

Smart Glasses
MOVERIO
BT-300

EPSON®
EXCEED YOUR VISION

User's Guide

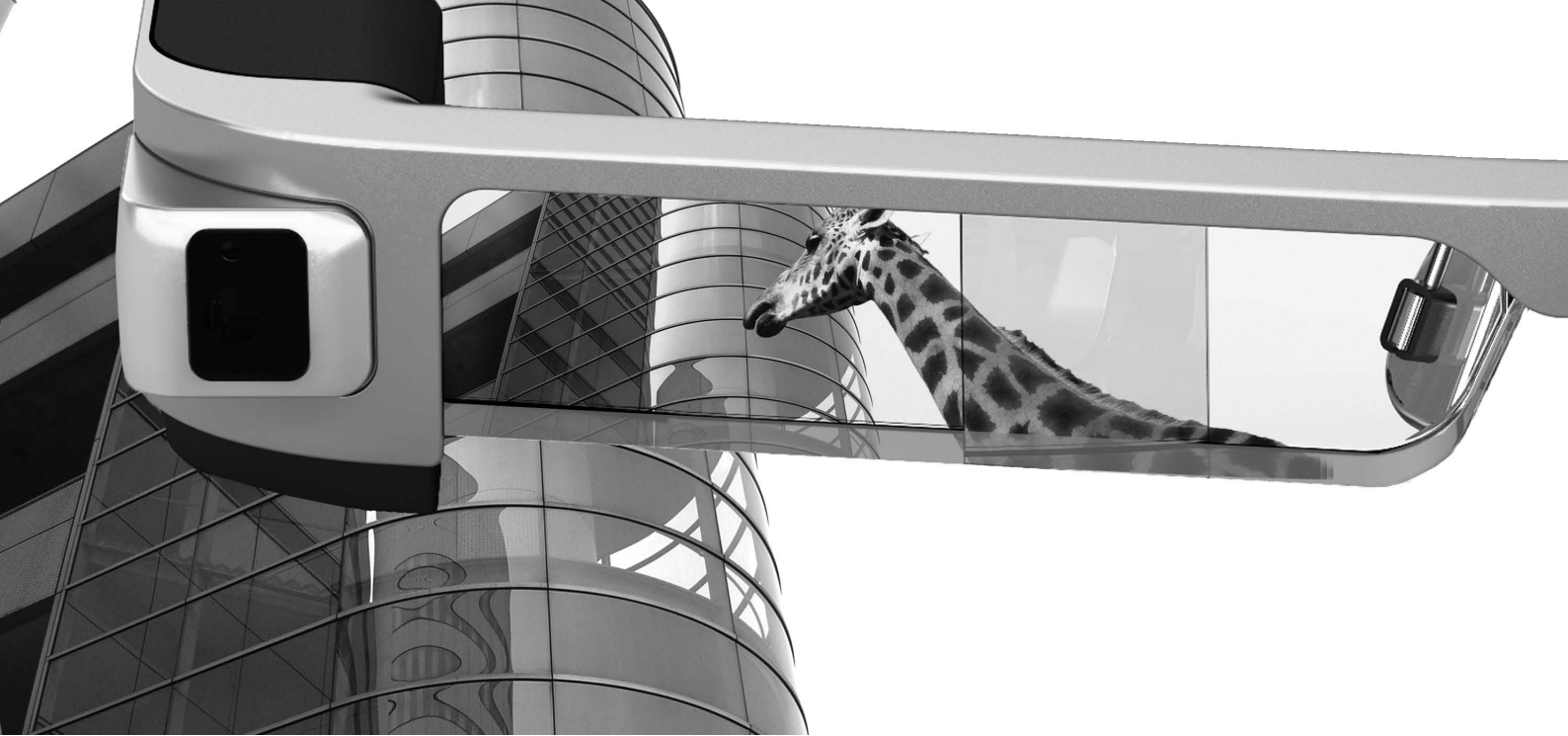


Copyright©2016 Seiko Epson Corporation. All rights reserved.
Printed in China XX.XX.-XX(XXX)
2016.11

Information on the Moverio Website

Provides useful tips and support information.

<https://moverio.epson.com/>



Welcome to the BT-300

These smart glasses allow you to enjoy viewing images and use apps anywhere and anytime you like. The see-through lenses allow you to create your own world using AR (Augmented Reality) which overlays images on your actual surroundings.

Enjoy viewing images

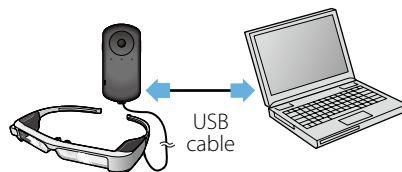
View images on the Web



Movie sites

➔ "Viewing Movies on a Website (Browser)" on page 37 (this guide)

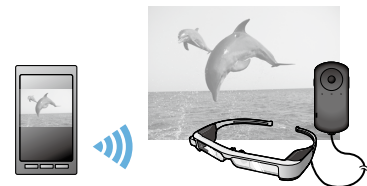
View saved images



Save easily by USB

➔ "Viewing Movies Copied from a Computer (Gallery)" on page 38 (this guide)

View images playing on other devices



Sync with images on a smartphone

➔ "Viewing Images on Other Devices (Miracast)" on page 40 (this guide)

Having Fun with Apps

You can download apps and use them with your product.

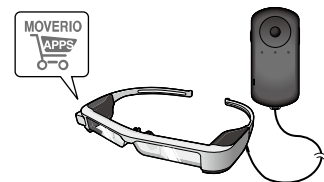
Games

Entertainment

Business

Life Style

➔ "Downloading Apps" on page 44 (this guide)



Download the apps you want

Contents



Safety Instructions	6
Notes on Usage	11
Getting Ready	12
Part Names and Functions.....	12
Charging.....	14
Wearing the Headset.....	16
Turning On and Off	20
Using the Controller.....	22
Using the Home Screen	26
Setting the language, date and time.....	30
Setting up network	32
Bluetooth settings	34
Adjusting the Screen	35

Viewing Images	37
Viewing Movies on a Website (Browser).....	37
Viewing Movies Copied from a Computer (Gallery)	38
Viewing Images on Other Devices (Miracast)	40
Using Apps	42
Shooting a Movie (Camera).....	42
Downloading Apps	44
Troubleshooting	48
System Update.....	51
Specifications	53
Intellectual Property Rights	55
General Notes	60
Contact List	64

User's Guide Organization

User's Guide (this guide)	This guide provides information on safely using this product, basic operating methods, and troubleshooting. Make sure you read this guide before using the product.
Start Guide	This guide provides information on using this product for the first time.

Symbols Used in this Guide

■ Safety symbols

 Warning	This symbol indicates information that, if ignored, could possibly result in serious personal injury or even death due to incorrect handling.
 Caution	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

■ General information symbols

	Indicates procedures which may result in damage or injury if sufficient care is not taken.
[]	Indicates icons, menu items, and controller key names displayed on the screen.
	Indicates additional information and points which may be useful to know regarding a topic.
	Indicates a reference to related topics.

Safety Instructions

For your safety, read the attached documents carefully to use the product correctly. After you have read the documents, keep them in a safe place so that you can refer to them quickly at a later date.

Warning Usage environment and condition precautions

Only use this product at the stated power-supply voltage.

Only use the supplied USB cable and AC adapter. Using other power supply devices could result in heat, fire, explosion, malfunction, or liquid leakage.

Take the following precautions when handling the plug. Failure to comply with these precautions could result in fire or electric shock.

- Do not plug the AC adapter into an outlet being used by many other devices.
- Do not insert the plug into a dusty outlet.
- Insert the plug firmly into the outlet.
- Do not hold the plug with wet hands.
- Do not pull the power cable when disconnecting the plug.

Do not use the power cable (USB cable supplied) if it is damaged. Doing so could result in fire or electric shock.

- Do not modify the supplied power cable.
- Do not place heavy objects on top of the supplied power cable.
- Do not bend, twist, or pull the power cable with excessive force.
- Keep the power cable away from hot electrical appliances.

For your safety, unplug the product when it is not being used. The insulation may deteriorate, which may result in electric shock, fire, or malfunction.

Do not touch the plug during a thunderstorm. Doing so could result in fire or electric shock.

Do not leave this product in locations subject to temperatures beyond the specified operating range, such as cars with the windows closed, in direct sunlight, or in front of air-conditioning or heater outlets. Also, avoid locations subject to sudden changes in temperature. Doing so may result in fire, breakdown, malfunction, or failure.

Do not use the product in locations where it may get wet or is subject to high levels of humidity such as in a bath or shower. Doing so could result in fire or electric shock.

Do not place this product in locations subject to smoke, steam, high humidity, or dust such as kitchen counters or near humidifiers. Doing so may result in fire, electric shock, or deterioration in image quality.

Do not cover this product with a cloth or similar material during use. Doing so may change the shape of the case through heat, or fire.

Do not expose the camera lens to direct sunlight for a long time. Doing so may result in fire or explosion due to condensed beams of light from the lens.

Warning Product usage precautions



Do not start using this product at a high volume. Doing so may result in hearing impairment. Lower the volume before turning off the product, and gradually increase the volume after turning on the product. To prevent possible hearing damage, do not listen at high volume for prolonged periods of time.

Do not allow any conductive foreign objects to touch the charging connector, external device connector, or earphone microphone socket, and do not put any conductive foreign objects into the connection ports. Doing so may cause a short circuit and result in fire or electric shock.

Do not allow solvents such as alcohol, benzene, or thinner to touch the product. Also, do not clean this product with a wet cloth or solvents. Doing so may warp or crack the product housing and may result in electric shock, malfunction, or fire.

The product housing should only be opened by qualified service personnel unless you are explicitly instructed to do so in the User's Guide. Also, do not disassemble or remodel the product (including consumable items). Many of the parts inside the product carry a high voltage and could cause fire, electric shock, accident, or poisoning.

Do not subject the lens of the product to strong shocks or knock it against hard objects. If the lens is damaged, it could splinter and cause serious injuries to the eyes and face.

Do not throw the product into a fire and do not heat the product. Do not place objects with naked flames, such as candles, on this product. Doing so may result in heat, fire, or explosion.

Warning Viewing image precautions

Do not wear this product while driving a car, riding a motor bike or bicycle, or performing any other dangerous tasks. Doing so may result in accident or injury.

Do not use this product in unstable locations such as stairs or at altitude. Also, do not use the product while walking in dangerous locations such as near machinery or equipment that might get caught on the cables, where there is a lot of traffic, or where it is dark. Doing so may result in accident or injury.

When walking while viewing images on the product, be aware of your surroundings. If you are too focused on the image, it could result in accidents, falling down, and colliding with other people.

When viewing in dark locations, it is difficult to see your surroundings due to the brightness of the image. Be aware of your surroundings.

When using this product in small locations, be aware of your surroundings.

When wearing this product, do not look directly at the sun or other light sources even if you are using the shade. This could cause serious injury to your eyes or loss of eyesight.

Make sure the cable does not catch on anything in the surrounding area while wearing the product. Also, make sure the cable does not wind around your neck. Doing so may result in accident or injury.

Make sure the cable does not get damaged. Otherwise, it may result in fire or electric shock.

- Do not damage the cable.
- Do not place heavy objects on top of the cable.
- Do not bend, twist, or pull the cable with excessive force.
- Keep the power cable away from hot electrical appliances.

Warning Product abnormality precautions

In the following situations, turn off this product immediately, unplug the power plug, and contact your local dealer or the Epson service call center. Continuing to use under these conditions may result in fire or electric shock. Do not try to repair this product yourself.

- If you see smoke, or notice any strange odors or noises.
- If any water, beverages, or foreign objects get into the product.
- If the product was dropped or the case was damaged.

Warning Wireless function precautions

When taking this product into areas in which the use of electromagnetic waves is prohibited, such as in an aircraft or in hospitals, follow the instructions in the area and turn off this product or disable the Bluetooth or wireless LAN function. Do not use the Bluetooth or wireless LAN function near automatically controlled devices such as automatic doors or fire alarms. If the product has an auto power on

function, disable it before turning off the product. The electromagnetic waves may cause electromagnetic interference with medical equipment or cause the equipment to malfunction.

Note the following points when using the Bluetooth or wireless LAN function in medical institutions.

- Do not bring this product into operating rooms, Intensive Care Units (ICUs), or Cardiac Care Units (CCUs).
- When in wards, turn off this product or stop the electromagnetic waves.
- Even when not in wards, turn off this product or stop the electromagnetic waves if there is any electronic medical equipment in the area.
- Follow any rules stipulated by medical institutions that prohibit the use of devices emitting electromagnetic waves, or that prohibit entry to certain areas with such devices.
- If the product has an auto power on function, disable it before turning off the product.

If you have an implanted pacemaker or implanted defibrillator, make sure you keep a distance of at least 22 cm between this product and the implanted device when using the Bluetooth or the wireless LAN function. The electromagnetic waves may influence the operation of implanted pacemakers or implanted defibrillators. Turn off this product or stop the electromagnetic waves if you are in a location where someone near you may have a pacemaker, such as a crowded train.

Caution Usage environment and condition precautions

Do not place the product in locations subjected to vibrations or shocks.

While using the product to view images, play games, or listen to music, make sure you confirm the safety of your surroundings and do not leave any fragile items in your immediate vicinity. The images you are viewing may cause you to move your body involuntarily, resulting in damage to nearby items or personal injury.

Do not place this product near high-voltage lines or magnetized items. Doing so may result in breakdown, malfunction, or failure.

When performing maintenance, make sure you turn off the product, unplug the power plug and the power connector and disconnect all wires. Otherwise, it may result in electric shock.

Stop charging the battery if the charging does not end in the stated period of time. Continuing the charge may result in liquid leakage, heat, explosion, or fire.

Caution Product usage precautions

Stop using this product if the skin that touches the product (face and so on) feels itchy when wearing the product, or any unusual rashes occur, and consult your local dermatologist.

If you sweat while using the product, wipe the sweat from your face and the product. Continuing to use under these conditions may re-

sult in itching or a rash.

Hold the controller securely or place it on a stable surface and make sure the cables are not pulled with undue force. Dropping the headset due to the weight of the controller may result in injury or malfunction.

Dispose of this product in accordance with your local laws and regulations.

Caution Viewing image precautions

Always take periodic breaks when viewing images using this product. Long periods of viewing images may result in eye fatigue. If you feel fatigued or uncomfortable even after taking a break, stop viewing immediately.

Do not drop this product or treat it with unnecessary force. Also, if the product breaks due to an impact such as a fall, stop using the product. Continuing to use this product may result in injury due to glass fragments.

When wearing this product, be aware of the edges of the frame. Also, do not place your finger between the moving parts of this product, such as the hinges. Doing so may result in injury.

Make sure you are wearing this product correctly. Incorrect usage could make you feel nauseous.

This product should only be used for the purposes stated in the manuals. Using it for anything else may result in injury.

If a problem or malfunction occurs, stop using this product immediately. Continuing to use this product may result in injury or could make you feel nauseous.

Stop using this product if your skin feels unusual when wearing this product and consult your local dermatologist. Sometimes allergies may occur due to the coating or material of the product.

How a 3D image is perceived varies depending on the individual. Stop using the 3D function if you feel strange or cannot see in 3D. Continuing to view the 3D images could make you feel nauseous.

This product must not be used by children under the age of six as their eyesight is still developing.

If a child of seven years or older uses the product, make sure they are supervised at all times and that they do not wear the product for extended periods. Pay close attention to the child's physical condition and make sure they are not suffering from eye strain.

Do not use this product if you are sensitive to light, or feel nauseous. Doing so may aggravate your pre-existing conditions.

Do not use this product if you have prior eye conditions. Doing so may aggravate the symptoms such as strabismus, amblyopia, or anisometropia.



Caution Product abnormality precautions

Contact an authorized Epson dealer when replacing batteries.

Data such as video, images, or music stored on the product may be lost or damaged when the product malfunctions, is repaired, or undergoes other services. Epson shall not be responsible for the loss of any data, damage to data, or loss of profits that occurs at such a time.



You can recycle used lithium-ion batteries. When the product's internal battery reaches the end of its service life, contact a service center for information on recycling.

Notes on Usage

This product uses an Si-OLED display panel. Due to the characteristics of the Si-OLED, you may notice burn-in or decreasing luminance on the panel. This is not a malfunction. To reduce the burn-in, do the following.

- Do not display the same image for a long time.
- Hide markers or text that always appear in the same position.
- Decrease the display brightness.
- Turn off the display using the tap to mute function or sleep function, or turn off the product when you are not viewing images for a long time.

Charge the battery at least once a year even if you do not use the product. If you do not use the product for a long period of time, the battery performance may deteriorate or you may not be able to charge the battery.

List of Safety Symbols (corresponding to IEC60950-1 A2)

The following table lists the meaning of the safety symbols labeled on the equipment.

	Approved standards: IEC60417 No.5031
	Meaning: Direct current
	To indicate on the rating plate that the equipment is suitable for direct current only; to identify relevant terminals.

Getting Ready

Part Names and Functions

Controller

Cross-key (touch sensor)

Selects items and scrolls the screen.

Enter key

Selects or confirms items.

Switch key

Changes the adjustment items to brightness or 2D/3D mode. (Use the cross-key to adjust settings.) Hold down to turn key lock on and off.

◀ BACK key (touch sensor)

Displays the previous screen.

○ HOME key (touch sensor)

Displays the Home screen.

□ History key (touch sensor)

Displays recently used apps.

Headset connector

Connects the controller connector.

➔ "Charging" on page 14 (this guide)

⏻ Power button

Turns the power on or off.

➔ "Turning On and Off" on page 20 (this guide)

LED indicator

Indicates the status of the product.

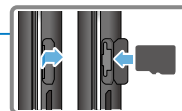
➔ "LED indicator status" on page 15 (this guide)

Volume keys

Adjusts the volume.

microSD card slot

Insert a commercially available microSD card.



micro-USB connector

Connects the supplied USB cable.

Trackpad

Touch with your finger to operate the product.

➔ "Using the Controller" on page 22 (this guide)

Headset

Tap to mute

This function allows you to tap twice to temporarily hide the image and mute the audio.

Ambient light sensor

Senses the brightness of your surroundings and automatically adjusts the brightness of the screen.

➔ "Adjusting the Brightness of the Screen" on page 36 (this guide)

Camera/Indicator

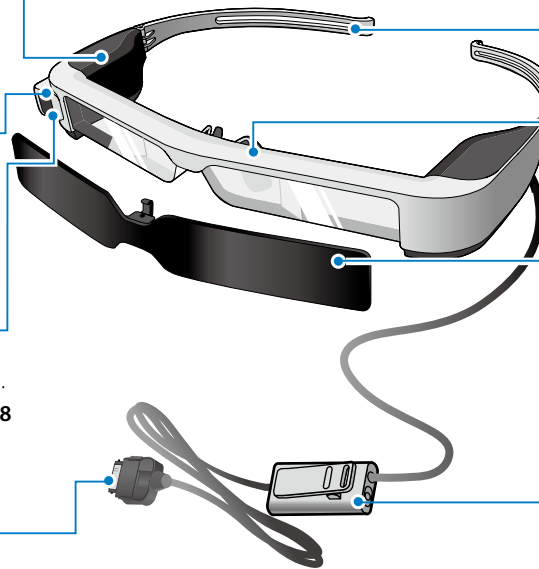
Captures images and movies. The indicators flash while the camera is starting.

➔ "Preinstalled applications" on page 28 (this guide)

Controller connector

Connects the controller.

➔ "Charging" on page 14 (this guide)



Temples

Open the temples to wear.

➔ "Wearing the Headset" on page 16 (this guide)

Nose pads

When wearing the product over glasses, replace with the supplied nose pad for glasses.

Shade

Shades the product from too much exterior light.

➔ "Attaching and Removing the Shade" on page 19 (this guide)

Earphone microphone socket

Connects the socket for earphone microphones. You can also connect commercially available earphone microphones.

➔ "Wearing the Headset" on page 16 (this guide)

Charging

The product is not fully charged at the time of purchase. Charge before use.

This section explains how to charge using the AC adapter. Initial charging takes approximately 5 hours.

1 Connect the headset and the controller.

Insert the controller connector into the controller's headset connection port until it clicks.



Do not connect the controller connector to any other devices except for the product.

2 Connect the controller and AC adapter.

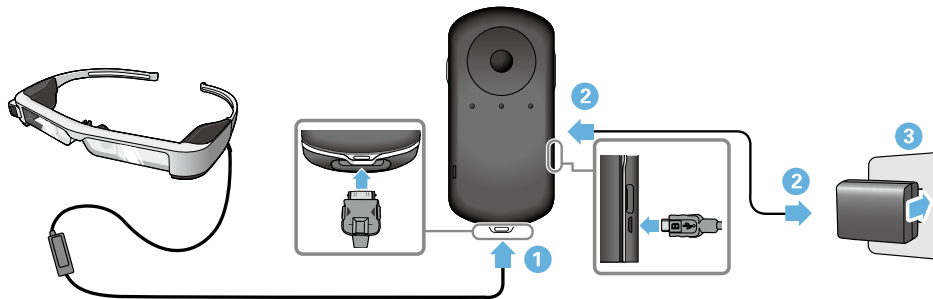
Connect the controller and the AC adapter with the USB cable.

3 Plug in the AC adapter.

The LED indicator flashes light blue.



If the battery is dead, the LED indicator does not turn on for a while when charging starts. Charge for at least 30 minutes, and then re-connect the USB cable.



When the battery is charged 90% or higher, the LED indicator stops flashing and remains on. The LED indicator turns off when the battery is fully charged. (The LED indicator provides a rough indication of the amount of remaining battery.)

Disconnect the AC adapter and the USB cable.

Battery life is approximately six hours. Battery life may vary depending on application and environmental usage conditions.

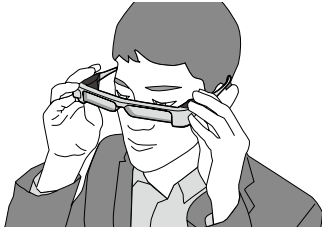
LED indicator status

You can check the status of the product from the colors and the lit status of the LED.

Green	Starting up or Shutting down
Light blue	Charging/Operating
Blue	Sleep mode
Orange	Battery running low
Pink	Error

Wearing the Headset

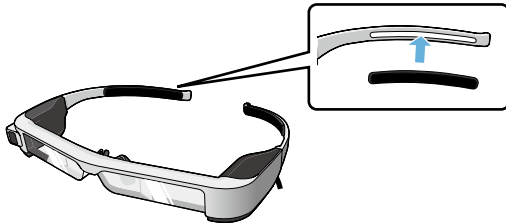
- 1 Use both hands to open the temples, and then put on the headset.



Do not use too much force when opening the temples of the headset.

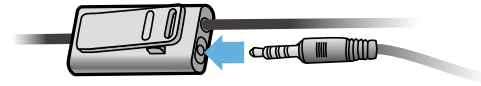


If the headset does not feel secure when wearing it, attach the temple grip supplied.



- 2 Connect the earphone microphone to the earphone microphone socket.

Attach the earphones before playing back any content. Noise may be heard if the earphone microphone is disconnected or connected while content is being played.



You can clip the earphone microphone to your clothes.

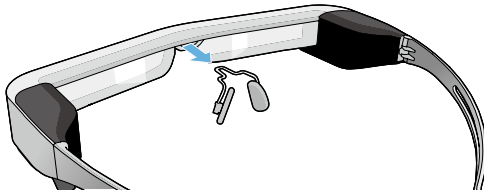
- 3 Wear the earphones.

Wearing over Glasses

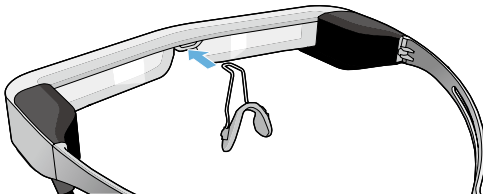
By replacing with the supplied nose pad for glasses, the headset can be worn over glasses. (The headset can only be worn over glasses that are approximately 147 mm wide.)

- ! Make sure that you do not damage the glasses and the lens of the headset when wearing. You may not be able to wear the headset over the glasses depending on the shape of your glasses.

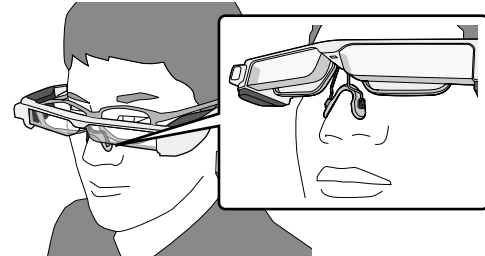
1 Pull the nose pad forward to remove it.



2 Attach the nose pad for glasses.



The nose pad for glasses fits over your glasses.



Attaching the lens holder and wearing the headset

If you wear glasses, the lens holder allows you to wear the headset without wearing your glasses.

Visit your local opticians and have them install lenses in the lens holder and attach them to the headset. (The customer is responsible for the cost of the lenses. Depending on the opticians, they may not be able to perform this procedure.)

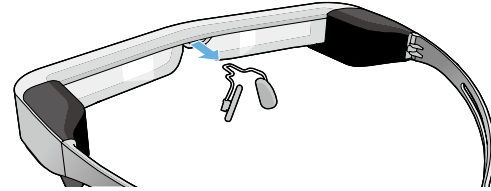
Lens holder supported lenses

Lens (W x H)	50 x 24 mm
Nose pads	20 mm
Frame PD	70 mm
Curve	4

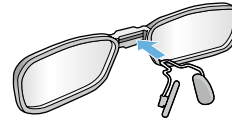


You may not be able to view images when using special lenses such as colored lenses, mirrored lenses, and polarized lenses.

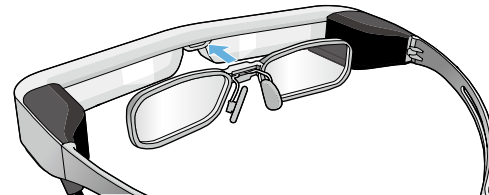
- 1 Pull the nose pad forward to remove it.



- 2 Attach the nose pad to the lens holder.



- 3 Attach the lens holder to the headset.

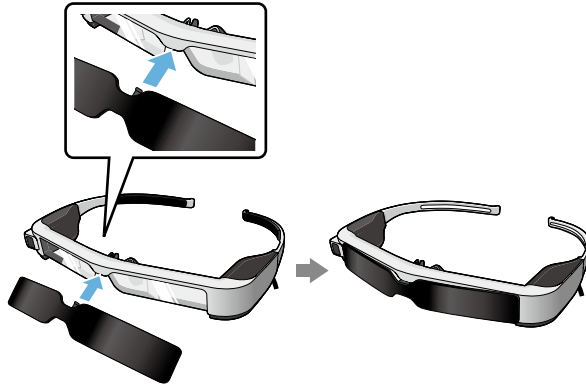


Attaching and Removing the Shade

If it is too bright to view the screen when wearing the headset, attach the shade.

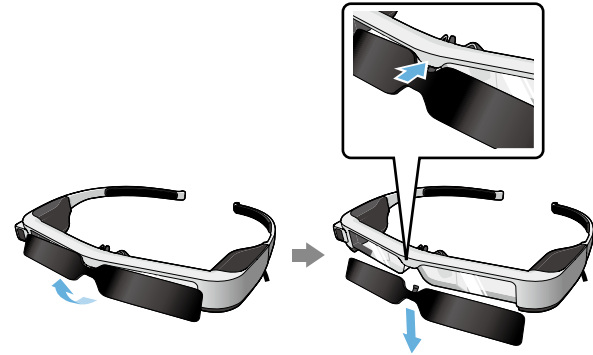
■ Attaching the Shade

Tilt the shade, and then push the protruding section into the headset until it clicks into place.



■ Removing the Shade

Raise the bottom edge of the shade and pull carefully down while pressing the center of the shade to remove.



! If the shade is pushed or pulled with too much force, the shade and the lens could be damaged. Do not use too much force on the shade.

Turning On and Off

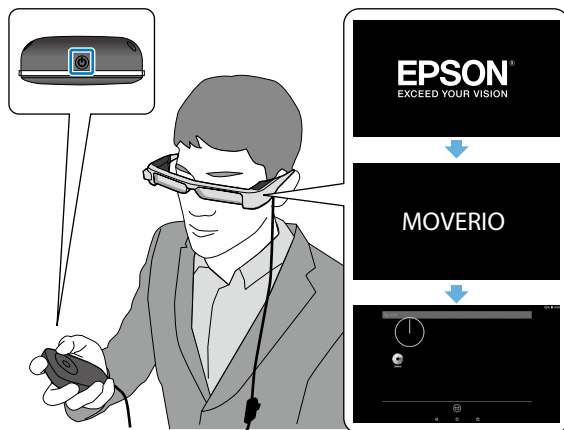
Turning on



Before turning on the product, check the charge level.

➔ "Charging" on page 14 (this guide)

Press the Power button for one second.



When the startup begins, the start screen is displayed in the headset. When startup is complete, the Home screen is displayed.

When you cannot view the images, adjust the vertical position of the headset so that the lens is in line with your eyes.



- See the following for information on using the controller.

➔ "Using the Controller" on page 22 (this guide)

- **Turning off the screen while the product is on (Sleep mode)**

When you press the Power button briefly, the product enters Sleep mode and the LED indicator turns blue. Press the Power button briefly again to wake the product from Sleep mode.

- **Disabling controller operations (Key lock)**

When you hold down the Switch key, the key lock turns on. When you hold down the Switch key again, the key lock turns off.

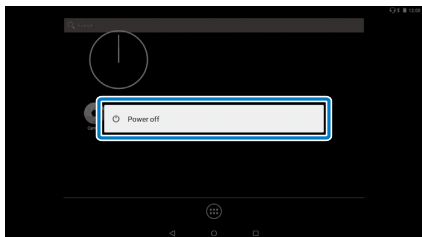
Turning off

- 1 Hold down the Power button for at least one second.



The [Power off] screen is displayed.

- 2 Select [Power off].



The power turns off.



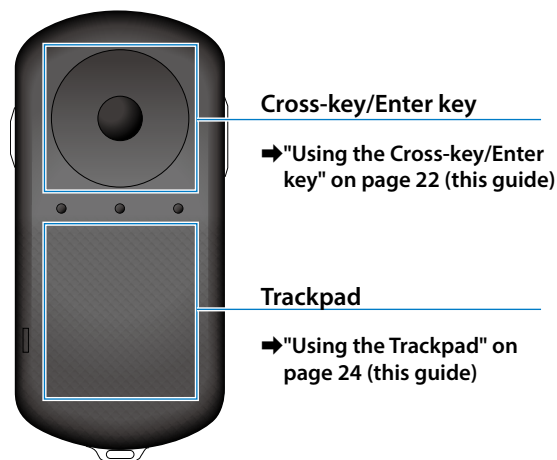
If operations are unstable, you can force the product to shutdown by holding down the Power button for at least 10 seconds.



Do not force the product to shutdown unless operations are unstable.
Stored data and settings may be lost.

Using the Controller

You can operate the product using one of the following methods.



The controller may vibrate depending on the operation being performed.

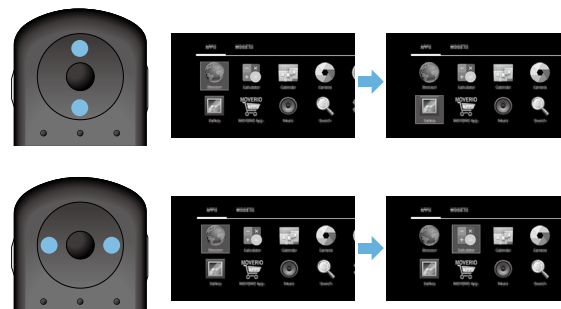
Using the Cross-key/Enter key

Cross-key

The Cross-key is an electrostatic touch sensor, and will react to the lightest of touches.

The selection moves when you select icons or displayed items. When you hold down one direction, the selection moves continuously in that direction.

When you have not selected icons or displayed items, you can scroll the screen.



■ Enter key

Selects or confirms items or launches the app.



Using the Trackpad

When you touch the trackpad with your finger, a pointer is displayed on the screen. Move the pointer to operate the product.

■ Tap

Move the pointer to an icon or displayed item, and then tap the trackpad. Tap performs actions such as launching apps and selecting items.



■ Drag

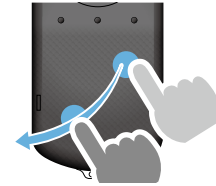
Touch the track pad for about one second to select the icon or displayed item, and then drag your finger while holding down the trackpad. Drag performs actions such as moving icons, scrolling, or changing the screen.



■ Flick

Swipe your finger with a dragging motion, or swipe the trackpad with two fingers.

Use two fingers to scroll the screen smoothly.



■ Pinch out

Enlarges the size of the screen by moving two fingers apart.



■ Pinch in

Reduces the size of the screen by moving two fingers closer together.

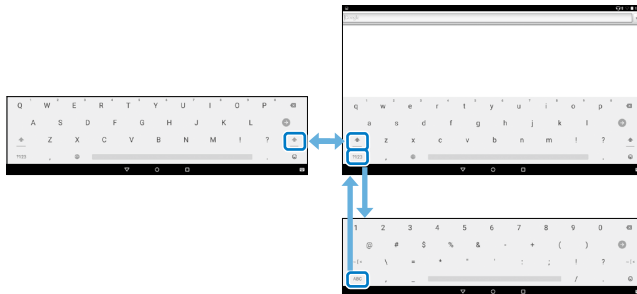


Entering text

When you select a location where text entry is possible, the software keyboard is displayed. Enter text using the keyboard.

Changing the text entry mode

Press the [?123] key or the [ABC] key to switch between characters on the keyboard, and press the [↑] key to switch between upper and lower case letters.

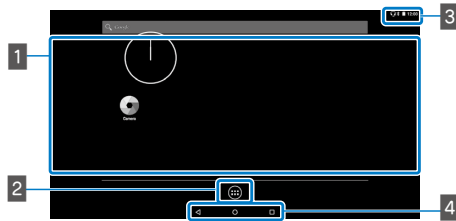


Using the Home Screen

You can launch applications and perform various settings from the Home screen.

The following screen is the initial screen you see when using this product.

Press the [○] key to display the Home screen.



1 App/Widget area

This area allows you to layout shortcuts and widgets for applications displayed on the Home screen.

2 APPS/WIDGETS list

Displays the APPS/WIDGETS list screen.

3 Status bar

Indicates the status of this product.

4 Virtual buttons

◀ : Returns you to the previous screen.

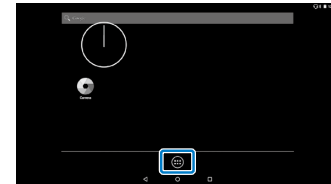
○ : Displays the Home screen.

□ : Displays recently used apps.

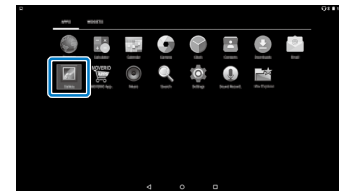
Launching an application

Launch an app from the APPS list screen.

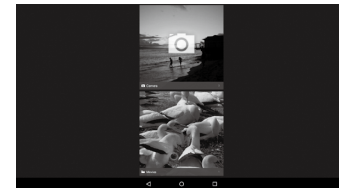
Home screen



APPS list screen



App screen



Arranging apps and widgets on the Home screen

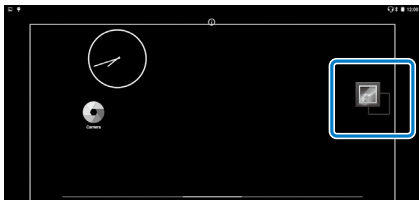
Select apps and widgets you want to display on the Home screen from the APPS/WIDGETS list screen, and then arrange them.

- 1 On the APPS/WIDGETS list screen, move the pointer to the app/widget, and then hold your finger down on the app/widget.



The screen that allows you to select the location to place the icon on the Home screen is displayed.

- 2 Drag to the location you want to place the icon, and then release your finger.



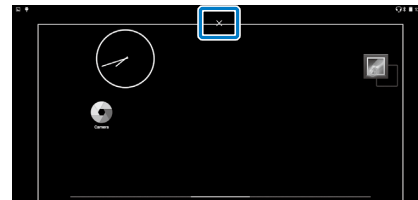
Deleting apps and widgets from the Home screen

Delete apps and widgets that have been placed on the Home screen.

- 1 On the Home screen, hold down your finger on the app/widget you want to delete.

[X] is displayed at the top of the screen.

- 2 Drag the app/widget you want to delete over the [X], and then release your finger.



Status bar icons

	Playing music
	Connecting/using wireless LAN
	Connecting to Bluetooth
	Scanning microSD card
	Battery charge status
	Charging
	Download complete
	Screen dims due to high internal temperature

Preinstalled applications

	Gallery ➔ Page 38 (this guide)
	Music
	Browser ➔ Page 37 (this guide)
	Calendar
	Search
	Sound Recorder
	Calculator
	Email
	Camera ➔ Page 42 (this guide)
	Clock
	Downloads
	Settings

	MOVERIO Apps Market
	Contacts
	Mov Filer

Available widgets

Widgets are small applications that display information on the Home screen. The following widgets are available for this product.

Analog clock

Bookmark

Calendar

Contacts

Email

Music

Music playlist

Search

Digital clock

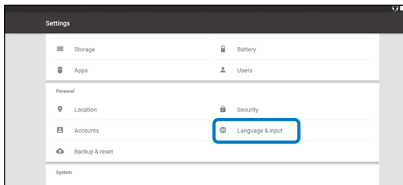
Photo Gallery

Setting the language, date and time

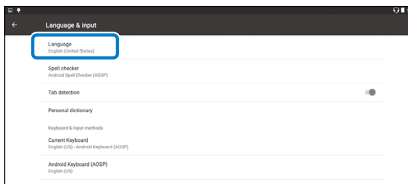
Setting the language

You can set the display language.

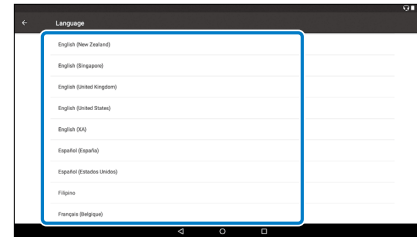
- 1 Select [] on the APPS list screen.
- 2 Select [Personal] - [Language & input].



- 3 Select [Language].



- 4 Select the language you want to use.



The display language changes.