



# EAR3H

## HELMET AMP

MODEL NUMBER: IA-E3H-AMP

*Thank you* for choosing the IASUS EAR3H Helmet Amp, the newest evolution in a long line of IASUS portable audio amplifiers. The EAR3H boosts any audio track, giving it a fuller and more robust sound from a micro and compact form factor, with the signature IASUS quality and performance many have come to trust.

In addition to boosting volume, the EAR3H also features the embedded Transparent Mic to introduce transparency into your music by blending in surrounding ambient sounds. This keeps you safe in no matter what environment you wish to experience premium in-ear audio.

The EAR3H is based on the EAR3 Micro Amp, but with a special attachment designed for helmet users - an IASUS proprietary quick release mounting system. Just snap it on and go.

In this manual are instructions and tips to operating the EAR3H Helmet Amp. Should you have any questions and require assistance with setup and usage, please feel free to visit our website or contact us directly at : [info@iasus-concepts.com](mailto:info@iasus-concepts.com)

You must register your product to be eligible for warranty service. To register online, please visit the IASUS Concepts website. To receive warranty service, you will need to provide a copy of your dated sales receipt to confirm warranty status. Please retain the original copy for your records.

# ABOUT THIS MANUAL

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We recommend reviewing this instruction manual in its entirety before using your EAR3H Mobile Amp.

It introduces and explains the EAR3H's features, how to set them up, and correct operation for a rich user experience that you come to expect from the best performing amp on the market today.

## WARNINGS

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Any changes or modifications to this product not expressly approved by IASUS Concepts Ltd. could void the 1-year limited warranty. Should there be any questions or concerns about modifications, please contact IASUS.



## CAUTION

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Do not operate your device at high volume levels when using the EAR3H Amplifier. Hearing experts advise against continuous exposure to high volume levels. If you experience ringing in your ears, discontinue using the EAR3H immediately.

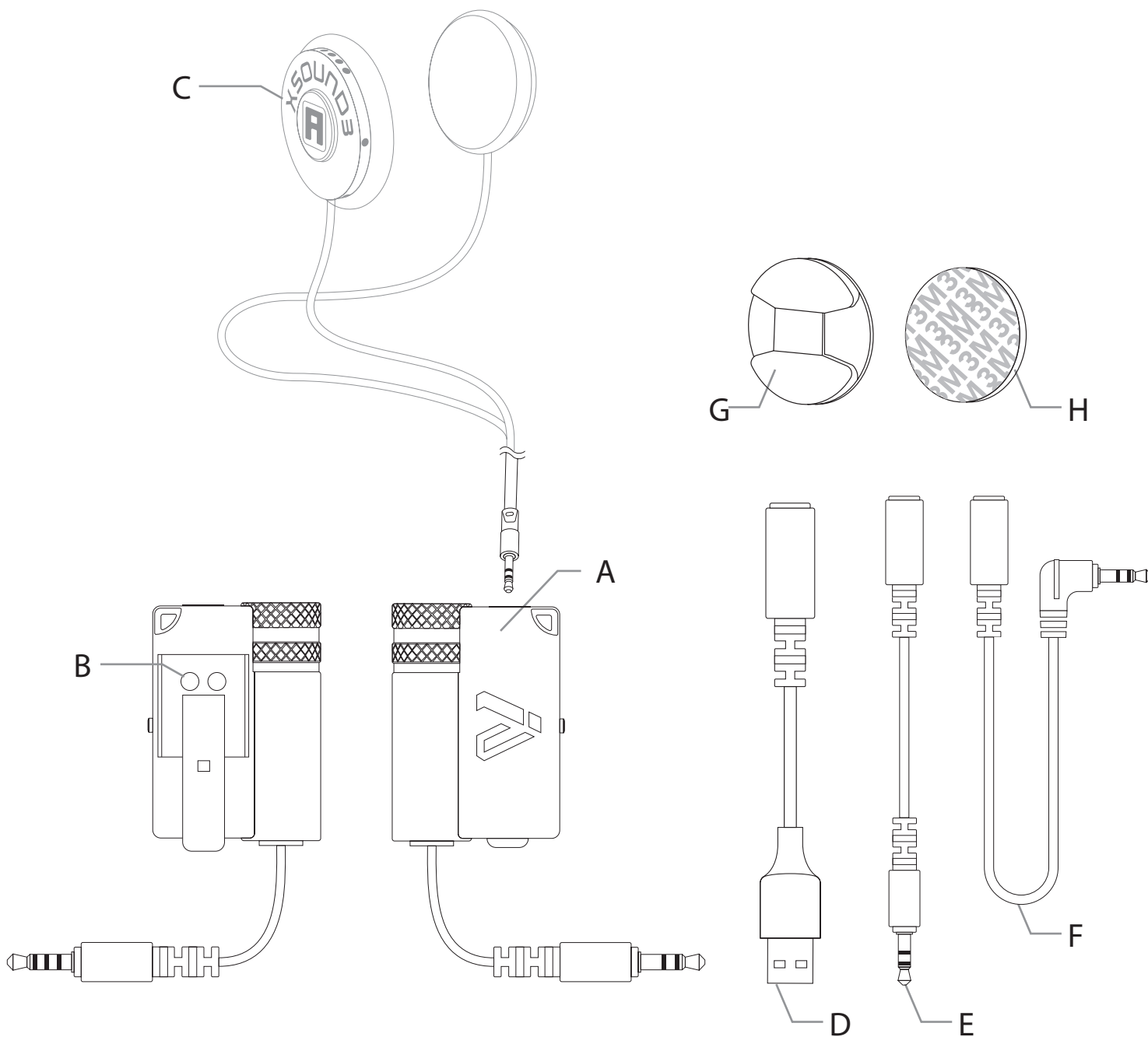
Do not turn the volume up too high on the EAR3H. This amp has the potential to damage helmet speakers, earphones, headphones, etc., should they not be rated for a higher audio input. Use the volume amplification carefully by increasing the volume slowly. Proceed with caution to avoid over boosting your helmet speakers, earphones, headphones, etc., but most importantly, to avoid permanently damaging your hearing.

# TABLE OF CONTENTS

PACKAGE CONTENTS .....	4
PARTS & CONTROLS REFERENCE .....	5
SPECIFICATIONS .....	5
CHARGING THE EAR3H .....	6
BOOSTING VOLUME AND SAVING BATTERY LIFE.....	6
CONTROLS .....	7
POWER ON/OFF .....	7
VOLUME + / -.....	7
CONNECTING THE EAR3H .....	8
AUDIO SOURCE.....	9
AUDIO OUT .....	10
MOUNTING THE EAR3H ONTO A HELMET.....	11
TRANSPARENCY MODE .....	12
TURNING TRANSPARENCY MODE ON .....	12
TURNING TRANSPARENCY MODE OFF .....	14
1-YEAR LIMITED WARRANTY .....	15

# PACKAGE CONTENTS

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## EAR3H AMPLIFIER

**A**..... EAR3H Amplifier

**B**..... Quick Release Clip

**C**..... XSound 3 Helmet Speakers (Sold Separately)

## ACCESSORIES

**D**..... 3.5mm to USB-A Charging Cable

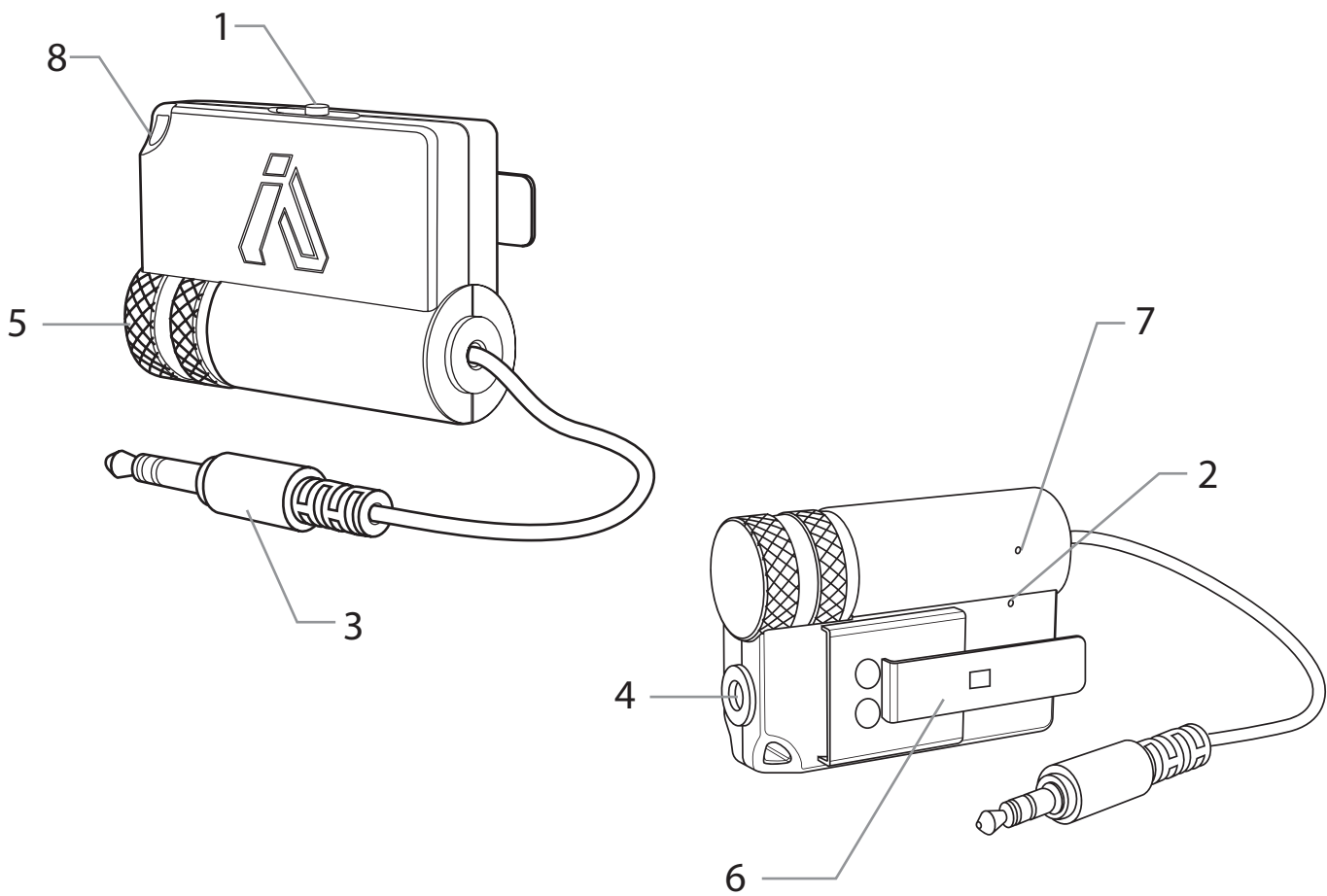
**E**..... Short Extension Cable

**F**..... Long Extension Cable with right angled plug

**G**..... Quick Release Mount

**H**..... 3M Double Sided Adhesive

# PARTS & CONTROLS REFERENCE



- 1 ..... Transparency Mode Switch On/Off
- 2 ..... Mic for Transparency Mode
- 3 ..... Input 3.5mm jack Cable
- 4 ..... Output 3.5mm jack plug

- 5 ..... Volume Knob
- 6 ..... Quick Release Clip
- 7 ..... Charging indicator LED
- 8 ..... Lanyard Loop

# SPECIFICATIONS

## DIMENSIONS

51mm x 37mm x 20mm  
2" x 1-3/8" x 3/4"



WEIGHT  
30g | 1oz



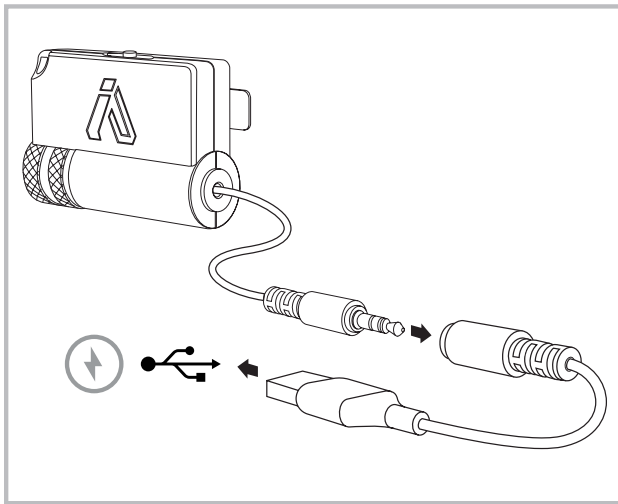
## BATTERY

OPERATION .....20 HOURS /charge  
CHARGING TIME .....3 HOURS  
BATTERY CAPACITY .....150mAh

## AUDIO

BOOST .....10Hz to 100Hz +0/-0.1dB  
OUTPUT .....55mW / channel x2 @ 16Ω  
S/N RATIO .....100dB@32Ω, 20mW  
FREQ RESPONSE .....10Hz to 100Hz +0/-0.1dB

## CHARGING THE EAR3H



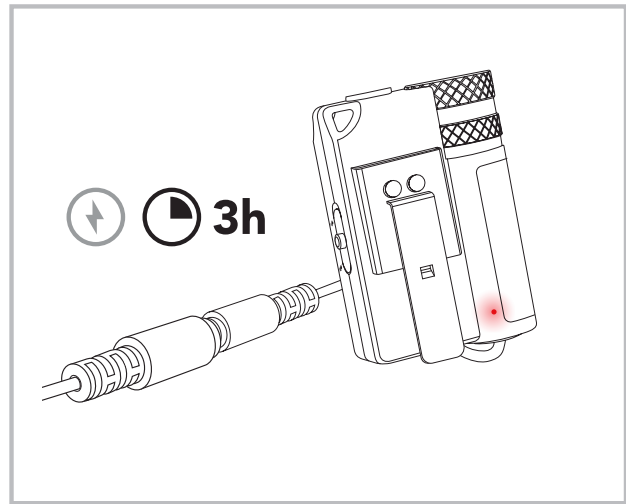
The EAR3H is powered by an internal, non-removable lithium-ion battery. It is best to charge the EAR3H to full before the first use.

When charging is required, connect the included charging cable to the input jack at the bottom of the unit and the other end to a computer USB port.

When charging, the Charging Indicator LED (7) is lit



**Use only the included IASUS charging cable. Using any other charging cable may cause permanent damage to the EAR3H.**



red and will turn off when charging completed.

A full charge can be completed in about 3 hours when charged using a computer's USB port (0.5A output). Each charge allows for usage of up to 20 hours, depending on the output volume level and ambient temperature.

To prolong the life of the battery cells, IASUS does not recommend charging the EAR3H using high output USB chargers (ie. 1.0A, 2.1A, etc).

**Note:** If the EAR3H will not be used for a prolonged period, fully charge the unit before storing to prevent permanent damage to the battery.

## BOOSTING VOLUME AND SAVING BATTERY LIFE

One of the EAR3H's main features is amplifying your audio source's signals to higher and sufficient levels for your helmet speakers and earphones. This results in the fuller and richer sound one comes to expect from IASUS portable amplifiers.

Another main feature is conserving the power on your audio source (smartphone, music player...)

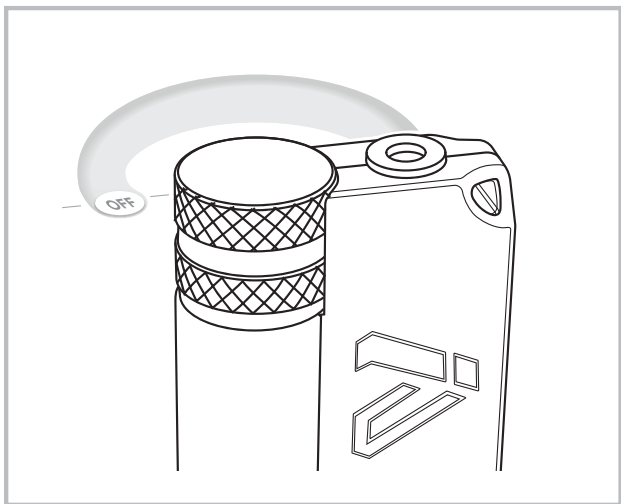
**Example:** Lowering the volume on your phone and turning up the EAR3H will allow you to achieve the same desired volume while saving your phone's battery power.



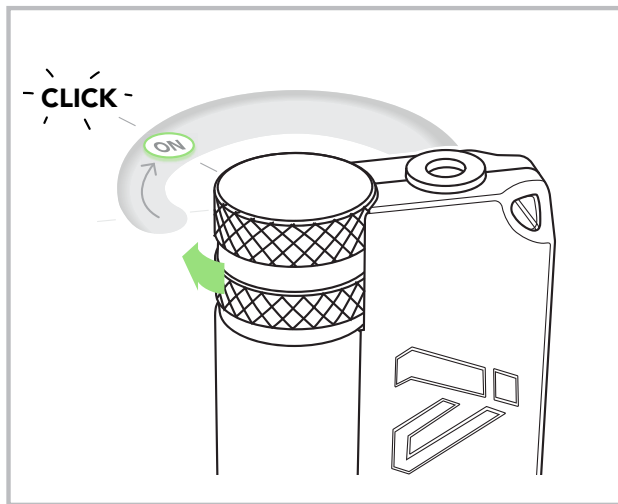
**WARNING:** Do not turn the volume up too high on the EAR3H. It has the potential to damage helmet speakers, earphones, headphones, etc., should they not be rated for a higher audio input. Use the volume amplification slowly and proceed with caution to avoid over boosting your helmet speakers, earphones, headphones, etc., but most importantly, to avoid permanently damaging your hearing.

# CONTROLS

## POWER ON/OFF



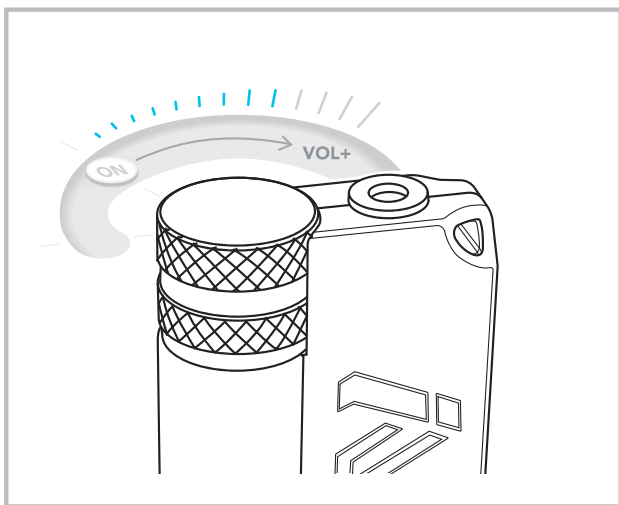
The EAR3H is equipped with the IASUS signature CNC-machined and knurled aluminum volume knob for an enhanced grip, even when operating with gloves.



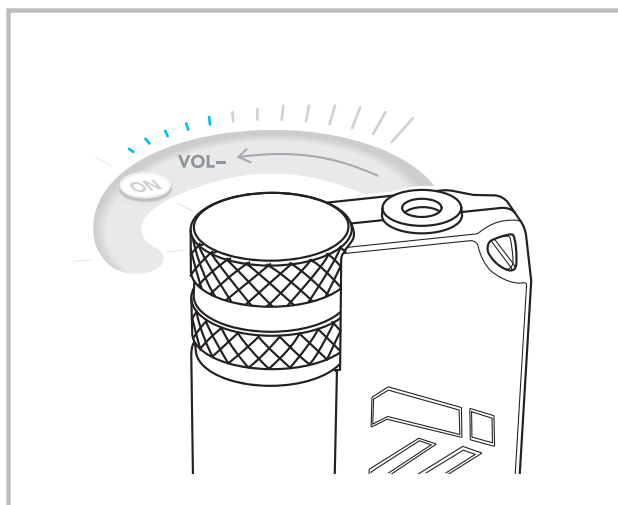
To power on the EAR3H and increase the volume, turn the volume knob clockwise until you hear and feel a click.

To power off the EAR3H, turn it counter-clockwise until you hear and feel the click.

## VOLUME + / -



Power on the amp and continue turning clockwise to your desired volume level.

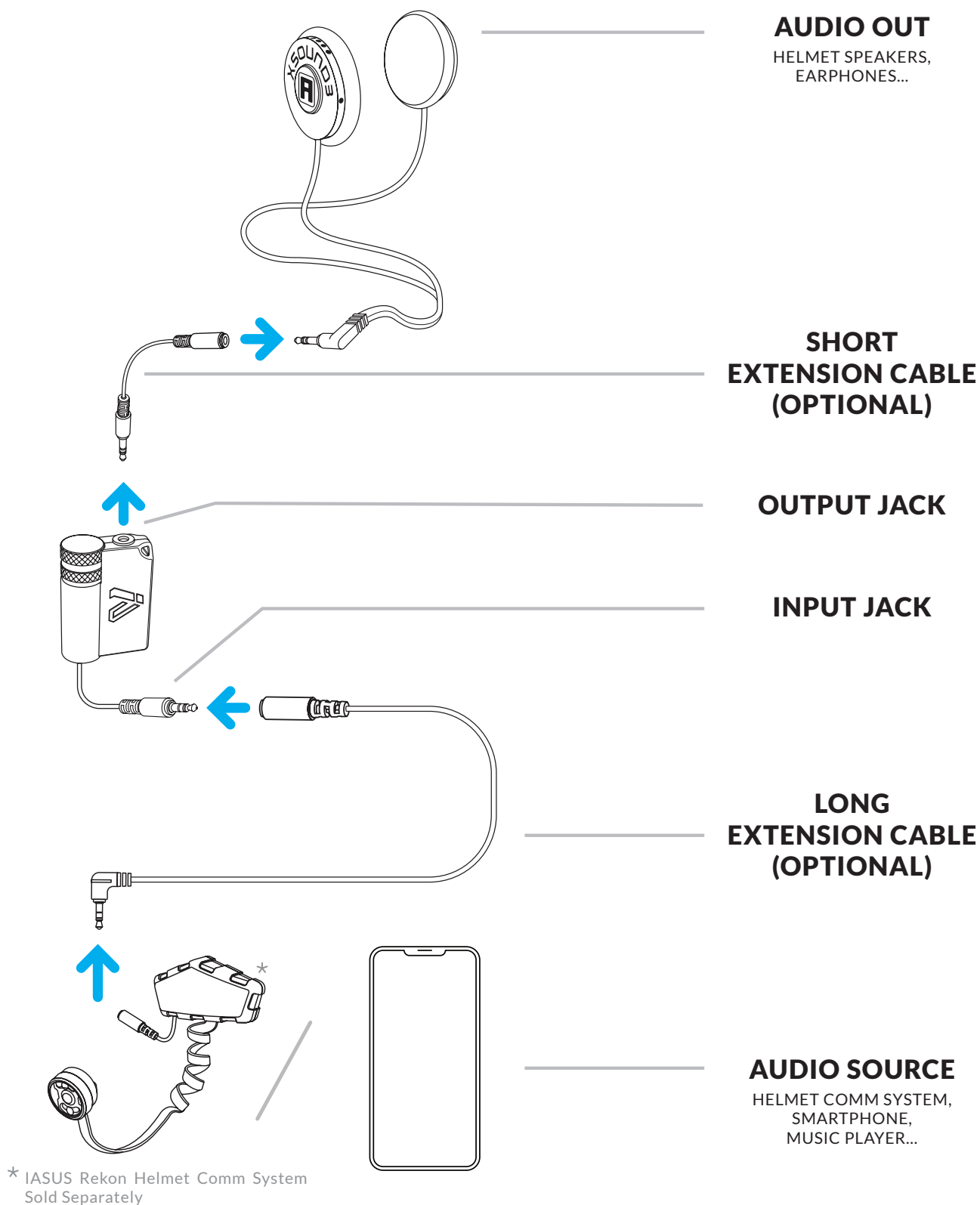


To decrease the volume, turn it counter-clockwise.



**WARNING:** Do not turn the volume up too high on the EAR3H. Please exercise extreme caution when doing so. It has the potential to damage helmet speakers, earphones, headphones, etc., should they not be rated for a higher audio input. Use the volume amplification slowly and proceed with caution to avoid over boosting your helmet speakers, earphones, headphones, etc., but most importantly, to avoid permanently damaging your hearing.

# CONNECTING THE EAR3H

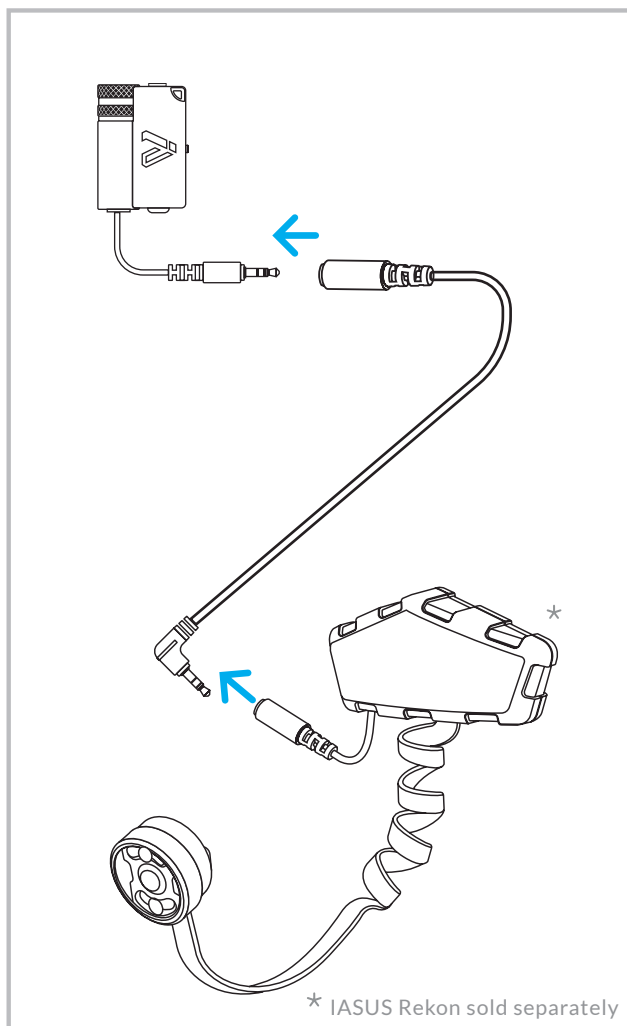


**Note:** While the EAR3H Output Jack supports headsets and earbuds with an inline mic, any mic input will not pass through the EAR3 and into the audio source. A smartphone will not receive any input from that mic.

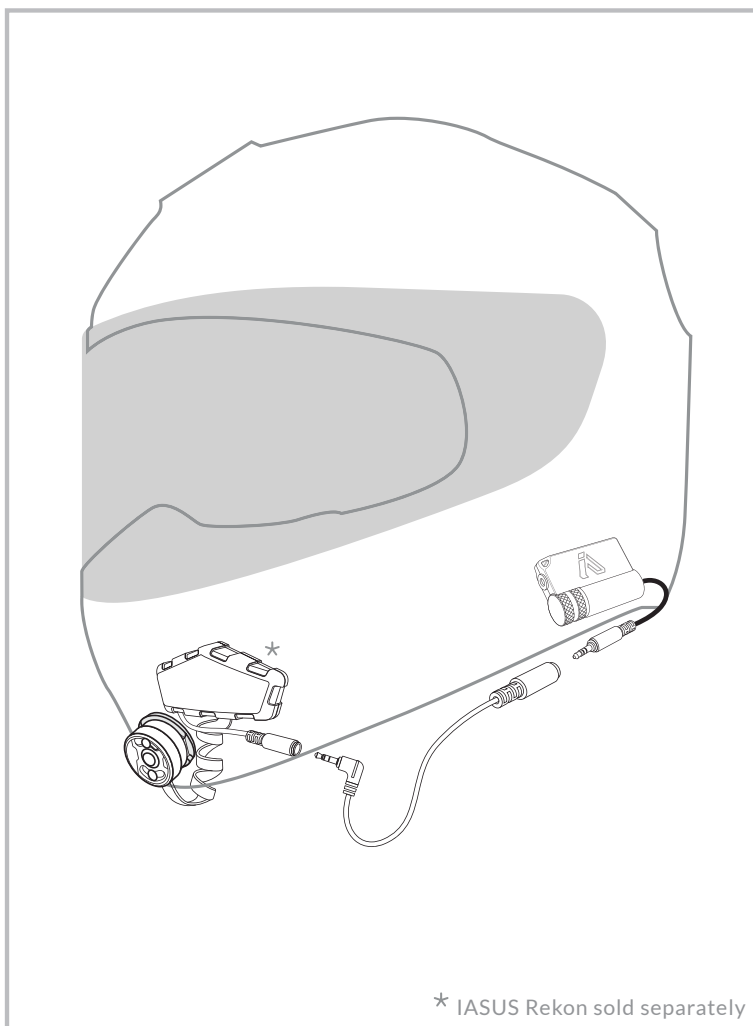


# CONNECTING THE EAR3H

## AUDIO SOURCE



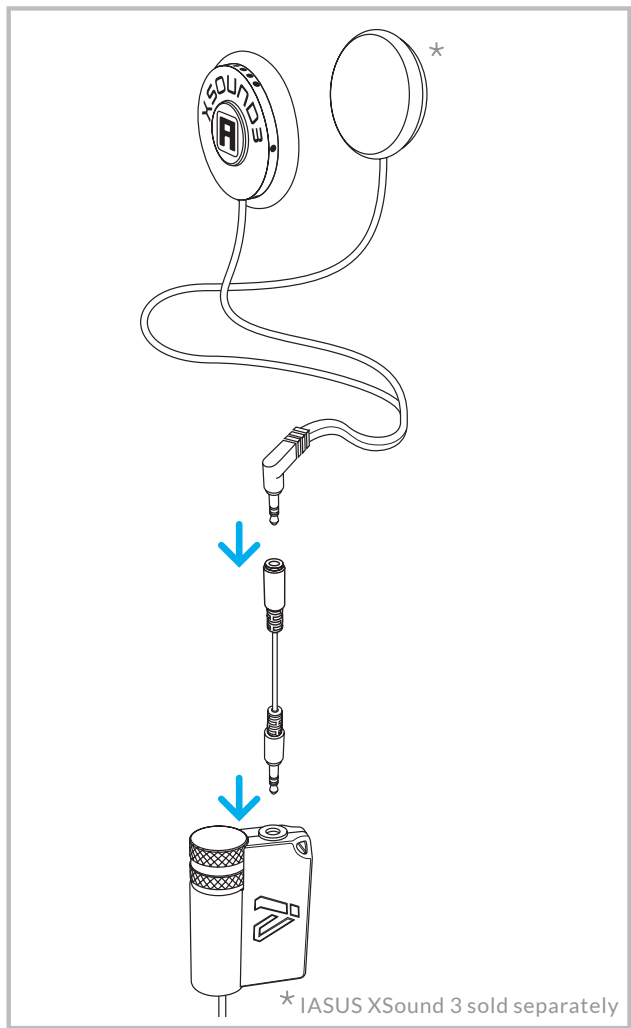
Connect the Audio Source into the Input jack (3) of the EAR3H Amp.



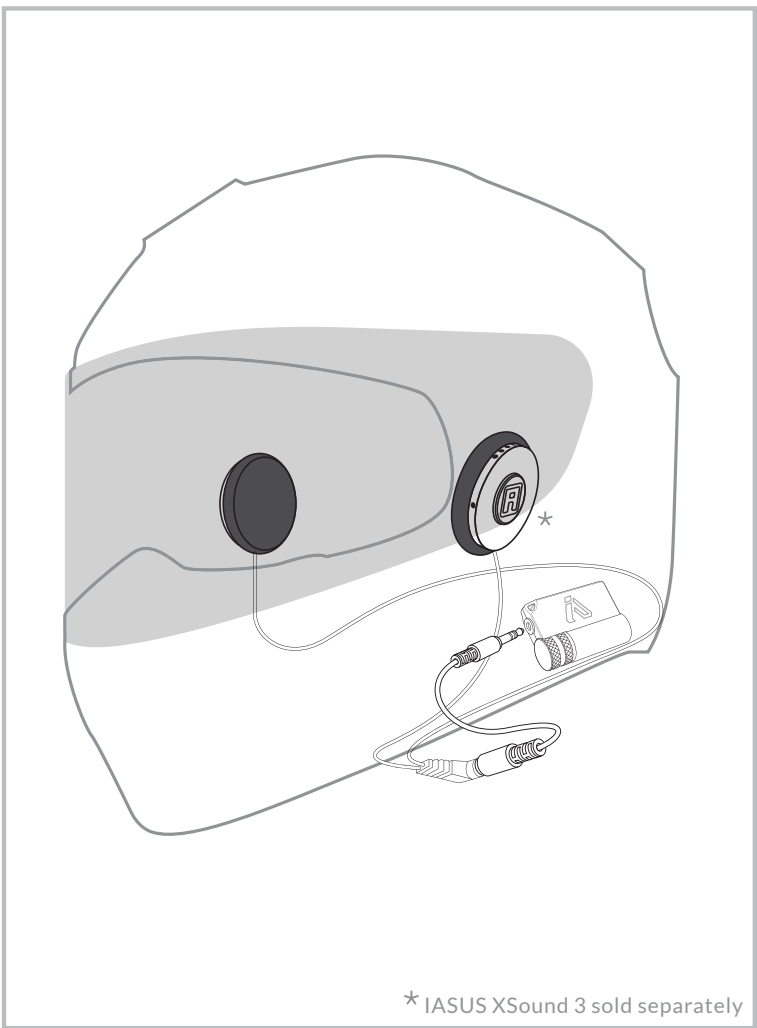
In most cases when installing onto a large helmet, use the included extension cable with right angle plug to connect the EAR3H Amp with your audio source (helmet comm, smartphone, music player...).

# CONNECTING EAR3H

## AUDIO OUT



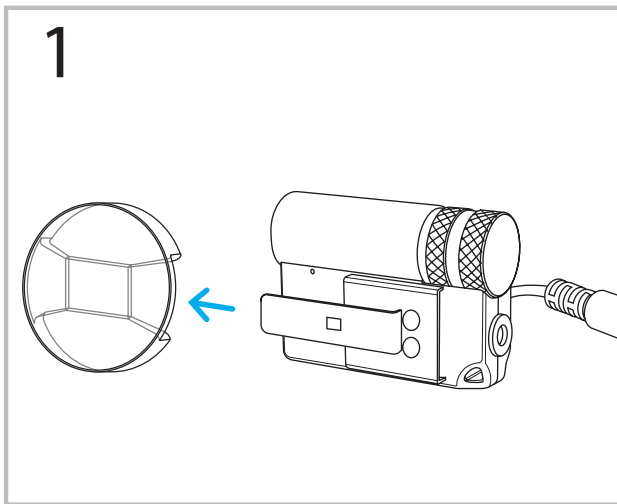
Connect helmet speakers, or earphones directly into the Output jack (4) of the EAR3H Amp.



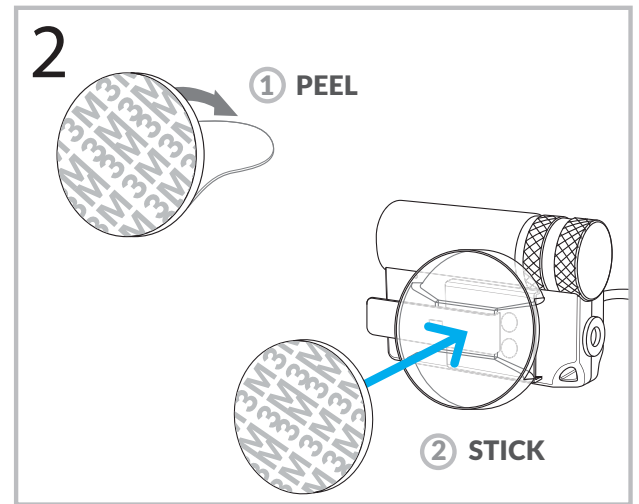
If needed, use the included short extension cable. For a tidy installation, cables can be tucked behind the helmet padding.

# MOUNTING THE EAR3H ONTO A HELMET

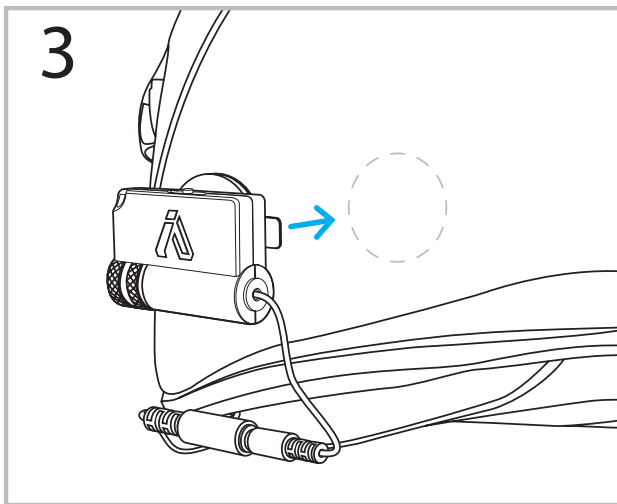
The EAR3H utilizes the included IASUS proprietary quick release system. To install, follow these steps:



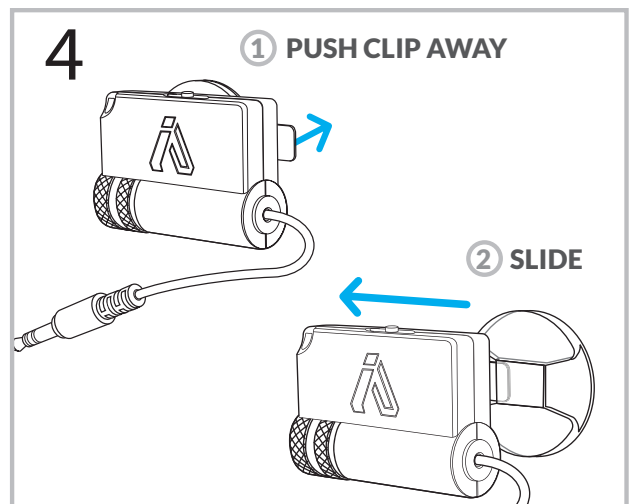
Clean the mounting surface of your helmet.  
Secure the EAR3H onto the Quick Release Mount (G).



Peel away the backing paper on the 3M Adhesive (H)  
and position it on the Quick Release Mount (G)



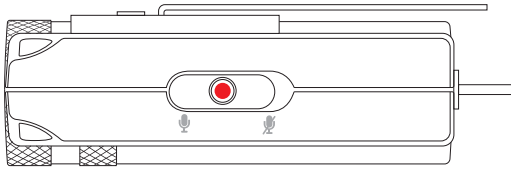
Peel the second backing paper on the 3M Adhesive.  
Position on your helmet and press firmly.



To remove EAR3H from the mount, simply push the  
clip away from the amp and slide the unit until it is  
fully released.

# TRANSPARENCY MODE

## TURNING TRANSPARENCY MODE ON

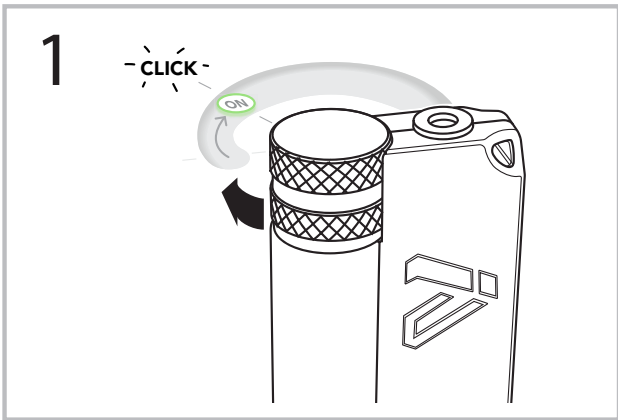


One of the unique features of the EAR3H is the Transparent Mic. With the flick of a switch on the side of the unit, the ambient sounds from your surroundings are mixed in with the audio source, enabling you to be aware of what's around you as you enjoy your amplified audio.

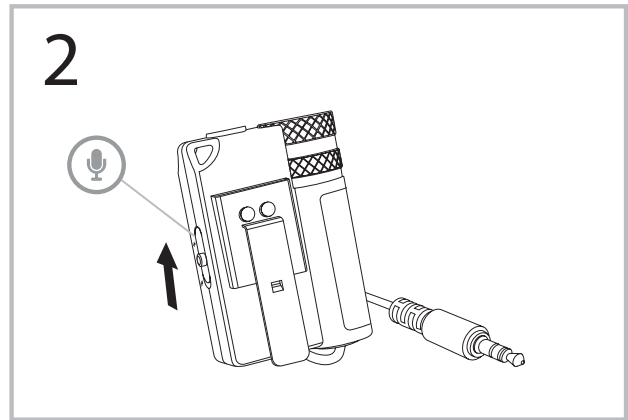
### TRANSPARENCY MODE ON



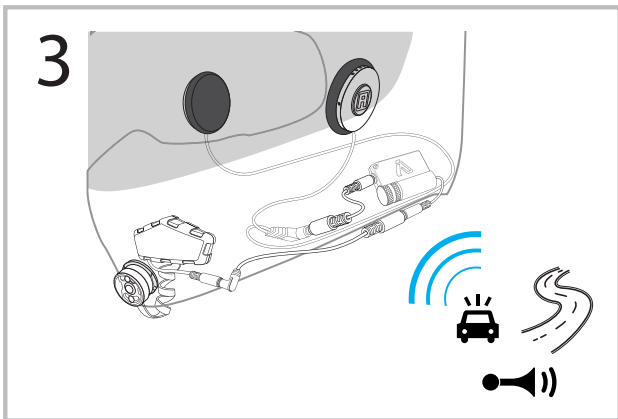
Mixing ambient sounds into your audio source is simple and convenient to do:



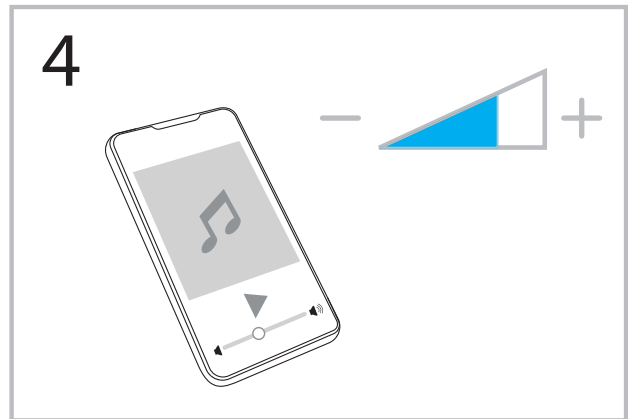
Power on EAR3H Amp by turning the volume knob (5) until you hear and feel a click.



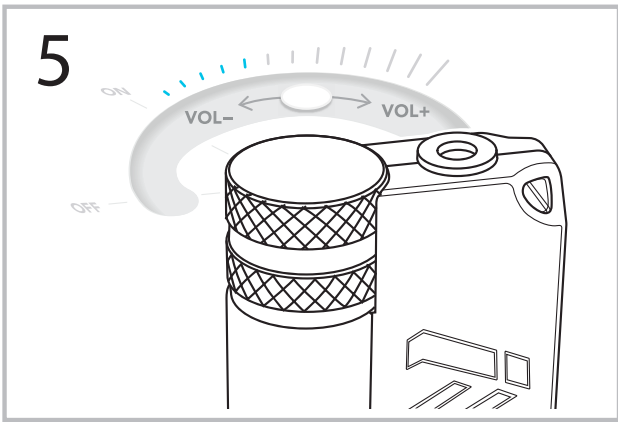
On the side of the EAR3H, slide the TRANSPARENCY MODE switch to the ON position.



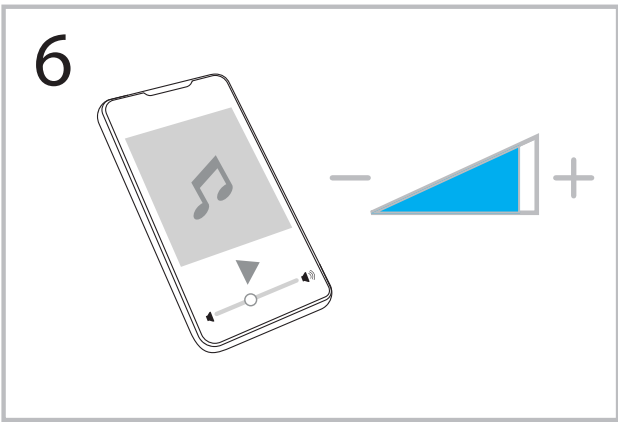
Put on the helmet and adjust EAR3H volume for ambient sounds by slowly turning the volume knob.



Play a track on the audio source and adjust the volume on it to your liking.



Adjust the overall volume with the volume knob of the EAR3H Amp. This will adjust both the music and the ambient sounds volume at the same time.



Fine tune the desired volume between music and ambient sounds by using the audio source volume control.

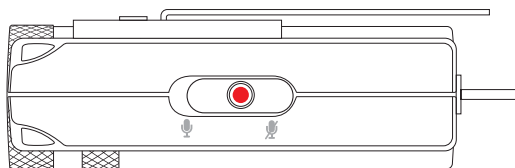
**Tip:** For the audio source to be louder than the ambient sounds, turn up the volume on the audio source and reduce the EAR3H volume. The following table give some examples on how the ambient sounds (EAR3H) and the audio source affects the desired output volume.

EAR3H Volume (Ambient Sounds)		Audio Source Volume		Overall Volume
HIGH	+	HIGH	>	LOUD Ambient Sounds LOUD Audio Source
LOW	+	HIGH	>	LOW Ambient Sounds LOUD Audio Source
HIGH	+	LOW	>	LOUD Ambient Sounds LOW Audio Source

Using these combinations, the ambient sounds and audio source can be fine tuned to suit your personal listening preference.

## TURNING TRANSPARENCY MODE OFF

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When using the EAR3H in environments where ambient sounds do not need to be heard, disable the Transparent Mic for the EAR3H to only amplify the audio source. The sound will be cleaner and more solid than using a direct signal from your audio source, and is capable of putting out higher volume compared to connecting to the audio source directly.

### TRANSPARENCY MODE OFF



**WARNING:** Use caution when turning the volume up to higher levels on the EAR3H. The EAR3H has the potential to damage helmet speakers, earphones, headphones, etc., should they not be rated for higher audio input. Use the volume amplification slowly and proceed with caution to avoid over boosting your helmet speakers, earphones, headphones, etc., but most importantly, to avoid permanently damaging your hearing.

# 1-YEAR LIMITED WARRANTY

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IASUS Concepts Limited warrants that the EAR3H Helmet Amp sold by IASUS Concepts or its authorized agents is free from defects in materials and workmanship under normal use for one year. This warranty is only applicable to the original purchaser in possession of a dated sales document receipt that includes the name and the company from which it was purchased. This warranty is in lieu of and excludes all other warranties, expressed or implied, including any implied warranty of merchantability or fitness, and of any other obligation on the part of IASUS Concepts Limited.

## WHAT THIS WARRANTY DOES NOT COVER

- Damage from improper operation, misuse, neglect such as dropping the product onto hard surfaces, contact with extreme humidity or heat, or acts of nature (lightning, floods, power surges, etc.).
- Products that may have been tested, adjusted, installed, maintained, repaired or altered in any way by persons not expressly approved by IASUS Concepts Limited.
- Cords that are stretched, burnt, torn or cut.
- Products purchased more than 12 months previous to the current date.
- Products that are not accompanied by a valid proof of purchase.

## TO REGISTER FOR YOUR WARRANTY

You must register your product to receive warranty service. To do so and to view detailed information about our warranty service, please visit :

<https://iasus-concepts.com/warranty/>

## TO GET WARRANTY SERVICE FROM IASUS CONCEPTS

Please contact our customer service department via our website. Once you have done so, you will receive instructions on how to ship the products to IASUS Concepts or to one of our designated service centers. If instructed to ship the product, you must ship it with freight, duties and insurance prepaid. Regardless of where you are instructed to ship your product, you must include:

- A copy of your dated sales document receipt
- A fully completed Return Materials Authorization (RMA) form.
- Payment for any services or repairs not covered by the warranty. This will have been predetermined with your customer service representative.

## LEGAL INFORMATION

There is no informal dispute settlement mechanism available. This warranty gives you specific legal rights, and you may also have other rights, which vary geographically. Some areas do not allow limitations on how long an implied warranty last and/or do not allow the exclusions or limitations or consequential damages. IF this is true for your area, the above limitations or exclusions may not apply to you. IASUS Concepts shall not be liable for any special or consequential damages or for loss or expense directly or indirectly arising from use of the product, inability to use the product in combination with other equipment, or from any other cause. IASUS Concepts reserves the right to make changes in the design of the product and to make additions or improvements to it without incurring any obligation to modify any products previously sold.

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