

BOSE

AVIATION



PROFLIGHT SERIES 2
AVIATION HEADSET

NEW



A20
AVIATION HEADSET

BOSE PROFLIGHT SERIES 2 AVIATION HEADSET

In-ear configuration for pilots of moderately
noisy aircraft, such as pressurized jets.





Introducing the new Bose ProFlight Series 2 Aviation Headset, with features designed for airline and corporate flight decks.

The new ProFlight Series 2 builds upon the advanced technology of the original and is the most lightweight, compact and comfortable aviation headset Bose has ever produced. ProFlight Series 2 is engineered and refined for the way professional pilots fly and now offers numerous updates and enhancements based on pilot input. ProFlight Series 2 features a new lighter, thinner more flexible cable providing increased freedom of movement and improved tap control for talk-through communication. Like the original, the ProFlight Series 2 is FAA TSO and E/TSO-C139a certified. Additionally, a new non-Bluetooth® variant of the ProFlight Series 2 is now available.



- **FAA TSO and E/TSO-C139a certified.**
Compatible with TSO certified systems.
- **New 4.5 ounce (128 gram) on-head weight.**
For enhanced comfort during extended use.
- **Thin, flexible cable.**
Allows improved freedom of movement and easy storage.
- **Digital active noise cancellation.**
Reduces ambient noise, allowing users to lower radio volume.
- **User selectable noise cancellation.**
Customize noise reduction according to personal preference.
- **Long term durability.**
Designed and tested for demanding cockpit environments.
- **Optimized audio.**
Active equalization clarifies incoming audio.
- **Updated tap control for talk-through communication.**
Double tap either earbud to optimize audio for communication outside of the intercom.
- **Bluetooth connectivity and audio prioritization.**
Full-function *Bluetooth* enables connections to phone, tablet or EFBs. Prioritization controls how Bluetooth audio interacts with the intercom system.
- **New, non-Bluetooth headset variant now available.**
- **Multiple plug types.**
Available with twin plug, 5 pin XLR or 6 pin LEMO plug configurations.
- **Automatic shutoff.**
Powers down automatically when not in use.
- **Quick-release, side swappable mic and cable.**
Attach on either side - no tools required.
- **Easily adjustable mic.**
New mic winglets allow for precise mic and boom adjustments.
- **Exceptional battery life.**
Two AA batteries power 45+ hours of use with *Bluetooth* off and at least 25 hours with *Bluetooth* on.
- **Replaceable silicone StayHear+ tips.**
Easily removed and replaced without tools.
- **Available custom molded ear tips.**
For purchase through Bose-authorized partners.
- **Bypass communications mode.**
Provides primary intercom audio with or without power.
- **Five-year limited warranty with acclaimed service.**
Worldwide coverage.

BOSE A20 AVIATION HEADSET

Around-ear configuration for higher noise environments.





Acclaimed performance. The difference is clear.

The Bose A20 was designed for best-in-class active noise reduction - and provides ANR that's 30% greater than conventional aviation headsets, enhanced comfort, clear audio and intuitive operation. No matter what you fly, the Bose A20 is engineered to improve the experience.



- **FAA TSO and E/TSO-C139a certified.**
- **Acclaimed noise reduction.**
30% greater noise reduction than conventional aviation headsets.
- **Comfortable, stable fit.**
30% less clamping force than conventional aviation headsets.
- **12 ounce (340 gram) on-head weight.**
The lightest aviation headset in the "around-ear, full-feature headset" category.
- **Clear audio with active equalization.**
- **Bluetooth® connectivity for audio and communications.**
- **Customizable audio prioritization.**
Choose from "mute" or "mix" communication settings.
- **Simple, intuitive headset operation.**
Plug it in, turn it on, go flying.
- **Available in a variety of plug configurations.**
Straight or coiled cord.
- **Side-swappable boom mic and cable.**
- **Flexible power with auto-on.***
Switch seamlessly between battery and aircraft power.
- **Lightweight magnesium headband.**
For a highly durable headset that weighs in at just 12 ounces (340 grams).
- **High-performance microphone.**
- **At least 45 hours.**
Two alkaline AA batteries power at least 45 hours of use.

**Available in certain variants of the headset.*

PROFLIGHT SERIES 2 ADDITIONAL DETAILS AND ACCESSORIES

ALTITUDE FOR NON-PRESSURIZED CABINS

15,000 feet maximum for full noise reduction

POWER SOURCES

Battery power: 3 volts, 2 AA alkaline batteries (average battery life: 45 hours)

Aircraft power: Operating voltage range, 10 to 32 VDC

Power consumption: 500 mW for average use

FUSE/BREAKER RECOMMENDED

¼-amp, fast-blow fuse (AGC ¼-amp fuse) or

½-amp circuit breaker

HEADSET INPUT IMPEDANCE

Monaural mode: 300 ohms

Binaural mode: 600 ohms

WEIGHT

4.5 ounces (128 grams) on-head

CABLE LENGTH

Headset to control module: 52.4 inches (1.33 meters)

Control module: 3.9 inches (0.1 meters)

Control module to aircraft: 22.8 inches (0.58 meters)

Total: 79.1 inches (2.0 meters)

MICROPHONE (ELECTRET)

Bias voltage range: 4 to 28 VDC

Sensitivity: -27dBV (+/- 2.5dB) at 94dB SPL (1 Pa), measured at 6mm distance from artificial mouth, across 220 ohms load resistor and biased with 12 VDC via 470 ohms resistor.

BLUETOOTH® COMMUNICATIONS INTERFACE

Bluetooth 4.2, hands-free profile, A2DP, AVCRP, multi-point

FAA TECHNICAL STANDARDS ORDER (TSO)

Bose ProFlight Series 2 Aviation Headset, its interface, cables and electret boom microphone are certified to the Federal Aviation Administration's Technical Standard Order number TSO-C139a. The headset system has been designed to function per headset performance requirements described in RTCA/DO-214A and to withstand exposure to the environmental conditions described within RTCA/DO-160G, as well as several other environmental tests, including those for humidity, salt spray, temperature cycle and shock. This enables long life and durability in the real world.



IN-BOX ACCESSORIES:

Two AA batteries, three sets of StayHear+ tips with pouch (large, medium and small; medium tips are already attached to the earbuds), a control module lanyard and a carrying case with carabiner.

AVAILABLE CONFIGURATIONS:

DUAL GENERAL AVIATION (G/A) PLUG

Battery powered only

6 PIN LEMO CONNECTOR

Flex Power, switches seamlessly between aircraft and battery power

5 PIN XLR CONNECTOR

Flex Power

AVAILABLE ACCESSORIES:

HEADSET CABLE, DUAL G/A PLUG (BLUETOOTH)

HEADSET CABLE, DUAL G/A PLUG (NON-BLUETOOTH)

HEADSET CABLE, 5 PIN XLR (BLUETOOTH)

HEADSET CABLE, 5 PIN XLR (NON-BLUETOOTH)

HEADSET CABLE, 6 PIN (BLUETOOTH)

6 PIN TO DUAL G/A PLUG ADAPTER

STAYHEAR+ TIPS (SMALL, 2 PAIRS)

STAYHEAR+ TIPS (MEDIUM, 2 PAIRS)

STAYHEAR+ TIPS (LARGE, 2 PAIRS)

SIDE CUSHIONS

MICROPHONE WINDSCREEN

HEADBAND PAD

CARRYING CASE

TERMINATION CAP

CABLE CLOTHING CLIP

ACCESSORY KIT

Includes headband cushion, mic windscreen and side pads

CONTROL MODULE LANYARD

A 20 ADDITIONAL DETAILS AND ACCESSORIES

ALTITUDE FOR NON-PRESSURIZED CABINS

15,000 feet maximum for full noise reduction

POWER SOURCES

Battery power: 3 volts, 2 AA alkaline batteries (average battery life: 45 hours)

Aircraft power: Operating voltage range 10 to 32 VDC

Power consumption: 500 mW for average use

CURRENT

Operating: 25 mA in typical aircraft noise

FUSE/BREAKER RECOMMENDED

¼-amp, fast-blow fuse (AGC ¼-amp fuse) or ½-amp circuit breaker

HEADSET INPUT IMPEDANCE

Monaural mode: 160 ohms ON and OFF

Stereo mode: 320 ohms ON and OFF

WEIGHT

12 ounces (340 grams)

CABLE LENGTH

Headset to control module: 38.2 inches (0.97 meters)

Control module: 3.9 inches (0.1 meters)

Control module to aircraft: 23.2 inches (0.59 meters)

Total: 65.3 inches (1.66 meters)

MICROPHONE (ELECTRET)

Bias required: 6 to 16 VDC through 220 to 2200 ohms

Sensitivity: Varies depending on bias and AC radio input impedance. Typical output is 600 mV at 114 dB SPL. To assure proper modulation of the radio, it is recommended that an avionics technician adjust its input to match the output of the microphone.

MICROPHONE (DYNAMIC)

Impedance: 5 ohms

Sensitivity: Equivalent to M-87/M-101

BLUETOOTH COMMUNICATIONS INTERFACE

Hands-free profile, A2DP, AVCRP, multi-point, *Bluetooth* 3.5

FAA TECHNICAL STANDARDS ORDER (TSO)

Bose A20 Aviation Headset, its interface, cables and electret boom microphone are certified to the Federal Aviation Administration's Technical Standard Order number TSO-C139a. The headset system has been designed to function per headset performance requirements described in RTCA/DO-214 and to withstand exposure to the environmental conditions described within RTCA/DO-160F, as well as several other environmental tests, including those for humidity, salt spray, temperature cycle and shock. This enables long life and durability in the real world.



CONFIGURATION INFORMATION:

Different cable configurations may be purchased separately and added easily with no need for adapter plugs. A coil cord cable is also available in U-174, dual G/A and other popular configurations. In-box accessories: Two AA batteries, a male-to-male 3.5mm aux-in adapter cable and a carrying case.

AVAILABLE CONFIGURATIONS:

DUAL GENERAL AVIATION (G/A) PLUG

AIRCRAFT-POWERED 6 PIN LEMO CONNECTOR

5 PIN XLR PLUG

BATTERY-POWERED HELICOPTER

U-174 single plug with coil cord cable

CHOOSE FROM THE FOLLOWING COMPLETE HEADSET OR CABLE OPTIONS:

DYNAMIC MIC:

- Complete headset model coil cord cable, *Bluetooth* module and 150 ohm dynamic mic
- Cable only, coil cord with *Bluetooth* module and 150 ohm dynamic mic

ELECTRET MIC:

- Complete headset model coil cord cable, *Bluetooth* module and electret mic
- Cable only, coil cord with *Bluetooth* module and electret mic
- Cable only, coil cord, electret mic without *Bluetooth*
- High impedance - for most U.S. general aviation aircraft

AVAILABLE ACCESSORIES:

ADDITIONAL CONTROL MODULE CABLE

Available with or without *Bluetooth* communications module
Available connector types: Dual G/A, 6 pin aircraft powered, 8 pin aircraft powered, 5 pin XLR or U-174

6 PIN CONNECTOR TO DUAL G/A PLUG CABLE ADAPTER

6 PIN CONNECTOR TO U-174 CABLE ADAPTER

REPLACEMENT EAR CUSHION KIT

REPLACEMENT HEADBAND CUSHION

REPLACEMENT MICROPHONE WINDSCREEN

AIRCRAFT PANEL CONNECTOR INSTALLATION KIT

Wire harness for the 6 pin connector configuration

SERVICE KIT

Includes replacement ear cushions, microphone windscreen and headband cushion



AVIATION