Connecting to External Display

Connecting to the HDMI Port

HDMI is a multimedia interface that can integrate and transmit video and audio signals.

In some models, DTS Audio may not work when you use HDMI.

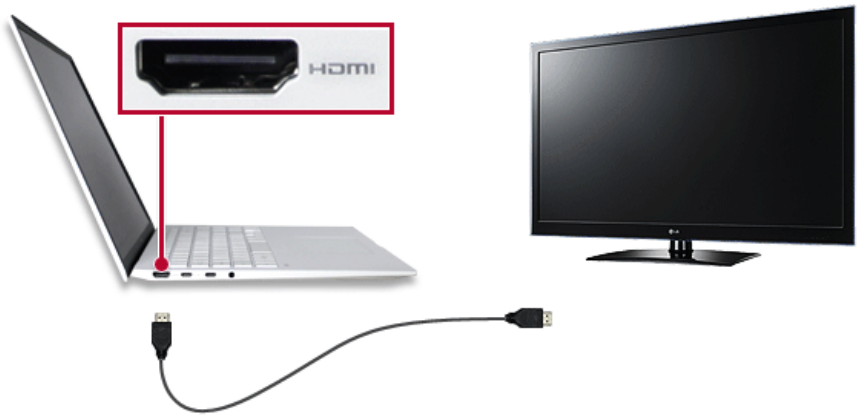
TIP

Ensure the monitor power is off before connecting the external monitor to the PC.

Use **'HDMI to VGA Gender'** to connect to VGA port.

1 Connect the HDMI cable to the PC and the external device (TV, monitor) that supports HDMI.

2 HDMI port transfers both video and audio simultaneously. Hence, there is no need for a separate audio connection.



3 On the PC, press [Fn] + [F7] to display monitor (projector) toggling screen. Select the desired screen output.

TIP

- Everytime [ ] + [P] keys are pressed, the screen output option changes. Release the keys to display the selected screen output.

CAUTION

- If you do not set Speaker as the default value after disconnecting the HDMI cable, the system may not produce any sound.
- If a program was running already, you must exit and restart the program to produce sound.

ENGLISH

Connecting to Wireless Display

The wireless display feature connects the PC screen and sound to a display (TV, projector, etc.).

OPTION

- To use the wireless display feature, the display device must support this feature.
- To connect to the display device that does not support wireless display, you must separately purchase a wireless display connection device.
- Once the wireless display connection is established, no additional procedures and searching are necessary the next time you try to connect.

Connecting to Wireless Display

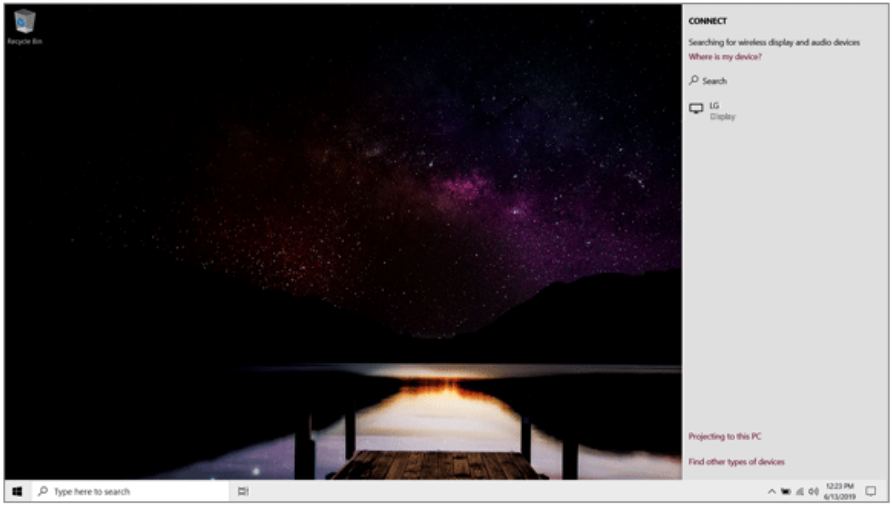
1 Press the Action Center [ ] icon on the right side of the taskbar.

2 When the Action Center screen appears, press the **[Connect]** tile.

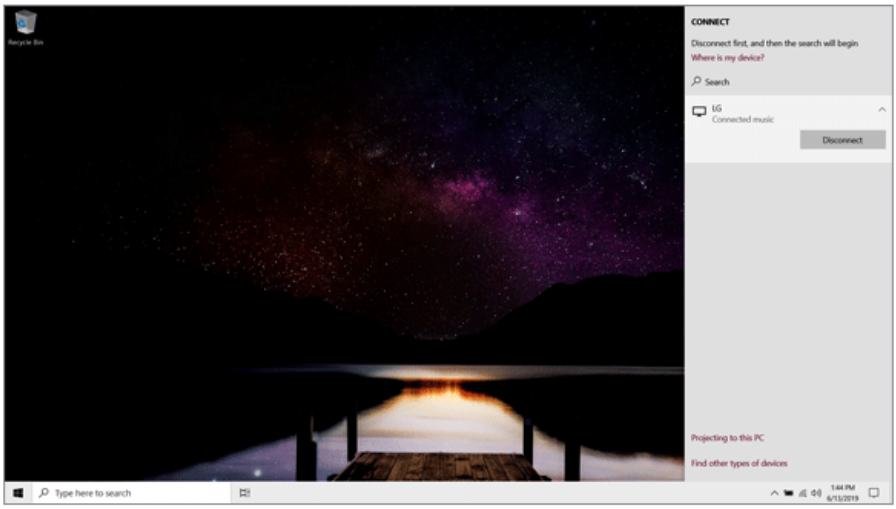
TIP

If the tile does not appear, press the [Expand] menu.

3 Search for wireless display devices in the proximity.



4 Once the wireless display device is connected, it outputs the PC screen and its sound.



Connecting an External USB-C™ (Thunderbolt™) Device

The USB-C™ port mounted on this product supports USB 4.0 Gen 3x2 standards.

Use the USB-C™ port to connect USB devices or to output a screen to an external display.

TIP

The names of USB versions have changed from USB 3.0 (or USB 3.1 Gen 1) and USB 3.1 (or USB 3.1 Gen 2) to USB 3.2 Gen 1x1 and USB 3.2 Gen 2x1.

Connecting a USB Device

If a USB device is connected to a USB-C™ port, the port works as an ordinary USB port.

TIP

To use a conventional USB device, a separate conversion adapter should be used.

(Conversion adapters may be purchased separately.)

Outputting to an External Display

By connecting a display that supports USB-C™ Alternate Mode, you can use the USB-C™ port to output a screen to an external display.

TIP

The Alternate mode allows you to use the DP (DisplayPort) and HDMI outputs through the USB-C™ port.

We support DP (DisplayPort) interface standards.

CAUTION

You must use a cable that supports **Alternate Mode** to output a screen to another display.

If you use USB-C™ accessories (cables, interface adapters, etc.) that are used for other products, you may have compatibility problems (no screen output or a malfunction).

Connecting a Thunderbolt™ Device

You can connect to the USB-C™ port an external display or a high-performance data device that support the Thunderbolt™ specifications.

Depending on the specifications of the device connected to the USB-C™ port, it acts as a USB or Thunderbolt™ device.

TIP

The Thunderbolt™ cable is not provided with the product. Make sure that you use a certified cable.

Some functions may not be available depending on the product. For more information, refer to the user manual provided with the device to be connected.

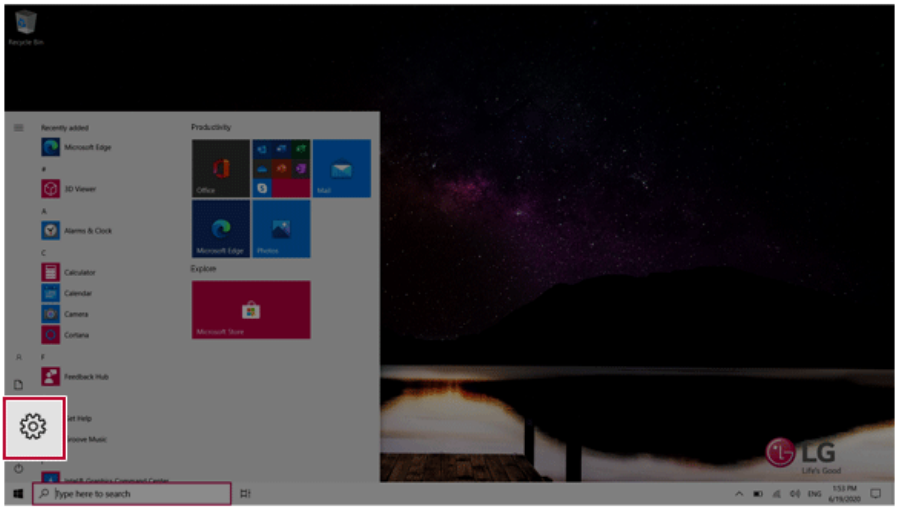
Connecting two notebook PCs that support Thunderbolt™

Use Thunderbolt™ to connect two PCs easily and quickly and send and receive data between them.

1 Press the [ ] button and select the **[Settings]** menu.

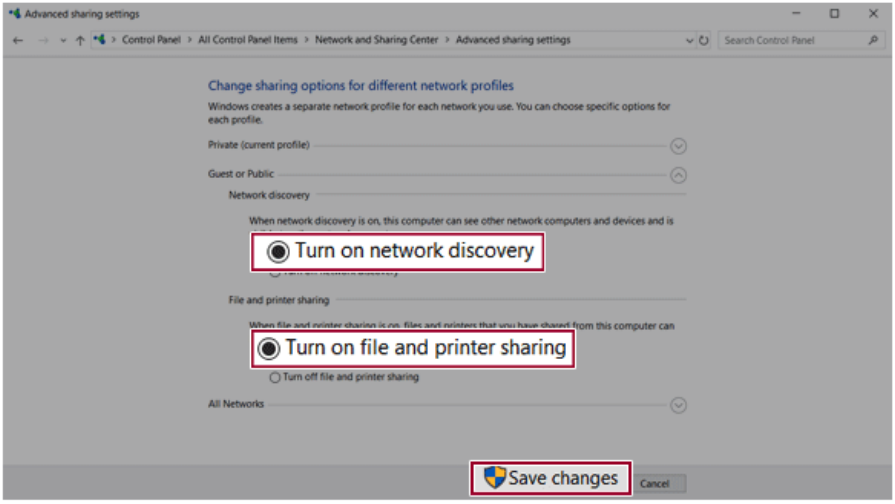
TIP

Press the [ ] key or [Ctrl] + [Esc] to display the Start menu.



2 Select [Network & Internet] > [Status] > [Network and Sharing Center] > [Change advanced sharing settings].

3 Enable [Change sharing options for different network profiles] and save the changes.



4 Use the Thunderbolt™ cable to connect two notebook PCs.

5 A while later, an icon of the connected computer appears on the desktops of the two notebook PCs.

6 Double-click the connected computer icon to open the authentication screen.

7 Input the user name and password to connect to the other PC.

TIP

If there is no shared folder in the connected PC, nothing may appear on the screen.

ENGLISH

Using USB-C™ (Thunderbolt™) Charging Function

You can connect the USB-C™ device to charge a notebook PC battery or an external device, and the operation mode is automatically selected depending the charge settings of the connected device.

- To charge a notebook PC battery, the external device (USB PD Charger, notebook PC, etc.) should support USB Power Delivery 10 W (5 V / 2 A) or higher profile.
- The external devices that use the USB-C™ port support 10 W (5 V / 2 A) and 15 W (5 V / 3 A).
- A USB device compatible with USB PD (Power Delivery) supports charging at 15 W (5 V / 3 A), whereas a regular USB device supports charging at 10 W (5 V / 2 A).
- USB PD batteries cannot be charged using the USB-C™ port of the notebook PC.
- Always-On Charging is supported only with USB-C™ ports, but not with the regular USB ports.
- If you connect an adapter with a lower output than the rated adapter, it may take more time to charge the notebook PC.

1 When the connected device is set to Automatic (charging the notebook PC or a connected device. Charging the notebook PC by using the mobile phone is not supported.)

2 When the connected device is set to Source (the notebook PC is charged.)

3 When the connected device is set to Sink (the connected device is charged.)

TIP

The charging status of the external device being charged is not displayed on the notebook PC.

If you connected a smartphone, you should select "Charge mobile phone" on the smartphone screen to charge the phone battery.

CAUTION

If the power consumption of the notebook PC is larger than the power supply from the external device, the battery may be consumed gradually.

Bluetooth

Bluetooth allows the user to access wirelessly various devices such as camera, cell phone, headset, printer, and GPS receiver that support Bluetooth. It can also establish a network and exchange data with other Bluetooth-enabled PC or smartphone.

OPTION

The Bluetooth device is optional, and it may not be available in some models.

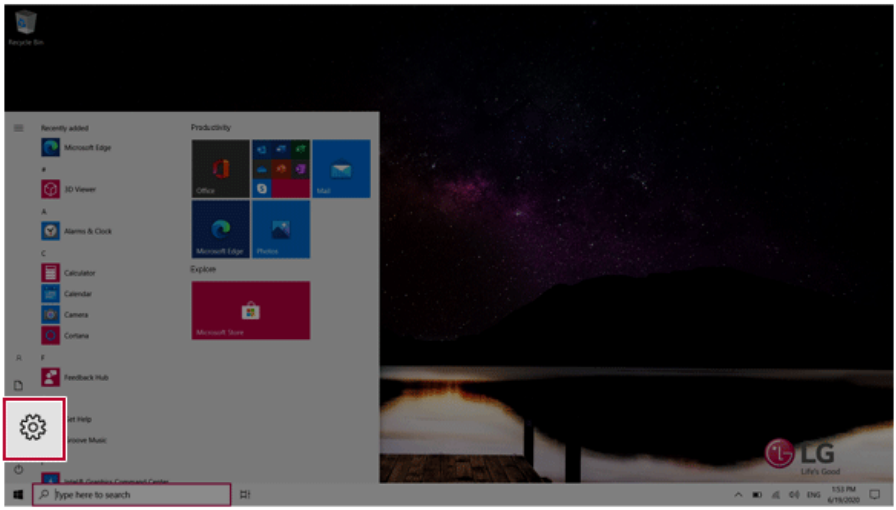
The figures herein may differ by language selection and are subject to change without prior notice.

For details on connecting a Bluetooth device, refer to the user manual that came with the Bluetooth device.

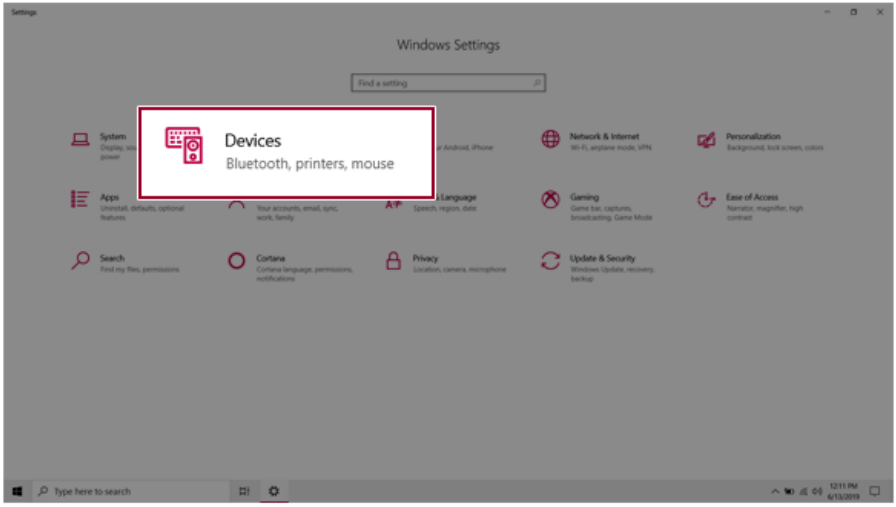
1 Click the [ ] button and select the [Settings] menu.

TIP

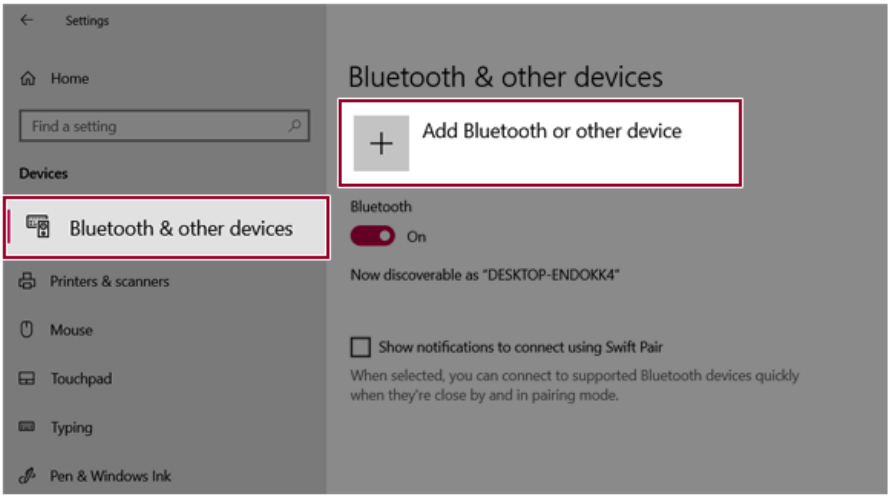
Press the [ ] key or [Ctrl] + [Esc] to display the Start menu.

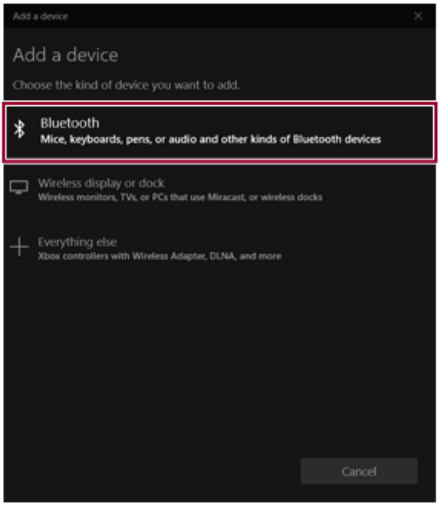


2 When the [Settings] screen appears, select [Devices].

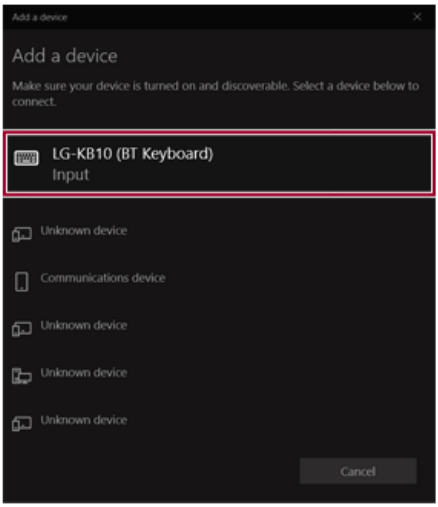


3 Select **[Bluetooth & other devices]** > **[Add Bluetooth or other device]** > **[Bluetooth]** to search for Bluetooth devices.





4 Select a device to connect to.



5 Complete the Bluetooth connection as directed.

Wired LAN

LAN is the network environment that users can connect to by using a cable to connect to their internet providers or the company's network.

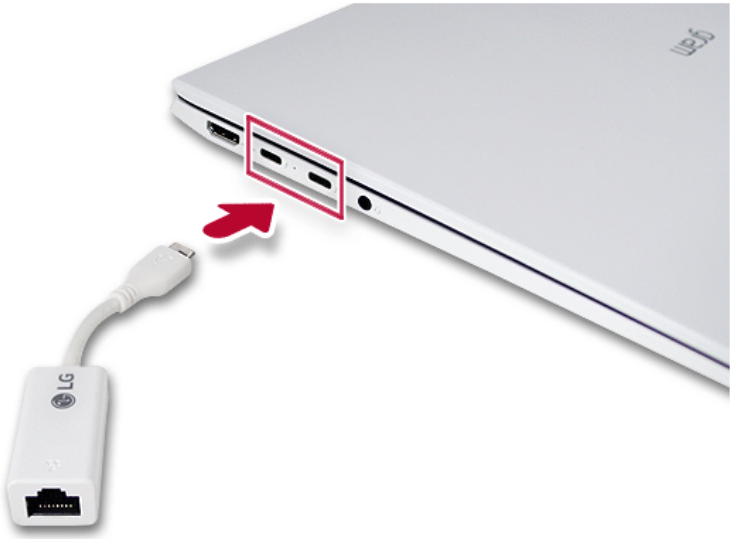
Using Wired LAN

LAN is installed with an automatic IP (DHCP) as default value.

Please refer to the following instructions for details on setting up an automatic IP (DHCP) or manual IP.

1 Connect the LAN adapter to the USB-C™ port on the PC.

> **TIP**
>
> The recommended network cable for the optimal network environment is CAT5 or higher.
>
> The network (LAN) cable may be connected when the LAN adapter is used.

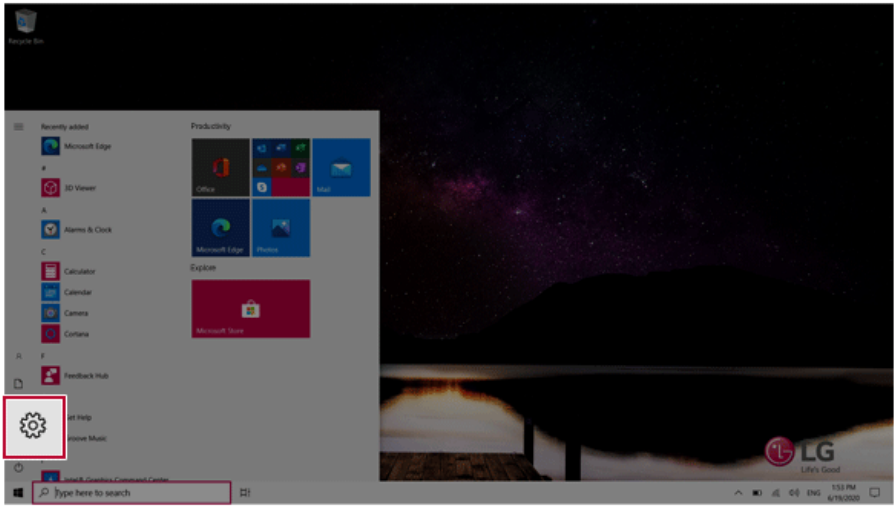


2 Connect the wired LAN cable to the LAN port.

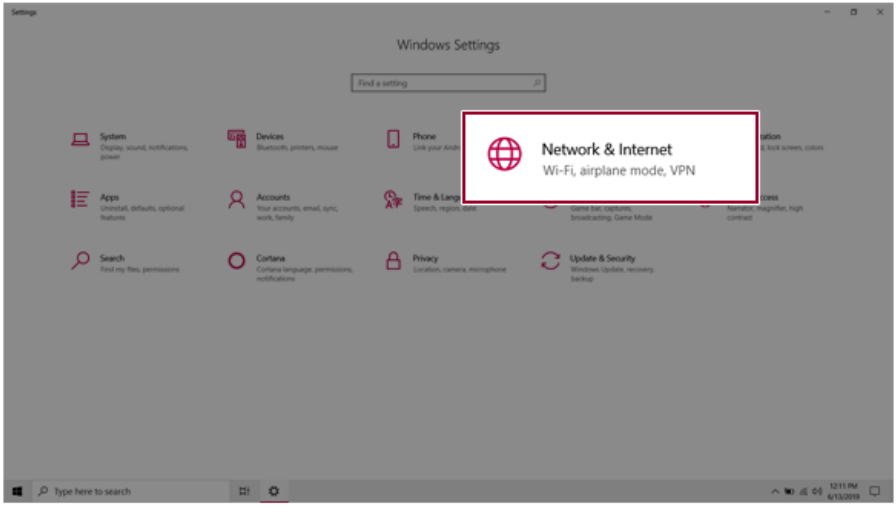
3 Press the [ ] button and select the **[Settings]** menu.

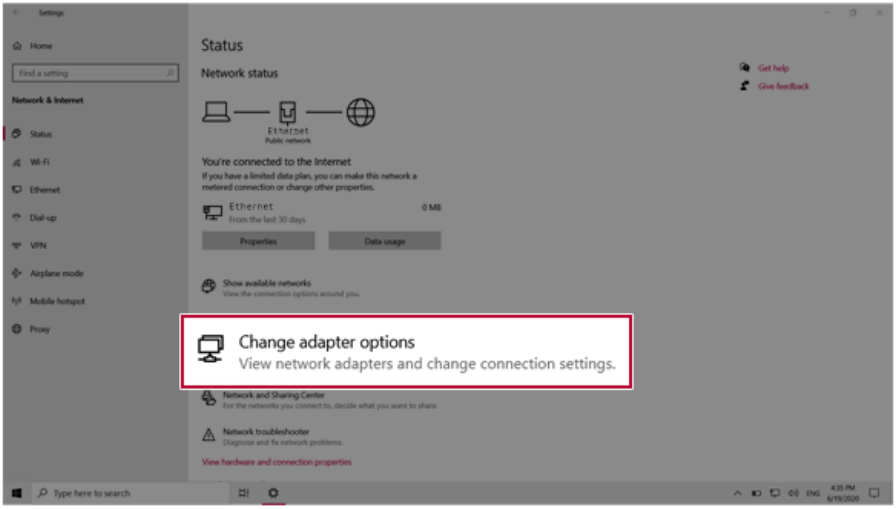
TIP

Press the [ ] key or [Ctrl] + [Esc] to display the Start menu.

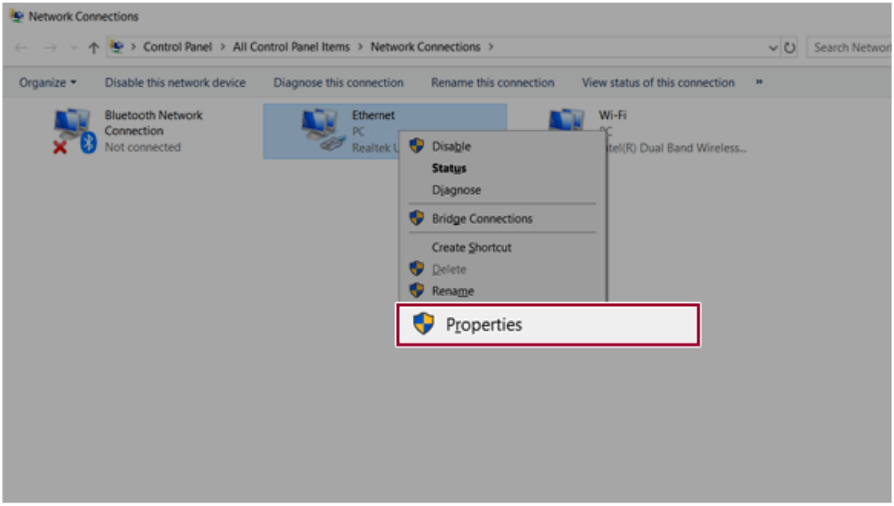


4 Select **[Network & Internet]** > **[Status]** > **[Change adapter options]**.

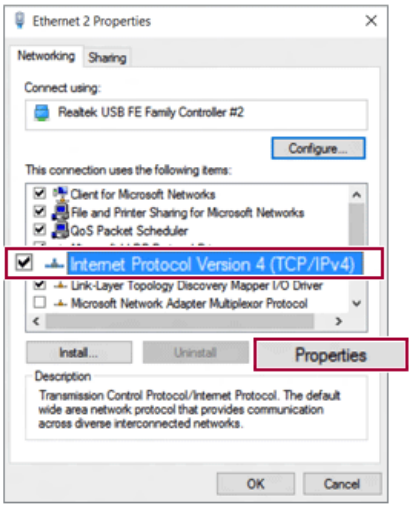




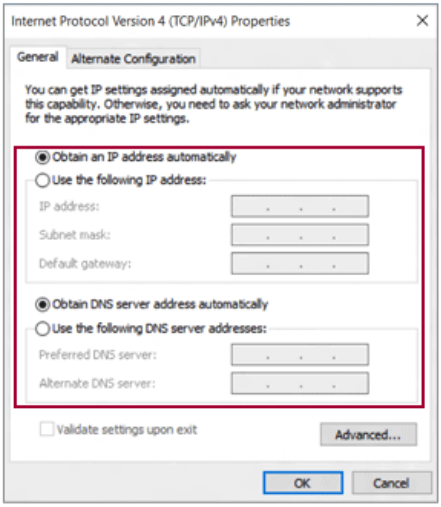
5 Right-click **[Ethernet]** and select the **[Properties]** menu.



6 Select **[Internet Protocol Version 4 (TCP/IPv4)]** and then click **[Properties]**.



7 To use an automatic IP(DHCP), select **[Obtain an IP address automatically]**. If you wish to use a static IP, select **[Use the following IP address]** to enter the address.
Contact the network service provider or administrator to use a static IP.



8 Press **[OK]** to complete the network setup.

9 Click the Web Browser icon to check whether the Internet is operating normally.

Wireless LAN

The wireless network (Wireless LAN) is the network environment that connects a PC with the internet provider or company network through an Access Point (wireless or regular router).

OPTION

Wireless LAN is optional. Hence, it may not be installed in some models.

Turning On/Off **Airplane Mode**

Prior to using the wireless LAN, press [Fn] + [F6] to turn off **Airplane Mode**.

Pressing [Fn] + [F6] keys will turn on or off the **Airplane Mode**. If you are not going to use the product for a while, keep the **Airplane Mode** turned on to reduce the battery power consumption.

Using the Wireless LAN

If an Access Point (wired or wireless router) is in the vicinity of the PC, the wireless LAN can easily be accessed.

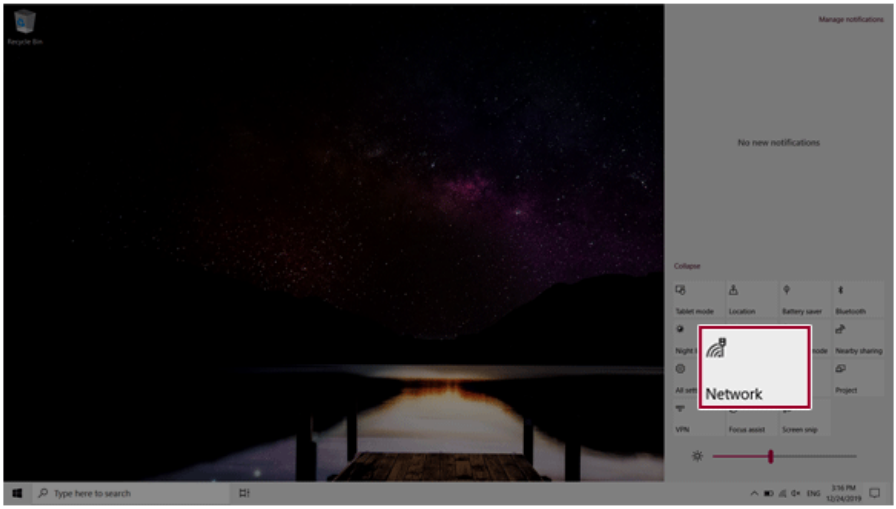
During the search for a wireless network (Wireless LAN), various Access Points may be found according to the location where the PC is used.

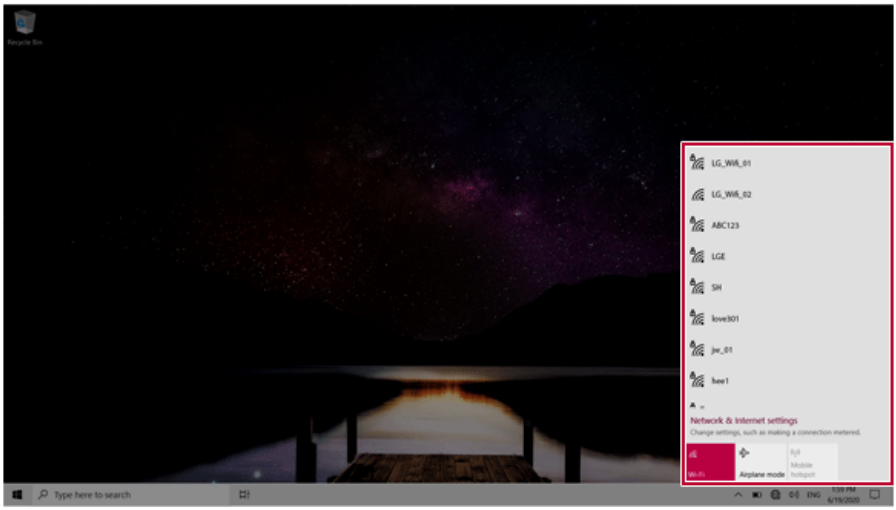
In case there are no accessible wireless networks (Wireless LAN) near the PC, no Access Points may be found.

A password protected Access Point cannot be accessed without the correct password.

1 Press the Action Center [ ] icon on the right side of the taskbar.

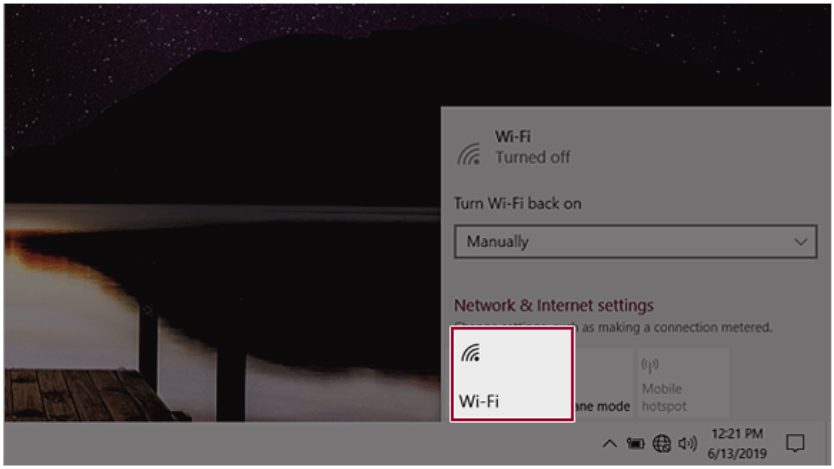
2 Press the **[Network]** tile to search for a nearby Access Point.



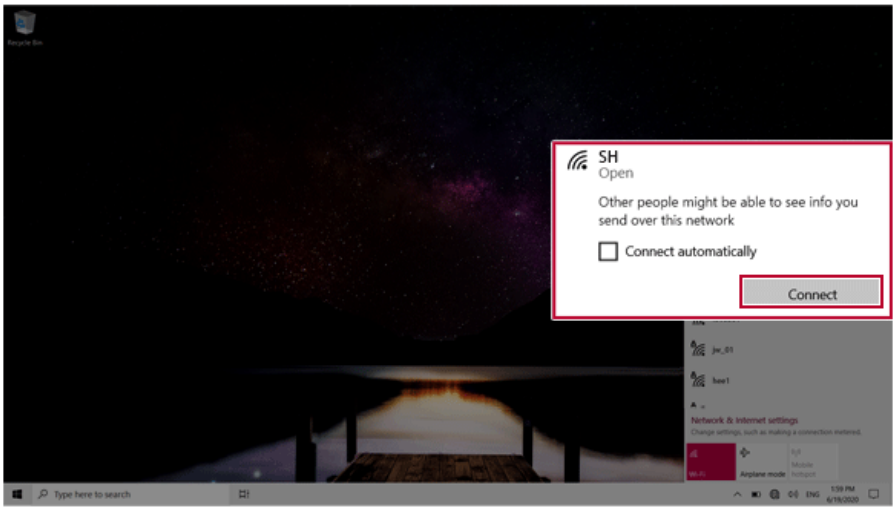


TIP

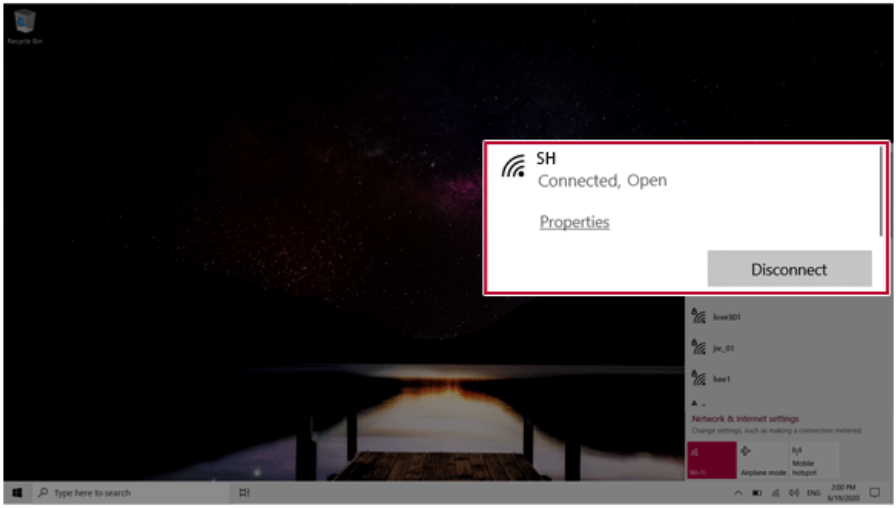
If **Wi-Fi** is turned off, press the **[Wi-Fi]** tile.



3 Select the Access Point you want to connect to and press [Connect].



4 If a connection is established, [Connected] appears below the Access Point name.



5 Click the Web Browser icon to check whether the Internet is operating normally.

Using a Wired/Wireless Router

A wireless / regular router connects several PCs and mobile devices to one internet line and enables the use of internet and the network.

A wireless / regular router has to be bought separately. Refer to the manual provided by the manufacturer for instructions.

Connecting a Wireless or Regular Router

If one internet line is used with a wired / wireless router and several devices are connected, this may result in a slower connection.

In case of a wireless LAN, it is recommended to change the network name and security settings for a more secure connection.

Network speed can differ according to operation environment and specifications.

1. Connect the internet cable of the modem that was provided by your internet provider to the router's WAN port.
2. Connect all devices (PC, IPTV, internet phone, etc.) with a LAN cable to LAN ports 1 to 4 of the router.
   The number of LAN ports can vary for each router model.
3. Please refer to the manual provided by the router manufacturer for setup of the network and internet.

UFS/Micro SD Slot

Checking Available Memory Card

This model supports UFS and Micro SD memory cards.

- **Directly applicable memory cards**

UFS

micro SD

Mounting and Using Memory Card

This product supports one **UFS/Micro SD** slot.

Make sure that the insertion direction of the memory card is correct and push it in until the **UFS** or **Micro SD** memory card is fully seated.

TIP

- When the memory card is formatted, the data stored in the memory card will be deleted. Check whether there are important data before formatting the memory stick.
- To format a memory card, right-click the memory card drive and select Format. When the Format window appears, press Start to continue.
- If the write protection tab of memory card is locked, the user cannot format the memory stick nor write or delete the data.
- **UFS** and **Micro SD** memory cards can be used only as data storage devices and do not support the copyright protection feature.

Removing Memory Card

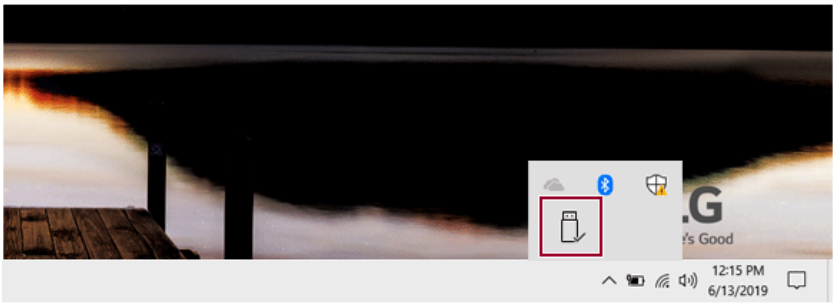
Push the card with your finger to make the card spring out of the slot. Remove the memory card.

TIP

To safely remove a Micro SD card:

The figures herein may differ by language selection and are subject to change without prior notice.

1 Click **Safely Remove Hardware and other Media** icon on the right side of the taskbar.



2 Select **Remove Multi-Card USB Device** to safely remove hardware.

ENGLISH

Using Software

LG Control Center

LG Control Center allows you to easily change the settings of your PC according to your needs.

TIP

The menus displayed in **LG Control Center** and its supported functions may differ depending on the model.

Please update the program to the latest version through **LG Update Center**.

The figures herein are subject to change without prior notice.

Running **LG Control Center**

Select the [ ] button > [LG Software] to run **[LG Control Center]**.

1 **Minimize/Exit Button:** Minimizes the size of the window, or exits the software.

2 **help/info Button:** Runs Help or displays information about the software.

3 **System Settings:** Sets the device settings such as the screen brightness, sound, and external display.

4 **Power Management:** Sets the USB-C™ charging function, battery status and battery life extension function.

5 **Windows Security:** Sets User Account Control settings and Firewall settings.

6 **Color Temperature:** The screen color can be set to cold(with a bluish tint) or warm(with a reddish tint).

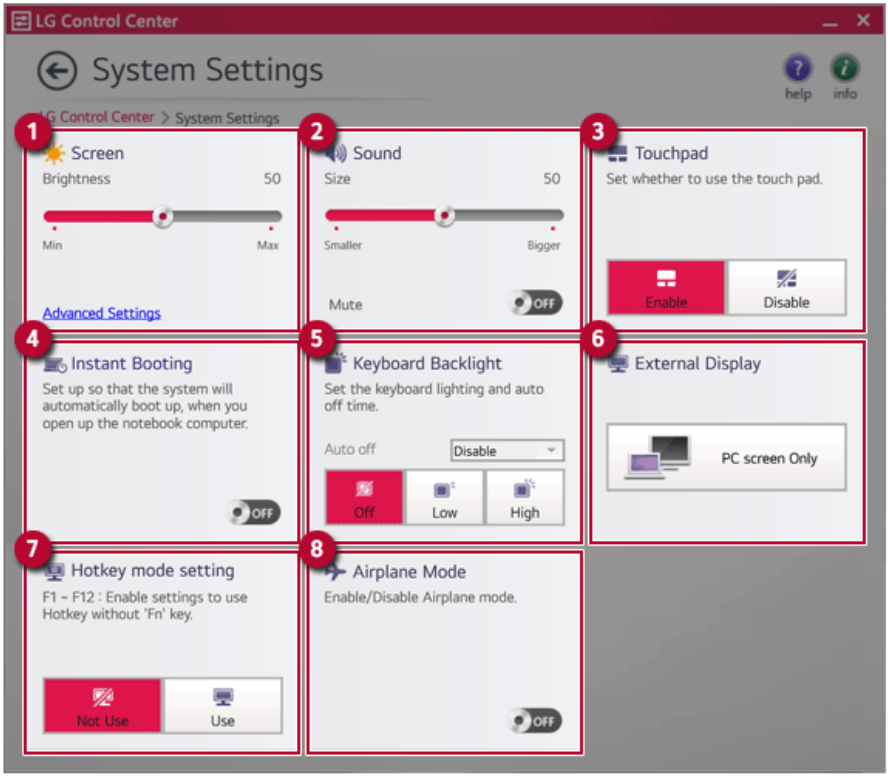
7 **Cooling Mode:** You can set the cooling mode to any of the **Silent**, **Optimal**, and **Performance** modes according to the computer usage environment.

- **Silent:** This mode minimizes the use of the fan when used in a quiet environment. CPU performance may reduce, and it changes to **Optimal Mode** on reboot.
- **Optimal:** This mode optimizes Performance, heating, and noise of the system.
- **Performance:** This mode is suitable for CPU-intensive works. Heating or fan noise may shorten the battery lifetime, and it changes to **Optimal Mode** on reboot.

> CAUTION
>
> When using for a long term, use **Optimal Mode**.

System Settings Screen

You can use this screen to configure various devices in your PC.



1 **Screen:** Allows you to adjust the system brightness. (This function is not supported in a model that does not provide the brightness settings in Windows.)

2 **Sound:** Allows you to adjust the volume of the sound or use the mute function.

3 **Touchpad:** Allows you to set whether to use the touchpad.

4 **Instant Booting:** You can set the system to automatically boot whenever you open the notebook PC.

5 **Keyboard Backlight:** You can set the Keyboard Lighting and off time.

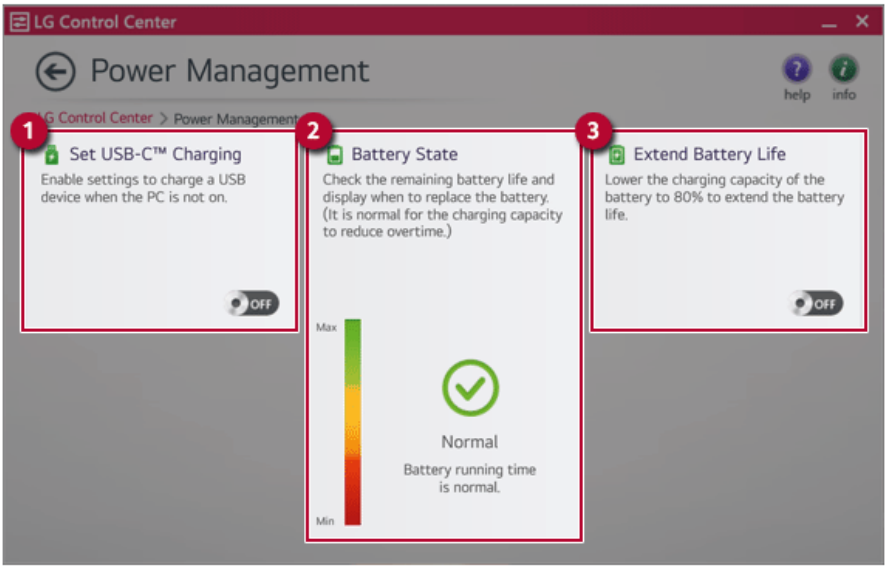
6 **External Display:** Allows you to configure the connection mode of an external display connected to the PC.

7 **Hotkey mode setting:** Allows you to set the hot keys(F1~F12) so that you can use them without pressing the **Fn** key.

8 **Airplane Mode:** Allows you to set the Airplane Mode. (It turns off the wireless LAN.)

Power Management Screen

You can check or change the settings related to PC USB-C™ port or battery.



1 **Set USB-C™ Charging:** Allows you to set the USB port so that you can perform charging using the USB-C™ port even when the PC is turned off.

2 **Battery State:** Allows you to measure the battery lifespan so that you can replace it timely.

3 **Extend Battery Life:** Allows you to increase the battery lifespan by lowering the battery charging level to 80 % of the battery capacity.

Windows Security Screen

You can change the User Account Control and firewall settings in Windows.

1 **User Account Control Settings:** Allows you to change the User Account Control settings in Windows.

2 **Firewall:** Turns on/off the Windows firewall. (It may not work if other vaccine software is installed in the PC.)

FAQ

Q: Battery status displays "Warning".

- The battery is a consumable item and its lifespan may decrease depending on the usage frequency and environment. It is recommended that you visit the LG Electronics service center to have the battery replaced.

LG Update Center

LG Update Center allows you to install various PC drivers, applications and Windows patches easily.

TIP

It may not work properly depending on user preferences (security tools, etc.) and the network status.

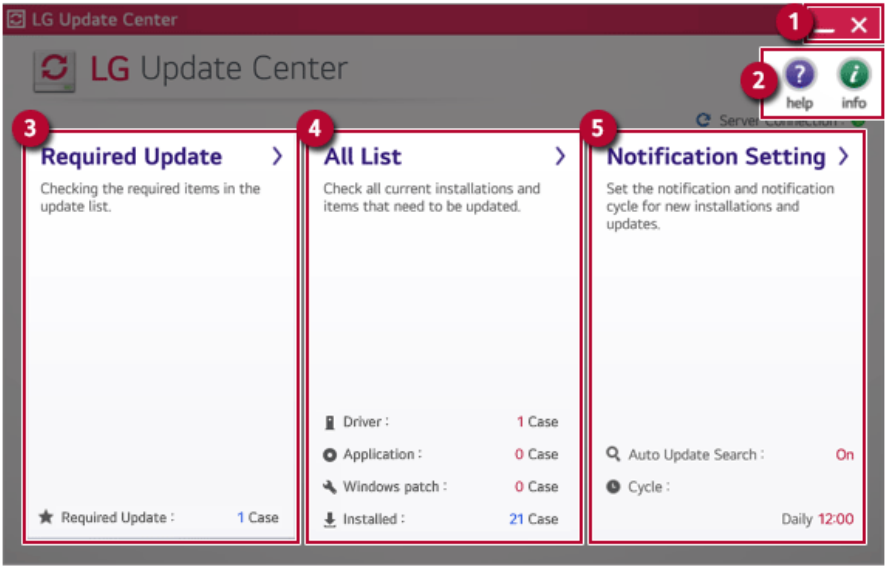
You can use the **LG Update Center** to quickly install the latest drivers, or reinstall any deleted drivers.

Use **LG Update Center** to keep your system current and optimized.

The figures herein are subject to change without prior notice.

Running **LG Update Center**

Select the [ ] button > **[LG Software]** to run **[LG Update Center]**.



1 **Minimize/Exit Button:** Minimizes the size of the window, or exits the software.

2 **help/info Button:** Runs Help or displays information about the software.

3 **Required Update:** Installs critical items that must be applied to the system.

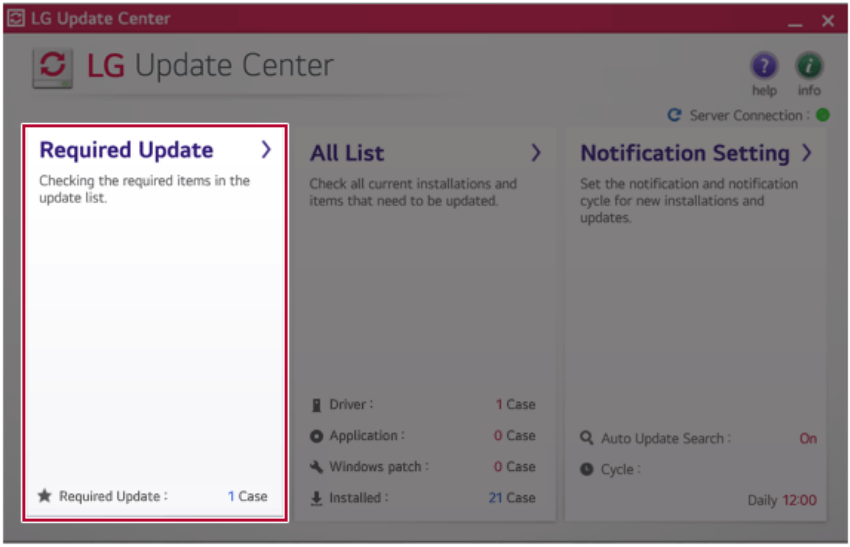
4 **All List:** Displays and installs all required items for the system.

5 **Notification Setting:** Sets up notifications for online updates for installed items.

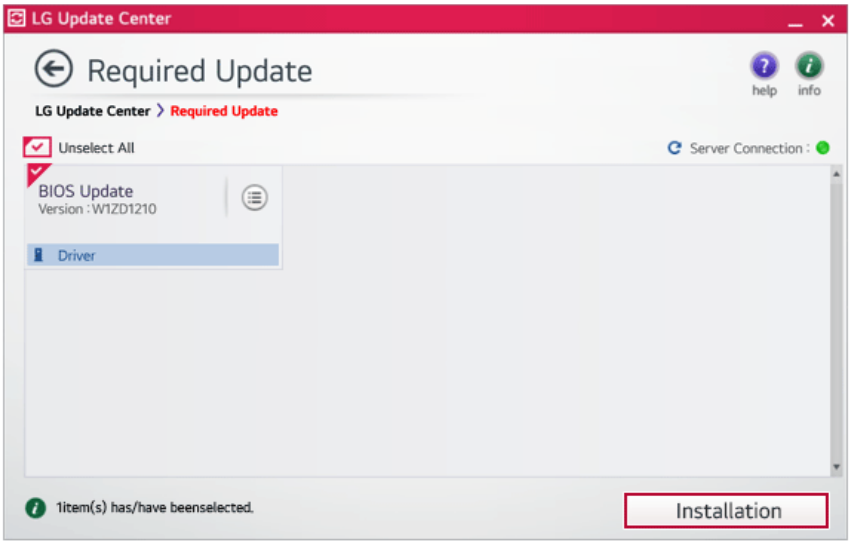
Required Update

You can install essential updates and drivers that are necessary for the system.

1 Select the [Required Update] menu.



2 When the **Required Update** list appears, select the updates to install and press the [Installation] button.



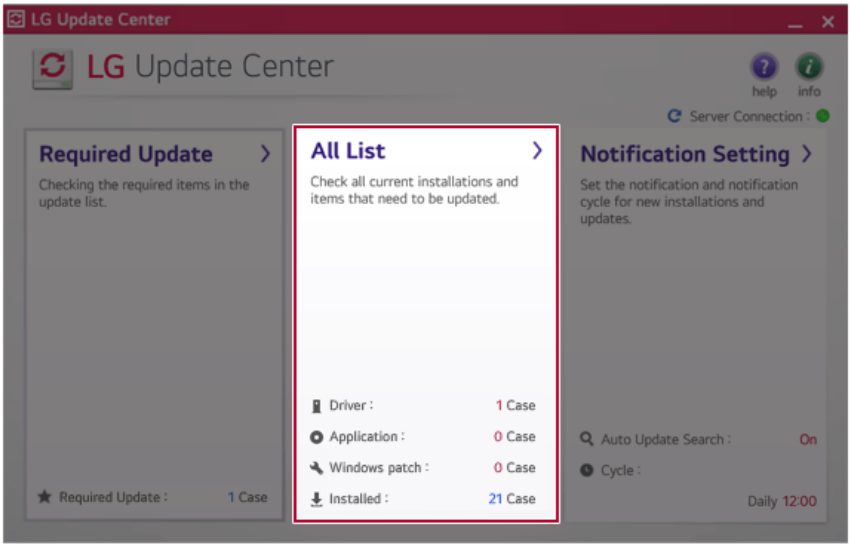
TIP

All items are selected by default.

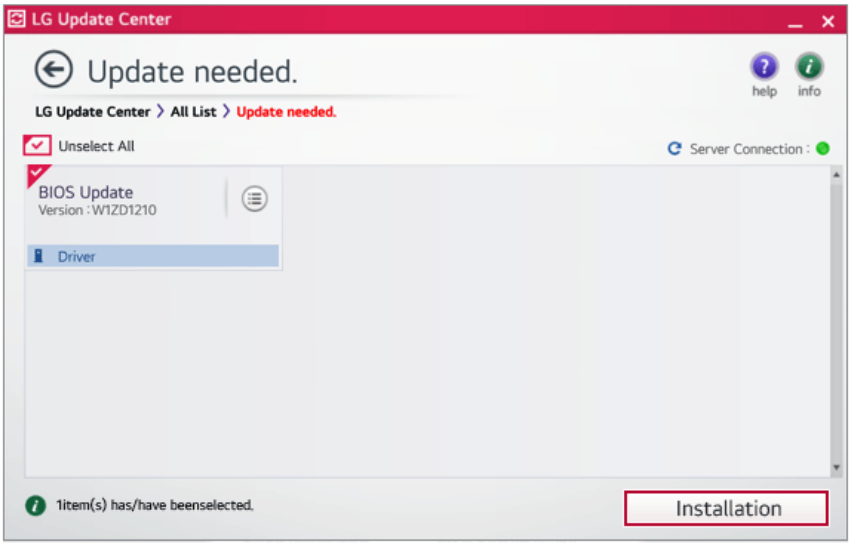
All List

You can install all updates and drivers that can be installed in the system.

1 Select the [All List] > [Update needed] menu item.



2 Select the updates to install and press the [Installation] button.



TIP

All items are selected by default.

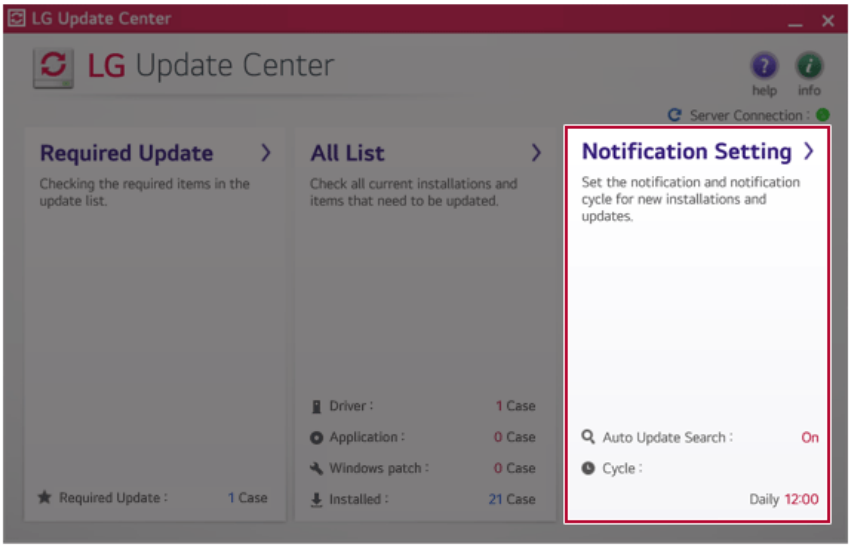
Notification Setting

You can check the critical updates to set whether to display the notifications for update installation.

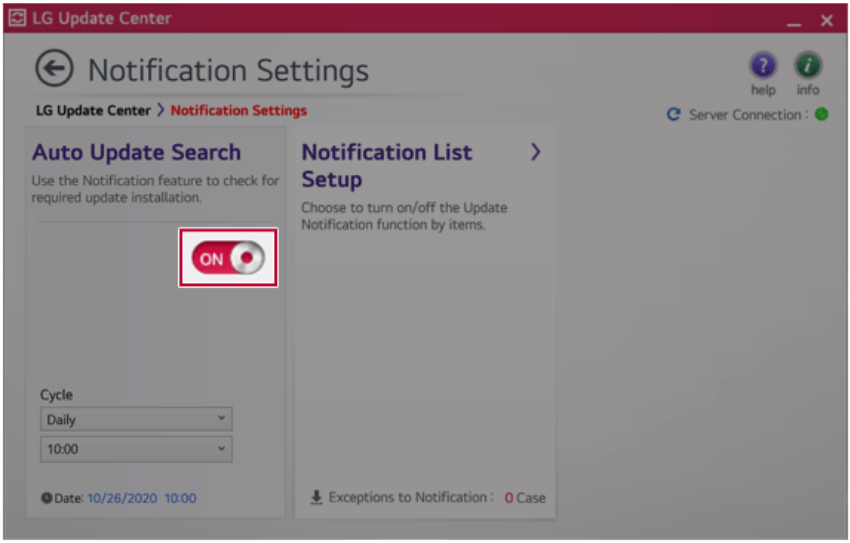
TIP

The Auto Update Search function is set to [ON] by default. If you set it to [OFF], the notifications are not displayed.

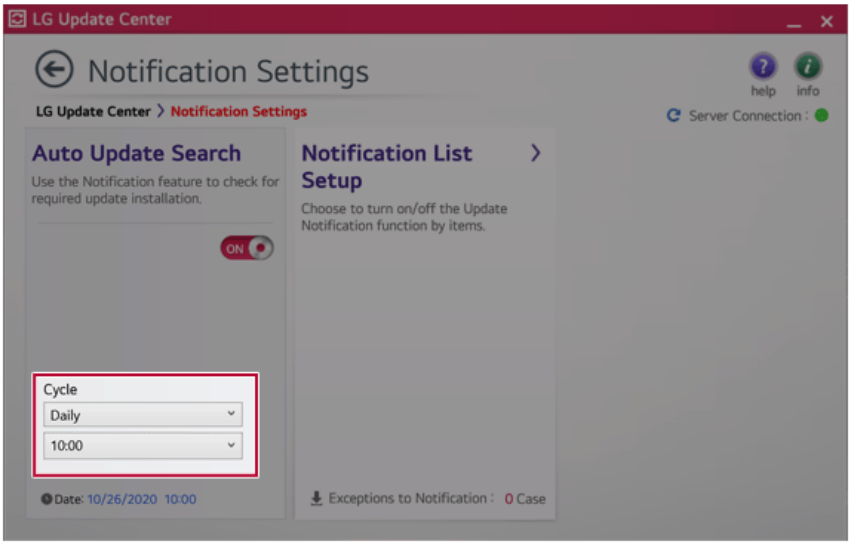
1 Select the [Notification Setting] menu.



2 Set [Auto Update Search] to [ON] or [OFF].



3 Set the [Cycle].



4 Select [Notification List Setup] menu to turn on/off the notification for each item.

FAQ

Q: Is there a way that I can install the drivers and applications easily?

- You can select [Required Update] or [All List] menu in **LG Update Center** to automatically install the drivers and applications that you want.

Q: The server connection status is not displayed in the program.

- Check if your PC is properly connected to the wired or wireless LAN.
- Check if Internet connection works properly.

Q: I want to hide the update notifications.

- Select the [Notification Setting] menu and set the [Auto Update Search] to [OFF].
- Select [Notification List Setup] menu to turn on/off the notification for each item.

Q: How can I update the items that are excluded from the notification list?

- You can also install the items that are excluded from the notification list by using the [Required Update] or [All List] menu.

LG Reader Mode

LG Reader Mode prevents the users from eyestrain and helps them to read the PC screen comfortably by displaying the screen just like a printed paper.

Using **LG Reader Mode**

CAUTION

Using the **Reader Mode** and the **Night light** at the same time can cause color distortion. When you use the **Reader Mode**, turn off the **Night light**.

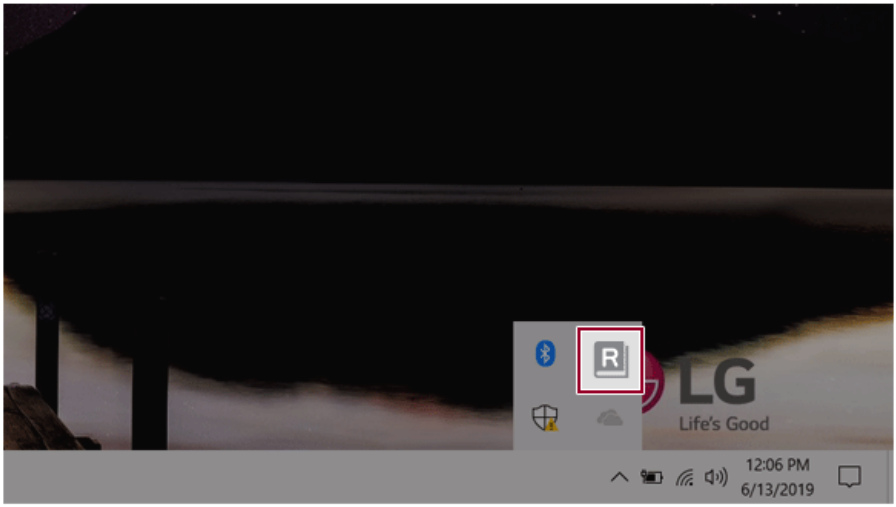
- Press the [ ] icon to the right of the taskbar to run the **Action Center** and press the **[Night light]** tile to turn on/off the **Night light**.

TIP

You can use hot keys to use the **Reader Mode** function more conveniently.

- Press the [Fn] + [F9] keys to switch the PC screen to **reader mode**. Press them again to turn off **reader mode**.

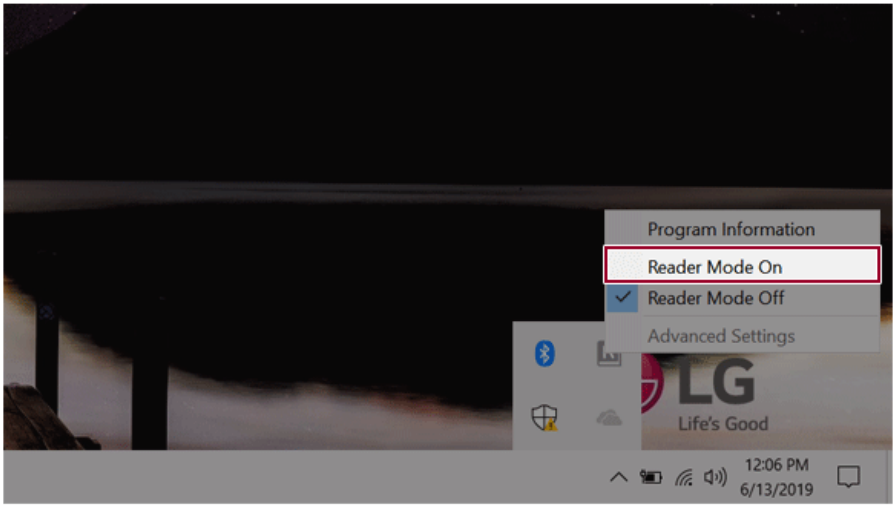
1 Press the [R] icon on the taskbar.



2 If you select the **[Reader Mode On]** menu item, the PC screen switches to **Reader Mode**.

TIP

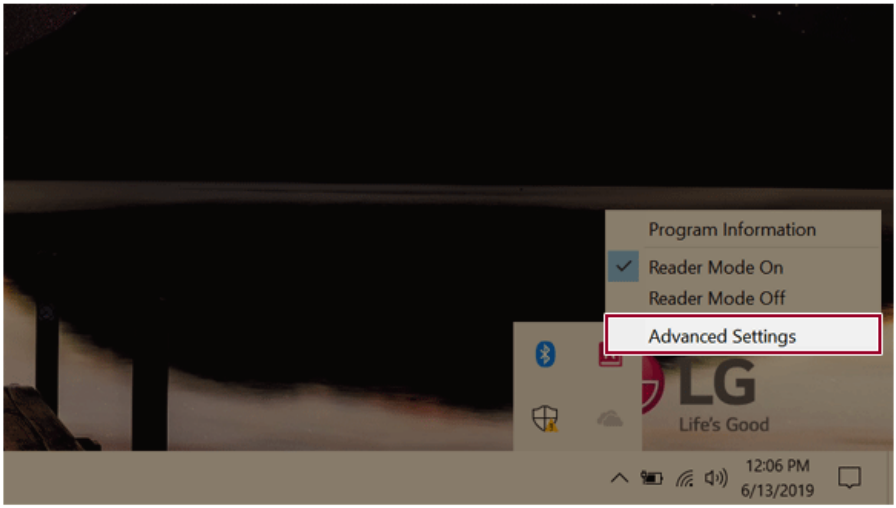
Select **[Reader Mode Off]** to turn off the **reader mode**.



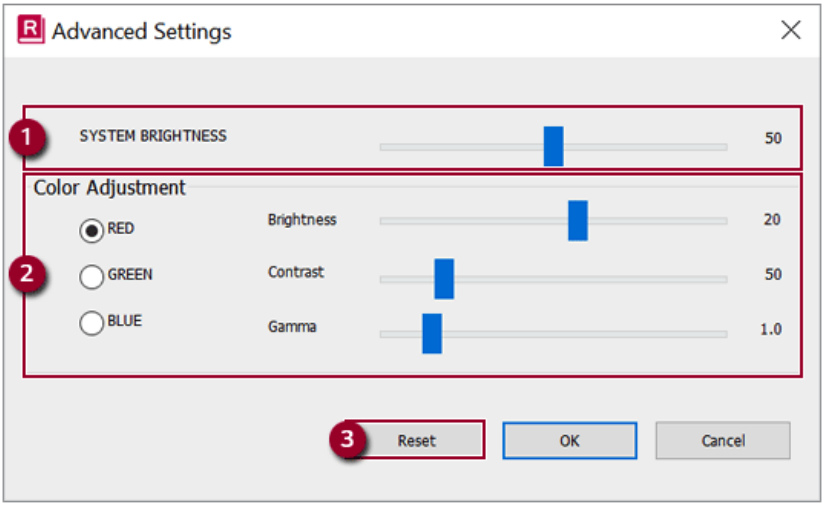
Using **Advanced Settings**

1 Click the icon [R] on the right of the taskbar and select the **[Advanced Settings]** menu item.

> TIP
>
> The **[Advanced Settings]** menu is activated when **Reader Mode** is on.



2 The **[Advanced Settings]** windows appears.



a **System Brightness:** System brightness can be adjusted.

b **Color Adjustment:** Color and its **brightness, contrast and gamma** can be adjusted.

c **Reset:** Settings are reset to the default settings.

DTS:X Ultra

DTS:X Ultra provides rich, sonorous sound when you listen to music, watch videos or play games in the PC.

DTS:X Ultra may not be applied depending on the model.

The figures herein are subject to change without prior notice.

Running Program **DTS:X Ultra**

1 Press the [ ] button to execute **[DTS:X Ultra]**.

2 The default is **Internal Speakers** Mode, and it works in **Headphones** Mode when the earphone is connected.

DTS:X Ultra Tour

1 **Power: DTS:X Ultra** Turns the power on/off.

2 **Automatic:** Provides an environment that is automatically optimized for the running application.

3 **Music:** Provides an optimized environment for music playback.

4 **Voice:** Provides an optimized environment for voice playback.

5 **Movies:** Provides an optimized environment for movie playback.

6 **Strategy, RPG and Shooter:** Provides an optimized environment for each game.

7 **Custom Audio:** Selects the spatial model and adjusts the expansion power, and it is optimized for each setting.

8 **Device:** Allows you to select the connected earphone/headphone. (Provides headphone mode only)

9 **Personalized EQ:** Sets an equalizer optimized for your personal hearing. (Provides headphone mode only)

10 **Graphic EQ:** Sets the equalizer.

TIP

If you want to remove Audio Driver or DTS:X Ultra , remove [DTS:X Ultra] and [Realtek(R) Audio Driver] in the order specified and restart the system.

If you want to reinstall Audio Driver or DTS:X Ultra, remove [DTS:X Ultra] and [Realtek(R) Audio Driver] in the order specified and install [Realtek(R) Audio Driver]. Then restart and install [DTS:X Ultra].

- If you do not remove or install them in the order specified, an error may occur.

Virtoo by LG

Virtoo by LG is software that allows you to connect your smartphone and PC to check your phone's notifications, make phone calls, send and receive text messages, use media, use mirroring, etc. on your PC.

TIP

If **Virtoo by LG** is not installed, connect to the **Microsoft Store** and search for **Virtoo by LG**.

Also, your smartphone must have the **Virtoo by LG** app installed.

You can search for and install the **Virtoo by LG** smartphone app from **Google Play** or **App Store**.

It is recommended to disconnect from the app after using on a public PC.

Virtoo by LG's service may be suspended without prior notice due to the company's circumstances.

The app may not work properly on some smartphone models and upgrading the operating system of a smartphone may prevent some features from working properly.

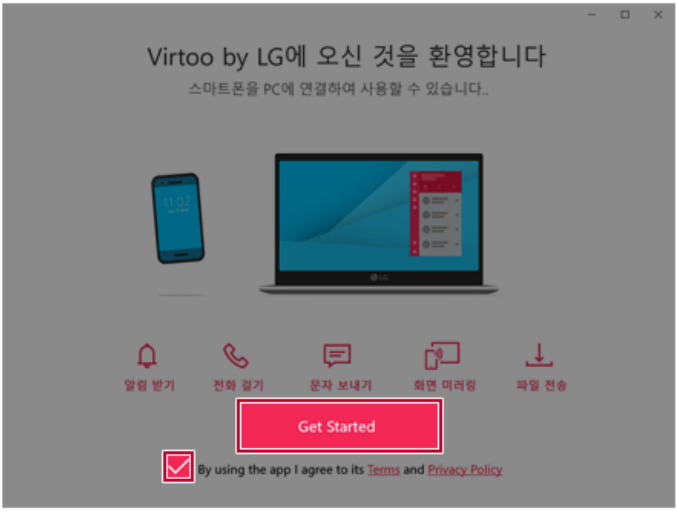
In order to use a dialer with a Microsoft **user's mobile phone**, you need to uninstall **Virtoo by LG** app and driver.

The figures herein are subject to change without prior notice.

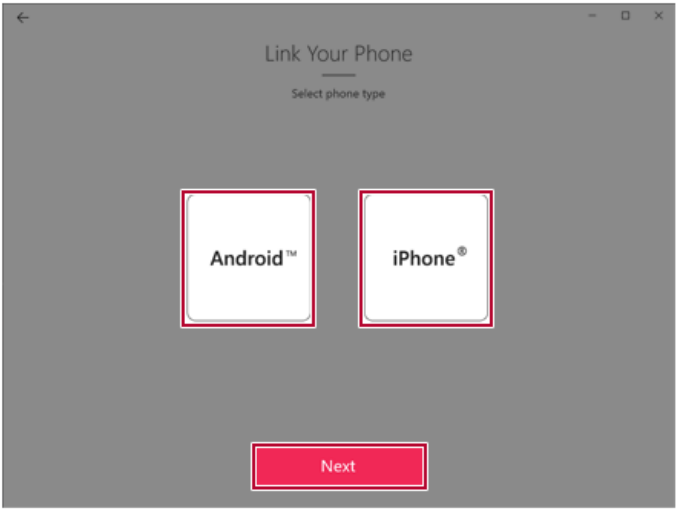
Virtoo by LG Connect

1 Press the [ ] button to run **[Virtoo by LG]**.

2 Once **Virtoo by LG** is executed, agree to the terms and conditions and the privacy policy and click the **[Start]** button.



3 Select [Android] or [iPhone] and then click the [Next] button.



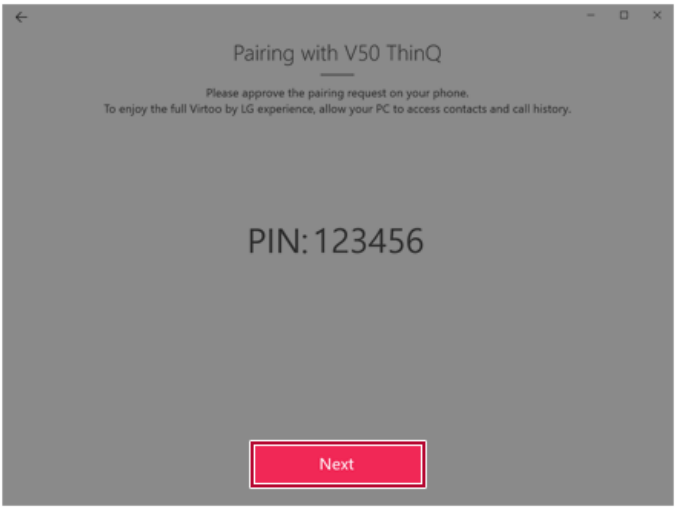
4 Follow the instructions to connect your smartphone and PC.

- **Android**

- **iPhone**

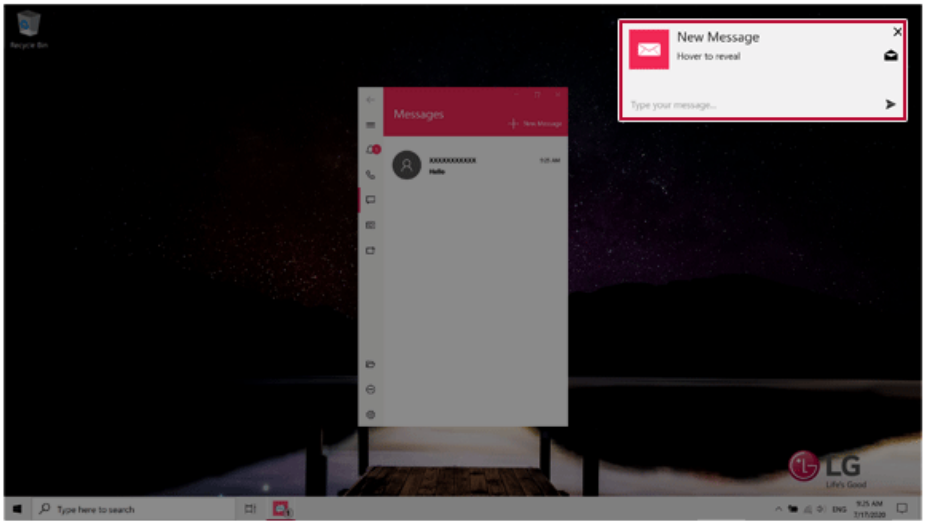
5 When an identical PIN Code appears on both PC and smartphone, tap the **[Register]** or **[Pair]** button on the smartphone.

6 On the PC, click the **[Next]** button to finish the connection.



Displaying Notification Messages

When your smartphone receives a notification, phone call, text message, app notification message, or email, a notification message is displayed on the PC screen.



TIP

If the smartphone notification does not appear on the PC, allow notification access authority of the [Virtoo by LG] app in the smartphone settings.

- The actual menu structure may differ by smartphone model. Refer to the smartphone manual for more information on menu structure.

Virtoo by LG Tour

1 **Notification:** You can check your phone's notifications on the **Virtoo by LG** app screen.

2 **Phone:** Allows you to browse the contacts and send text or make a phone call to the contacts.

3 **Message:** Allows you to send and receive text messages in a conversation format.

4 **Media:** Displays media files (photos, movie clips, music files, and documents) on your smartphone. You can drag a media file to share it between the smartphone and the PC. (iPhone does not support the sharing of music files and documents.)

5 **Mirroring:** Allows you to display the screen of the connected smartphone on your PC and access it from the PC.

TIP

Notes on Input System

LG smartphone: You can use the PC keyboard to type characters. Press the Korean/English key or [Shift]+[Spacebar] to switch languages, according to smartphone model.

iPhone: You can use the PC keyboard to type characters. Press the [ ] icon at the top of the screen to switch Korean/English.

Other smartphones: Display an input window at the top of the screen when you enter texts using a PC keyboard. You can type characters using the input console.

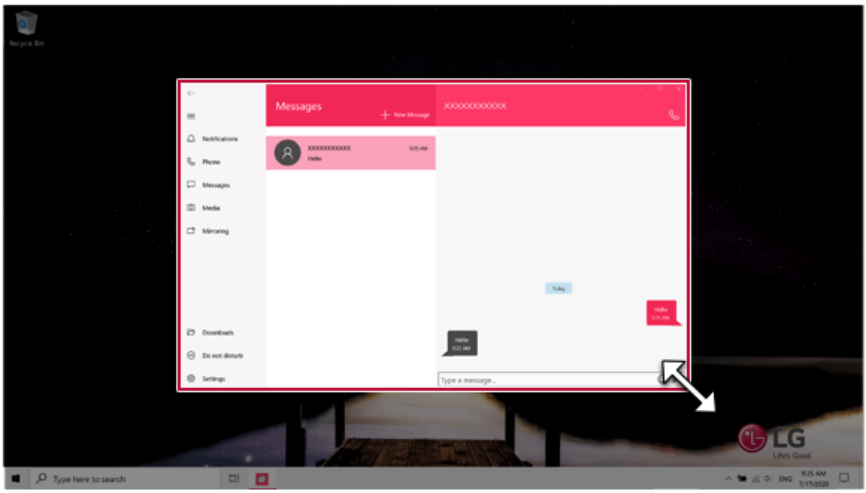
6 **Download:** Opens the download folder of your PC.

7 **Do Not Disturb:** Allows you to set smartphone notifications to be or not to be displayed on your PC. By default, the feature is "Off" (Notifications are displayed).

8 **Settings:** You can change app settings of **Virtoo by LG**.

TIP

You can adjust the window size of the **Virtoo by LG** app on the PC.



Sharing Media Files (Photos, Movie Clips, Music Files, and Documents)

TIP

Only one file can be transferred at a time and it may take a while if the file is big.

If you want to use the Share Media/File function on your iPhone, you need to connect the iPhone and the PC to the same router.

iPhone does not support the sharing of music files and documents.

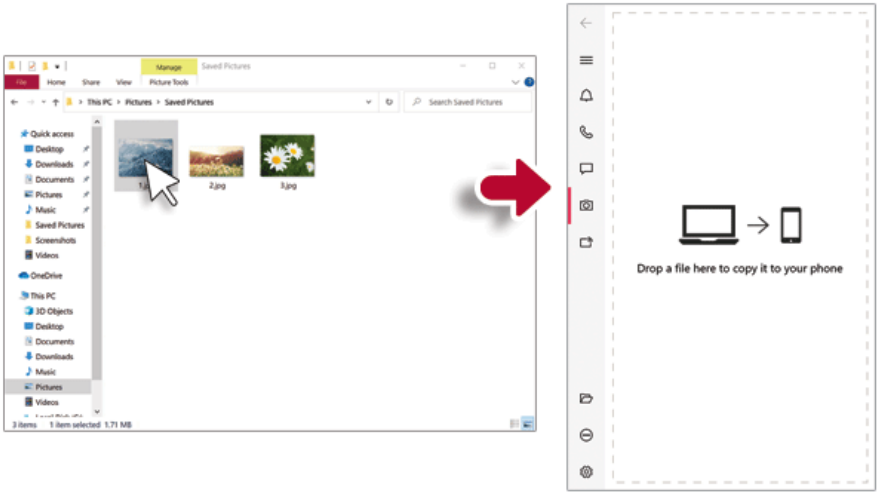
Storing PC Files on Your Smartphone

1 Drag and drop the files to share from your PC to the Media screen.

TIP

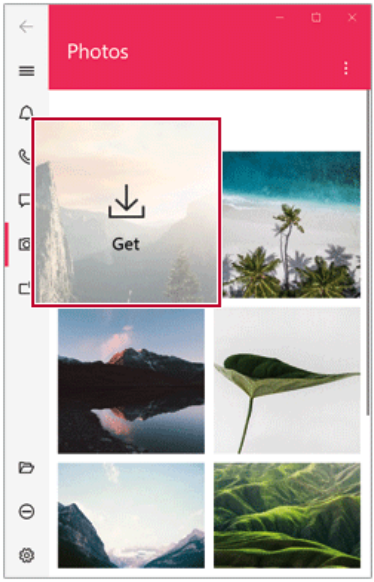
Android: Files sent to the smartphone are classified according to file types and stored in **[Internal Storage]** > **[Virtoo by LG]** > **Images / Videos / Audio / Other** folder.

iPhone: Files sent to the smartphones are saved in the Album.

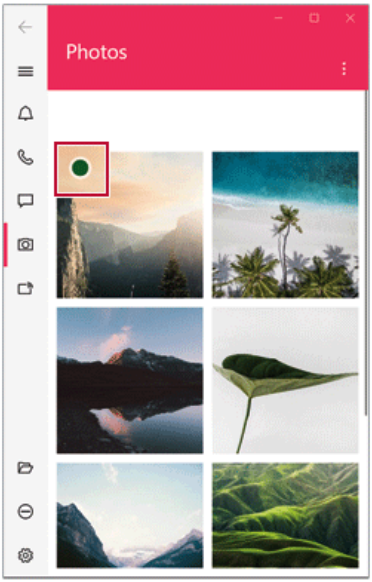


Storing Smartphone Files on Your PC

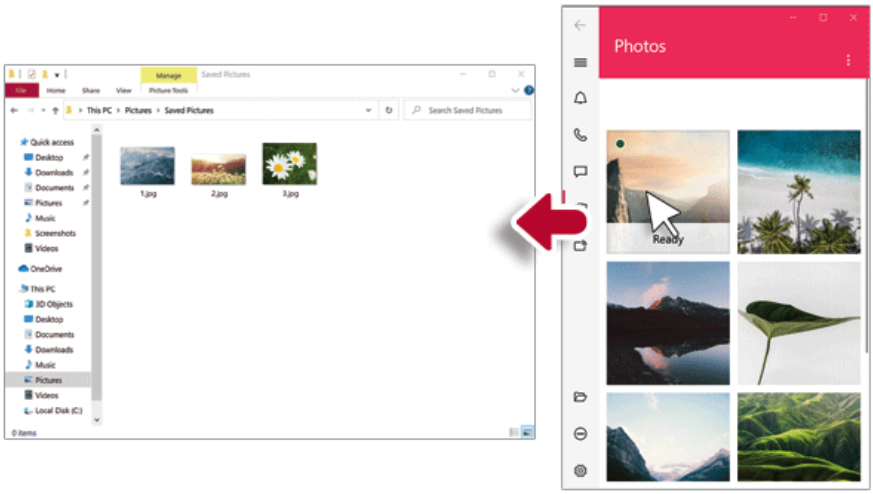
1 Select file to share from the Media screen.



2 Once the files are ready to be sent, a green circle [ ] appears above the selected files.



3 You can check the files that are ready to be sent, or drag and save them to a desired location on the PC.



File Sharing with Mirroring

The smartphone's mirroring must be enabled to use the file sharing feature.

TIP

Only Android smartphones support the file sharing feature through mirroring.

Only one file can be transferred at a time and it may take a while if the file is big.

Depending on the wireless environment, the mirroring screen may suffer a buffering problem or the file transmission speed may be lowered.

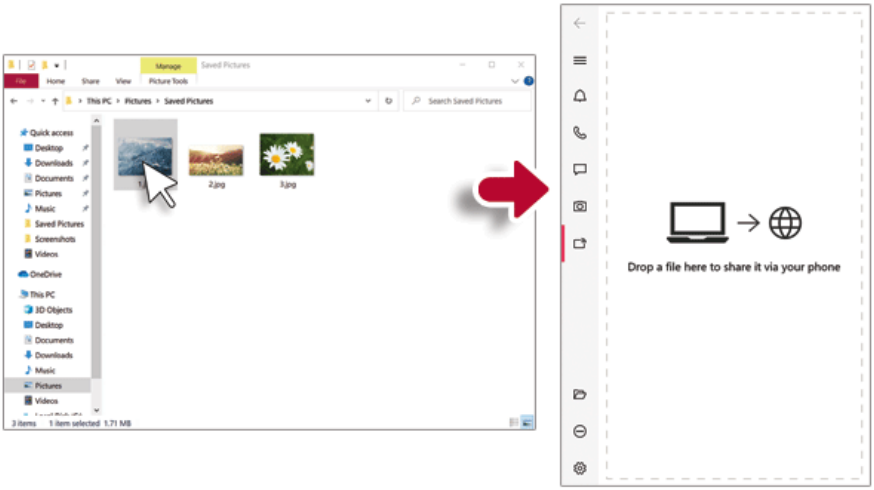
The keyboard and mouse on the PC acts on the smartphone as if Bluetooth keyboard and mouse are connected to it.

Files sent to the smartphone are classified according to file types and stored in **[Internal Storage]** > **[Virtoo by LG]** > **Images / Videos / Audio / Other** folder.

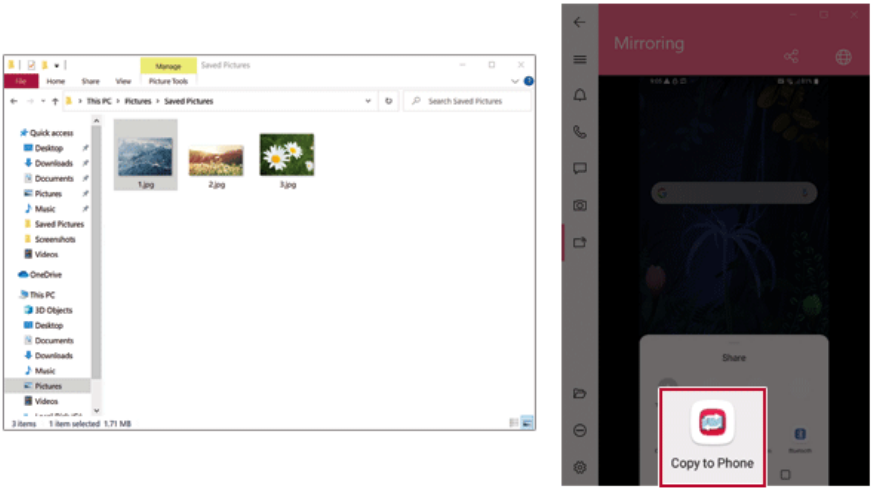
Files sent from your smartphone are stored in the [Download] folder of your PC.

Storing PC Files on Your Smartphone

1 Drag the files to share to the mirroring screen from your PC.



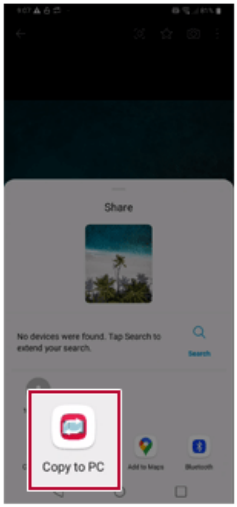
2 Click the [Store on Smartphone] button to store the file(s) on your smartphone or click another app icon to share the file(s) on the app.



Storing Smartphone Files on Your PC

1 Select file(s) on your smartphone using a file browser and then tap the [Share] menu item.

2 Tap the [Store on PC] button to transfer them to your PC.



Virtoo by LG Update

Some functions may not work properly if the version of an app installed on your PC or mobile device (Android or iPhone) is out of date. You can update your PC and mobile device as below:

Please initialize your app after it is updated.

- PC app: In **Microsoft Store**, search for and update the **Virtoo by LG** app.
- Smartphone app: In **Google Play** or **App Store**, search for and update the **Virtoo by LG** app.

LG Power Manager

LG Power Manager allows you to configure the power settings according to the usage environment to manage the battery efficiently.

TIP

LG Power Manager is provided with the UWP app and it can be downloaded again on the **Microsoft Store** if it is deleted. If you want to download the files again, connect to the **Microsoft Store**, search for **LG Power Manager** and install them.

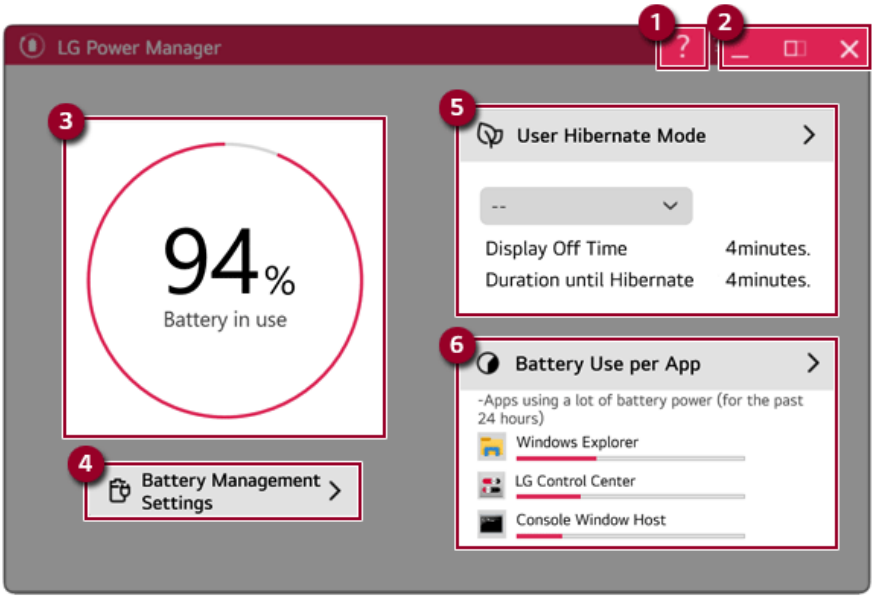
The figures herein are subject to change without prior notice.

Using **LG Power Manager**

Click the [ ] button to launch **[LG Power Manager]**.

TIP

Double-click the [ ] icon on the right side of the taskbar to start the **[LG Power Manager]**.



1 **Help button:** Displays the Help menu.

2 **Minimize/Maximize/Exit button:** Allows you to minimize or maximize the window or exit the program.

3 **Battery Status:** Displays the battery level and battery usage status including power connection.

4 **Battery Management Settings:** Allows you to set a window theme to Dark Mode or set the notification function for battery status.

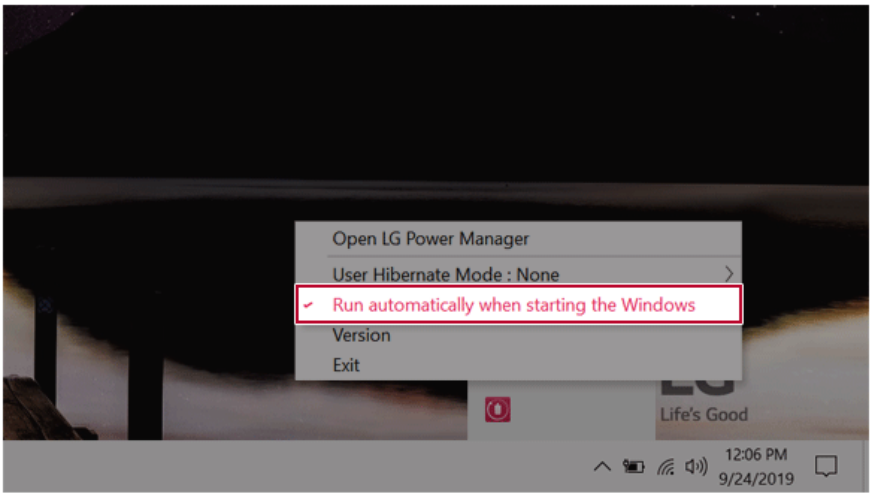
5 **User Hibernate Mode:** Allows you to create a user mode and configure the detailed settings such as Display Off Time and Duration until Hibernate.

6 **Battery Use per App:** Allows you to check the battery use of a running app.
The actual content may differ depending on the Windows OS version and usage environment. For more detailed information, click the menu.

TIP

LG Power Manager is set to run automatically when running Windows.

You can change the Autorun settings by right-clicking the [ ] icon on the right side of the taskbar and selecting the [Run automatically when starting the Windows] menu.



Set custom Hot Keys

Set Custom Hot Keys helps users quickly access the desired app or website.

TIP

Set Custom Hot Keys is available only if **LG On Screen Display 3** is installed.

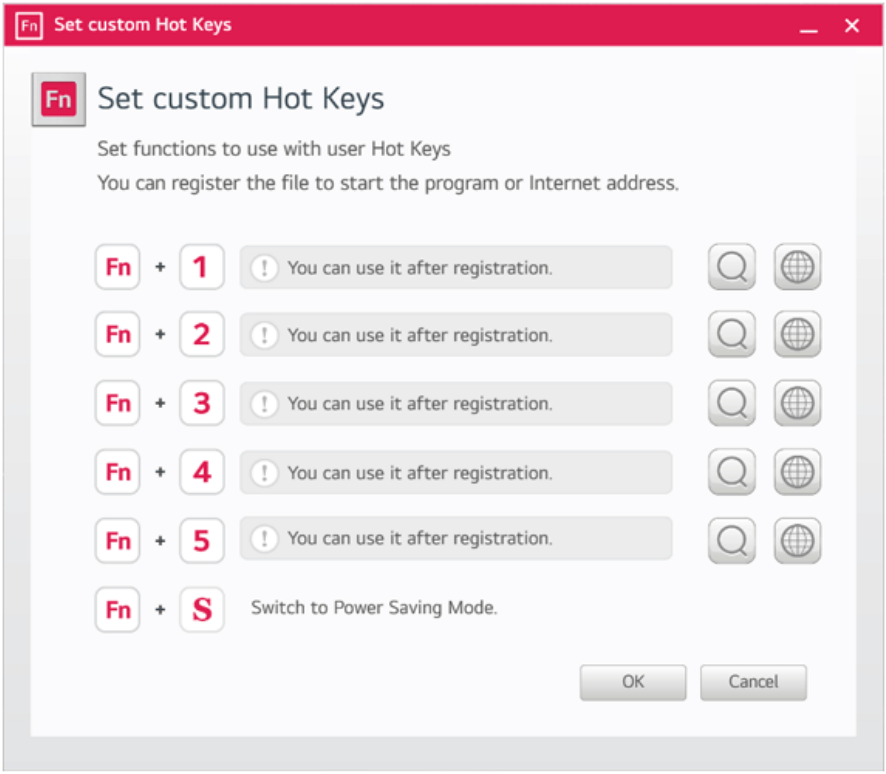
LG On Screen Display 3 may be installed through **LG Update Center**.

Some abnormal program files (exe) and Internet addresses (links) may not be linked.

The figures herein are subject to change without prior notice.

Running **Set Custom Hot Keys**

Double-click the [ ] icon in the lower right corner of the task bar to run **[Set Custom Hot Keys]**.

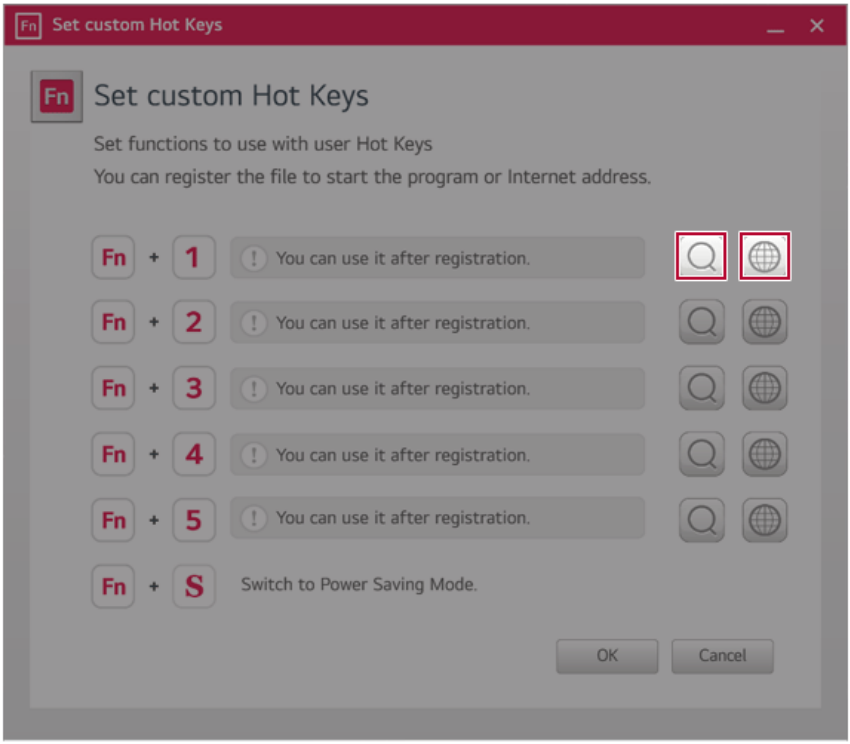


Setting Hot Keys

TIP

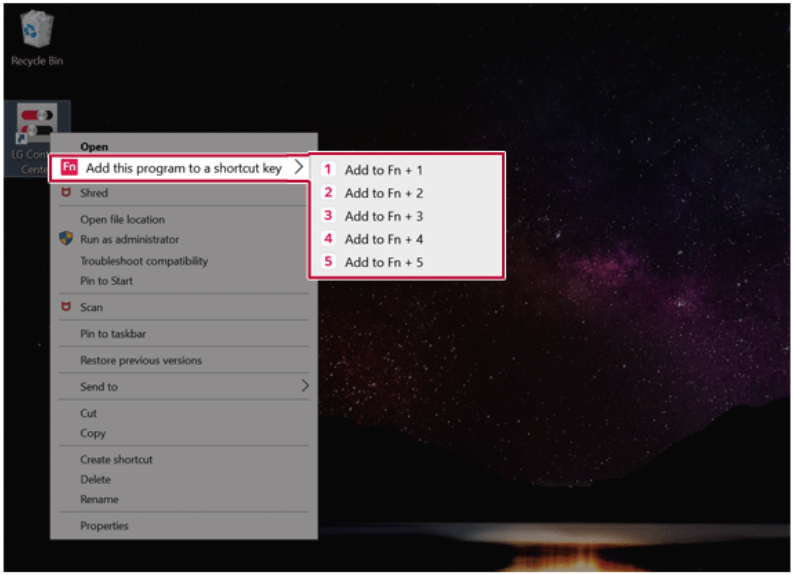
Hot keys can be set from 1 to 5, and the [Fn] + [S] Sleep Mode cannot be changed.

1 On the Hot Keys Settings List, tap the navigation icon [ ] or Internet icon [ ] to register the desired app or Internet address.

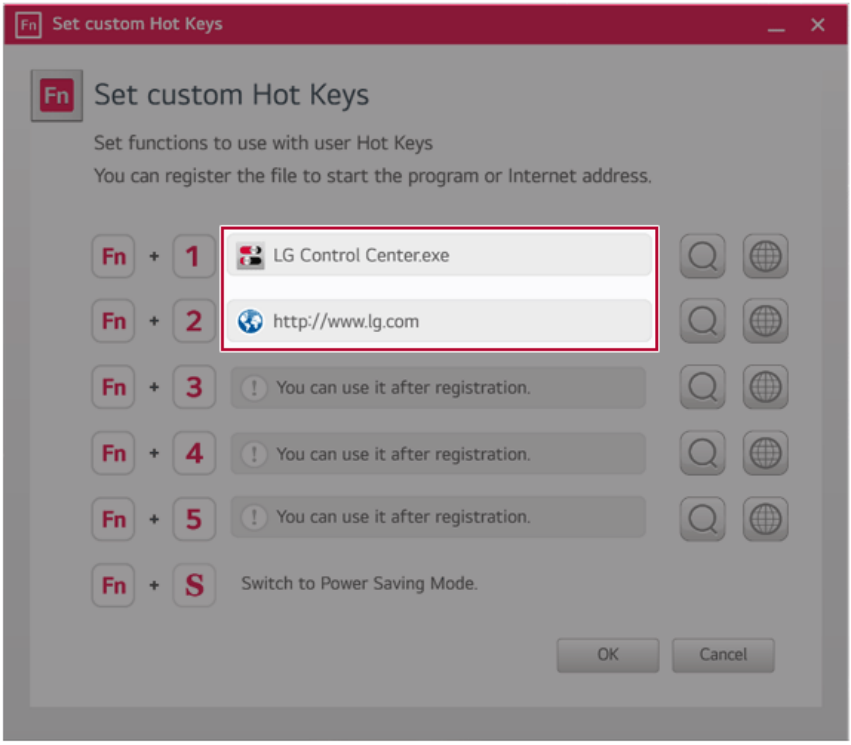


TIP

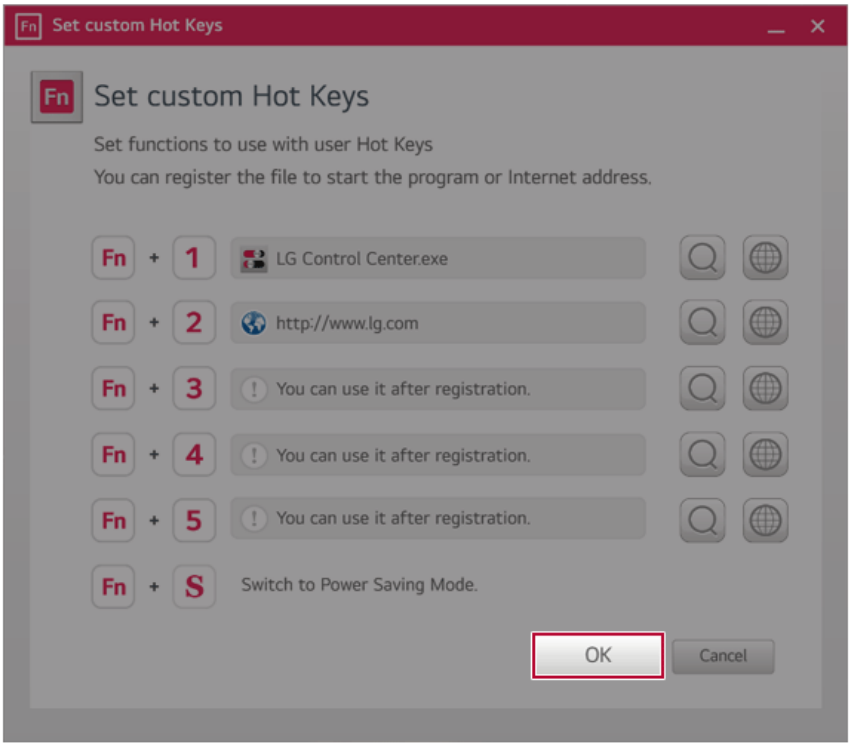
After selecting the app-running file, right-click the mouse and use the [Add this program to a shortcut key] menu to register the app quickly.


Recycle Bin
Open
Add this program to a shortcut key
Shred
Open file location
Run as administrator
Troubleshoot compatibility
Pin to Start
Scan
Pin to taskbar
Restore previous versions
Send to
Cut
Copy
Create shortcut
Delete
Rename
Properties
1 Add to Fn + 1
2 Add to Fn + 2
3 Add to Fn + 3
4 Add to Fn + 4
5 Add to Fn + 5

2 When registration is complete, it is displayed on the settings list.



3 Press [OK] to complete the setup.



ENGLISH

Restoring the System

Restoring the System

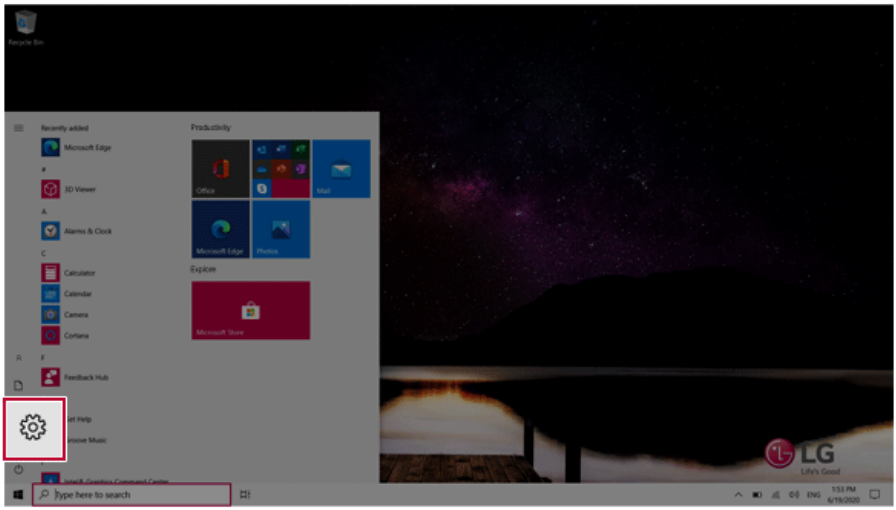
If the system has an error, you can use Windows 10's recovery function to recover or restore the system to its initial pre-purchase state.

CAUTION

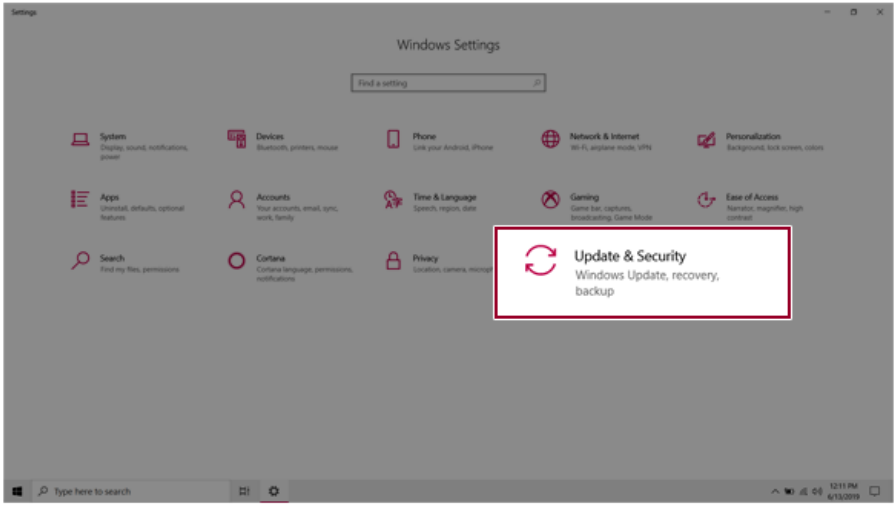
If you have deleted the restoration data in the protected area of the disk, or have arbitrarily installed another operating system, the restore function may not work.

To recover the system, the AC adapter must be connected.

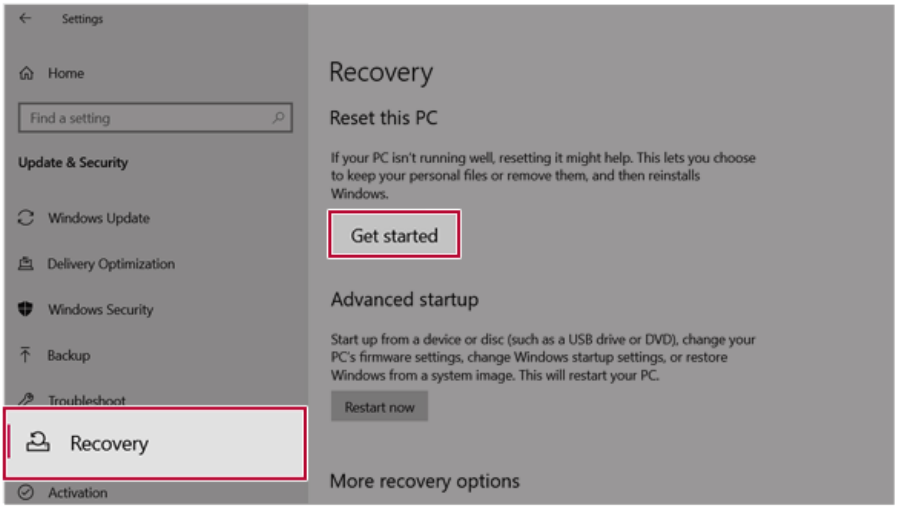
1 Click the [ ] button and select the [Settings] menu.



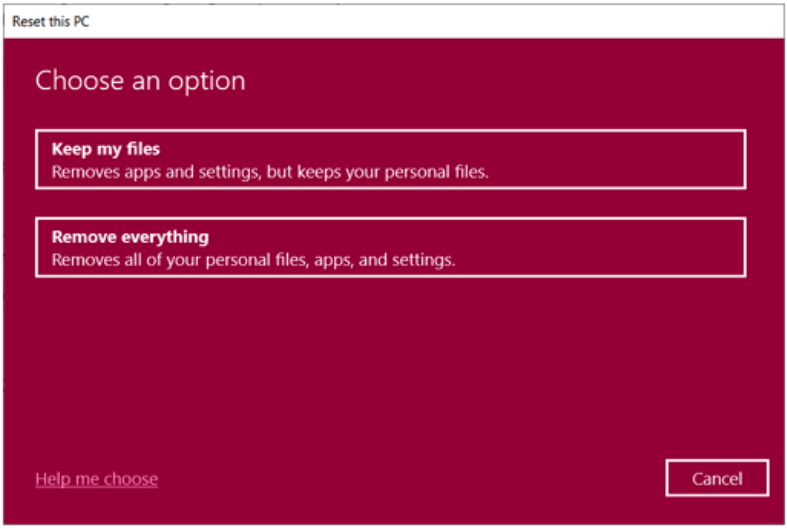
2 When the [Settings] screen appears, select [Update & Security].



3 Select the [Recovery] menu and press [Get started] in the **Reset this PC** menu.



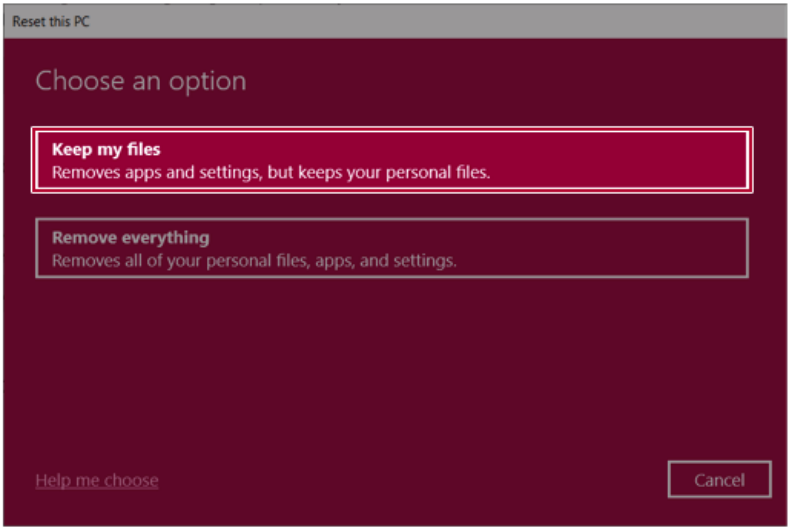
4 If the following option screen appears, select a desired option to proceed with recovery.



Keep My Files

It removes the apps and their settings without loss of personal files.

1 Select [Keep my files].



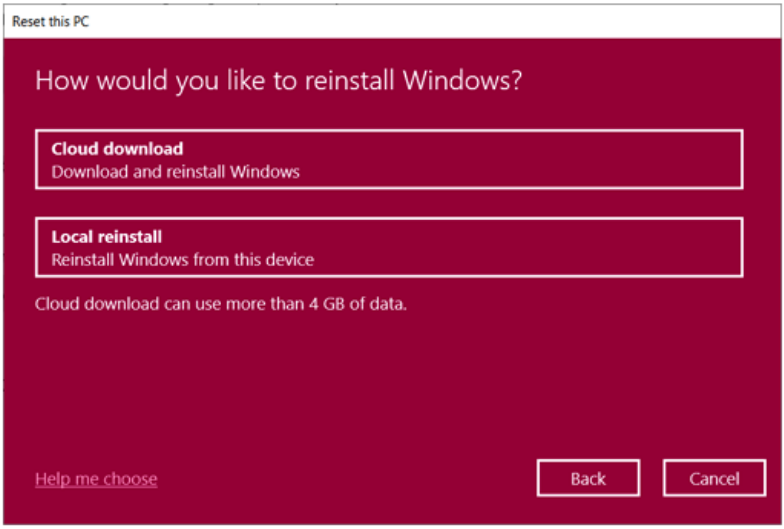
2 Select How to Reinstall Windows.

TIP

If the PC is not connected to the Internet, the screen for selecting Windows installation method does not appear.

[Cloud download] is a menu for downloading **Windows** from **Microsoft** Cloud Server and reinstalling it.

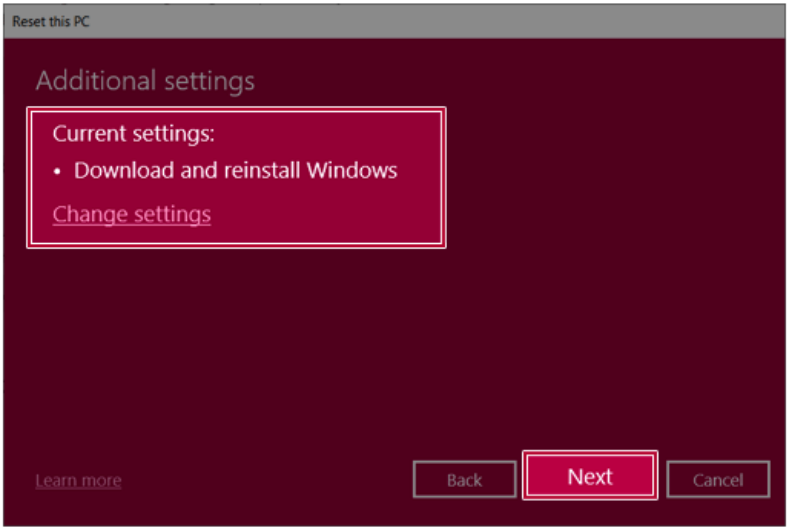
The required time may vary depending on the Internet speed.



3 Check the current settings and click [Next] to perform the recovery according to the instructions.

TIP

If you need to change the settings, click [Change settings] and change the settings.



Remove everythings

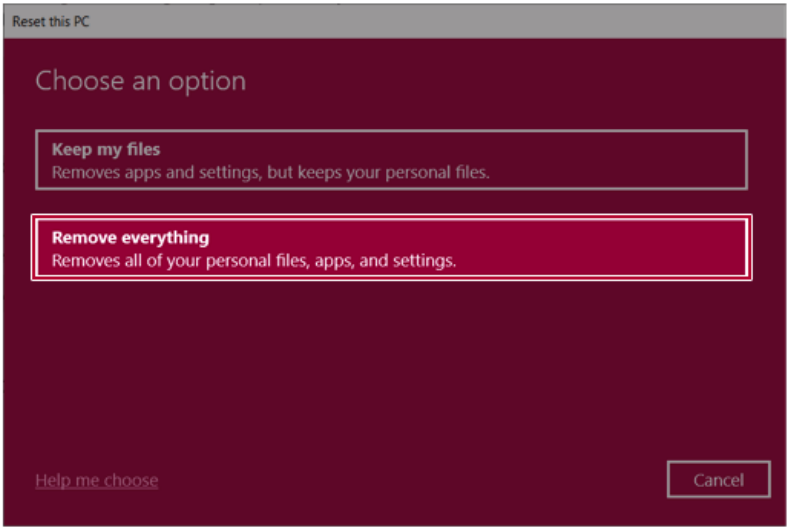
Removes all items from the system and restores the system to its initial pre-purchase state.

CAUTION

All data is lost during the initialization, so you must backup all critical data in advance.

It may take about 5 hours or longer depending on the system conditions.

1 Select [Remove everything].



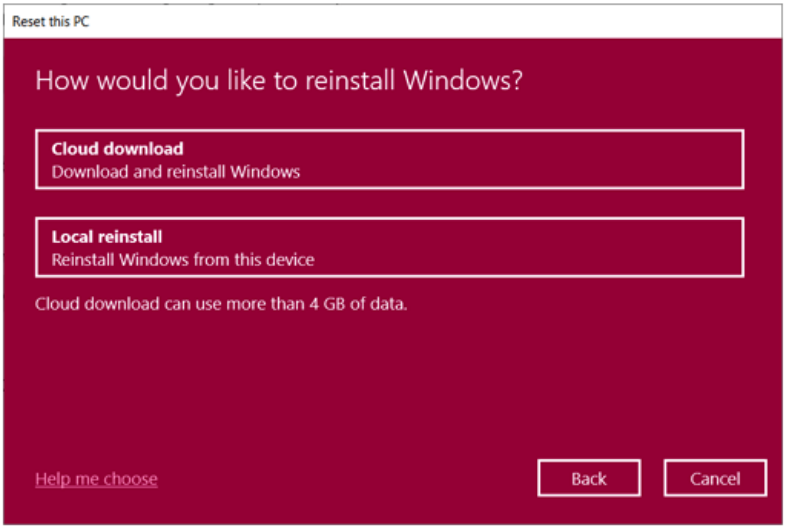
2 Select How to Reinstall Windows.

TIP

If the PC is not connected to the Internet, the screen for selecting Windows installation method does not appear.

[Cloud download] is a menu for downloading **Windows** from **Microsoft** Cloud Server and reinstalling it.

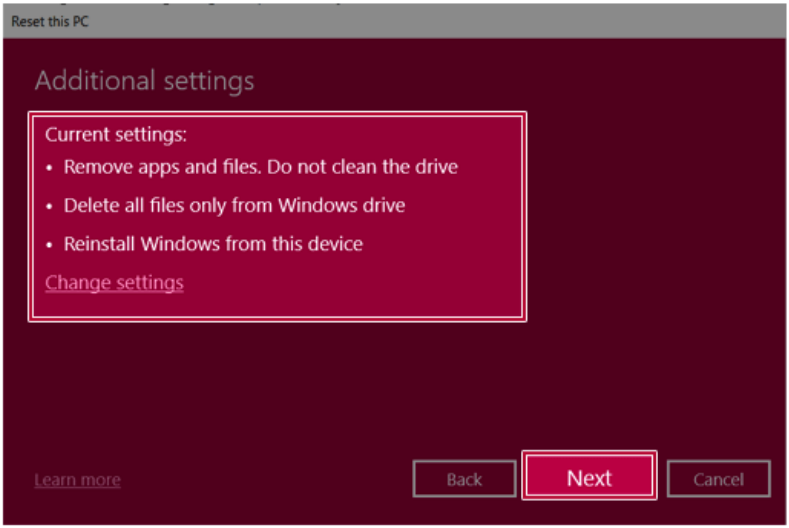
The required time may vary depending on the Internet speed.



3 Check the current settings and click [Next] to perform the recovery according to the instructions.

TIP

If you need to change the settings, click [Change settings] and change the settings.



LG Recovery Center RE

If booting is impossible due to an error with the system, you can recover the system using **LG Recovery Center RE**.

TIP

It is recommended that you create a recovery drive in case a serious error occurs in the system.

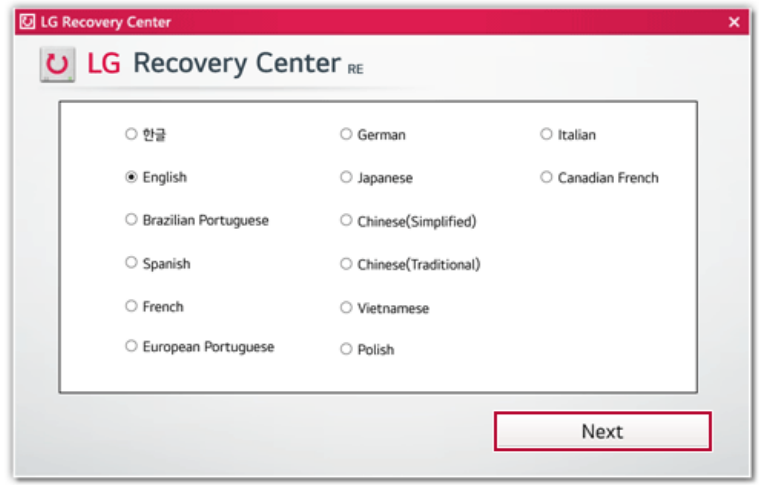
CAUTION

If you have deleted the restoration data in the protected area of the hard disk, the restore function may not work.

All data is lost during the initialization, so you must backup all critical data in advance.

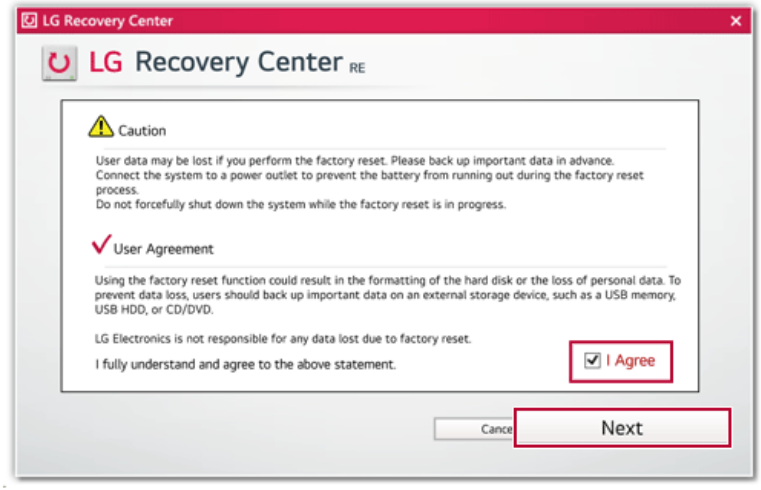
1 Turn on the PC and press [F11].

2 Once **LG Recovery Center RE** is started, select a language and press the [Next] button.

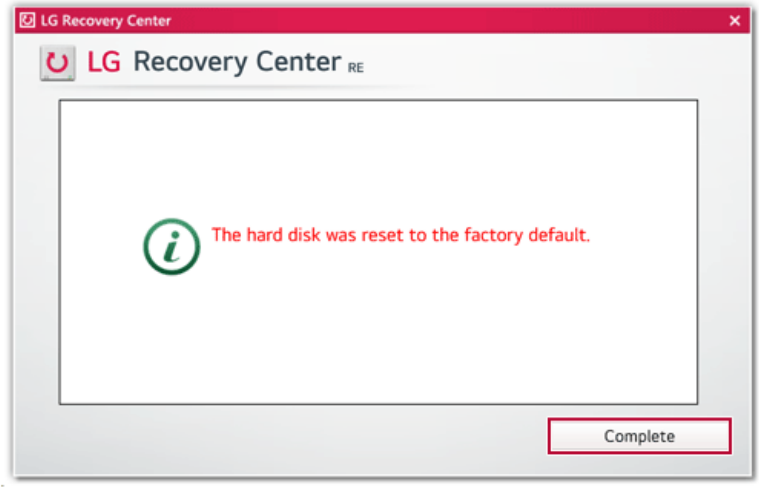


3 When the cautions and user agreement screen appears, check the [I Agree] button and press the [Next] button.

For recovery, the power adapter must be connected. Connect the system power and then recover the system.



4 When factory reset is complete, press the [Complete] button to restart the system.



Recovery Drive

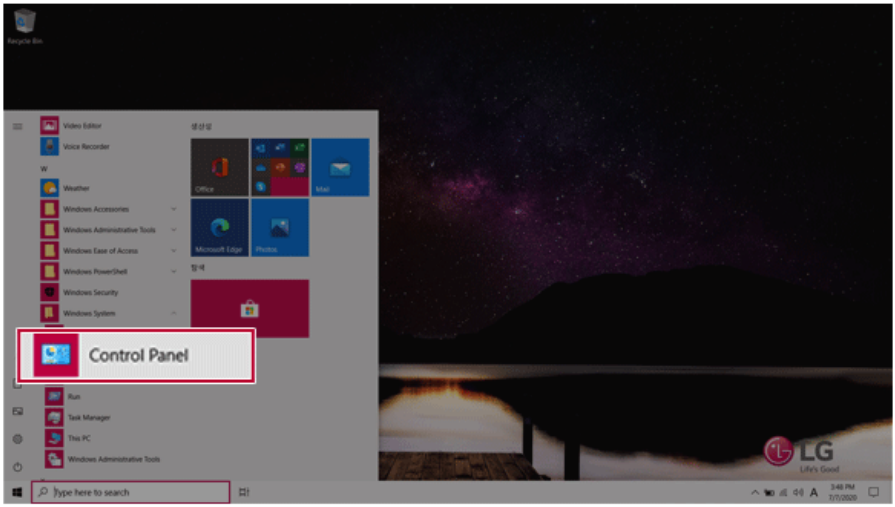
Creating Recovery Drive

Create a recovery drive in case **LG Recovery Center RE** is unable to recover the system.

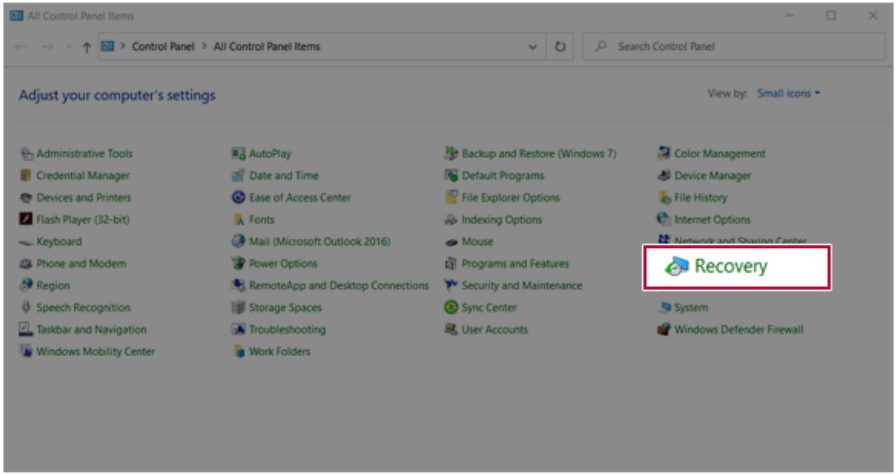
TIP

This process may delete all data on the storage device designated as the recovery drive. Make sure to back up all important data in advance.

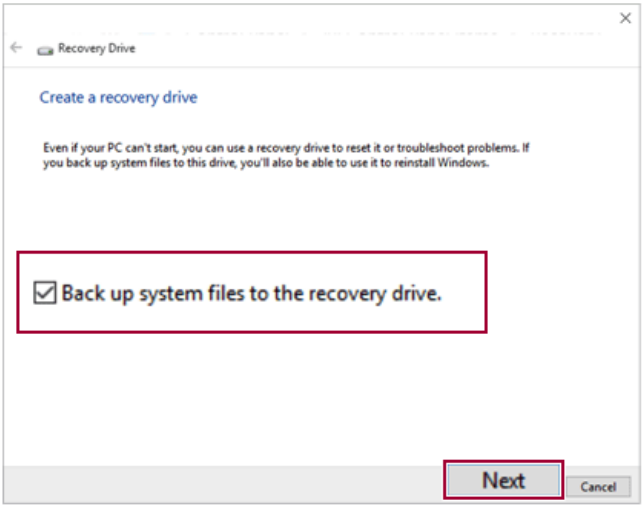
1 Press the [ ] > **[Windows System]** button and run **[Control Panel]**.



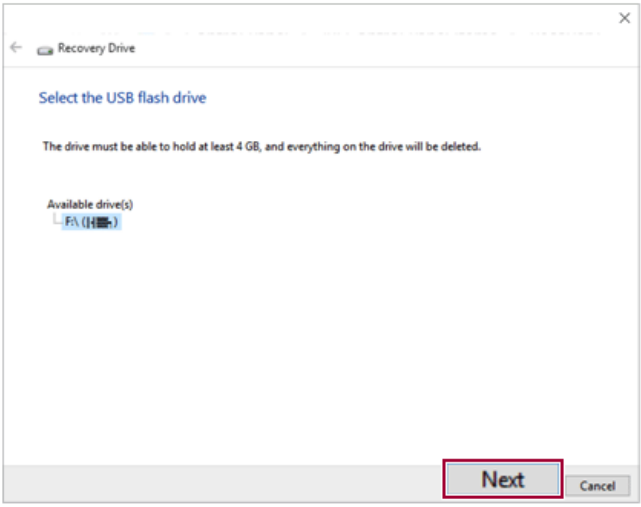
2 Press [Recovery] in the control panel and select [Create a recovery drive].



3 When the recovery drive creation screen appears, check [Back up system files to the recovery drive] and press the [Next] button.



4 Select the USB flash drive to use and press [Next] to create a recovery drive.



5 Once the storage device is ready, press [Finish] to complete the creation of the recovery drive.

Using Recovery Drive

In case **LG Recovery Center RE** is unable to recover the system, you can use the recovery drive to recover the system.

> CAUTION
> All data may be lost depending on the user settings during the system recovery.

1 Connect the recovery drive to the USB port of the PC.
2 Turn on the PC and press [F10] several times.
3 When the screen for selecting the boot device appears, select the connected recovery drive and press [Enter].
4 Set the language and select the [Troubleshooting] menu.
5 Select the item you want and recover the system by following the instructions.

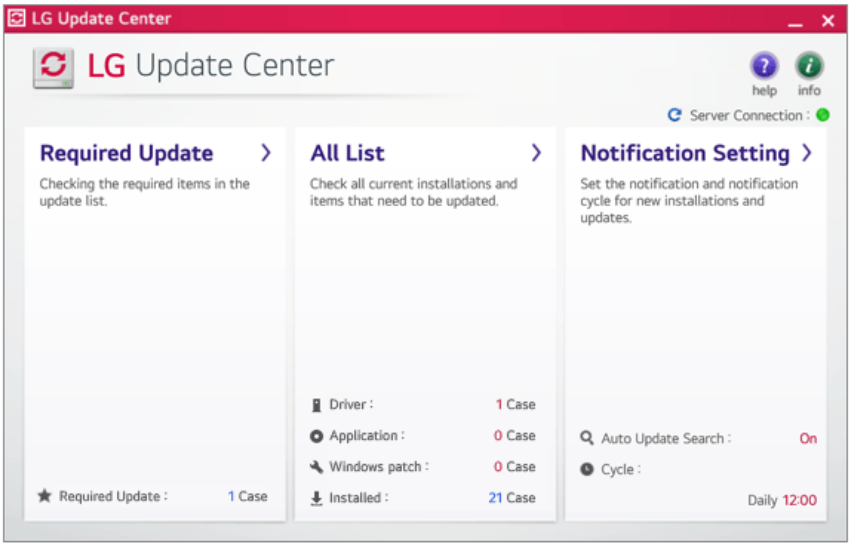
Setup and Upgrade

Installing the Driver

The figures herein may differ by language selection and are subject to change without prior notice.

Using **LG Update Center** to install the Driver

1 Select the [ ] button > [LG Software] to run **[LG Update Center]**.



2 Select **[Required Update]** or **[All List]** to install the driver.

TIP

You can use the **LG Update Center** to quickly install the latest drivers, or reinstall any deleted drivers.

Use **LG Update Center** to keep your system current and optimized.

How to Download **LG Update Center**

You can install **LG Update Center** by downloading it from the LG Electronics Website (www.lg.com).

Starting System Setup

System setup means storing the hardware configuration information of the PC in the flash memory. Through system setup, the PC retrieves various information including current date and time, memory capacity, and hard disk capacity and type.

You setup the system when you set passwords, change the boot order, and add new peripheral devices to the machine.

Items displayed on the Setup screen may differ by model type and specification.

- Refer to .
- Refer to .
- Refer to .

TIP

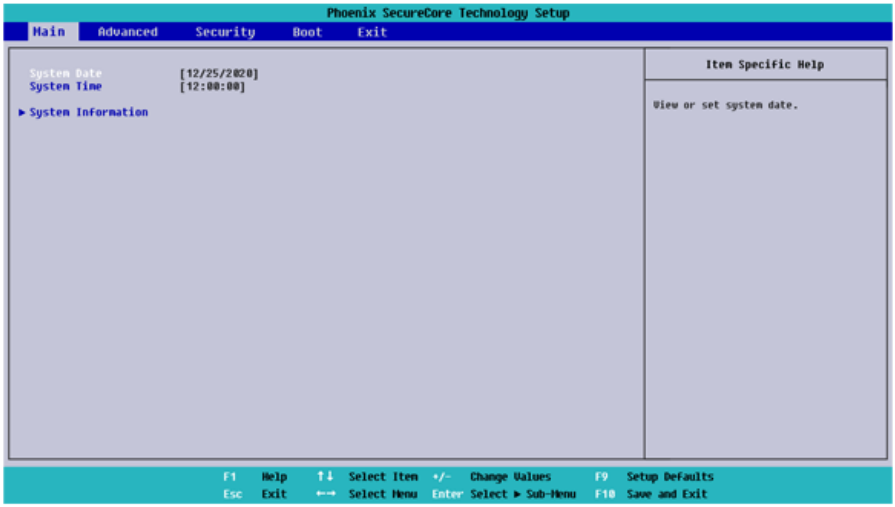
To use the system setup (F2), booting device selection (F10), or recovery (F11), you need to restart the system (click [Restart] in the system power menu) and then immediately press the corresponding function key due to the fast booting speed.

CAUTION

- Do not change the system setup unless necessary. Incorrect system setup may cause errors during system operation. Use caution when changing the system setup.
- For performance improvement, the system setup menu configuration and the initial setup status may be changed and may become different from images included in the user manual.

1 Reboot the system and press [F2].

2 In a few moments, the system setup screen appears.



Keys Used in System Setup

Keys	Function
Enter	Selects the current item.
Esc	To deselect the current item or to move to the previous screen.
▲, ▼, ◄, ► (Arrow keys)	Moves the cursor up, down, left, and right.
+, —	Increases or decreases the item value.
F10	Saves the new settings or exits the system setup.

Setting the Password

This process is to set a password so that other people cannot use the PC or change the settings.

The user can set a password while booting the system or setting up the system.

The model in the example can differ from actual models and is subject to change for performance improvements, without prior notice.

CAUTION

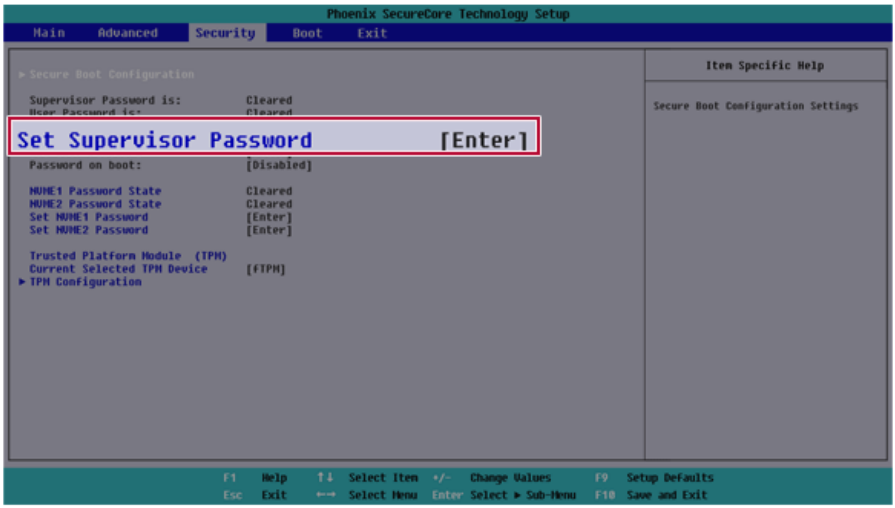
- Without the registered password, access to the system will be denied. Write down and keep the password in a safe place.

Set Supervisor Password

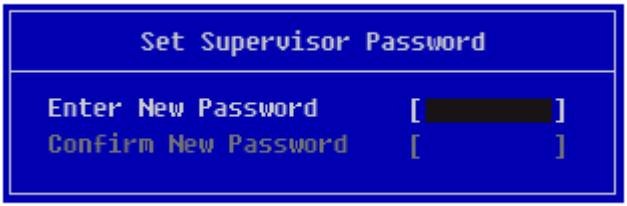
The password prevents unauthorized people from accessing the PC. By default, no password is set for the machine. If an unauthorized person changes the password in the System Setup, you will be unable to access the system.

1 After opening the system setup screen, use the arrow keys to move to **[Security]**.

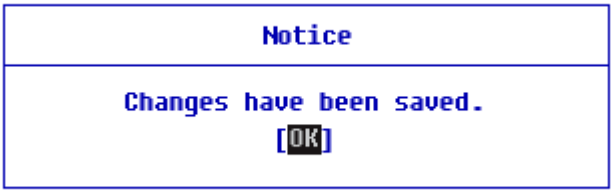
2 When the **Security** item appears, select **[Set Supervisor Password]** using the arrow keys, and then press the [Enter] key.



3 When the **Set Supervisor Password** setting screen appears, enter the password and press the [Enter] key. The password should not exceed 12 characters and should consist of English letters (A - Z), numbers (0 - 9), and special characters or a combination of them.

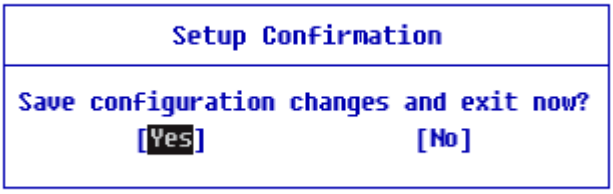


4 When the **Notice** screen appears, press the [Enter] key.



5 To save the changes in the system setup, press [F10].

6 When the **Setup Confirmation** screen appears, check **[Yes]** and press the [Enter] key. The PC will restart.



TIP

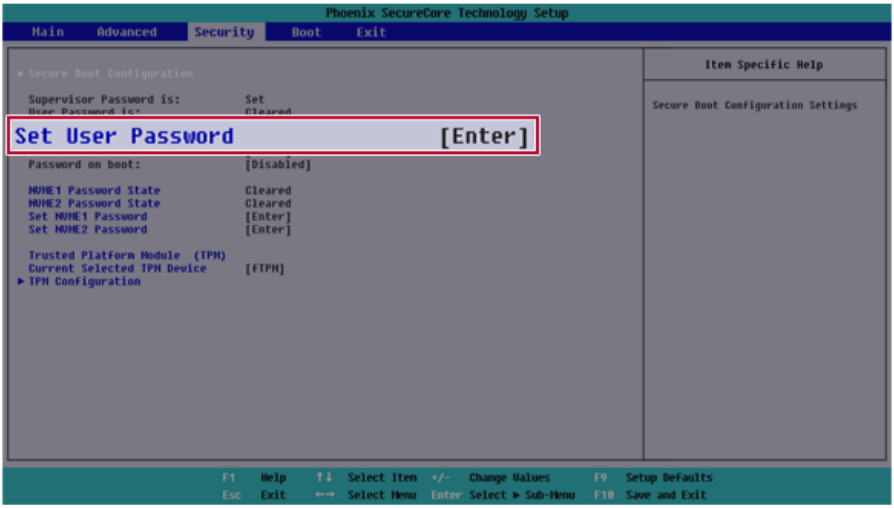
- With **Supervisor Password**, you are authorized to set all items in the System Setup and to set **Password on boot**. In case other people also use the PC, it is recommended to set the **Set User Password**.

Set User Password

The password set by the **Set User Password** process is lower in level than that set by the **[Set Supervisor Password]** process, and so the user can use the **[Set User Password]** only after setting a password in the **[Set Supervisor Password]** menu.

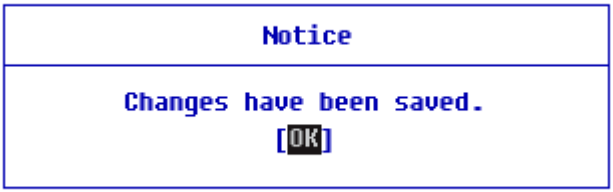
1 After opening the system setup screen, use the arrow keys to move to **[Security]**.

2 When the **Security** item appears, press the [Enter] button in the **[Set User Password]** menu.



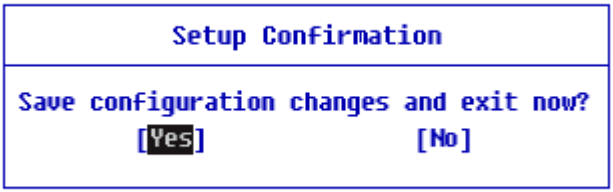
3 When the **Set User Password** setting screen appears, enter the password and press the [Enter] key. The password should not exceed 12 characters and should consist of English letters (A - Z), numbers (0 - 9), and special characters or a combination of them.

4 When the **Notice** screen appears, press the [Enter] key.



5 To save the changes in the system setup, press [F10].

6 When the **Setup Confirmation** screen appears, check **[Yes]** and press the [Enter] key. The PC will restart.



TIP

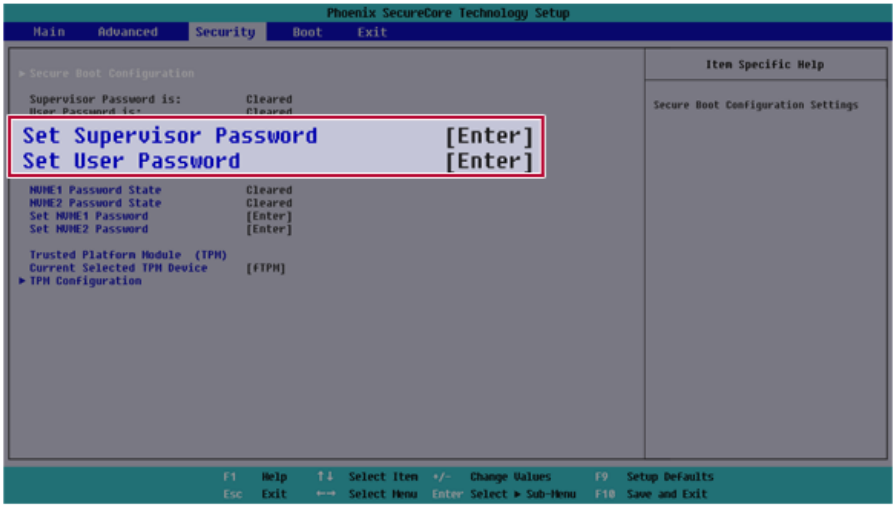
- **[User Password]** allows limited access to the items in the System Setup compared to the **[Supervisor Password]** item.

Password on boot

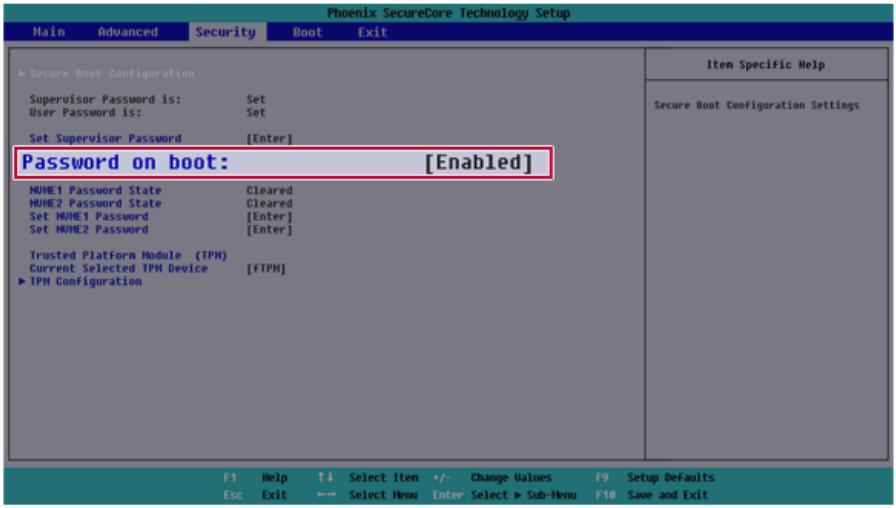
Password on boot protects the system by requesting **[Set Supervisor Password]** or **[Set User Password]** during boot up.

1 After opening the system setup screen, use the arrow keys to move to **[Security]**.

2 When the **Security** item appears, set a password for **[Set Supervisor Password]** or passwords for both **[Set Supervisor Password]** and **[Set User Password]**.



3 The popup screen will show up, after selecting **[Password on boot]** and press [Enter]. After selecting **[Enabled]** and press [Enter], **[Password on boot]** will be complete.



Set NVMe™ Password / SSD Password

TIP

Some models installed with NVMe™ may not support the password settings.

Depending on the model, the menu name may be displayed as NVMe™ **Password**, **SSD Password**, etc.

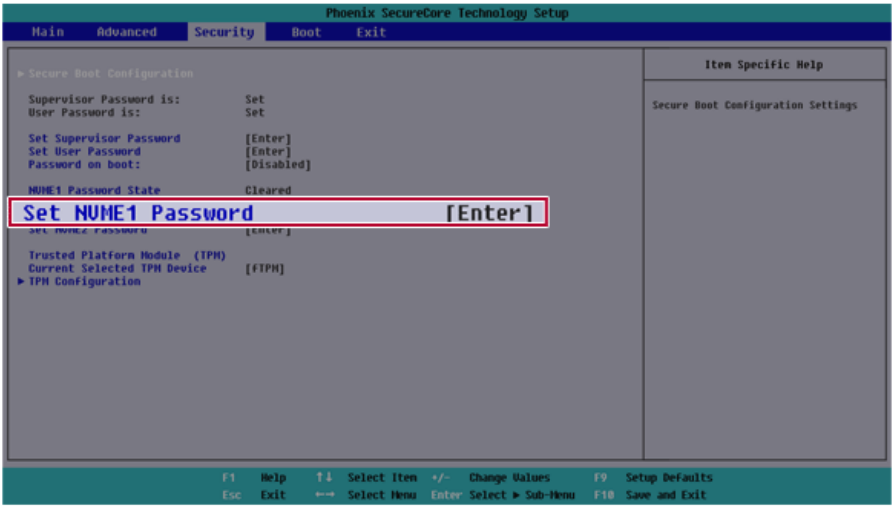
For models equipped with two NVMe™ devices installed, the menu names are displayed as NVMe™1, NVMe™2, and if NVMe™ and **SSD** are installed, they are displayed as NVMe™1, **SSD**01, etc.

For models with two NVMe™ or **SSD** devices, you can set a password for each device. If you set passwords for both, the password input window will appear twice during booting.

The password input windows appear according to the **[Boot Priority order]** in the **[Boot]** menu.

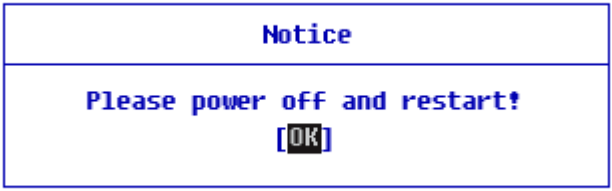
1 After opening the system setup screen, use the arrow keys to move to **[Security]**.

2 When the **Security** item appears, select **[Set NVME1 Password]** using the arrow keys and press the [Enter] key.



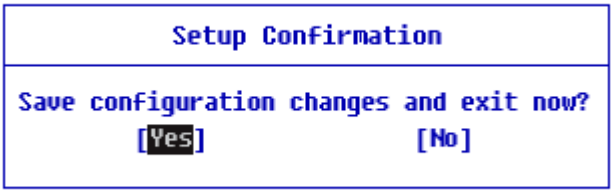
3 When the **Set NVME1 Password** setting screen appears, enter the password and press the [Enter] key. The password should not exceed 12 characters and should consist of English letters (A - Z), numbers (0 - 9), and special characters or a combination of them.

4 When the **Notice** screen appears, press the [Enter] key.



5 To save the changes in the system setup, press [F10].

6 When the **Setup Confirmation** screen appears, check **[Yes]** and press the [Enter] key. The PC will restart.



CAUTION

If you forgot NVMe™ Password/SSD Password, you cannot restore the NVMe™/SSD.

- The replacement of NVMe™/SSD due to a forgotten NVMe™ **Password/SSD Password** is not covered by warranty.

Changing or Deleting the Password

You can delete or change the password only after entering the current password.

The model in the example can differ from actual models and is subject to change for performance improvements, without prior notice.

Changing the Password

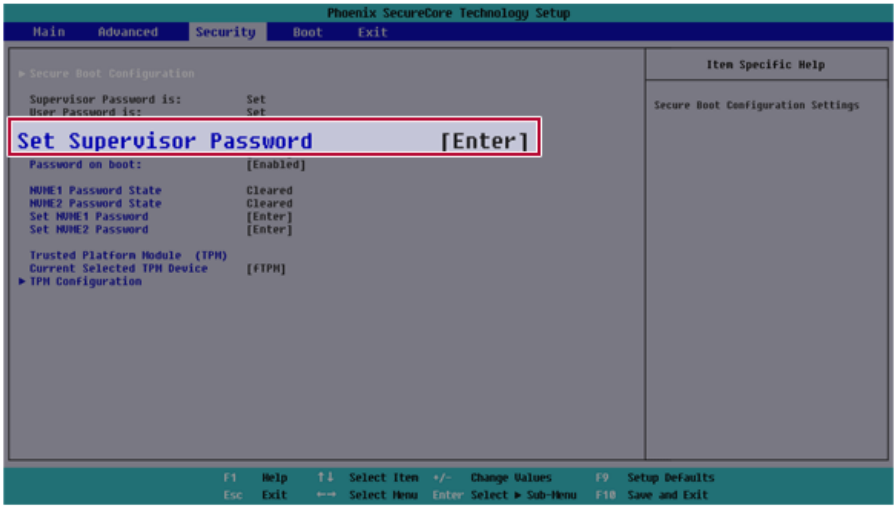
1 Execute System Setup, enter the password, and click [Enter].

2 Change the password in the same way as setting one.

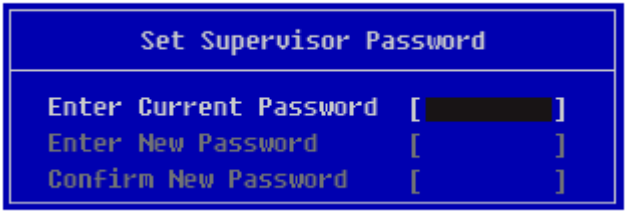
Deleting the Password

1 Execute System Setup, enter the password, and press [Enter].

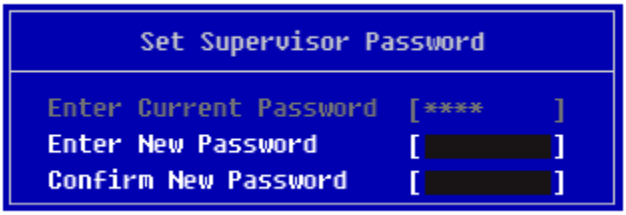
2 After moving **[Security]** by using the arrow keys from the setup start screen, click **[Set Supervisor Password]** and press [Enter].



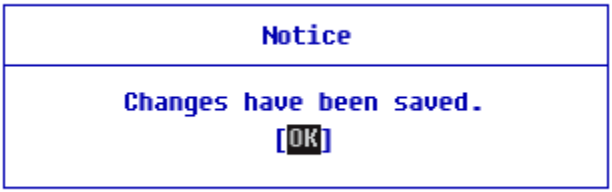
3 When the **Set Supervisor Password** setting screen appears, enter the current password in **[Enter Current Password]**.



4 Press [Enter] in **[Enter New Password]** and **[Confirm New Password]**.

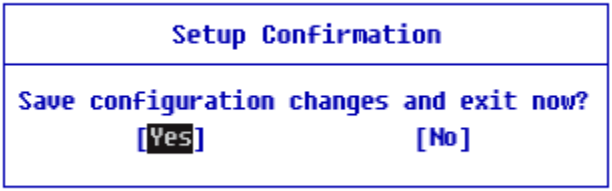


5 When the **Notice** screen appears, press the [Enter] key.



6 To save the changes in the system setup, press [F10].

7 When the **Setup Confirmation** screen appears, check **[Yes]** and press the [Enter] key. The PC will restart.



Deleting the Password (Set NVMe™ Password / SSD Password)

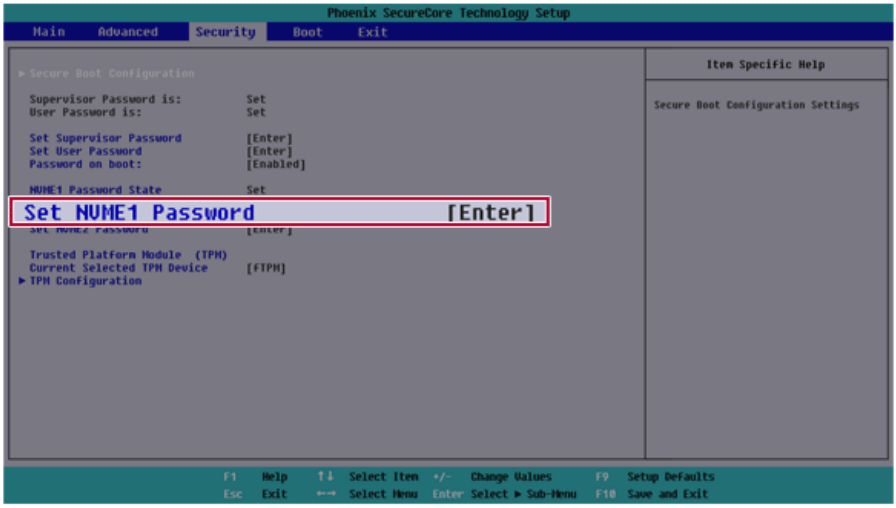
1 Execute System Setup, enter the password, and press [Enter].

2 After moving **[Security]** by using the arrow keys from the setup start screen, click **[Set NVME1 Password]** and press [Enter].

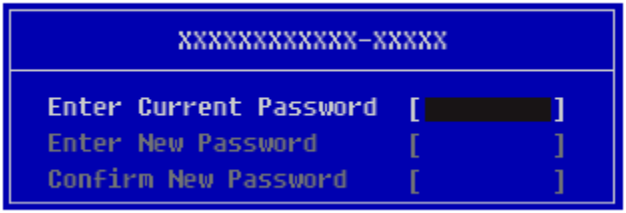
TIP

Depending on the model, the menu name may be displayed as NVMe™ **Password**, **SSD Password**, etc.

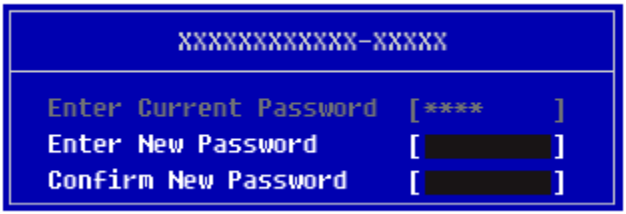
For models equipped with two NVMe™ devices installed, the menu names are displayed as NVMe™1, NVMe™2, and if NVMe™ and **SSD** are installed, they are displayed as NVMe™1, **SSD**01, etc.



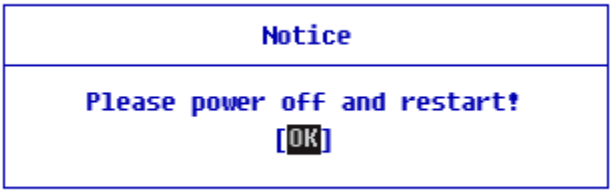
3 When the **Set NVME1 Password** setting screen appears, enter the current password in **[Enter Current Password]**.



4 Press [Enter] in **[Enter New Password]** and **[Confirm New Password]**.

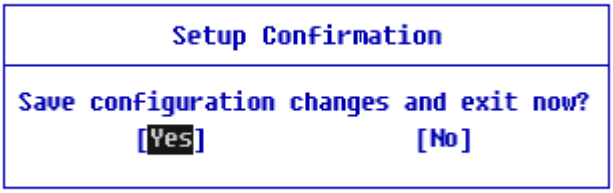


5 When the **Notice** screen appears, press the [Enter] key.



6 To save the changes in the system setup, press [F10].

7 When the **Setup Confirmation** screen appears, check **[Yes]** and press the [Enter] key. The PC will restart.



ENGLISH

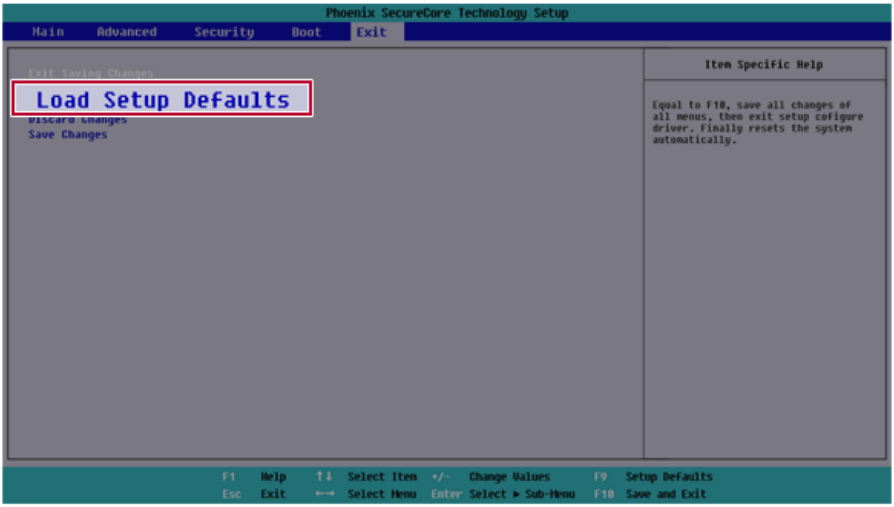
Restoring the Factory Default Settings

If you have changed the system setup by mistake, you can restore the default settings.

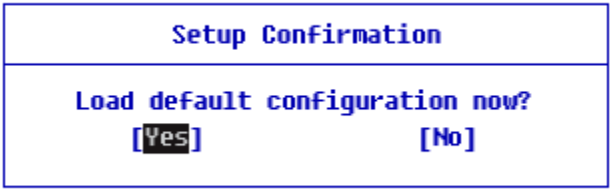
The model in the example can differ from actual models and is subject to change for performance improvements, without prior notice.

1 After opening the system setup screen, use the arrow keys to move to **[Exit]**.

2 Click **[Load Setup Defaults]** by using the arrow keys and pressing [Enter].

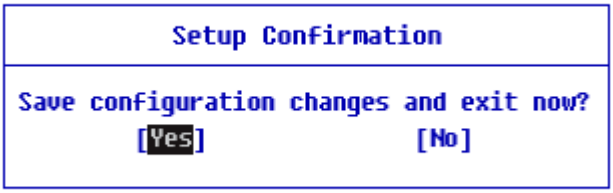


3 When the **Setup Confirmation** screen appears, check **[Yes]** and press the [Enter] key. The settings will be reset to the factory default.



4 To save the changes in system setup, press [F10].

5 When the **Setup Confirmation** screen appears, check **[Yes]** and press the [Enter] key. The PC will restart.



TIP

- When you press [F9], you can use **[Load Setup Defaults]**.

Changing the Boot Order

The user can change the boot order according to his or her needs, or select a boot device

The model in the example can differ from actual models and is subject to change for performance improvements, without prior notice.

TIP

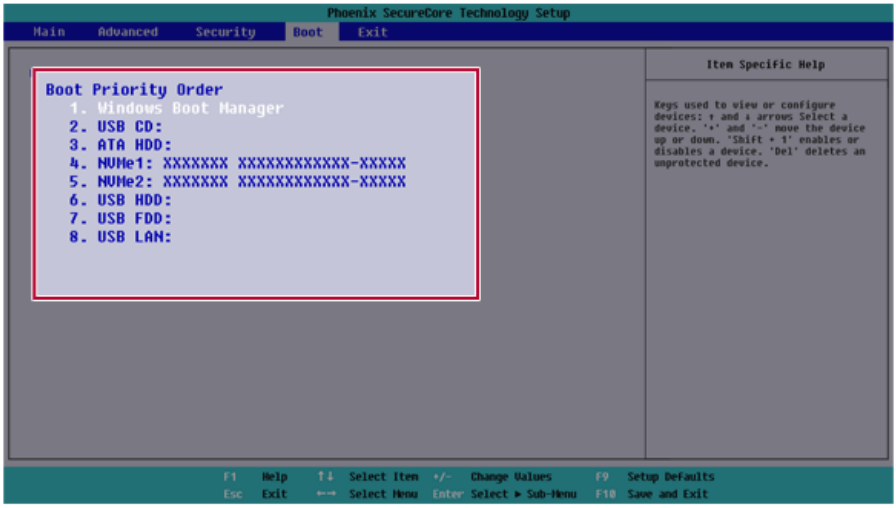
To use the system setup (F2), booting device selection (F10), or recovery (F11), you need to restart the system (click **[Restart]** in the system power menu) and then immediately press the corresponding function key due to the fast booting speed.

Changing the Boot Order

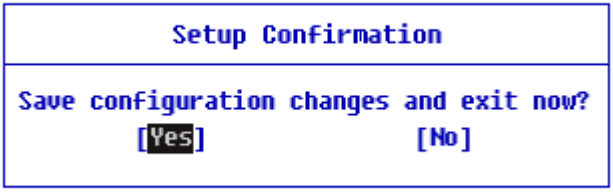
1 Reboot the system and press [F2].

2 Move to the **[Boot]** menu when the system setup screen appears.

3 Go to **[Boot Priority Order]** and press [F5] or [F6] to change the booting order.



4 Press the [F10] key, and when the **Setup Confirmation** screen appears, select **[Yes]** and press the [Enter] key.

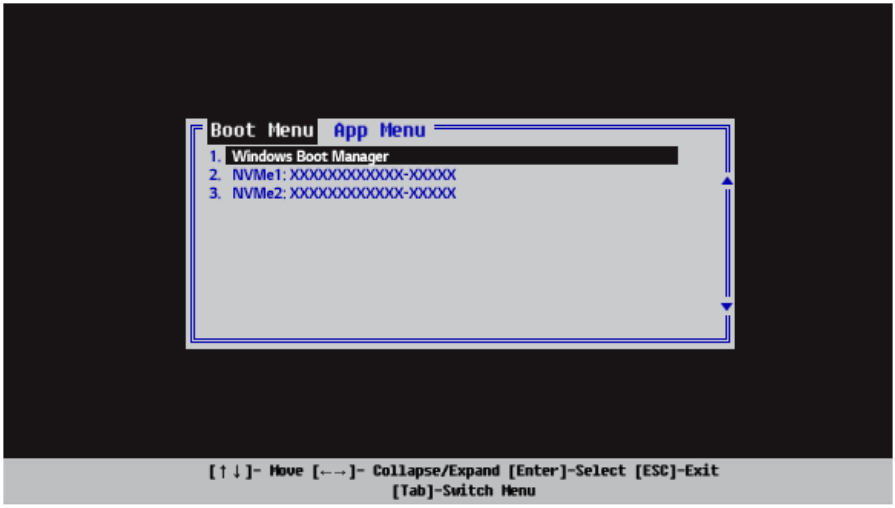


5 The changes are saved and the system reboots.

Selecting a Booting Device to Use

1 Reboot the system and press [F10].

2 When the Select Booting Device screen appears, select the device.



3 Boots using the selected device.

Windows 10 Auto Scaling

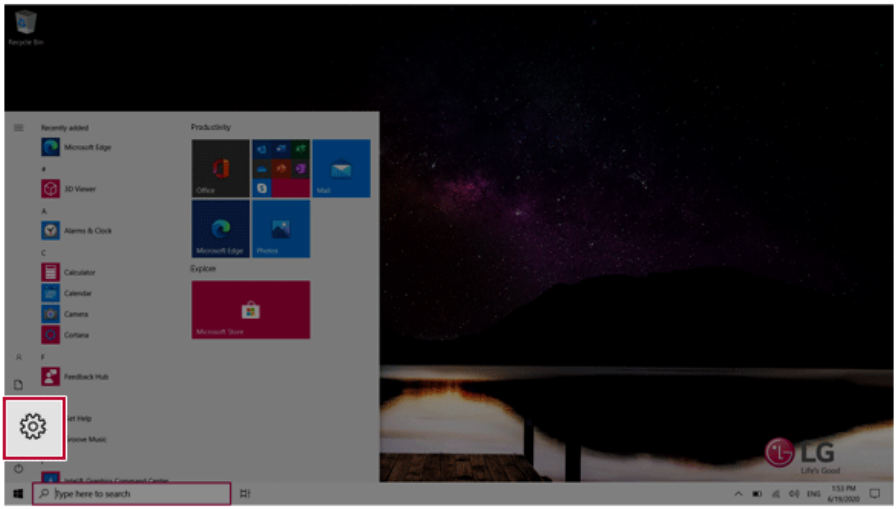
The Windows 10 **Auto Scaling** feature for user's convenience may partially blur the screen or display some icons and texts larger.

Refer to the following information to change the DPI scaling to suit your needs.

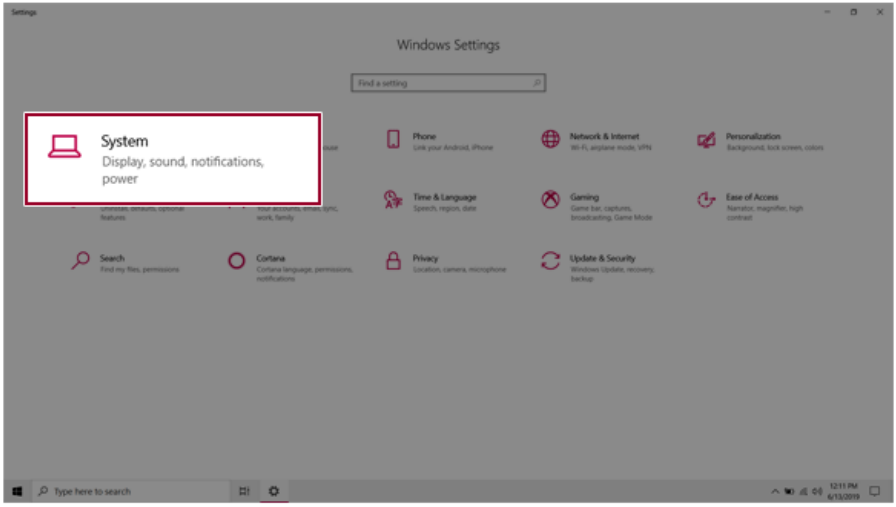
1 Press the [ ] button and select the **[Settings]** menu.

TIP

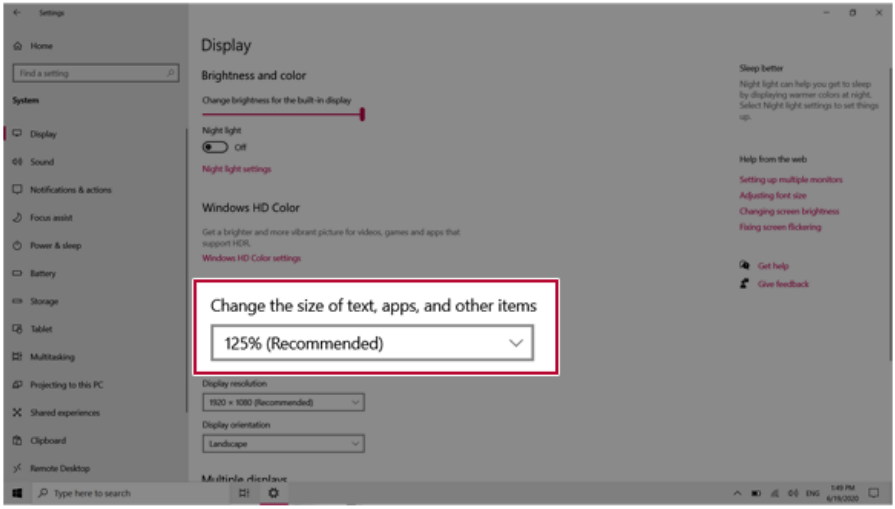
Press the [ ] key or [Ctrl] + [Esc] to display the Start menu.



2 Select **[System]** > **[Display]**.



3 Modify the **[Change the size of text, apps, and other items]** value to change the Auto Scaling settings.



TIP

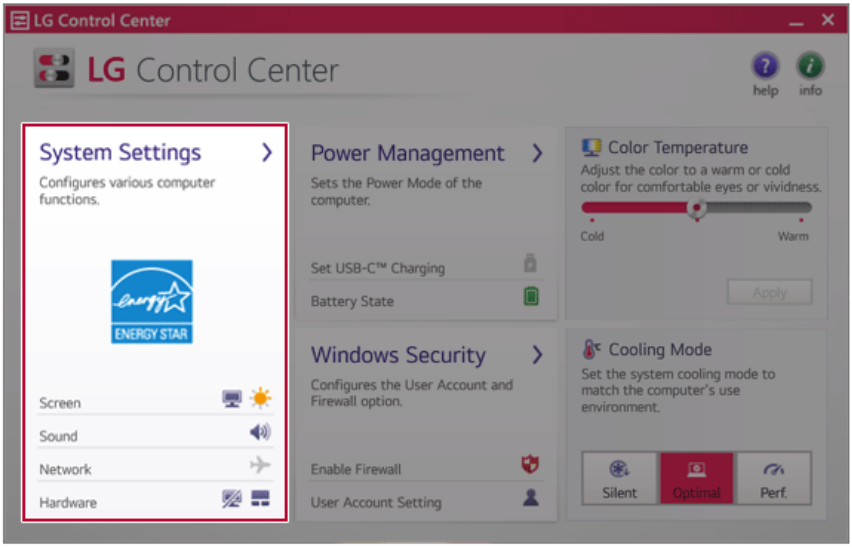
After auto scaling, you may need to restart some apps to apply the new scale and layout.

Using **Instant Booting**

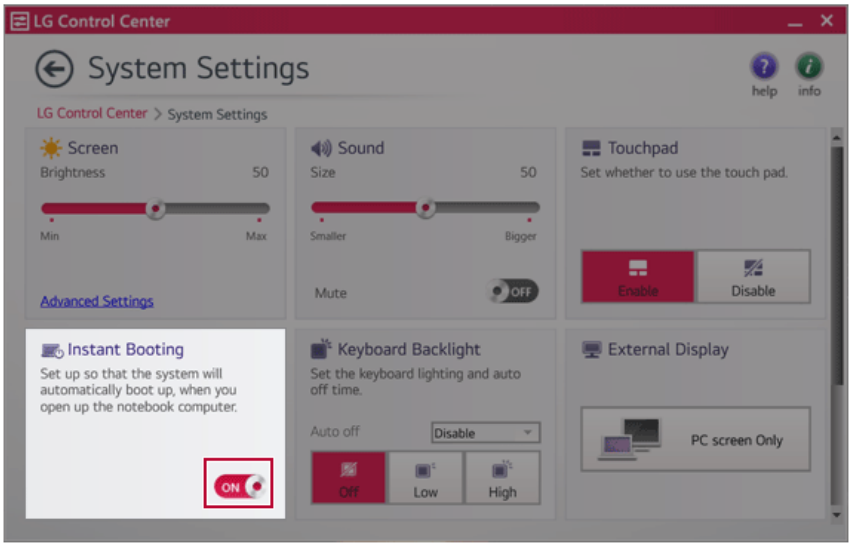
Instant Booting allows the system to boot automatically when the notebook PC cover is opened, so that you can use the system without pressing the power button.

1 Select the [ ] button > [LG Software] to run **[LG Control Center]**.

2 On the **LG Control Center** screen, select the **[System Settings]** menu.



3 Set **[Instant Booting]** to **[ON]**.



4 Shutdown the system and close the notebook PC cover.

5 When the cover is opened, the notebook PC turns on and the system starts to boot automatically.

FAQ

LG Recovery Center RE

If booting is impossible due to an error with the system, you can recover the system using **LG Recovery Center RE**.

TIP

It is recommended that you create a recovery drive in case a serious error occurs in the system.

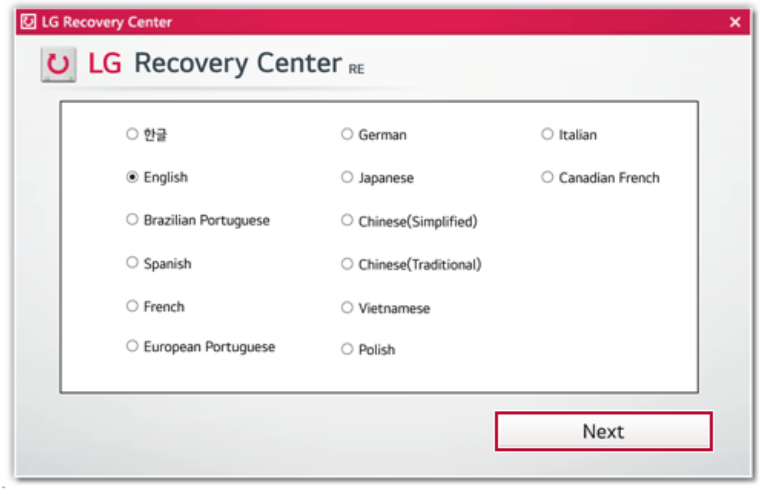
CAUTION

If you have deleted the restoration data in the protected area of the hard disk, the restore function may not work.

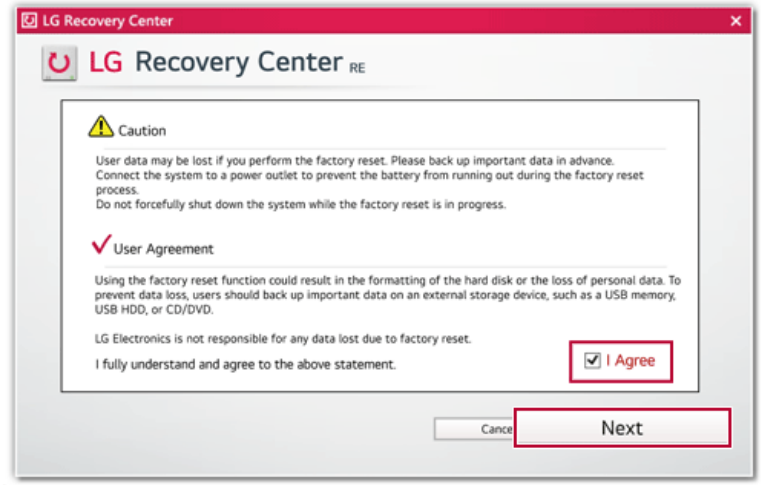
All data is lost during the initialization, so you must backup all critical data in advance.

1 Turn on the PC and press [F11].

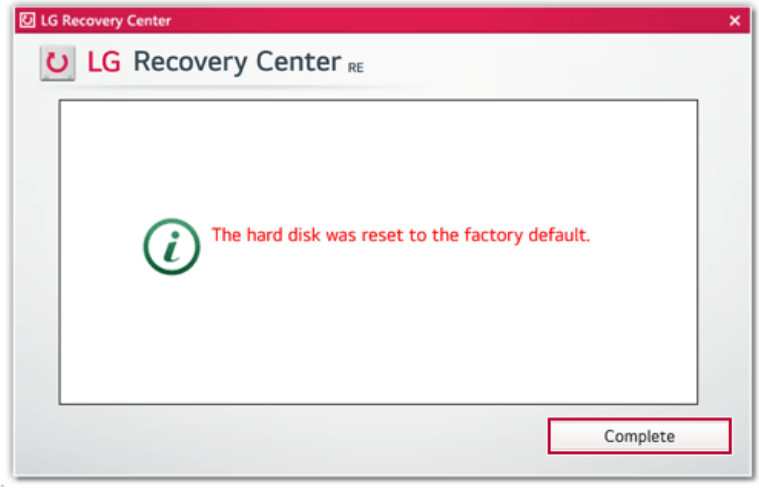
2 Once **LG Recovery Center RE** is started, select a language and press the [Next] button.



3 When the cautions and user agreement screen appears, check the [I Agree] button and press the [Next] button.
For recovery, the power adapter must be connected. Connect the system power and then recover the system.



4 When factory reset is complete, press the [Complete] button to restart the system.

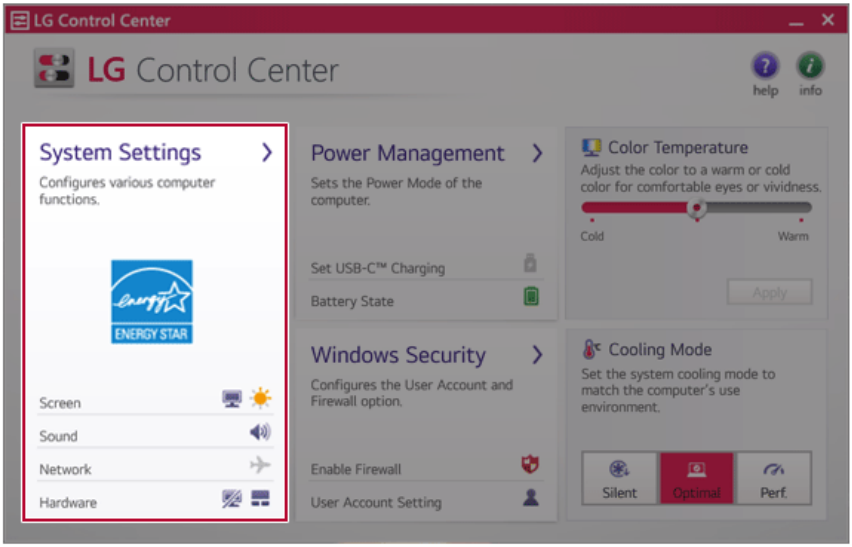


Using **Instant Booting**

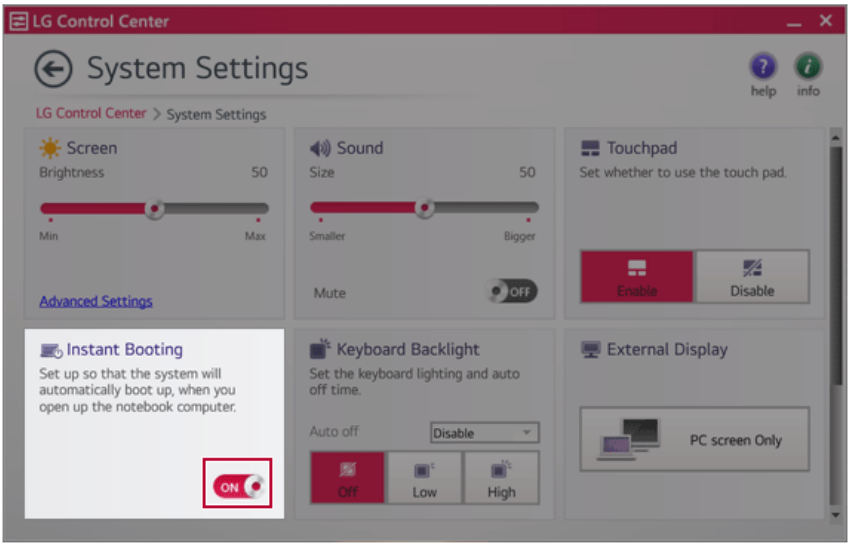
Instant Booting allows the system to boot automatically when the notebook PC cover is opened, so that you can use the system without pressing the power button.

1 Select the [ ] button > [LG Software] to run **[LG Control Center]**.

2 On the **LG Control Center** screen, select the **[System Settings]** menu.



3 Set **[Instant Booting]** to **[ON]**.



4 Shutdown the system and close the notebook PC cover.

5 When the cover is opened, the notebook PC turns on and the system starts to boot automatically.

Windows 10 Auto Scaling

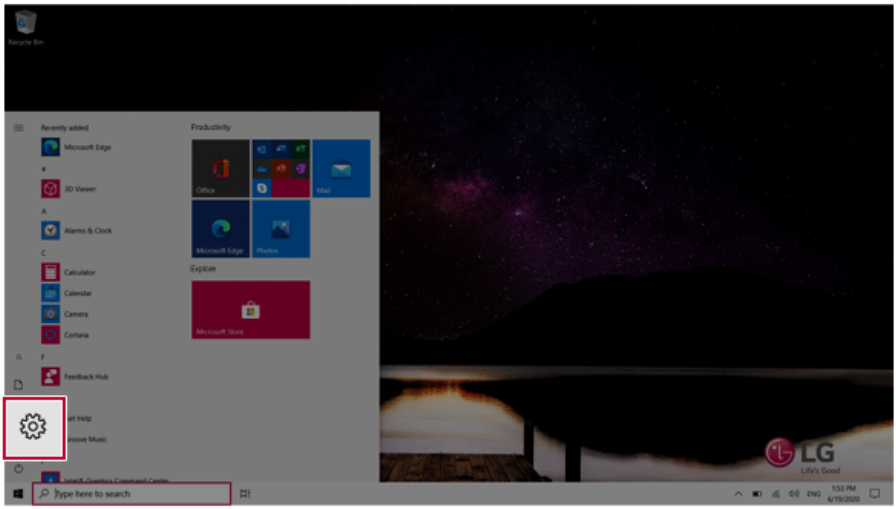
The Windows 10 **Auto Scaling** feature for user's convenience may partially blur the screen or display some icons and texts larger.

Refer to the following information to change the DPI scaling to suit your needs.

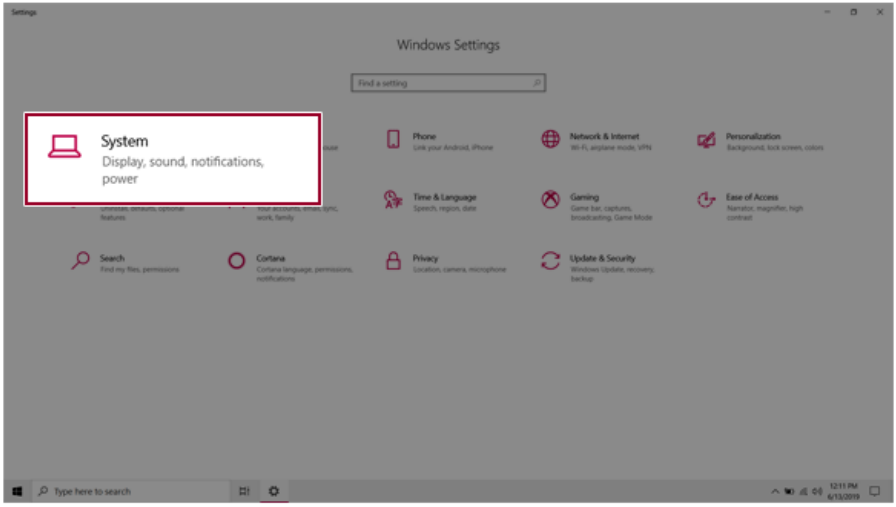
1 Press the [ ] button and select the **[Settings]** menu.

TIP

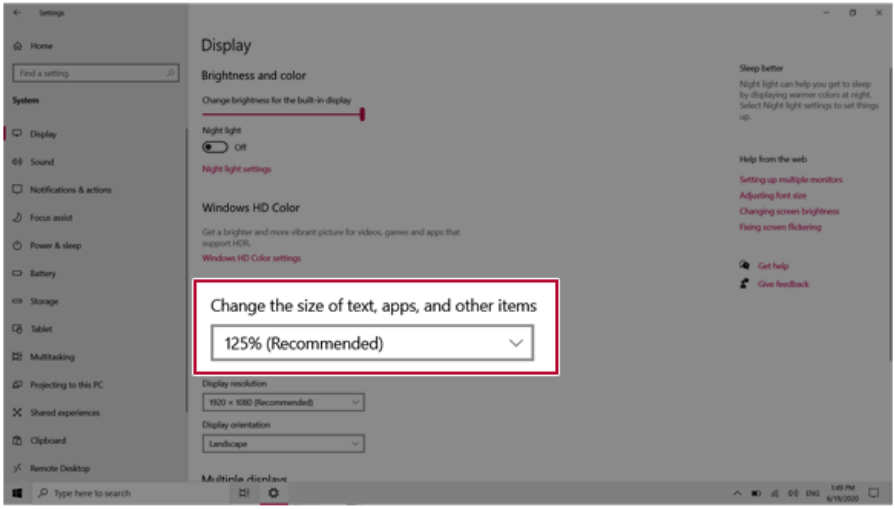
Press the [ ] key or [Ctrl] + [Esc] to display the Start menu.



2 Select **[System]** > **[Display]**.



3 Modify the **[Change the size of text, apps, and other items]** value to change the Auto Scaling settings.



TIP

After auto scaling, you may need to restart some apps to apply the new scale and layout.

Restoring the System

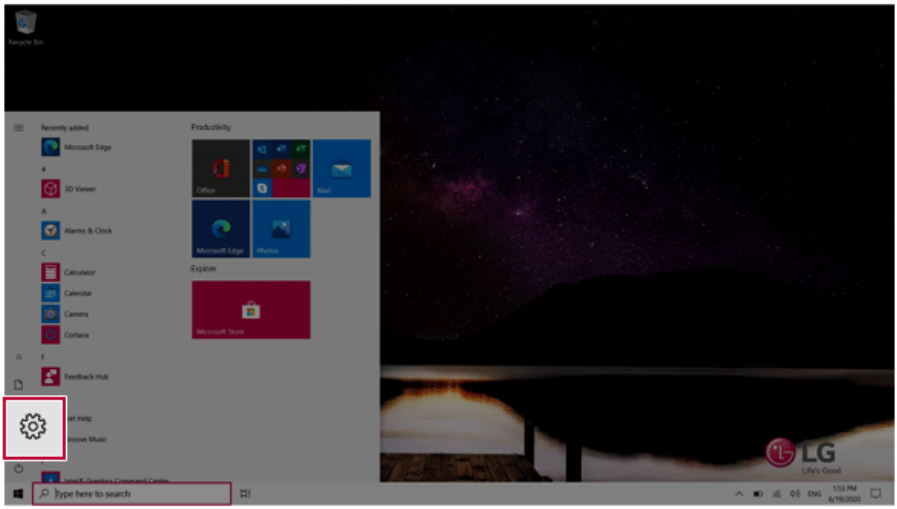
If the system has an error, you can use Windows 10's recovery function to recover or restore the system to its initial pre-purchase state.

CAUTION

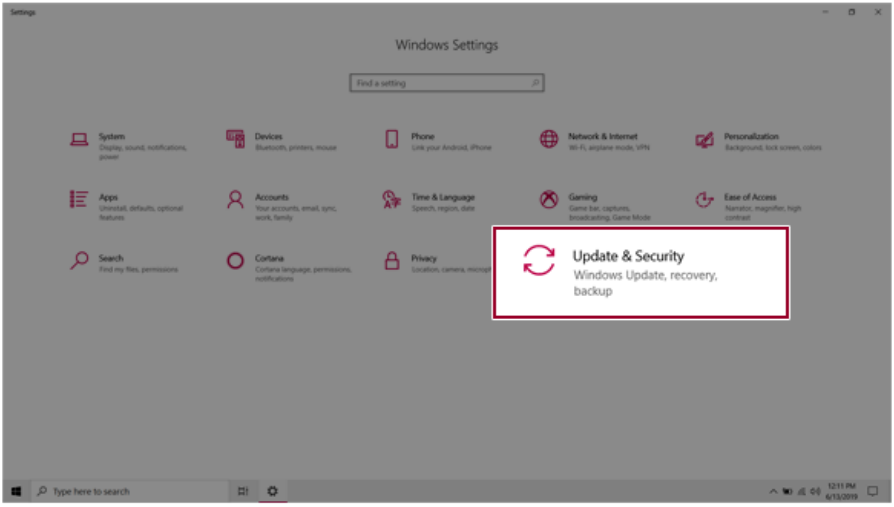
If you have deleted the restoration data in the protected area of the disk, or have arbitrarily installed another operating system, the restore function may not work.

To recover the system, the AC adapter must be connected.

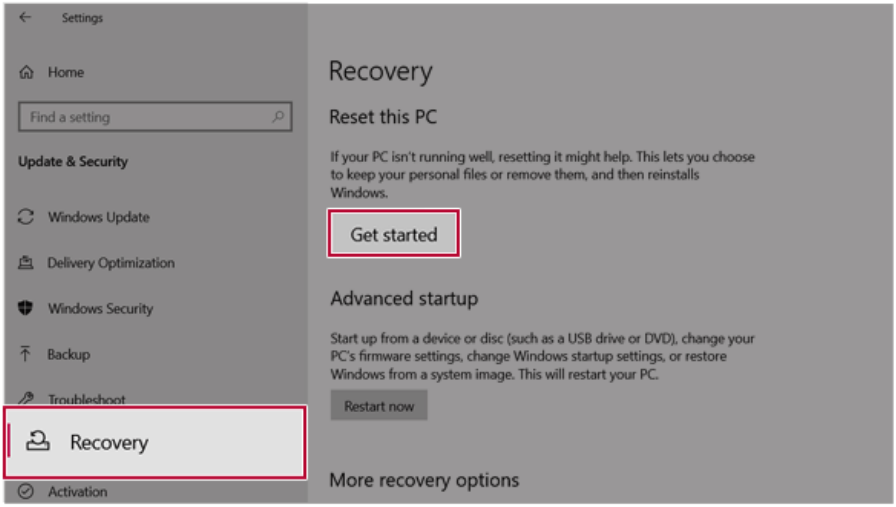
1 Click the [ ] button and select the [Settings] menu.



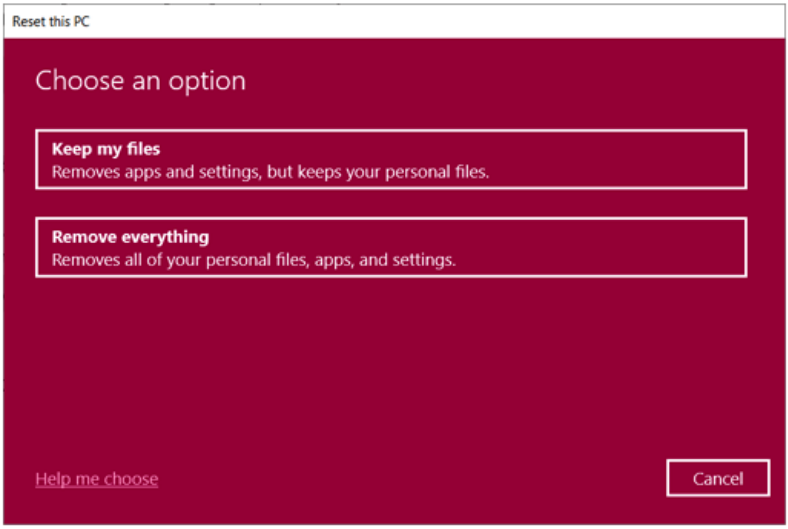
2 When the [Settings] screen appears, select [Update & Security].



3 Select the [Recovery] menu and press [Get started] in the **Reset this PC** menu.



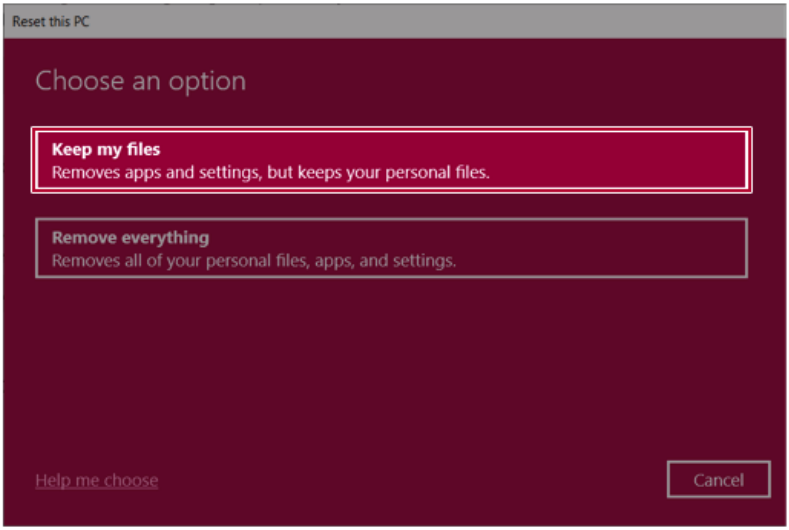
4 If the following option screen appears, select a desired option to proceed with recovery.



Keep My Files

It removes the apps and their settings without loss of personal files.

1 Select [Keep my files].



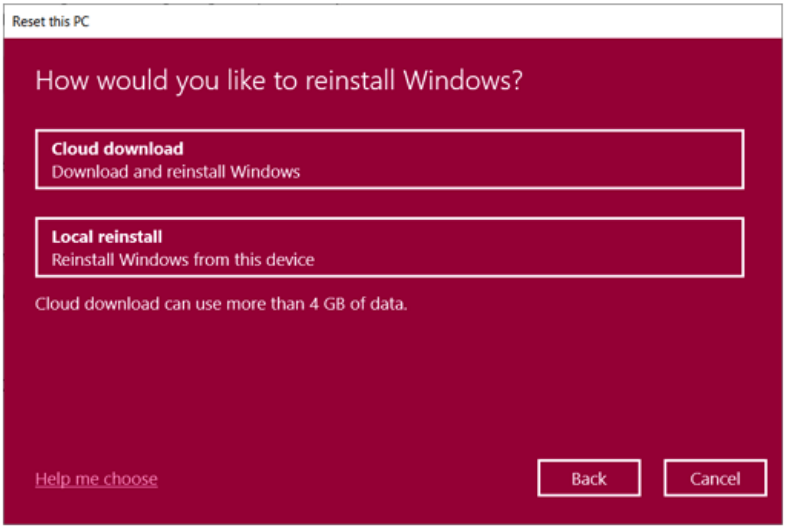
2 Select How to Reinstall Windows.

TIP

If the PC is not connected to the Internet, the screen for selecting Windows installation method does not appear.

[Cloud download] is a menu for downloading **Windows** from **Microsoft** Cloud Server and reinstalling it.

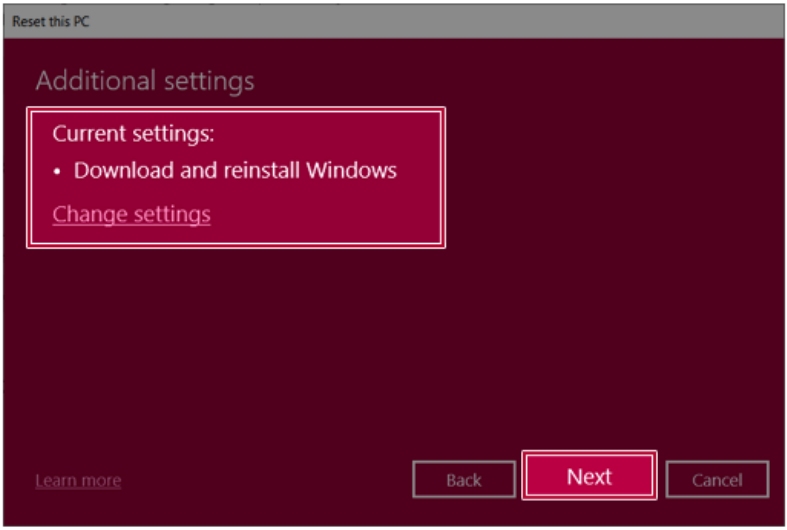
The required time may vary depending on the Internet speed.



3 Check the current settings and click [Next] to perform the recovery according to the instructions.

TIP

If you need to change the settings, click [Change settings] and change the settings.



Remove everythings

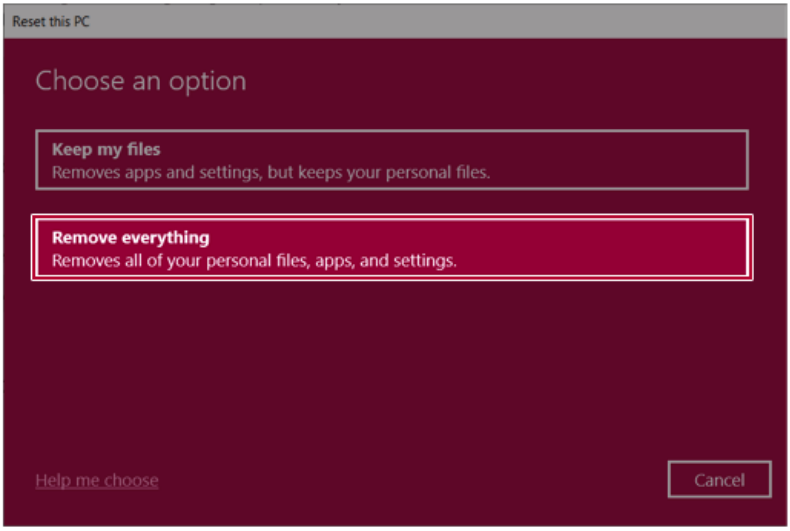
Removes all items from the system and restores the system to its initial pre-purchase state.

CAUTION

All data is lost during the initialization, so you must backup all critical data in advance.

It may take about 5 hours or longer depending on the system conditions.

1 Select [Remove everything].



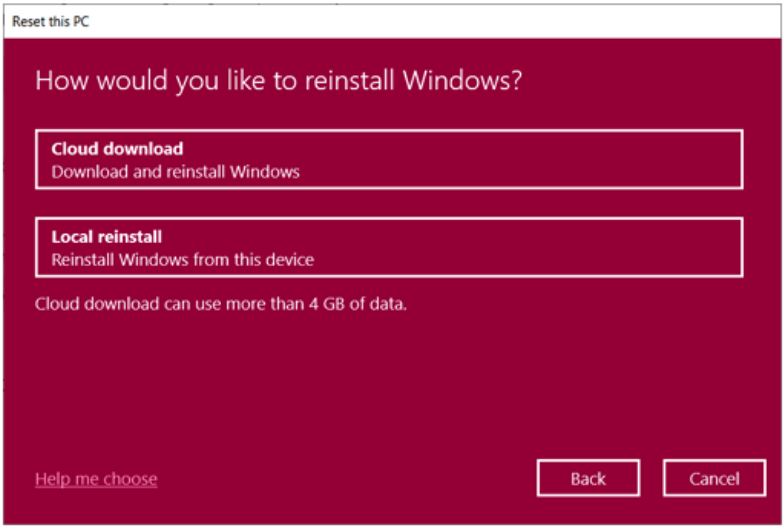
2 Select How to Reinstall Windows.

TIP

If the PC is not connected to the Internet, the screen for selecting Windows installation method does not appear.

[Cloud download] is a menu for downloading **Windows** from **Microsoft** Cloud Server and reinstalling it.

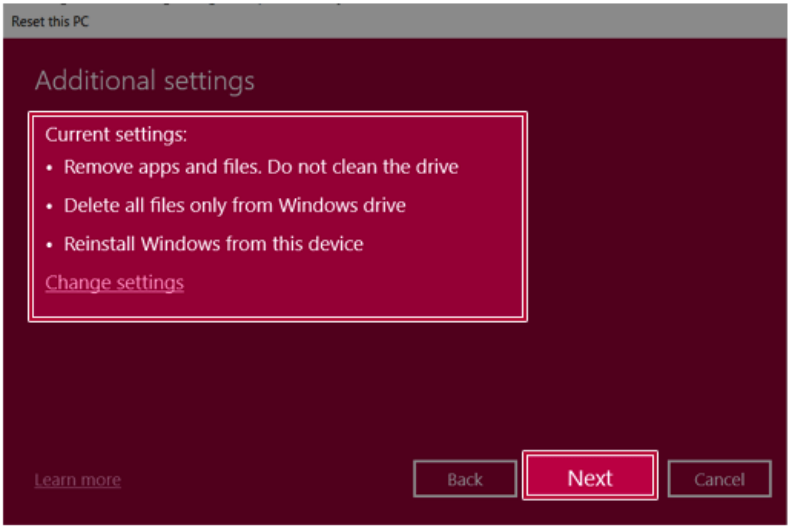
The required time may vary depending on the Internet speed.



3 Check the current settings and click [Next] to perform the recovery according to the instructions.

TIP

If you need to change the settings, click [Change settings] and change the settings.



Connecting to External Display

Connecting to the HDMI Port

HDMI is a multimedia interface that can integrate and transmit video and audio signals.

In some models, DTS Audio may not work when you use HDMI.

TIP

Ensure the monitor power is off before connecting the external monitor to the PC.

Use **'HDMI to VGA Gender'** to connect to VGA port.

1 Connect the HDMI cable to the PC and the external device (TV, monitor) that supports HDMI.

2 HDMI port transfers both video and audio simultaneously. Hence, there is no need for a separate audio connection.

3 On the PC, press [Fn] + [F7] to display monitor (projector) toggling screen. Select the desired screen output.

TIP

- Everytime [ ] + [P] keys are pressed, the screen output option changes. Release the keys to display the selected screen output.

CAUTION

- If you do not set Speaker as the default value after disconnecting the HDMI cable, the system may not produce any sound.
- If a program was running already, you must exit and restart the program to produce sound.

Using a Wired/Wireless Router

A wireless / regular router connects several PCs and mobile devices to one internet line and enables the use of internet and the network.

A wireless / regular router has to be bought separately. Refer to the manual provided by the manufacturer for instructions.

Connecting a Wireless or Regular Router

If one internet line is used with a wired / wireless router and several devices are connected, this may result in a slower connection.

In case of a wireless LAN, it is recommended to change the network name and security settings for a more secure connection.

Network speed can differ according to operation environment and specifications.

1. Connect the internet cable of the modem that was provided by your internet provider to the router's WAN port.
2. Connect all devices (PC, IPTV, internet phone, etc.) with a LAN cable to LAN ports 1 to 4 of the router.
   The number of LAN ports can vary for each router model.
3. Please refer to the manual provided by the router manufacturer for setup of the network and internet.

Wireless LAN

The wireless network (Wireless LAN) is the network environment that connects a PC with the internet provider or company network through an Access Point (wireless or regular router).

OPTION

Wireless LAN is optional. Hence, it may not be installed in some models.

Turning On/Off **Airplane Mode**

Prior to using the wireless LAN, press [Fn] + [F6] to turn off **Airplane Mode**.

Pressing [Fn] + [F6] keys will turn on or off the **Airplane Mode**. If you are not going to use the product for a while, keep the **Airplane Mode** turned on to reduce the battery power consumption.

Using the Wireless LAN

If an Access Point (wired or wireless router) is in the vicinity of the PC, the wireless LAN can easily be accessed.

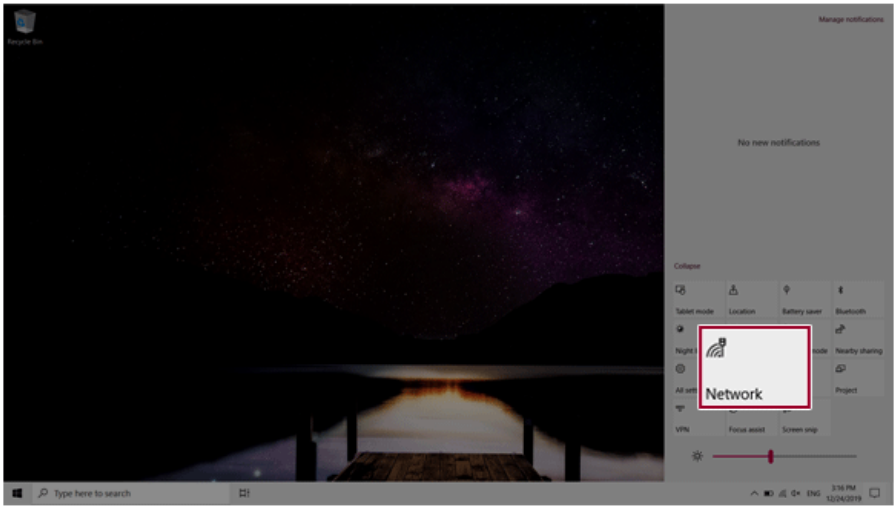
During the search for a wireless network (Wireless LAN), various Access Points may be found according to the location where the PC is used.

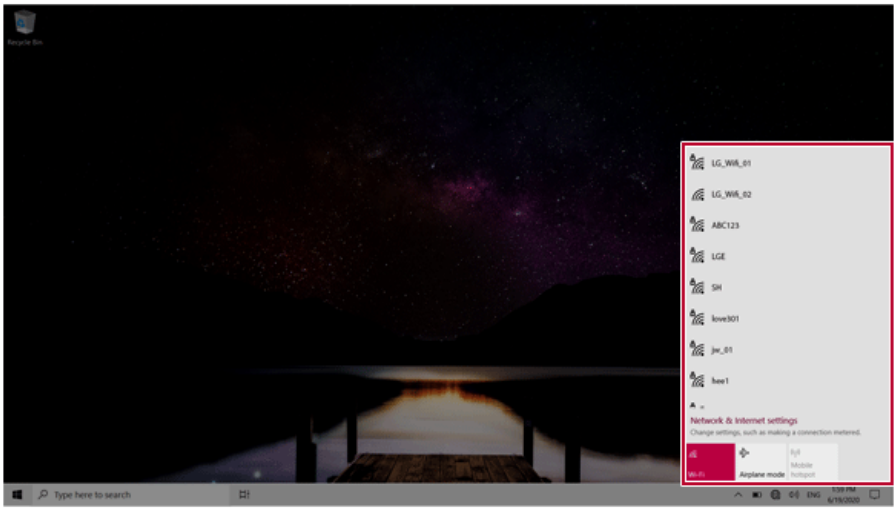
In case there are no accessible wireless networks (Wireless LAN) near the PC, no Access Points may be found.

A password protected Access Point cannot be accessed without the correct password.

1 Press the Action Center [ ] icon on the right side of the taskbar.

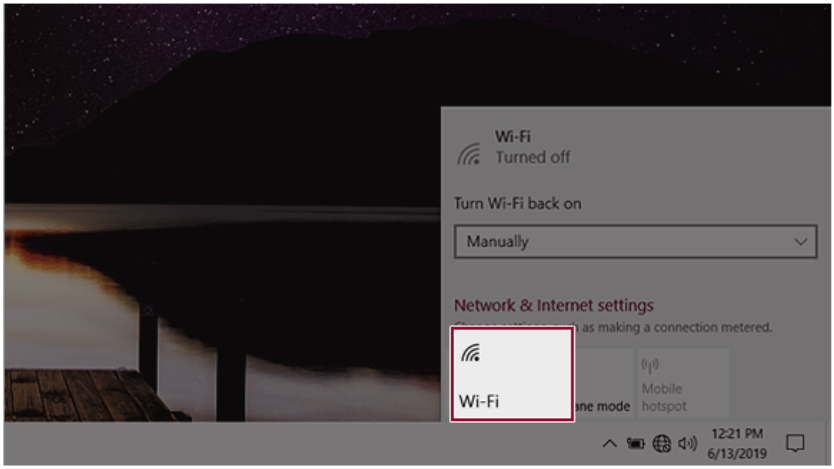
2 Press the **[Network]** tile to search for a nearby Access Point.



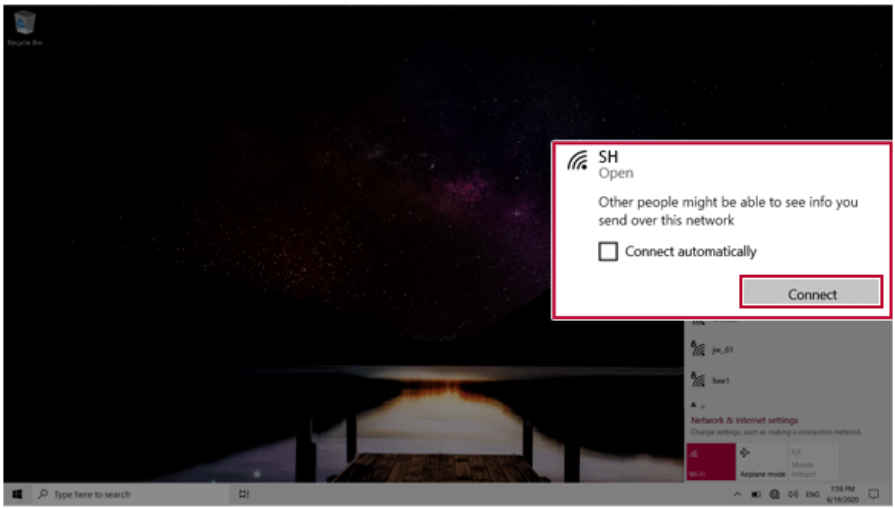


TIP

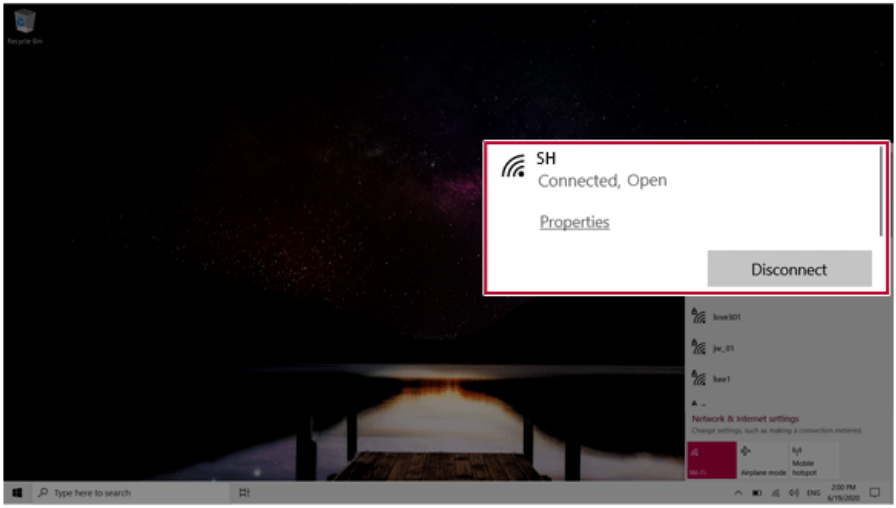
If **Wi-Fi** is turned off, press the **[Wi-Fi]** tile.



3 Select the Access Point you want to connect to and press [Connect].



4 If a connection is established, [Connected] appears below the Access Point name.



5 Click the Web Browser icon to check whether the Internet is operating normally.

Wired LAN

LAN is the network environment that users can connect to by using a cable to connect to their internet providers or the company's network.

Using Wired LAN

LAN is installed with an automatic IP (DHCP) as default value.

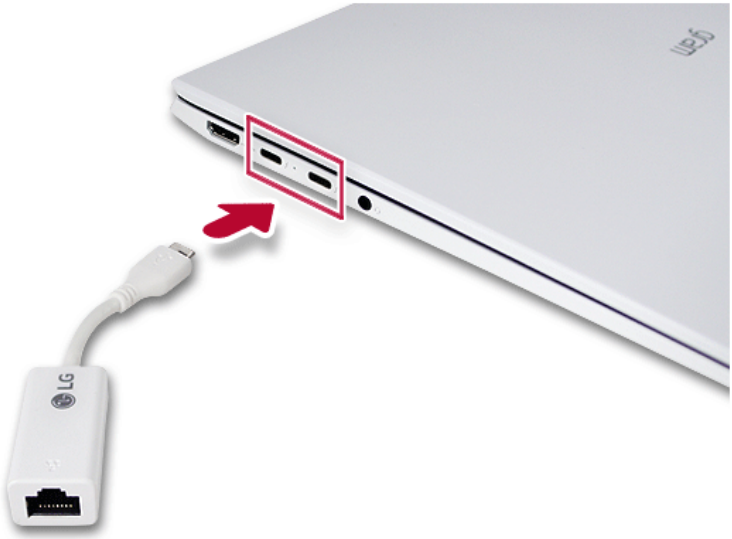
Please refer to the following instructions for details on setting up an automatic IP (DHCP) or manual IP.

1 Connect the LAN adapter to the USB-C™ port on the PC.

TIP

The recommended network cable for the optimal network environment is CAT5 or higher.

The network (LAN) cable may be connected when the LAN adapter is used.

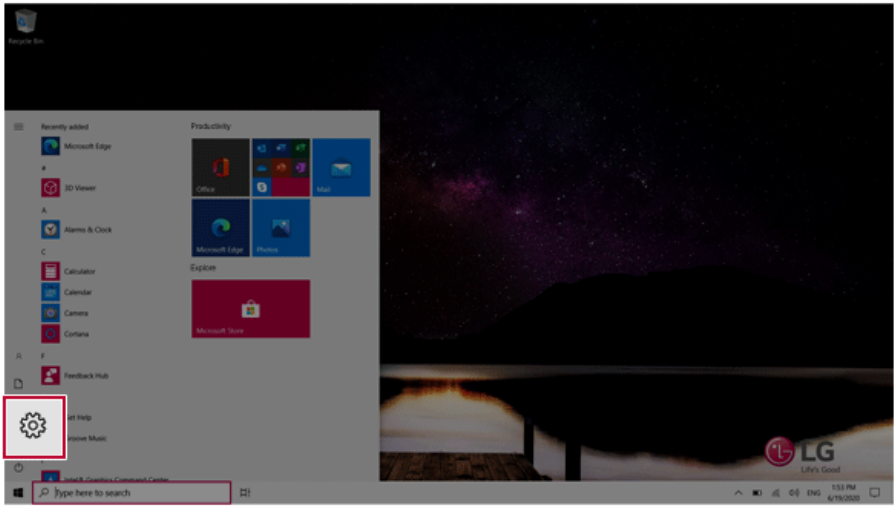


2 Connect the wired LAN cable to the LAN port.

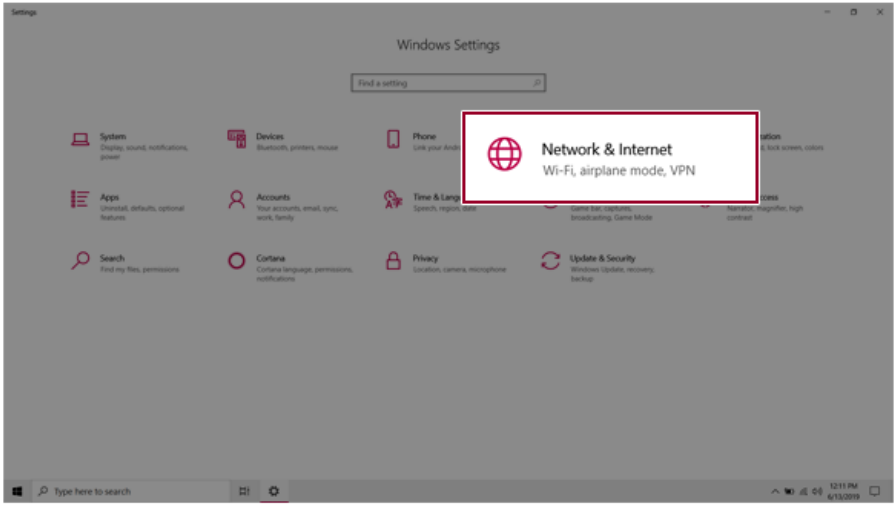
3 Press the [ ] button and select the **[Settings]** menu.

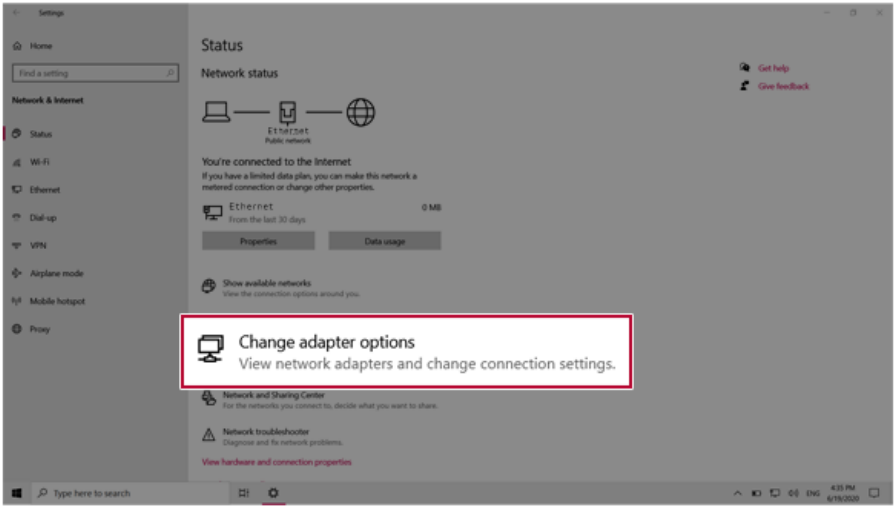
TIP

Press the [ ] key or [Ctrl] + [Esc] to display the Start menu.

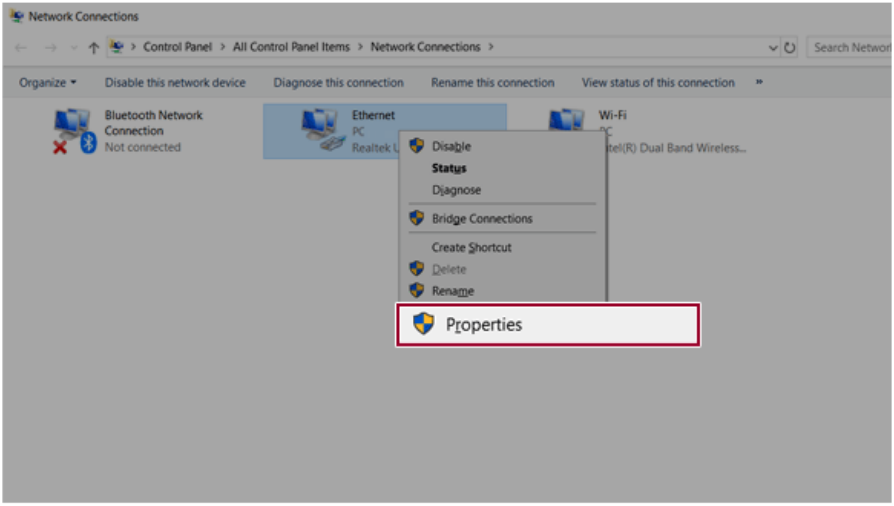


4 Select **[Network & Internet]** > **[Status]** > **[Change adapter options]**.

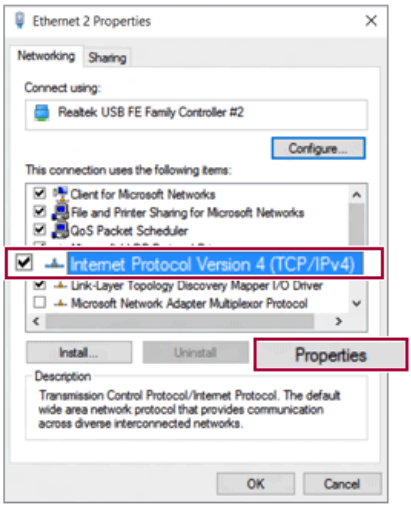




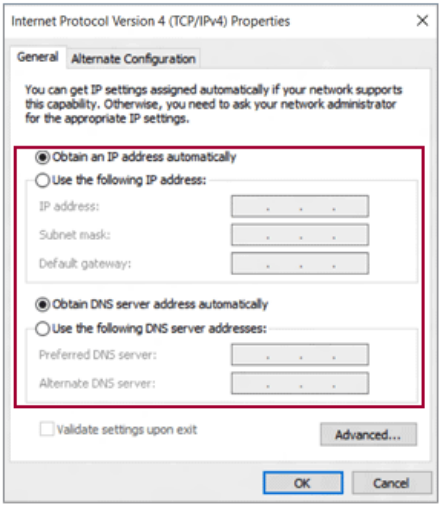
5 Right-click **[Ethernet]** and select the **[Properties]** menu.



6 Select **[Internet Protocol Version 4 (TCP/IPv4)]** and then click **[Properties]**.



7 To use an automatic IP(DHCP), select **[Obtain an IP address automatically]**. If you wish to use a static IP, select **[Use the following IP address]** to enter the address.
Contact the network service provider or administrator to use a static IP.



8 Press **[OK]** to complete the network setup.

9 Click the Web Browser icon to check whether the Internet is operating normally.