CARE AND MAINTENANCE

GENERAL CARE

As with most electronic equipment, it's important to protect your Denali headset from exposure to the elements. Do not leave the headset on the seat of a plane or car, or in intense, direct sunlight exceeding 156° F. Do not leave the headset out in the rain or in freezing temperatures. Return the headset to its carrying case and store in a cool, dry area.

IMPORTANT: Contrary to popular belief, wrapping the headset cords around the headband is not a proper storage method. In fact, by doing so you risk damaging the com cable, splitter, or battery box. Instead, loosely loop the headset cord in your hand and place the cable in the headset bag, next to the headset.

GENERAL CLEANING

To clean the Denali headset, earseals, or headpad, dampen a non-abrasive cloth with water and mild soap. After cleaning, wipe dry with a soft cloth. Note: do not allow any water to seep into the ear dome.

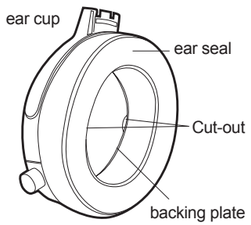
IMPORTANT: Do not immerse the headset in water. Never use bleach on ear seals, headpad, or any other part of the Denali headset.

DENALI EAR SEAL REMOVAL AND INSTALLATION

REMOVAL

Your new Denali ear seals are permanently attached to the hard plastic backing plate. Do not attempt to remove the ear seal from the backing plate.

To remove the ear seal assembly, look inside the ear seal opening, half way down either side of the ear cup. You will notice a small cut-out just large enough to place your finger tip under the backing plate. Pull the backing plate (with the ear seal) away from the ear cup. Note: it will take a bit of force and the ear seal will pop off of the ear cup.



INSTALLATION

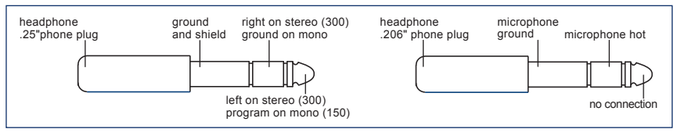
Lay the gasket (for ANR models only) flat on the ear seal backing plate. The gasket must have no wrinkles. Carefully position the backing plate (with the gasket) on the ear cup and apply even pressure with your fingers spaced around the circumference of the ear seal/backing plate and then snap on to the ear cup. Note: the backing plate must not have any space between it and the ear cup.

DENALI HEADPAD REMOVAL AND INSTALLATION

Your new Denali headpad is permanently attached to the backing plate. Do not remove the headpad from the backing plate.

To remove the headpad, pull on each side of the headpad and it will snap out of position on the headset. To install the headpad, line it up to the top of the headset and then snap into position.

PLUG CONNECTION CHART



SPECIFICATIONS

D90ANR - Stereo, Active Noise Reduction

		Denali ANR
Headset	Shielding	Full floating w/independent ground
	Weight	12.9 ounces
	Temperature Sensitivity	Not to exceed 156°F
	Battery Life	50 hours of continuous use
Speakers	Sensitivity(@1mW in dBspl)	104dB
	Frequency Response	90Hz—20kHz
	Impedance	300 ohms stereo/ch.—150 ohms mono
	Total Harmonic Distortion (@1kHz)	<.15%
	Maximum Power Input	250 mW
	Noise Reduction Rating	21dB
Microphone	Type	Noise canceling electret condenser w/constant-gain preamp
	DC Bias Voltage	8-16 volts
	Supply Source Resistance	220-2200 ohms
	Frequency Response (±6dB)	420Hz-6.4kHz
	Sensitivity (@ 114dBspl*)	1.3V
	Noise Rejection Ratio (@1kHz)	-46dB
	Total Harmonic Distortion (@ 1kHz)	<0.3%
	Impedance	500 ohms
	Maximum Speech Level	112 dBspl*
	Maximum Ambient Noise Level	132 dBspl*

*Sensitivity measurements referred to 0.0002 ubar (dynes/cm2) @ 1kHz. Microphone measurements made with 10-volt supply with a 1000 ohm resistor.

Contact Flightcom for the most current ANR specifications.

To Order Flightcom Accessories: Call: 1-800-432-4342

Flightcom Corporation
7340 SW Durham Road, Portland, OR 97224 USA
www.flightcom.net • e-mail: sales@flightcom.net • 800-432-4342 or 503-684-8229

P/N: 600-3042-00 Rev. A

FLIGHTCOM™

DENALI® Aviation Headset

Active Noise Canceling Model

D90ANR

Operation Manual

General Aviation

IMPORTANT USER INFORMATION

WARNING: Do not store your Denali headset in temperatures that exceed 156° Fahrenheit. Do not leave it in the sun, or hanging on the yoke of your aircraft, or exposed in conditions where the surface area of the headset might exceed this high temperature.

Under certain conditions, a mic muff might be necessary. A mic muff is provided for your convenience.

We also recommend that in the interest of hygiene, you replace your ear seals at least annually.

FITTING INSTRUCTIONS

Denali headsets accommodate the differences in head shapes and sizes of the pilot population through angled ear domes, the shape and surface area of the ear seal, low side force and a light-weight design. When worn properly, you will feel very little pressure on top of the head, which is a refreshing departure from the traditional fit and feel of an older style aviation headset.

Additionally, personalized fit adjustments can be made in the length of the headband, the rotation of each ear cup, both side-to-side and up and down, and the placement of the boom and microphone.

PERSONALIZED HEADBAND ADJUSTMENTS

- Hold the Denali headset in front of you. Place the dome that holds the mic boom in your left hand.
- Extend the headband to full extension. When you have reached the maximum headband extension, the headband slider will stop. Make sure you have extended the headband equally on both sides.
- Place the headset on your head. If the domes feel as if they're sitting too low on your ears, starting on one side of the headset, move the headband slider to a smaller position, ensuring both sides are adjusted equally.

IMPORTANT: While wearing the Denali, you should feel very little pressure on top of your head. THIS IS NORMAL AND OPTIMAL.

If you're an experienced headset wearer, you may have a tendency to reduce the headband size until you feel a familiar pressure on the top of your head or at the top of your jawbone. For Denali, this indicates you've actually reduced the size of the headband too much. Extend the headband in a downward direction, on both sides, until the top of the headset seems to "disappear." Check for a secure fit by shaking your head from side to side. Denali should remain firmly in place—without creating undue pressure on the top of the head.

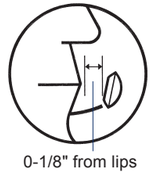
INDIVIDUAL EAR DOME ADJUSTMENTS

Denali's ear domes rotate not only in an up and down direction, but also from side-to-side. This allows for maximum adjustment around the ear and jaw area.

- Once the headset is in place and the headband is adjusted properly, you may want to individually rotate the dome and ear cup around each ear, to determine the most comfortable position.
- If during an extended flight you start to feel a bit of a pressure point, adjust the ear cup or the length of the headband to restore comfort.

MICROPHONE AND BOOM ADJUSTMENTS

- Adjust the mic boom for proper fit and comfort. Place the microphone no more than 1/8" from lips, at the corner of the mouth. This is critical to the performance of the noise-canceling electret microphone.



IMPORTANT: All Denali mic booms are shipped from the factory for wearing on the left side of the head only. Because the domes are canted to match the angle of the ears, the boom can ONLY be worn on the left side.

CAUTION: Rotating the boom beyond the "stop" will cause non-warranty damage to the boom

INSTALLATION

- Insert the headset plug into your aircraft comm panel jack.
- Volume controls are located on each ear dome. Adjust to the desired volume level on each dome. **Note:** the ear dome volume control does not affect the volume of auxiliary listening or cellphone devices.
- Reduce volume on aircraft interphone system before engaging the ANR circuit. Aircraft interphone volume can be adjusted to a comfortable level after the ANR circuit has been activated.

BATTERY BOX

The battery box uses two AA batteries to supply power to the headset's ANR circuit. The battery box also contains additional ports for cellphone and auxiliary listening devices.

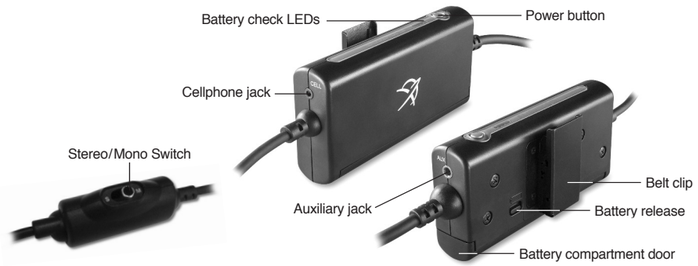
Power On
To turn the ANR power on, depress the "power" button located on the top of the battery box for two to three seconds. The ANR power will be active immediately, while simultaneously checking the battery voltage. The battery check first illuminates the bottom yellow LED and then gradually builds through the green LEDs. The number of green LEDs lit will be proportionate to the remaining battery life. Four lit LEDs indicate full battery voltage capacity. As the battery voltage decreases, so does the number of lit LEDs. If the yellow LED is continuously illuminated, the batteries will need to be replaced. If the batteries are not replaced, the unit will automatically shut off when voltage has dropped below 1.2V. The ANR function, cell phone and auxillary jacks will no longer work.

Power Off
To turn the ANR power off, depress the "power" button located on the top of the battery box for two to three seconds. Three quick flashes of the yellow LED will illuminate until the power is shut off. Once the ANR power is off, the unit will continue to monitor for low battery voltage and will illuminate the yellow LED if the battery voltage falls below 1.6 volts.

Replacing the Batteries
To install or replace the AA batteries, open the battery box door by pushing down on the battery release, located next to the belt clip. While pushing down on the battery release, simultaneously slide the battery compartment door toward you. The compartment door stops halfway and is not intended to be removed. Do not attempt to remove the door completely from the unit. Place the AA batteries in the box and slide the unit's door away from you until the door snaps into place.

Battery life is dependent on the ambient noise in the aircraft, but it should provide an average of 50 hours continuous use for standard alkaline-zinc batteries.

Caution: Leaving the batteries installed in the battery box when the headset is not in use for extended periods may result in battery leakage and non-warranty damage to the headset. Flightcom suggests using only high quality batteries for longer life and reduced risk of leakage.



Auxiliary-In Audio Jack
The full stereo auxiliary-in audio jack is enabled when ANR power is activated. Follow "Power On/Power Off" instructions in this manual to turn on system power.

An auxiliary audio jack interface cable is provided with your headset. Plug the cable into the "AUX" battery box jack and connect the plug to your playback device. Please note the volume control on the headset does not affect any auxiliary device. Volume must be set to the appropriate level on the device.

Cellphone Interface Jack
The cellphone interface jack is enabled when the system power is activated. Follow "Power On/Power Off" instructions in this manual to turn on system power.

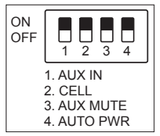
A 6' standard 2.5 mm, 3-conductor audio cable is provided with your headset. Please note that if your cellphone is not equipped with a standard 2.5 mm, 3-conductor headset jack, you will need to purchase an adapter. You may need to check with the original cellphone manufacturer or wireless system provider for the appropriate adapter.

To activate your cellphone, plug the cable into the "CELL" battery box jack and plug the other end of the cable into the headset jack on your cellphone. Please note the volume control on the headset does not affect the cellphone. Volume must be set to the appropriate level on the device.

Sure Power System™ (SPS)
To conserve battery life, the V90 ANR will automatically shut off the system power if no audio signal is sensed by the headset for a period of 15 minutes or the headset is stored in a quiet location for more than 15 minutes. To turn the system power back on, depress the "power" button located on the top of the battery box for two to three seconds after which ANR power will be turned on, accompanied by a simultaneous battery check.

DIP Switch
The battery box DIP switches enable or disable the following features:

Position 1: AUX Enable
Position 2: CELL Enable
Position 3: AUX Mute on CELL enable
Position 4: Auto Power Off (Sure Power System)



All battery box features are enabled at the factory. To disable any of the factory default settings, open the battery compartment door by pushing down on the battery release located next to the belt clip. While pushing down on the battery release, simultaneously slide the unit's battery compartment door toward you. Remove the AA batteries and set aside. A descriptive DIP switch label is visible once the batteries have been removed.

Using a small screwdriver or slender tool, gently pull the edge of the label toward you until you can see the DIP switches. To enable a feature, using your tool, push the switch into the "up" position. Push the switch in the "down" position to disable the feature. Once you have completed enabling or disabling the feature, push the label back into its original position and place the AA batteries in the box. Slide the unit's door until it snaps into place.