LG
Life's Good

Installation Guide

LG Chromebase

Read the safety precautions carefully before using the product.

LG Chromebase Model List
22CV241

P/NO : MFL68300509(1405-REV01)
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www.lg.com

ENGLISH

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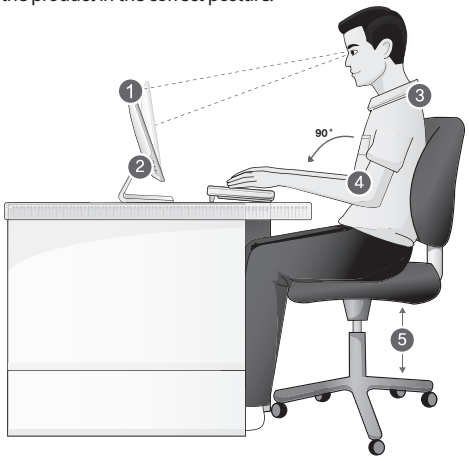
ENGLISH

Instruction and Notices

Using the Product Correctly

Maintaining the correct posture while using this product can alleviate eye strain and allow more comfortable use. Refer to the following to use the product in the correct posture.



1. The screen should be slightly below eye level. (The monitor angle may be adjusted from -5 ° to 25 °.)
2. Adjust the screen to eliminate glare.
3. Straighten your neck and back.
4. Keep your hands, wrists, and arms level.
5. Adjust the height of your chair to have your hands and arms at a suitable position for using the keyboard.

Replacing Flash Memory Battery

The flash memory battery, when LG Chromebase is turned off, works to keep the date and time data. The flash memory battery is a consumable part.

CAUTION

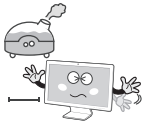
- It is recommended that the flash memory battery should be replaced at LG Electronics Service Center.
- Using a non-compliant battery may cause a failure.
- If a failure is caused by the user who replaced the part, it is excluded from the warranty service.
- If you leave the product disconnected to the power for a long time, the flash memory may be discharged. This case is excluded from the warranty service.

Important Safety Precautions

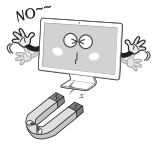
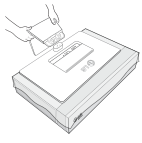
Please avoid any undesirable environmental factor that shortens the machine's life span. Use the machine in a safe and stable place.

Installation

⚠ WARNING

	Do not use the LG Chromebase in damp places like a laundry room or bathroom. • Moisture may cause a glitch or an electric shock.		**Dispose of the wrapping plastic properly.** • The wrapping plastic may cause suffocation. • If a child eats it by mistake, force him/her to vomit immediately and take him/her to the hospital.
	Ensure that the end of the LG Chromebase bottom will not protrude towards the front, when installing it on a cabinet or shelf. • The LG Chromebase may get out of the center of gravity and fall, resulting in injury or destruction. • The cabinet or self should fit the size of the product.		**Do not leave any object nearer than 15 cm from the LG Chromebase.** • Otherwise, lack of ventilation could overheat the LG Chromebase from inside and you could get a burn from the heat. • The LG Chromebase may cause a burn. (especially, babies, infants, aged and patients need to be more careful.)
	Do not place the LG Chromebase in a closed place, such as bookshelf or closet, on a carpet or sitting cushion. • The product may get heated from the inside and result in a fire.		**Do not place the LG Chromebase on a place which can be reached by oil or steam, such as cooking table or humidifier.** • An electric shock or fire may occur.
	Use the LG Chromebase in a dust-free environment. • Otherwise, the system may not function properly.		

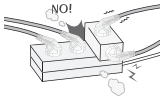
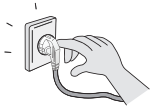
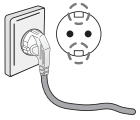
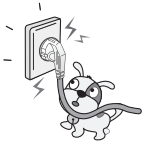
⚠ CAUTION

	**Do not store or use the LG Chromebase near a magnetic object (i.e. a bag with a magnetic object, a diary, a wallet, a memo board, high-powered speakers, a bracelet, or etc.).** • Otherwise, the SSD and the system may be damaged and fail to operate properly. **Never place the LG Chromebase on a bag with magnetic objects including magnetic buttons.** • Otherwise, the SSD and the system may be damaged and fail to operate properly.		**Operate the LG Chromebase in a place without electromagnetic interference.** • Keep a proper distance between the LG Chromebase and such electronic appliances as speakers that generate strong magnetic fields. • Otherwise, data may be lost from the SSD or the LCD may show impaired coloration.
	Place the LG Chromebase in a safe place so that it does not fall. • If dropped, the machine could be damaged and even cause an injury.		**Do not put any heavy object on the LG Chromebase.** • If falling, the object could damage the LG Chromebase and cause an injury.
	• Spread a soft cloth on the floor to protect the screen (panel) when connecting the stand base.		

Using an AC Adapter

⚠ WARNING

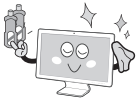
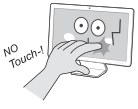
	Do not bend the power cable for AC adaptor too much. • Otherwise, the wires inside the cable may break and cause an electric shock or an electrical fire.		• Do not use loose plugs or damaged power cords. • An electric shock or fire may occur.

	Do not touch the power cord with your hands wet. • Otherwise, an electric shock may occur.		**Pull the plug, not the cord, to disconnect the power.** • Otherwise, a fire may occur or the LG Chromebase may get damaged.
	**Operate the product at the proper voltage.** • Excessive voltage may result in damage on the product, electric shock or fire.		**Use power outlets with an earth pin installed and proper supply of rated electricity.** • An electric leakage may cause an electric shock or fire.
	**Plug the power cord tightly into the outlet.** • Loose connection of the power cord could cause a fire. • If the cord pins are wet or dusted, dry them sufficiently or remove the dust before use. • If the holes of the electric outlet are loose, do not use it.		**In the case that a strange noise is heard from the cord or plug, disconnect the power cord from the outlet immediately and contact the service center.** • A fire or electric shock may occur.
	Never disassemble the power supply and adapter. • A damaged power cord may cause an electric shock or fire.		**Use a socket with an earth pin equipped.** • If not earthed, the product may cause an electric shock and get damaged.
	Ensure that the power outlet is earthed before plugging in. • Otherwise, an electric shock from power leakage may occur.		**Always keep the power cord and the outlet clean.** • A fire may occur.
	**Do not impair the cord by bending or pressing it too hard. Keep children and pets from damaging the power cord.** • An impaired cord could damage the LG Chromebase parts causing a fire or an electric shock.		**Disconnect the LG Chromebase completely from others before cleaning it.** • Otherwise, an electric shock may occur.

	Do not insert a metal chopstick or other conductors into a hole of the outlet when the power cable is connected to the outlet. Do not touch the plug right after disconnecting it from the outlet. • Otherwise, an electric shock may occur.		**Please use the power adapter and cord certified by LG Electronics.** • Using a non-certified product may result in a fire and electric shock. • Disconnect the power cable if you want zero power consumption. • The system may malfunction.

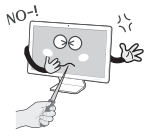
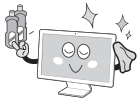
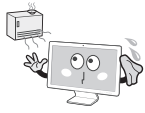
Using the LG Chromebase

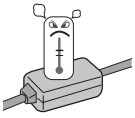
⚠ WARNING

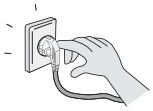
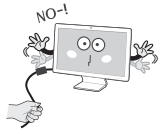
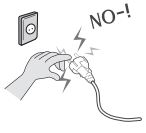
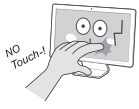
	**Clean the LG Chromebase with a proper agent and dry it completely before using it again.** • If the LG Chromebase is wet while used, an electric shock or fire may occur.		**When lightning flashes in your area, disconnect the power, LAN and other connections.** • An electric shock or fire may occur.
	Do not leave a cup or other containers filled with liquids near the LG Chromebase. • In the case that liquid goes inside the LG Chromebase, a fire or electric shock may occur.		**If you have dropped or damaged the LG Chromebase, disconnect the power and contact the local service center for a safety check.** • If a damaged LG Chromebase remains in service, an electric shock or fire may occur.
	Do not put a lit candle or live cigarette on the LG Chromebase. • A fire may occur.		• If you have contacted the liquid from the LCD panel, immediately wash the substance away with water and consult a physician.
	If you smell or see smoke from the LG Chromebase, stop using the LG Chromebase and disconnect the power before contacting the local service center. • A fire may occur.		**Do not play online games excessively.** • Playing an online game for an extensive time may cause a mental disorder. It could even inflict physical impairments on invalids, children, and the elderly.

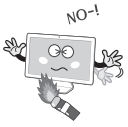
	If you use the LG Chromebase for a long period of time, you may be stressed physically. • You should rest for 10 minutes per hour of usage. • Do not use the LG Chromebase more than two hours a day (recommended). • Take a rest regularly and relax your muscles by stretching lightly.		• Flickering or patterned images may cause a seizure. If you have a history of epilepsy or seizure, consult your doctor before watching 3D video.

⚠ CAUTION

	**Do not press or scratch the LCD panel with a sharp object.** • It may cause impairment.		**Solid State Disk damage and data loss may occur when:** • External shocks are inflicted on the machine while disassembling or installing it.
	**To clean the LCD screen and the front frame, use designated agents and soft cloth and rub the screen to one side.** • Too much force may damage the screen. • If the cloth is too wet, you may have strains.		**Please ask one of our service technicians to check the operational state after your LG Chromebase has been repaired.** • Otherwise, an electric shock or fire may occur.
	For minors, we recommend a program that blocks access to illegal or pornographic web sites. • Minors' exposure to adult-only contents may inflict psychological instability or even trauma on them. Take an extra precaution for your children if the whole family is using this machine.		**Keep the LG Chromebase away from heat-emitting devices such as a heater.** • The LG Chromebase may be deformed or catch on fire.

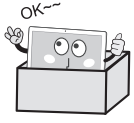
	Do not insert other devices than designated ones in the ports. • Otherwise, the LG Chromebase may be damaged.		**Do not block the ventilation hole with any object.** • Otherwise, an electric shock may occur.
	Turn off the LG Chromebase if you are not going to use it for an extended time period. • Due to heating, spark and/or insulation deterioration caused by stacked dust, you may have short circuit, electrical shock, and fire.		• As the adapter can be hot, do not touch it with bare skin while using it.
	Before using the headset, check if the volume is too high. • Do not use the headset too long. • A headphone that has a resistance higher than 20 Ω can cause electromagnetic interference. Therefore, we recommend you to use a headphone that has a resistance less than 20 Ω.		**If you smell gas, never touch the electric outlet and open the window for ventilation.** • An electric shock or fire may occur.
	Ensure that no child will hang or ride on the installed product. • They could fall or tumble, resulting in an injury.		**Do not disassemble, repair, or revamp the product.** • An electric shock or fire may occur. • If you need a checking, adjustment, or repair, contact the service center. • If you replace a part yourself, the product may not work properly.
	If you drop the product, or the case is destroyed, turn off and unplug the product. • An electric shock or fire may occur. • Contact the service center.		**Do not spray water directly on the body nor use the combustible substances (thinner or benzene) to clean the product.** • An electric shock or fire may occur.

	• The main power cut-off device is the power cord, which should be placed in a location you can easily access.		**If the product is out of order, for example, with blank screen or no sound, do not use it.** • Turn off and unplug the product immediately and contact the service center. • An electric shock or fire may occur.
	Contact the seller or service center once a year to consult with them regarding the internal cleaning. • If dust builds up over time inside the product, it may result in a fire or failure.		**Refer to the guide to set up the resolution and frequency to fit the product.** • You may have poor eyesight.
	• The LCD is a product composed of millions of pixels and requires highly advanced technologies. You may have a few pixel spots (red, green, white and black) on the screen. This is usual on the LCD and unrelated to the product performance. It is not a defect.		• The LCD may have different level of brightness and tones of color on the right, left, upper and lower parts of it, depending the viewing angle. This is usual on the LCD and unrelated to the product performance. It is not a defect.
	To minimize data loss resulting from Solid State Disk damage, back up important data frequently. • The manufacturer is not responsible for any data loss.		**Do not disconnect the power cord while using the LG Chromebase.** • The LG Chromebase may be damaged by an electrical shock.
	**Do not plug or unplug the product to turn on or off the product (do not use the plug as a power switch.).** • Otherwise, an electric shock or impairment may occur.		• Avoid touching the screen. It can be easily damaged.

	• Spilling a liquid like coffee or juice on the keyboard may cause a fault, malfunction, or electric shock. • The keys may not work properly when you use several keys at the same time while playing a PC game. (Please change the key combination settings according to the combinations necessary for the game play.)		**Do not put in metals, such as coins, hair pins, or other iron, and combustible substances such as paper or matches.** • Especially, warn the children against the above behavior. • An electric shock or fire may occur. • If a foreign substance gets in the product, disconnect the power cord and contact the service center.
	Do not use the product near other electronics such as microwave, TV set or refrigerator. • Connectivity and screen quality may be affected.		

Carrying the LG Chromebase

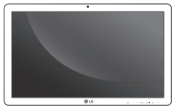
⚠ CAUTION

	Before carrying the machine, turn off the power and disconnect all the cables. • Otherwise, you may trip over the wire, damaging the LG Chromebase and getting an injury.		**Protect the machine from any shock while carrying it.** • System damage or an injury may result.
	• Save the box. • When you move the product, use this box.		• The product is heavy. To unpack or move the product, do not do it by yourself. You must do it with another person at least. • Otherwise, the product would result in an injury or be damaged. • Before using the product that was once dropped, contact the service center as it may result in an electric shock or a fire.

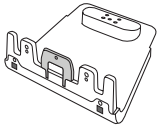
Assembling and Preparing

Product Components

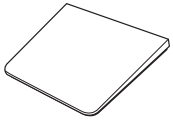
Before using the product, check that it comes with all the specified components.



LG Chromebase
Main body



Stand body



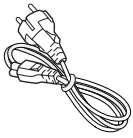
Stand base

Stand cap

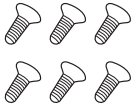
Installation guide
and Cards

Regulations and
Safety Notices

AC Adapter



Power cable



6 Screws
(M4 x 10)

Keyboard

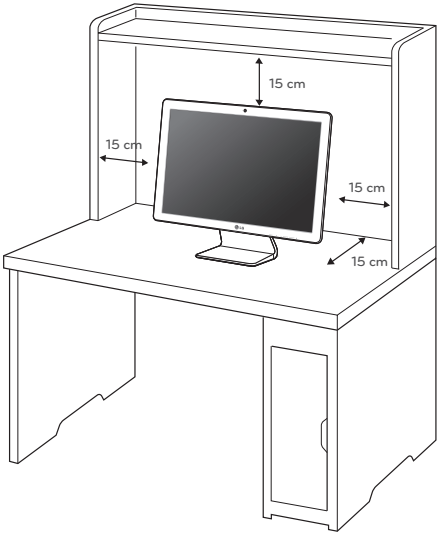
Mouse

NOTE

- The product color and components may vary depending upon the model and are subject to change without prior notice for performance improvement.
- The power cable and AC adapter may differ depending upon your country.
- HDMI cables are not provided with the product.

Product Operating Environment

The monitor must be installed on a flat surface. It is recommended to leave space around the product as shown below.



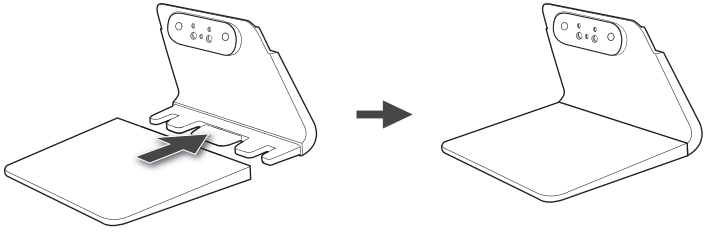
Installation

PRECAUTIONS BEFORE INSTALLATION

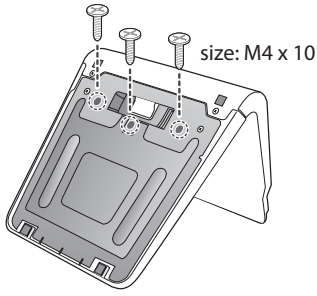
- Wear gloves to protect your hands while installing the product.

Assembling the Stand

1. Slide and attach the stand base into the stand body in the direction pointed by an arrow.



2. Tighten the 3 screws provided in the package to secure the Stand Body and Stand Base in place.

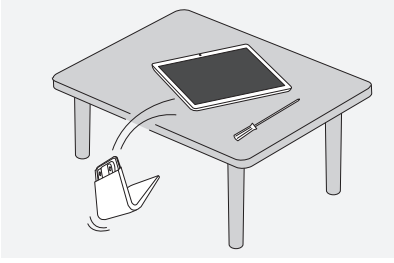


3. To disassemble the stand, repeat the process in reversed order.

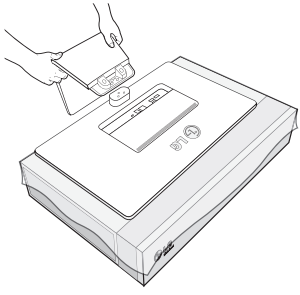
Assembling the Body with the Stand

CAUTION

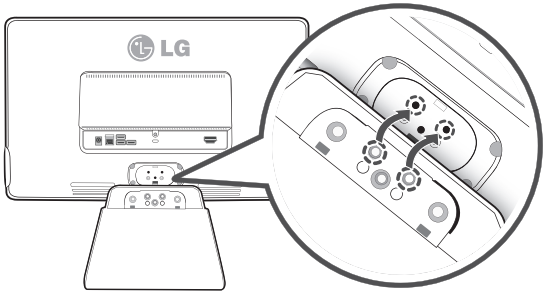
- Assembling the body and stand on the desk or other high places can run the risk of dropping the product on the floor.
- Watch out for any dust or debris where you assemble the product, as the screen may be scratched or damaged.



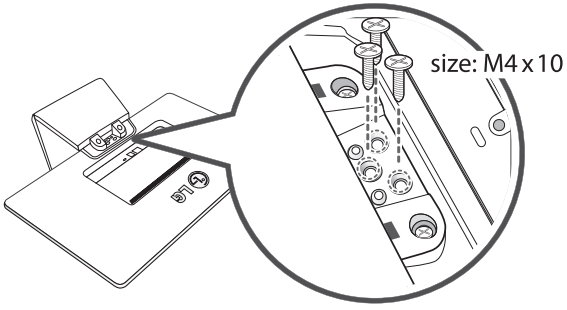
1. Spread a soft cloth on the packaging box or a low table to protect the screen (panel).
2. Place the body on the packaging box or low table, align them at the edge, and make sure the screen is facing downward.



3. Connect the stand by aligning it with the hinges behind the body.

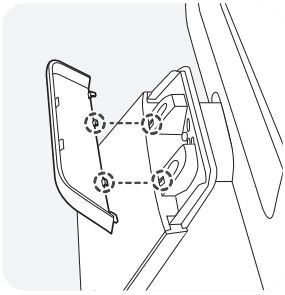


4. Tighten the 3 screws provided in the package to secure the body to the Stand in place.

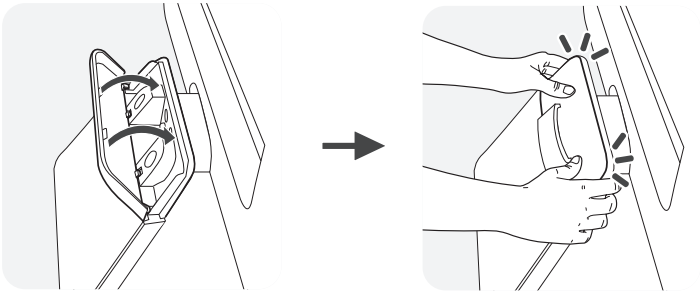


Assembling the Stand Cap

1. Place the product properly as shown in the following figure and align the bottom of stand cap with the groove.



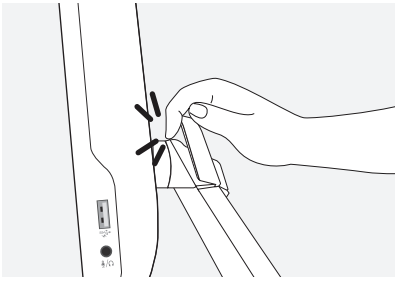
2. Push the stand cap in the direction of the arrow until you hear a click sound.



3. To disassemble the body and stand, repeat the process in reversed order.

⚠ CAUTION

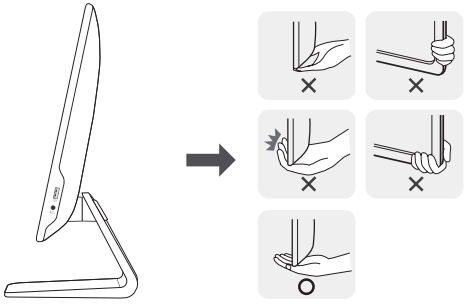
- While assembling the stand cap, please be careful as your finger may be caught between the stand and the body.



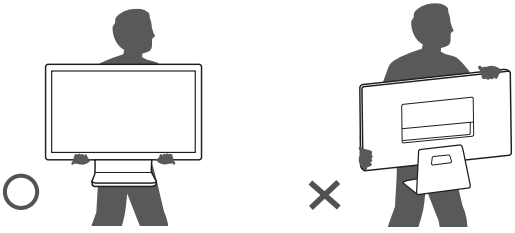
Moving the Product and Precautions

When you pick up or move the product, please keep the followings in mind so that the product is not scratched or damaged.

- Do not touch the monitor screen as this may damage the screen of the pixels within it.
- It would be better to put the product into the original box or pack it before moving it.
- Be sure to shut down the system and disconnect the power cable and all other cables before picking up or moving the product.
- Hold the product at the top and bottom frame firmly.

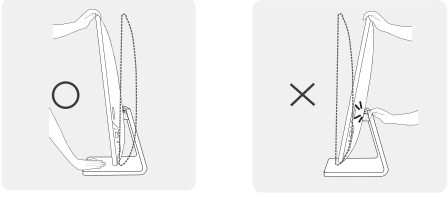


- When you hold the product, turn the screen to the opposite direction to prevent scratches.
- When you are moving the product, make sure that the product will not be exposed to excessive impact or vibration.
- When you are moving the product, keep the product upright.
- Make sure that the product is not flat or tilted left or right.



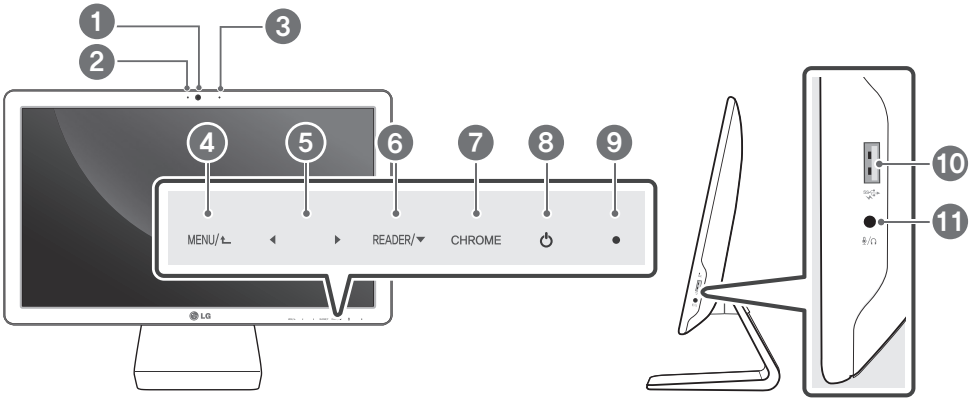
WARNING

- When controlling the screen angle, do not hold the product at the stand.
- Your fingers may be stuck in the stand.

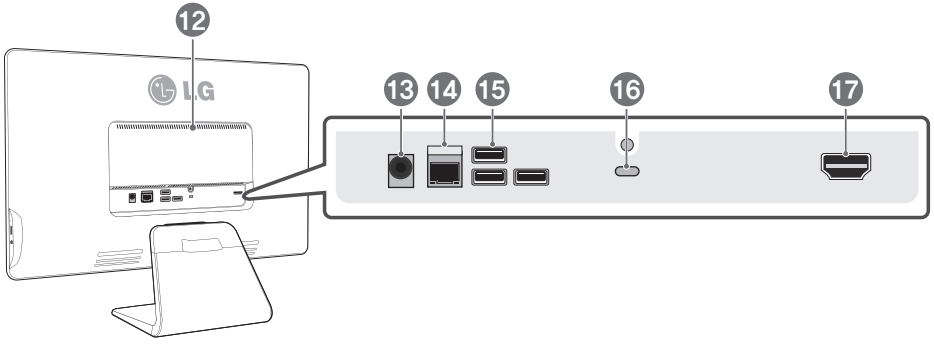


Component Names and Functions

Front / Right View



Rear View



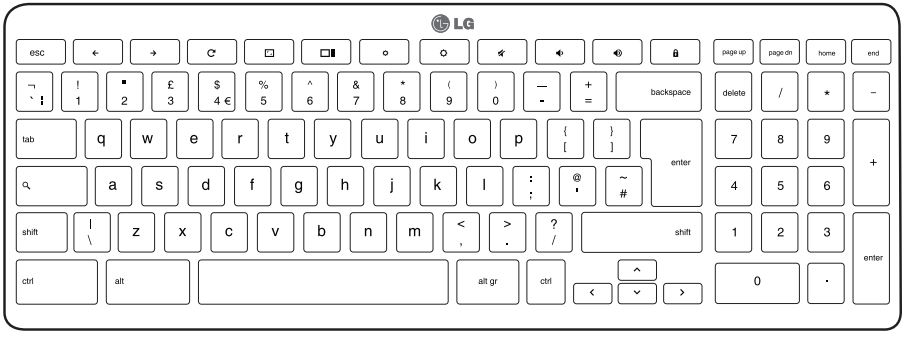
No.	Name	No.	Name
1	Web Camera	10	USB Port (USB 3.0)
2	Webcam Status Lamp	11	Headset with Microphone Port
3	Built-in Microphone	12	Air holes
4	Run OSD / Menu Navigation / MUTE Button	13	Power Port
5	OSD Menu Navigation and Settings Adjustment / Volume Control Button	14	LAN Port
6	READER mode Switch Button	15	USB Port (USB 2.0)
7	Screen Switch (Chrome OS / Monitor) / OSD Exit Button	16	Kensington Lock / Recovery Button
8	Power Button	17	HDMI Input Port
9	Power Lamp		

NOTE

- Do not place radios or other devices using specific frequencies within 10 cm of the front side buttons and power button.

Keyboard View

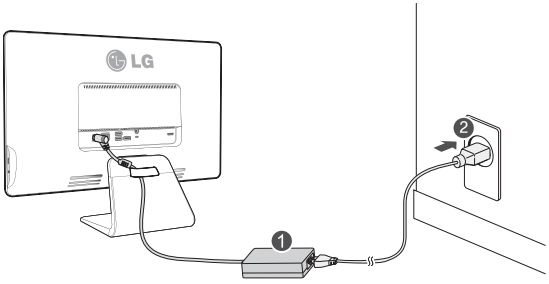
LG Chromebase Keyboard provides the following function keys that can help you use LG Chromebase more conveniently.
The keyboard may differ depending on your country.



Icon	Function	Description
←	Previous	Go to the Previous page.
→	Next	Go to the next page.
↻	Reload	Reload the current page.
⛶	Full-screen	Open the page in full-screen mode.
▭	Next window	Switch to the next window.
☼	Brightness down	Decreases the screen brightness.
☼	Brightness up	Increases the screen brightness.
🔇	Mute	Turns off audio output.
🔉	Volume down	Decreases the volume.
🔊	Volume up	Increases the volume.
🔒	Lock Screen	Switch to the locked screen.
🔍	Search	Search from the Apps panel.

Connecting the Power

Connect the AC adapter to the product and connect the power cord to a wall outlet.



NOTE

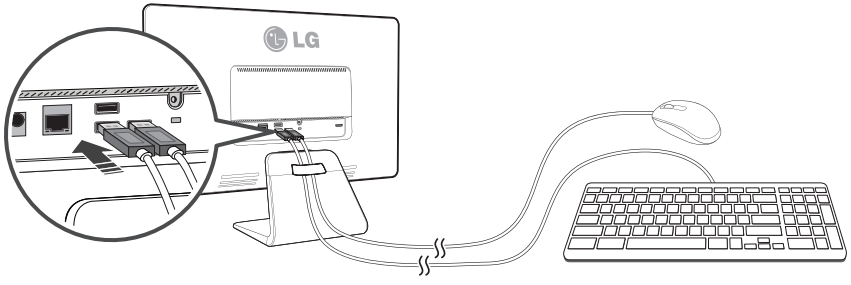
- To ensure safety when using the product, connect the system to a multi-tap or wall outlet fitted with an earth terminal.

CAUTION

- Unplug the power cord before moving or installing a product. (There is a risk of receiving an electric shock.)

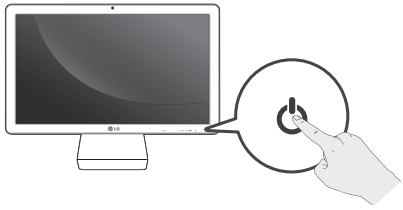
Connecting the Keyboard / Mouse

To use Chrome OS, connect the keyboard and mouse to the USB ports on the back of the product.



Turning on Power

1. When you have connected the AC adapter and the HDMI cable, press the ⏻ button to turn the power on.
   (If the monitor is stored in a cool place, the screen may flicker briefly when you turn the power on.)



2. Press the CHROME button to switch between Chrome OS or Monitor mode.

NOTE

- If you turn the product on for the first time, it starts with Chrome OS. After that, the product starts with the last mode you used. However, if you reconnected the AC adapter, it starts with Chrome OS.

Turning off Power

Chrome OS Mode

On the Chrome OS mode, you can turn off the power as follows.

- System Default Settings Menu: on the Chrome OS screen, press the 9:21 at bottom right corner to display the **System Default Settings Menu**. Press the ⏻ icon to turn off the power.
- Front power button: press the front power button until the account is signed out and the power is turned off (press the power button for a half second to sign out of Chrome OS and keep pressing the button for another half second to turn off the power.). If any error occurs while using Chrome OS, press the power button and hold for 6 seconds or longer to turn the power off.

CAUTION

- If you turn the power off while using Chrome OS, you may lose any data not stored.

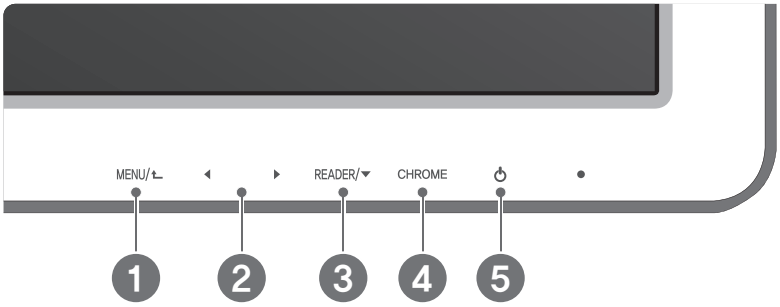
Monitor Mode

Press the power button for half a second or longer to turn the power off.

NOTE

- If you are using Chrome OS, the power is turned off with the following message:

Front Panel of the Product



No.	Button	Description
1	MENU/	Provides the screen adjustment and settings menu for the OSD (On Screen Display). • Use it to move from a OSD (On Screen Display) sub menu to the main menu. - It works as a MUTE button while controlling the volume. • For more information on the screen adjustment and settings menu, refer to **User's Guide** > **Using the Monitor** > **OSD Settings Menu**.
2	◄ ►	• In the Monitor mode or Chrome OS mode, it is used as a volume control button. - On the OSD menu screen, it is used as a navigation or control (decrease/increase) button.
3	READER/▼	• Switches the screen to the READER mode. The Reader mode controls the brightness and color of the LCD screen to look similar to the printed paper to protect the user from eyestrain. - On the OSD (On Screen Display) menu screen, it is used as a navigation or control (decrease/increase) button.
4	CHROME	• Switches the product to the Chrome OS mode or Monitor mode. - On the OSD (On Screen Display) menu screen, it is used as an Exit button.
5	⏻	• Press the Turn Power On - button to turn on the monitor. • Turn Power Off - Chrome OS mode: press the front power button until the account is signed out and the power is turned off (press the power button for a half second to sign out of Chrome OS and keep pressing the button for another half second to turn off the power.). If any error occurs while using Chrome OS, press the power button and hold for 6 seconds or longer to turn the power off. (If you turn the power off while using Chrome OS, you may lose any data not stored.) - Monitor Mode: If you press the button, the power is turned off. If you are using Chrome OS, the message *Please wait while LG Chromebase is turned off* is displayed and then the power is turned off. • If the power is turned on, the white indicator lamp is also turned on or blinks when the LG Chromebase is in the energy savings mode. • In the standby mode, you can press the power button once to turn on the screen. • If any error occurs while using the LG Chromebase, press the power button for 6 seconds or longer to turn the power off.

Using Chrome OS

What is Google Chrome?

Google Chrome operating system (hereinafter is all one word called *Chrome OS*) is suitable for the user who use a PC mainly for internet surfing.
Chrome OS has removed the complicated functions of the existing operating systems so that the user can access Internet quickly and easily and use the Web Store to install various apps.
As Chrome OS is a different OS from Windows and Mac OS, you need to check the following before you use it.

Classification	Windows, Mac O/S	Chrome OS
Drive Installation	Different drivers are required for each device.	Drivers are installed automatically.
Program (app) Installation	Users install programs that they want.	The Google Web Store provides Programs (apps).
OS Update	Users have to set up update details.	Updates automatically.
Security Update	Users have to set up update details.	Updates automatically.
Printing	Prints from the product directly.	Uses Cloud Print
Device Connection	Connects devices to various extension ports	Connects devices to USB ports
External ODD (CD/DVD ROM)	Supported	Not supported

CAUTION

- LG Chromebase is optimized for Chrome OS. If you install any other operating system other than Chrome OS, you cannot have the technical support.
- In Chrome OS, you are not allowed to install Active-X and Plug-in software, and any web that uses these software may not work properly.
- Your new or existing peripheral devices may not work with Chrome OS. Refer to the provided user manuals or contact the manufactures to check the compatibility of those devices.

NOTE

Be aware of the following for Chrome OS:

- Chrome OS supports standard codecs and may not play other videos and music formats except the standard codecs.
- Chrome OS updates the system automatically and keeps the system latest.
- A system update may start without the consent of the user.
- The screen and method to use may be different depending on the OS version.
- For more information on Chrome, visit the Chrome web site at http://www.google.com/chromeos.

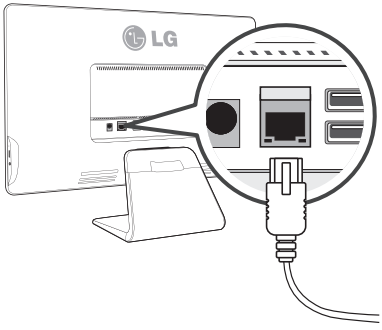
Initial Setting and Logging In

Before you can use Chrome OS, you need a connection to a network and a Google account.

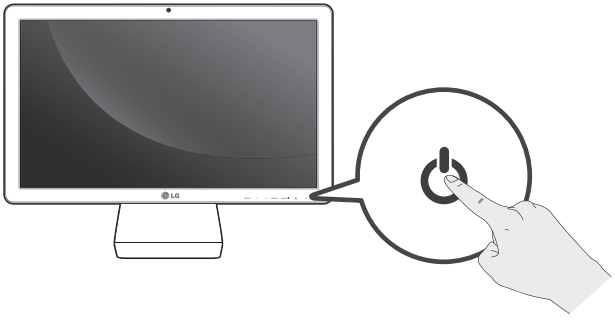
NOTE

- The Chrome OS Start screen, Chrome Browser screen and Web Store screen may look different depending on the Chrome OS version.
- If you don't have a Google account, you may use a Guest account, but you may be limited in using some of the features.
- LG Chromebase does not support the PPPoE protocol or Gigabit LAN. It needs a connection to 10 base-T or 100 base-TX LAN port.
- Use a standard Internet cable to use the product properly. (Cat5 LAN cable or above with a RJ45 connector)
- Proper services may not be provided if the Internet connection speed is too slow or the content is not supported by Chrome OS.
- LG Electronics is not responsible for any problem related with the Internet services (e.g. connection error) not caused by the product itself.
- Contact your Internet service provider if there are any problems with the Internet connection.

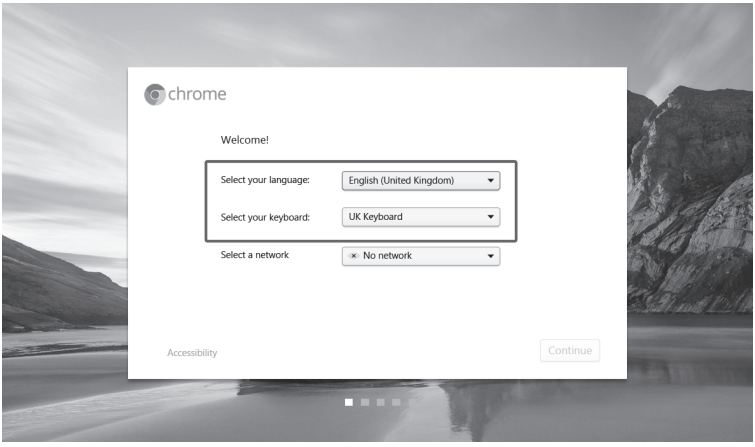
1. To use a wired network, connect the wired network cable to the back of the LG Chromebase.



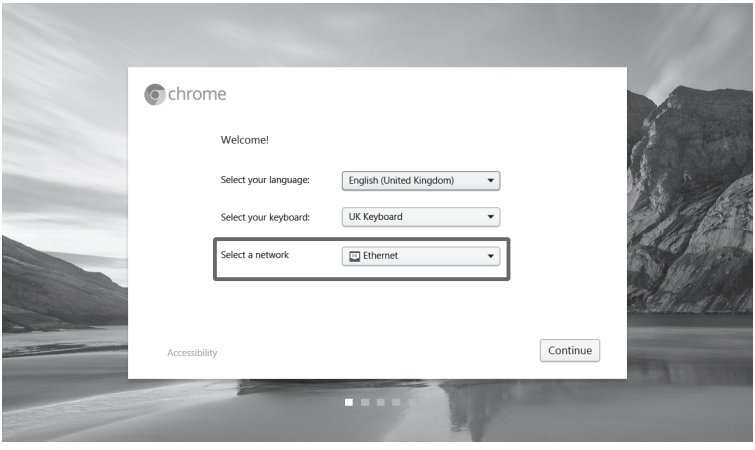
2. Press the ⏻ button on the front of the LG Chromebase to turn the power on.



3. On the Chrome initial setting screen, select the language and keyboard type.



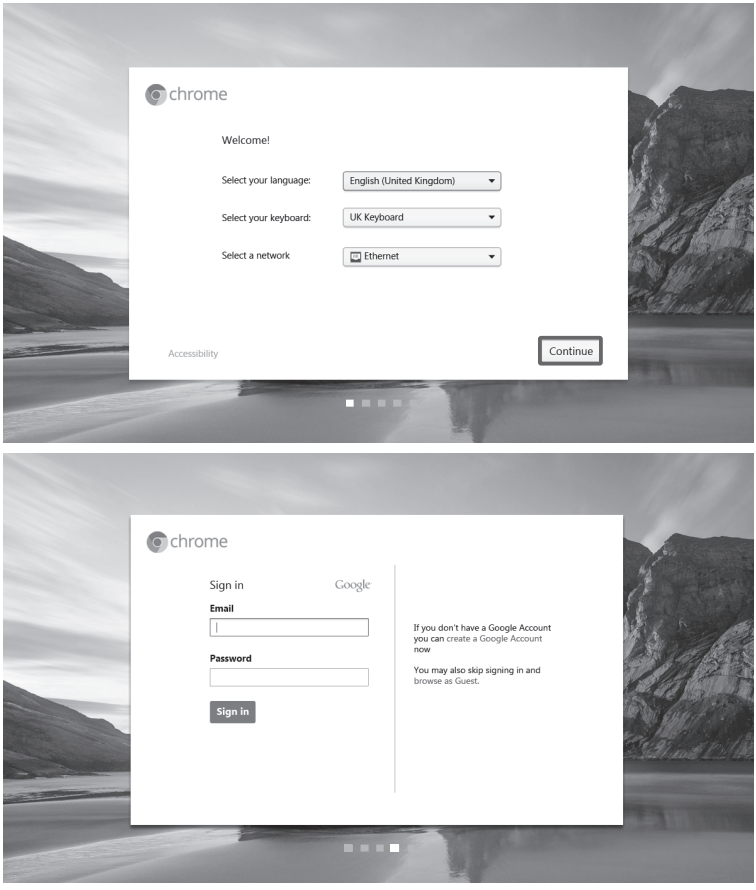
4. If connected to a wired network, **Ethernet** is automatically selected for **Select a network**.



NOTE

- To connect to a wireless network, press the ▼ button in **Select a network** and continue the connection procedures as guided.

5. If you press the **Continue** button and agree on the information for the user, the system checks for any OS update automatically and the Google the **Sign in** screen appears.



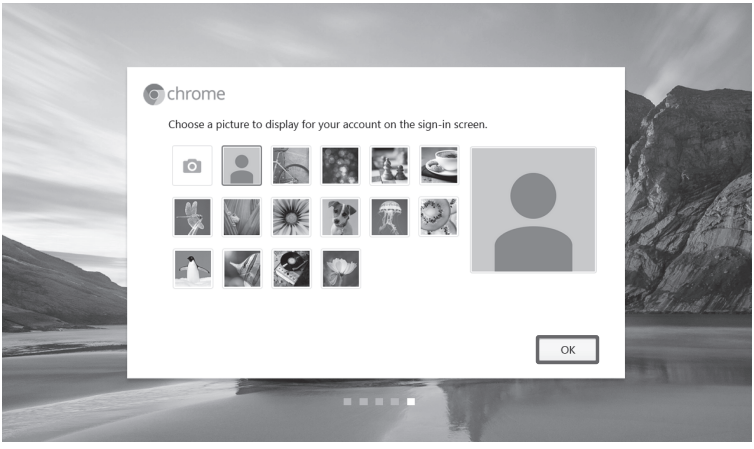
6. If you have a Google account, type your email address and password and click the **Sign in** button.

NOTE

- If you select **browse as Guest**, you can use Chrome with a Guest account, but may be limited in using some functions.
- If you use your existing Google account to sign in, the actual screen may look different from the screen on the manual due to the synchronization of Google account.

7. To create a Google account, click the **create a Google Account** link.
8. When the page for creating a Google account appears, register a new Google account as guided.
9. Press the

icon at the right bottom of the screen and select **Exit guest**.
10. On the **Sign in** screen, type the email and password of the created Google account and click the **Sign in** button.
11. When the following screen appears, select a sign-in image and press the **OK** button.



12. At the right bottom of the screen, the selected image is registered as the sign-in screen and Chrome OS starts.

Start Screen

When the initial setting and login are completed, the Chrome OS start screen appears.

NOTE

- The basic apps shown on the Start Screen may be different depending on the version of Chrome OS.
- For details on how to use Chrome OS, refer to User's Guide.

1	Background	The Chrome background, on which you can right-click to use **Set wallpaper...** or **Autohide shelf** menu.
2	App List	The list of apps installed in the system is displayed.
3	Browser	Runs the browser.
4	Gmail	Runs Google Gmail.
5	Google Search	Runs the Google Search engine.
6	Google Docs	Runs Google Docs with which you can create documents easily.
7	YouTube	Runs YouTube that plays various videos for you.
8	Time	Shows the current time.
9	Wireless Network Status	Shows the connection status to wireless network. (Not shown when connected to a wired network)
10	Sign-in image	Shows the sign-in image of the user.

Set up Wake On LAN (WOL)

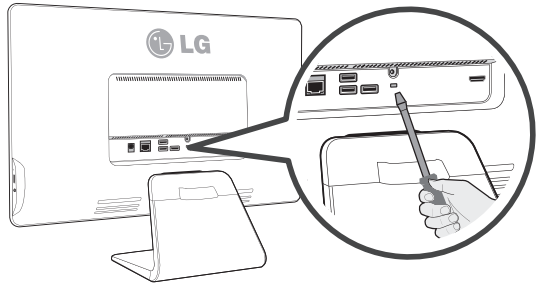
You can set up and use Wake On LAN (WOL) if you want.
Before you can change the Wake On LAN settings, you should turn Verification Off (Developer Mode) as follows:

Turn Verification Off

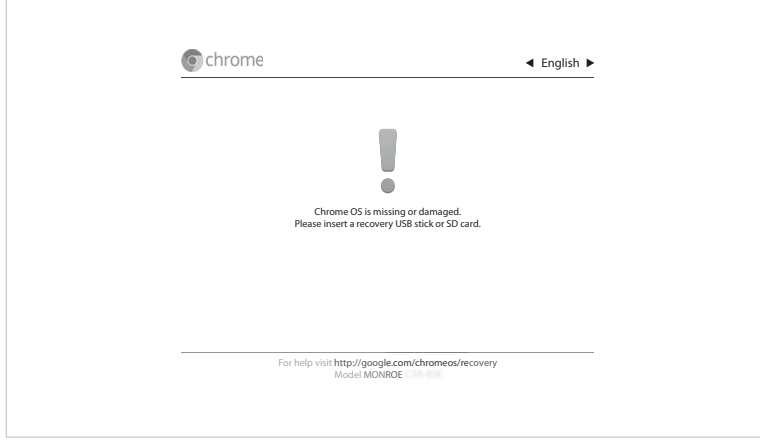
CAUTION

- All data stored in the system including account information, photos, apps and downloaded files as well as data synched with your Google account will be deleted.

1. Turn off the LG Chromebase.
2. While keep pressing the recovery button inside the Kensington lock, press the button to turn on LG Chromebase. (You may need a flat-head driver to press the recovery button.)



3. When the power is turned on and the following screen is displayed.

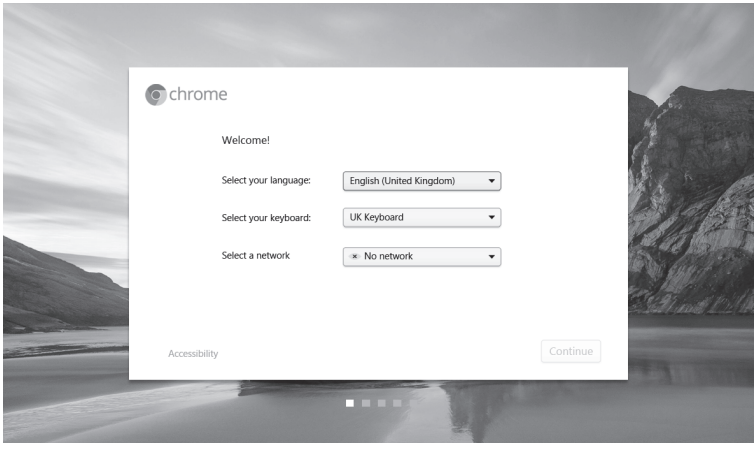


4. Press **ctrl** + **d** to display the following screen.

5. Press Recovery button to reboot the system and turn Verification off.

6. After about thirty seconds, the following screen appears.

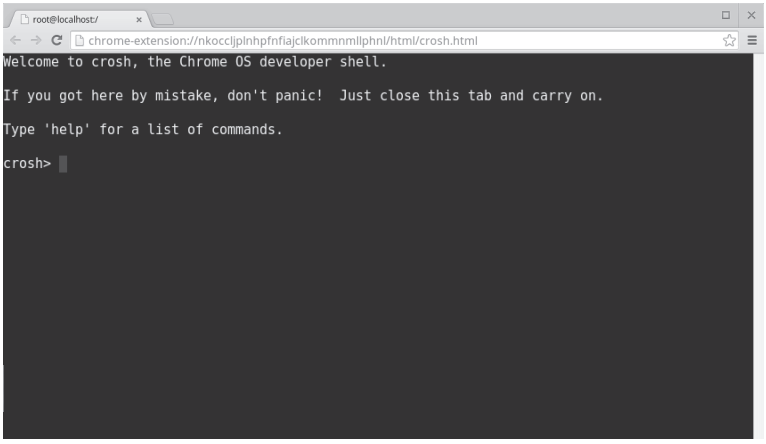
7. After about five minutes, the Chrome OS setup screen appears as follows:



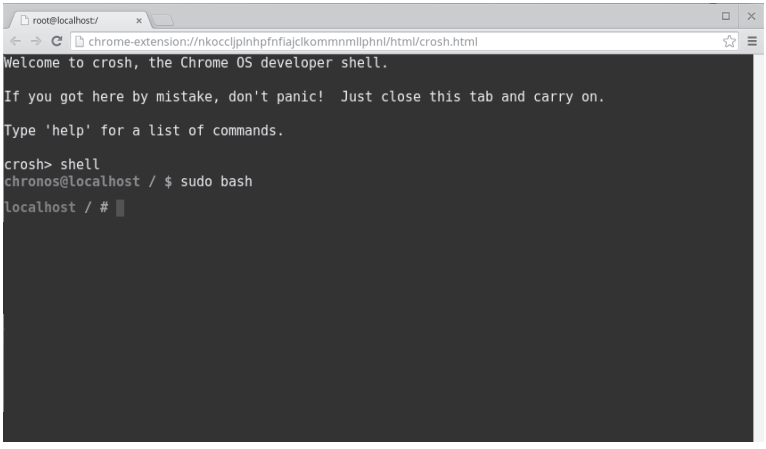
Turn Wake On LAN On/Off

To use this function, turn Verification Off (Developer Mode).

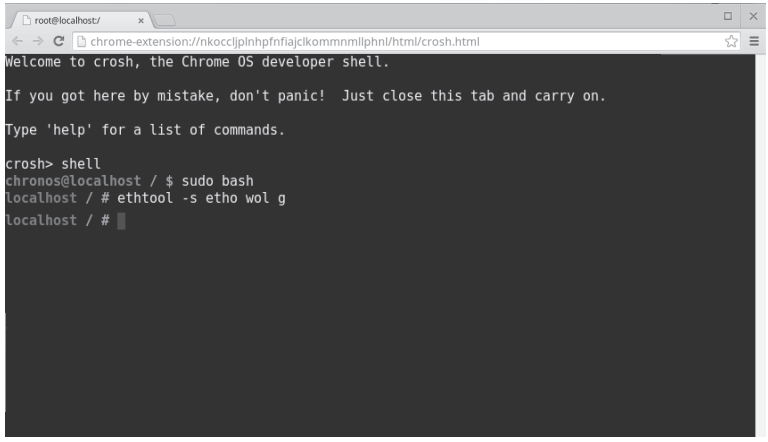
1. Log on to Chrome OS and press **alt** + **ctrl** + **t** on the keyboard to display the following console screen.



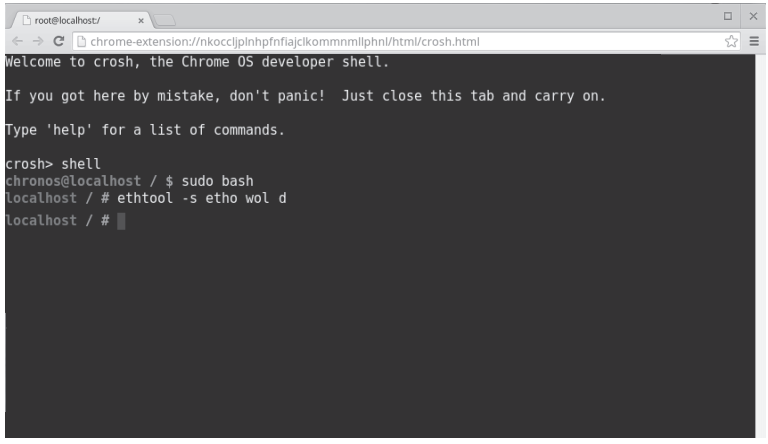
2. Type **shell** at the **crosh** > prompt and press the **Enter** key.
3. Type **sudo bash** at the **chronos@localhost** > prompt and press the **Enter** key.



4. To turn on **Wake On LAN**, type **ethtool –s eth0 wol g**.



5. To turn off **Wake On LAN**, type **ethtool –s eth0 wol d**.



Turn Verification On

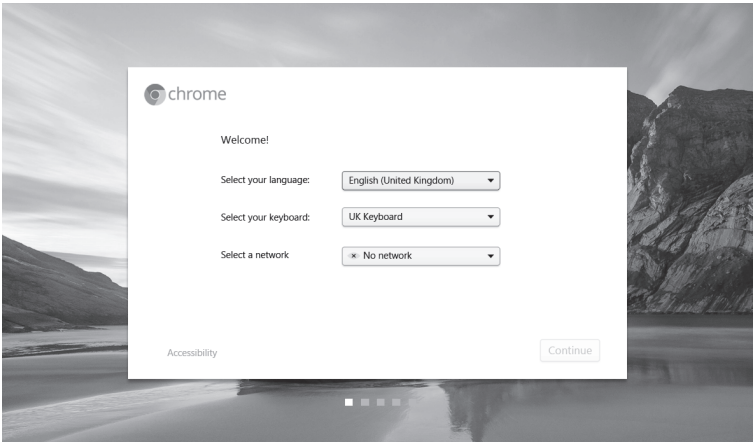
CAUTION

- All data stored in the system including account information, photos, apps, and downloaded files as well as data synched with your Google account will be deleted.

1. Press the button to turn it on and press the **Space** key in the following screen.

2. Press the **Enter** key in the following screen to turn Verification On.

3. Once Verification is set to On, the system reboots and the following Chrome OS setup screen appears.



Power Management

Without user activity, the display goes to dim in 7 minutes, screen off in 8 minutes and sleep mode in 30 minutes (default timeouts).
Based upon individual user activity, Chrome OS tries to optimize these timeouts. Therefore, users may find that the actual timeouts vary slightly from the default timeouts listed above.

To restore the default timeouts for power management, please run **Powerwash**.

CAUTION

- If you run **Powerwash**, the registered account and stored data will be all deleted. Please back up the data to exterior storage such as USB HDD, or other memory devices.

ENGLISH

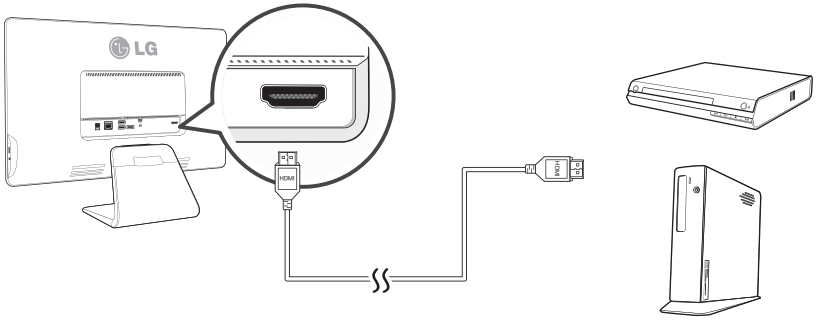
Using the Monitor

Connecting the HDMI Cable

You can connect various devices (PC, DVD player, or game console) to the HDMI port on the back of the product to use it as a monitor.
Use the HDMI cable to connect external devices as shown below.

NOTE

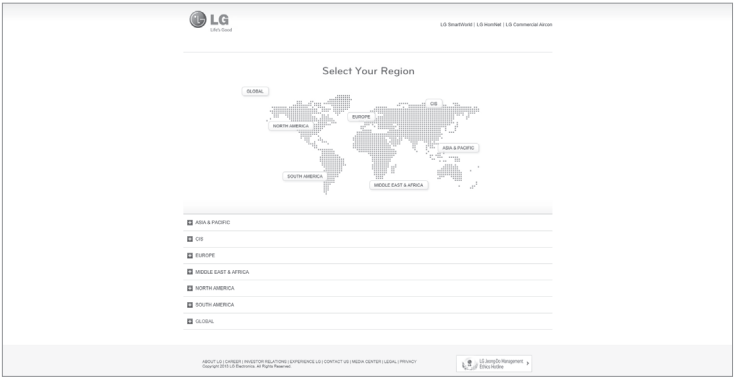
- HDMI cables are not provided with the product.
- For details on how to use the monitor functions, refer to User's Guide.
- Use a High Speed HDMI™ Cable.



To Read the User's Guide

Please read the User's Guide to learn how to use the product.

1. Visit http://www.lg.com and select your region.
2. Select Support or Service and search for the model name (22CV241) to read the User's Guide.



Product Specifications

CPU	Intel® Celeron® processor	
OS	Chrome OS	
Memory	2 GB DDR3L	
Storage	16 GB iSSD	
Input / Output	Display Rear: USB 2.0 x 3, HDMI In x 1, Dc-In Display Side: USB 3.0 x 1, HP out/Mic In combo	
Network	WiFi: 802.11 a/b/g/n (2.4 G / 5 G, Dual Band) LAN: Ethernet 10/100/1000 mbps Bluetooth: 4.0	
Webcam / MIC	Web CAM: 1.0 M / HD with Webcam LED (include indicator) built-in MIC	
Audio	5 W x 2 built-in Stereo Speakers	
LCD Screen	Type	54.61 cm TFT (Thin Film Transistor) IPS LCD (Liquid Crystal Display) Screen Diagonal length of the screen: 54.61 cm
	Pixel Pitch	0.08265 mm x 0.24795 mm
Video Signal (HDMI)	Maximum Resolution	1920 x 1080 @ 60 Hz
	Recommended Resolution	1920 x 1080 @ 60 Hz
	Horizontal Frequency	30 kHz to 83 kHz
	Vertical Frequency	50 Hz to 75 Hz
Power	Voltage	19 V ⎓ 3.42 A
	Power consumption (Typ.)	On mode: 32 W (Typ) Power Saving Mode ≤ 2.5 W Off Mode ≤ 0.5 W
AC/DC adaptor	DA-65G19 manufactured by ASIAN POWER DEVICES INC. Output: 19 V DC ⎓ 3.42 A	
Stand Angle Adjustment	Forwards/Backwards: -5 ° to 25 ° (Head)	
Environmental Conditions	Operating Condition	Temperature: 10 °C to 35 °C, Humidity: 10 % to 80 %
	Storing Condition	Temperature: -20 °C to 60 °C, Humidity: 5 % to 90 %
Dimension	Monitor Size (Width x Height x Depth)	
	With Stand	528.6 mm x 396.8 mm x 189.2 mm
	Without Stand	528.6 mm x 320.4 mm x 43.5 mm
Weight (With Stand)	4.3 kg	

※ The product specifications are subject to change without prior notice for performance improvement.

Factory Preset Mode

MODE	CLASSIFICATION	Polarity	Frequency [kHz] / [Hz]	Resolution
1	H (Pixels)	-	31.469	640 x 480
	V (Lines)	-	59.94	
2	H (Pixels)	+	37.879	800 x 600
	V (Lines)	+	60.317	
3	H (Pixels)	-	48.363	1024 x 768
	V (Lines)	-	60.0	
4	H (Pixels)	+	45.00	1280 x 720
	V (Lines)	+	60.00	
5	H (Pixels)	+	63.981	1280 x 1024
	V (Lines)	+	60.02	
6	H (Pixels)	+	55.935	1440 x 900
	V (Lines)	-	59.887	
7	H (Pixels)	+	60.00	1600 x 900
	V (Lines)	+	60.00	
8	H (Pixels)	-	65.290	1680 x 1050
	V (Lines)	+	59.954	
9	H (Pixels)	+	67.50	1920 x 1080
	V (Lines)	+	60	

HDMI TIMING

	Factory support mode (Preset Mode)	Horizontal frequency (KHz)	Vertical frequency (Hz)	HDMI
1	480P	31.5	60	O
2	576P	31.25	50	O
3	720P	37.5	50	O
4	720P	45	60	O
5	1080i	28.12	50	O
6	1080i	33.75	60	O
7	1080P	56.25	50	O
8	1080P	67.5	60	O (Recommend Mode)

Supported file types and codec

Microsoft Office document	doc, .docx, .xls, .xlsx, .ppt (read-only), .pptx (read-only).
Media	.3gp, .avi, .mov, .mp4, .m4v, .m4a, .mp3, .mkv, .ogv, .ogm, .ogg, .oga, .webm, .wav
Image	.bmp, .gif, .jpg, .jpeg, .png, .webp
Compressed files	.zip, .rar, .tar, .tar.gz (.tgz), .tar.bz2 (.tbz2)
Other	.txt (read-only), .pdf
Video Codec	ogv, webm, mp4, mov, avi, 3gp
Audio Codec	MP3, AAC, AMR-NB

Supported external storage devices

This product can use the external storages (USB memory, HDD, etc.) of the following file systems:
- Ext2, Ext3, Ext4, FAT, HFS+(read-only on journaled HFS+), ISO9660 (read-only), NTFS, UDF(read-only)

NOTE

- The supported file type, codec, and file system may differ depending upon the Chrome OS version.
- USB port supports 0.5A electric current. If you need more electric current in case of HDD, use the separate power adaptor.

System Limitations Guide

- Copyright protected contents or those with limited access authority cannot be played back using this device.
- This device does not support the USB printer and ODD (CD/DVD ROM drive).
- This device supports the USB memory and hard disks of the following file systems: Ext2, Ext3, Ext4, FAT, HFS+ (read-only on journaled HFS+), ISO9660 (read-only), NTFS, and UDF (read-only). The compatibility of other file systems or external devices is not guaranteed.
- If a USB memory or hard disk with insufficient free space is inserted, some applications may not work properly due to the slower system response.

Guide on open source licenses for customers

- The Software included in this product contains copyrighted software that is licensed under the GPL/LGPL. You may obtain the complete Corresponding Source from website: http://git.chromium.org/gitweb/ and Notice from website: chrome://credits/
  This offer is valid to anyone in receipt of this information.
  Copyright (c) 2014 The Chromium OS Authors. All rights reserved.
  Use of this source code is governed by a BSD-style license that can be found in the LICENSE file.

Troubleshooting

Chrome OS Troubleshooting

When the Web Browser Screen is not properly displayed.	
Does a message appear saying **No network connection** when trying to visit a website?	• Verify that your LAN cable is properly connected. • Verify in your task bar that **Network connect** is activated.
Have you verified your network settings?	• **Settings** > **Network** select Settings from the **Network** screen. • Check LAN items. • Select Ethernet from **Settings** and select DHCP or Static IP. • If you have been assigned a static IP from your internet service provider, enter your IP address.
Is a screen asking for personal information?	• When you try to connect to the internet for the first time through a LAN cable, certain internet service providers will request your personal information. • The user information screen is to verify the internet subscription of the user.
Is a web page asking to download and install Adobe Flash Player?	• This message appears when the Adobe Flash Player plug-in is not enabled on your system. • Open your web browser settings and check **Enable plug-ins**.
Are you unable to use ActiveX?	• The web browser installed on the internet monitor does not support ActiveX. Only Internet Explorer supports ActiveX.
Does the web browser stop only on certain sites?	• If a web page contains multiple instances of Flash content, the web browser may stop working.

Malfunction of the external storage device (USB memory)	
Are you unable to open files on the external storage device?	• Check if your external storage device has enough free space. • If not, remove some of the files to free up space on the device.
Is the photo viewer slow?	• If your external storage device has more than 1,000 files, the media player may perform slowly. • Remove some of the files and try again.

Malfunction in Peripheral Devices	
Is the mouse not responding?	• Verify that the mouse is connected to the USB port on the rear of the monitor.
Does the keyboard display jumbled letters?	• Different types of keyboards are used for different languages. • Verify that your keyboard matches the language used by the program. • The keyboard is set when the user selects the country.
Are the speakers not producing any sound?	• Make sure that nothing is connected to the headset with microphone port on the right side of the product. • Make sure that the volume is NOT set to 0 or Muted.

Monitor Troubleshooting

The screen is blank	
Is the product's power cord connected correctly?	• Check if the power cord is connected correctly to a wall outlet.
Is the power lamp on?	• Check the Power button.
Is the power on and the power lamp is lit either blue or green?	• Adjust the screen brightness and contrast.
Is the power lamp blinking?	• The power lamp blinks when the Internet Monitor is in standby mode. When you press the power button, the monitor turns on again within 2 to 3 seconds. Using a keyboard or mouse does not exit standby mode.
Do you see the **Monitor Frequency Range Exceeded** message on the screen?	• This occurs when the signal sent by the PC (video card) exceeds the range of horizontal or vertical frequency supported by the monitor, so check the **Product Specifications** of this manual and change the settings.
Do you see the **Check Signal Cable Connection** message on the screen?	• This occurs when the signal cable between the PC and the monitor is not correctly connected or unplugged, so check and reconnect the signal cable.

There are afterimages on the screen	
Are there afterimages on the screen even after turning the monitor off?	• Please be careful as displaying a fixed image on the screen for a prolonged period of time can damage the monitor and leave afterimages on the screen. Use screen savers to extend your monitor's working life.

NOTE

Vertical Frequency

- A monitor screen must be refreshed dozens of times every second like a fluorescent lamp to allow users to see the picture.
- This rate of screen refresh is called the Vertical Frequency or Refresh Rate, and is measured in Hz.

Horizontal Frequency

- The time taken to display the full length of a single horizontal line on the screen is called the horizontal cycle. The Horizontal Frequency, measured in kHz, is the inverse of the horizontal cycle and shows the number of horizontal lines displayed on the screen every second.

The screen is unstable and shakes. / The screen shows ghost images.	
Did you set the correct screen resolution?	• Refer to User's Guide > Using the Monitor > Setting the Resolution and set the screen to the recommended resolution.

NOTE

- Check if the video card resolution or frequency is set within the range usable by the monitor, and go to **Control Panel** -> **Display** -> **Settings** to change the resolution to the recommended resolution (optimum resolution).
- Set the resolution to the recommended resolution (optimum resolution) to prevent the occurrences of text smearing, screen blurring, screen truncation or screen slanting.
- The setting procedures may vary depending on the PC and O/S (operating system), and the recommended resolution may not be supported by some video cards. In such cases, please consult the PC or video card manufacturer.

The screen color is strange	
Is the screen displayed in 16 colors?	• Change the color to 24 bit (True Color) or higher. In Windows, select **Control Panel** -> **Display** -> **Settings** -> **Color Quality**.
Does the screen color seem unstable or look monochromatic?	• Check the connection of signal cable and connect it properly. Or, pull out and insert the video card in the PC again.
Are there spots on the screen?	• The screen may display a few pixel spots (red, green, blue, white and black) during operation. This is caused by the inherent characteristics of LCD panels. This is not a fault and unrelated to the monitor's performance.

After connecting the monitor, the Unknown Monitor is displayed on the screen	
Have you installed the device driver for the monitor?	• Visit the homepage of LG Electronics (http://www.lg.com) to download and install the driver. • Check the user's manual for the video card and see if it fully supports the *Plug and Play* function.

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