Q SET
AVIATOR

User Manual

Aviation ANR Headset and Helmet

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Introduction

ANR Instruction: The Active Noise Reduction CN-1000AC-BT Headset is a headset that can isolate, offset and cancel noise. In comparison with passive headsets. The noise cancelling circuitry reduces outside noise considerably more than a standard headset, making it extremely comfortable for the pilot of the aircraft.

As of Ser.# 0170 a person can turn on or off the “ANR Auto OFF” feature. A Switch is located on the inside of the battery box.

- ANR Active Noise Reduction
- Light weight 290 Grams (Headset)
- Soft leather ear-pads
- Carbon Fiber Construction
- Stereo and Mono
- Clear and Clean Communication
- Separate volume controls Av. Comm & Phone
- Blue Tooth including 3.5 mm aux. input
- Easy store carrying satchel
- AA Battery Power / Opt. A/C Power
- 1 Year Warranty
- Install PDF manual for phone from web

Prepare Headset for Use

REGISTER FOR WARRANTY / www.aviationheadsets.ca / Serial # under Velcro headband.

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 control (on the side of the battery box) down 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 seals are centered over the ears.

4. For best noise cancellation, position the microphone in front of your lips.

5. Insert the microphone plug (PJ068) into the aircraft or intercom microphone jack. Insert the ear-phone plug （PJ055 into the aircraft or intercom earphone jack. / U174 Helicopter / Lemo plug

6. Volume Adjustment Procedure: Rotate the volume control up to a comfortable level.

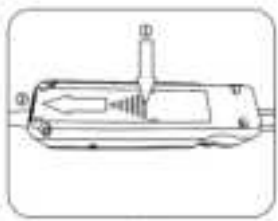
7. Auxiliary (AUX) audio input: Insert the plug (3.5mm plug) of your external audio device into the AUX jack on the side of battery box as indicated. The volume is controlled by your audio device.

8. Bluetooth function: as indicated in operation 5.

9. Adjust and balance Intercom and Headset controls for best audio

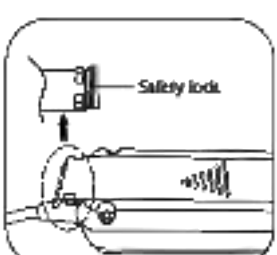
Operation

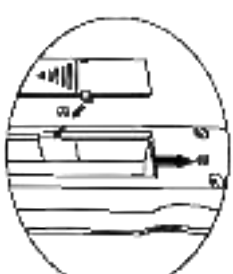
1. **Insert or change Batteries**:



AA Alkaline, **No Lithium over heat issue**
Hi use: Optional A/C power Lemo Controller

①press from the base of the triangle on the cover, see Figure 1;②push the cover out of the safety lock, see Figure 2;③tilt the end of the cover up and remove the whole cover; put the batteries in;④put the cover latch into the notch and push it back, see Figure 3.





2. **S/M switch**: There is an s / m switch inside the battery box, see Figure 4. Ensure the switch is on Mono to make both ears active (on most aircraft).

   Mono Controller has no switch / BT is stereo

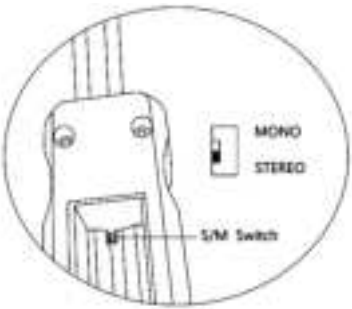


Figure 4

3. **Light Indication for Power:**

   Press power button for 0.5 seconds, ANR starts working.

   Flash in green—battery fully charged;

   Flash every 2 seconds in amber—battery low;

   Flash every 1 second in red—battery dying.

4. **Mode Setting:**

   When it is on, press Bluetooth button for 1 second to start the Bluetooth function.

   Mode Setting:

   A:Intercom Priority —When intercom is busy, Bluetooth and AUX will be attenuated.

   B:Intercom, Bluetooth and AUX –All three channels are open.

   C:Intercom Only –Only intercom is on. Bluetooth and AUX are both off.

   The prioritization of Bluetooth and AUX is:
   Bluetooth phone >AUX > Bluetooth music

5. Bluetooth works when the mode setting switch is positioned on A or B.

Bluetooth volume control: Press "+" or "-" to turn up or down the volume of blue tooth connected device. Holding "+" or "-" will keep the volume up or down, see Figure 5

Pairing: device name—BT-ANR; pairing code: 0000 (four zeros). The first Bluetooth device connecting to the headset will be paired automatically.

Pairing the second device: manual pairing is required. Press the Bluetooth button for 5 seconds to start pairing.

Re-pairing: re-pairing starts automatically if the phone moves

out of the Bluetooth scope and thus gets disconnected. The phone will be

disconnected if the re-pairing cannot succeed In 5 minutes.

Re-connecting: click the Bluetooth button to re-connect to the last connected phone. The call ends after the BEEP.

Rejecting calls: Press the Bluetooth button for 3 seconds.

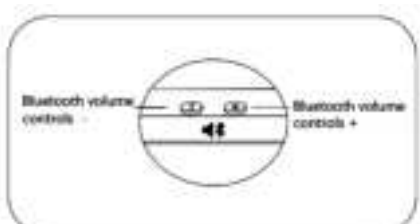


Figure 5

Clearing the pairing record: press both Bluetooth volume control buttons on the side for 3 seconds.

Making calls: dial the number on your phone.

Click the Bluetooth button twice to return the last incoming call.

Receiving calls: Press the Bluetooth button and answer the call after the BEEP.

End a call: Press the Bluetooth button. The call ends after the BEEP.

Rejecting calls: Press the Bluetooth button for 3 seconds.

Light Indication for Bluetooth:

Flash in blue and red—pairing.

Flash in red twice—disconnected.

Flash in blue regularly –phone connected.

Short flash in blue—line busy.

6. **Turn Off ANR**: Press power button for 2 seconds to turn ANR off.

Notice:

1.Use non-rechargeable alkaline AA batteries.

2.Shut the power off when ANR is not in use.

3.Take out the batteries if ANR is left unused for a long period.

7. **Lemo Controller**

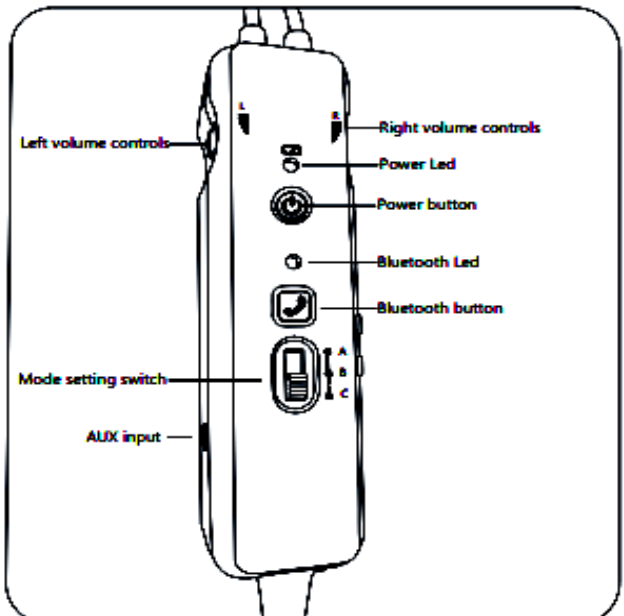
1.AA batteries must be installed

2. ANR is automatic when using A/C power (USB or 14-28 V)

3. Turn on **BT** use power button.

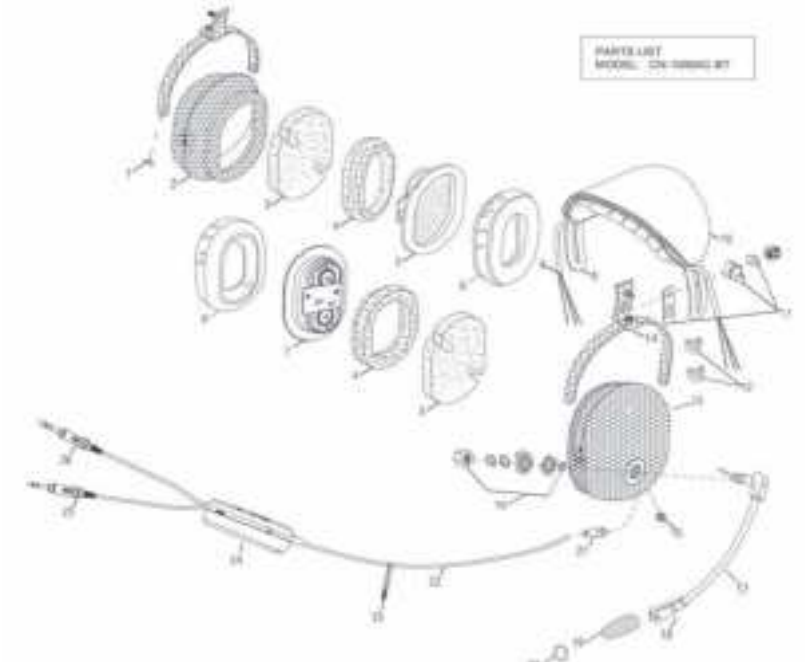
4. XLR connector cables:
Plugs: GA / U174 / Lemo /

5. Power cables available: straight or curly, USB, 5.5mm x 2.1mm male plug, cigar lighter 14-28V



Control module layout

EXPLODED VIEW AND DISASSEMBLY INSTRUCTIONS

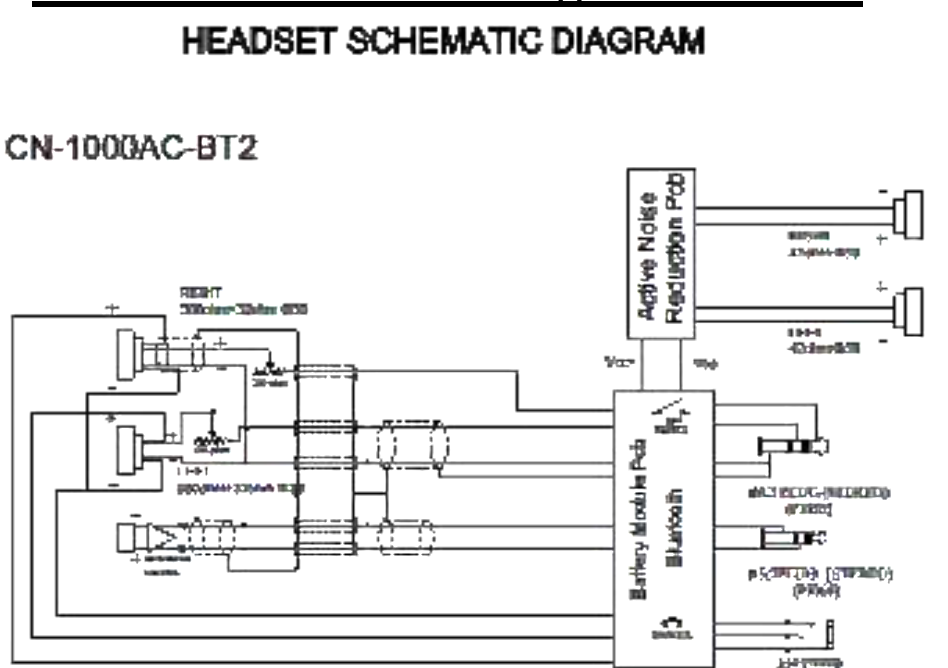


Parts List

ITEM	P/N	Description
1	10ME0069	RETAINING RING
2	10PL0038	RIGHT CARBON EARCUP
3	10SP0055	ABSORBENT NOISE FILTER (1)
4	10SP0056	ABSORBENT NOISE FILTER (2)
5	10EL0046	NOICE CANCELING PCB (RIGHT)
6	10SP0049	PROTEIN LEATHER EARSEAL
7	10EL0047	NOICE CANCELING PCB (LEFT)
8	10CR0020	OVERHEAD CORD
9	10ME0068	HEADBAND STAINLESS STEEL
10	10SP0005	HEADBAND CUSHION
11	10KI0020	CLAMP KIT
12	10PL0002	OVERHEAD CORD CLAMP

ITEM	P/N	Description
13	10PL0041	LEFT CARBON EARCUP
14	10PL0046	CARBON STIRRUP
15	10PL0004	GROMMET , RUBBER
16	10KI0037	MIC BOOM ATTACHMENT KIT
17	10KI0036	FLEXIBLE BOOM ASSEMBLY
18	10EL0045	ELECTRET MICROPHONE
19	10SP0054	MICROPHONE WINDSCREEN
20	10PL0008	O RING
21	10PL0005	STRAIN RELIEF
22	10CR0004	COMM CORD , STRAIGHT
23	10SP0021	SELF-GRIPPING FASTENER
24	10KI0038	BT BATTERY MODULE
25	10CR0005	Φ 5.2 MOLDED PLUG CORD (PJ068)
26	10CR0015	Φ 6.3 MOLDED PLUG CORD (PJ005)

Headset Schematic Diagram



Specifications

PNR Noise Reduction Ratings (NRR) : 23dB

ANR Noise Reduction Ratings (NRR) : 29dB

Headphone

Type: Dynamic （Φ30）

Frequency Response: 50 Hz to 20 kHz

Sensitivity: 95±5 dB SPL

(1 kHz, 1 mw input per earcup side)

full volume on ear simulator

Active Noise Attenuation:

Dynamic 42 ohms:

Rate Input: 30mW Max. Input: 100 mw

Speech Sound:

Dynamic 300 ohms:

Rate Input: 30mW Max. Input: 100mW

Microphone and Amplifier:

Element Type: Noise-canceling electret

Frequency Response: 100Hz to 5 kHz

Operating Voltage (supplied by aircraft): 8-32 Volts DC

Matching Impedance: 150-1000 ohms

Sensitivity: -33±4 dB (Ref: 0dB SPL=20.0uPa at 1 kHz with 10 Vdc 150 ohms AC load)

General:

Temperature: Operating: - 20 to 70°C

Cordage: Straight cord from headset to molded plug, 150CM

Intercom Connections:

Earphone Plug： PJ-055 (.25” 6.3Φ phone plug)

Microphone Plug： PJ-068 (.206” 5.2Φ phone plug)

Helicopter Plug: U174

Weight: 290g

Serial # Location : Under Velcro headband

ANR Noise Reduction Specifications:

Attenuation Frequency Band ….

…….20Hz~20 KHz

Main Attenuation Frequency Band ….20Hz~600Hz

Attenuation Capability… ……..29dB

Power Consumption ……. …...30 mw

Headset size range Height: 10 to 14 cm

Color: Black **Boom:** Flexible Boom

Manufactured in China and distributed by:

RS Designs & Consultations

Brandon, Manitoba, Canada

1-204-726-4221

Warranty register: www.aviationheadsets.ca

Qsetaviator@gmail.com

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