



User Instructions



Stratus Heli-XT

Active Noise Reduction Headset

Uniform Limited Warranty

Telex branded products are warranted by Telex Communications, Inc. against malfunction due to defects in materials and workmanship for a specified period, as noted in the individual product line statements below, beginning with the date of original purchase by the end-user. If such malfunction occurs during the specified period, the product will be repaired with new or remanufactured equivalent parts and products or replaced (at our option) without charge. The product will be returned to the customer postage prepaid.

Exclusions and Limitations

The limited warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product line statements below; (c) malfunction resulting from use or operation of the product other than as specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product, including accidents; (e) defects resulting from excess moisture, lightening or power surges; or (f) malfunction occurring at any time after repairs have been made to the product by anyone other than a Telex Service Department employee or any of its authorized service representatives. The warranty is void if the label bearing the product serial number (if applicable) has been removed or defaced.

Other Express or Implied Warranties Excluded

TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE WARRANTY SET FORTH HEREIN ARE IN LIEU OF, AND EXCLUSIVE OF, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. SPECIFICALLY EXCLUDED, WITHOUT LIMITATION, ARE THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR USE OR FOR A PARTICULAR PURPOSE, AND WARRANTIES ARISING FROM COURSE OR DEALING OR USAGE OF TRADE OR ANY OTHER MATTER. IF, UNDER APPLICABLE LAW, IMPLIED WARRANTIES MAY NOT BE VALIDLY EXCLUDED, THE DURATION OF SUCH IMPLIED WARRANTIES IS LIMITED TO THE WARRANTY PERIOD.

Limitation of Remedies; Certain Damages Excluded

REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS ARE THE SOLE AND EXCLUSIVE REMEDIES PROVIDED BY TELEX TO THE CUSTOMER OR TO ANY OTHER PERSON AND SHALL CONSTITUTE FULL SATISFACTION OF ALL CLAIMS, WHETHER BASED ON CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. TELEX'S MAXIMUM LIABILITY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT BY THE CUSTOMER. TELEX AND ITS SUBSIDIARIES SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, INJURY TO PERSONS OR PROPERTY OR LOSS OF USE. SOME STATES AND COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF CERTAIN DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. IN SUCH STATES AND COUNTRIES, TELEX SHALL BE LIABLE FOR NO MORE THAN THE DIRECT DAMAGES FOR BODILY INJURY AND/OR REAL OR PERSONAL PROPERTY ARISING FROM THE NEGLIGENCE OF TELEX.

Other Rights

This warranty gives you specific legal rights, and you may also have other rights, depending upon where you live.

Obtaining Warranty Service

To obtain warranty service, a customer must deliver the product, prepaid, to the appropriate Telex Service Department listed below or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or invoice.

Applicable Law

The validity, performance and construction of this limited warranty shall be governed by the laws of the State of Minnesota without reference to its choice of law principles. The Minnesota federal courts and/or the state courts located in Hennepin County, Minnesota, shall have exclusive personal and subject matter jurisdiction over, and the parties shall each submit to the jurisdiction of such courts and to venue in Minnesota with respect to any dispute concerning the product or pursuant to this limited warranty, and all objections to such jurisdiction or to such venue are hereby waived.

For additional warranty repair or service information, contact the Telex Service Department listed below:

USA, Canada, & Latin America

1720 E, 14th Street
Glencoe, MN 55336
Tel: 320-864-3177
Fax: 320-864-3225

Customer Service

For information or technical assistance, call or write Telex at:

Customer Service Department
Telex Communications, Inc.

12000 Portland Ave. So.
Burnsville, MN 55337 U.S.A
(952) 884-4051

www.telex.com/aircraft

When returning equipment for repair, please enclose an explanation of the problem. And, if the equipment is covered under warranty, please enclose a copy of your proof of purchase. The equipment must be accompanied by documentation stating your name, return address, and telephone number.

Return equipment for factory repair to:

Customer Service Department

Telex Communications, Inc.

1720 East 14th St.

Glencoe, MN 55336 U.S.A.

(320) 864-3177

Warranty Repairs

If in warranty, no charge will be made for the repairs. Equipment being returned for warranty repair must be sent prepaid and will be returned prepaid.

Non-Warranty Repairs

Equipment that is not under warranty must be sent postage prepaid to Telex. If requested, an estimate of repair costs will be issued prior to service. Once you approve repair, and repair of equipment is completed, the equipment will be returned on a collect on delivery basis. Collect charges may be avoided by sending a signed check for payment in full along with you signed estimate approval form (the estimate includes the shipping charge).

	Telex Warranty Term Lengths					
	1 Month	3 Months	12 Months	36 Months	60 Months	Other
Aviation						
Stratus Heli-XT					X	

** Warranty subject to change without notice.

Ordering Information

Stratus Heli-XT Headset.....	PRD000220000
Stratus Heli-XT 1” Replacement Foam-Filled	
Ear Cushions (package of 2).....	800456021
Stratus Heli-XT Premium Replacement Headband Pad.....	800456017
Replacement Electret Microphone	800136100
Microphone Windscreen.....	800456000
Clothing Clip	590637000
Stratus Heli-XT Replacement Carrying Case.....	CME000009000
Cell Phone Accessory Cable	550216002
Auxiliary Device Accessory Cable	550216003
Aircraft Power Cord	550216004
AC Wall Adapter	8004546023
Battery Box Door	800456024

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Introduction

Design Features

NOTE: This device complies with part 15 of the FCC Rules. Operation is subject to the following two(2) conditions:



- 1.This device may not cause harmful interference.
- 2.This device must accept any interference received, including interference that may cause undesired operation.



FIGURE 1. Stratus Heli-XT Reference View

Noise Reduction	Passive noise reduction: >29dB Active noise reduction: up to 16dB
Fit and Comfort	<p>Detented slide adjustment on the headband allows the ear cup to be easily raised or lowered for proper fit. Yoke design allows the ear cup to pivot in two planes assuring proper seal to the head and distributing ear cushion pressure evenly over its entire surface. Adjust ear cup pressure by rotating the patented “Comfort Cam™” to one of three(3) tension settings.</p> <p>1” thick ear cushion made from heat sensitive slow recovery foams Conforms to your head to provide a perfect seal while spreading the weight over a large area eliminating pressure points.</p>
Boom Microphone	<p>Amplified electret noise-canceling microphone prevents unwanted cabin noise from entering the communication system. Boom rotates up to allow the boom to be worn on the left or right side. Retaining hooks are designed into the microphone housing to securely hold the windscreen in place and prevent it from slipping off.</p>
Cordage and Plugs	<p>All cables are shielded to protect against RFI (Radio Frequency Interference). Strain relief is added to all cord entry points to provide protection from tugging resulting from normal usage. Bend relief is added at high-flex cord entry points to protect cords from breakage due to bending.</p> <ul style="list-style-type: none">• Cable with 2.5mm plugs is provided for interfacing to a cellular telephone.• Cable with 3.5mm plugs is provided for interfacing to a portable music device, such as a CD player or MP3 player. <p>Cigarette lighter adapter is provided to power the headset off of aircraft power and to recharge the batteries.</p> <p>AC wall adapter is provided to recharge the batteries when user is away from the aircraft.</p>

Auto Shut-Off

Headset will shut off automatically after 15 minutes in low-noise environments. When Auto Shut-off is enabled, audio signals that keeps the headset active are:

- communication over the aircraft radio/intercom system
- cellular phone conversations
- listening to music
- cabin noise greater than 90dB SPL

Battery/User Interface Module

Puts most commonly used controls at the pilot's fingertips. Cell phone jack for communication on your cell phone using the headset microphone and speakers. Auxiliary input jack for listening to portable CD and MP3 players using the headset speakers. Power ON/OFF button turns ON and OFF all function to and from the headset except for to and from the radio/intercom system. Accessory mute button quickly and completely disables the cell phone and auxiliary audio devices, while maintaining radio/intercom communication. LED indicates power ON/OFF, accessory enabled/muted, low battery and battery charging. CD input jack to power the headset OFF of aircraft power and to recharge the batteries.

Electrical Requirements

Microphone Bias Voltage

8-16VDC. Output is designed for radio input impedances from 50-600 Ohms.

Headset Power

2AA Alkaline or NiMH batteries or panel power from 8-32VDC negative ground electrical systems.

Wiring Diagram

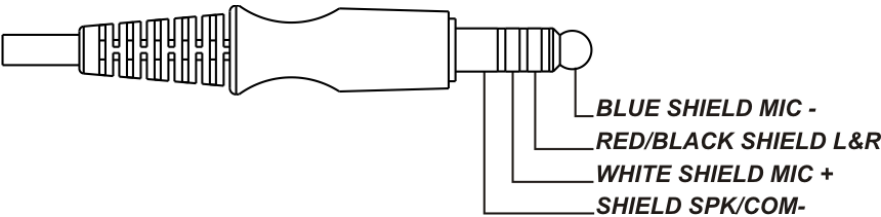


FIGURE 2. Wiring Diagram

Specifications

Receivers

Type:

Dynamic

Frequency Response:

50Hz - 10kHz

Sensitivity:

95±5dB SPL (1kHz, 1mW input)

Impedance (Max. Volume):

Monaural, 150 Ohms

Headset Power:

2 - AA batteries or panel power from 8-32 Vdc

Microphone

Element Type:

Amplified noise-canceling electret

Frequency Response:

100Hz - 3.5kHz

Sensitivity:

-50 ±6dB (ref: 1V/μbar at 1kHz with 12Vdc supply voltage and 470 Ohm DC, 150 Ohm AC load)

Matching Impedance:

50 - 600 Ohms

Gain Adjustment Range:

±5dB (clockwise rotation increases gain; counterclockwise rotation decreases gain)

Operating Voltage:

8-16Vdc (supplied by aircraft radio/intercom)

Cordage

Coiled Cord 8.5 ft. (2.6m) extended

Connectors

Microphone and Receiver Plug:

U174u equivalent TP120

2.5mm 3 conductor audio jack for connection to cell phone connection

3.5mm 3 conductor audio jack for connection to auxiliary audio

DC Jack:

1.3mm ID, 3.5mm OD, pin +

Weight

Effective Head Weight:

Approximately 18.5oz. (524g)

Color

Grey/Black

Operation

Headset Operation

Headband Size Adjustment

To **adjust the headband size**, do the following:

1. With the headband resting securely on the top of the head, verify the **ear cups** are centered over the ears.

-
2. Reposition the ear cups, if necessary, by moving the **headband sliders** up or down.

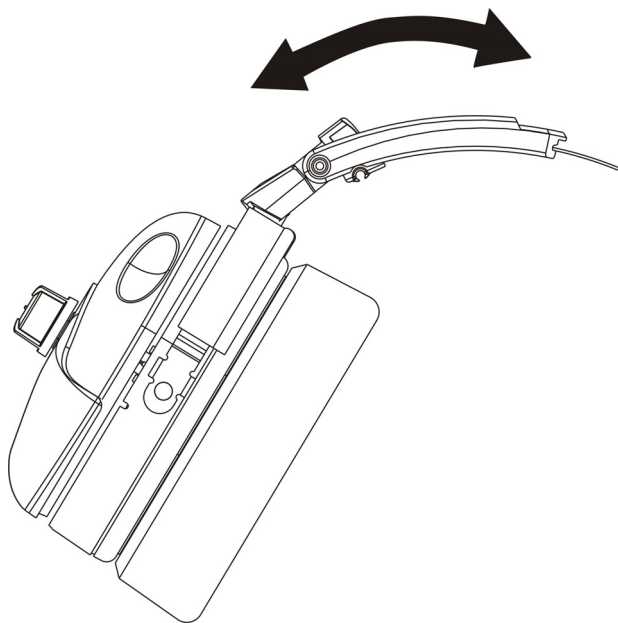


FIGURE 1. Headband Size Adjustment

Headband Pressure Adjustment

There are three(3) pressure settings. Increasing the pressure improves the seal between the ear cup and the head for greater noise reduction.

To **change the pressure setting**, do the following:

1. Remove the headset and fold the **ear cup** inward.
2. Rotate the **Comfort Cam™** to the desired setting.
3. Repeat for **both ear cups**.

NOTE: Both sides of the headband should be set to the same pressure setting to keep the headband properly centered on the head.

COMFORT CAM™ ADJUSTMENT SETTINGS

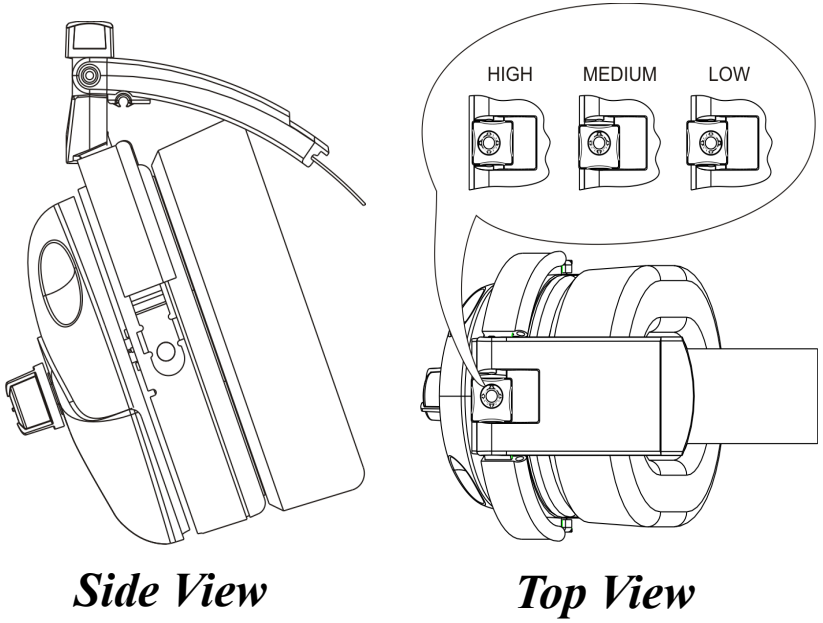


FIGURE 2. Headband Pressure Adjustment

Microphone Boom Rotation

To **rotate the boom microphone**, do the following:

- > Rotate the **entire boom** overhead to wear the microphone on either the right or left side of the head.

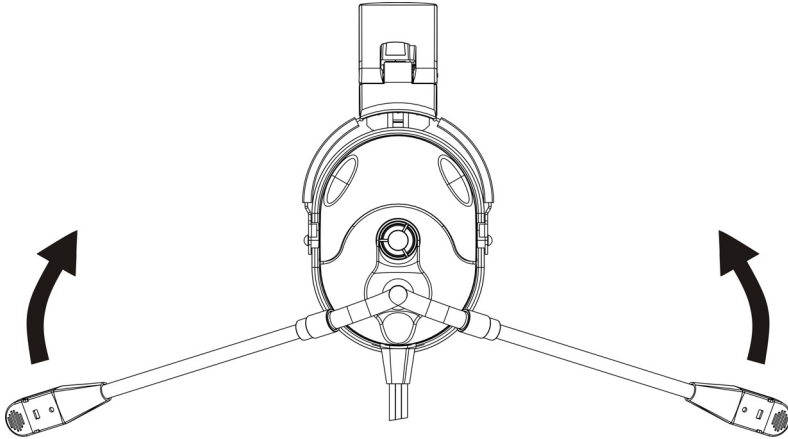


FIGURE 3. Microphone Boom Rotation

Microphone Placement

To **accurately place the microphone**, do the following:

- > Reshape the **boom** so the microphone is in front of the mouth.

NOTE: To assure optimal performance, the user should position the microphone close to the lips as possible, near the corner of the mouth with the flat part of the microphone parallel to the user's face. Speak in a normal voice.

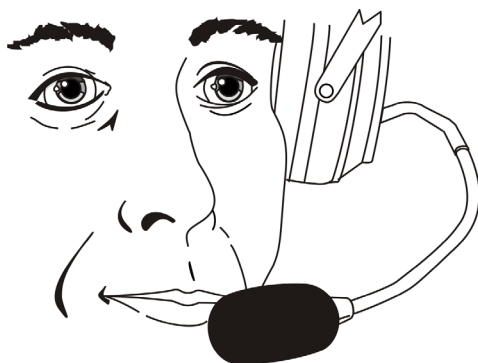


FIGURE 4. Mic Placement

Battery Installation

NOTE: Rechargeable NiMH Batteries supplied with the Stratus Heli-XT need to be fully charged before first use.

To **install the batteries**, do the following:

1. Press the **thumb-grip area** of the battery cover and slide the battery cover down, and then lift off the cover.
2. Place the **batteries** into the battery compartment in the direction indicated.
3. Slide the **battery cover** back into place.

Accessory Connections

Connect cellular telephone and/or audio input devices, as desired.

The Telex Stratus Heli-XT cell phone/audio interface has been designed to function with the widest array of cellular telephones and portable audio devices. There are cell phones and audio devices on the market not designed to industry physical and electrical standards. These devices are not guaranteed to function properly with the Stratus Heli-XT headset.

See the Telex website (www.telex.com/aircraft), for additional information.

Speaker Volume Adjustment

When the microphone is worn on the left side, volume is increased by rotating the top of the volume controls toward the front of the head. Control operation is reversed when the microphone is worn on the right side. Volume control affects communications, as well as cell phone and auxiliary audio inputs.

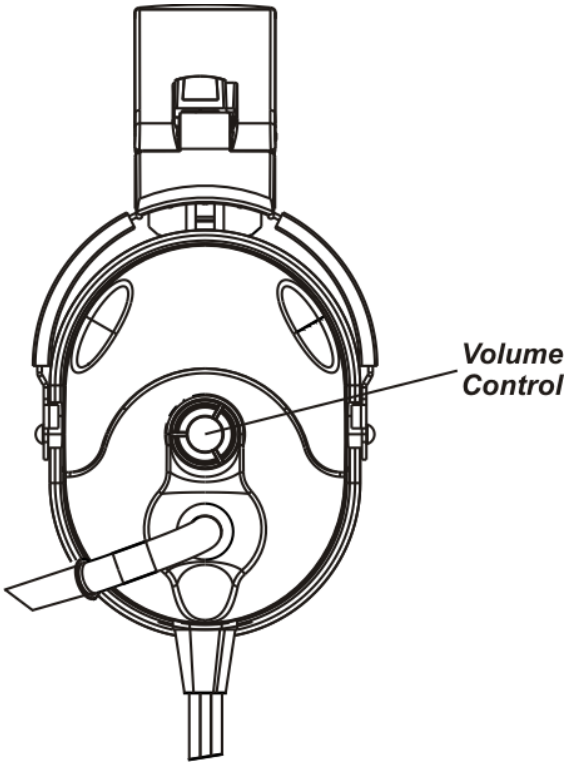


FIGURE 5. Volume Adjustment

Powering ON/OFF

To **power the headset ON**, do the following:

- > To turn the headset ON, press the **ON/OFF button**.
A blinking LED indicates the power is ON.

To **power the headset OFF**, do the following:

-
- > To turn the headset OFF, hold down the **ON/OFF button** until the LED blinks rapidly, and then let go.
The blinking LED stops when the unit is OFF.

Accessory Muting

To **mute accessories**, do the following:

- > To either enable or mute the accessories, press the **accessory mute button**.
When the accessories are muted, the LED blinks at a slower rate than when they are enabled.

Battery Charging

To **charge the batteries**, do the following:

- > Connect either the **AC wall adapter** or the **aircraft cigarette lighter** to the DC input jack.
If the headset is OFF, the LED lights solid red during charging. If the unit is ON and the batteries are charging, the LED will be mostly ON, but blink OFF occasionally, as opposed to being mostly OFF but blinking ON occasionally when the batteries are not charging.

Disable Auto Shut-Off

To disable the auto shut-off feature, do the following:

1. Remove the **batteries** from the unit (see “Battery Installation” on page 13).
2. Locate the **DIP switch** in the battery compartment.
3. Using a small, flat-blade screwdriver, set switch position 3 to the **ON position** (away from the number 3).
Auto Shut-Off can be re-enabled by setting switch 3 to the OFF position (toward the number 3).

Reading the LED Indicator

TABLE 1. LED Indicator Descriptions

	Battery Normal	Battery Low	Battery Charging
Power OFF	LED OFF	LED OFF	LED Solid Red
Power ON/ Accessories Enabled	Blinks Green every two (2) seconds	Blinks Red every two (2) seconds	Blinks OFF every two (2) seconds
Power ON/ Accessories Muted	Blinks Green every four (4) seconds	Blinks Red every four (4) seconds	Blinks OFF every four (4) seconds

Microphone Gain Adjustment

The microphone gain has been factory-adjusted to the nominal level required for aviation use, and should not require adjustment. Any changes to the microphone gain should be done by a qualified avionics technician.

To access the gain trimmer, do the following:

- 1. Insert a small, flat-blade screwdriver through the access hole in the microphone assembly.
- 2. Turn the **gain pot clockwise** to increase the gain.
OR
Turn the **gain pot counterclockwise** to decrease the gain.

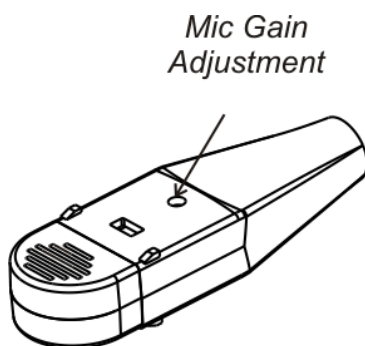


FIGURE 6. Microphone Gain Adjustment

Microphone Replacement

To replace the microphone, do the following:

1. On the boom assembly, press the **release catch** and carefully pull the microphone from the mic mount.
Be sure not to pull the connecting wires from the mic mount.
2. Detach the **microphone** from the connector.

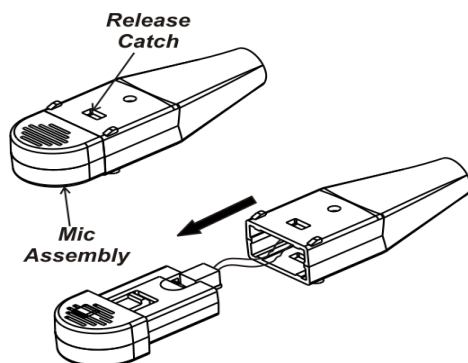


FIGURE 7. Mic Element Removal

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3. Re-attach the **new microphone** to the connector.
 4. Carefully rejoin the **microphone** and **microphone mount**, taking care not to fold the connecting wires.

Ear Cushion Replacement

To **remove an old ear cushion**, do the following:

- > Grasp the **ear cushion** and pull it off the ear cup.

To **install a new ear cushion**, do the following:

1. Starting at the top of the ear cup, place the **back flap of the ear cushion** over the top lip of the ear cup.
2. Pull the **bottom of the ear cushion** over the bottom lip of the ear cup.



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