## **Problem solving**

#### 1. Bad ATC reception - reading you two

The most common problem for fresh aviators, is that the microphone is placed too far away from the mouth. This makes the intercom and radio pick up little or no audio from you, and this will of course lead to problems. Keep the microphone approx. 6mm from your mouth at all times – and let the flat side & white dot face your mouth.

A good basic rule is that when you hear yourself well in the intercom, ATC and other aircrafts hear you well. However – the aircraft intercom and the radio are usually two separate and independent systems and they behave differently.

## 2. Intercom squelch setting.

On most GA aircrafts intercoms, the squelch is set manually.

If the first part of the word is clipped – or the intercom squelch is not opening at all – this must be corrected by adjusting the squelch threshold in the aircraft.

#### 3. Audio in left ear only:

The Avee microphone is set to stereo mode. Set to mono mode to fix this issue.

#### **TECHNICAL SPECIFICATIONS**

#### **Document information**

Document version: 4.7 - September 9th 2022

Valid for products: AveeXM3/XM4 NG (for Sony WH1000XM3/XM4)

#### Connectors

Headphone connector: 3.5mm - four pin audio

Connector to aircraft interface cable USB C
Bias voltage accepted: 9-16VDC

#### Microphone

Type: Noise reduction

Output signal: Adjustable with potentiometer

Output signal level: Adjustable between 0.5V RMS and 2V RMS

Default output level: 0.7 V RMS @ 1khz / 74dB SPL

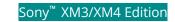
#### Headphone speaker

Audio level: Adjustable with potentiometer (10-100%)

#### **DISCLAIMER**

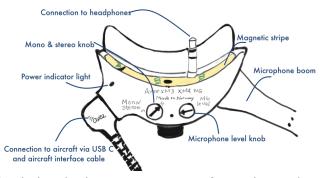
Avee is an unlicensed third-party accessory and is not affiliated with Bose<sup> $\mathbb{I}$ </sup> or Sony<sup> $\mathbb{I}$ </sup>. Bose<sup> $\mathbb{I}$ </sup> or Sony<sup> $\mathbb{I}$ </sup> does not approve or endorse the products manufactured by Avee.







## The Avee Aviation Microphone Setup Instructions & User Guide



**Tusen takk** (which is *thank you* in Norwegian ) – for purchasing the Avee aviation microphone! We hope it gives you as much joy flying with it – as it gives us designing it - and flying with it!

In this leaflet we will show you how to prepare and connect the Avee microphone to your headset – and how to use it.

## How to prepare your headphones

The Avee microphone is using an <u>adhesive magnetic</u> <u>stripe</u> to attach safely to your Bose<sup>™</sup> or Sony<sup>™</sup> headset. This solution makes it easy to attach and detach the Avee microphone from the headphone in seconds, and the Avee microphone stays safely in place whenever it is connected to the headphones.

Please follow these instructions to install the magnetic stripe properly to your headphones. You can also scan the QR-code in the upper left corner of this page to get a video on how to do it.

**Step 1:** Using the cleaning wipe supplied, clean the base of your headphones including the area surrounding the input jack. Ensure that you remove any residue that is adhered to the headphones. Let dry for a minute or two.

**Step 2:** We are now preparing to transfer the magnetic stripe to the headphones using the Avee microphone as a jig. Let the magnetic stripe be attached to the Avee microphone, and remove the adhesive stripe *protective backing from the magnetic stripe*. The magnetic stripe *should stay on the Avee microphone* and the adhesive side should be facing the headphone.

**Step 3:** Guide the add-on to the base of the left headphone and firmly press it in

place for minimum 30 seconds. Once attached, carefully unplug it to reveal the adhesive magnetic stripe being transferred to the headphones.

Press firmly on the tape to ensure all edges of the tape have adhered to the headphones.

Optimally the adhesive on the magnetic stripe needs a 24 hrs curing time.

# That is all - the Avee aviation microphone is ready to be used!



## Connecting the Avee microphone to the aircraft

To start using the Avee microphone in the aircraft, follow this procedure:

- Plug the Avee aircraft interface cable into the Avee microphone using the angled USB connector. Use force to make the USB C connector go all the way into the USB socket. The connection may be done in two directions – either the cable pointing upwards – or the cable is pointing downwards.
- Switch on the ANR on the headphones before attaching the Avee to the headset. Please note that you will always have audio in your headphones regardless of headphone battery level or headphones ANR status and
  - The Avee <u>microphone output</u> is NOT affected by headphone battery power level.
- 3. Attach the Avee microphone to the headset. Make sure the Avee microphone is clamped safely to the headset.
- 4. Plug the Avee aircraft interface into the aircraft. Please note that the aircraft connector might be the dual GA, Lemo Redel, Neutricon or XLR-5 all depending on what you have purchased from us & what is available in your aircraft.

- 5. When the aircraft radio & intercom is switched on, the mic add-on will get bias power from the aircraft. This is indicated with a steady dimmed Power indicator light on the bottom side of the Avee microphone.
- 6. The internal Bluetooth® available in your headset will automatically disconnect all units connected via Bluetooth® when the Avee microphone is connected.

To be able to listen to music or use your phone when flying, you need the Avee BlueLink. Check out our web pages for more info on this product.

### **Headphone volume setting**

Adjust the headphone volume by using the *Volume knob* on the bottom of the Avee microphone. Rotate <u>clockwise</u> for minimum volume and <u>anti-clockwise</u> for maximum volume.

Please note that for most pilots the normal procedure for adjusting the headphone volume is by setting the Avee headphone volume to maximum – and then adjusting the volume *from the aircraft audio panel*.

In small GA aircrafts, the headset volume is typically adjusted individually for pilot and co-pilot. Volume level in the *left back seat* is following the *pilot volume level*, while the *right back seat* is *following the level set by the co-pilot*.

In this case we suggest letting the back seaters adjust the volume level to lower level (if needed) using the volume control on the Avee microphone.

## Microphone output level

The microphone output level is factory set to a normal output level, and will usually not require adjustments.

The output level may however be set by using the <u>Mic level adjustment knob</u> on the bottom side of the Avee microphone and your finger nail or the corner of a credit card as a tool.

Level 9 is maximum and level 1 is minimum level. Factory setting level is 3. *Avoid setting the output level to high. This will make the noise cancelling microphone in the Avee pick up unnecessary cockpit/ambient noise and the signal might saturate.* 

#### Headset mono & stereo mode

The Avee microphone is set to the mono mode (factory setting), by turning the mono / stereo adjustment knob fully to 'M'. To set stereo mode, turn the adjustment knob fully to S. Please note that most aircrafts have a mono radio & intercom system. If you set the Avee to stereo mode in an aircraft with mono support, you will loose the sound in the right earphone.