

SEHT



**SH10XB
AVIATION HEADSET**

**USER MANUAL
Edition 1.0 (2022)**

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 with the product for any reason simply return it within 30 days (full details available on request)

The SH10XB is not just a high quality ANR aviation headset with an unrivalled price/performance ratio it also employs a Bluetooth v5 interface for simultaneous connection to two separate devices including navigation aids, mobile phone and audio players.

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 recommended to switch to an alternate communication method and to use standard cockpit resource management skills to minimise distraction.

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

When listening to an audio source via the SH10XB limit the volume to safe levels to ensure you are able to hear communication and warning alarms from your aircraft.

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

Advanced reverse noise cancelling technology, reduces up to 90% of background noise.

Noise cancelling dedicated 50mm driver, single piece formed corona diaphragm ensuring crystal clear, high quality sound reproduction. Hi-Fi quality speakers for music reproduction to maximise listening pleasure and reduce fatigue.

Failsafe design to ensure communication is not lost in the event of battery failure. Headset reverts automatically to passive mode.

Full cover cap design, high quality synthetic kid leather ear seal material to maximise comfort and reduce background noise.

Electret noise cancelling microphone to ensure faithful voice reproduction and minimise noise and unwanted breakthrough of interference.

Using the SH10XB

The SH10XB uses state-of-the-art technology to reduce exterior noise and promote clear in-flight communications reducing user fatigue.

Once the ANR power switch is activated the SH10XB reduces unwanted ambient noise through Active Noise Reduction (ANR). This is done by placing a microphone inside and outside the ear cup and generating an anti-noise signal through the speakers.

The anti-noise and the ambient noise cancel each other out before they reach the ear resulting in a quieter environment. Through this technology low frequency ambient noise is significantly reduced making communication easier and reducing user fatigue.

The SH10XB will continue to operate as a standard passive aviation headset should the ANR become inactive for any reason such as low or no battery power.

Getting started

Correct fitment is essential to ensure the correct operation of any headset. A good seal around your entire ear and a symmetrical fit across the top of your head is necessary to ensure the correct performance of the ANR feature.

The following steps will assist you in achieving the proper fit:

1. Extend the ear shell slider adjusters fully.
2. Place the headset on your head and compress the sliders slowly on each side until the head pad rests softly on the top of your head.
3. Adjust the ear cups to ensure the ears are fully inside the ear seal and there is uniform pressure on your head
4. Tighten the adjusters securely to prevent unwanted movement.
5. Position the microphone approximately 3mm from your lips.

Aircraft Squelch/Gain control (locate this on your aircraft)

The sensitivity of the squelch is controlled by turning the control clockwise (increasing microphone sensitivity) or by turning the control counter clockwise (decreasing microphone sensitivity).

The squelch can be adjusted to meet even the most extreme noise levels of aircraft noise.

Setting the squelch correctly allows the intercom to be active only when someone speaks into their headset microphone.

The intercom will become inactive as soon as they stop speaking. In this manner all Extraneous noise in the cockpit is not heard over the microphone

IMPORTANT

If the headset is not fitted correctly this may generate an oscillating noise, this is caused by the ears seals not sealing entirely around the ear, adjust the ear cup and ear seal to make sure the ears are sealed completely.

The microphone can be rotated and placed on the right or left side of the headset. To adjust the microphone placement rotate the microphone from its base and bend the flexible boom. For clear and crisp communication, the microphone should be placed approximately 3mm from the lips.

Battery Type

The SH10XB uses two AA batteries (supplied). Always use good quality alkaline batteries to ensure the best performance. DO NOT use rechargeable batteries as they provide reduced and uneven voltage which can interfere with the correct headset performance.

The SH10XB has a failsafe mode and will continue its basic operations of hearing and transmitting in the event of battery failure or without batteries fitted.

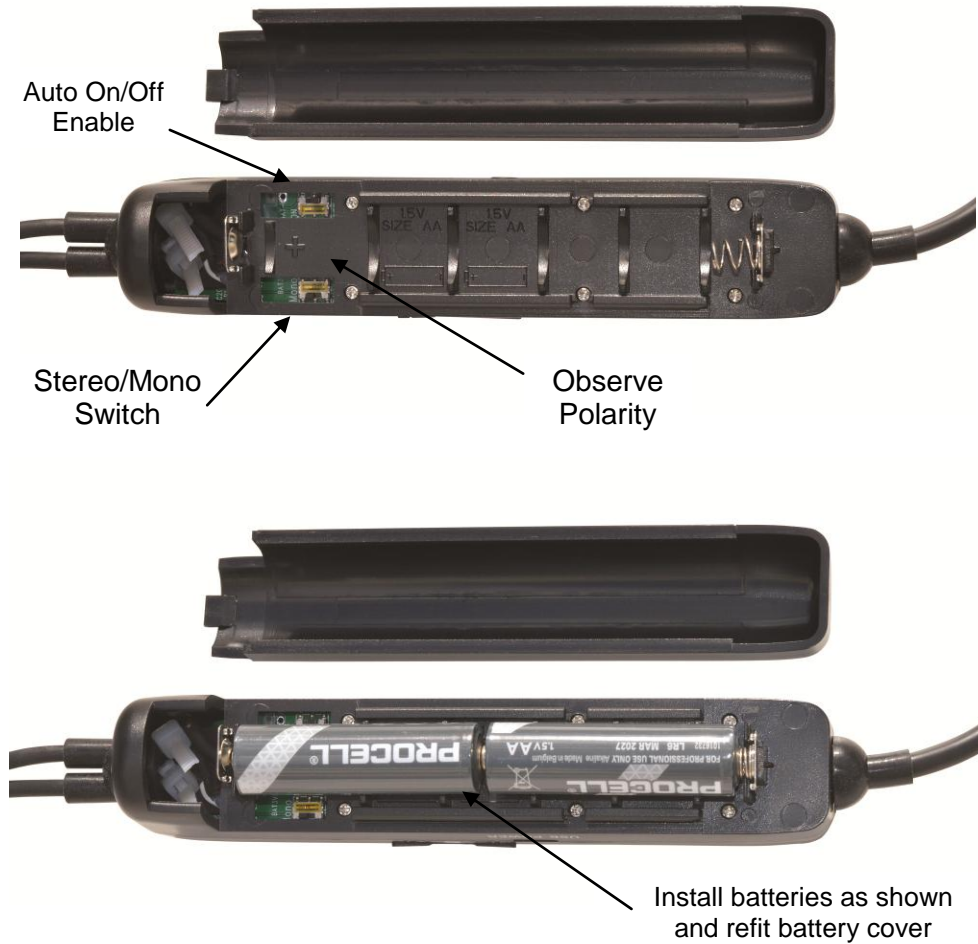
The SH10XB can be used with external power by using the USB-C connection on the hand controller and supplied cable.

DO NOT mix old and new batteries together.

Battery Installation



Press firmly and slide to one side to open the battery box



Mono/Stereo Operation

The switch is located on the LEFT side of the battery bay. This should be selected to the same as your avionics wiring. For most general aviation aircraft the mono setting is correct. If you only hear in one side of your headset then switch to the other setting.

Auto Shut Off

The SH10XB is set to switch off automatically if it is disconnected from the aircraft or an external device for a period of time in order to preserve battery life.

To disable the auto shut off feature simply move the switch (located in the right side of the battery bay) to the disabled position.

The auto shut off feature operates as follows:

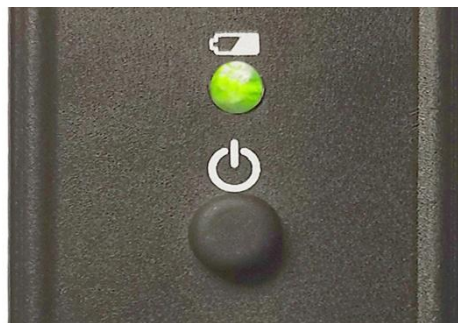
- If the SH10XB is not connected to a live intercom and there is no auxiliary or Bluetooth audio, it will auto shut off in approximately 5 minutes.
- If the SH10XB is not connected to a live intercom but there is a Bluetooth or auxiliary audio, it will auto shut off in approximately 60 minutes.

- If the SH10XB is connected to a live intercom it will not automatically turn off.

Please Note: If the SH10XB shuts off unexpectedly after 5 minutes it is recommended to disable the auto shut off feature.

Power Selection

Firstly the SH10XB MUST be switched on with the headset power control switch to activate the ANR circuits.



ON: Press the power button for more than 1 second then release (If power button is pressed for more than 3 seconds the SH10XB will switch on and then off). The power LED will illuminate and an audible command will be heard in the headset.

OFF: Press the power button for 1 second, the power LED will extinguish and an audible command will be heard in the headset.

Bluetooth



Press and hold the Bluetooth button for more than 1 second the SH10XB will start to search for previously connected devices, if none can be found it stays in the search phase. On your device look for the Bluetooth name “BT-Link” (if prompted for a code enter 0000)

The SH10XB employs Bluetooth 5.0 so it is possible to connect to 2 Bluetooth devices simultaneously using the following method.

Once you have paired to your first device then disable Bluetooth function on that device before pairing with the second device. Once the second device has successfully paired then re-enable the Bluetooth function on the first device, the SH10XB will re-pair to that device whilst remaining paired to the second device.

The SH10XB always tries to reconnect with the last devices it was paired to automatically, if no connection is made within 3 seconds it will enter search mode and start to search for new devices.

When in call mode the button functions as a call accept/reject function as follows:

- Press once to accept a call and press again to terminate.
- Press and hold button to reject an incoming call.
- Press twice to redial the last call.

To turn off the Bluetooth function press and hold the button for more than 1 second.

Bluetooth Volume/Track Control



Press and hold the relevant button to adjust the Bluetooth volume (there is an audible tone when max or min is reached). Briefly tap the relevant button to skip tracks in the direction desired.

Headset volume



To adjust the comms volume move the sliders for the relevant ear.

Please note: Adjusting the SH10XB volume does not affect the Bluetooth or auxiliary volume levels and does not affect the ANR function.

Audio Priority Modes

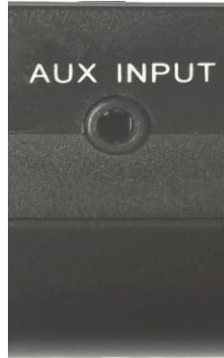


AUTO: With incoming transmission Bluetooth and auxiliary inputs are muted automatically and resume after the transmission ends.

MIX: Auxiliary and Bluetooth continue to play with the transmission

OFF: Only transmissions are heard, Bluetooth and auxiliary inputs are permanently muted in this mode. To preserve battery life the Bluetooth connection is switched off in this mode, once the mode is changed the Bluetooth will automatically reconnect to the devices.

Auxiliary Input



Use the provided 3.5mm cable to connect your device to the auxiliary input socket. This socket is a stereo wired 3.5mm jack socket.

Once a device is connected you will hear a voice prompt in the headset. Adjust the volume of the device to a suitable level from the device itself

Please Note: The Bluetooth volume controls can be used to adjust the volume level locally but does not control the auxiliary device remotely.

LED Colour Indicators

Main Power Button:

Steady Green:	Headset is powered via USB
Flashing Green:	Headset is powered by battery
Orange:	BT-Link has low battery
Flashing Red:	BT-Link will turn off shortly

Bluetooth Button:

Flashing Blue and Red:	Searching for device
Red Flash Twice:	Device Disconnected
Blue Flash:	Connected
Short Blue Flash:	Call is in progress
Steady Blue:	Aux 3.5mm plugged in

Storage

When storing the SH10XB in the carry case arrange it as shown in the picture below. This will prolong the life of your headset by not putting any undue strain on the cables caused by sharp kinks and bends.



Pro Tips

1. Always ensure the SH10XB is fitting correctly by reviewing adjustments each time you wear them, ear seals should be centered over the ears for best performance.
2. There may be a noise generated if the ears seals are not providing a good seal around the ear, in this case you should adjust the ear cup and ear seal to make sure the ears are covered and sealed correctly.
3. Position the microphone in front of your lips for maximum noise cancellation.
4. Set Mono / Stereo setting to match your aircrafts avionics. In most situations this would be mono, if set to the incorrect setting audio will be lost in one ear.
5. It is suggested that the USB power supply is used at all times to ensure continued operation of both the ANR and Bluetooth functions.
6. If using battery power the headset will operate correctly when the voltage level is correct. Once the battery starts to deplete the headset will turn off the Bluetooth function in order to maintain the ANR function. This mode will continue for many hours but it is recommended to change the batteries at your earliest convenience.

7. If the battery level is low you may experience increased noise levels in which case change the batteries with fresh ones immediately.
8. When the headset is powered on it is advisable to set the volume to the minimum level for clear communications, this ensures the noise level remains low and readability is improved.

FAQ

Q. Why can I hear in only one side?

A. The SH10XB 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. What is the best way to store the headset?

A. Please remove the batteries before storing the headset for a prolonged period, always store your headset in a ventilated area away from direct sunlight.

Q. Why do I need to yell 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. Consult someone who is familiar with your airplane's avionics if you cannot locate the squelch control.

Q. Why can I always hear cockpit noises in my ears even when I am not talking?

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. Consult someone who is familiar with your airplane's avionics if you cannot locate the squelch control.