

ErgonoptiX

Surgical Loupes

User Guide



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Congratulations on purchasing your new ErgonoptiX surgical loupes!
Please read the guide and follow the instructions before using your loupes.

Working with your new Loupes :

We recommend that you gradually become accustomed to your new loupes.

Especially if you have not used surgical loupes before, limit your use to 30 minutes the first day, and slowly add 30 minutes each following day until you feel comfortable using the loupes for long periods.

Adjustments Before Wearing the Loupes:

Frames: Loupes are pre-assembled onto your frames

Clip-On: Clip the loupes onto your existing frames

Headband: Connect the loupes to the headband mount

Headlight: See the instructions provided with your headlight

Assemble the accessories you intend to use regularly:

- Fit the removable lens covers (A) to protect the optics (C)
- Click the flip-up lever (B) to the loupes (Galilean / micro Prism)
- Fit the elastic head strap onto your frame for added stability
- Metal frames: Place the side shields onto the arms of the frame

Double Hinge System (Flip-Up only)

- Use the double hinge system to change the eye level and angle
- Position the oculars at about 35 to 45 degrees downwards.
- Place the oculars close to your eyes without touching the frame.

- **TTL loupes are pre-set** (No adjustment needed).



Adjustments While Wearing the Loupes (Flip-Up only)

- Tighten the head strap for added stability (recommended).
- Keep your head level, with your neck and back relatively straight.
- Place the calibration target at the correct working distance.
- position the loupes vertically so that you can see through them.
- Tilt your eyes down to look through the loupes.

Galilean & micro Prism (one central adjustment knob):

- Turn the Pupil Distance Adjustment Knob clockwise until the oculars are far apart .
- Slowly turn the Pupil Distance Adjustment Knob anti-clockwise until the view converges into a single, clear image.
- Move slowly, as it may take a few seconds for your eyes (and brain) to adjust to a single image.

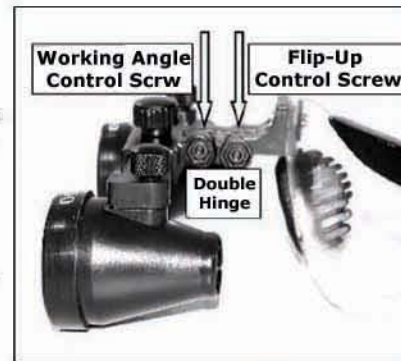
Prismatic (two separate adjustment knobs):

- Release the two ocular cover screw knobs **slightly**.
- **Gently** slide both oculars into position so you can see through them
- It may be easier to position one eye at a time (close your other eye).
- Once in the correct position, tighten the ocular cover screw knobs.

Once the loupes and oculars are positioned:

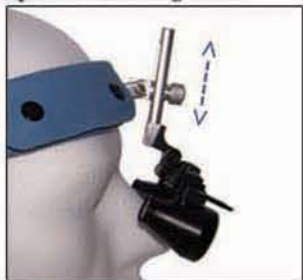
- Tighten the Working Angle Control screw.
- Tighten the Flip-Up screw slightly to allow flip up/down movement.
- Now the loupes will always return to the correct position

- **TTL loupes are pre-set** (No adjustment needed).



Connecting and positioning a Headband

- A. Attach the loupes (1) to the sliding bar (2) with the screws provided.
- B. Remove the screw cover (3) from the headband mount (4).
- C. Place the bar onto the mount and partially tighten the screw cover
- D. Slide the vertical bar up or down into position. Now tighten it.



Connecting a Headlight

Follow the instructions provided with your headlight



Adjusting the Frame

- Comfort is important. Make sure the frames are as comfortable as possible..
- Metal Frame: Adjust the nose-pads to fit your personal nose features.
Adjust the arms to fit your personal features.
- Flex Safety Frames: Different sizes nose-pads are available.
- Your local optician can place prescription lenses into most ErgonoptiX frames and also generally help fit the frames (and loupes) to your personal features.

Handling and Cleaning

This is a sensitive precision-made optical instrument, please handle with care. The magnifying lenses can be damaged if the loupes are hit or dropped.

Use lens cleaning solution on a microfiber cloth (provided) to remove debris or fingerprints. Disinfect by rubbing with a microfiber cloth moistened with disinfectant.

Do not immerse your loupes in water, cleaning solution or sterilizing solution. Do not spray cleaner directly into the lenses. Do not use products containing glutaraldehydes.

Do not autoclave or chemiclave any part of your ErgonoptiX loupes.

For your safety: Do not look at any strong light source directly through magnifying loupes, as this could permanently damage your eyes.

Prescription Lenses

Please note: If you need prescription lenses, your local optician can fit your personal prescription lenses into most ErgonoptiX frames or into the special ErgonoptiX RX prescription inserts.

Maintenance and replacement parts

Please contact ErgonoptiX for any maintenance or replacement parts you need.

Warranty

ErgonoptiX guarantees its products against defects in material and workmanship for a period of TWO (2) years from the date of purchase. During this time, ErgonoptiX will repair (or may decide to replace) free of charge any ErgonoptiX products which are defective. This guarantee does not apply if ErgonoptiX concludes the product has been damaged by accident, abuse, misuse or misapplication. If a claim under guarantee is investigated and found to be outside of the scope of the guarantee (i.e. other than material & workmanship defect or wilfully damaged products as stated above), or not within the two year guarantee period, the claimant will be billed the costs of such investigation and repair.

Liability

ErgonoptiX is not responsible for direct or indirect damages, whatever their cause. ErgonoptiX's liability will never exceed the amount paid for the product that was either directly or indirectly involved, as indicated by the ErgonoptiX invoice for the ErgonoptiX product. If you do not accept the warranty and liability terms stated above, please return the product in its original state (properly packaged) to ErgonoptiX immediately. ErgonoptiX will then refund the invoiced amount.

Fine Convergence (Galilean Flip-Up only):

The fine adjustment knobs might loosen during shipment, moving the ocular out of alignment.

- Please Note: This adjustment should only be done if the pupil distance adjustment did not produce a single image or if you know you have highly asymmetrical pupils.
- Slightly loosen the fine convergence adjustment knob and turn the ocular slowly until you see a single, clear image. Tighten the fine adjustment knob when done.
- Personal instructions can be provided on request to assist you with this set-up if needed.

Included Accessories

Please confirm your basic loupes package includes:

- Carrying Case,
- Frame, or Clip-on, or Headband
- Head Strap
- Lens Covers
- Flip-Up Lever (Galilean @ micro Prism only)
- Side Shields (Metal Frames only)
- Screwdriver
- Microfiber Cloth

This User Guide with Calibration Target ---->

Headlight (if you ordered as set with your new loupes)

