dry before use.

### **Interference**

EduMic has been thoroughly tested for interference according to the most stringent international standards. However, interference between EduMic and other devices (e.g. some mobile telephones, citizens band devices, shop alarm systems and other wireless devices) may occur. If this occurs, increase the distance between EduMic and the interfering device.

### **Use on aircraft**

EduMic contains Bluetooth. EduMic should not be used on board an aircraft, unless specifically permitted by the flight personnel.

### **Active implants**

EduMic has been thoroughly tested and characterised for human health according to interna-

tional standards for human exposure (Specific Absorption Ratio - SAR), induced electromagnetic power and voltages into the human body. The exposure values are well below international accepted safety limits for SAR, induced electromagnetic power and voltages into the human body defined in the standards for human health and coexistence with active medical implants, such as pacemakers and heart defibrillators.

### **Rechargeable battery**

Do not attempt to open EduMic as it may damage the battery. Never attempt to replace the battery. If battery replacement is needed, please return your device to the supplier. The service guarantee is void if there are signs of tampering.

The safety of recharging batteries using a USB connector is determined by the external signal source. When connected to external equipment plugged into a wall outlet, this equipment must comply with IEC 62368-1 or equivalent safety standards.

## Warnings

### Connection to external equipment

The safety of the use of EduMic, when connected to external equipment with auxiliary input cable or directly, is determined by the external signal source. When connected to external equipment plugged into a wall outlet, this equipment must comply with IEC 62368-1 or equivalent safety standards.

### Incompatible non-supplied accessories

Only use accessories, transducers or cables supplied by the manufacturer. Incompatible accessories may result in reduced electromagnetic compatibility (EMC) of your device.

### Use of lanyard

If by accident the lanyard is caught on something while wearing it, the lanyard is constructed to break automatically. Therefore, never try to shorten or modify the lanyard in an unauthorised way. The lanyard should not be used by children under 36 months of age.

### Charging

To prevent potential battery damage during storage please charge EduMic every 6 months.

### Possible side effects

The otherwise non-allergenic materials used in EduMic may, in rare cases, cause a skin irritation or other side effects.

*Please, seek consultation with a physician if these conditions occur.*

### Use in traffic

Using EduMic can distract you. Be aware of your surroundings while using EduMic. Please refer to national traffic laws regarding the use of communication devices while in traffic.

### Warnings to hearing care professional

A hearing care professional should advise a prospective hearing aid user to consult immediately with a licensed physician (preferably an ear specialist) before dispensing a hearing aid if the hearing care professional determines through inquiry, actual observation, or review of any other available information concerning the prospective user, that the prospective user has any of the following conditions:

## Conditions of use

<b>Operating, storage and transportation humidity</b>	15% to 93% relative humidity, non-condensing
<b>Operating temperature</b>	+41 °F to +104 °F
<b>Storage temperature</b>	-4 °F to +86 °F Charge EduMic before storage Charge every 6 months hereafter
<b>Transportation temperature</b>	-4 °F to +140 °F
<b>Atmospheric pressure</b>	700 hPa to 1060 hPa

# Troubleshooting

Symptom	Possible causes	Solutions
<b>Reduced sound from EduMic</b>	The microphone opening is covered	Move EduMic so it is not covered by clothes
	EduMic is placed too far from the mouth	Move EduMic within 20 cm of your mouth
	EduMic is turned away from the mouth	Turn EduMic to point in the direction of your mouth. See section: How to wear EduMic
<b>No sound from EduMic</b>	The hearing aids are not in the EduMic program	Mute and unmute EduMic, or re-pair the hearing aids with EduMic
	Pairing with the hearing aids failed	Replace/recharge the batteries to ensure the hearing aids have power and pair again
<b>EduMic is unable to pair with hearing aids</b>	Oticon Opn and Oticon Siya hearing aids are already paired with another EduMic	Clear all pairings with this EduMic, and pair with relevant EduMic as they can only be paired with one EduMic
	Hearing aids are paired with another EduMic that is turned ON and within a range of 20 m	Turn OFF the connected EduMic or clear all pairings with this EduMic to connect with the relevant EduMic
<b>Low-pitched noise in jack mode when charging</b>	Charging and listening to audio from the same device/PC is not supported	Charge EduMic by using the wall charger
<b>Light blue flashes when I try to turn EduMic ON</b>	EduMic is out of power	Charge EduMic
<b>Both LED indicators are flashing RED</b>	System error	Contact your hearing care professional

## International warranty

Your EduMic is covered by an international limited warranty issued by the manufacturer for a period of 12 months from the date of delivery. This limited warranty covers manufacturing and material defects in the device itself, but not in accessories such as e.g. batteries, cables, power supplies, etc. Problems arising from improper/incorrect handling or care, excessive use, accidents, repairs made by an unauthorised party, exposure to corrosive conditions, damage due to foreign objects entering the device or incorrect adjustments are NOT covered by the limited warranty and may void it. The above warranty does not affect any legal rights that you might have under applicable national legislation governing sale of consumer goods. Your hearing care professional may have issued a warranty that goes beyond the clauses of this limited warranty. Please consult him/her for further information.

### If you need service

Take your EduMic to your hearing care professional, who may be able to sort out minor problems and adjustments immediately.

## Warranty

### Certificate

Name of owner: \_\_\_\_\_

Hearing care professional: \_\_\_\_\_

Hearing care professional's address: \_\_\_\_\_

Hearing care professional's phone: \_\_\_\_\_

Purchase date: \_\_\_\_\_

Warranty period: \_\_\_\_\_ Month: \_\_\_\_\_

Serial no.: \_\_\_\_\_

## Technical information

EduMic contains a radio transceiver using Bluetooth Low Energy (BLE) and a proprietary short range radio technology both working at ISM band 2.4 GHz. The radio transmitter is weak and always below 22.4 mW equal to 13.5 dBm E.I.R.P. (in total radiated power).

EduMic complies with international standards concerning radio transmitters, electromagnetic compatibility and human exposure. Due to the limited space available on EduMic, relevant approval markings can be found in this booklet.

For body worn operation, this device has been tested while touched the human body and meets FCC and IC RF exposure limits. The transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

EduMic contains the software LittleFS © 2017, Arm Limited. All rights reserved. Please visit Support on [www.oticon.ca](http://www.oticon.ca) for more details.

Additional information can be found in the Technical Data sheet on [www.oticon.ca](http://www.oticon.ca)

Regulatory Model: N01.

### USA and Canada

The device contains a radio module with the following certification ID numbers:

FCC ID: U28N01

IC: 1350B-N01

The device complies with Part 15 of the FCC Rules and with Industry Canada's licence-exempt RSSs.

Operation is subject to the following two conditions:

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

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

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

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer or an experienced radio/TV technician for help.

The manufacturer declares that this EduMic is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

Declaration of Conformity is available at the manufacturer.



Manufactured by:  
Oticon A/S  
Kongebakken 9  
DK-2765 Smørum  
Denmark  
[www.oticon.global](http://www.oticon.global)



Waste from electronic equipment must be handled according to local regulations.



**Imported and Distributed by**

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## Description of symbols used in this booklet

	<b>Warnings</b> Text marked with a warning symbol must be read before using the device.
	<b>Manufacturer</b> The device is produced by the manufacturer whose name and address are stated next to the symbol. Indicates the medical device manufacturer, as defined in EU Directives 90/385/EEC, 93/42/EEC and 98/79/EC.
	<b>CE mark</b> The device complies with Medical Device Directive 93/42/EEC.
	<b>Electronic waste (WEEE)</b> Recycle hearing aids, accessories or batteries according to local regulations. Hearing aid users can also return electronic waste to their hearing care professional for disposal. Electronic equipment covered by Directive 2012/19/EU on waste and electrical equipment (WEEE).
	<b>Regulatory Compliance Mark (RCM)</b> The device complies with electrical safety, EMC and radio spectrum requirements for devices supplied to the Australian or New Zealand market.
	<b>Double insulation</b> Indicates that product power supply is double insulated. This means a very low risk of single fault failures.
	<b>Indoor use</b> Indicates that the product is qualified for indoor use.
	<b>Medical device</b> The device is a medical device.

	<b>TwinLink 2.4 GHz</b> The device contains Bluetooth Low Energy (BLE) 2.4 GHz radio technology, which supports wireless streaming to Oticon hearing aids with a 2.4 GHz receiver.
	<b>Hearing loop</b> This logo incorporates the universal symbol for hearing assistance. The "T" signifies that a hearing loop is installed.

## Description of additional symbols used on labels

	<b>Keep dry</b> Indicates a medical device that needs to be protected from moisture.
	<b>Caution symbol</b> Consult instructions for use for warnings and cautions.
	<b>Catalogue number</b> Indicates the manufacturer's catalogue number so that the medical device can be identified.
	<b>Serial number</b> Indicates the manufacturer's serial number so that a specific medical device can be identified.
	<b>Battery recycling symbol</b> Li-Ion Battery recycling symbol
	<b>Power supply inlet</b> Indicates the rate at which power is sent from the power supply to your device.
	<b>Firmware</b> Firmware version used in the device