

**SEHT**



# **SM-1 MICROPHONE SYSTEM**

**USER MANUAL  
Edition 1.0(2019)**

## 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 SM-1 is a new innovative product. It's simple to use just attach this microphone to your active Hi-Fi headphones to transform it into an active noise cancelling aviation headset.

## 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

Very light microphone harness at only 130g, easy to use and attached using Velcro pads and releasable cable ties means the microphone can also be easily removed and reattached when required.

Amplified electret noise cancelling microphone for clear communication and auxiliary input for external audio/GPS device. Easy to use dual volume sliders and mono/stereo switch on hand controller.

## Contents

- Microphone cable harness
- Carry case
- User manual
- Cable clips
- 10 x releasable nylon cable ties
- 6 x self adhesive 3M Velcro pads
- Velcro strap
- 2.5mm to 3.5mm connector adaptor

## Using the SM-1

1. Using one of the supplied Velcro pads separate it and stick the male side (hard) on the left side of the headband of your headphones, stick the female (soft) side on the SM-1



2. Attach the SM-1 to your headphones and insert the 2.5mm plug into the input socket of your headphones (use the 2.5mm to 3.5mm supplied adaptor if required)



3. Using a cable tie secure the SM-1 tightly to your headphones (it is recommended to use 2 cable ties for improved stability and durability). Pull the cable ties as tight as possible then cut excess leaving around 1 cm protruding to make it easier to release and reuse in the future (extra cable ties and Velcro pads are supplied for future use as required).



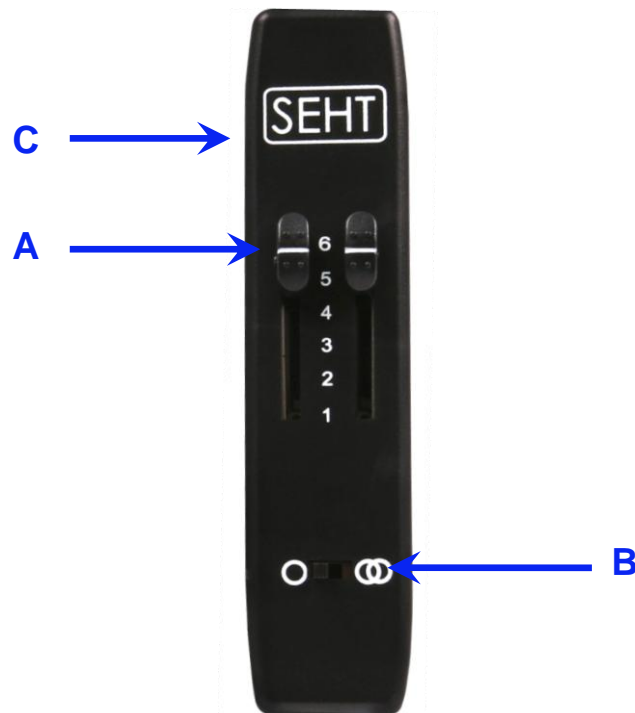
4. Secure the cables with the Velcro strap to keep them neat and tidy.



5. 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.

## Connecting auxiliary devices (C)

The SM-1 can be connected to an external audio source such as a portable audio device or a GPS via the provided 3.5mm cable.

When using this input be aware that the volume is controlled from the external device and should not be set too loud so you cannot clearly hear radio communication.



## Pro Tips

1. Ensure the microphone is fitting correctly by reviewing the adjustments listed in this manual
2. Position the microphone in front of your lips for maximum noise cancellation
3. Set Mono/Stereo setting to match your aircraft's 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 SM-1 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 aircraft's avionics if you cannot locate the squelch knob or button.
- Q) Where can I purchase replacement Velcro pads and tie wraps?
- A) While you can purchase official SEHT replacement parts from your local SEHT stockist or directly from the SEHT website the pads and tie wraps are common items and can easily be sourced locally or online.

## 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

### Microphone

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