



Part No. MM001AA

UL-300 ANR & VOX, ULM Headset

USER MANUAL V1.0

www.microavionics.com

UL-300 with ANR & VOX

Thank you for buying the UL-300 headset. Used correctly you will have many years of clear communication. Please read this manual in full before use.

This headset has been specifically designed to work in open and enclosed cockpits with specific attention to noise reduction and clear communication. The headsets are compatible with our UL100 & UL200 headsets, and Lynx Avionics Micro system.

The headset is fitted with ANR (active noise reduction) and VOX. ANR listens to the noise penetrating the ear cup and cancels this noise out using phase reversal technology. The result is an extremely quiet ear defender, even under the harshest environment. The ANR technology reduces this noise by 6dB, which is twice as quiet compared to non ANR.

The UL-300 also has VOX. VOX is a system where the microphone is switched off when you are not speaking. This in turn switches off the speakers in the ear cups to give an exceptionally quiet headset. The VOX level is user adjusted by a small control on the headset

The UL-300 is a first of its kind for microlight aircraft. The result from VOX & ANR means you have a very quiet headset.

Instructions:

Charging:

The headsets have only a small charge from new. You should connect the headsets to our plug in wall charger, or connect to our powered radio interface. If using the wall charger you should leave on charge for 18 hours for the first charge. Do not charge for longer as this will shorten the life of the batteries. The headset has Nigh batteries. Nigh batteries do not have a memory effect like Ni Cad batteries. This means you can charge the headset even if they are not flat. A charge of 12-14 hours is recommended from flat batteries.

If charging via the interface then connect two headsets and when the charge light appear on the interface you can disconnect the headsets.

Connecting:

Solo: For non-radio use. When flying solo you can connect the headset to a switching adapter- our part No. MM003. This enables the user to monitor background noise from the engine.

Dual linking: For none radio use. When flying dual you can connect two headsets via the linking adapter- our part No. MM004. This gives you a portable intercom that can be carried between aircraft.

Interface: For use with radio, phone or music. Connect one or two headsets to the radio interface. This will give you a two way intercom or use solo if required. You can now use the headsets to transmit on radio, use the mobile telephone or listen to music. Headset extension leads can be purchased if required.

Helmets

The UL-300 headset can be fitted underneath the Micro Avionics helmet (part MM020A). A helmet should be worn if there is a risk of head injury.

Compatibility

Compatibility is not a problem. Although the headsets have been specifically designed to work with each other (UL-300 series), they will work with the UL-100/UL-200 & Lynx Avionics Micro System although VOX and ANR performance will be reduced, unless used with UL-200 or UL-300.

Using VOX

You should take time to familiarise yourself with this feature. Please take time to learn this feature.

The microphone sponge should be skimming your lips. If the microphone is further away then you will reduce its noise cancelling properties. This would greatly reduce the performance of the headset.

The small adjuster at the top on the left hand ear cup adjusts the threshold of the VOX. If turned fully clockwise the microphone will be permanently on. Turned fully anti-clockwise the microphone will be muted and will not turn on until you speak loudly into the microphone.

There is an overrun set into the headsets. This means that when taking slight pauses the microphone does not mute. Please bear this in mind when setting up the VOX mute level adjuster. The overrun is approximately one second.

Set the VOX level once your aircraft is in the cruise. You should set the VOX level to mute your voice at the lowest mute level. To achieve this turn the VOX adjusters so the microphone is muted 'OFF'. There will be no amplified background noise (do not speak at this point). Now turn the adjuster until the microphone cuts in 'OPEN/ HOT MIC' (you will hear amplified engine noise [do not speak at this point]). STOP adjusting at this point! Now turn the VOX dial clockwise a small amount (raising the cox level). This is the optimum level of mute. However in noisy conditions, or open cockpit aircraft you may need to turn the VOX level up otherwise background noise will activate the microphone. Also, when setting the VOX please bare in mind that the microphone will be active for around 1 second after speaking. Please take your time to familiarise yourself with this function. Listed below are a few pointers to help set the VOX.

- Turn both headset VOX to Max mute.
- Set one headset at a time.
- DO NOT speak whilst setting VOX level, or you WILL set the level too high.
- Set VOX level once in the cruise.
- Slowly turn the VOX adjuster until you hear background noise cut in.
- Now turn the dial clockwise (UP) a small amount. The mix will mute after 1 second.
- Make sure the mix sponge skims your lips.
- Now adjust the second headset in the same way.
- Your headset is now optimised.

Using ANR

There is no user setting up or adjusting to the ANR. For the ANR to be effective you must use in conjunction with the VOX. When the microphone of the headset is muted the ANR will be most effective.

MM001AA

UL-300

HEADSET

www.microavionics.com