

**SEHT**



**SH 30-60  
AVIATION HEADSET**

**USER MANUAL  
Edition 4 (2018)**

## OVERVIEW

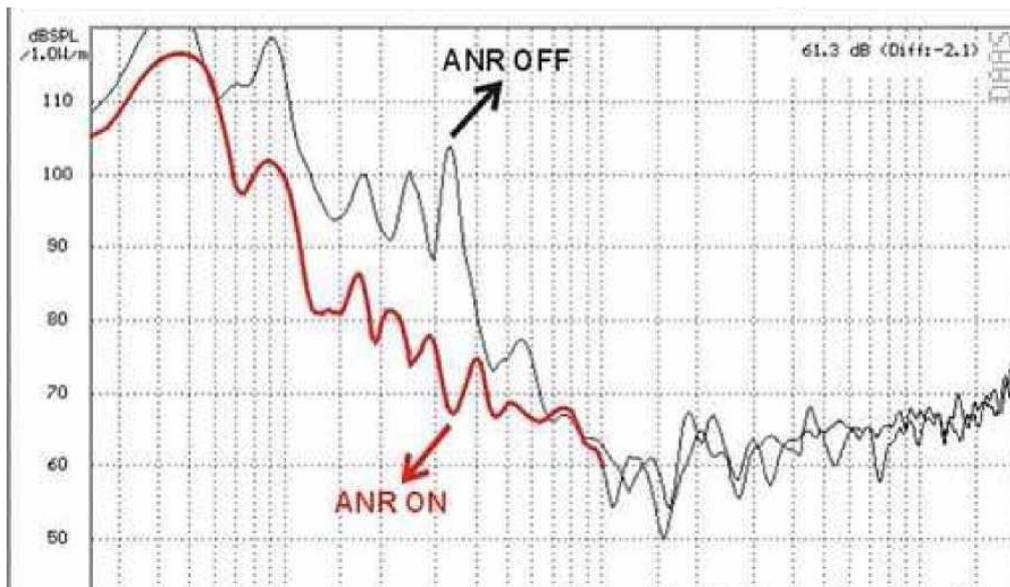
With the SH 30-60 you will hear and feel the difference immediately by improving low frequency noise cancellation by an additional 18-24 dB when the Active Noise Cancelling circuitry is enabled

## OUTSTANDING FEATURES

- Superior active noise cancelling level, average 20dB
- Up to 48 hours use from one 9v alkaline battery (included)
- Synthetic leather ear seals for greater comfort and noise reduction
- Noise cancelling electret microphone for improved vocal clarity
- Auto Power On and Off to extend battery life
- 5 YEAR WARRANTY

## MAIN FEATURES

- Active Noise Reduction Aviation Headset (ANR power: 9V battery)
- Passive Noise Reduction Rating (NRR): 24dB
- Active Noise Reduction Rating (NRR): 20dB
- Total Noise Reduction Rating (NRR): 44 dB



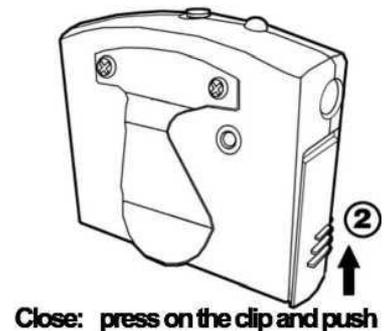
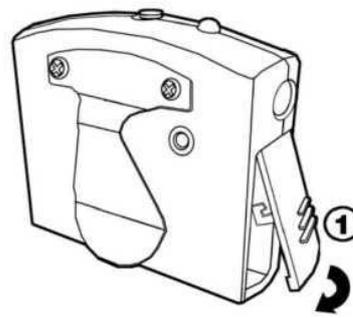
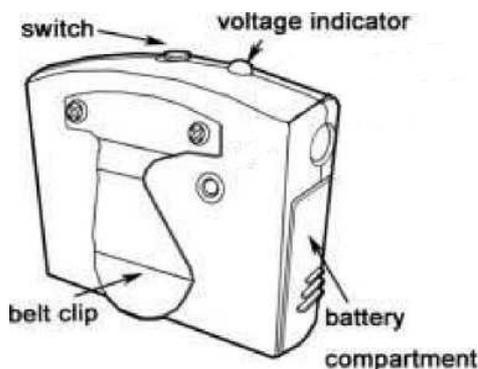
An Active Noise Reduction Headset can isolate, offset and reduce repetitive and continuous noise. In comparison with conventional headsets it can, under noisy circumstances, provide a quieter and more comfortable experience by reducing background noise, making it possible to improve the telecommunication quality and clarity which results in a higher operation safety factor. The noise cancelling circuitry reduces outside noise considerably more than a standard headset, making it more comfortable for the user.

## HEADSET OPERATION

1. Rotate the flexible boom overhead to wear the microphone on either the right or left side of the head.
2. Rotate the headset volume controls (on the ear shells) fully counter-clockwise to the minimum position, before the headset plug is inserted into the aircraft or intercom.
3. With the headband resting securely on the top of the head check that the ear seal are centred over the ears.
4. For best noise cancellation, position the microphone 0-6mm from your mouth.
5. Insert the microphone plug (PJ068) into the aircraft intercom microphone jack socket. Insert the earphone plug (PJ055) into the aircraft intercom earphone jack socket.
6. The headset ANR circuitry is automatically switched on when the connectors are inserted into the aircraft intercom system. The LED on the battery module will flash approximately once every 5 seconds to indicate working and healthy battery power.
7. Rotate the headset volume knobs clockwise to a comfortable level.

## BATTERY MODULE OPERATION

mono/ stereo



Close: press on the clip and push

Open: press on the clip and pull

N.B. The battery module requires one 9 volt PP3 size alkaline battery (Supplied).

1. Hold down the battery compartment clip and pull it to open.
2. Observe correct battery polarity and identify the positive (+) and negative (-) symbols on both the battery and the battery compartment when replacing the battery (Remove any transit insulating material from battery terminals prior to fitting).
3. Close the battery compartment lid and push back until it clicks into place.
4. The battery is automatically disconnected when the headset plugs are removed from the aircraft sockets.
5. There is a switch on the battery module to select MONO or STEREO.

## PLEASE NOTE

1. This headset can only work when the plug is connected with a working aircraft comms system. The microphone supply voltage acts as a signal to turn on the ANR function. The power of ANR function comes from the headset battery.
2. When the battery power is low, the LED indicator will flash red. This indicates approximately 1 hour battery life remaining under normal operating conditions. Once the battery is exhausted or removed the headset will continue to operate as a normal passive headset until a serviceable battery is correctly fitted. **The ANR function may not operate reliably under low battery conditions.**

## CAUTION

1. Proper fit is critical to noise attenuation effectiveness. When wearing the headset always push the headband down until it rests comfortably on the top of your head. Move the ear cups slightly up or down or from side to side until you feel maximum attenuation. The use of eyeglasses will reduce the attenuation, use thin temples on your glasses to keep noise leakage at a minimum.
2. Use in Impulsive Noise Area: NRR is based on continuous noise and is not an accurate indicator of the attenuation of impulsive noise such as gunfire. For maximum protection we recommend the use of ear plugs in addition to a headset in such environments..
3. Maintenance and Cleaning: In order for your headset to continue working properly, always comply the following:
  - a. Never alter your headset.
  - b. If you see a defect such as splits in cups etc seek immediate replacement or return to an approved SEHT service centre for repair.
  - c. Always fit SEHT approved replacement parts/accessories
4. Cleaning Instructions
  - a. Do not immerse in water.
  - b. Clean regularly with mild soap water. Sponge off head pad and ear seals, Taking care to rinse thoroughly

## HEADSET NOISE ATTENUATION DATA

1. The noise reduction or attenuation characteristics of communication headsets must be measured according to an accepted standard procedure if the characteristics of different headset are to be compared in a meaningful way.
2. The Noise Reduction Rating (NRR) is provided in accordance with U.S.EPA Regulation 40 CFR Part 211.Subpart B. The Range of Noise Reduction Rating for Existing Hearing Protectors is approximately 0 to 30. (Higher Numbers Denote Greater Effectiveness)

Frequency[Hz]	125	250	500	1000	2000	3000	4000	6000	8000
Attenuation [dB]	14.3	21.5	27.1	31.8	36	39.5	41.3	39.7	37.0
Standard Deviation	3.3	2.4	1.5	1.6	1.3	2.1	2.1	2.0	1.3

## SPECIFICATIONS

### **Noise Reduction Rating (NRR): 24dB**

#### **Headphone:**

Type:	Dynamic
Frequency Response:	50Hz to 20kHz
Sensitivity:	95±5dB SPL (1kHz, 1mW input per side)
Active Noise Attenuation:	Dynamic 42 Ohms: Rated Input: 30mW, Max. Input: 100mW
Speech Sound:	Dynamic 300 Ohms: Rated Input: 30mW, Max. Input: 100mW (full volume on ear simulator)

#### **Microphone and Amplifier:**

Element Type:	Noise-cancelling electret
Frequency Response:	100Hz to 5kHz
Operating Voltage:	8-32VDC (supplied by aircraft)
Matching Impedance:	150-1000 Ohms
Sensitivity:	-33±4d (ref: 0dB SPL=20.0uPa at 1kHz with 10 VDC 150 Ohms AC load)

#### **General:**

Operating Temp:	-20 to 70°C
Cord:	Straight cord from headset to moulded plugs, 150cm
Connections:	Earphone Plug : PJ-055 (0.25" 6.30 phone plug) Microphone Plug : PJ-068 (0.206" 5.20 phone plug)
Weight:	600g

#### **Noise Reduction Specifications:**

Attenuation Frequency Band.....	20Hz~20KHz
Main Attenuation Frequency Band.....	20Hz~600Hz
Attenuation Capability.....	18~21dB
Power Consumption.....	30mW

#### **General:**

Height:	10 to 14cm
Colour:	Black
Boom:	Flexible