# Telex User Instructions



FC

Stratus 30XT (shown)/Stratus 30 Active Noise Reduction Headset





This device complies with part 15 of the FCC Rules, Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



## **Design Features (See Figure 1)**

#### **Noise Reduction**

Passive noise reduction: >29dB Active noise reduction: up to 16dB (Stratus 30XT) Active noise reduction: up to 13dB (Stratus 30)

#### Fit and Comfort

Detented slide adjustment on the headband allows the ear cup to be easily raised or lowered for proper fit. Yoke design allows the earcup to pivot in two planes assuring proper seal to the head and distributing ear cushion pressure evenly over it's entire surface. Adjustable earcup pressure by rotating the patented "Comfort Cam<sup>tm</sup>" to one of three tension settings.

1" thick ear cushion made from heat sensitive slow recovery foam which will conform to your head to provide a perfect seal while spreading the weight over a large area eliminating pressure points (Stratus 30XT only).

#### **Boom Microphone**

Amplified electret noise-canceling microphone eliminates 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.

#### Cordage and Plugs

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. The headset includes separate receiver and microphone plugs for plugging into the aircraft radio/ intercom system.

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.

Cigarette lighter adapter is provided to power the headset off of aircraft power and to recharge the batteries (Stratus 30XT only).

AC wall adapter is provided to recharge the batteries when user is away from the aircraft (Stratus 30XT only).

## Auto Shut-Off

Headset will shut off automatically after 15 minutes in low-noise environments. When Auto Shut-off is enabled, things that keep headset on 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 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 on Stratus 30XT only). DC input jack to power the headset off of aircraft power and to recharge the batteries (Stratus 30XT only).

# **Electrical Requirements**

### Microphone Bias Voltage

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

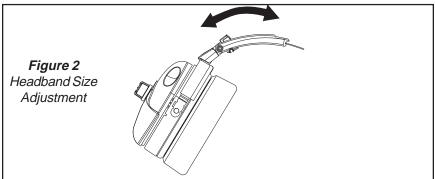
#### **Headset Power**

2 AA Alkaline or NiMH batteries or Panel power from 8-32 VDC negative ground electrical systems (Stratus 30XT only).

# Headset Operation

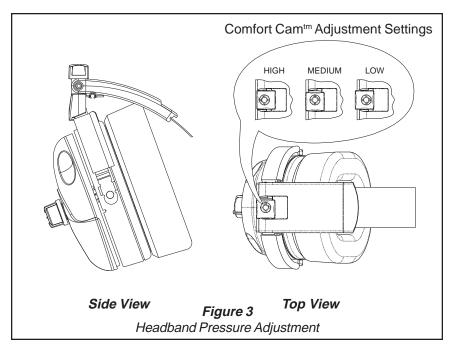
## Headband Size Adjustment

With the headband resting securely on the top of the head, check that the ear cups are centered over the ears. Reposition them if necessary by moving the headband sliders up or down.



#### Headband Pressure Adjustment

There are three pressure settings. Increasing the pressure will improve the seal between the ear cup and the head for greater noise reduction. To change the pressure setting, remove the headset and fold the ear cup inward, then rotate the Comfort Cam<sup>tm</sup> to the desired setting. Repeat for both ear cups. Both sides of the headband should be set to the same pressure setting to keep the headband properly centered on the head.



## **Microphone Boom Rotation**

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

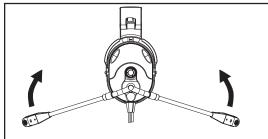
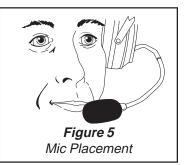


Figure 4 Microphone Boom Rotation

#### **Microphone Placement**

Reshape the boom so that the microphone will be in front of the mouth. 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.

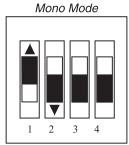


#### **Mono/Stereo Selection**

The user can set the mono/stereo headphone switches to match the type of sound system in your aircraft. If the headset is set for stereo and the intercom is set for mono, sound will only come out of one ear cup.

To change the mono/stereo setting, remove the batteries (see Battery Installation) and locate the DIP switch in the battery compartment. Using a small flat-blade screwdriver, set switch positions 1 and 2 to the following locations:

For mono set switch 1 away from the number 1 and switch 2 toward the number 2. For stereo set switch 1 toward the number 1 and switch 2 away from the number 2.



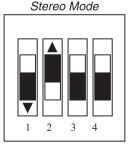


Figure 6 Mono/Stereo Selection

#### **Battery Installation**

\*Note - Rechargable NiMH Batteries supplied with the Status 30XT need to be fully charged before first use.

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

#### **Accessory Connections**

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

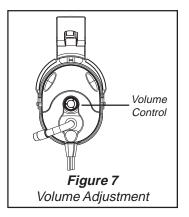
The Telex Stratus 30XT cell phone / audio interface has been designed to function with the widest array of cellular telephones and portable audio devices. There are cell phones and audio devices on the market not designed to industry physical and electrical standards. These devices are not guaranteed to function properly with the Stratus 30XT headset.

Please see the Telex website for additional information.

www.telex.com/aircraft

#### **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.



#### Powering On/Off

To turn the headset on, press the ON/OFF button. To turn the headset off, hold down the ON/OFF until the LED blinks rapidly, then let go. A blinking LED indicates that power is on.

#### **Accessory Muting**

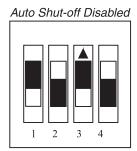
To either enable or mute the accessories, press the accessory mute button. When the accessories are muted, the LED will blink at a slower rate than when they are enabled.

## Battery Charging (Stratus 30XT only)

To charge the batteries, connect either the AC wall adapter or the aircraft cigarette lighter adapter to the DC input jack. If the headset is off, the LED will light 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.

#### **Disabling Auto Shut-Off**

To disable the Auto Shut-Off feature, remove the batteries (see Battery Installation) and locate the DIP switch in the battery compartment. Using a small flat-blade screwdriver, set switch position 3 away from the number 3. Auto Shut-Off can be re-enabled by sliding switch position 3 toward the number 3.



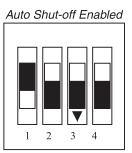


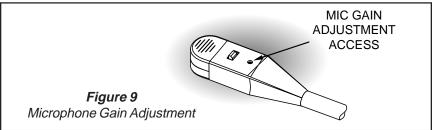
Figure 8 Disabling Auto Shut-off

## **Reading the LED Indicator**

	Battery Normal	Battery Low	Battery Charging (Stratus 30XT only)		
Power Off	LED Off	LED Off	LED Solid Red		
Power On / Accessories Enabled	Blinks Green every 2 sec.	Blinks Red every 2 sec.	Green, Blinks off every 2 sec.		
Power On / Accessories Muted	Blinks Green every 4 sec.	Blinks Red every 4 sec.	Green, Blinks off every 4 sec.		

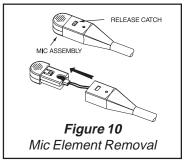
# Microphone Gain Adjustment

The microphone gain has been factory-adjusted to the nominal level required for aviation use, and it should normally not require readjustment. Any changes to the microphone gain should be done by a qualified avionics technician. To access the gain trimmer, insert a small flat-blade screwdriver through the access hole in the microphone assembly. Clockwise rotation of the trimmer increases gain.



## Microphone Replacement

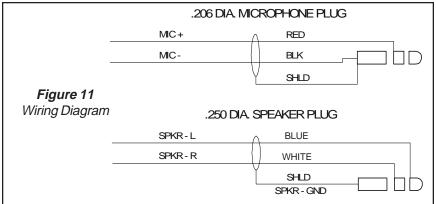
Press the release catch and carefully pull out the microphone element. Avoid pulling the connecting wires.



## Ear Cushion Replacement

To remove an old ear cushion, simply grasp it and pull it off the ear cup. To install a new ear cushion, start at the top of the ear cup. Place the flap on the back of the ear cushion over the lip along the top of the ear cup. Then, pull the bottom of the ear cushion down over the lip at the bottom of the ear cup.

## Wiring Diagram



## **Specifications**

**Receivers:** Type: Dynamic Frequency Response: 50 Hz - 10 kHz Sensitivity: 95 ± 5 dB SPL (1 kHz, 1 mW input) Impedance (Max. Volume): Monaural......150 ohms Headset Power: 4AA Batteries or Panel Power from 8-32 Vdc(Stratus 30XT only) Microphone: Element Type: Amplified noise-canceling electret Frequency Response: 100 Hz - 3.5 kHz Sensitivity:  $-50 \pm 6$  dB (ref: 1V/ µbar at 1 kHz with 12 Vdc supply voltage and 470 ohm DC, 150 ohm AC load) Matching Impedance: 50-600 ohms Gain Adjustment Range: ± 5 dB (clockwise rotation increases gain) Operating Voltage: 8-16 Vdc (supplied by aircraft radio/intercom) Cordage: Approx. 6.5 ft (2 m) total Connectors: Microphone Plug: PJ-068 or equivalent Receiver Plug: PJ-055 or equivalent 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 + (Stratus 30XT only) Weight: Effective Head Weight: Approximately 18.5 oz. (524 g)

Color: Grey/Black

# **Ordering Information**

Stratus 30XT Headset Catalog no. PRD000011100 Stratus 30 Headset					
Stratus 30XT 1" Foam-filled Ear Cushions (package of 2)					
·	Catalog no. 800456021				
Stratus 30 Ear Cushions (package of 2)	Catalog no. 800456008				
Stratus 30XT Premium Headband Pad)	Catalog no. 800456017				
Stratus 30 Headband Pad	Catalog no. 800456004				
Replacement electret microphone	Catalog no. 800136100				
Microphone windscreen	Catalog no. 800456000				
Clothing Clip	Catalog no. 590637000				
Stratus 30XT Carring Case	Catalog no. CME000009000				
Stratus 30 Zippered Pouch	Catalog no. 500266000				
Cell Phone Accessory Cable					
Auxiliary Device Accessory Cable	Catalog no. 550216003				
Aircraft Power Cord (for Stratus 30XT only)	Catalog no. 550216004				
AC Wall Adapter (for Stratus 30XT only)	Catalog no. 800456023				
Battery Box Door (for Stratus 30 and 30XT only)	Catalog no. 800456024				

#### **TELEX COMMUNICATIONS, INC. - LIMITED WARRANTY**

**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, lightning 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 WARRANTIES 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 OF 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 14<sup>th</sup> Street Glencoe, MN 55336 Tel: 320-864-3177 Fax: 320-864-3225

#### CUSTOMER SERVICE

For information or technical assistance, call, write, or email 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 your 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 30				Х				
Stratus 30XT					х			
Note: Subject to change without notice.								



TELEX COMMUNICATIONS, INC. • 12000 Portland Ave. S., Burnsville, MN 55337 U.S.A.

www.telex.com/aircraft