



User's Guide



Ver.1.0

Using this manual

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The content of this manual may change without prior notice. We have made every effort to prepare this manual; however, if anything is unclear or omitted, please contact us. Understand that Enhanlabo is not liable for anything resulting from how your b.g. is used.

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For Your Safety

Before using the product, be sure to read the documentation thoroughly, so you can use the product correctly.

Symbols used in this document

| | |
|---|---|
|  | <p>Use of the product that disregards the safety precautions indicated by this symbol may cause fire, electric shock, overheating, or rupture, which may result in accidents that cause serious personal injuries or death.</p> |
|  | <p>Use of the product that disregards the safety precautions indicated by this symbol may cause property damage to the user or other parties.</p> |



Warnings: operating environment and usage conditions

- The USB port must provide electric power and voltage at 5 V at 1 A or more. Do not connect the product to USB ports other than these. May result in fire or electric shock.
- Do not use damaged cables. May result in fire or electric shock. Also be sure to observe the following in order to prevent damage to cables.
 - Do not modify any cables.
 - Do not place heavy objects on the cables.
 - Do not forcibly bend, twist, or stretch the cables.
 - Do not place wires near electric heaters.
- If you are not using the product, unplug its cables. Keeping the cables plugged into the product may result in product failure, fire, or electric shock.
- Do not use the product while it is submerged in fluids or in places that are excessively dusty. May result in fire or electric shock.
 - Example) Outdoors during heavy rainfall, in water, in sand, etc.
- Do not use the product while it is covered with a cloth. Heat may result in deformation and cause a fire.
- Do not place the product anywhere that is extremely hot or anywhere that is exposed to direct sunlight. Also avoid sudden changes in temperature. May result in fire, failure, malfunction, or damage.
 - Example) In a vehicle with its windows closed, or in front of a heater or air conditioner outlet, etc.



Warnings: handling the product

- Do not drop the product or subject it to strong impacts. Subjecting it to strong impacts may cause the lenses to break, cause you injury via lens fragments, or cause lens fragments to get inside the displays and make them difficult to see. Stop using the product immediately and do not touch the parts that are damaged.
- Keep the product away from fire. May cause the product to ignite, rupture, or catch fire.

- Do not disassemble or modify the product. May result in failure or electric shock. Request an internal inspection or repairs from the store at which you purchased the product or an Enhanlabo distributor.
- Do not get water or other fluids inside the product.
- Do not put foreign objects inside or in the terminals of the product. May result in short circuiting of the terminals, leading to a fire or product failure.
- Do not disrupt the natural dissipation of the product's heat. Heat may result in deformation and cause a fire.
- Make sure that the cables do not pull or catch on nearby objects. Also, never wrap the cables around your neck. May result in accident or injury.
- Be sure to hold the plug, without pulling on the cords (cables), to unplug and plug in the cables.
- Do not unplug or plug in the cables with wet hands. May result in fire or electric shock.



Warnings

Warnings: using the product

- This product has not been certified for business use by any agency. If you are using this product for business, understand the following issues and use the product at your own risk. Likewise, Enhanlabo does not assume any responsibility for damage incurred by business use. If you have any concerns contact the store at which you purchased the product or an Enhanlabo distributor.
 - This product has not been certified as a medical device. If you are using the product for medical procedures, such as diagnosis and treatment, use it as a supplementary measure.
 - To use the product in situations requiring precision or situations involving human life, such as medical, nuclear, aviation, or traffic facilities, the user needs to understand the deviations and inaccuracies in the specifications of the product's images, such as color, shape, and perspective.
 - If you are using the product in dangerous situations, such as when driving a vehicle, motorbike, or motorized bicycle, or when operating a ship, boat, train, airplane, or heavy machinery, take steps and considerations before using the product so it does not impair the safety of driving and operation.
- Do not use the product in locations with unstable footing, in vehicles that produce extreme vibrations, or in situations subject to excessive acceleration. If the product slips, it may restrict your field of view or it may fall and result in accident or injury.
- Do not use the product while walking in dangerous places (dark places and places where many people and vehicles come and go). May result in accident or injury.
- If you are using the product in a cramped place, pay close attention to your surroundings.
- Be careful when the surroundings become dark, because the display appears bright, which makes seeing the surroundings difficult.



Warnings

Warnings: cleaning the product

- Do not use organic solvents, such as alcohol, benzene, or thinners. May cause deformation or melting to occur, resulting in fire, product failure, or electric shock.
- When cleaning, remove the cables. May result in electric shock or fire.
- Do not use flammable aerosols or sprays because static electric sparks or hot parts could cause them to burst into flame and cause a fire or explosion.



Warnings

Warnings: product abnormalities

- If abnormalities, such as strange sounds, strange smells, or the generation of smoke, occur, immediately unplug the cables and request repair from the store at which you purchased the product or an Enhanlabo distributor. Continuing to use the product in this state may result in a fire or electric shock.



Precautions

Precautions: operating environment and usage conditions

- The pupillary distance that the product supports is 60 mm to 68 mm. People with a pupillary distance outside of this range may not be able to use the product. Also, even if the pupillary distance is in the supported range, there are individual differences in how the screens appear, depending on visual traits, such as the difference in eyesight between the left and right eyes.
- The screen display for the product virtually appears to be 1 m in front of your eyes. If you cannot clearly see an object 1 m in front of you in your day-to-day life, you will not be able to clearly see the product's screen display. If you use bifocal contact lenses, you may not be able to see the product's screen display clearly.
- The operating temperature for the product is -10°C to 35°C . Using the product in extremely cold or hot places that are outside the operating temperature range may result in product failure.



Precautions

Precautions: handling the product

- When putting on and taking off the product, be careful to not scratch your eyes with the ends of the frames and to not catch your fingers in the hinges.
- Periodically inspect the USB and HDMI connectors for collected dust or other problems.
- To prevent damage, use both hands to put on and take off the product.
- Do not allow children to use the product. Also, keep the product out of the reach of children. Disregarding this precaution may result in unexpected accident or injury.
- When you are adjusting the angles of the displays, do not pull or bend the product too forcefully. May cause damage.
- Do not forcefully press or bend the nose pad. May cause damage.
- When disposing of the product, do so according to your local waste collection rules.



Precautions: using the product

- When using the product, pay attention to the conditions of your surroundings. Pay attention to the traffic and road conditions, especially when you are using the product while walking.
- If you are working intensively while using the product, be aware that the product may fall, hit things, or cause injury.
- While using the product, take reasonable breaks periodically.
- If you start having uncomfortable symptoms, such as eye fatigue, feeling ill, motion sickness, or other similar symptoms, stop using the product and do not use it again until your symptoms are gone.
- Correctly put on the product. Continuing to use the product, despite being unable to see correctly, may make the user feel ill.
- Do not use the product if it causes itchiness, rashes, eczema, or similar skin conditions.
- If you sweat while using the product, wipe the sweat from your face and the product. Continuing to use the product in this state may result in itchiness or rash.
- People who have a history of photosensitivity disorder and people who are not feeling well should not use the product. May cause symptoms to become worse.
- People who have eye diseases or disabilities should not use the product. May cause symptoms, such as squinting, weak sight, or anisometropia, to worsen.



Precautions: cleaning the product

- Do not use water or other fluids. May cause problems. If the product is dirty, lightly wipe it off with a soft cloth for glasses or lenses.
- Do not use an ultrasonic cleaner.

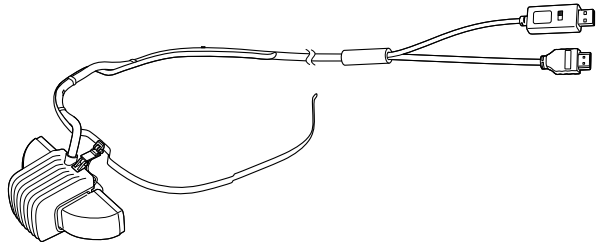


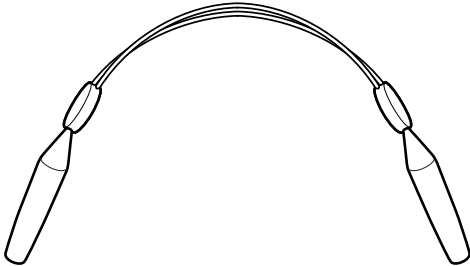
Part Names and Bundled Items / Optional Products

Before you use your b.g., make sure that all of the bundled items are included and check the names of the parts.

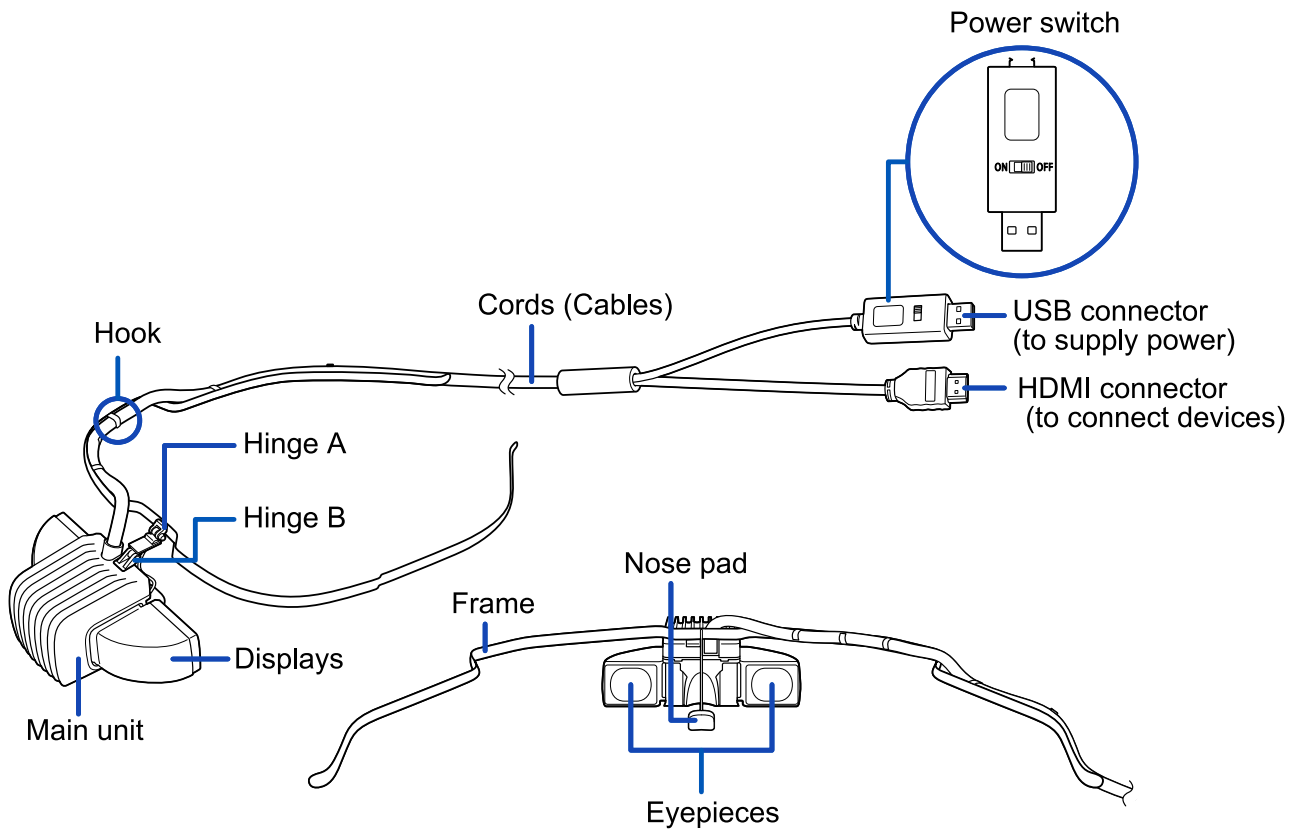
We also offer some useful optional products, which are sold separately, that you may find helpful when using your b.g.

Bundled items

The following are included with your purchase. Make sure that nothing is missing.

| b.g. | Instruction sheet to access User's Guide | Screwdriver for the hinges |
|---|---|---|
|  |  |  |
| <p>Frame strap</p> <p>➔ Attaching the frame strap (page 21)</p> | | |
|  | | |

Part names

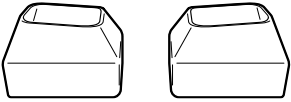
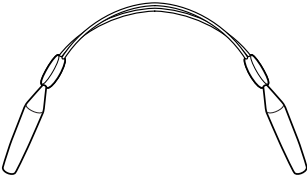
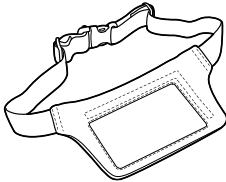
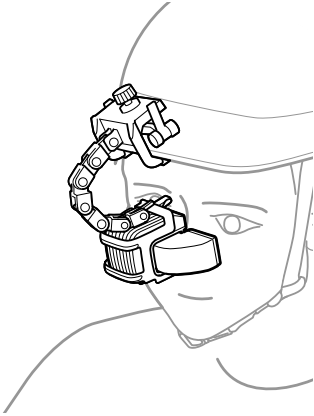

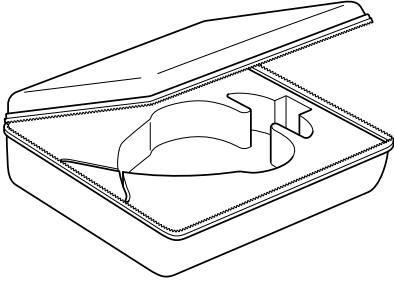


Optional products

You can use the following optional products (sold separately) with your b.g.

Purchase these options according to how you plan to use your b.g.

The specifications and lineup of our optional products are subject to change without notice.

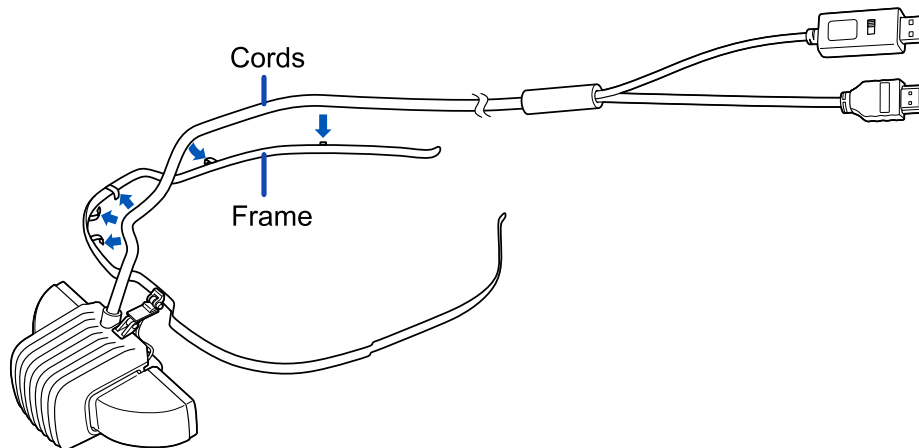
| | | |
|---|--|---|
| <p>Eye cups</p>  | <p>Frame strap</p>  | <p>Pouch</p>  |
| <p>Helmet mount</p>  | <p>Headband gear</p>  | <p>b.g. carrying case</p>  |

Getting Ready

Before you use your b.g., fasten the cord and connect the cables.

Fastening the cord

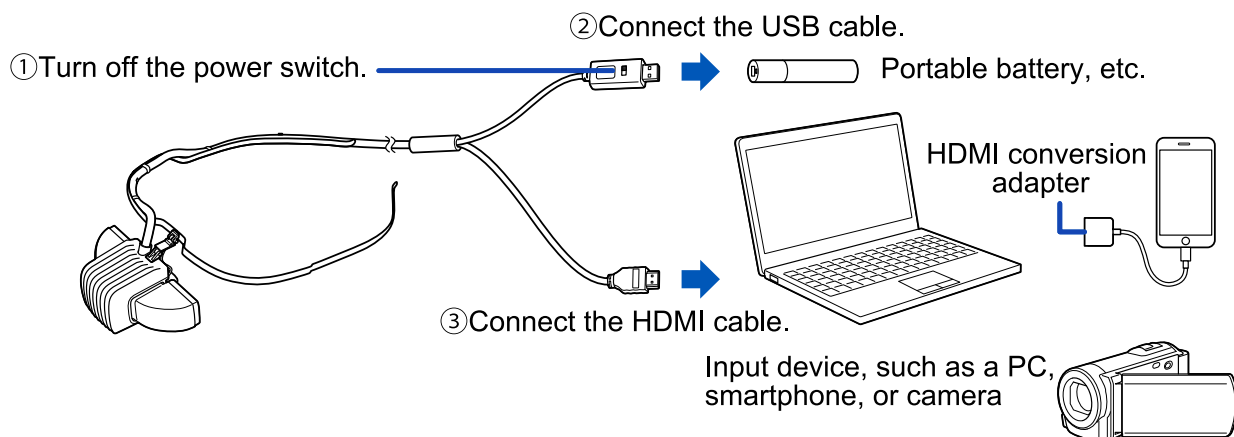
Before use, be sure to fasten the cord along the frame, using the hooks to keep it in place.



The cord may come undone from the hooks. If the cord comes undone from the hooks, your b.g. may feel uncomfortable, so be sure to secure the cord in the hooks before you start.

Connecting the cables

Connect the USB cable to a device that can supply power and connect the HDMI cable to a device that outputs images, videos, and other things to be projected in the displays. The USB port must provide electric power and voltage at 5 V at 1 A or more.



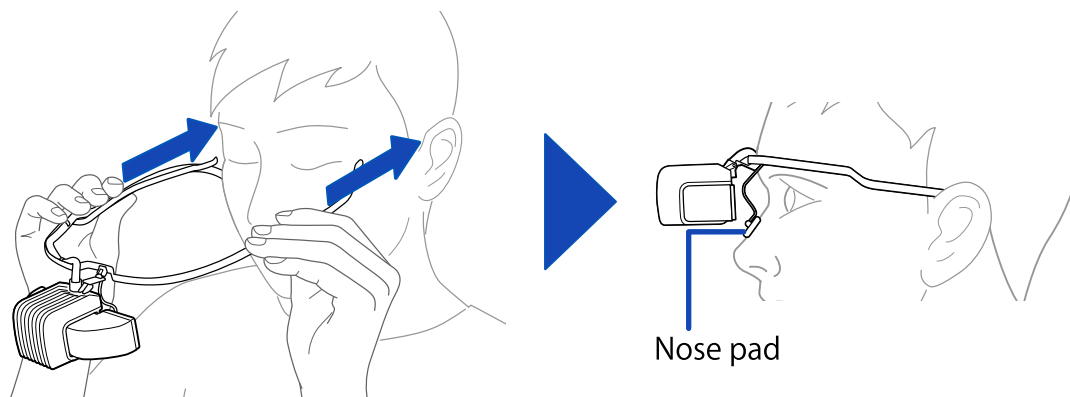
- Connect the USB connector directly to a USB port that is supplied with sufficient power, such as a portable battery or self-powered USB hub.
- Connecting to a bus-powered USB hub may not provide enough power necessary for operations.
- Connect to a device that has an HDMI Type A (720 p/60 Hz) port or to a device that can be connected with an HDMI conversion adapter.
- Depending on the type of computer, tablet, or smartphone you are using, you may need to change the settings or use an adapter to output images externally. For more information, refer to the manual of the device you are using.
- Your b.g. does not support HDCP.

Using your b.g.

When you have finished checking and preparing your b.g., put it on. Turn on the power switch, adjust the displays, and then start using your b.g.

Putting on your b.g.

Hold your b.g. with both hands and place it on your ears.



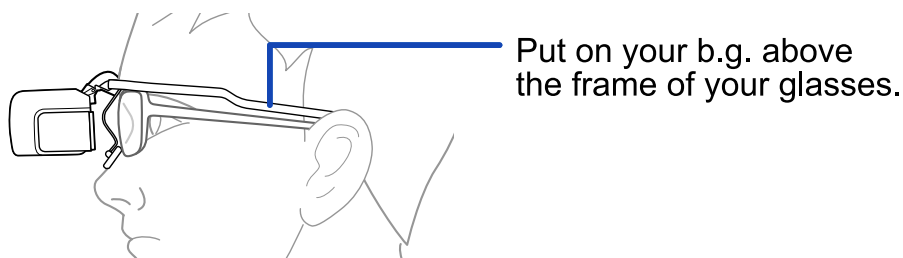
Be careful not to scratch your eyes with the ends of the frames and to not catch your fingers in the hinges.



Adjust the position of your b.g. so that the nose pad rests on your nose.

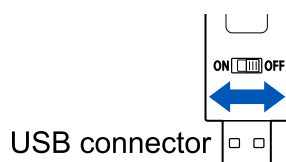
Putting on your b.g. while wearing glasses

After adjusting your glasses so that they are in the correct position, place your b.g. above your glasses.



Turning the power on and off

Your b.g. has a power switch that can be turned on and off while it is connected to a device that can supply power via USB. If you are not using your b.g., turn the power off.



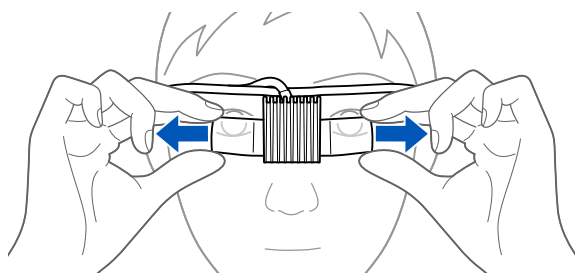
The displays' projection switches between the following.

- No USB connection, power off: no image
- ↓
- USB connection, no HDMI connection: blue screen
- ↓
- USB connection and HDMI connection: image appears

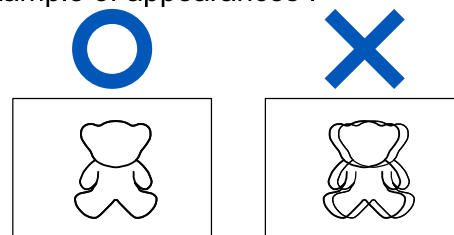
Adjusting your b.g.

Adjusting the focus (horizontally)

If images are blurry or you see double images, the focus needs to be adjusted. Adjust the positions (horizontally) of the displays so that their projections come into focus.



Example of appearances :



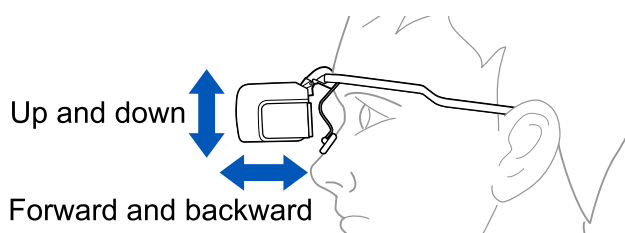
Be careful not to pull the displays forcefully or diagonally since doing so may damage them.



You can separately adjust the positions (horizontally) of the left-side and right-side displays.

Adjusting the position (up and down, forward and backward)

Adjust the positions of the displays according to what you are doing so you can see clearly. You can use the 2 hinges—hinge A and hinge B—to adjust the displays up and down or forward and backward.



Tips for adjustments

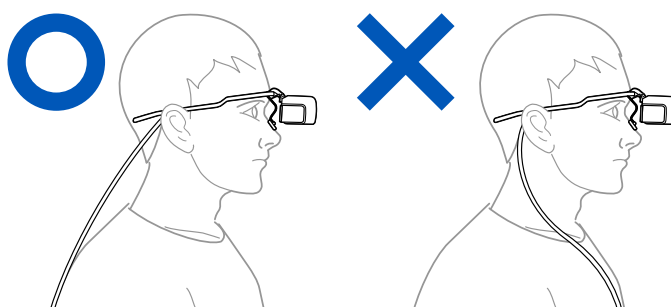
- Adjust your b.g. so that the nose pad is in the center of your nose. Even if you adjust the displays, if the nose pad is off-center, images will not be in focus.
- To make it easier to see, adjust your b.g. so that your eyes are as close as possible to the eyepieces.
- If the projection is too bright, adjust the positions of the displays.

- The position of your glasses may prevent the nose pad from resting on your nose and keeping your b.g. in place. Adjust the position of your glasses so that the nose pad rests on your nose.
- The shape of your glasses may prevent the nose pad from resting on your nose and keeping your b.g. in place. If you adjust the position of your glasses and the nose pad still does not rest on your nose, try wearing contact lenses or changing to a different pair of glasses.



Do not bend the nose pad forcefully. Disregarding this precaution may cause damage.

- Position the cords (cables) behind you.

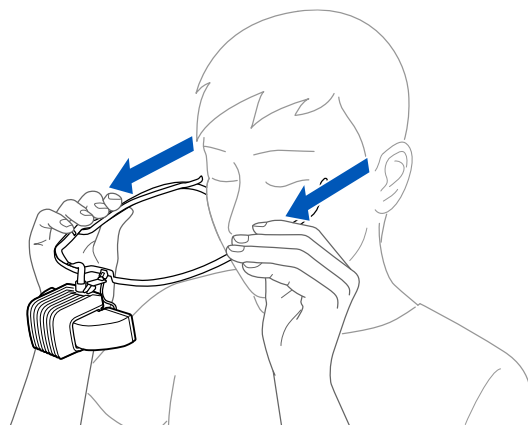


Positioning the cords (cables) in front of you brings the center of gravity toward the front, your b.g. may feel uncomfortable.

You can reduce the slipping of your b.g. by positioning the cords (cables) so they go down your back, to balance the weight of the displays.

Taking off your b.g.

When taking off your b.g., hold it with both hands and remove it gently.



- After using your b.g., turn off its power switch.
- If your b.g. is dirty or sweaty, clean it.

Maintenance

If your b.g. is dirty or sweaty, unplug the cables, and then lightly wipe your b.g. with a soft cloth for glasses or lenses.

If your b.g. is dusty

Use a hand blower made for cameras to blow the dust off your b.g.

If you cannot remove dirt from the eyepieces

Wipe the eyepieces using a cloth dampened with lens cleaner.

If the hinges are loose

Use a screwdriver to lightly tighten the loose hinges. Then, after tightening the hinges, check whether they work smoothly. They cannot work smoothly if you tighten them too tight.



- Do not put fluids, such as water or lens cleaner, directly on your b.g.
- Do not spray substances (air sprays, spray-type detergents, etc.) directly on your b.g.

Troubleshooting

Power does not turn on

- Check whether the power switch is on.
- Check whether the USB cable is connected correctly.
- Check that the device connected to the USB cable is a device that can supply power.
- Briefly unplug the USB cable, and then plug it back in.
- Connecting via a bus-powered USB hub may not supply power. Connect the USB connector directly to the USB port of a device, such as a portable battery, computer self-powered USB hub, that can supply power.
- If your b.g. is connected to a portable battery, check whether the portable battery's power is on and that the remaining battery level is sufficient.
- Check that the specifications for the device connected to the USB cable are supported by your b.g.

Nothing appears in the displays

- Check whether the USB cable is connected correctly and that the power switch is on.
- Briefly unplug the USB cable, and then plug it back in.

The displays' screens are blue

- Check whether the HDMI cable is correctly connected to the device.
- Briefly unplug the HDMI cable, and then plug it back in.
- Depending on the settings of the device to which the HDMI cable is connected, the display range may not be appropriate. Check the settings of the device.
- Depending on the type of computer, tablet, or smartphone you are using, you may need to change the settings or use an adapter to output images externally. For more information, refer to the manual of the device you are using.

Images are hard to see or blurry

- Adjust the positions of the displays to bring them into focus.
- Wipe the eyepieces with a soft cloth.
- If images look small, bring the eyepieces as close as possible to your eyes.
- If images are partially cut out, adjust the angles of the displays.

Something is wrong with the projection

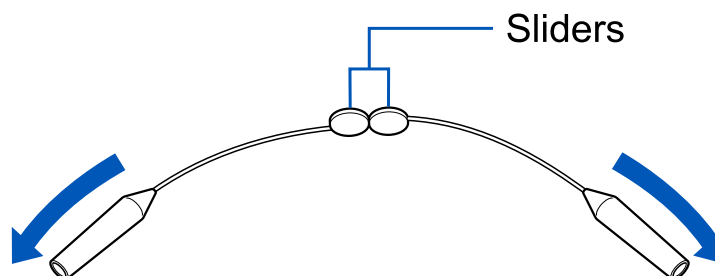
- If you see images flashing, check whether the port to which the USB cable is connected is 5 V at 1 A or more.
- If images show interference noise, briefly unplug the USB cable or the HDMI cable, and then plug it back in.
- If you see a series of duplicated images, or the colors are incorrect, connect an adapter to convert to HDMI resolution or adjust the settings of the device connected to the HDMI cable.

The b.g. frequently slips or falls off

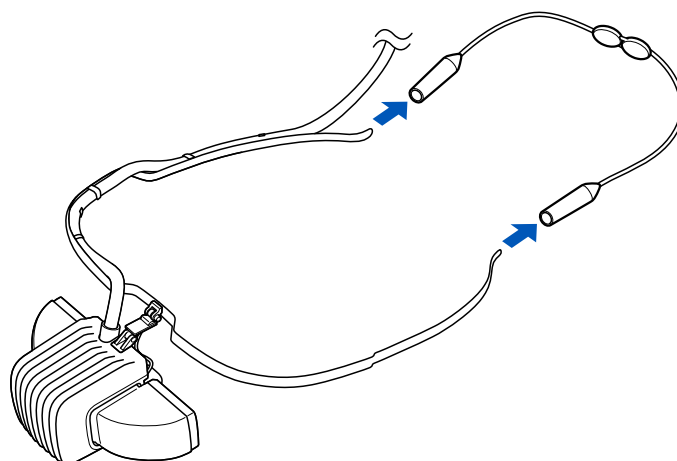
- Position the cords (cables) so that they go down your back to balance the weight of the displays.
- If the hinges are loose, use a screwdriver to lightly tighten them.
- Use the frame strap included in the bundled items.

Attaching the frame strap

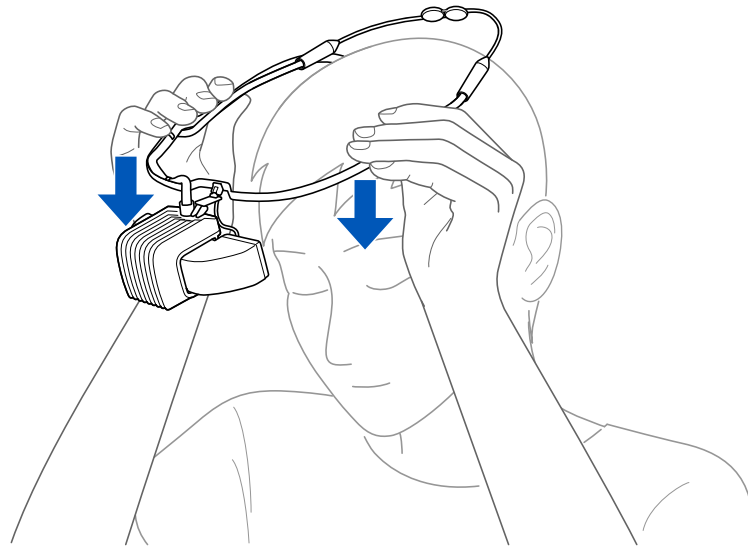
1. Stretch out the frame strap so that the sliders touch one another.



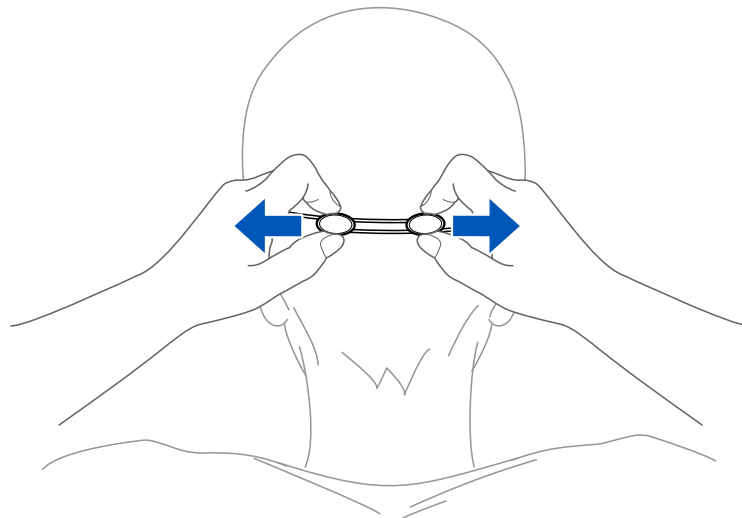
2. Insert the ends of the b.g.'s frame into the silicone parts of the frame strap.



3. Put your b.g. on your head and adjust your b.g.'s position.



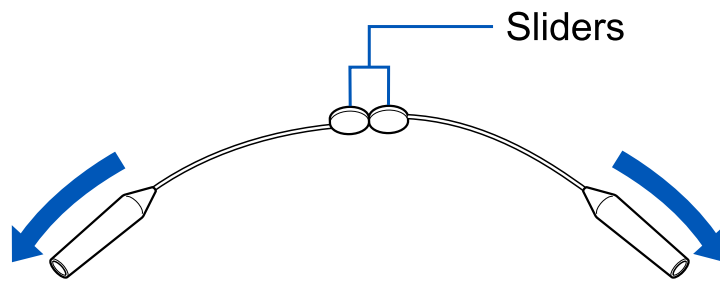
4. Pull the frame strap's sliders left and right to fit your b.g. to your head.



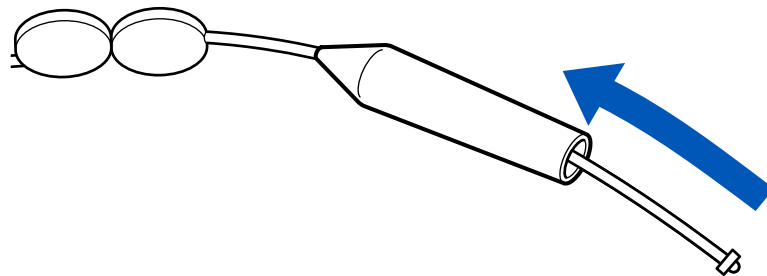
If the frame strap is loose

If the frame strap is still loose, even though you have shortened it as much as possible, adjust the length by cutting the wires.

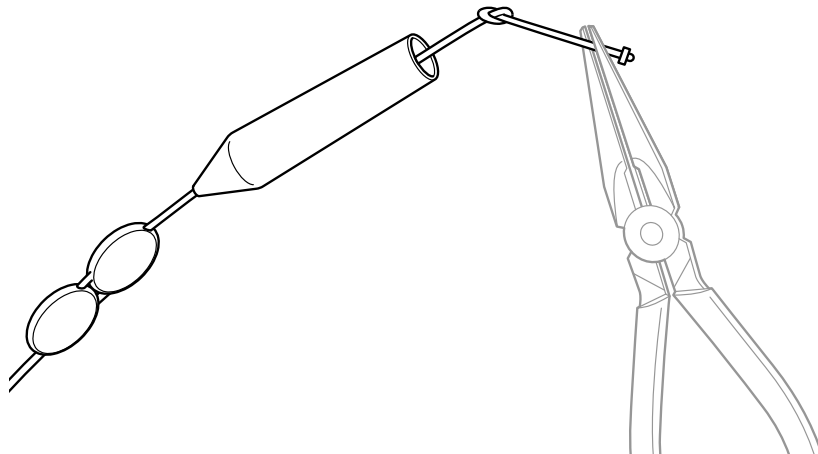
1. Stretch out the frame strap so that the sliders touch one another.



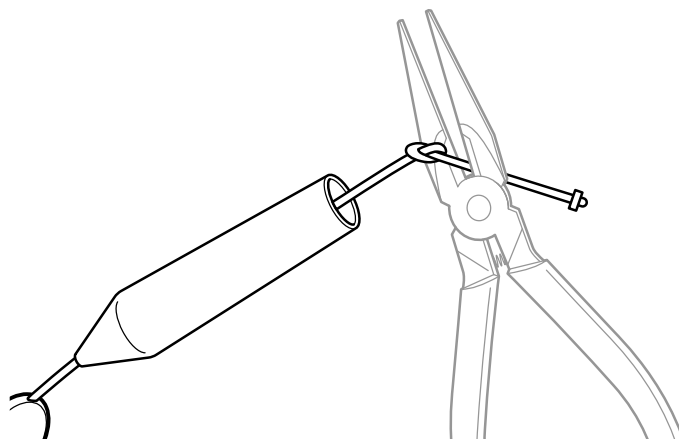
2. Pull the silicone parts of the frame strap, moving them toward the sliders.



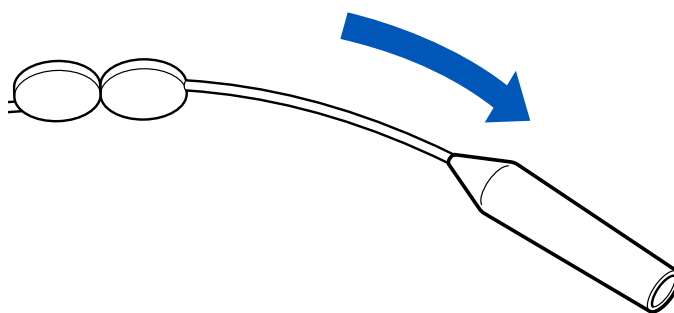
3. Use longnose pliers to tie the wire to a suitable length.



4. Use the longnose pliers' cutter to cut off the excess wire at the knot.



5. Put the wires back into the silicone parts.



If these solutions do not remedy the situation, contact the store at which you purchased your b.g. or an Enhanlabo distributor.

Specifications

| Item | | Details |
|---------------------|--|---|
| Main specifications | Temperature and humidity range for storage | -10 to 35 °C, relative humidity lower than 85% (no condensation) |
| | Operating temperature range | -10 to 35 °C, relative humidity lower than 85% (no condensation) |
| | Weight | Approx. 130 g (including the frame and cables) Frame: approx. 10 g Cables: approx. 75 g |
| | RoHS compliance | Compliant (excluding supplies and bundled items) |
| | Waterproofing and dustproofing | Equivalent to IP65 |
| Displays | Panel | 1/2-inch organic EL panels (×2) |
| | Resolution | 1280 × 720 |
| | Aspect ratio | 16:9 |
| | Field of view | Approx. 28° |
| | Size of virtual screen | Approx. 19 inches (virtual distance: 1 m) |
| Interface | Cables | HDMI type A (720 p/60 Hz), HDCP not supported |
| | | USB type A (5 VDC/1 A or more) |

* Please note that any specifications may change without notice.

Enhanlabo Co., Ltd.

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