

PA-1771T

Liberty Series

Owner's Manual

“Biggest Bang For The Buck”

Originally introduced at the Oshkosh AirVenture 2001 Fly-In as the first ANR headset with built-in cell/satellite phone jack, the PA-1771T continues to be one of the industry's most popular, affordable ANR headsets. As one of our lightest weight ANR headsets (11.9oz) this ANR combines 25dB (NRR) passive noise reduction and 18-22 dB of active noise canceling.

Features

Passive: 25 dB (NR)	Auxiliary Audio Interface
Active: Additional 18 – 22 dB	Dual Volume Control
30 dB Noise Reduction At 100 Hz	Custom Padded Headset Case
Mono/Stereo Capability	Uses 9V Alkaline Battery
Electret Noise Canceling Microphone w/ Windscreen	Auto On / Auto Off Circuitry
Sheepskin Head Pad	Battery Life 25 – 35 Hours
Silicone Gel Ear Seals	Weight: 11.9 Oz (333 Grams)
Cell/Satellite Phone Interface	Five Year Warranty

Made in USA

Additional Models

PA-1771TH Helicopter Model – with coiled cord and U174/U plug

Optional Accessories

Throat Microphone (PA-2E)
Leatherette Windscreen (PA-11)

Standard Foam Ear Seals (PA-21F)
Metal Headband

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2.0 Fitting Your Headset

Wearing your headset properly is paramount in achieving both comfort and the best performance possible. The headset should be placed on your head and slowly pulled down so that each ear cup is properly positioned over the ears.

It should apply slight pressure on your head without being too snug. You may need to make your final adjustments in a high noise environment and with the ANR electronics turned on.

2.1 Microphone Placement

Your headset comes with a fully flexible microphone boom and a noise canceling electret microphone. The boom can be rotated 360 degrees for left or right side use. Proper placement of the microphone is critical in order to achieve clear communications. The microphone should be positioned at the corner of your mouth approximately ¼" away from your lips.

2.2 Volume Control (On Comm-Cord Splitter)

The PA-1771T is fitted with two individual volume controls, one each for the right and left side of the headsets. The volume control is located on one side of the triangular splitter on the comm-cord. The other side contains the mono-selector switch. When adjusting the volume control the pilot-in-command should adjust their volume control first with the audio system turned on and the ANR system turned off. Then turn the ANR back on and adjust the individual sides of the headset.

2.3 Mono/Stereo Selector (On Comm-Cord Splitter)

Your headset comes standard with a Mono/Stereo selector switch which is located on one side of the triangular splitter. "M" indicates the mono position while "S" indicates the stereo position. The volume control is on the reverse side. It should be noted that if you are using a monaural intercom and your headset is set in the stereo position, you will only hear through one speaker of your headset. With a stereo intercom you will hear true stereo in both ears.

3.0 Battery Box

- A. Toggle Switch: The Toggle Switch on the battery box has 2 positions, Auto and On. To turn the ANR On when not plugged in to the aircraft panel or intercom, put the switch in the On position. To turn ANR Off, put switch in Auto Position. When switch is left in Auto position ANR will automatically turn on when headset is plugged in to the aircraft panel or live intercom system.
- B. LED Light: The LED light indicates the power status of your ANR system. When the light is illuminated, the ANR system is turned on.
- C. Power Jack: The power cord from the headset plugs into the power jack on the face plate of the battery box.
- D. Battery Compartment: The ANR system is powered by one 9V alkaline battery. Battery life is estimated to be 25 – 35 hours depending on level of noise in the environment. Battery life is also affected by age and extreme hot and cold temperatures. To change the battery simply slide the battery plate off the battery box and insert the new battery. Reinstall the plate and you're ready to go.

3.1 Cell / Satellite Phone Capable

In an emergency having the capability of being able to place a cell phone call from your aircraft is one of the reasons *PILOT* has installed a Cell/Satellite jack on the headset. Located on the Right Ear cup (Non boom side) is a 3.5mm jack. The headset comes with two cables marked "PHONE" and "AUDIO". The right angle (90°) plug on both cables should always plug into the headset. The straight plug will plug directly into your cell phone or audio input source. An adapter may need to be purchased from us in order to utilize this feature.

3.2. Custom Padded Headset Case

We provide you with a custom padded headset case to protect your ANR headset and to house your battery box, headset and comm-cord. You should treat you headset like you would treat any other electronic product of value. Keep it clean and out of extreme temperatures for best results.

3.3 Taking Care of Your Headset

To insure the full life of your headset, keep it clean and free of dust and dirt. Clean your headsets with non-alcohol wipes or a soft cloth dampened with water and a mild soap. *Never use alcohol*. Plastic parts dry out or fray when exposed to alcohol based products. Headband, ear cups, ear seals and cords can be lightly cleaned but one should be careful around the microphone and speakers on the headset.

- A. Mic Windscreen: *PILOT* recommends periodically replacing the microphone windscreen if necessary. The foam microphone windscreen helps eliminates the popping "P"s and "T"s and annoying breath puffs when you're communicating with the headset. The foam microphone windscreen also helps protect the microphone from moisture and other elements that may cause damage to the electronics. You may use mild soap and water to clean your foam windscreen. Place the foam windscreen in mild soapy water. Rinse and make sure the windscreen is fully air dried before reattaching to the microphone.
- B. Ear Cushions: Ear seals also need periodic replacing. Depending on how much you fly, temperature (extreme heat or cold) also influences the life span of your ear seals. We have several types of ear seals on our headsets. Generally PVC, foam and silicone gel style ear seals can be wiped off with mild soap and water. *Do not submerge the ear seals in water*. All three types of ear seals have vent holes and water would enter the ear seal's vent holes thus ruining the ear seal.
- C. Communication Cord: Take care of your communication cord. Wires in the cord can break if abused. Always disconnect them by disconnecting the plugs, not by pulling the cords. Pulling on the cord instead of the plugs is a major cause of headset repairs – it causes wire breaks and static.

4.0 Technical Specifications

Microphone:

Generating Element - Electret Condenser
Polar Pattern—Bi-Directional
Frequency Response—150-4000 Hz
Impedance—50 ohms @ 16 VDC
Sensitivity— 100dB @ 1mW Input
Power Requirements— 8-16 VDC
Current Drain—8 mA at 8 VDC
Color/Case Materials —Black ABS
Weight — 6 grams
Mating Connector—U173/u

Transducers:

Audio Speaker Impedance: 300 ohms
Nominal Power: 100 mW
Max Power: 200 mW
SPL: 102+2dB at 1 KHz
Effective DNC Frequency Range: 30 Hz - 8000Hz
Active Noise Reduction: 18-22 dB at 100 Hz
Maximum Ambient Noise Level: 120 dB SPL

4.1 FAQs

Some potential problems you may encounter are listed below along with the possible solution.

Problem: Audio is heard in only one ear

Solution: Check Mono/Stereo selector for proper setting.

Problem: Communication, but the ANR system is not working

Solution: Make sure the headset is turned on. Check LED. Check to make sure the battery is fresh.

Problem: ANR works but no communications

Solution: Check the headset and intercom volume controls to see if they are set too low.

Problem: Whistling, squealing or cricket sound

Solution: Check to see that the outer foam pad is still in-place in the center of the ear seal. If the foam pad is missing, check your headset case to see if it has come loose. If not, contact *PILOT*.

Problem: “Motor boating” or low rumbling sound with headset turned on in a quiet environment

Solution: This could be caused by a small pressure change - possibly caused by opening a cabin door or by turning your head and causing a leak between your ear headset and the ear seal. Check your ear seals for wear. Possibly the headsets were stored improperly and the cushions were squeezed into an abnormal shape. A low battery can also cause this problem.

Pilot Communications USA