



## BOSE PROFLIGHT SERIES 2 AVIATION HEADSET

In-ear configuration optimized for jet aircraft and quieter environments.





# Designed to be lightweight. Proven to be durable.

The ProFlight Series 2 is the most lightweight, compact and comfortable aviation headset Bose has ever produced. This headset is engineered and refined for the way professional pilots fly. The ProFlight Series 2 features a light, thin and flexible cable providing freedom of movement, as well as tap control for talkthrough communication. The ProFlight Series 2 is FAA TSO and EASA E/TSO-C139a certified. A non-*Bluetooth*<sup>®</sup> variant of the ProFlight Series 2 is also available.



- FAA TSO and EASA E/TSO-C139a certified. Compatible with TSO certified systems.
- 4.5 ounce (128 gram) on-head weight. For enhanced comfort during extended use.
- Thin, flexible cable. Allows 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.
- 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.
- Non-Bluetooth headset variant available.
- Multiple plug types. Available with dual 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. 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 designed for a wide range of aircraft, including high noise cockpits.







# 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-C139 certified. Compatible with TSO certified systems.
- 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.
- $\cdot$  Clear audio with active equalization.
- · Bluetooth<sup>\*</sup> 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.
- $\cdot$  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.
- Five-year limited warranty with acclaimed service. Worldwide coverage.

\*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<sup>®</sup>** 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

ACCESSORY KIT Includes headband cushion, mic windscreen and side pads

CONTROL MODULE LANYARD

CABLE CLOTHING CLIP

## A 2 0 A D D I T I O N A L D E T A I L S A N D A C C E S S O R I E S

#### 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-C139. 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



## COMPARE AND ORDER AT BOSE.COM/AVIATION

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