![LG Life's Good]

OWNER'S MANUAL

LG UltraFine™ Display
(For Mac)

Please read this manual carefully before operating your set and retain it for future reference.

24MD4KL
24MD4KLB

CONTENTS

LICENSE

Each model has different licenses. Visit *www.lg.com* for more information on the license.

Thunderbolt and the Thunderbolt logo are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

Mac and the Mac logo are trademarks of Apple Inc., registered in the U.S. and other countries.

* USB Type-C™ and USB-C™ are trademarks of USB Implementers Forum.

IMPORTANT PRECAUTIONS

Please read these safety precautions carefully before using the product.

⚠ WARNING

Failure to follow those warnings may result in death, serious injury or damage to the product or other property.

Precautions to the AC Adapter and Electrical Power

⚠ WARNING

- If water or any foreign substance goes inside the product (TV, monitor, power cord, or AC adapter), disconnect the power cord immediately and contact the service center.

Otherwise, this may cause a fire or electric shock due to damage to the product.

- Do not touch the power plug or AC adapter with wet hands. If the pins of the plug are wet or dusty, wipe and dry them before use.

Otherwise, this may cause a fire or electric shock.

- Make sure to completely insert the power cord into the AC adapter.

If loosely connected, the poor connection may cause a fire or electric shock.

- Be sure to use power cords and AC adapters provided or approved by LG Electronics, Inc.

The use of non-approved products may cause a fire or electric shock.

- When unplugging the power cord, always pull it by the plug. Do not bend the power cord with excessive force.

The power line can be damaged, which may cause electric shock or fire.

- Be careful not to step or place heavy objects (electronic appliances, clothing, etc.) on the power cord or AC adapter. Be careful not to damage the power cord or AC adapter with sharp objects.

Damaged power cords may cause a fire or electric shock.

- Never disassemble, repair or modify the power cord or AC adapter.

This may cause a fire or electric shock.

- Use only the power cord supplied with the unit or another manufacturer's authorized cord.

Failure to do so may result in fire or electrical shock or damage to the product.

- Use only a properly grounded plug and receptacle.

If you do not you may be electrocuted or injured. Or the product might be damaged.

- Do not use a damaged or loose plug.

This may cause electrical shock or fire.

- Operate the display only from a power source(i.e. voltage) indicated in the product specification.

Otherwise the product can be damaged, fire can occur or you may be electrocuted. If you are not sure what type of power supply you have, consult a certified electrician.

- In the presence of thunder and lightning, never touch the power cord and signal cable because it can be very dangerous.

It can cause electric shock.

- Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power bar with a grounding terminal designed for exclusive use with the computer.

A fire can break out due to overheating.

- Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off before plugging in the cord.

You may be electrocuted due to excess moisture.

- If you don't intend to use the product for a long time, unplug the power cable from the product.

Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.

- Insert the power plug firm so it cannot come loose.

A loose connection can cause fire.

- Do not insert metal or other conductive materials into the product openings. Additionally, do not touch the power cable right after plugging into the wall input terminal.

You may be electrocuted.

- The AC Plug is the disconnecting device. It should be easily accessible in case of emergency.

- Please make sure the device is installed near the wall outlet to which it is connected and that the outlet is easily accessible.

- Be sure to keep the outlet, AC adapter, and pins of the power plug clean from dust and etc.

This may cause a fire.

- Do not unplug the power cord while the product is in use.

Electrical shock can damage the product.

- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.

Precautions in installing the Product

⚠ WARNING

- Keep away from heat sources like heaters or open flames.

Electrical shock, fire, malfunction or deformation may occur.

- Keep the packing anti-moisture material or vinyl packing out of the reach of children.

Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.

- Do not put heavy objects on the product on sit upon it.

If the product collapses or is dropped, you may be injured. Children must pay particular attention.

- Do not leave the power or signal cable where someone can trip over it.

The passerby can falter, which can cause electrical shock, fire, product breakdown or injury.

- Install the product in a neat and dry place. Do not use near water.

Dust or moisture can cause electrical shock, fire or product damage.

- Do not add accessories that have not been designed for this display.

- If you smell smoke or other odors or hear a strange sound from the product unplug the power cord and contact LG Customer Service.

If you continue to use without taking proper measures, electrical shock or fire can occur.

- If you dropped the product or the case is broken, turn off the product and unplug the power cord.

If you continue to use without taking proper measures, electrical shock or fire can occur. Contact LG Customer Service.

- Do not drop an object on or apply impact to the product. Do not throw any toys or objects at the product.

It can cause injury to humans, problems to the product and damage the display.

- Keep out of reach of children and do not place toys near the product.

- Make sure the product ventilation hole is not blocked. Install the product more than 100 mm (3.9 inches) from the wall.

If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat build-up.

- Do not cover the product with cloth or other material (eg. plastic) while plugged in.

The product can be deformed or fire can break out due to internal overheating.

- Place the product on a flat and stable surface that is large enough to support the product.

If the product is dropped, you may be injured or the product may be broken.

- Install the product where no Electromagnetic Interference occurs.

- Keep the product away from direct sunlight.

The product can be damaged.

- Do not place the product on the floor.

Small Children and others may trip over it.

- Do not install this product on a wall if it could be exposed to oil or oil mist.

This may damage the product and cause it to fall.

- For displays with glossy bezels the user should consider the placement of the display as the bezel may cause disturbing reflections from surrounding light and bright surfaces.

Precautions in Moving the Product

⚠ WARNING

• Make sure to turn off the product.

You may be electrocuted or the product can be damaged.

• Make sure to remove all cables before moving the product.

You may be electrocuted or the product can be damaged.

• When lifting or moving the product, do not hold it upside down while holding only the stand.

This may cause the product to fall resulting in damage or injury.

• Do not shock the product when moving it.

You may be electrocuted or the product can be damaged.

• Make sure the panel faces forward and hold it with both hands to move.

If you drop the product, the damaged product can cause electric shock or fire.

• Do not place the product face down.

This may damage the TFT-LCD screen.

Precautions in Using/Cleaning the Product

⚠ WARNING

• Do not attempt to disassemble, repair or modify the product yourself.

Fire or electric shock can occur.

Contact LG Customer Service for repair.

• When cleaning the product, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not clean with a wet cloth or spray water or other liquids directly onto the product. An electric shock may occur. (Do not use chemicals such as benzene, paint thinners or alcohol)

• Keep the product away from water.

Fire or electric shock accident can occur.

• Avoid high temperatures and humidity.

• Do not put or store flammable substances near the product.
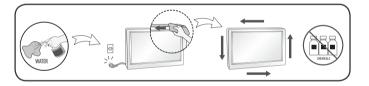
There is a danger of explosion or fire.

• Keep the product clean at all times.

• Take a comfortable and natural position when working with the product.

• Take a regular break when working with the product for a long time.

• Do not press on the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.

• Keep proper distance from the product and rest from time-to-time.

Your vision may be impaired if you look at the product too closely or for too long.

• Set the appropriate resolution by referring to the User's Guide.

• Keep small accessories out of the reach of children.

• Displaying a still image for long time on the monitor may leave persistent image or stain on the monitor screen. To avoid this problem, use a screen saver and power off when this product is not used. Persistent image or stain caused by long time usage are not covered by the warranty on this product.

• Do not use products using high voltage around the Monitor. (ex. Electrical Swatter)

Monitor may have malfunction as its electrical shock.

• Spray water onto a soft cloth 2 to 4 times, and use it to clean the front frame;wipe in one direction only. Too much moisture may cause staining.

OPEN SOURCE SOFTWARE NOTICE INFORMATION

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit *http://opensource.lge.com*.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to *opensource@lge. com*.

This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

ASSEMBLING AND PREPARING

⚠ CAUTION

• Always use genuine LG components to ensure safety and product performance.
• The product warranty will not cover damage or injury caused by the use of unauthorized components.
• It is recommended to use the supplied components.

🛈 NOTE

• Without prior notice, all product information and specifications contained in this manual are subject to change to improve the performance of the product.
• To purchase optional accessories, visit an electronics store or an online shopping site, or contact the retailer from which you purchased the product.
• The power cord provided may differ depending upon the region.

Supported Software
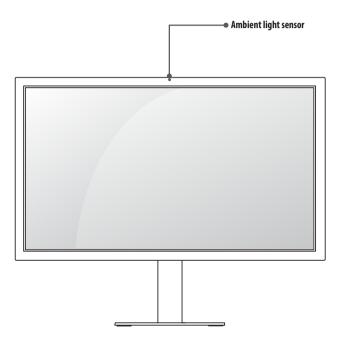
Check the software supported by your product.
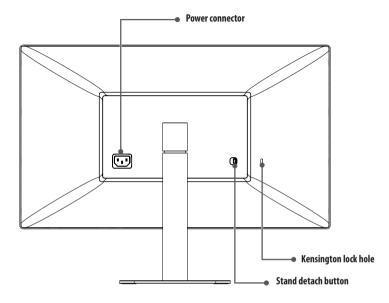
Software	Installation Priority	24MD4KL, 24MD4KLB
LG Screen Manager 🖥	Recommended	0

• LG Screen Manager is an application that provides monitor software update feature.
• You can download and install the latest version from the Apple App Store.
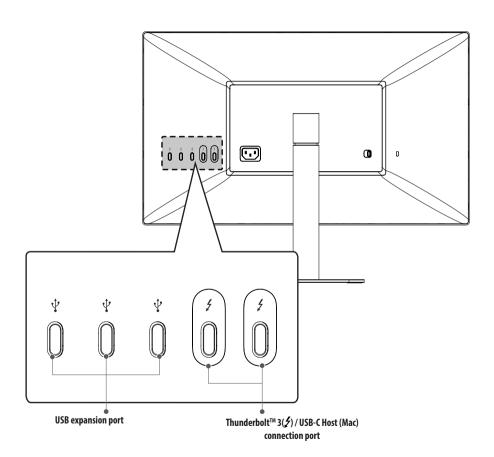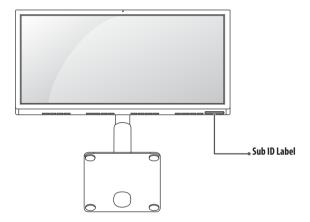
Product Description

Front

Ambient light sensor

Back

Power connector

Kensington lock hole

Stand detach button

⚠ NOTE

• The ambient light sensor is for auto brightness control of display and can be controlled by Mac OS.

Input Connector
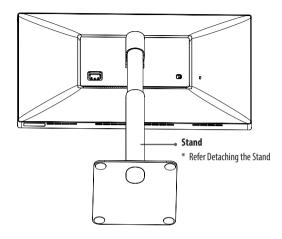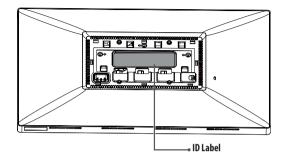
USB expansion port

Thunderbolt™ 3(⚡) / USB-C Host (Mac)
connection port

ID Label / Sub ID Label

You can view the monitor's ID Label and Sub ID Label.

Sub ID Label

Stand

* Refer Detaching the Stand

ID Label

❗ NOTE

• ID Label: the monitor's standard ID label that states model name, production date, country of production, specifications, etc.
  Sub ID Label: a secondary ID label that states only the model name and basic specifications
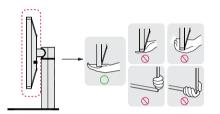
⚠ CAUTION

• To view the ID Label, you must detach the stand.

Moving and Lifting the Monitor

When moving or lifting the monitor, follow these instructions to prevent the monitor from being scratched or damaged and to ensure safe transportation, regardless of its shape or size.
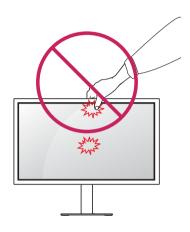
• Place the monitor in the original box or packing material before attempting to move it.

• Before moving or lifting the monitor, disconnect the power cord and all other cables.

• Hold the bottom and side of the monitor frame firmly. Do not hold the panel itself.

• When holding the monitor, the screen should face away from you to prevent it from being scratched.

• When transporting the monitor, do not expose the monitor to shock or excessive vibration.

• When moving the monitor, keep it upright and never turn the monitor on its side or tilt it sideways.
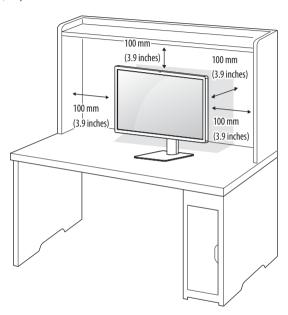
⚠ CAUTION

• Avoid touching the monitor screen as much as possible.

  - This may result in damage to the screen or some of the pixels used to create images.

• If you use the monitor panel without the stand base, its button may cause the monitor to become unstable and fall, resulting in damage to the monitor or human injury. In addition, this may cause the button to malfunction.
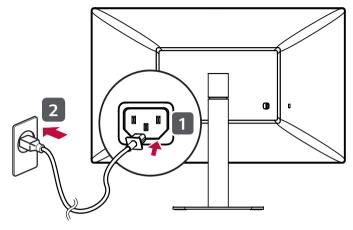
Installing on a Table

1   Lift the monitor and place it on the table in an upright position. Place the monitor at least 100 mm (3.9 inches) away from the wall to ensure sufficient ventilation.
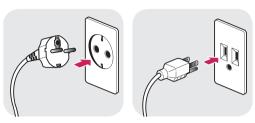

2   Connect the power cord to the monitor and then plug the power cord into the wall outlet.

⚠ CAUTION

- Unplug the power cord before moving or installing the monitor. There is risk of electric shock.
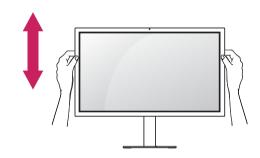
Cautions When Connecting Power Cord

100-240 V ~

- Make sure to use the power cord that is provided in the product package and connect it to a grounded power outlet.
- If you need another power cord, please contact your local dealer or the nearest retail store.
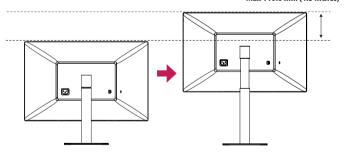
Adjusting the Stand Height

1   Place the monitor mounted on the stand base in an upright position.
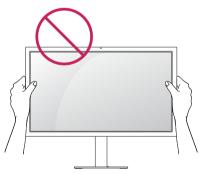2   Handle the monitor with both hands for safety.

Max 110.0 mm (4.3 inches)

⚠️ WARNING

• When adjusting the screen height, do not place your hand on the stand body to avoid injury to your fingers.

• Be careful not to touch or press the screen area when adjusting the angle of the monitor.

🛈 NOTE
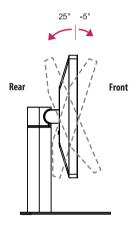
• The left or right side of the monitor head can be slightly rotated up or down. Adjust the horizontal level of the monitor head.

Adjusting the Angle

1 Place the monitor in an upright position, mounted on the stand base.
2 Adjust the angle of the screen. The angle of the screen can be adjusted forwards or backwards for a comfortable viewing experience.

25° -5°

Rear   Front

⚠ WARNING

• To avoid injury to the fingers when adjusting the screen, do not hold the lower part of the monitor's frame as illustrated below.
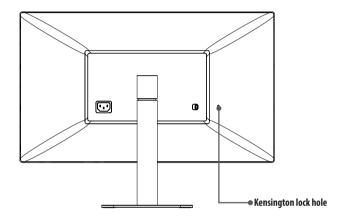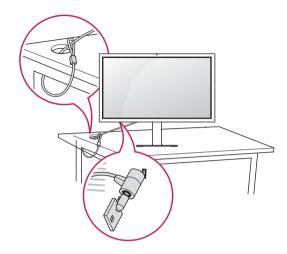
Using the Kensington Lock

The connector for the Kensington security system is located at the back of the monitor.

For more information on installation and usage, refer to the Kensington lock owner's manual or visit the website at *http://www.kensington.com*.

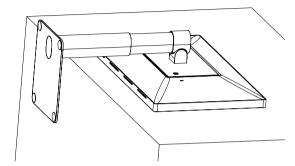Connect the monitor to a table using the Kensington security system cable.
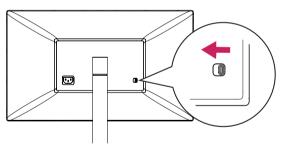
Kensington lock hole

🛈 NOTE

• The Kensington security system is optional. You can obtain optional accessories from most electronics stores.
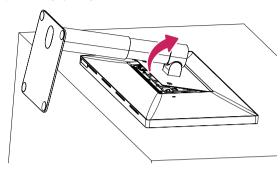
Detaching the Stand

1 Place the monitor's screen face down. To protect the screen from scratches, cover the surface with a soft cloth.
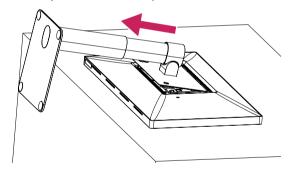
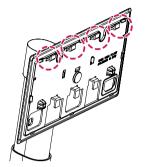2 Push the Detach button on the back of the monitor to the left.

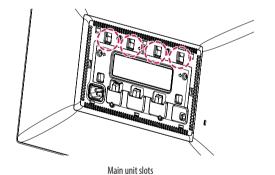3 Lift up the stand, slightly rotating it.

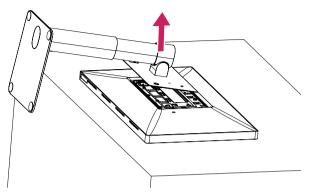4 Pull the stand away from the monitor in its rotated position.

5   Check whether the hooks on the stand are separated from the slots of the main unit.

Stand hooks

Main unit slots

6   Remove the stand once the hooks on the stand have been released from the slots of the main unit.
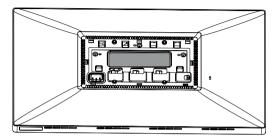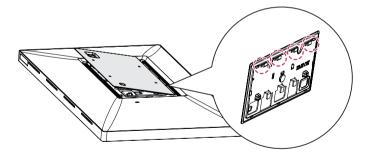

⚠ CAUTION

- Be careful not to drop the stand while detaching it.
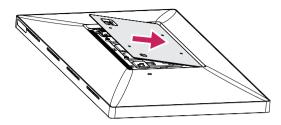
Attaching the VESA design cover

1 Place the monitor's screen face down. To protect the screen from scratches, cover the surface with a soft cloth.
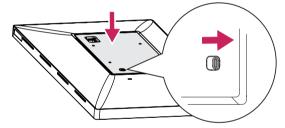
2 Place the VESA design cover on the monitor in a slightly slanted position so its hooks can be inserted to the slots of the main unit.

3 Push the VESA design cover in the slanted position until it touches the other side.

4 Push down on the VESA design cover.

⚠ CAUTION

• Check whether the detach button has been pushed to the right after attaching the VESA design cover. If the button has not been pushed to the right, push it into position with your hands.

Installing the Wall Mount Bracket

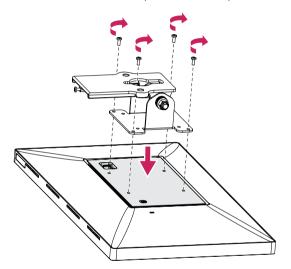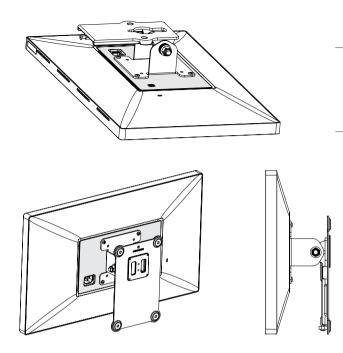1   Place the monitor's screen face down. To protect the screen from scratches, cover the surface with a soft cloth.

2   Use four screws to attach the wall mount bracket. (Standard screws: M4 x L10)

🚫 NOTE

- Install the monitor at least 100 mm (3.9 inches) away from the wall on each side of the monitor to ensure sufficient ventilation.
- The wall mount bracket and the wall mount bracket screws are not included.
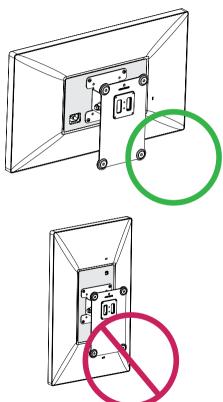
⚠ CAUTION

- Be sure to attach the VESA design cover before attaching the wall mount bracket.
- If you use screws longer than the standard length, it may damage the inside of the product.
- To prevent injury, this apparatus must be securely attached to the wall in accordance with the installation instructions.

Wall Mount (mm)	100 x 100
Standard screw	M4 x L10
Number of screws	4
Wall Mount Plate (Optional)	RW120

🚫 NOTE

- Vertical orientation is not recommended.

MAKING CONNECTIONS

⚠ CAUTION

• If you use generic cables not certified by LG, the screen may not display or there may be image noises.

• Do not press the screen for a prolonged time. This may cause image distortion.

• Do not display a still image on the screen for a prolonged time. This may cause image retention. Use a screensaver if possible.

• The plugs of the cable may become hot during operation. Do not touch the plug for a long time.

❗ NOTE
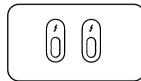
• When connecting the power cord to the outlet, use a grounded (3-hole) power strip or a grounded power outlet.

• The monitor may flicker when turned on in an area where the temperature is low. This is normal.

• Sometimes red, green, or blue spots may appear on the screen. This is normal.
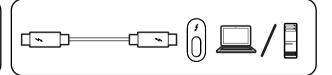
Connecting to a host

• This monitor supports the *Plug and Play feature.

* Plug and Play: A feature that allows you to add a device to your computer without having to reconfigure anything or install any manual drivers.

Thunderbolt™ 3 (⚡) connection

Please connect a Thunderbolt™ 3(⚡) host with Thunderbolt cable.

USB-C connection

Please connect a USB-C host with USB-C cable.

⚠ NOTE

- PD (Power Delivery) is supported via Thunderbolt™ 3(⚡) / USB-C Host (Mac) port.
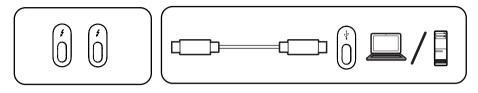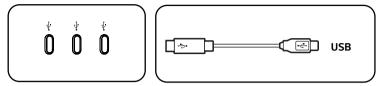- Features may not work properly depending on the connected device's specifications and the environment.
- Thunderbolt™ 3(⚡) / USB-C Host (Mac) port is not for the Monitor Power source but for a PC power source. Connect the Power cord to supply power to the Monitor.
- Make sure to use supplied cable. Otherwise, this may cause the device to malfunction.
- The charging speed may vary depending on the port and device.
- Thunderbolt™ 3(⚡) / USB-C Host (Mac) is supported in such environments as Windows 10 and Mac product.
- In accordance with Mac products may not support the recommended resolution or the some features.
- The ability to set up dual monitors using the Thunderbolt™ 3 (⚡) and daisy-chaining technology depends on the performance of your video card.
- Some USB devices and USB-C monitors may behave abnormally when connected to Thunderbolt™ 3(⚡) / USB-C Host (Mac) ports.
- For more information about the latest Mac device supported list, refer to Apple website at *www.apple.com*.

Connecting to USB Device

Power Delivery 5 V/1.5 A is supported via the USB expansion port.

 USB

NOTE

• Peripheral devices are sold separately.

TROUBLESHOOTING

Nothing is displayed on the screen.	
Is your monitor connected to your Mac?	• Connect your monitor to your Mac. The monitor will turn on automatically if the PC is operating normally.
Is the monitor's power cord plugged in?	• Check if the power cord is correctly plugged into the power outlet.

The screen retains an image.	
Does image sticking occur even when the monitor is turned off?	• Displaying a still image for a prolonged time may cause damage to the screen, resulting in the retention of the image. • To extend the lifetime of the monitor, use a screensaver.

Screen display is unstable and shaky. / Images displayed on the monitor leave shadow trails.	
Did you select the appropriate resolution?	• Set your monitor to the recommended (optimal) resolution. • Update your Mac OS or driver to the latest version.

⚠ NOTE

• Not setting the graphics card to the recommended (optimal) resolution may result in blurred text, a dimmed screen, a truncated display area or misalignment of the display.

• The setting methods may be different depending on the computer or operating system, and some resolutions may not be available depending on the performance of the graphics card. If this is the case, contact the manufacturer of the computer or graphics card for assistance.

• Some graphics cards may not support 3840 x 2160 resolution. If the resolution cannot be displayed, contact the manufacturer of your graphics card or Mac, please update your OS or driver to the latest version.

The display color is abnormal.	
Does the display color appear unstable or monochrome?	• Check if the signal cable is connected properly. Reconnect the cable or reinsert the PC's graphics card.
Are there spots on the screen?	• When using the monitor, pixilated spots (red, green, blue, white, or black) may appear on the screen. This is normal for an LCD screen. It is not an error, nor is it related to the monitor's performance.

The brightness cannot be adjusted. The ALS(Ambient Light Sensor) does not work.	
Have you updated Mac OS or Host for this operation?	• The ambient light sensor operates in accordance with Mac OS. Some Mac OS doesn't support the display ALS(Ambient Light Sensor).
	• You can also adjust the monitor brightness by controlling the menu or hot key of a host manually.

PRODUCT SPECIFICATION

The product specifications below may be changed without prior notice due to upgrade of product functions.

The ~ symbol means alternating current, and the ⎓ symbol means direct current.

LCD Screen	Type	TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Screen
	Color Depth	8-bit, 10-bit color is supported.
	Pixel Pitch	0.1369 mm x 0.1369 mm
Resolution	Max Resolution	3840 x 2160 @ 60Hz
	Recommended Resolution	
Video Signal	Horizontal Frequency	30 kHz to 135 kHz
	Vertical Frequency	48 Hz to 60 Hz
Input Connector	Thunderbolt™ 3(⚡) / USB-C Host (Mac) connection port x 2, USB expansion port x 3	
Power Sources	Power Rating	100 - 240 V~ 50/60 Hz 2.3 A
	Power Consumption	On Mode: 140 W Typ. (Outgoing condition) * Off Mode: ≤ 0.3 W (No Cable connection from monitor and USB expansion)
Stand Angle	Forward/Backward: -5° to 25° (Head)	

Environmental Conditions	Operating Conditions	Temperature	0 ℃ to 40 ℃ (32 ℉ to 104 ℉)
		Humidity	Less than 80 %
	Storing Conditions	Temperature	-20 ℃ to 60 ℃ (-4 ℉ to 140 ℉)
		Humidity	Less than 85 %
Speaker	Stereo Speakers		

Dimensions	Monitor Size (Width x Height x Depth)	
	With Stand	556.1 x 418.0 x 229.9 (mm) (21.8 x 16.4 x 9.0 (inches))
	Without Stand	556.1 x 328.7 x 50.3 (mm) (21.8 x 12.9 x 1.9 (inches))
Weight (Without Packaging)	With Stand (kg)	7.0 (15.4) (kg (lbs))
	Without Stand (kg)	5.2 (11.4) (kg (lbs))

* The On Mode of power consumption is measured with LGE test standard. (Full White pattern, Maximum resolution)

The power consumption level can be different by operating condition and monitor setting.

The monitor goes into the sleep mode in a couple of minutes. (Max 5 minutes)

Signal Timing

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Polarity (H/V)	Remarks
640 x 480	31.469	59.94	-/-	
1920 x 1080	66.66	60	+/-	
2560 x 1440	88.86	60	+/-	
3360 x 1890	116.64	60	+/-	
3840 x 2160	65.73	30	+/-	
3840 x 2160	65.688	30	+/-	
3840 x 2160	110.5	50	+/-	
3840 x 2160	133.31	60	+/-	Main Recommended Timing

LG

Life's Good

The model and serial number of the product are located on the back and on one side of the product. Record them below in case you ever need service.

Model

Serial No.