



## User Instructions



# Echelon 25XT

## Noise Reduction Headset

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### **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 Bosch 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.

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### **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 Bosch 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.



# Ordering Information

| Parts List   |                                  |     |
|--------------|----------------------------------|-----|
| Part No.     | Description                      | Qty |
| 800456022    | Replacement Head Pad             | 1   |
| 590637000    | Cord Clip                        | 1   |
| 800136100    | Microphone Element Assembly      | 1   |
| 800456021    | Foam Ear Pads (set of 2)         | 1   |
| 800456000    | Windscreen                       | 1   |
| CME000009000 | Carrying Case                    | 1   |
| 550216002    | Cell Phone Accessory Cable       | 1   |
| 550216003    | Auxillary Device Accessory Cable | 1   |

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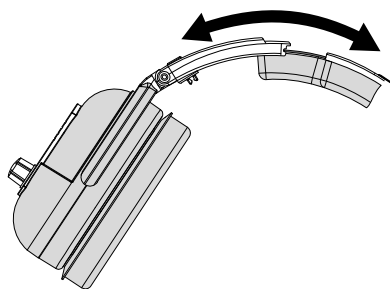


**FIGURE 1.** Echelon 25XT Noise Reduction Headset

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## Headband Size Adjustment

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**FIGURE 2.** Headband Size Adjustment

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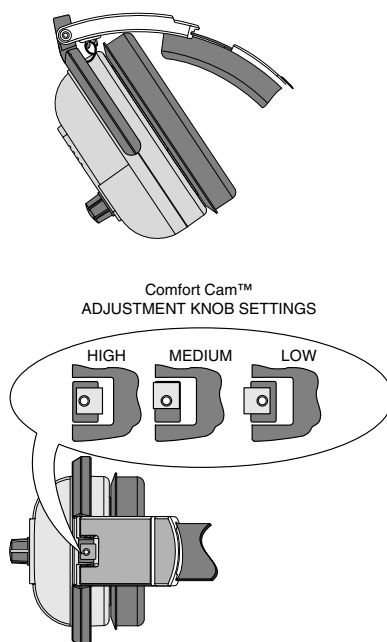
To **adjust the headband size**, do the following:

1. Move the **earcup sliders** up or down on the headband.  
*Size is properly adjusted when the earcups are centered over the ears. It is important to make the same adjustments to both sides of the headband to keep the headband and pad properly centered over the head.*

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## Headband Pressure Adjustment

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



**FIGURE 3.** Headband Pressure Adjustment

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

1. Remove the **headset**.
2. Fold the **earcup inward**, as shown in (Figure 3).
3. Rotate the **Comfort Cam adjustment knob** to the desired setting.
4. Repeat for **both earcups**.

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

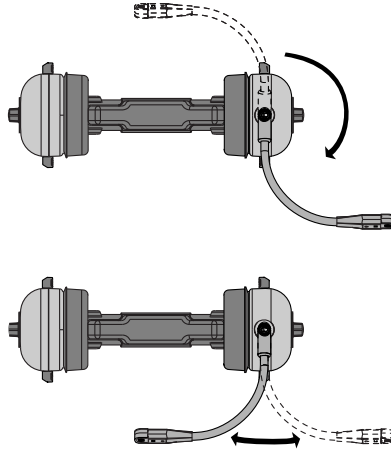
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## *Left or Right Side Microphone Placement*

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To **adjust the microphone to the left or right**, do the following:

1. Rotate the **boom**, as shown inFigure 4.



**FIGURE 4.** Rotating and Reshaping the Boom

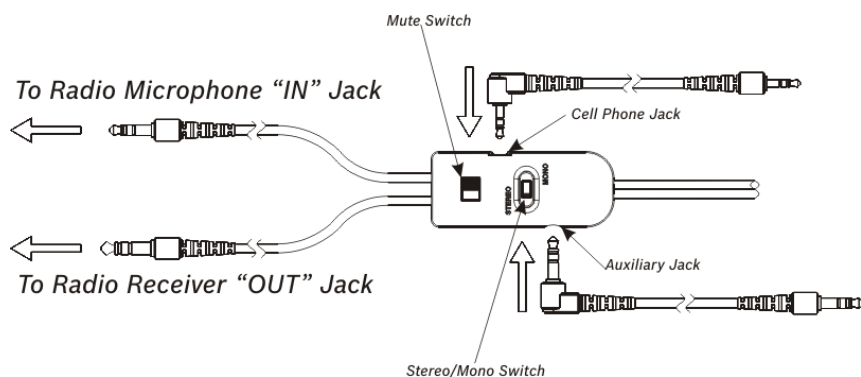
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2. Reshape the **boom** so the microphone is at the corner of the mouth.

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## Connection

Using the headset to the aircraft radio or intercom system as shown in Figure 5.



**FIGURE 5.** Echelon 25XT Connectors

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## Stereo Mono Switch

This switch is located on the Y-cord (Figure 5). Set the switch to stereo for aircraft with a stereo intercom system. Set the switch to mono for monaural intercom systems or for direct connection to the aircraft radio.

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## Cell Phone/Audio Interface

The Echelon 25XT includes a unique amplified interface allowing for the connection of a cellular telephone and an audio input simultaneously. This configuration allows the user to set up before take-off and eliminates the need to re-configure cords and equipment when operating the aircraft.

the other unique feature of this interface is the ability to obtain power from the aircraft's communications system. By amplifying the inputs, the Echelon 25XT allows the user to adjust volume level at the headset contributing to the ability to not need re-configuring while in flight.

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The Telex Echelon 25XT 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 Echelon 25XT headset.

**NOTE:** Cell phone usage while in the air or under situations requiring full attention is not recommended.

For additional information, see the Bosch website

[www.telex.com/aircraft](http://www.telex.com/aircraft)

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## *Volume Adjustment*

When the microphone is worn on the left side, volume is increased by rotating the top of the volume controls clockwise. Control operation is reversed when the microphone is worn on the right side.

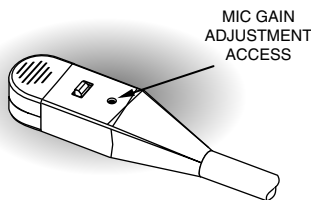
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## *Microphone Gain Adjustment*

The microphone gain has been factory-adjusted to the nominal level required for aircraft use and should normally not require readjustment. Readjustment by a qualified avionics technician is recommended.

To **access the gain trimmer**, do the following:

1. Insert a small flathead screwdriver through the access hole in the mic element.



**FIGURE 6.** Mic Gain Adjustment

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2. Turn the **gain pot** clockwise to increase gain.  
OR  
Turn the **gain pot** counter-clockwise to decrease gain.

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## *Ear Cushion Replacement*

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

- > Grasp the ear cushion and pull it off the earcup.

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

1. Starting at the top of the earcup, place the **flap** on the back of the ear cushion over the lip along the top of the earcup.
2. Pull the **bottom of the ear cushion** down over the lip at the bottom of the earcup.

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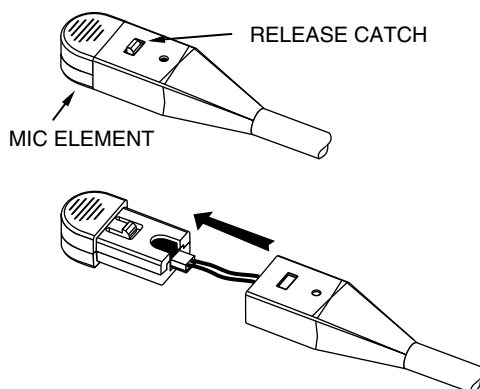
## Mic Element Removal

To **remove the mic element**, do the following:

1. Press and release the **catch** on the microphone element.
2. Carefully pull out the **element**.

**NOTE:** Avoid pulling the microphone wires.

3. Pull the **plastic connector housing** to unplug the microphone element.



**FIGURE 7.** Mic Element Removal for Replacement

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## *Specifications*

### **Receivers**

Type: Dynamic

Impedance: accepts 150 Ohm (stereo) 300 Ohm (mono) source

Frequency Response: 350Hz -3.0 kHz  $\pm 6$ dB

Sensitivity: 90  $\pm 5$ dB SPL for 1mW, 1kHz input

Maximum Power Input: 30mW

### **Microphone/Amplifier Assembly**

Microphone Type: Noise-canceling electret condenser

Output Impedance: 50 Ohm

Frequency Response: 100Hz – 3.5kHz

Sensitivity: -50  $\pm 6$ dB (ref: 1V/ $\mu$ bar)

Operating Voltage: 8–16Vdc

### **Cords and Plugs**

Cord: 5.5ft (1.7m) “y” cord with stereo/mono selector switch

Receiver Plug: 1/4” stereo phone plug

Microphone Plug: PJ-068 equivalent

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

3.5mm 3 conductor audio jack for connection to auxiliary audio

