

eSight

User Guide



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Safety

- **Read through this entire manual before using your eSight Eyewear.**



Caution

eSight makes no claims about the fitness of the eSight Eyewear for any specific activity.

DO NOT use your eSight Eyewear during activities requiring very significant physical movement — such as operating a motorized vehicle, jogging, power tool use (without specific training), or similar activities.

See below for more details.

- DO NOT drive while wearing your eSight Eyewear.
- DO NOT continuously look through your eSight Eyewear while
 - Walking or traveling in unfamiliar or congested areas.
 - Negotiating stairs, curbs, doorways, escalators, revolving doors, and so on.
 - Operating power equipment, tools, or other potentially dangerous machines.
 - Looking at the sun (with or without the eSight Eyewear).
- Your eSight Eyewear can obscure your field of vision above the line of sight. Take care to avoid objects, such as low tree branches and the tops of door frames in automobiles.

-
- Avoid applying foreign substances to either the headset or the controller. DO NOT paint or use household cleaning fluids on the unit. Avoid getting sunscreen, skin lotions, or makeup on the headset or controller. For cleaning instructions, see “Cleaning your eSight Eyewear” on page 22.
 - When using your eSight Eyewear in mobile situations, place the headset in the bioptic position (see “Tilting the Headset” on page 12) and secure the controller.

About Your eSight Eyewear

The eSight Eyewear is a state-of-the-art head mounted camera and display system, as shown in Figure 1.

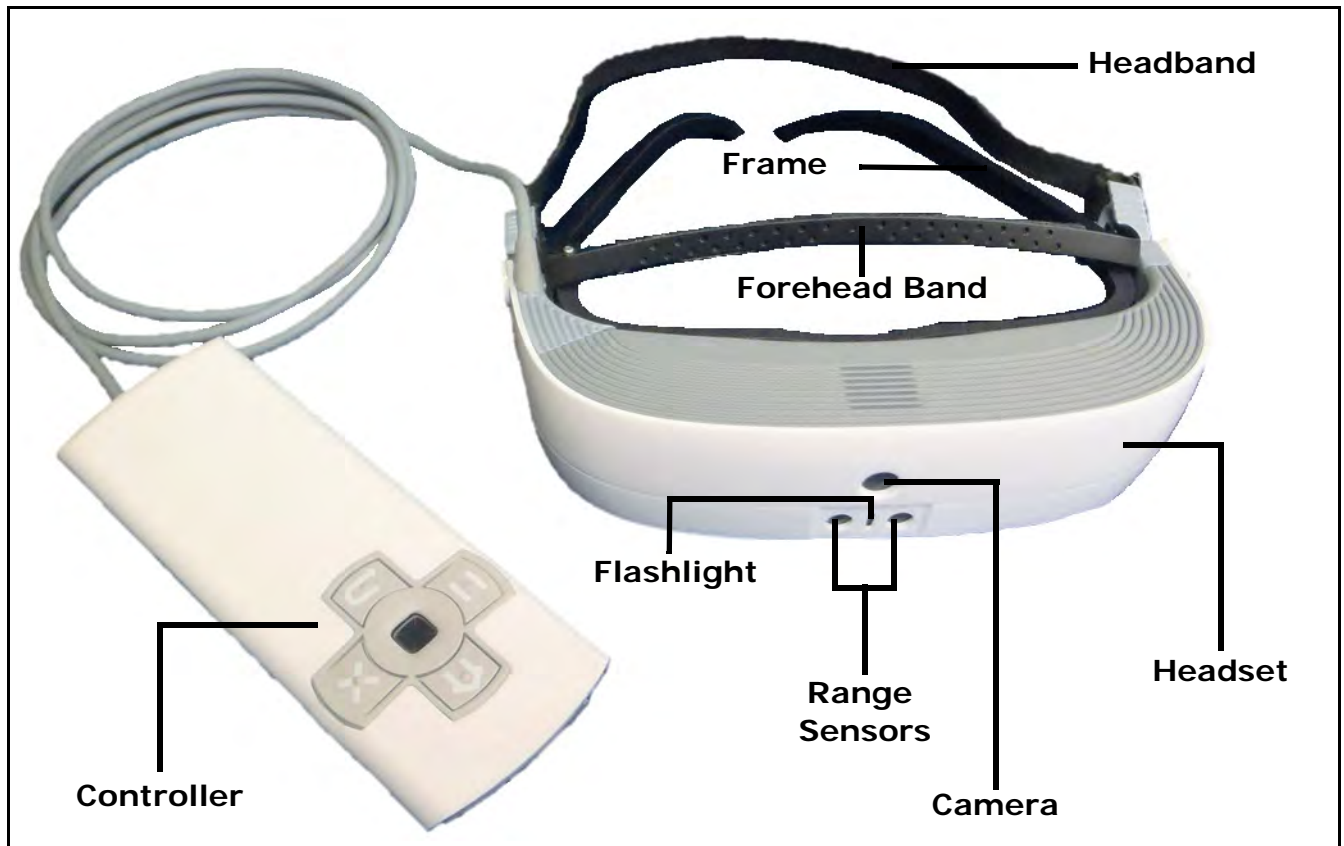


Figure 1 eSight Eyewear

Contents of Your eSight Eyewear Package

As you unpack your eSight Eyewear, make sure you have received the items below:

Standard Contents

- eSight Eyewear (Headset and Controller)
- Lenseless Frame with Nosepad
- eSight Eyewear USB Cable
- USB AC Wall Adapter
- SD Card, includes Electronic Product Documentation
- Digital Video Cable
- Printed Product Documentation
- Wrist and Neck Lanyards
- Belt Clip
- Carry Case
- Warranty Card

Optional Contents

- Ophthalmic Frame and Lenses with Microfiber Bag
- 5 Meter HDMI Cable
- Double USB Type A to Type C Cable

Once you have checked the contents of your package, charge your eSight Eyewear battery.



You must fully charge the battery before you can use your eSight Eyewear for the first time. See “Charging Your eSight Eyewear using the Wall Charger” on page 21 for information on charging the battery.

Wearing Your eSight Eyewear

Getting the most out of your eSight Eyewear begins with learning how to comfortably wear your eyewear and controller and how to tilt your headset.

Putting On the eSight Eyewear

Your frames support the headset, so you can wear it like a pair of normal glasses. The headstrap and forehead band lift the weight of the eyewear off the bridge of your nose for a secure and comfortable fit.

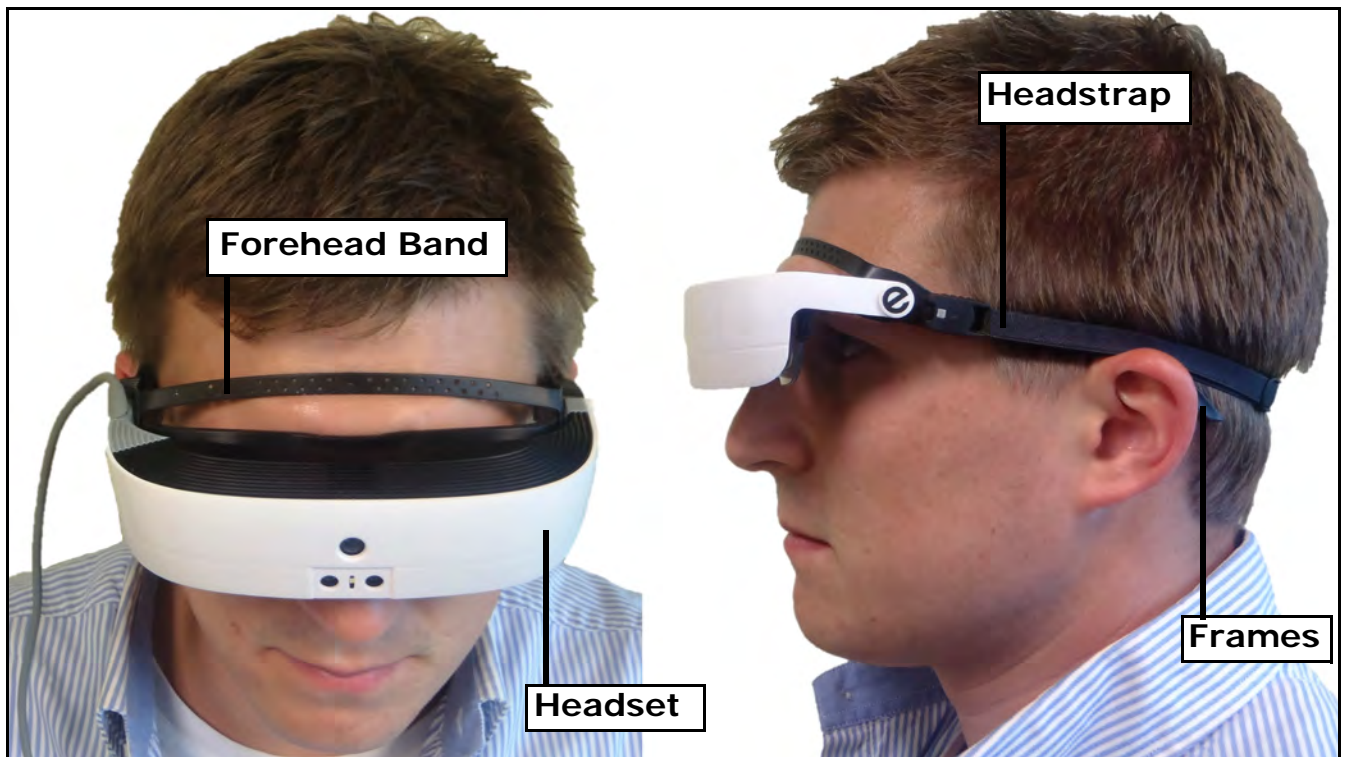


Figure 2 Proper Wearing of the Headset

Achieving the Perfect Fit

You have a good fit when

- Your frames are positioned on the face like a regular pair of spectacles.
- Your forehead band fits snugly against your forehead.
- Your headband fits snugly around your head.
- Your headset and frames should feel weightless on the bridge of your nose.
- Your headset and frames should not move when you shake your head.

Connecting and Disconnecting the Frames

The frames connect magnetically to headset, as shown in Figure 3.

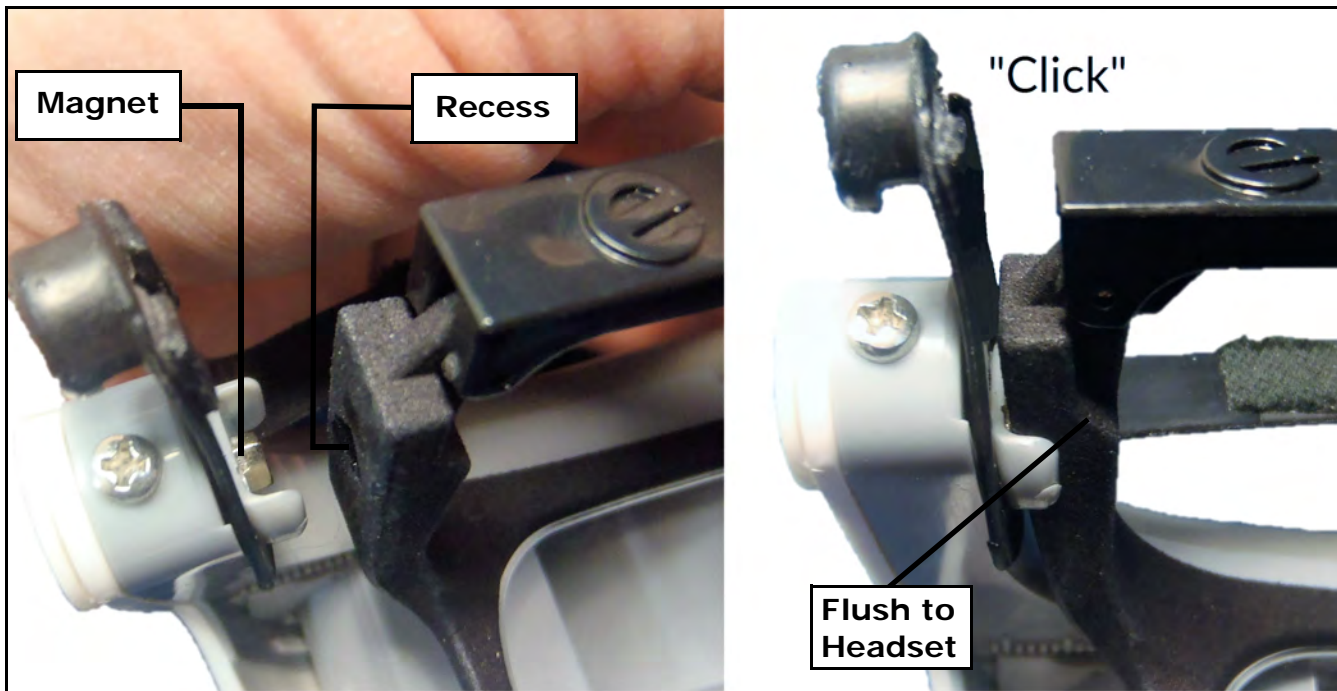


Figure 3 Connecting the Frames

To connect the frames

1. Align the magnetic recess on the frames with the magnet on the headset (Figure 3, Left).

2. Gently push the frames until they “click” into place (Figure 3, Right).
3. In the same manner, fit the opposite side.

Both sides of the frames are flush with the headset (Figure 4).



Figure 4 Frames Fitted in the Headset

To disconnect the frames

1. On one side, gently push the frames slightly inward and then away from the headset, as shown in Figure 5.
2. Gently pull the frames free from the headset on the opposite side.

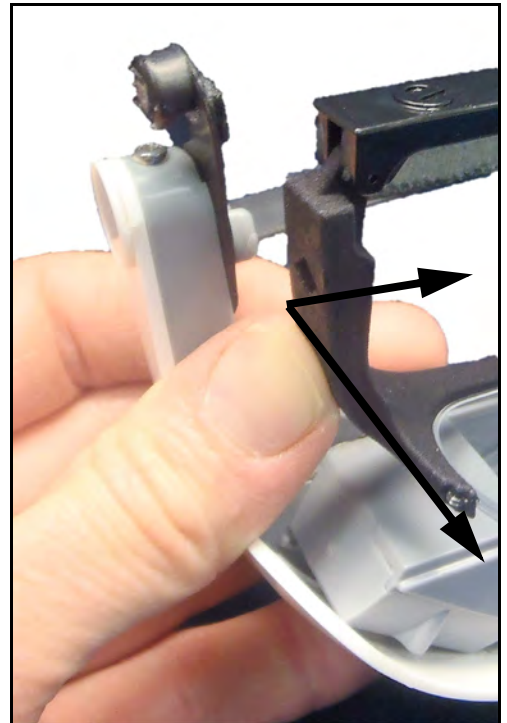


Figure 5 Disconnecting the Frames

Connecting and Disconnecting the Headstrap

The headstrap connects to attachment points on the forehead band, as shown in Figure 6.

To connect the headstrap to the eyewear

1. Attach the headstrap to the right side of the eyewear, as shown in Figure 6, and then gently pull on the connector until it “Clicks” into place.

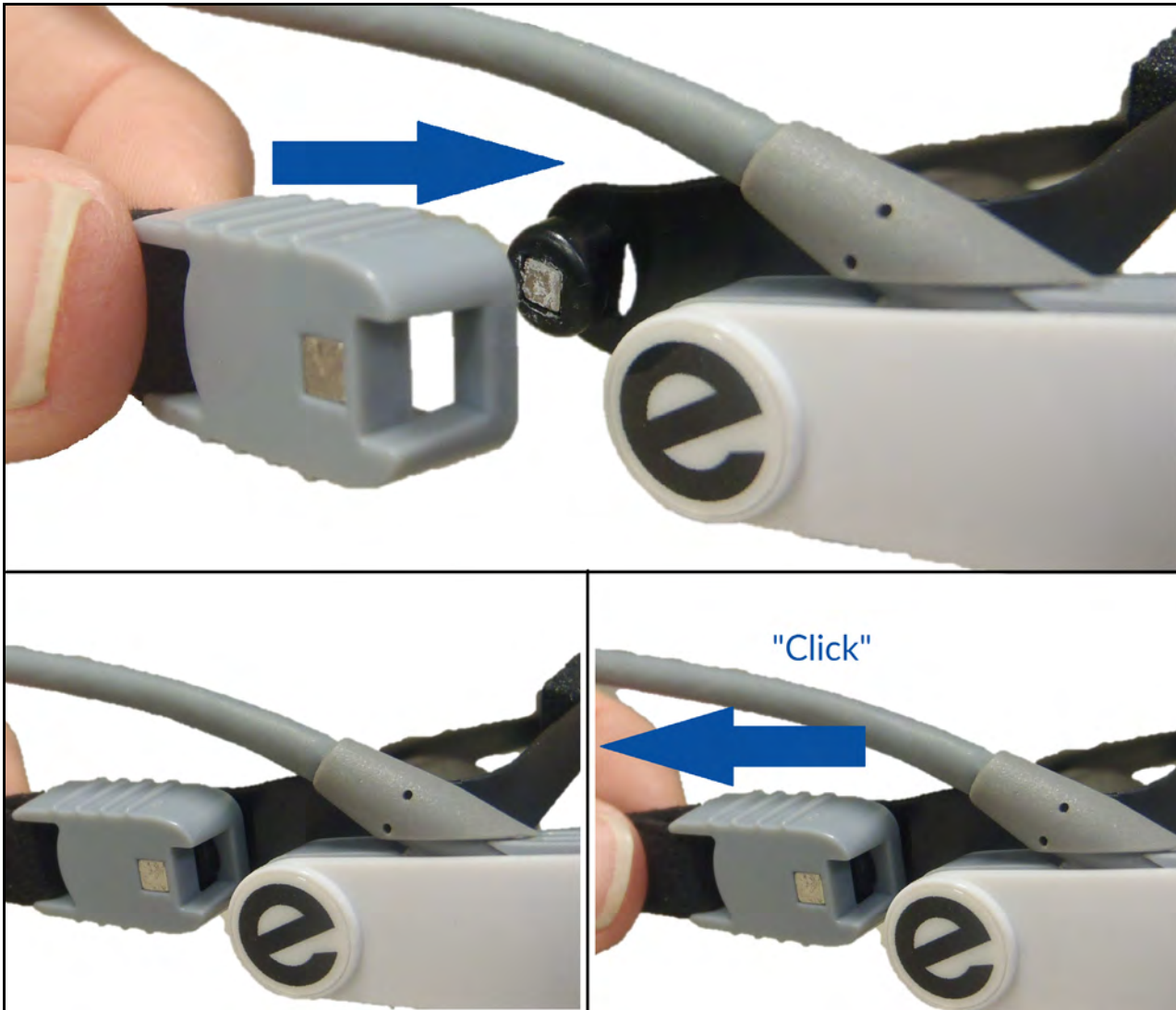


Figure 6 Connecting the Right Side of the Headstrap

2. With your frames connected to the headset, put on the headset like a pair of glasses.
3. Wrap the headstrap around your head.
4. In the same way as you attached the right side of the headstrap, attach the left side of the headstrap, as shown in Figure 7.

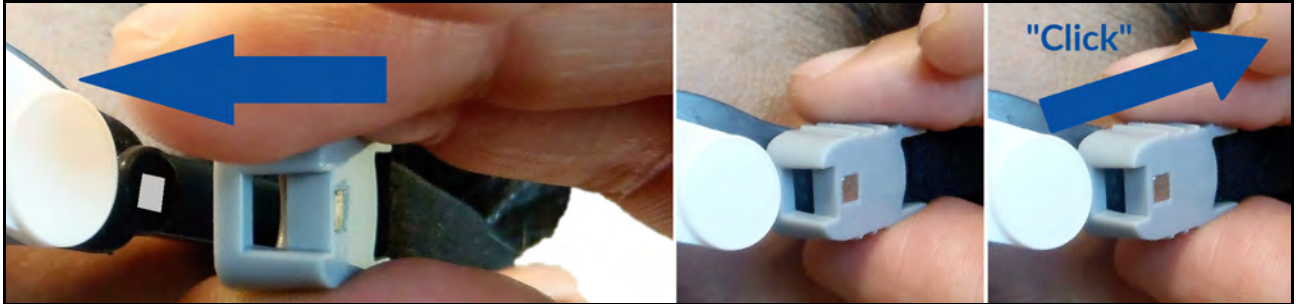


Figure 7 Connecting the Left Side of the Headstrap

5. Tighten the headstrap by sliding the strap buckle until you have a snug fit, as shown in Figure 8. See "Wearing Your eSight Eyewear" on page 5.



Figure 8 Adjusting the Headstrap

To disconnect the headstrap from the eyewear

- While wearing your eyewear, rotate the headstrap connector until it "Pops off", as shown in Figure 9.



Figure 9 Disconnecting the Headstrap

Securing the Controller

When you are using your eSight Eyewear in mobile situations, you can secure the controller using the belt clip, wrist strap, or neck lanyard. Alternately, you can carry the controller in your pocket or purse.

To use the belt clip

1. Fit the tooth on the belt clip cradle into the slot on the side of the controller (Figure 10 Left and Center).
2. Push down on the controller until it snaps into the cradle (Figure 10, Right).



Figure 10 Securing the Controller

3. Secure the belt clip to your clothing, and position the cable behind your head and back or down the front of your chest.
4. Rotate the cradle on the belt clip, so the controls are easily accessible when the belt clip is secured to your clothing, as shown Figure 11.

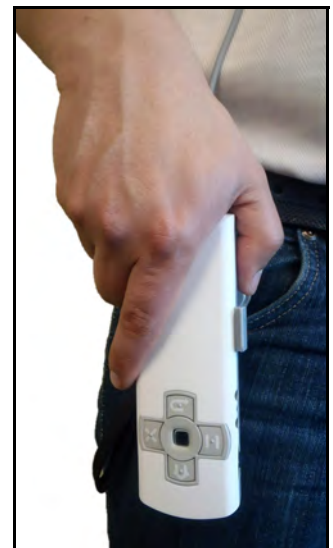



Figure 11 Using the Belt Clip


Tilting the Headset

You can tilt your eSight Eyewear through a wide range of positions. There are three common positions: nearly immersive, bioptic, or headset up. When you use each position depends on your activity and personal preference.




Nearly Immersive Position — Headset Fully Down

- View using mostly the displays
- Limited access to peripheral vision
- Useful for immersive activities like reading, crafts, and watching t.v.
- Do not attempt mobile activities with your headset fully down



Bioptic Position — Headset Partially Upright

- View using the displays and frame lenses
- Allows you to use your peripheral vision and glance up into the headset displays for greater detail
- Useful for mobile activities, social occasions, and working with screens



Fully Tilted Position — Headset Fully Up

- View using only your frame lenses
- Cannot view the displays
- Headset is out of the way

Powering Your eSight Eyewear

Your eSight Eyewear has three power modes:

- **ON — Push the Power button to turn on your eSight Eyewear.**

The light momentarily flashes red and green as your eyewear starts up.

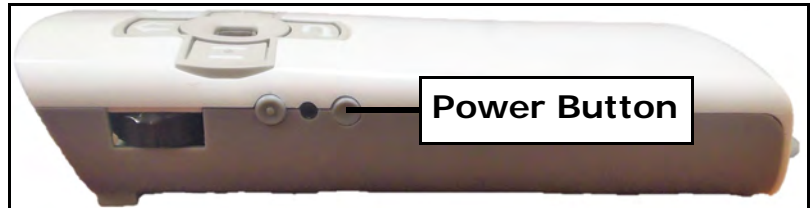



Figure 12 Power Button on the Controller

When your eyewear is ready, the light indicates the power and battery status of your eyewear. See “Getting to Know Your Controller” on page 15 for more information about the Power/Battery Status Light.

- **Standby — When your eyewear is turned on, push the Power button to put your eyewear into Standby mode. Push the Power button again to leave Standby mode.**



Alternatively, push the **Home Button**  and **Menu Back/Control**

Lock Button  together to enter or leave Standby mode.

In this mode, the eSight Eyewear consumes very little power, and you can resume use of your eyewear quickly.

When your controller is in this mode, the Power/Battery Status Light is off unless you are charging your eyewear.

To conserve power, your eSight Eyewear automatically enters standby mode if the eyewear is resting in a stationary position for one minute.

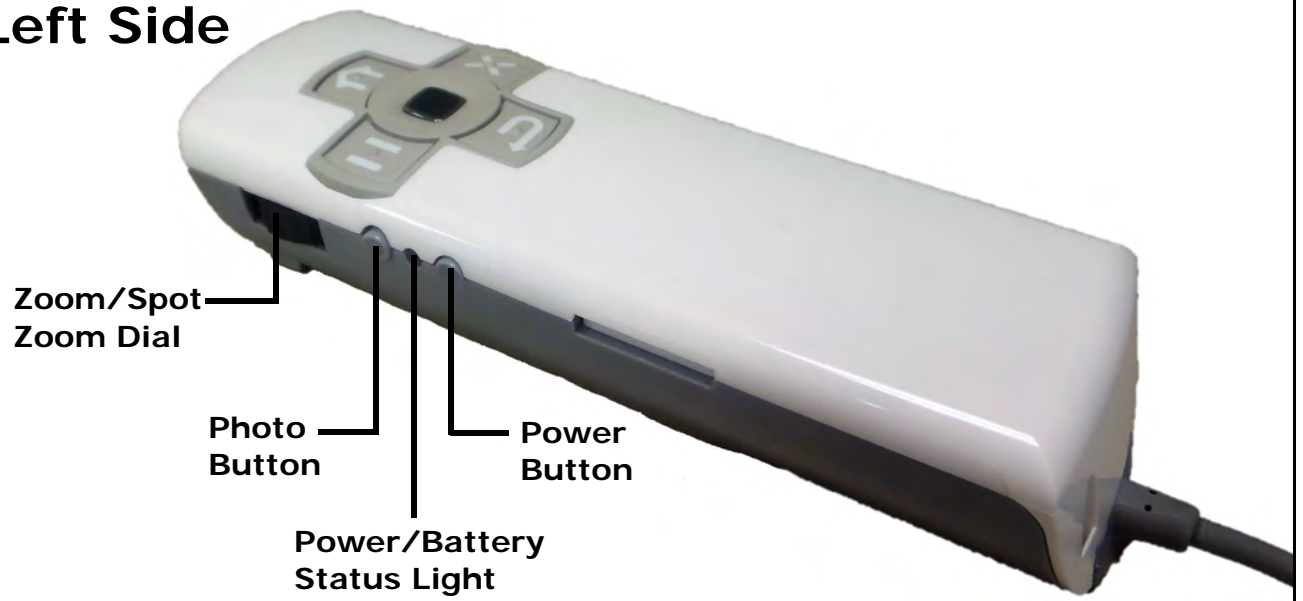
- **OFF — Push and hold the Power button.**

Turn off your eyewear when you are not planning to use it for an extended period.

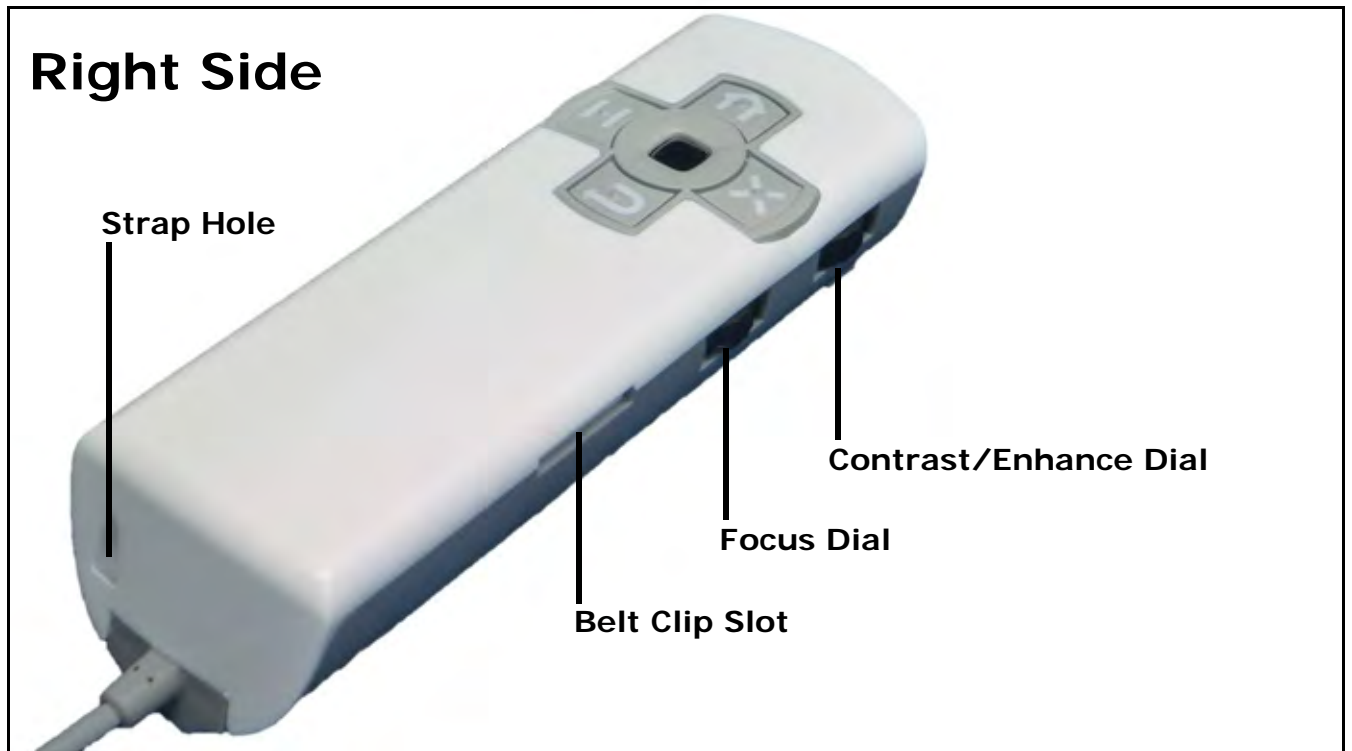
Getting to Know Your Controller

This section helps you familiarize yourself with your eSight Eyewear controller.

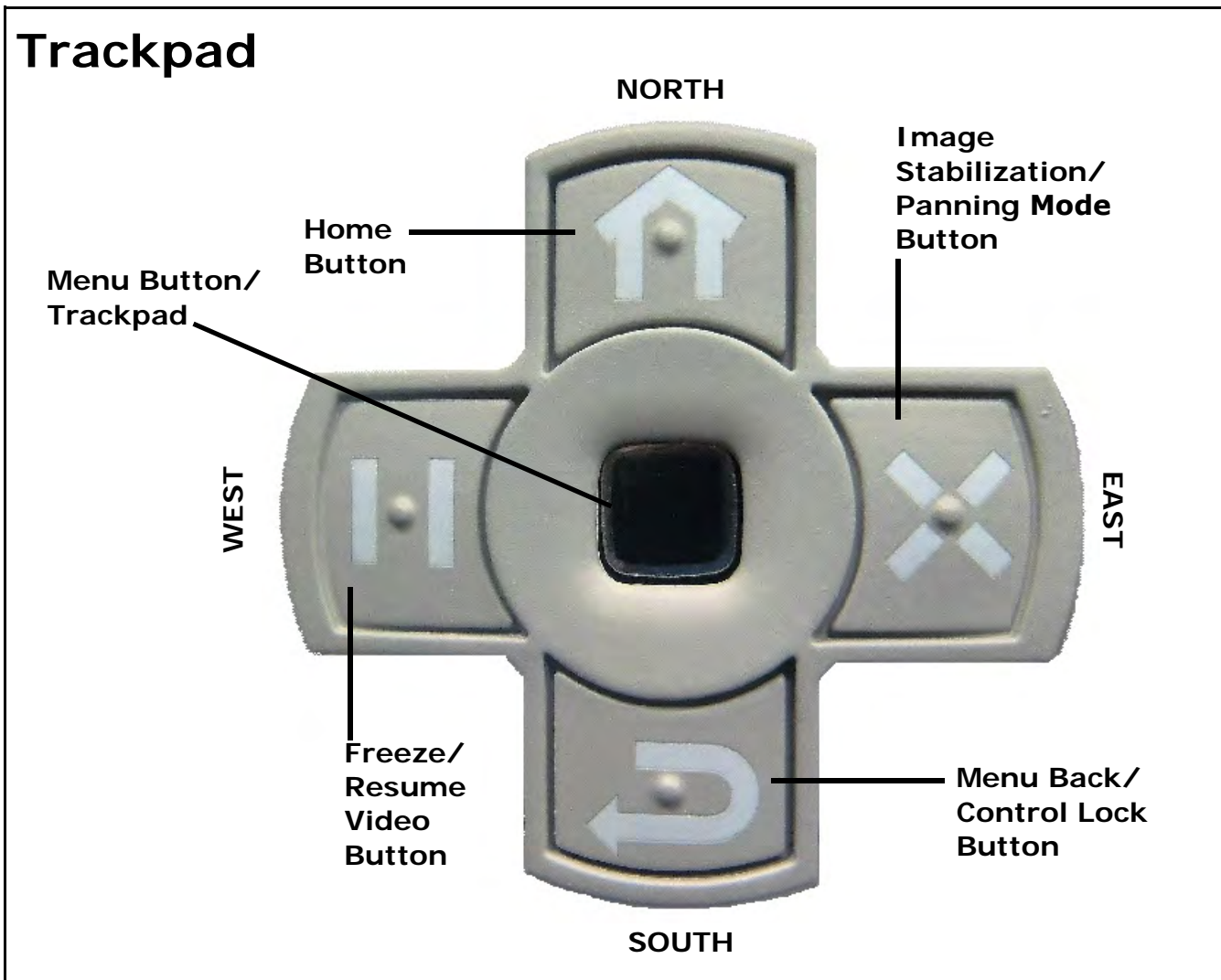
Left Side



Right Side





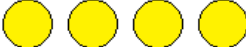





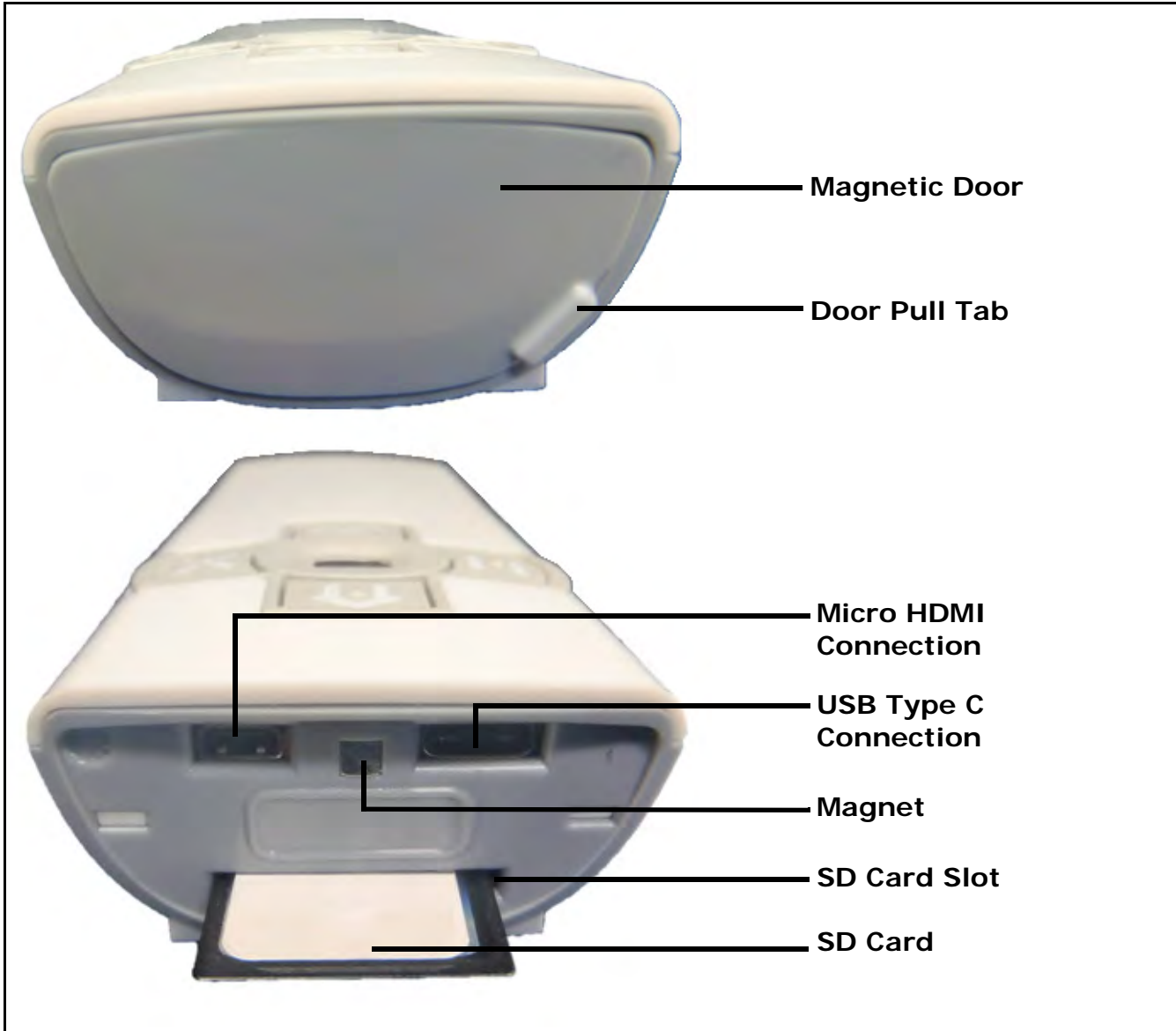
Trackpad



Power/Battery Status Light



Light	
 Solid Green	Battery Fully Charged. eSight Plugged In.
 Solid Yellow	Battery More Than 15 Percent Charged. eSight Charging.
 Solid Red	Battery Less Than 15 Percent Charged. eSight Not Ready for Use. eSight Charging.
 Flashing Green	Battery 80-100 Percent Charged. eSight Running on Battery Power.
 Flashing Yellow	Battery 15-80 Percent Charged. eSight Running on Battery Power.
 Flashing Red	Battery Less Than 15 Percent Charged. eSight Running on Battery Power.
 Flashing Red/Green	eSight Starting Up, OR eSight Updating.
 Flashing Red/Yellow	System Fault.



For more information about the Micro HDMI Connection and USB Type C Connection, see "Getting to Know the Connections" on page 20.


Locking and Unlocking the Controller


In some situations, you may want to lock the controller to avoid accidentally pressing buttons or turning dials. When locked, all the controls on the eSight controller are inoperable except the Power button.




You cannot lock the controller while you are viewing on-screen menus.

To lock the controller

- When the controller is unlocked, press and hold  for approximately 5 seconds to lock all the controls except the Power button.

A Lock icon  appears when you have successfully locked the controller.

To unlock the controller

- When the controller is locked, press and hold  for approximately 5 seconds to unlock all the controls.

The *Keys Unlocked* message appears when you have successfully unlocked the controller.

Getting to Know the Connections

Use this section to familiarize yourself with the connections on your eSight Eyewear.

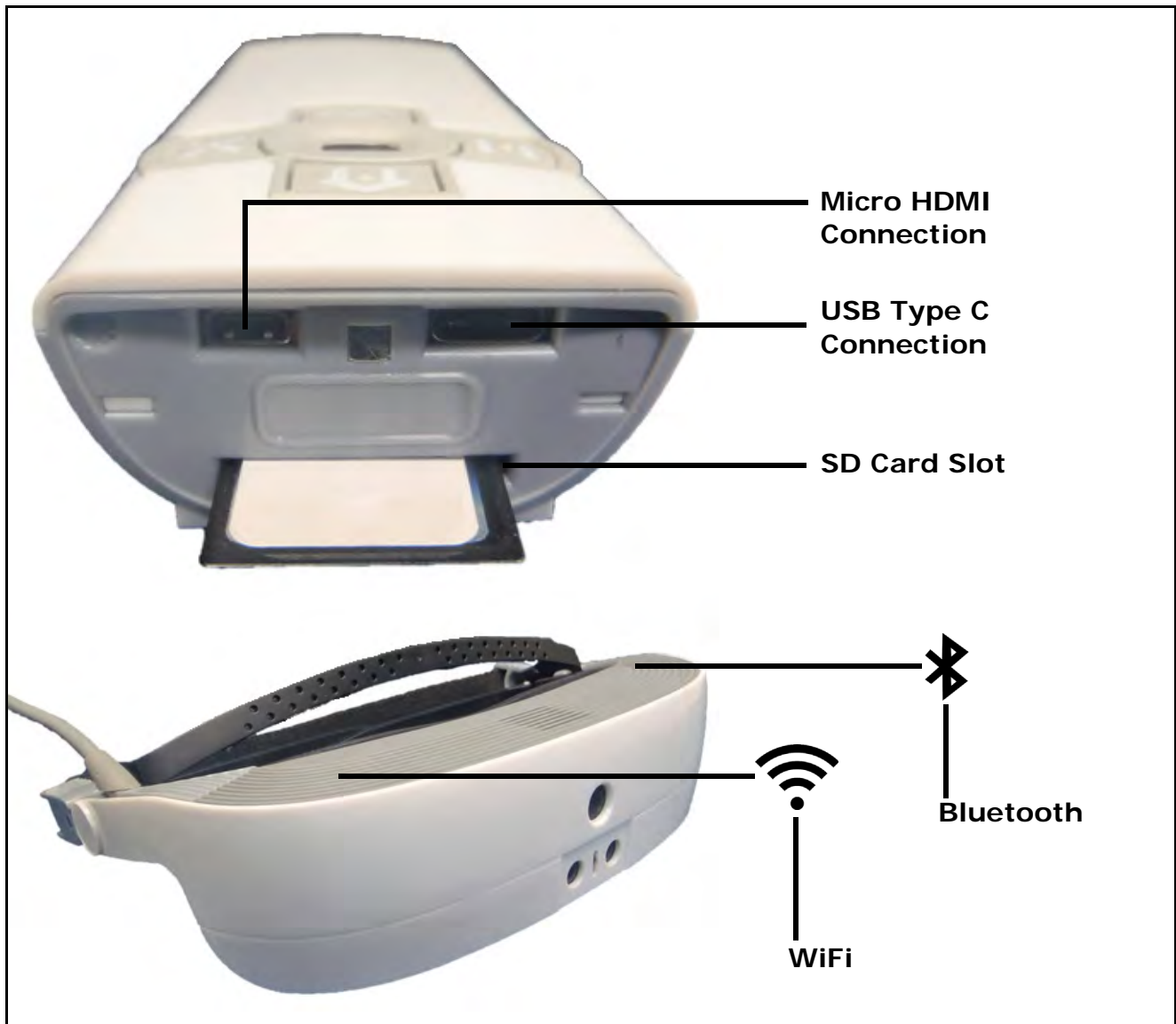


Figure 13 eSight Eyewear Connection

For more information about using these connections, consult the software manual accompanying your eSight Eyewear.

Maintenance

Proper care of your eSight Eyewear is essential. Familiarize yourself with how to charge the battery and how to clean the lenses, the headset, and the controller.

Charging Your eSight Eyewear using the Wall Charger

In order to maintain a charged battery, eSight recommends you charge your eSight Eyewear whenever you are using it while sitting.

You can charge your eSight Eyewear using the 1 meter USB cable and the USB AC wall adapter.

The battery is fully charged when the Power/Battery Status Light is solid green.

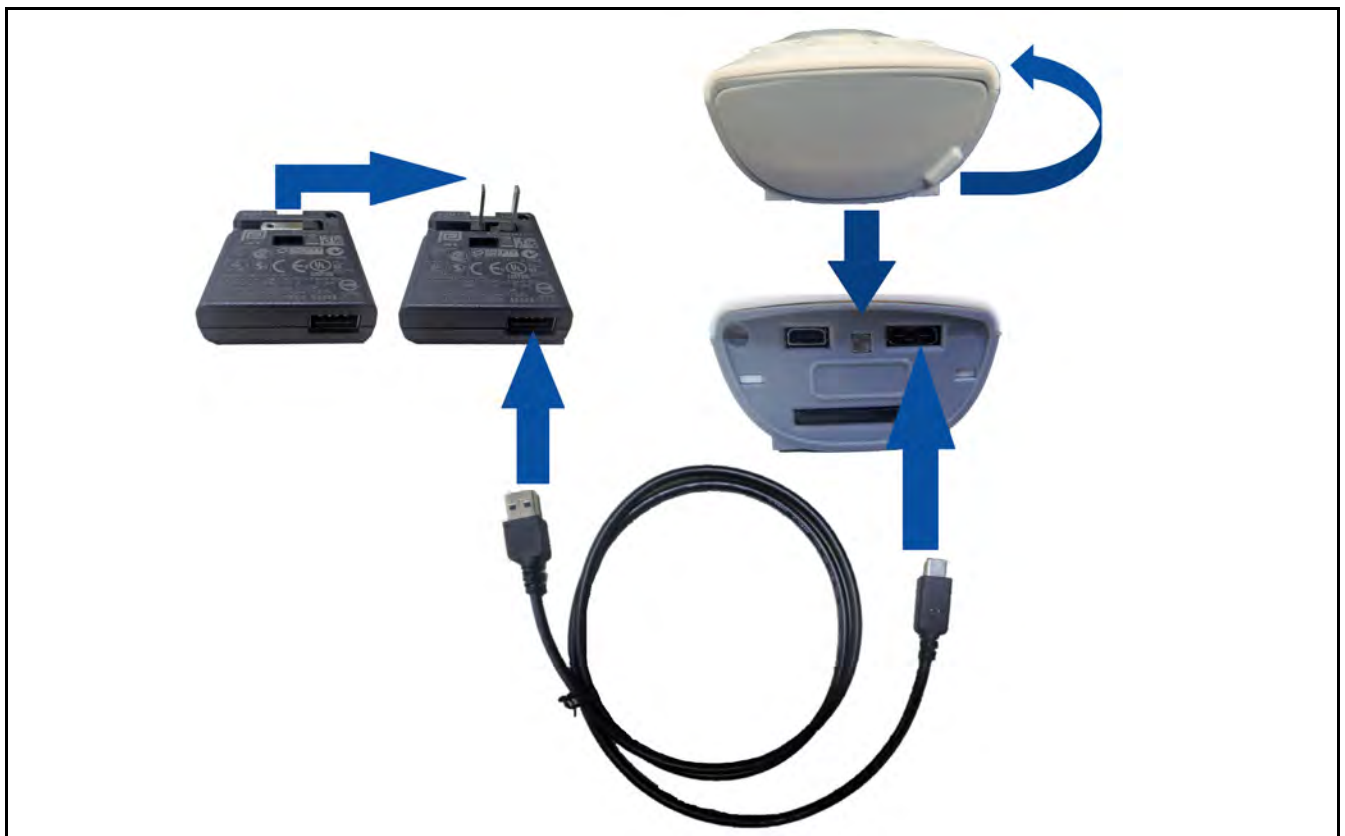


Figure 14 Charging the eSight Controller

To charge the battery using the wall adapter

1. Plug the large flat end of the 1 meter USB cable into the USB AC wall adapter.
2. Open the magnetic door at the top of your controller.
3. Plug the small end of the 1 meter USB cable into the USB connection on your controller.
4. Plug the AC adapter into a power outlet.

Cleaning your eSight Eyewear



Do not use solvents to clean any part of the eSight Eyewear.

Warning

Avoid getting liquids inside the headset or controller.

Follow the guidelines below to clean your lenses, headset, and controller:

- Disconnect the frames from the headset, and clean the lenses as you would a regular pair of glasses using a lens cleaning cloth or the microfiber bag provided with your ophthalmic frames.
- To clean the surface of the headset and controller, use a soft cloth dampened slightly with mild soapy water or rubbing alcohol. Pay particular attention to where the headset touches your face constantly.
- Clean the camera lens cover using a lens cleaning cloth.
- For hard-to-reach areas, use a cotton swab dampened slightly with mild soapy water or rubbing alcohol.
- Allow your equipment to dry thoroughly.

Replacing the Forehead Band

Your eSight Eyewear comes with the forehead band already attached. You can replace the forehead band if you need a different length or if the band is damaged due to wear and tear.

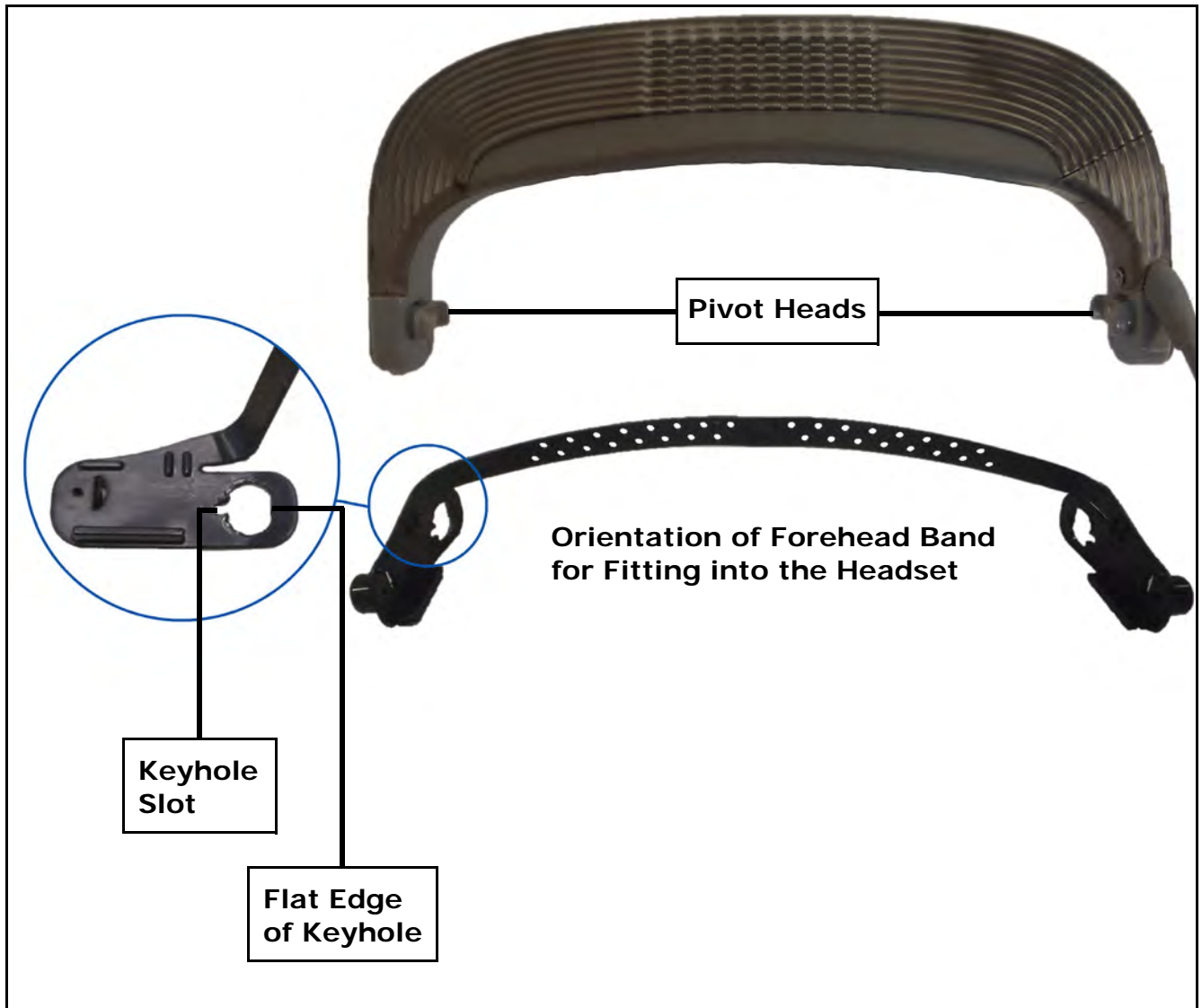


Figure 15 The Forehead Band and Headset

To replace the forehead band

1. Disconnect the frames from the headset. See “Connecting and Disconnecting the Frames” on page 6.

2. Rotate the forehead band until the keyhole slot aligns with the rounded end on the pivot head of the headset (Figure 16, Right).

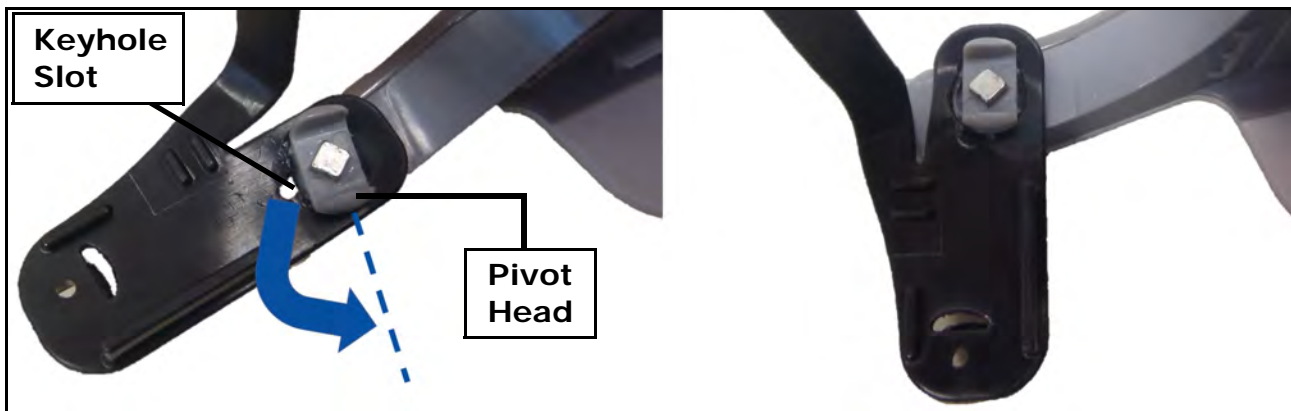


Figure 16 Rotating the Forehead Band Arm to Disconnect

3. Gently pull the forehead band off the pivot head, as shown in Figure 17.



Figure 17 Disconnecting the Forehead Band

4. Repeat 2 and 3 on the opposite side.
5. Orient the new forehead band, so the band curves up and away from you, as shown in Figure 15 on page 23.

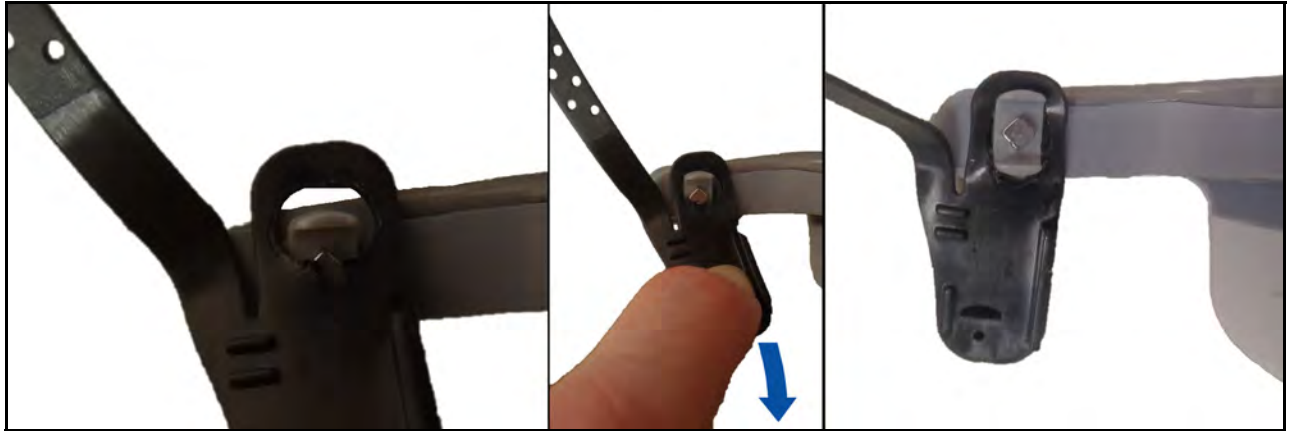


Figure 18 Connecting the Forehead Band

6. Fit the flat edge of the keyhole on the forehead band over the rounded end of the pivot head on the headset (Figure 18, Left).
7. Pull the keyhole over the other end of the pivot head (Figure 18, Middle and Right).
8. Rotate the forehead band until the arm of the band is parallel with the arm on the headset (Figure 18, Right).

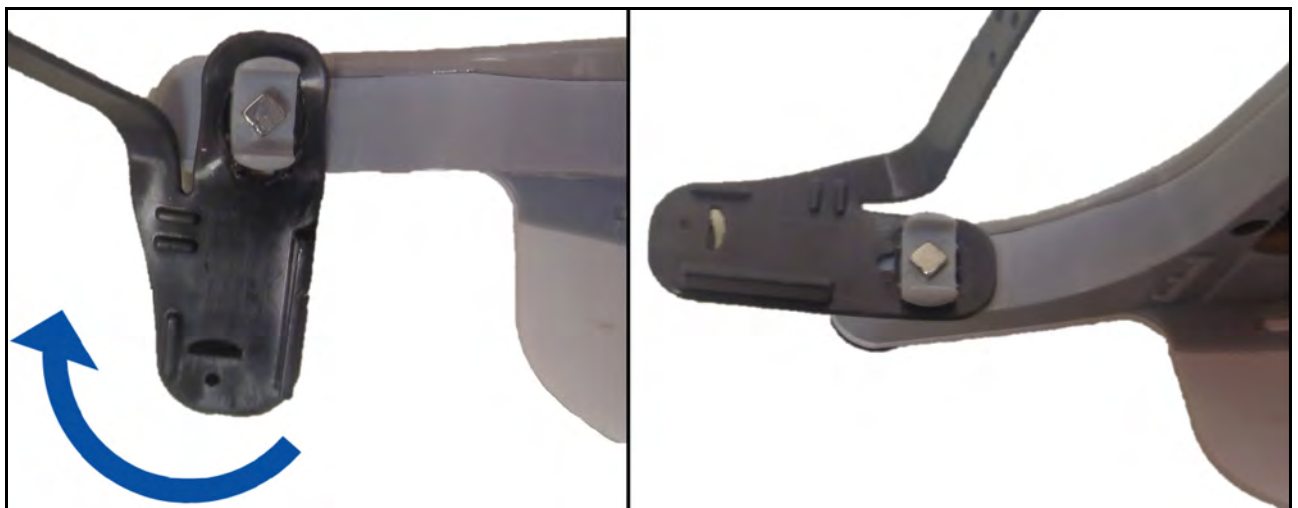


Figure 19 Locking Forehead Band into Position

The forehead band is locked in position.

9. Repeat steps 6 and 8 for the opposite side.

Specifications & Compliance Information

Technical Specifications

Display	
Resolution	<ul style="list-style-type: none">• 1024x768 (2.36 Megapixels)
Field of View	<ul style="list-style-type: none">• Diagonal 37.5°
Camera	
Range of Focus	<ul style="list-style-type: none">• 15 centimeters (6 inches) to Infinity
Image Resolution	<ul style="list-style-type: none">• Still Images: 21.5 Megapixels JPEG Compressed• Video Images: 1024x768
Power	
Battery	<ul style="list-style-type: none">• Integrated rechargeable lithium-ion battery• Maximum Charge Voltage & Current: 5.25V & 2.0A• Type C USB Cable with USB AC wall adapter• Recharge from a wall outlet• Optional extended lithium-ion battery pack
Storage	
SD Card	<ul style="list-style-type: none">• 8 Gigabyte Memory Card• Stores the eSight Low Vision Software and user data

Connections	
HDMI	<ul style="list-style-type: none"> Type D HDMI input that connects to Video Sources with HDMI Port Supported Resolutions and Frame Rates: <ul style="list-style-type: none"> 1080p/60 or 1080p/30 720p/60 or 720p/30 1024x768
USB	<ul style="list-style-type: none"> Type C USB input for power and data Charges the battery when used with the AC wall adapter Allows video and data sharing to or from the eyewear
Bluetooth	<ul style="list-style-type: none"> Pairs the headset with supported headphones
Wireless LAN	<ul style="list-style-type: none"> Allows video sharing to or from the eyewear 802.11ac, 802.11g at 2.4 GigaHertz and 802.11n at 2.4 and 5 GigaHertz
Sound	
Headset Speakers	<ul style="list-style-type: none"> For media streaming and user interface feedback
Bluetooth Headphones	<ul style="list-style-type: none"> Headset pairs with compatible headphones
Operating Environment	
Operating Temperature	<ul style="list-style-type: none"> 0°C to 40°C
Storage Temperature	<ul style="list-style-type: none"> 0°C to 50°C
Ingress Protection Rating	<ul style="list-style-type: none"> Designed to IP53, dust and water resistant
<p>NOTE: Your eSight Eyewear is not intended for use in rain or heavy snowfall conditions. Take the same care with your eSight Eyewear as you would a cell phone, tablet, or any other consumer electronics device.</p>	

Additional Safety and Regulatory Information

Consult the *Important Safety Information* booklet for complete product warnings, cautions, and statements of regulatory compliance.

eSight Customer Support

For questions and customer support, please contact us:



www.esighteyewear.com/contact



1-855-8eSight (1-855-837-4448) Press 2 for Support

