# Intelligent Controller BO-IC400

**User's Guide** 

**EPSON** 

Information on the Moverio Website

Provides useful tips and support information. https://tech.moverio.epson.com/en/



See the User's Guide supplied with the headset for precautions on using the headset



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## Introduction

This product is a controller that connects to the EPSON smart glass MOVERIO series headset and uses an app to display and share information. It supports models with USB Type-C connectors.

The MOVERIO series has see-through lenses that allow you to create your own world using AR (Augmented Reality) which overlays images on your actual surroundings.



Make sure your system software is up to date before using this product.

⇒"System Update" p. 31

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#### About the User's 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.

## Symbols Used in this Guide

## ■Safety symbols



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



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 and menu items displayed on the screen and the product's key names.



Indicates additional information and points which may be useful to know regarding a topic.

 $\Rightarrow$ 

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.

## **Product Warnings and Cautions**



When charging, use a commercially available USB power adapter that has received public safety standards certification and meets the necessary specifications of this product.

When charging, use the USB cable supplied or an officially certified USB cable. Using a cable that has not been officially certified could result in heat, fire, explosion, malfunction, or liquid leakage.

Do not charge when the product or the cable are wet.

Do not charge in locations where it may get wet or is subject to high levels of humidity such as in a bath or shower room.

If you need to charge after this product gets wet, wipe off any water on the product with a dry cloth, and then allow it to dry naturally before connecting the USB cable.



#### Warning

#### Usage environment and condition precautions

Do not leave this product in locations subject to temperatures beyond the specified operating range or that can easily become hot, such as cars with the windows closed, in direct sunlight, in front of air-conditioning or heater outlets, or under heated tables or futons. 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 outdoors or in a bath or shower room. Otherwise, it may 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. Otherwise, it may result in fire or electric shock.

Laws and regulations prohibit viewing the product's display or the screen of the connected headset while driving a car, motorbike, or riding a bicycle.

## **Warning**Product usage precautions

Do not allow any conductive foreign objects to touch the USB Type-C connector, microSD card slot, or earphone jack, 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 use a damaged USB cable. Failure to comply with these precautions could result in fire or electric shock.

Do not subject the product to excessive pressure or damage it. Be careful not to hit or trap the device in anything, especially when carrying the product in your pocket. Failure to do so could cause fire, burns, or injuries due to damage to the touch panel display, the camera glass, or the built-in battery.

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.



- Do not start using this product at a high volume. Sudden, loud noises could result in hearing impairment.
   Lower the volume before turning off the product, and gradually increase the volume after turning on the product.
- If you use the headset speaker amplification function of Moverio Link/Moverio Link Pro to listen to loud sounds that exceed the recommended level for a long time, your hearing may be impaired.

Do not use a wet cloth or solvent such as alcohol, benzine, or thinner when cleaning this product. In addition, do not apply alcohol, benzine, thinner, or any other organic solvents to the touch panel display or resin cover of this product. Doing so may result in electric shock or malfunction.

Except when explicitly instructed to do so in the User's Guide, the case for the product should only be opened by qualified service personnel. 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 allow the light or radiated light from the LED part into your eye. Take particular care to keep the light away from infants. Otherwise, it may result in visual impairment.

Additionally, being suddenly dazzled by the light can cause an injury to occur.

Do not touch this product or the USB Type-C connector with wet hands. Otherwise, it may result in fire, burns, electric shock, and so on.

Note the following points when inserting/removing all connectors.

- Do not apply excessive force such as pulling on the cables
- Insert straight into/remove straight out of the connector port Incomplete or incorrect connections could result in fire, burns, electric shock, and so on.

Make sure you use the USB cable supplied with the product or a USB certified product to connect to the USB Type-C connector. Using a cable that is not USB certified could result in fire, burns, electric shock, or damage to the product due to incorrect wiring.

For your own safety, do not use a commercially available conversion adapter or extension cable when using the USB Type-C connector.

Do not press too hard on the touch panel display or operate it with pointed objects. If the panel is scratched it may cause a malfunction or damage to occur.

In the following cases, the touch panel display may not work even if you touch it. These actions could also cause a malfunction.

· Operating when wearing gloves.

- Operating when your fingers are wet with sweat or water.
- Operating when the touch panel display is wet. Operating in water.
- Operating when a protective sheet or sticker is attached.
- · Operating when a foreign object is on the operating surface.

Do not throw the product into a fire and do not heat the product. Do not place combustible items, such as candles, near this product. Doing so may result in heat, fire, or explosion.



#### Warning

#### **Product abnormality precautions**

In the following situations, turn off the power immediately (if the product is being charged, disconnect the USB cable to stop charging), 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.
- If the touch panel display or the camera glass was damaged

Stop using the product if the product itself or the cable is damaged. Otherwise, it may result in fire or electric shock.

## **Marning**

#### 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. 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 on wards, turn off this product or stop the electromagnetic waves.
- Even when not on 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 (8.7 inches) 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.

When communicating using the product's wireless LAN (WLAN) function or Bluetooth function, data information could leak or unauthorized access may be possible depending on the security function settings. Note that the user is responsible for handling the security functions.

Epson accepts no responsibility for any data leaks when communicating using the product's wireless LAN (WLAN) function or Bluetooth function.



#### Caution

#### Usage environment and condition precautions

Do not use in the following locations.

- · Locations subject to heat such as near heaters
- · Locations subject to vibrations or shocks

Do not use or store the product in locations where the temperature is too high or too low. Also, avoid locations subject to sudden changes in temperature. Otherwise, the product may not work correctly.

Do not place this product near high-voltage lines or magnetized items. Otherwise, the product may not work correctly.

When performing maintenance, make sure you turn off the product, and disconnect all cables. 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.



## Product usage precautions

Note that the product may become hot during prolonged use or during charging. Furthermore, do not allow the product to remain in contact with your skin for too long, even while wearing the prod-

uct, as doing so may result in low temperature burns.

Just like computers, when the user installs an app or accesses a Website, this device may become unstable, or sensitive data, such as the user's location information or personal information registered to the device, could be illegally leaked over the Internet by malicious third parties. For this reason, be sure to check the creator of the app

or site you are using as well as the processing status before using it.

Do not look at the flashing screen for too long. Otherwise, convulsions or loss of consciousness could occur.

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 from the touch panel display or camera.

Be careful of the tip of the SD card slot pin when installing or removing the microSD card. Touching the tip of the SD card slot pin may cause an injury.

This product should only be used for the purposes stated in the manuals. Using it for any other purpose may result in injury.

Make sure you regularly backup your registered data (documents, movies, images, music data, etc.) to an external storage medium such as a microSD card or computer.

Epson shall not be liable for the loss of any data, damage to data, or loss of profits that occurs due to malfunction, repair, or other handling of this product.



You can recycle used lithium-ion batteries. For more information on how to recycle the built-in battery of this product, contact a dealer in the "Contact Information" provided at the end of this guide.

When recycling or disposing of this product, do so in accordance with your local laws and regulations.



#### Water resistance precautions

The water resistance feature does not guarantee protection against damage or malfunctions under all conditions. The warranty is invalid if malfunctions are determined to have occurred due to incorrect handling of the product by the user.

Close the USB Type-C connector (with cover) and the microSD card slot cover securely. If tiny pieces of trash such as hairs or sand become caught in the product, the water resistance is not maintained.

Do not allow other liquids (such as organic solvents, soapy water, hot spring water, and seawater) to splash onto the product.

Do not leave the product in locations subject to humidity such as bathrooms.

If rain or water splashes onto the product, wipe it with a dry cloth as soon as possible.

## Warnings and Cautions when Using the Headset



#### Warning

**Product usage precautions** 

#### <Usage in medical applications>

- This product and the headset have not been certified as medical equipment under laws such as medical supplies and medical equipment acts.
- 2) This product and the headset do not meet medical standards.



#### 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 in dangerous locations such as near machining tools, where there is a lot of traffic, or where it is dark. Doing so may result in accident or injury.



#### **Caution**

#### **Product usage precautions**

When connecting/disconnecting the headset's USB Type-C connector, do not handle it with wet hands or expose it to water or dust.

The headset uses an Si-OLED display panel (organic EL panel). Due to the characteristics of the Si-OLED, you may notice burn-in (after images) or decreasing luminance on the panel. This is not a malfunction.

Methods to reduce burn-in (after images) and decreasing luminance

- Turn off the headset display when it is not being used.
   By enabling the Power Saving setting in the pre-installed app
   "MOVERIO Link Pro", the built-in sensors detect when the headset is not being used and automatically turn off the display.
- 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.
- Do not make the display any brighter than necessary.

## **Notes on Usage**

Be sure to consider other people when using this product in public locations.

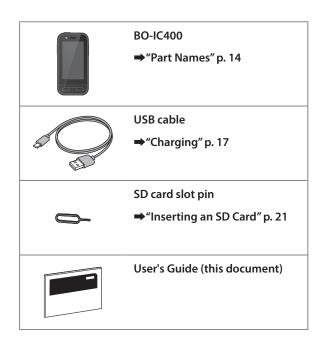
Charge the battery at least once a year even if you do not use the product. If you do not use the product for a long period of time, the battery performance may deteriorate or you may not be able to charge the battery.

The system software for this product may be upgraded to improve quality and add new features. When this occurs, the operating methods may change; therefore, be sure to check the Website provided on the cover for the latest information regarding added functions and changes in operating methods.

Additionally, apps used on the old version of the system software may become unusable or may cause unintended problems to occur.

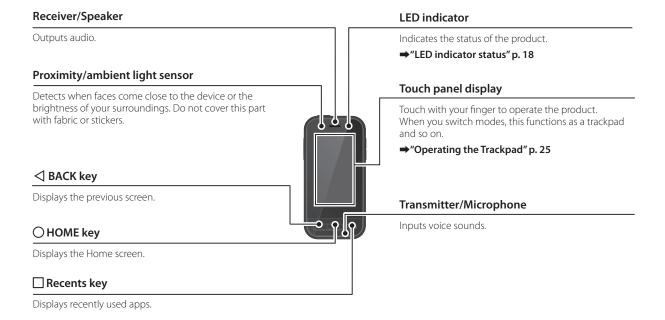
Before using services and apps provided by third parties, including apps provided by  $\mathsf{Google}^{\mathsf{TM}}$ , be sure to check the terms of service and so on provided by  $\mathsf{Google}$  or any other provider. Epson cannot be held responsible for any problems arising from the use of such services or apps.

## **Included Items**

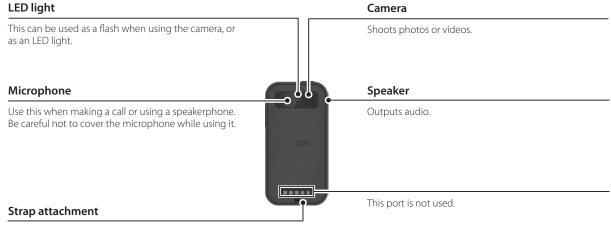


## **Part Names**

### **Front**



## **Back**



When using a strap, pass it through this part.

## Side

#### (I) Power button

Turns the power on or off.

⇒"Turning On and Off" p. 19

#### Switch key

Switches the mode.

⇒"Switching modes" p. 23

Hold this down to turn on the key lock feature. Hold it down again to turn off the key lock feature.



#### Volume keys

Adjusts the volume.

#### **USB Type-C connector (with cover)**

It supports USB 2.0, allowing you to connect and charge USB peripheral devices such as a mouse or keyboard.

- → "Charging" p. 17
- →"USB Type-C Connector Features" p. 37

#### microSD card slot

Insert a commercially available microSD card.

⇒"Inserting an SD Card" p. 21

## Slot pin insertion hole

Insert the SD card slot pin here to open the microSD card slot.

## Earphone jack

You can connect commercially available earphone microphones. Use earphone microphones that conform to the CTIA standard.



#### **USB Type-C connector (for headset connections)**

Connects the USB Type-C cable for your headset. It supports USB 2.0/USB 3.0 allowing you to transfer data and charge devices.

- → "Charging" p. 17
- ⇒"USB Type-C Connector Features" p. 37

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## Charging

Charge the battery by connecting the included USB cable to a commercially available USB power adapter.

Charging takes approximately 3 hours under the following conditions.

- · Turn off the device to charge
- Connect to the USB Type-C connector (for headset connections) to charge
- Use a USB power adapter with 5V/2A output

## Connect the device to a USB power adapter.

Connect the device to a USB power adapter using the included USB cable.

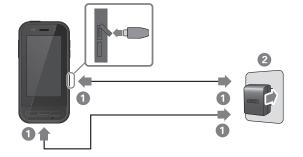
Charging capacity varies depending on the connector to be connected.

- USB Type-C connector (for headset connections): Up to 1.5 A (depending on the connected power adapter)
- USB Type-C connector (with cover): 0.5 A at all times

## Plug in the USB power adapter.

The LED indicator turns on.

If the battery is completely dead, the LED indicator does not turn on until a while after you start charging. Charge for at least 30 minutes, and then reconnect the USB cable.





You can reduce the charging time by using a commercially available USB Type-C cable and a USB Type-C power adapter that supports PD (Power Delivery).

## **LED** indicator status

This indicates the status of the product using colors and the lit status of the LED.

(The LED indicator provides a rough indication of the amount of remaining battery.)



Indicator	Status	Battery charge status
0	Operating	10% or more
(red)	Operating	Less than 10%
(green)	Charging	90% or more
(yellow)	Charging	10 to 89%
(red)	Charging	Less than 10%

## **Turning On and Off**

## **Turning On**

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

- ⇒"Charging" p. 17
- Hold down the Power button for at least two seconds.



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

Press the Power button briefly to enter Sleep mode. Press the Power button briefly again to wake the product from Sleep mode.

## **Turning Off**

Hold down the Power button for at least two seconds.



Select (b) from the menu displayed on the right of the screen.

The power turns off.



- If operations are unstable, you can force the device to restart by holding down the Power button for at least 12 seconds.
- Do not force the device to restart unless operations are unstable. Stored data and settings may be lost.

## Setting Wi-Fi/Bluetooth®

## Wi-Fi settings

Set up Wi-Fi so that the product can connect to the Internet over a wireless network.

Check the following before setting up.

- The SSID (network name) for the wireless LAN access point or public wireless LAN service you want to connect to.
- The password and security system to connect to the network if security has been enabled.
- Tap [ @ ] on the APPS list screen.
- 2 Select [Network & internet] [Wi-Fi], and then set [Wi-Fi] to on.

Available SSIDs (network names) are displayed.

3 Select the SSID (network name) you want to connect to, enter the [Password], and then tap [CONNECT].

## **Bluetooth settings**

You need to select Bluetooth settings to allow the product to connect wirelessly to Bluetooth enabled devices. Check the following before setting up.

- The Bluetooth device must be in pairing mode (see the user's guide supplied with your Bluetooth device for more information on pairing).
- The Bluetooth device supports the profiles supported by the device.
  - ⇒"Product Specifications" p. 35
- Tap [ @ ] on the APPS list screen.
- 2 Select [Connected devices] > [Pair new devices].

  Available devices are displayed.
- 3 Select the device you want to connect to and pair with it.



You may need to enter a set pairing code depending on the device you are connecting to.

## **Inserting an SD Card**

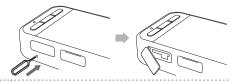
The following SD cards are supported by the device.

- microSD cards (2 GB maximum)
- microSDHC cards (32 GB maximum)
- microSDXC cards (2 TB maximum)
- \* An SD card is not included with this product.

You may not be able to use SD cards formatted on other devices. Follow the steps below to format the card. Note that any data on the SD card will be deleted when you format the card.

- Tap [ ② ] on the APPS list screen.
- 2 Select [Storage], and then select [SD card] from [Portable storage].
- 3 Tap [ ] at the top right of the [SD card] screen, and then select [Storage settings].
- Select [Format] or [Format as internal] to format the SD card.

Insert the SD card slot pin into the slot pin insertion hole to open the microSD card slot cover.



2 Insert the microSD card.



Close the microSD card slot cover.

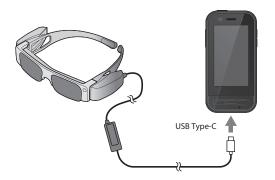


## Connecting the headset

Connect the headset cable to the USB Type-C connector (for headset connections) on the device.

By pressing the Switch key, you can change the combination of the headset image and the device's screen display.

#### ⇒"Switching modes" p. 23



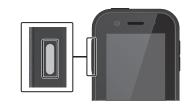


- See the User's Guide supplied with the headset for details on how to wear the headset.
- You will need a compatible app to use the sensor/camera built into the headset.
- \* Supported features may change depending on the system software version being used. See the following Website for features supported by the latest version of the system software. https://tech.moverio.epson.com/en/

## **Switching modes**

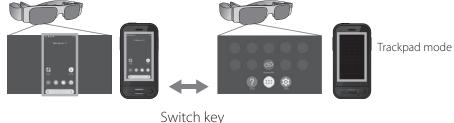
This device has two modes, and you can switch between these modes by pressing the Switch key twice on the left of the device.

In Trackpad mode, you can operate the touch panel display as a trackpad.



## <Switching example>





- \* After switching modes, start the app you want to use.
- \* In Trackpad mode, do not switch modes or connect/remove the headset while using the app. If you switch modes or connect/remove the headset while using the app, the app may close and data may be lost. Epson shall not be responsible for recovery of any lost data, damage caused, or loss of profits that occurs at such a time.
- \* Supported features may change depending on the system software version being used. See the following Website for features supported by the latest version of the system software. https://tech.moverio.epson.com/en/

## **Mode Types**

## Mirroring mode



The same screen is displayed in the headset and on the device.

## Trackpad mode



Use this mode when you want to use the device's touch panel display as a trackpad.

Images are only displayed in the headset.

#### →"Operating the Trackpad" p. 25



- The Recents key is not available in Trackpad mode.
- Some apps do not start in Trackpad mode.

## **Operating the Trackpad**

When you switch to Trackpad mode, the device's touch panel display functions as a trackpad.

When you touch the trackpad with your finger, a pointer is displayed on the screen and you can move the pointer to operate the device.

## Тар

Move the pointer to an icon or display item, and then tap the trackpad. This launches applications, selects items, and so on.



### Drag

Touch the track pad for about one second to select the icon or display item, and then drag your finger on the trackpad to move it. This moves icons, scrolls or changes the screen, and so on.



#### Flick

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



#### 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.



## **Introducing MOVERIO Link Pro**

The "MOVERIO Link Pro" app allows you to make a variety of settings for the headset.

The features available for MOVERIO Link Pro may differ depending on the product's system software version.

Check the tutorial provided in the app for the latest features.

The following outlines the main features of the MOVERIO Link Pro.

Available features vary depending on the model of the headset you are using.

Feature	Setting	Description
Adjust Brightness	Adjust using a slide bar	Adjusts the brightness of the headset screen.
Adjust Volume	Adjust using a slide bar	Adjusts the volume.
Power Saving	On/Off	When this is set to On, the screen goes dark after 10 seconds if no operations are performed on the device's screen. Also, the screen closes if the headset remains stationary for 60 seconds or more.
3D Display	On/Off	When this is set to On, the headset screen is displayed as 3D.
Auto Brightness Adjustment	On/Off	When this is set to On, the headset's screen brightness is automatically adjusted to match the brightness of your surroundings.
Tap to Hide Images	On/Off	When this is set to On, movies pause when you tap the left side of the headset twice with two fingertips (audio does not stop). Tap the left side twice again with two fingertips to restart the movie.
Movement Usage Warning	On/Off	When this is set to On, a popup note is displayed when you connect the headset to warn you about moving while wearing the headset.

## **Introducing MOVERIO Link Pro**

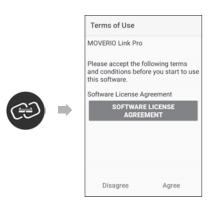
Notification of		
Reduced Sensor	On/Off	When this is set to On, a notification is displayed when the accuracy of the sensor is reduced.
Accuracy		auccu.

## **Initial Startup Settings**

## Checking your license

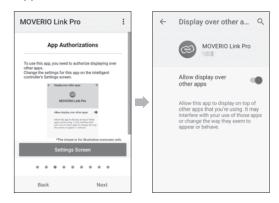
After purchase, tap the MOVERIO Link Pro icon on the APPS list screen. The MOVERIO Link Pro license agreement screen is displayed.

Before you can use the MOVERIO Link Pro, you need to check the Software License Agreement and agree to the terms of the agreement.



#### Setting app authorizations

After agreeing to the license agreement, you will see a warning/caution screen, followed by the table of contents, and then finally the App Authorizations screen. On the screen that is displayed when you tap [Settings Screen], enable the MOVERIO Link Pro app. After making this setting, use the BACK key on the device to return to the App Authorizations screen.



## **Launching MOVERIO Link Pro**

When you connect the headset, the start screen is displayed as well as a popup note warning you about moving while wearing the headset. Tap [OK] or [Close] to launch the MOVERIO Link Pro app.

After launching the app, swipe down from the top of the screen on this device to display the MOVERIO Link Promenu screen. You can make a variety of settings on this screen.





You can also adjust the brightness by pressing the switch key on the left of the device, and then using the volume keys.



The MOVERIO Link Pro app closes when you disconnect the headset.



Tap the MOVERIO Link Pro app icon on the APPS list screen to display the tutorial screen. You can learn more about how to use the app as well as details on each feature.



## **Installing Apps**

Follow the steps below to install apps using the apk file.

Save the app (apk file) you want to install onto the SD card or directly to the BO-IC400.



When connecting a computer to the device, connect it to the USB Type-C connector (for headset connections).

Next, swipe down from the top of the screen of the device to open the [USB Preferences] screen, and then make the following settings.

- [USB controlled by]: [This device]
- [Use USB for]: [File Transfer]
- 2 Tap [ Tiles] on the APPS list screen.
- 3 Tap the app (apk file) that you saved.
- 4 Follow the on-screen instructions to install the app.

## **System Update**

This product comes with a built-in system update function. If necessary, update to the latest system software version before using this device.

Follow the steps below to update the system.

Make sure that the device is connected to the Internet.

When a system software update is available, a notification is displayed at the top of the screen.

Select [Download], and then follow the on-screen instructions to perform the system update.



 Follow the steps below if you want to change the time at which the device checks for system software updates.

APPS list screen, [ ] > [System] > [Advanced] > [System update] > [Settings] > [Check for Updates]

 You can also update the system software manually.

APPS list screen, [ ] > [System] > [Advanced] > [System update] > [Check now].

## **Support Information**

Visit the following Website for information on app development and system updates for this device. https://tech.moverio.epson.com/en/

## Maintenance

## Cleaning the Charging Connectors

If the charging connectors on this device are dirty or if
there are foreign objects stuck to them, you may not be
able to charge or operate the device correctly. Disconnect
the USB power adapter and the USB cable, and wipe off
any dirt with a dry cloth or a cotton swab. We recommend
cleaning the charging connectors regularly (once every
three months).

## ♠ Caution

- Do not damage the charging connectors with your finger or a hard object.
- Do not expose the charging connectors to water. When cleaning the charging connectors, use a dry cloth or a cotton swab.

## **Troubleshooting**

If you think a malfunction has occurred, check the following.

## The product does not turn on

- · Check that the product is fully charged.
- If the battery is dead, the LED indicator does not turn on until a while after you start charging. Charge for at least 30 minutes, and then reconnect the USB cable.

## → "Charging" p. 17

 Press the Power button for two seconds. When startup begins, the start screen is displayed. When startup is complete, the Home screen is displayed.

#### → "Turning On" p. 19

 When charging cannot be performed or operations are unresponsive, hold down the Power button for at least 12 seconds to force the device to restart.

#### → "Turning Off" p. 19

 Contact Epson or your local Service Center if you forget the password for the screen lock. If the system software needs to be reinstalled, the device returns to the status at

- the time of purchase.
- If the product gets too hot due to prolonged use or due to the usage environment, battery charging stops, and the product may turn off for safety reasons. Wait for the temperature to fall, and then turn the product back on.

#### Cannot view movies or listen to audio

- If you cannot see movies in your headset, Tap to Hide Images may be enabled. To release this setting, tap the left side of the headset twice with two fingertips.
- If movies are accidentally hidden, turn off the Tap to Hide Images and Power Saving features in in the preinstalled "MOVERIO Link Pro" app.
- Use the earphone microphone to input audio. You may not be able to use it depending on the type of switch earphone microphone or standard earphone microphone.

## Images are fuzzy

- Close the app you are using and restart the device.
- The 2D or 3D display may not be suitable for the images displayed. Switch between 2D or 3D in the pre-installed "MOVERIO Link Pro" app.

## Cannot operate the device

- When you hold down the Switch key, the key lock feature activates and you cannot operate the device. Hold down the Switch key again to release the key lock.
- The device may have entered sleep mode. Press the Power button briefly to wake the product from Sleep mode.

#### Cannot connect to the network

- Check that the wireless LAN (Wi-Fi) environment where you are using the product can be accessed.
- Check that the product's network settings are correct.
   Contact your network administrator for more details.

## **Specifications**

## **Product Specifications**

The following specifications are current as of February 2022. Note that they are subject to change without notice.

Model Number	BO-IC400
Exterior dimensions	W 55 x D 110 x H 23 mm ( $2.16$ x $4.33$ x $0.90$ inches) (not including protruding parts)
Mass	Approx. 180 g (6.35 ounces)
Processor	Qualcomm® Snapdragon XR1
OS	Android <sup>™</sup> 9
Touch panel display	2.95 inches, 480 x 854, multi-touch capacitance system with AF coating
Memory	4GB
Storage	64GB
External memory	microSD (2 GB maximum), microSDHC (32 GB maximum), microSDXC (2 TB maximum)
Operating temperature	5 to 35°C (41 to 95°F), humidity 20 to 80% (no condensation)
Storage temperature	-10 to 60°C (14 to 140°F), humidity 10 to 90% (no condensation)
Rated output voltage/Current	5V/2A
Battery	3.8 V (lithium polymer), 3400 mAh, 13 Wh
Charging time	Approx. 3 hours (when charging through the USB Type-C connector (for headset connections) using a 5V/2A power adapter with the device turned off)
Camera	Approx. 13 million pixels, CMOS 1/3.06 inches, with auto focus and flash LED
Frequency band	IEEE802.11 a/b/g/n/ac, 2 x 2 dual-band, encryption (WEP/WPA/WPA2)

Bluetooth	Standard	ver5.0
	Profiles	Bluetooth Classic (A2DP 1.3/AVRCP 1.3/HSP 1.2/HID 1.0/PAN PANU/PAN NAP/OPP 1.2.1/SPP), Bluetooth LE (SCPP/HOGP)
Supported movie formats		MPEG-2, MPEG-4, H.263, H.264, H.265 (HEVC), VP8, VP9
Supported still image form	nats	BMP, GIF, JPEG, PNG, WebP, HEIF
Supported audio formats		AAC, HE-AAC, AMR, FLAC, MP3 (8 to 320 kbps) CBR/VBR, Vorbis, WAV, Opus
Satellite navigation system		GPS/GLONASS/Galileo/QZSS/BDS
Dust and water resistance		IPX2
Connector ports		USB Type-C connector (for headset connections), USB Type-C connector (with cover)
		⇒"USB Type-C Connector Features" p. 37
Audio		Microphone, receiver, speaker (0.5 W), 3.5 mm audio jack (earphones with microphone complying with the CTIA standard)*
User interface		Power button, Volume keys, BACK key, HOME key, Recents key, Switch key
Sensors		Geomagnetic sensor, accelerometer sensor, gyroscopic sensor, ambient light sensor, proximity sensor

<sup>\*</sup> Restrictions in operation may occur when using an adapter plug.

# **USB Type-C Connector Features**

	USB Type-C connector (for headset connections)	USB Type-C connector (with cover)	
Video output (DP Alt mode compatible)	<b>✓</b>	-	
Charging	<b>✓</b>	<b>✓</b>	
USB 2.0 data transfer	<b>✓</b>	<b>✓</b> *	
USB 3.0 data transfer	<b>✓</b>	-	

<sup>\*</sup> The USB Type-C connector (with cover) can only be connected to devices such as a mouse, a keyboard, a USB memory, or a mobile battery. Connect the host device, such as a computer, to the USB Type-C connector (for headset connections).



When using two USB Type-C connectors at the same time, you need to connect to the USB Type-C connector (for headset connections) first.

# **Intellectual Property Rights**







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As well as software owned by Epson, this product also uses open source software.

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- 2. We provide the source code of some open source software programs. If you desire to receive the source code above, please see the "http://www.epson.com" and contact the customer support of your region. We provide the source code until five (5) years after the discontinuation of this product. You shall comply with the license terms of each open source software program.
- 3. The open source software programs are WITHOUT ANY WARRANTY: without even the implied warranty of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. See the license agreements of each open source software program for more details, which are described in the product.
- 4. You can check the full text of the license agreement by tapping [6] on the APPS list screen, and then selecting [About phone] > [Legal information] > [Third-party licenses].

# **General Notes**

Notes when connecting to commercially available, third-party devices.	Please note that we cannot guarantee connection to commercially available, third-party devices. When connecting to commercially available, third-party devices, Epson shall not be responsible for the loss of any data, damage to data, or loss of profits that occurs at such a time.
Notes Regarding Wireless LAN	Do not use the Wireless LAN function in France unless you are indoors. If you purchase this product outside of North America and Taiwan, please note that this product emits wireless LAN electromagnetic waves on channels 1 to 13. Therefore, do not use the wireless LAN function in North America and Taiwan where wireless LAN channels are limited to 1 to 11 by the Wireless Telegraphy Act. Follow local laws and regulations when using in other regions.
Wireless Telegraphy Act Regulations	The following acts are prohibited by the Wireless Telegraphy Act.  Modifying and disassembling (including the antenna)  Removing the label of conformance  Using the 5 GHz bandwidth LAN when outdoors
Restrictions on Use	This product is manufactured based on the specifications of the country of sale. When using this product outside the country of sale, contact your nearest support center. If this product is used for applications that require high reliability, safety, and so on in their functionality, accuracy, and so on, such as disaster prevention equipment, and various safety devices directly related to the operation of aircraft, trains, ships, automobiles, and so on, in order to ensure the reliability and safety of these systems, we ask that you take into account safety designs of the entire system such as implementing a failsafe and taking redundancy measures when using this product. Since this product is not intended for use in applications that require high reliability and safety, such as aerospace equipment, trunk line communication equipment, nuclear power control equipment, medical equipment, and so on, we ask that you consider the suitability of using this product for any of these applications.
Symbols such as techni- cal standard compliance certification (technical compliance symbols)	You can check the technical compliance symbols by tapping [

# Notes on Frequency

This device operates in the same frequency bandwidth as industrial, scientific, and medical devices such as microwave ovens and mobile object identification (RF-ID) systems (licensed premises radio stations, amateur, and unlicensed specified low-power radio stations (hereafter "other radio stations")) used in factory production lines.

- 1. Before using this product, make sure there are no "other radio stations" being used in the vicinity.
- 2. If this device causes RF interference between the device and "other radio stations", promptly move to a different location, stop using the device, and contact your local dealer to ask for advice on preventing interference (for example setting up partitions).
- 3. In addition, when harmful radio wave interference occurs between the device and "other radio stations", contact your local dealer.

#### Caution

- (1) Reprinting all or part of this manual without prior permission is strictly prohibited.
- (2) The content of this guide is subject to change without notice.
- (3) The greatest care was taken in the creation of this guide; however, if you have any questions or notice any errors, omissions, and so on in this guide, please contact us directly.
- (4) Regardless of point 3, we cannot accept any responsibility for the outcome of operation of this product.
- (5) We cannot accept any responsibility for damage or malfunctions and so on that occur due to ignoring the content of this guide, this product being handled inappropriately, or repairs or modifications performed by a third party other than Epson or a company appointed by Epson (see "Contact Information").
- (6) We cannot accept any responsibility for malfunctions that occur due to installation of optional parts, consumable parts, or replacement parts other than genuine Epson products or Epson certified products.
- (7) The illustrations and screenshots used in this guide may differ to the actual device or screenshots.

CE DECLARATION of CONFOR-MITY



The purpose of the WLAN function is to connect to a 2.4 GHz access point.

Radio equipments are restricted to indoor operation only in the band 5150-5250MHz and 5250-5350MHz in Austria (AT), Belgium (BE), Bulgaria (BG), Cyprus (CY), Czech Republic (CZ), Germany (DE), Denmark (DK), Estonia (EE), Spain (ES), Finland (FI), France (FR), United Kingdom (GB), Greece (GR), Croatia (HR), Hungary (HU), Ireland (IE), Italy (IT), Lithuania (LT), Luxembourg (LU), Latvia (LV), Malta (MT), Netherlands (NL), Poland (PL), Portugal (PT), Romania (RO), Sweden (SE), Slovenia (SI) and Slovakia (SK).

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Supplier's DECLARATION of CONFORMITY According to 47CFR, Part 2 and 15

Class B Personal Computers and Peripherals; and/or

CPU Boards and Power Supplies used with Class B Personal Computers

We: Epson America, Inc.

Located at: 3131 Katella Avenue, Los Alamitos, CA

Tel: 562-981-3840

Declare under sole responsibility that the product identified herein, complies with 47CFR Part 2 and 15 of the FCC rules as a Class B digital device. Each product marketed, is identical to the representative unit tested and found to be compliant with the standards. Records maintained continue to reflect the equipment being produced can be expected to be within the variation accepted, due to quantity production and testing on a statistical basis as required by 47CFR 2.906. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Trade Name: EPSON

Type of Product: Intelligent Controller

Model: BO-IC400

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Indication of the manufacturer and the importer in accordance with requirements of EU directive

Manufacturer: SEIKO EPSON CORPORATION

Address: 3-5, Owa 3-chome, Suwa-shi, Nagano-ken 392-8502 Japan

Telephone: 81-266-52-3131 http://www.epson.com/

Importer: EPSON EUROPE B.V.

Address: Atlas Arena, Asia Building Hoogoorddreef 5, 1101 BA Amsterdam Zuidoost

The Netherlands

Telephone: 31-20-314-5000 http://www.epson.eu/

Indication of the manufacturer and the importer in accordance with requirements of United Kingdom directive

Manufacturer: SEIKO EPSON CORPORATION

Address: 3-5, Owa 3-chome, Suwa-shi, Nagano-ken 392-8502 Japan

Telephone: 81-266-52-3131 http://www.epson.com/

Importer: Epson (UK) Ltd.

Address: Westside, London Road, Hemel Hempstead, Hertfordshire, HP3 9TD,

United Kingdom

http://www.epson.co.uk

# **List of Safety Symbols and Instructions**

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

Symbol mark	Approved standards	Description
I	IEC60417 No.5007	"ON" (power) To indicate connection to the mains.
0	IEC60417 No.5008	"OFF" (power) To indicate disconnection from the mains.
பு	IEC60417 No.5009	Stand-by To identify the switch or switch position by means of which part of the equipment is switched on in order to bring it into the stand-by condition.
$\triangle$	ISO7000 No.0434B IEC3864-B3.1	Caution To identify general caution when using the product.

Symbol mark	Approved standards	Description
A	IEC60417 No.6042 ISO3864-B3.6	Caution, risk of electric shock To identify equipment that has risk of electric shock.
	IEC60417 No.5957	For indoor use only To identify electrical equipment designed primarily for indoor use.
<b>♦⊕⊕</b>	IEC60417 No.5926	Polarity of d.c. power connector To identify the positive and nega- tive connections (the polarity) on a piece of equipment to which a d.c. power supply may be connected.
<u></u>	IEC60417 No.5017	Earth To identify an earth (ground) terminal.
$\sim$	IEC60417 No.5032	Alternating current To indicate on the rating plate that the equipment is suitable for alternating current only; to identify relevant terminals.

Symbol mark	Approved standards	Description
	IEC60417 No.5031	Direct current To indicate on the rating plate that the equipment is suitable for direct current only; to identify relevant terminals.
	IEC60417 No.5172	Class II equipment To identify equipment meeting the safety requirements specified for Class II equipment according to IEC 61140.
$\Diamond$	ISO 3864	General prohibition To identify actions or operations that are prohibited.
	ISO 3864	Contact prohibition To indicate injury that could occur due to touching a specific part of the equipment.
Ö	IEC60417 No.5266	Standby, partial standby To indicate that part of the equipment is in the ready status.

# **Contact List**

https://www.epson.dk

This address list is current as of July 2020.

A more up-to-date contact address can be obtained from the corresponding website listed here. If you do not find what you need on any of these pages, please visit the main Epson home page at www.epson.com.

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<b>BULGARIA Epson Service Center Bulgaria</b> http://www.kolbis.com	CROATIA MR servis d.o.o. http://www.mrservis.hr	CYPRUS A.T. Multitech Corporation Ltd. http://www.multitech.com.cy	CZECH REPUBLIC Epson Europe B.V. Branch Office Czech Republic https://www.epson.cz
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**Epson Deutschland GmbH** 

https://www.epson.de

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Info Quest Technologies S.A.

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https://www.epson.it

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Epson Kazakhstan Rep. Office

http://www.epson.kz

#### LATVIA

**Epson Service Center Latvia** 

https://www.epson.lv

### LITHUANIA

**Epson Service Center Lithu**ania

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#### LUXEMBURG

Epson Europe B.V. **Branch office Belgium** 

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# NORTH MACEDONIA

**Digit Computer Engineering** 

http://digit.net.mk/

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Epson Europe B.V. Benelux sales office

https://www.epson.nl

## NORWAY

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https://www.epson.no

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http://www.epson.ru

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Epson Kiev Rep. Office http://www.epson.ua

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Nepo System d.o.o.

https://neposystem.rs AIGO Business System d.o.o.

**Beograd** 

https://aigo.rs

#### SLOVAKIA

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**Branch Office Czech Republic** 

https://www.epson.sk

SLOVENIA

Birotehna d.o.o.

http://www.birotehna.si

SPAIN

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https://www.epson.ch

**TURKEY** 

Tecpro Bilgi Teknolojileri Tic. ve San. Ltd. Sti.

http://www.tecpro.com.tr

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# **NORTH, CENTRAL AMERICA & CARIBBEAN ISLANDS**

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https://epson.ca

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U. S. A.

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https://www.epson.jp

**KOREA** 

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http://www.epson.co.kr

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Epson Malaysia Sdn. Bhd.

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You can get the latest version of the manuals and specifications on the Epson Web site.



Covered by one or more claims of the HEVC patents listed at patentlist. accessadvance.com.

