

# SH 50-10 AVIATION HEADSET

USER MANUAL Edition 1 (2017)

#### Welcome

We are so confident this product will bring you of years of trouble free, quiet, comfortable and enjoyable use that we offer not only a full 5 year warranty (by registration, see separate document for details) but we also offer our unrivalled satisfaction guarantee, if you are not entirely satisfied for any reason with the product simply return it (full details available on request)

The SH50-10 is a high performance ultra lightweight aviation headset, using the latest miniature audio transducer technology and a high sensitivity noise cancelling electret microphone we have produced one of the lightest aviation headsets available today weighing only 130grams. All this means you suffer from less fatigue and can enjoy a more pleasurable user experience.

## WARNING!

Please read the information in this user manual carefully and completely before using your headset. Keep these instructions and make them easily accessible to all other users. Always include this user manual when giving this headset to third parties.

In an unlikely event of a problem with your headset, it is recommend to switch to an alternate communication method and to use standard cockpit resource management skills to minimize distraction.

Your aircraft sounds such as engines, propellers, warning alarms and other sound sources may sound differently when using a new headset.

Do not attempt to disassemble the headset as this may void your warranty and result in unexpected performance of your headset. Always refer servicing and repair to SEHT approved service centres. Contact SEHT for details.

## Features

One of the lightest aviation headsets in the world only at only 130grams ergonomically designed to fit perfectly in the ear making it very comfortable for long term use.

24dB Noise Reduction Rating (NRR), an amplified electret noise cancelling microphone and enhanced high fidelity sound speaker system for crystal clear communication, dual volume controls on the separate control box for perfect and easy balance adjustment with Mono/Stereo switch.

## Using the SH50-10

Fitting your headset correctly is essential to ensure the correct performance and above all to make it comfortable to use.

The following steps will assist you in achieving the correct and optimum fit:

- 1. Place the headband behind your head not over the head.
- 2. Hang the earpiece wire around your ear
- 3. Put the earbud inside the ear.
- 4. Move the earphone around in order to get the best comfort and noise cancellation balance.





Step 2

Step 3

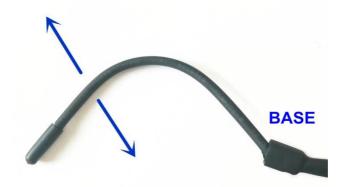
5. **Earbud selection** - Choosing the right size earbud for your ear is very important to achieve the best performance. Each headset includes 3 pairs of replaceable silicon rubber earbuds (shown below), the medium size is fitted by default to the headset.



 Headband adjustment - The headband does not need to fit tightly on the back of the headset. To make adjustments to the headband. Holding the metal band in front of you use both hands to apply equal pressure to expand or contract the size as desired.



7. Ear loop adjustment - It is important that the ear loops feel comfortable when the headset is on. Hold the base of the loop and adjust the bracket openings to the desired shape for a comfortable, light fit. Please ensure you are not pulling the speaker wires



8. **Microphone adjustment** - Position the microphone 1/8 inch from your mouth with this side of the microphone facing the mouth (windshield removed)



## **Understanding Controls**



#### Stereo/Mono selection (B)



Whether you should use Mono or Stereo setting depends on your aircraft's avionics. Incorrect setting will result in communication being heard in only one side. For most general aviation aircraft the mono setting is required.

#### Volume adjustment (A)

Each ear volume can be independently adjusted. The overall headset volume will be determined based on the settings on the headset as well as the aircraft's intercom or radio.

Caution: Avoid setting the volume levels too high. Exposure to loud sounds may cause hearing damage.

## **Pro Tips**

- 1. Clean ear tips perform better. Keep the ear tips clean and free of ear wax to extend their useful lifetime.
- 2. Wash the ear tips with water and mild soap if desired
- 3. Ensure the headset is fitting correctly by reviewing the adjustments listed in this manual
- 4. The ear tip should be inserted all the way to provide an all-around seal in the ear canal
- 5. Position the microphone in front of your lips for maximum noise cancellation
- 6. Set Mono/Stereo setting to match your aircrafts avionics, if set to the incorrect setting audio will be lost in one ear.

## FAQ

- Q) Why can I hear in only one side?
- A) The SH50-10 headset is compatible with both Stereo and Mono aircraft avionics. If your headset is set to the incorrect setting for your aircraft hearing will be lost in one side.
- Q) Why do I need to speak louder to activate the microphone?
- A) Your avionics' squelch setting must be adjusted correctly. It is common for every pilot to change the squelch setting just like adjusting the volume. Please consult someone who is familiar with your aircrafts avionics if you cannot locate the squelch knob or button.
- Q) How often should I change the replaceable earbuds?
- A) Change your earbuds when giving the headset to another person or when tips appear soiled or contaminated, generally a pair of tips will last few months before needing to be replaced
- Q) Where can I purchase replacement earbuds?
- A) You can purchase official SEHT replacement earbuds from your local SEHT stockist or directly from the SEHT website.

## **Technical Specifications**

#### General

Operating Temperature:	-20 to 70°C (-4 to 94°F)	
Storage Temperature:	-35 to 75°C (-31 to 167°F)	
Weight:	130g	
Cord Length:	180cm	
Noise Reduction Rating (NRR):	24dB	

#### Headphone

Transducer:		40mm moving coil
Frequency Response:		20Hz – 20kHz
Nominal impedance @ 1 kHz	Mono:	150 ohms in parallel
	Stereo:	600 ohms in series

#### Microphone

Transducer principle: Frequency response: Maximum SPL (Sound Pressure Level): Terminating impedance: Operating voltage: Noise-canceling electret 200Hz - 6000Hz 114 dB 220 - 2200Ohms 8 - 16V DC